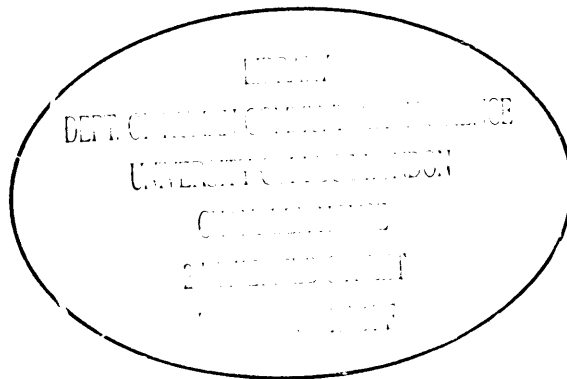


CROSS



A conversation analytic examination of the development of repair strategies  
in a child with a profound hearing loss

**Elizabeth Cross**



SEPTEMBER 2006

**Submitted in partial fulfilment of the MSc in Speech and Language Sciences**

**Department of Human Communication Science  
University College London**

**FOR  
REFERENCE ONLY**

UMI Number: U594068

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U594068

Published by ProQuest LLC 2013. Copyright in the Dissertation held by the Author.  
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against  
unauthorized copying under Title 17, United States Code.



ProQuest LLC  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

### **Acknowledgements**

I would like to thank UCL staff in the department of Human Communication Sciences and in the NICeST library, participants who took part in this study and the staff in the British Library, Boston Spa, Yorkshire for their help in this project.

Special thanks go to:

Merle Mahon, my project supervisor who provided support and guidance in the writing and research of this project.

Viv and Hannah who put up with my chaos and provided inexhaustible supplies of encouragement and chocolate

And my parents, Ann and Mike who knew I could do it.

## **Contents**

<b>List of Figures</b>	Page 4
<b>Abstract</b>	Page 5
<b>Chapter 1 – Introduction and Literature Review</b>	Page 6
• 1.1 Language acquisition in deaf children	
• 1.2 Deaf children with English as an Additional Language	
• 1.3 Classroom interactions	
• 1.4 Conversational repair in deaf children	
<b>Chapter 2 – Methodology</b>	Page 13
• 2.1 The use of conversation analysis	
• 2.2 Participant information	
• 2.3 Data collection	
• 2.4 Process of transcription and analysis	
• 2.5 Limitations of the study	
<b>Chapter 3 – Analysis</b>	Page 18
• 3.1 Fragment 1 Analysis	
• 3.2 Fragment 2 Analysis	
• 3.3 Fragment 3 Analysis	
• 3.4 Fragment 4 Analysis	
<b>Chapter 4 – Discussion and Conclusion</b>	Page 32
• 4.1 The development of conversational competence over time	
• 4.2 Teachers' strategies for managing repair	
• 4.3 Conclusion	
<b>References</b>	Page 41
<b>Bibliography</b>	Page 45
<b>Appendices</b>	
• Appendix I Instructions for CA transcription	Page 46
• Appendix II Complete transcription of data	Page 56
• Appendix III Audiometric test results for participant	Page 86

## List of figures

<u>Page no.</u>	<u>Figure</u>
P.18	Figure 1 – Fragment 1 1-DH 05-01
P.22	Figure 2 – Fragment 2 2-DH 07-01
P.25	Figure 3 – Fragment 3 2-DH 07-01
P.28	Figure 4 – Fragment 4 4-DH 03-03
P.33	Figure 5 – Excerpt from fragment 2
P.34	Figure 6 – Excerpt from fragment 4
P.35	Figure 7 – Excerpt from fragment 4
P.37	Figure 8 – Excerpt from fragment 3

## A conversation analytic examination of the development of repair strategies in a child with a profound hearing loss

### Abstract

This study examines strategies used for repair in conversations between a deaf child and her SLT and teacher and the changes in strategies used by the child over time. An overview of previous literature relating to deaf children's language acquisition, deaf children with English as an additional language, classroom interaction and conversational repair is given. Fragments from three different video recordings in which breakdowns occur in conversation are examined in detail, drawing on some of the insights gained into the management of repair by researchers working in the tradition of conversation analysis. The development of the child's conversational competence in dyadic interactions is discussed, in particular the strategies used by the child to resolve misunderstandings. The SLT and teachers repair strategies and their role in facilitating the emergence of conversational skills in the deaf child are also considered and some helpful strategies for managing repair in conversation with a deaf child are found.

## **Chapter 1**

### **Introduction and Literature Review**

The purpose of this study is to use Conversation Analysis as a method for evaluating conversations between a deaf child and her hearing teacher and with her speech and language therapist (SLT). The fragments used for analysis throughout the study are taken from recordings of one-to-one interactions and are concerned primarily with the resolution of misunderstandings. The analysis of these interactions will discuss the way misunderstandings are managed by the teacher, SLT and child and will highlight strategies used for repair when there is a breakdown in communication. The discussion will also include an evaluation of how these strategies alter as the child gets older.

This chapter will outline previous research in the areas of language acquisition in deaf children, deaf children with English as an additional language, classroom interactions and conversational repair and will give a rationale for this study based on the findings of these.

#### **1.1 Language Acquisition in Deaf Children**

It is well documented that deaf children have more difficulty acquiring language than hearing children. These difficulties are experienced in developing the skills of listening, speaking and learning the conventions of conversation (Mahon, 2003). Deaf children's difficulty acquiring spoken language is usually due to a number of contributing factors, not only to the child's primary disability (Wood, Wood, Griffiths, Howard & Howard, 1982).

Historically, researchers such as Bartlett (1850) thought that without spoken language, deaf children could not achieve high levels of cognitive functioning and therefore could not be successful in education (Marschark & Spencer, 2006). In a study published in 1996, hearing adults regarded intelligence as being linked to intelligibility of speech (Most, Weisel & Lev-Matezky), demonstrating that perceptions about cognitive competence can be based on the ability to use spoken language. These types of

perception have influenced the work carried out with deaf children, placing an emphasis on oral methods of education rather than sign language. It is suggested that children with intelligible speech will experience social and personal benefits as more opportunities will be available to them (Ling, 1990). Currently, theory suggests that when working with deaf children and their families, natural conversation aids language learning. The focus is therefore on the skills, such as turn-taking and topic selection, that are used in natural interaction and conversational contexts (Marschark & Spencer, 2006). In this study, the focus will be on a child who uses spoken language as her primary communication modality (see methodology for information on the school communication policy) and therefore research into children who use sign language will not be discussed.

A recent study has indicated that, contrary to the findings of previous research, early identification and early intervention may not significantly affect the facilitation of spoken language acquisition of a profoundly deaf child unless this leads to cochlear implantation (Nicholas & Geers, 2006). However, many studies have shown that a child's access to spoken language and speech production are affected by the severity of his/her deafness and the age at which this is identified and treated (Blamey, Sarant, Paatsch, Barry, Bow & Wales, 2001, Coulter and Thomson, 2000, 2001, Marschark & Spencer, 2006). This is widely accepted to be the case and current therapeutic practice is based on this evidence. Technological advances in recent years have had an effect on the development of spoken language of deaf children as digital hearing aids and cochlear implants have become more commonplace and the use of residual hearing can be maximised. Early therapeutic intervention is also more widespread due to early identification of problems (Marschark & Spencer, 2006). The subject of this study has a moderate to profound hearing loss and uses digital hearing aids (see methodology for details). Her diagnosis came relatively late, at age 3;8 and this must be considered when discussing her language development, as prior to this her access to spoken language is likely to have been greatly reduced.

In researching children's language in their home environments, studies of the language acquisition of deaf children in comparison with that of hearing children have found that mothers of deaf children have the tendency to be more controlling, discouraging and



negative in their interactions with their deaf child than mothers of hearing children (Galloway & Woll in Galloway & Richards, 1994), however it has been suggested that this type of control could instead be an appropriate adjustment to the language level of the child, indicating that it may have a positive effect on the language acquisition of the child, rather than a negative one (Galloway & Woll in Galloway & Richards, 1994, Cross et al, 1985, Power et al, 1990, Lloyd et al, 2001). A study carried out by Lederberg and Everhart (2000) showed that maternal 'dominance' decreased as the child got older and found that there was no difference in the pragmatic behaviours of mothers of deaf children when compared to mothers of hearing children. They surmise that what has been previously perceived as dominance may in fact be a language eliciting strategy resulting in a style of interaction that seems more dominant.

Several studies have been carried out investigating the role of visual attention in the language acquisition of deaf children. Some researchers argued that deaf children had difficulties acquiring language in early development due to unclear auditory and visual speech cues given by parents (Marschark & Spencer, 2006). Harris (2000) underlines the essential role of this modality and the potential conflict that exists when learning language, as a child must pay attention to both the face of the speaker and the object being referred to. Where sign language is being used, there is the additional element of the signer's hands to attend to.

### 1.2 Deaf children with English as an Additional Language (EAL)

The term 'EAL' is used to describe those who use other languages or dialects as well as English (Mahon, 2003). D, the subject in this study, is from a family whose first language is Arabic and this is the language spoken predominantly at home, therefore it is useful to give an overview of the research carried out with the deaf EAL population. A discussion of the language acquisition of deaf children is given above, and EAL adds another dimension to the difficulties faced in acquiring spoken English. Some skills which may be acquired with no problems in the home language may present difficulties in English conversation. EAL families with deaf children are often recommended to speak only English to their children as this will be most beneficial to their education (Mahon, 2003),

however there is no strong evidence base to show that limiting exposure to a single language is advantageous.

Historically, bilingual or multilingual children were thought to be disadvantaged educationally, yet in the 1960's research showed that being bilingual may in fact have cognitive advantages (Peal and Lambert, 1962) and there is little evidence to show that bilingualism itself will cause a child to have language difficulties (Crutchley, Conti-Ramsden & Botting, 1997). In terms of spoken language learning for EAL children, school will have a significant effect on their proficiency in each language. In their preschool years, children are mostly likely to encounter the language that their parents speak and therefore this will be their 'dominant' language (Baker, 2000). When they start school, this may change, as it is likely that for a child from a family where English is not the language spoken at home, school may be the first time the child is exposed to large amounts of spoken English (Mahon, 2003). The educational options for EAL children are varied, but in the UK provision for EAL children to be educated in their first language is limited, therefore teaching usually takes place through English. This is the case for D, who attends an English-speaking primary school with a specialist unit for the hearing – impaired.

There is little research on deaf EAL children at school, however it is to be expected that if the child has not previously had much exposure to English at home, this in addition to their deafness is likely to delay the development of spoken English. If the deaf child has been diagnosed early, they may have encountered English through the intervention carried out, however this is not the case for D, who was diagnosed fairly late, aged 3;8. The subject of this study was adjusting to her hearing aids and beginning school (and therefore more exposure to English) within a short period of time. The aim of this study is not specifically to look at EAL, nonetheless it is a factor which must be remembered when discussing D's language development.

### 1.3 Classroom Interactions

The data for this study were collected at school. Many studies of the hearing population have investigated talk in classroom situations and acknowledged the differences between adult-child talk in non-institutional settings and teacher-child talk in the classroom. Research has shown that in conversations at school, adults dominate the conversation and use frequent questions, which leads to the child contributing less (Tizard and Hughes, 1984), whereas at home, mothers tend to be less controlling (Bishop and Gregory, 1985) and children are more likely to contribute more to an interaction. As previously noted, research has shown that this is not the case for many deaf children whose home conversations are also adult-dominated.

Radford, Ireson and Mahon (2006) researched triadic dialogue in the classroom, a pattern of discourse in which a teacher *initiates* usually using a question, the child *responds* then the teacher provides *feedback*. This triplet is commonly known as IRF (Mehan, 1985, Mercer, 1995) and is used in classrooms worldwide. The research carried out by Radford et al showed that this form of using questions could be collaborative and therefore less controlling than other styles of questioning, allowing pupils to contribute more in both dyadic and small group work.

Vygotsky (1986) proposed that a child can learn more effectively with the assistance of an 'expert individual'. He developed the idea of a zone of proximal development (ZPD) which is the difference between a child's abilities without assistance and what they can achieve with the help of an expert individual. In terms of this study, at school the expert individual would be the teacher or SLT who would help to 'scaffold' the child's learning. The notion of scaffolding (Wood, 1998) relates to the provision of contingent support by the teacher for children with a language difficulty. This type of support can be beneficial to the child's language learning (Radford, Ireson & Mahon, 2006), as the teacher can talk in a more complex style than the child is capable of, thereby providing a model to assist their learning.

Studies carried out on classroom interaction with deaf children (Wood et al, 1982) have shown that the style of conversation of the teacher of deaf children has a great influence on the length and type of utterance the child will use. Similar to the evidence from studies carried out with hearing children, deaf children are less likely to elaborate or show initiative in conversation when the teacher is highly controlling. Wood et al (1982) also showed that the deafer a child is, the more controlling the teacher is likely to be.

Since this study is concerned with dyadic talk rather than a typical classroom situation, the teacher-child talk is slightly different. Although questions are still used, and in some instances the IRF pattern is used, the teacher can allow the child more time to respond than would be possible in a whole class or small group situation. In addition to this, the teacher is less controlling than would be necessary in a group situation, therefore the talk and the topic selection are more collaborative and there is more potential for scaffolding.

#### 1.4 Conversational repair in deaf children

Literature specifically related to hearing-impaired children's strategies for repair is sparse. A study of the pragmatic skills of deaf children (Jeanes, Nienhuys & Rickards, 2000) identifies a lack of research in the area of requests for clarification in this group. It highlights that requests for clarification should progress from general to specific as the listener develops communicative competence, which in normally hearing children is reached at about 8 – 10 years. Responses to requests for clarification should also mature; by around 9 years of age, normally hearing children have progressed from simple repetition to elaboration of utterances. Their research sought to determine whether this was also the case with deaf children. The experiment included 8-year-old children, including hearing children, deaf children who used oral speech and deaf children who used sign language. Results showed that deaf children who used oral communication requested clarification more often than hearing children or deaf children who used sign language. Specific requests for clarification, however, were made most often by hearing children. All the children made a high percentage of appropriate responses to listeners' requests for clarification, although hearing children made more major modifications which were more helpful to the listener. The hearing children were found to be more

communicatively competent than their profoundly deaf peers, who were more immature in their interactions.

Lloyd (1999) discusses previous studies which focus on how hearing-impaired children deal with conversation breakdowns with particular reference to other-initiated repair sequences. Research carried out by Beattie and Kysela (1992) showed four main types of repair strategy used by hearing-impaired pre-school children. These were repetition, changes in phonology, elaboration and demonstration, with repetition as the most used strategy. Repair, whichever strategy was used, was successful only 54% of the time. A study by Arnold et al (1999) found that hearing-impaired children request clarification less often than their hearing peers. He attributed this to developmental lag, misunderstanding of the task and assuming that the breakdown was due to them rather than their conversation partner. It remains unclear whether intervention is successful in breakdown and repair strategies. Lloyd (1999) suggests a longitudinal study would be useful to monitor the development of the strategies used to repair this type of conversation breakdown over time. This would give further information as to how these linguistic and conversational skills develop in deaf children and how their conversation partner could facilitate the emergence of these skills through their responses.

The aim of the current study is therefore to use conversation analysis as a tool for examining the repair strategies and clarification requests used by a deaf child and her SLT and class teacher when in one-to-one conversations, and to analyse how the deaf child's strategies for repair and clarification requests change over time. A secondary aim is to investigate how the SLT and teacher manage breakdowns in conversation and subsequent repair sequences.

## **Chapter 2**

### **Methodology**

#### **2.1 The use of Conversation Analysis**

Conversation Analysis (CA) is the study of ‘talk-in-interaction’ through the repeated observation of data in its raw form (Hutchby & Wooffitt, 1998). CA originated in the 1960’s from the work of Harvey Sacks and draws on sociology, linguistics and social psychology. This method was chosen for this study due to CA being an appropriate method for the study of interactions with deaf children as identified by Mahon (1997). The key reasons for the selection of CA for this study are as follows.

CA is a data-driven approach which allows the analyst to describe the communicative behaviours of the participants without using preconceived codes or categories. This allows the analyst to be objective as to whether an utterance is ‘appropriate’ or ‘inappropriate’ and focus more on the participants’ behaviours than appropriateness (Radford & Tarplee, 2000). The analyst is then able to describe the way each participant designs their turns and the impact this has on the rest of the sequence, therefore the breakdowns and repairs that occur in conversation between a teacher and a deaf child can be deconstructed and analysed allowing for greater understanding of how these phenomena occur and whether any strategies are being used by the participants in these situations.

CA is an approach which allows for the analysis of the effects of non-verbal aspects of conversation as well as the spoken interaction, largely because it is captured in real time and on video (Maynard & Heritage, 2005). Since non-verbal signals are especially important in conversation with deaf children, on the part of both participants, CA is an appropriate method to use as all the relevant information, such as pointing, nodding, gesturing and in particular signing, can be included in the transcription and analysis.

Finally, CA is a method in which the collaborative nature of interaction can be acknowledged (Radford & Tarplee, 2000). Conversation is shaped by the way in which each participant manages their turn and the ways in which they display their understanding (or misunderstanding) of their conversation partner's previous turn (Hutchby & Wooffitt, 1998). In the study of teachers' interactions with children, the type of data used in CA can highlight how the teacher may shape the conversation to teach the child about interaction (Mahon, 1997).

There are, of course, other methods of analysing conversation. Discourse analysis developed by Sinclair and Coulthard in 1975 is a linguistic method of analysis with a grammatical basis which has similarities to CA, however it has been criticised for treating language as a 'passive or neutral means of communication' while CA amongst other methods focuses on language as 'functional and constructive...to accomplish specific communicative tasks' (Hutchby & Wooffitt, 1998, p6). More recently discourse analysis has been used as a tool for social research (Fairclough, 2003), yet in this method of analysis, the non-verbal aspects of interaction are not examined and, as discussed above, when analysing the conversation of deaf children this is a vital component which cannot be neglected. In discourse analysis turn taking is not analysed in a sequential manner but turns are categorised according to linguistic type. This type of analysis does not allow for the effects of one participant's turn upon the following turn to be examined and therefore cannot take account of the collaboration between participants.

As CA is an approach which seeks to investigate all the aspects of an interaction video analysis, rather than audio analysis, is appropriate. Video allows the analyst to see and include both verbal and non verbal communication in the transcript. This detail allows a more thorough analysis of the interaction as a whole including speech, gesture, eye gaze and pauses, all of which can be significant in how a conversation develops.

## 2.2 Participant Information

The child, hereafter referred to as D, attends a unit for hearing impaired children within a London mainstream primary school. A 'natural language approach' is used in the unit.

This approach means that spoken English is the predominant communication modality used, but sign and gesture are also used and accepted as forms of communication.

D was born on 23<sup>rd</sup> November 1996. Her family's first language is Arabic and this is the main language used at home, although some signs are used to aid communication. She has an older brother who is also deaf and a younger, hearing sister. She was diagnosed with a severe-profound bilateral sensori-neural hearing loss at the age of 3;8. Her unaided audiogram results show a Pure Tone Average of 83.3dBHL in her left ear and 88.6dBHL in her right ear. No aided results are available from the school records; however the estimated aided results are 50dBA. The cause of D's hearing loss is thought to be genetic. D received her first hearing aids in September 2000 at age 3;11. These were bilateral digital aids, programmed for everyday listening with minimal background noise and with a radio loop setting on M and T.

D's family accept her deafness and use of hearing aids, however they do not insist that she wears her hearing aids at home and her use of them is inconsistent in that environment. At school D's hearing aid use is good. No middle ear complications have been recorded.

Two hearing teachers participated in the study. They are referred to in transcriptions as T1 and T2. T1 is a speech therapist who works regularly in the unit, T2 is D's teacher therefore both are familiar adults with whom D is used to communicating.

### 2.3 Data Collection

D was videoed in conversation with her speech therapist and her teacher in school regularly between May 2001 and February 2005 with the consent of her parents. The video recordings were made in a classroom in the school using a video camera fixed on a tripod. In each recording, a different activity is taking place which is conversation based and involves D and a teacher or SLT. In each session D and the adult are seated at a table, however the seating positions of the participants are not consistent across recordings.



Three of these video recordings will be used for analysis in this study as listed below and a selection of samples from this data will be discussed in detail.

<u>D's age</u>	<u>Date of clip</u>	<u>Teacher</u>	<u>Activity</u>
4;6	May 2001	T1	Looking at a photo album
4;8	July 2001	T2	Reading a book
6;4	March 2003	T2	Discussing D's family

Although CA is intended to be the analysis of naturally occurring talk-in-interaction, the issue arises that a conversation which is being video recorded cannot be completely natural, as behaviour may be affected due to the knowledge that the interaction is being observed. This 'observer's paradox' (Labov, 1972) is unlikely to have a significant effect in this study however, as both children and teachers at the school are recorded regularly in order to monitor the child's progress. As this school policy pre-dates the recordings made for the purpose of the study, any changes in behaviour due to the presence of a video camera are likely to be minimal as being videoed is a normal occurrence for D and for the teachers.

#### 2.4 Process of Transcription and Analysis

The video data for the three recordings listed above were transferred onto compact disc suitable for use on a computer to allow the data to be viewed repeatedly for the purpose of analysis. The data were viewed using Windows Media Player.

The data were transcribed in full following transcription guidelines, samples from the three recordings which were of particular interest were selected for detailed analysis. These fragments were analysed in detail using CA methods detailed in appendix I (Beeke & Wilkinson, 2000). Orthographic transcription was used for intelligible utterances. Where utterances were unintelligible, an approximation of the utterance is given (e.g /mae!/).

The interaction of participants was analysed across the recordings, particularly with regard to the repair of breakdown and management of misunderstandings. Differences were noted and comparisons were drawn between the different teacher-child dyads and different time periods. These are discussed in detail in chapters 3 and 4.

### 2.5 Limitations of the study

The researcher acknowledges that a limited amount of data were used for this study, therefore generalisations from the findings of the study must be made with caution. Whilst they were typical examples in this context, the strategies used may not be typical of the behaviour of these participants in other interactions.

The examination of the data was based on the principles of conversation analysis, but it is acknowledged that it could have been carried out in more detail. However, it was sufficiently detailed to draw out common strategies used by each participant and to reflect on the impact these may have had on the talk of another participant.

## **Chapter 3**

### **Analysis**

This chapter aims firstly to analyse fragments of conversation in detail focusing on how D initiates repair and how her management of misunderstandings changes over time. Secondly, the way in which the teacher or SLT manages the repair sequences will be discussed.

In the first fragment, a gesture is the first trouble source that requires repair. This fragment demonstrates D's attempts to repair a misunderstanding and how T does not initially attempt to repair the breakdown in communication.

#### **3.1 Fragment 1**

1 DH 05-01 Age at recording 4;6

In this interaction T and D are looking at an album with photos from a recent school trip. In the previous sequence they have been naming the people present in the pictures. The picture they are looking at in Fragment 1 shows T making a gesture with her hand. It is this gesture that is ambiguous.

T1 = Teacher

D = Deaf child

**Fig. 1**

010	D	Miss Handel	
011	T1	Miss Handel, ((points to picture))	
012	D	((imitates hand position T is doing in photo using LH))	D looks at T
013	T1	I went ((imitates hand position)) (.)	T looks at D
014	T1	ooh like that didn't I!	D gaze not clear - rubbing face
015	T1	(.) (( reaches & taps D's shoulder))	
016	D	((looks up at T))	
017	T1	p'raps I was saying [ 'bye bye' ] [ ((waves using hand	

		position in photo))]		
018		p'raps I was saying bye bye		
019	D	((thumps table with RH elbow)) [ /mae/! ]		
020	T1	[d'you think?]		
021	D	/mae/!		
022	T1	p'raps I said [ 'bye bye ] [ ((waves using same hand shape as previous)) ]	school'	T looks away as she gestures then back to D
023		(2)		
024	D	/ae/!		
025	T1	[No? ] [ ((headshake)) ]		
026	D	yeah.		both look at album
027	T1	yeah. maybe.		
028	D	Miss Handel bye bye ((waves hand iconic goodbye gesture))		D looks at T as she waves
029	T1	I said bye bye .		both look at album
030		(1.17)		
031	D	((Looks steadily at T))		
032	T1	[look at it ]		
033	D	[ ((Looks down, thumps table with fist)) ]		

### Line by line analysis

D initiates a new topic for conversation by saying the teacher's name. T repeats the name in line 11 and points to the picture of herself. D mimes the hand position T makes in the photo and looks at her (line 012). D designs this turn non-verbally and her gesture is acting as a description of T's action. This signals the end of a simple naming sequence and the beginning of a new sequence.

T responds by imitating D's gesture (line 013) and verbally suggests what she might have been doing (lines 013 to 018). She designs this turn as the first part of an adjacency pair using the tag question 'didn't I' and by using 'p'raps' which may be to prompt D to respond, however between line 017 and 018 when she is using 'p'raps' she does not pause to allow D to respond.

When she does pause, D responds with a loud vocalisation and thumps the table with her elbow (line 019). T's response "d'you think?" (line 020) indicates that she may be unsure whether D is using the sound to agree or disagree. D repeats the same loud vocalisation (line 021). T does not acknowledge the vocalisation as either a positive or a negative, but continues to prompt D by reformulating her previous suggestion that she may have been saying bye bye (line 022). This indicates that T may not have understood D's utterances, however at this stage she does not make a specific clarification request.

There is a two second pause before D responds. Following this transition relevance place, D takes the next turn making a different loud vocalisation (line 024). Again, it is unclear what the purpose of this sound is. T interprets the sound as a possible negative and asks for specific clarification with the question "No?" (line 025) to check whether she has understood the meaning of D's responses in line 024. D then responds affirmatively "yeah." (line 026) and looks back at the album. T interprets this as an agreement that T was indeed saying 'bye bye' but her response to this "yeah" indicates that she is aware there is still some uncertainty as she says "yeah. maybe." (line 027).

D then responds both verbally and non-verbally "Miss Handel bye bye" and waves using the iconic wave gesture rather than the hand position in the picture. T interprets this as a confirmation of their agreement and repeats her utterance (line 028).

The transition relevance place following this is fairly long (line 030) and, significantly, D looks steadily at T. This suggests that the issue has not been completely resolved for D. Her response is then to thump the table and look down, again suggesting dissatisfaction with the outcome of the conversation.

### Summary

This is a fragment in which attempts at repair are made by both participants, although it could be argued that the issue at hand, i.e. the meaning of the hand position of T in the photograph, is never resolved. T refrains from initiating repair at first, however she is forced to seek clarification from D when D makes loud vocalisations which could be misinterpreted. By the end of this sequence, it seems that T feels the issue is resolved and that she and D are in agreement that her hand position meant she was saying goodbye.

D's responses though are not conclusive, and detailed analysis of the passage reveals a potentially very different story. It is possible that D has not yet developed a successful strategy for disagreeing. One possible hypothesis would be that D does not agree that the gesture is a "bye bye" gesture, and it is T's turn in line 017 that becomes the trouble source because she combines "bye bye" with the hand gesture used in the photograph. D's loud vocalisations and physical action of thumping the table (lines 019, 021 and 024) demonstrated here may be an early form of disagreeing and initiating a repair sequence.

This could explain why, when her loud vocalisations and physical actions are interpreted as a disagreement (line 026), she says "yeah", confirming T's "No?" and in effect saying 'yes, you're right, I mean "no"'. T seems to accept it as an agreement but there is still some doubt, as she says "yeah, maybe".

D's next turn could then be interpreted as an attempt to repair the breakdown in communication non-verbally by using a gesture different from the one at issue and thereby correcting T and implying that, when saying goodbye, people do not use the hand gesture shown in the photograph, but use a waving gesture. Being unable to articulate this, D may be using the verbal phrase and the 'correct' gesture for goodbye to repair this misunderstanding.

This hypothesis is supported by D's apparent dissatisfaction at the end of the sequence that an agreement has been reached, demonstrated again by the physical gesture of thumping the table.

A similar strategy for disagreeing can also be seen in the following fragment with T2.

### 3.2 Fragment 2

2 DH 07-01 Age at recording: 4;8

T2 = Teacher  
D = deaf child

T and D are looking at a book together. This fragment provides another example of D using physical gesture to indicate disagreement with T (line 118, line 124), similar to that seen in fragment 1. A detailed analysis is given below.

**Fig.2**

121	T2	back it's [on her back]	
122	D	[back ]((points to self)) [me]	
123	T2	[ther]e's	
124		[a (.) green car ] [((points to book))]	D look of surprise as she looks at picture
125	D	ah! green?	D looks at T in surprise
126	T 2	yeah is it green?	
127	D	NO! ((shakes head and stamps feet, smiling))	
128	T2	oh	
129	D	red	
130	T2	red car?	
131	D	((nods))	
132	T2	[there's a yellow car ] [((points to book)) ]	D rests her elbow on table, head in RH looking at book
133	D	((nods)) (.) [urr! [((makes hands into fists, looks frustrated))]	D looks at T smiling slightly

134		(.) blue	
135	T2	a blue car	
136	D	[look [((points to book))]]	
137	T2	[and mummy's in the car]: ((points to book)) [((points to book))]	D looks at book

### Line by line analysis

T and D are looking at a story book together. They have been talking about a lady in the book who has a baby on her back. In line 121, T is clarifying this. D repeats “back” (line 122) and begins an extension, saying “me”, but this is overlapped by T’s initiation of a new topic talking about the colour of cars.

T draws D’s attention to the picture by pointing and says “there’s a (.) green car” (lines 123 -124). Here T is trying to elicit a response from D by giving the wrong colour of car. D shows surprise in her facial expression and in her tone of voice (line 125) as she uses a falling and rising intonation on the word “green?”, as well as an exclamation “ah!”. She does not at this point indicate disagreement. T acknowledges this response by designing her next turn in a questioning manner (line 126) “is it green?”. D’s response is a loud shout of “NO!” and she stamps her feet and shakes her head (line 127).

T’s next turn acknowledges D’s negative response, as she says “oh” (line 128), but she does not offer any further information, perhaps to encourage D to extend. D does this, saying “red” (line 129). T in turn extends D’s utterance by adding the word “car”, but again in a questioning manner (line 130). D confirms their agreement with the non-verbal response of a nod (line 131).

In the following turn, T points to another car, saying “there’s a yellow car” (line 132). At first D nods, then realises that T has given the wrong colour of car again. D then shows frustration in her utterance “urr!” and her physical gesture of making her hands into fists



(line 133), however she seems to realise this may be deliberate on the part of T as she smiles at her. D then pauses slightly before giving the correct colour of the car as “blue” (line 134). T confirms this with the statement “a blue car”.

D changes topic (line 136) by pointing to a picture of a person in the book and saying “look”. T accepts this change of topic and begins a new process of naming who is in the car.

### Summary

In this fragment D still uses physical actions to indicate disagreement, however in the first example from this fragment (line 127) she does verbally express her disagreement as well, saying “NO!”. In this sequence of conversation, she is able to offer, in both instances, the correct response after her initial physical response.

In this situation the language required of her to repair the breakdowns is simpler (i.e. colours) and she is able to verbally resolve the perceived misunderstanding. A possible hypothesis is that she may be beginning to develop this as a strategy for repairing the breakdowns; indicating her disagreement physically but then going on to provide a verbal response which repairs the breakdown.

In fragments 1 and 2 we have seen how D manages a misunderstanding on the part of her conversation partner. In fragment 3, an extract from the same video, we will see how D struggles to indicate her own misunderstanding verbally to T.

### 3.3 Fragment 3

2 DH 07-01 Age at recording 4;8

T2= Teacher

D= Deaf child

T and D are talking about who does the food shopping in D’s family. This fragment shows D’s difficulty indicating her own misunderstanding and the repair sequence surrounding this breakdown. A detailed analysis is given below.

**Fig.3**

00:00:13	001	T2	Who goes shopping?	T and D hold eye contact
	002	D	Susan	
	003	T2	Susan and::	
	004	D	Susan	
	005	T2	Susan and mummy?	
	006	D	((nods))	
	007	T2	and Diana?	
	008	D	((nods))	
	009	T2	What about Oscar?	
	010	D	Oscar ((turns head away. beginning of headshake))	
	011	T2	Oscar goes shopping ?(.)	
	012	D	((nods))	
	013	T2	Does he go shopping? Goes shopping as well=	
	014	D	(( nods))	
	015	T2	= [ with you? ] ((points to D))	
	016	D	[ uh ]	D holds gaze. looks confused and raises both hands palms upwards. shaking head
	017	T2	likes shopping:	
	018	D	A:!	Smiles and hits table with hands then hits her forehead with RH
	019	T2	What about daddy?	
	020	D	Daddy	
	021	T2	does daddy go	
	022	D	((D nods))	
	023	T2	to the shop	
	024	D	((D nods))	
	025	T2	to buy the food?	D looks at book in front

				of her
	026	D	blue	T takes hold of book
00:00:42	027	T2	this is about a dog ((points to book))	

### Line by line analysis

T designs her first turn as a question (line 001) which D's response indicates she understands (line 002). T acknowledges this response by repeating it and requests further information by holding her pitch on the word "and::" (line 003).

D repeats her previous response of 'Susan' (line 004), indicating that she has not understood that another name was being requested. T corrects, and models further answers by supplying the names of others who may go shopping with her (line 005). D's non-verbal response to T suggests that she understands (line 006, line 008), however T's question 'What about Oscar?' (line 009) does not prompt the expected response, as D repeats 'Oscar' (line 010) with a slight turn of head as though beginning a headshake possibly indicating 'not Oscar'.

T interprets the repetition of Oscar as indicating that D has not understood, so she reformulates her question 'Oscar goes shopping' with a slight pitch rise. D nods in response. T pursues a different response however, by reformulating the question twice more 'does he go shopping? goes shopping as well?' (line 012). Again, D responds non-verbally by nodding, however when T continues to question 'with you?', D is forced to indicate her misunderstanding (line 016).

D indicates her misunderstanding verbally saying "uh" and non-verbally by shaking her head and putting her hands out palms upwards. Her facial expression also indicates confusion which prompts T to clarify further (line 017) "likes shopping". D's exclamation and non-verbal gestures (line 018) suggest that she does understand, nevertheless, she does not answer the question T has posed.

T designs her next turn as another question “what about daddy?” (line 019), arguably to prompt a response to check whether D has understood. D’s response is to repeat ‘daddy’ (line 020) which indicates a lack of understanding that prompts T to extend her utterance again (line 021 and 023). As previously D responds non-verbally by nodding, however it is unclear whether she has understood as she does not answer T’s question.

D introduces a new topic verbally and non-verbally (line 026) by looking at her book and saying ‘blue’. T does not pursue the repair sequence, instead following D’s shift of topic and starting a conversation about the book (line 027).

### Summary

This sequence is an example of a breakdown in conversation when D does not indicate her misunderstanding immediately and only does so after repeated questions from T. When she does indicate her lack of comprehension, it is her non-verbal indication, the confusion in her expression and her body posture that give T the message that she has not understood. This general clarification request could be because her language is not yet sophisticated enough to request a specific clarification. Equally, the problem may be due to a reluctance on D’s part to admit she has not heard or understood.

Even after a repair sequence has taken place and D’s “A:!” (line 018) seems to indicate that she understands, the turns that follow suggest that repair may not have been successful as D never responds to T’s open questions, instead nodding in response to her closed questions, giving the impression of understanding but never explicitly demonstrating it. As in fragment 1, the breakdown is never fully resolved, yet both participants choose to shift topic rather than to pursue the repair sequence further.

Fragment 4 shows D at age 6;4 when her conversation skills have matured and she is able to indicate her own misunderstanding and repair breakdown much more effectively.

### 3.4 Fragment 4

4 DH 03-03 Age at recording 6;4

T2= Teacher

D = deaf child

T and D are talking about D's family and where each family member sleeps. This fragment provides an example of the ways D manages misunderstanding. There is evidence of her use of extension (line 044, 048, 056) and a request for repetition (line 062). These are strategies she uses to clarify or repair a breakdown in understanding. Both D and T use gesture to aid comprehension. A detailed analysis of this fragment is given below.

**Fig.4**

	039	T2	he's got his own room has he? (.) so one room for	
	040		Oscar and another room for Diana and Susan and	
	041		another room for mummy?	
00:01:31	042	D	and daddy.	
	043	T2	and daddy and [Marian]	
	044	D	[Mari ] Marian but in there	D looks to side and draws a rectangle shape in the air twice then once more on the table
	045	T2	In a box or [ a cot ]	
	046	D	[yeah] (.) box.	draws box shape on table
	047	T2	[a box! ] (.) Oh ( ) that's [funny! ]	T draws back in surprise
	048	D	[((furrowed brow, slight nod))] [it white]	uncertainty. Draws shape again
	049	T2	a white box. Is it called a cot?	
	050		( 2.1 )	D body posture 'ready to answer' and then drops shoulders
	051	D	cot or box ((questioning gesture both palms upwards and shrugs))	
	052	T2	I think it's called a cot. Has it got bars on it?	draws bars in the air with

			hands
	053	(.)	
	054	D ah! ((smiles))	
	055	T2 mm it's called a cot	
	056	D and it waves	D rocks from side to side with arms out
	057	T2 oh a crib, a crib yeah [and y]ou can rock it backwards	
	058	D [ mm ]	
	059	T2 and forwards yeah it's called a crib or a cot	
	060	D yeah	D looks away as bell sounds and looks back
	061	T2 yeah. You don't sleep in there	eye contact maintained
	062	D huh?	
	063	T2 you don't sleep in a cot	
	064	D ((shakes head)) only Marian	
00:02:08	065	T2 only Marian. And do you think mummy's gonna have	
	066	another baby? Or is she finished now.	

### Line by line analysis

T summarises what has been discussed so far (line 039 – 042) but designs her turn in a questioning manner. This allows D to add information in (line 043) 'and daddy'. T acknowledges this by repeating it (line 044) and extends the utterance by adding 'and Marian'. This extension leads to the clarification sequence that follows.

D acknowledges T's extension by repeating 'and Marian' and extends it further, extending the topic from rooms and beds to the baby and her cot, saying; 'but in there' (line 044) drawing a rectangle shape in the air twice and then on the table once. By repeating and adapting her 'drawing' of the shape, D is self correcting in order to clarify.

T tries to clarify where Marian sleeps (line 045) giving D two options 'In a box or a cot'. It is possible that D does not hear T saying 'cot' as their utterances overlap as D says 'yeah. box' and gestures a box shape (line 046).

T's response indicates that this is surprising. Her tone of voice, body movement and facial expression indicate that this is unexpected. D's response to T's surprise is to clarify further. She does this by giving the additional information 'it white' (line 048) and drawing the shape again, however her facial expression here shows uncertainty.

T acknowledges D's verbal clarification and summarises 'a white box' (line 049) then uses a question to try to resolve the issue.

After a pause (line 050), D designs her turn as a question (line 051) with an accompanying gesture to indicate that she does not know. This is a specific request for clarification from T and suggests that she does not have the word 'cot' in her vocabulary. T treats this as a normal question and replies 'I think it's called a cot.' and seeks further clarification rather than correcting D (line 052) using a question 'does it have bars on it?' and accompanying this with a gesture. D's response (line 054) of 'ah!' with a smile, suggests that she now understands what the word 'cot' refers to. T confirms this (line 055) with the statement 'mm it's called a cot.'

D still wishes to clarify further and uses verbal and non verbal description (line 056) to indicate that it rocks from side to side. T verbally interprets D's meaning (line 057) 'oh a crib' and then acknowledges D's description of the cot moving. D confirms this (line 058 and line 060) with affirmatives 'mm' and 'yeah'.

D becomes distracted as the school bell rings and T draws her attention back (line 061) with a questioning turn designed to elicit a response. D requests repetition (line 062) and T rephrases the question. D confirms that she does not sleep in a cot with a non verbal response (line 064) and the statement 'only Marian'

T acknowledges this by repeating her utterance (line 065) then moves on to a new topic about D's mother. Again this turn is designed in a questioning manner.

### Summary

In this fragment D demonstrates a more mature and sophisticated strategy for dealing with misunderstanding than we have previously seen. She is able several times within this fragment to use extension to give more information when T does not understand her, and uses a specific verbal request for clarification when she does not understand T. She also requests repetition from T when she has not heard.

D is no longer using physical actions to indicate disagreement or misunderstanding. Here she is able to use spoken language accompanied by gestures to request repetition or clarification and to extend her own utterances to help her conversation partner understand. At the end of this sequence D and T are both satisfied that they have understood one another and move easily on to another topic.



## **Chapter 4**

### Discussion

The analytic method adopted here - Conversation Analysis - offers a detailed and descriptive examination into the strategies used for indicating misunderstanding and repairing breakdown in conversation by D, a deaf child, between the ages of 4;6 and 6;4. It also allows an analysis of the different strategies used by the SLT and class teacher and gives some insight into whether this has an effect on D's conversation.

#### 4.1 The development of conversational competence over time

Looking at the development of D's conversational competence over time, some conclusions can be drawn about her skills in initiating repair, clarifying, seeking clarification and extending. The first fragment was taken from a recording made when D was 4;6 and fragments 2 and 3 when she was 4;8. As these video data were collected within a short space of time, we would not expect D to change substantially over this time in terms of conversational competence. Indeed she shows similar behaviours in fragments 1 and 2 which highlight the difficulties she has indicating disagreement. She uses a strategy of making a physical movement such as thumping the table or making her hands into fists and accompanies this with a vocalisation, but not a word, on more than one occasion.

To address the question of why she does this, it is necessary to consider the likely pragmatic skills of a deaf child of this age. Jeanes, Nienhuys and Rickards (2000) discuss the difficulties experienced by profoundly deaf children in using appropriate pragmatic behaviours when requesting or providing clarification or when communication breaks down. They suggest the reason for these difficulties may be a lack of opportunities to learn these behaviours through interaction. Although the study by Jeanes et al (2000) deals with older children, many of the pragmatic aspects of language communication are already developing at 2-3 years of age in normally hearing children (Ghuman, Peebles & Ghuman, 1998, Shatz, 1995). It may be the case that D has not, at age 4;6 or 4;8, learnt effective methods of indicating disagreement due to reduced opportunities for learning these skills through interaction, caused by her deafness. Deaf children at preschool age

have been found to rely more on gesture to communicate than hearing preschoolers (Lederberg & Everhart, 1998) and the same study found that the deaf children's spoken language was at a very early stage by 3 years of age, therefore D is likely to be accustomed to using gesture to communicate, to have more delayed speech than a hearing child and may not have experienced opportunities within conversation to learn the skill of verbal disagreement. Her response to a statement she disagrees with, because she does not have the linguistic or conversational skills to articulate it, is therefore to use a negative physical gesture as an indication of disagreement.

Although both fragments 1 and 2 show D using a physical action to indicate disagreement, fragment 1 does not seem to be satisfactorily resolved, as D is unable to express the clarification she wishes to make verbally and is misinterpreted. In contrast, fragment 2 shows a more successful conversation in which D is able to verbally articulate the correction she wishes to make. This may seem to indicate that D is more competent in her communication with T in fragment 2. However, the linguistic complexity of the clarifications needed differ greatly, from a complicated explanation of subtle differences in gesture for fragment 1 to simply giving an alternative colour in fragment 2.

It is not only indicating disagreement and repairing breakdown that D struggles with. In fragment 3, we see an example of a conversation breakdown caused by D's reluctance to indicate to T that she has not understood. She does not make a clarification request until T asks a direct question and points to her, then she is forced to indicate her misunderstanding. When she eventually indicates it and T attempts to repair the sequence, it is unclear whether repair has been successful. According to research by Jeanes et al (2000), general requests for clarification are the first to emerge. When D does request clarification in this sequence, it is a general request, and although she does make a vocalisation, the request is non-verbal indicated by raising her hands with her palms upwards and shaking her head.

**Fig.5 Excerpt from fragment 3**

015	T2	= with you? ((points to D))
-----	----	-----------------------------

016	D	[uh ]	D holds gaze. looks confused and raises both hands palms upwards. shaking head
-----	---	-------	--

Arnold (1999) noted that requests for clarification are less common in deaf children than their hearing peers. One of the reasons he suggested for this phenomenon was a reluctance to indicate misunderstanding in conversation because the deaf child assumes the breakdown is due to them rather than their conversation partner.

The video segment from which fragment 4 is taken was recorded when D was aged 6;4. By this time we would expect her conversational skills to have matured somewhat. According to Jeanes et al (2000), conversational maturity is reached at about 8 or 9 years in typically hearing children, but no normative data is available for the deaf population. As deaf children's spoken language skills are often delayed, on average achieving 8-9 year-old norms on leaving school aged 16 (Wood et al, 1982), we would expect conversational maturity to be reached later in deaf children. Nevertheless, it is evident from the data in fragment 4 that D's communication skills are more sophisticated than in previous fragments. Here we see evidence of her use of extension, clarification of her own utterances and specific requests for clarification from T.

We can see how her requests for clarification have developed. Where in fragment 3, D was only able to indicate her misunderstanding non-verbally, in this fragment she uses the same non-verbal request but accompanies it with a verbal question as a specific clarification request:

**Fig.6 Excerpt from fragment 4**

051	D	cot or box ((questioning gesture both palms upwards and shrugs))	
052	T2	I think it's called a cot. Has it got bars on it?	draws bars in the air with hands

Using a specific clarification request rather than a general one shows a development in D's language skills beyond expectations, as early studies of normally hearing children found that requests for clarification are mostly general until a child reaches 9 or 10 years old, at which point they become specific (McTear, 1985, Ironsmith & Whitehurst, 1978).

There remains a strong tendency for D to use gesture and physical action to extend and clarify her utterances, but she is able to do this verbally as well, as shown in the extract below where D verbally describes the motion of the cot and physically represents it:

**Fig.7 Excerpt from fragment 4**

055	T2	mm it's called a cot	
056	D	and it waves	D rocks from side to side with arms out
057	T2	oh a crib. a crib yeah [and y]ou can rock it backwards	
058	D	[ mm ]	
059	T2	and forwards yeah it's called a crib or a cot	

The repair sequences in fragment 4 are managed competently by D and misunderstandings are resolved satisfactorily. This suggests that D has matured in her conversational competence and her repair strategies have become more sophisticated. This links with the development of normally hearing children whose skills in repair become more sophisticated during their school years (Brinton & Fujiki, 1989, McTear & Conti-Ramsden, 1992)

#### 4.2 Teachers' strategies for managing repair

The way in which teachers interact with children has been shown to have an effect on child language development (Wood et al, 1982) (see literature review for details), therefore we would expect that the strategies they employ when there is a breakdown in communication will have an effect on how the child responds and how the breakdown is resolved. For example, an early study by Cazden (1965) (in Marschark & Spencer, 2006) demonstrated that correct grammatical expansions of a child's utterances are less effective than semantically and contextually appropriate expansions. Similarly, different

types of response to conversation breakdown can have different effects. Whilst negative responses can be damaging to a child's confidence in conversation (Saxton, 1997), responses that provide specific feedback to the child can support them in developing conversational skills (Ridley, Radford & Mahon, 2002).

Previous research by Gardner (2006) has indicated that the behaviours of adult SLTs has a great impact on the language development of the child, who must be provided with information that he/she can respond to in subsequent turns, such as cues, prompts and models. If these are not provided, the impact can be negative for the child's next try.

The strategies used by the SLT and teacher in this study will be discussed here. Due to the fact that two different adults participated, it is not possible to comment on the development of strategies over time. It is possible however to comment on the general strategies used by the SLT or teacher in each video recording and how these may affect the repair sequences analysed.

Fragment 1 is an example of a repair sequence in which the breakdown is not satisfactorily resolved for both participants. The SLT in fragment 1 does not immediately try to repair the breakdown that occurs surrounding an ambiguous gesture in a photograph. It could be argued that this strategy allows D more control in the conversation, as she is given time to respond and T does not use questions to prompt a clarification. Since a less controlling approach has been seen to encourage contributions from children (Tizard & Hughes, 1984, Bishop & Gregory, 1985), this strategy could allow D freedom to express her agreement or disagreement with T's suggestion. Alternatively it could be argued that the repair would have been more successful if T had requested clarification earlier and further breakdown would have been prevented. Ridley et al (2002) argue that repair offers an opportunity for the teacher to help the child and that lack of repair can mean that the child does not receive this help:

“Failure to repair not only risks confusion between the teacher and the child, but represents a lost opportunity for this contingent support.”<sup>1</sup> p57.

If T had requested clarification from D earlier, rather than rephrasing her own utterance, it might have been easier for D to indicate her disagreement with support from T. Equally, if her clarification request had been specific rather than general, e.g “yes or no?” rather than just “no?” which can be misinterpreted, this would have provided a model for D to give a clearer response. However, as the idea that D was trying to express was a fairly complex one, and potentially beyond her linguistic ability to explain (as discussed above) the breakdown might have proved difficult to repair regardless of the strategy used by T.

A different strategy is used by the teacher in fragment 2 to elicit disagreement and clarification from D. T gives incorrect information which does successfully elicit a physical and verbal disagreement from D, however following this, similar to the SLT in fragment 1, T does not use a specific request for clarification. Nonetheless D is able to clarify in this instance, perhaps because of the simpler language required for this clarification rather than any strategy used by T.

In fragment 3 we see how T does use specific clarification requests. D consistently responds non-verbally (by nodding) to early questions in the sequence, but then exhibits uncertainty, exposing a possible misunderstanding.

**Fig.8 Excerpt from fragment 3**

007	T2	and Diana?
008	D	((nods))
009	T2	What about Oscar?
010	D	Oscar ((turns head away, beginning of headshake))
011	T2	Oscar goes shopping ?(.) Does he go shopping?

<sup>1</sup> Ridley, J., Radford, J. and Mahon, M. (2002) How do teachers manage topic and repair? *Child Language Teaching and Therapy* **18**, 1 43-59

T uses a series of questions to try to repair this misunderstanding, yet we can see how, even with the specific clarification requests used and the modelling by T to support D in an answer, D does not clearly demonstrate understanding, therefore it is unclear whether the repair has been successful.

From these three fragments we can see that although different strategies were used by the SLT and teacher, repair was only clearly successful when the language required for repair was simple enough for D to use, despite T's attempts to provide scaffolding for the child when the language was more challenging (fragment 3). In fragment 4 where D is 22 months older and more skilled in conversation, repair is much more successful. We must therefore pose the question; is the success of repair dependent on the conversational competence of the child rather than the strategies used by the teacher? It is evident from the data that this sequence of conversation is a much more balanced conversation in which teacher and child work collaboratively to achieve understanding. T is able to support D in her description of where Marian sleeps and provide a model of the words 'cot' and 'crib' along with non-verbal models of the shape of the crib and the bars on it, without dominating or controlling the interaction. T also gives specific feedback to D about the information that is unclear, helping her to clarify her description (lines 045, 047, 049 and 052). This sequence in fragment 4 relates to Vygotsky's zone of proximal development (Vygotsky, 1962), as the teacher is facilitating D's language learning by providing language ahead of the child's development (e.g. 'cot' and 'crib') with support for the child to be able to integrate this language into her own vocabulary. Although D does demonstrate more sophisticated conversational skills, the type of response used by T is integral to the success of the repair sequence.

#### 4.3 Conclusion

The use of conversation analysis has allowed the researcher to identify the ways in which a deaf child's strategies for repair change as her conversational competence develops over time, and some evidence of the ways in which her SLT or teacher can support these repair strategies.

The findings of the analysis indicate that as her language skills are developing, D uses non-verbal signals as strategies in conversation to indicate disagreement, initiate repair and request clarification. She attempts to use physical actions as a means of disagreeing and initiating repair before she has the language skills to achieve this verbally. Interestingly though, this is never recognised as an initiation of repair by a conversation partner, it is only through close analysis of the data that it becomes evident that this is a specific strategy used by D. She uses facial expression and gestures, which are successful in prompting a clarification from her conversation partner.

At age 6;4, when she has developed the communicative competence to achieve these skills verbally, a strength shown by D is her use of non-verbal actions or gestures to accompany her spoken language. As deaf children's spoken language can be less intelligible than that of hearing children this strategy is an effective means of supporting speech. For D, the non-verbal actions have developed from being an easily misinterpreted means of communication to being a useful strategy to support and clarify spoken language.

By age 6;4, D is exhibiting a mature conversational style and is able to use some strategies that research has shown to be typical of older children in a normally hearing population, such as specific requests for clarification. She can competently extend her utterances and when breakdown occurs, she and the teacher are able to collaboratively solve the breakdown satisfactorily for both participants.

A further conclusion that can be drawn is that a deaf child can be supported in developing the skills used to repair conversation breakdown by the conversation partner she interacts with, although it seems from the evidence in this study that this takes place when the child is developmentally ready to acquire these skills and may not be effective before this. Both adults in this study use strategies which aim to facilitate the repair sequences and provide models, cues and prompts for D. The most effective strategies used are detailed below.



A particularly effective strategy used here is that of non-verbal cues. Facial expression, body movements and gesture are used by the SLT and teacher when attempting to repair breakdown in conversation. The use of non-verbal modalities is seen as essential by some researchers because of the amount of additional information it gives to the child (Harris, 2000) This non-verbal information accompanies speech rather than replacing it, therefore giving the deaf child additional cues to respond to.

Another strategy that has been shown to be effective is providing the child with specific feedback, as can be seen in fragment 4. This enables the child to understand the trouble source in the conversation and clarify as necessary with support. When specific feedback is not provided, it can cause confusion between participants as seen in fragment 1.

The identification of these strategies for repair through the use of conversation analysis may be useful to teachers and other adults engaging in dyadic talk with a deaf child when deciding how to manage misunderstandings or communication breakdowns.

9564 words

## **References**

- Arnold, P., Palmer, C. and Lloyd, J. (1999) Hearing impaired children's listening skills in a referential communication task: an exploratory story. *Deafness and Education International*, **1**; 47-55
- Baker, C. (2000) *The Care and Education of Young Bilinguals. An Introduction for Professionals*. Clevedon: Multilingual Matters
- Beattie, R.G., Kysela, G.M. (1992) A descriptive study of communication breakdowns and repairs in preschool children with hearing impairments. *Association of Canadian Educators for the Hearing Impaired*, **18**; 7-22
- Beeke, S. and Wilkinson, R. (2000) Instructions for CA transcription  
<http://www.ucl.ac.uk/HCS/current-students/resources/trnscrpt.doc>
- Bishop, J. and Gregory, S. (1985) Mothers and teachers looking at books with deaf children. *Child Language, Teaching and Therapy* **1**; 149-161
- Blamey, P.J., Sarant, J.Z., Paatsch, L.E., Barry, J.G., Bow, C.P and Wales, R.J (2001) Relationships among speech perception, production, language, hearing loss and age in children with impaired hearing. *Journal of Speech, Language and Hearing Research*, **44**; 264-285
- Brinton, B., and Fujiki, M (1989) *Conversational Management with Language-Impaired Children: Pragmatic Assessment and Intervention*. Rockville MD: Aspen
- Cazden, C. (1965) *Environmental Assistance to a Child's Acquisition of Grammar*, Unpublished PhD dissertation, Harvard University, School of Education
- Cross, T.G., Nienhuys, T.G., & Kirkman, M. (1985). Parent-child interaction with receptively disabled children: Some determinants of maternal speech style. In K.E. Nelson (Ed.) *Children's Language*. Hillsdale, NJ: Lawrence Erlbaum
- Crutchley, A., Conti-Ramsden, G. and Botting, N (1997) Bilingual children with specific language impairment and standardised assessments: preliminary findings from a study of children in language units. *International Journal of Bilingualism*, **1**; 117-134
- Fairclough, N. (2003) *Analyzing Discourse: Textual analysis for social research*.
- Gallaway, C. and Richards, B.J.(Eds) (1994) *Input and interaction in language acquisition*. Cambridge: University Press
- Gardner, H., 2006, Training others in the art of therapy for speech sound disorders: an interactional approach. *Child Language Teaching and Therapy*, **22,1**; 27-46

- Ghuman, J.K., Peebles, C.D., & Ghuman, H.S. (1998) Review of social interaction measures in infants and preschool children. *Infants and Young Children* **11**; 21-44
- Harris, M., (2000) Social interaction and early language development in deaf children. *Deafness and Education International*, **2, 1**; 1-11
- Hutchby, I., and Wooffit, R. (1998) *Conversation Analysis. Principles, practices and applications*. Cambridge: Polity Press
- Ironsmith, W., and Whitehurst, G. (1978) The development of abilities in communication: How children deal with ambiguous information. *Child Development*. **49**; 348-352
- Jeanes, R.C., Nienhuys, T.G.W.M., and Rickards, F.W. (2000) The Pragmatic Skills of Profoundly Deaf Children. *Journal of Deaf Studies and Deaf Education* **5, 3**; 237-247
- Labov, W. (1972), *Sociolinguistic Patterns*, Philadelphia: University of Pennsylvania Press
- Lederberg, A.R and Everhart, V.S. (1998) Communication between deaf children and their hearing mothers: the role of language, gesture, and vocalizations. *Journal of Speech, Language and Hearing Research* **41**; 887-899
- Lederberg, A.R. and Everhart, V.S. (2000) Conversations between deaf children and their hearing mothers: pragmatic and dialogic characteristics. *Journal of Deaf Studies and Deaf Education*, **5, 4**; 303-322
- Ling, D. (1990) Advances underlying spoken language development: A century of building on Bell. *Volta Review*, **92, 4**; 8-20
- Lloyd, J. (1999) Hearing-impaired children's strategies for managing communication breakdowns. *Deafness and Education International*, **1, 3**; 188-199
- Lloyd, J., Lieven, E. and Arnold, P. (2001) Oral conversations between hearing-impaired children and their normally hearing peers and teachers. *First Language*, **21**; 83-107
- Mahon, M (1997). *Conversational interactions between young deaf children and their families in homes where English is not the first language*. Unpublished PhD thesis, University College London
- Mahon, M. (2003) Conversations with young deaf children in families where English is an additional language. In Gallaway, C., and Young, S.A (Eds) *Deafness and Education in the UK: Research Perspectives*. London: Whurr

- Marschark, M., and Spencer, P.E., (2006) *Advances in the Spoken Language Development of Deaf and Hard-of-Hearing Children*. New York: Oxford University Press
- Maynard, D. and Heritage, J. (2005) Conversation Analysis, doctor-patient interaction and medical communication. *Medical Education* **39**; 428-435
- Mc Tear, M. (1985) *Children's Conversation*. Tonbridge: Basil Blackwell
- McTear, M.F. and Conti-Ramsden, G. (1992) *Pragmatic Disability in Children*. London: Whurr
- Most, T., Weisel, A., and Lev-Matezky, A. (1996) Speech intelligibility and the evaluation of personal qualities by experienced and inexperienced listeners. *Volta Review*, **98, 4**; 181-191
- Nicholas, J.G. and Geers, A.E. (2006) Effects of early auditory experience on the spoken language of deaf children at 3 years of age. *Ear and Hearing* **27, 3**; 286 - 298
- Peal, E. and Lambert, W.E. (1962) The relationship of bilingualism to intelligence. *Psychological Monographs*. **76, 27**; 1-23
- Radford, J. and Tarplee, C. (2000) The management of conversational topic by a ten year old child with pragmatic difficulties. *Clinical Linguistics & Phonetics*, **14, 5**; 387-403
- Radford, J. (2004) *Collaboration in topic and repair: developing language skills in SLI classrooms* Unpublished PhD thesis, London
- Radford, J., Ireson, J. and Mahon, M (2006) Triadic dialogue in oral communication tasks: what are the implications for language learning? *Language and Education*, **20, 3**
- Ridley, J., Radford, J. and Mahon, M. (2002) How do teachers manage topic and repair? *Child Language Teaching and Therapy* **18, 1**; 43-59
- Sacks, H., Schegloff, E.A. and Jefferson, G. (1974) A simplest systematics for the organisation of turn-taking in conversation. *Language*, **50, 4**; 696-735
- Saxton, M. (1997) The contrast theory of negative input. *Journal of Child Language* **24**; 139-161
- Shatz, M (1995) *A Toddler's Life: Becoming a Person*. New York: Oxford
- Tizard, B., and Hughes, M. (1984). *Young children learning*. London: Fontana
- Vygotsky, L.S. (1986) *Thought and Language*. Cambridge, MA: MIT Press

Wood, D. (1998) *How children think and learn: the social contexts of cognitive development*. Oxford: Blackwell

Wood, D.J., Wood, H.A., Griffiths, A.J., Howarth, S.P., and Howarth, C.I. (1982). The structure of conversations with 6-10 year-old deaf children. *Journal of Child Psychology and Psychiatry*, **23**; 295-308

## **Bibliography**

Dalton, A. (2004) *An investigation of how a young deaf child develops aspects of spoken language during interactions with her teacher in the first year of school*. MSc Project, University College London

Lartz, M.N. (1993) A description of mothers' questions to their young deaf children during storybook reading. *American Annals of the Deaf* **138, 4**; 322-330

Miles, S. (2004) *An investigation into the application of Conversation Analysis in the design and evaluation of a training programme for teaching assistants working with secondary school age children with speech, language and communication needs*. MSc Project, University College London

Musselman, C. and Hambleton, D. (1990) Creating classroom conversations with deaf children. *Association of Canadian Educators of the Hearing Impaired* **16, 2/3**; 68-90

Passingham, S (2005) *An investigation of reformulation in the follow up turns of two teachers' interactions with a deaf child*. MSc Project, University College London

Tait, M., Lutman, M.E. and Nikolopoulos, T.P (2001) Communication development in young deaf children: review of the video analysis method. *International Journal of Paediatric Otorhinolaryngology*. **61**; 105-112

Weisel, A., Most, T. and Efron, C. (2005) Initiations of social interactions by young hearing impaired preschoolers. *Journal of Deaf Studies and Deaf Education*. **10,2**; 161-170

Wilkinson, R. (2004) Reflecting on talk in speech and language therapy: some contributions using conversation analysis. *International Journal of Language and Communication Disorders*. **39, 4**; 497-503

Wood, D.J, Wood, H.A., Griffiths, A.J. and Howarth, C.I. (1986) *Teaching and Talking with Deaf Children*. Chichester: Wiley

## Appendix I

### Instructions for Conversation Analysis Transcription

#### **INSTRUCTIONS FOR CA TRANSCRIPTION**

Suzanne Beeke/Ray Wilkinson, Human Communication Science, UCL  
2000

##### **Word processing**

It is recommended that you word process your transcript using Microsoft Word, Times New Roman font 10, combined with an IPA font for phonetic transcription. A *standard transcription template* has been designed to provide a format for your transcript. This template is available on disc (format shown on page 5). You may wish to develop your own layout if you have data which does not lend itself well to this format.

Save all transcripts to disc. The suggested format for naming a transcript document is:  
[subject initials] [date of data collection] #[transcript version number]

For example:

DM 140298 #4

Always make backup copies of your files.

##### **Using the standard transcription template**

At the beginning of the transcript you need to supply brief information on the subject, the nature of his or her language difficulties, the length of the transcribed sample and the name of the transcriber. The standard transcription template suggests information for inclusion in [square brackets] (see page 5). Consult the person who collected the data if you do not have the information required.

*Do not alter the format of the transcription template in any way.*

The transcription is then typed into a *table*, which has six columns (standard format shown on page 5). The table is merely an aid to transcription - the lines are not visible when the transcript is printed out.

##### *Column 1: Counter time*

Enter counter time of the *first* line of talk in hours, minutes and seconds (for example if starting 2 hours 45 minutes and 16 seconds into the video recording then enter '02:45:16' in the first line of the first column). Then mark every subsequent minute ('02:46:00', '02:47:00', '02:48:00' etc). Mark the exact time at the end of the transcript (eg. if you transcribe through to 2 hours 55 minutes and 34 seconds then enter '02:55:34' next to the last line of talk). Calculate the total length of the transcript in minutes and seconds and enter into the information at the top of the transcript (eg. 'transcribed sample length 10 minutes 18 seconds'). Add the start and stop counter times in hours, minutes and seconds

to the information at the top of the transcript ('counter times: start 02:45:16 stop 02:55:34').

*Column 2: Analysis marker*

Used to mark lines of talk which you refer to in your analysis with an arrow symbol:

→

You are unlikely to have any arrows in this column until you have analysed the data.

*Column 3: Line number*

Enter the line number as three digits, starting at '001' on the first line of this column, unless instructed otherwise. Number each line. Count upwards in ones. There should only be *one* number per box in this column (see '*Common Transcription Errors*', pages 8-9).

*Column 4: Speaker identifier*

Enter the pseudoinitials of the first speaker in the first line of this column. From then on enter pseudoinitials only when the speaker *changes from one to the other* (leave other lines blank so it is obvious where the same speaker *continues* over several lines of talk).

Where a pause occurs which does not 'belong' to a particular speaker, *do not* put any initials in the speaker identifier column (see '*Transcription of Pauses*', page 3). Leave it blank. Make sure to enter initials in the line directly after one of these types of pause, to show which speaker has taken up the next turn, even if it is the same speaker who took the turn prior to the pause.

*Column 5: Talk*

Each line of talk must occupy a *separate* box of this column. If type is longer than one line (ie. you can see the size of the box is now bigger than the others) then cut and paste any extra text into successive boxes (see '*Common Transcription Errors*', pages 8-9). You should also type into this column a *succinct* gloss of any relevant non-verbal behaviours which can be seen to be referred to or acted on in subsequent turns. (eg. gesture, eye contact). The gloss should be typed ((inside double brackets)) and should be situated directly *below* the talk that it accompanies, with large brackets used to indicate exactly where the non-verbal behaviour occurs during the talk:

<i>column 5</i>
talk
[(non-verbal behaviour)]

A gloss of non-verbal behaviour is the only text which is typed in the *same box* of column 5 as the talk it accompanies. Therefore, it *shares* a line number with the talk, and does *not* have a line number of its own (see '*Common Transcription Errors*', pages 8-9). The procedure for transcription of non-verbal information differs in this way from the transcription of overlapping talk (see '*Transcription of Overlapping Talk*', page 3).

*It is absolutely vital that your transcription of a speaker's talk is accurate, and that it captures the sequential aspects of the talk, ie. how each piece of talk is related to what has gone before it, and what comes after it. In order to do this you will need to listen to*



multiple replays of every utterance you transcribe in order to satisfy yourself that what you have typed is an accurate representation of what is said. If you cannot make sense of what is said consult your supervisor, or someone who knows the data well.

Your analysis and conclusions will be invalid if your transcription is inaccurate.

#### Column 6: Notes

Add notes on any non-verbal or descriptive aspects of the interaction which you don't wish to put in the main transcription in column 5. Column 6 can also be used to add notes on analysis of data.

#### Transcription of Overlapping Talk

You should pay particular attention to *accurate* transcription of overlapping talk. Align one speaker's overlapping talk *below* the other speaker's talk, with large brackets used to indicate exactly which sections of talk overlap:

<i>column 5</i>	
speaker one's	talk
speaker two's talk	

Each speaker's talk should occupy a *separate* box of column 5 (see 'Common Transcription Errors', pages 8-9).

#### Transcription of Pauses

Pauses are always typed as numbers in (single brackets). Use a stopwatch to measure pauses to the nearest tenth of second, eg. (0.8) equals eight tenths of a second, (1.5) equals one and a half seconds. Pauses of less than or equal to a tenth of a second, ie. (0.1) or less, should be transcribed as a full stop in single brackets (.)

Pauses in talk fall into three categories, and should be positioned accordingly:

##### *A word-search pause*

This is a break in a stream of talk where the speaker is searching for a word or formulating the rest of their utterance. It is usually easy to identify a word-search pause as it often breaks up the syntax of an utterance, and co-occurs with fillers such as 'er' or 'um':

	001	A	he'll stand there >he'll say< oh er (0.3) he'll say right	<i>word search pause of (0.3) seconds</i>
	002		eh (.) who's gonna (0.4) cu- eh (0.3) carve the eh (.) the	<i>word search pauses of varying lengths</i>
	003		ha- eh (0.2) <u>ham</u>	<i>word search pause of (0.2)seconds</i>
	004	C	°heh heh°	

### *An attributable pause*

This is a pause which *belongs* to a particular speaker. It occurs when the prior talk sets up the *expectation* of a certain response, for example a prior question expects an answer, but instead of the required response there is a pause. Attributable pauses can be identified by their occurrence after the first part of such 'paired' utterances as 'question-answer' and 'greeting-return greeting', and they often signal that the next speaker has some 'trouble' with the second part of the pair. It is common to see the initial speaker deliver the first part of the pair *again* after an attributable pause, possibly by rewording it (in the following example R clarifies the question asked in line 001 by adding more information in line 003, after perceiving that A's attributable pause indicates that she has not *understood* the question):

			<b>4</b>		
		001	R	so wha- what have you been doing	<i>question expects answer</i>
		002	A	(0.6)	<i>pause attributable to speaker A</i>
		003	R	at the centre when you go	<i>R clarifies question</i>
		006	A	(1.0)	<i>pause attributable to speaker A</i>

Note: An attributable pause **MUST** have a speaker label in column 4 to indicate which speaker it belongs to.

DO NOT confuse attributable pauses with word search pauses. An attributable pause occurs at the *completion point* of a turn, where it is clear that the next speaker should take the conversational floor (the prior utterance is complete and can stand alone). However, a word search pause occurs in the middle of a turn which the speaker will continue with, once the word has been found. The next speaker has not yet been selected to take the conversational floor, and if she or he was to do so, it would be deemed an *interruption* of the first speaker.

### *A lapse in conversation*

Some pauses occur where there is no expectation that either speaker will talk, and where the conversation has temporarily 'dried up'. These are lapses. They often appear prior to a change in topic, as in lines 007 and 011 below:

			<b>4</b>		
		001	C	you had your light trousers and your white shirt	
		002		with yer sleeves (0.4) rolled up	
		003	A	<u>ohhh</u> yeah	
		004	C	he said oh what are we this- oh yeah bowls umpire	
		005	A	bowls yeah	
		006	C	he says huh huh huh	
		007		(2.5)	<i>lapse</i>
		008	A	's one o' those things I 'spose there's one thing er: (.)	
		009		<u>casual</u> and <u>bowls</u> at the same time	

	010	C	hehehehehheh	
	011		(2.0)	<i>lapse</i>
	012	C	mind you w- we never <u>did</u> go an' find out about the	<i>new topic</i>
	013		bowlin' did we	

Note: lapses DO NOT need a speaker label in column 4. Leave the box blank.

DO NOT confuse lapses with attributable pauses. Lapses do not occur after questions, or after any other utterance which sets up the expectation of a particular response.

### Standard transcription template

---

#### SUBJECT [pseudo-initials]

transcript version [no.]

subject with [language difficulty] in conversation with [person, pseudo-initials] [location]

sample date [month, year]

transcribed sample length [minutes seconds]

counter times: start [hh:mm:ss] stop [hh:mm:ss]

**All initials, names and places are pseudonyms**

column 1    2 3        4                            5    6

counter time	line no.	speaker	talk	notes
--------------	----------	---------	------	-------

hh:mm:

ss

## Symbols

The following symbols can either be found on the keyboard, or accessed as follows:- choose *insert* menu: choose *symbol* to access 'symbol' window. To access an IPA font enter *insert* menu, choose *symbol* to access the window, and then click on *font* arrow to select the IPA font of your choice.

[ a large left-hand bracket links an ongoing utterance with an overlapping  
utterance or non-verbal action at the point where the overlap/simultaneous non-  
verbal action begins

] a large right-hand bracket marks where overlapping utterances/simultaneous  
non-verbal actions stop overlapping

eg. 01 PR how have you been since I last saw [you]  
02 AM [not ] so [good  
[ ((AM shakes head)) ]

= an equals sign marks where there is no interval between adjacent utterances

e.g. 01 DG did he really say that?=  
02 FB =yes

(.) a full stop in single brackets indicates an interval of tenth of a second or less in  
the stream of talk

oh: a colon indicates an extension of the sound or syllable it follows (more colons  
prolong the stretch)

. a full stop indicates a stopping fall in tone, *not necessarily the end of a  
sentence*

, a comma indicates a continuing intonation

? a question mark indicates a rising inflection, *not necessarily a question*

! an exclamation mark indicates an animated tone, *not necessarily an  
exclamation*

but- a single dash indicates a halting, abrupt cut off to a word or part of a word

↑↓ marked rising and falling shifts in intonation are indicated by upward and  
downward pointing arrows immediately *prior* to the rise or fall

stress underlining indicates emphasis

°no° degree signs indicate a passage of talk which is *quieter* than surrounding talk

TALK capital letters indicate talk delivered at a *louder volume* than surrounding talk

h,heh indicates discernable aspiration or laughter (the more hs the longer the

hah aspiration/laughter)

fu(h)n an h in single brackets marks discernable aspiration or laughter *within* a word in an utterance

°h discernable inhalation (the more hs the longer the inhalation)

>talk< lesser than/greater than signs indicate sections of an utterance delivered at a *greater speed* than the surrounding talk

[ yes text in double brackets represents a gloss or description of some non-verbal  
L((nods))aspect of the talk, and is linked to the relevant section of talk with large  
brackets (see above)

(1 syllable)

(dog) single brackets containing either a word, phrase, or syllable count (if utterance is very unclear) mark where target item(s) is/are in doubt

/δOδ/ transcribe paraphasias and jargon between slashes, using an IPA font. Check with your supervisor about which vowel transcription system to use.

----- a broken underline in *bold* indicates speaker's gaze is directed at listener (place on *separate line directly below* relevant talk). Only note eye gaze if (a) it seems particularly relevant/important to the interaction, or (b) you are particularly interested in analysing it.

e.g. 01 IB did you hear about John?

02 JM no (.) what? -----

→ an arrow in *column 2* alerts the reader as to which line contains the issue discussed in the analysis

### Common transcription errors

#### *Positioning of non-verbal information*

Non-verbal text is always positioned in the same box of the table as the talk it accompanies. This is to allow the comment box in column 6 to expand down the page to accommodate sometimes lengthy analysis notes (as in the examples below) *without* causing a large gap to form between the talk and the non-verbal text.

DO type the text in the *same box* of column 5 as the talk it accompanies. For example:

			<i>column 5</i>	<i>column 6</i>
	001	A	(I know it) aint what (you're) supposed to do but (0.2)	
	002		even if the (.) [th'other way round (0.2) ] [((mimes sharpening knife))]	<i>note how ((non-verbal)) text is in same 'box' of the table as the talk, and shares the same line number as the talk (here, 002). This allows notes such as these to expand the table without 'splitting up' the text from the talk (see below)</i>
	003	C	mm	

DO NOT type the text in the next box below the talk. This example is *incorrect*:

	3		<i>column 5</i>	
	001	A	(I know it) aint what (you're) supposed to do but (0.2)	
	002		even if the (.) [th'other way round (0.2) ]  ↑ <i>this gap is incorrect</i>  ↓	<i>here the text is in the box below the talk – this is incorrect as it causes notes in column 6 such as these to 'split up' the non-verbal text from the talk</i>
	*		[((mimes sharpening knife))]	
	003	C	mm	

If you put the text in a separate box you will find you have an *empty box in column 3*, the line number column, as in this example (see the asterisk\*). This is incorrect. Non-verbal text never needs a line number if it is positioned correctly.

#### *Positioning of lengthy sections of talk*

Each line of talk must occupy a separate 'box' of column 5. If the type is longer than one line (ie. you can see the size of the box is now *bigger* than the others) then cut and paste any extra text to the next box.

DO arrange talk to 'fit' neatly into each box. For example:

		4	<i>column 5</i>	
	001	A	yeah (0.5) somewhere out there it's all er at least at the	<i>each box only holds</i>
	002		moment if it's here you can put the big /κεφ≡λ/	<i>as much talk as it</i>
	003		put the big /κςφ≡λ/ (0.3) coffee >in the middle<	<i>has room for on ONE</i>
	004	C	heh heh heh	<i>line</i>

Note, it does not matter *where* in the utterance you choose to split the talk, so long as each bit fits neatly onto one line. As a result, the example above would *also be correct* if

the talk had been split up as below. Note that it is now *four* lines long (001 to 004) rather than three:

			4	column 5	
		001	A	yeah (0.5) somewhere out there it's all er at least	
		002		at the <u>moment</u> if it's here you can	
		003		put the big /κεφ≡λ/ put the big /κςφ≡λ/	
		004		(0.3) coffee >in the middle<	
		005	C	heh heh heh	

Note that it is only necessary to indicate the speaker at line 001, here speaker A. It is then *implicit* in lines 002, 003 and 004 that speaker A *continues* to talk. The next thing which needs to be marked in column 4 is the *change* of speaker, shown above at line 005 as a change to speaker C.

DO NOT allow talk to enlarge the boxes of column 5, as shown below:

				column 5	
		001	A	yeah (0.5) somewhere out there it's all er at least at the <u>moment</u> if it's here you can put the big /κεφ≡λ/ put the big /κςφ≡λ/ (0.3) coffee >in the middle<	<i>the box in column 5 has expanded to accommodate the talk – this is incorrect</i>
		002	C	heh heh heh	

Also, DO NOT put multiple line numbers in the same box of column 3, as shown here:

		3		column 5	
		001	A	yeah (0.5) somewhere out there it's all er at least at the <u>moment</u> if it's here you can put the big /κεφ≡λ/ put the big /κςφ≡λ/ (0.3) coffee >in the middle<	
		002			
		003			
		004	C	heh heh heh	

### Positioning of pauses

A speaker's pauses are *never* transcribed where they overlap with the other speaker's talk. A transcription is designed to convey the sequence of talk, and since it is the case that talk from one speaker most commonly occurs whilst the other speaker is pausing, it is not necessary to transcribe this pause. It is implied by the sequence of the transcript. The following is an example of this unnecessary inclusion of pauses, and is *incorrect*:

				column 5	
		001	A	guess h- d' you know who I saw yesterday	
		002	B	[oh not Jane!]	
		003	A	[(0.6) ] yep (.) what a nerve	<i>this pause is assumed as A is silent whilst B talks, and it is therefore unnecessary to show it</i>
		004	B	[heh heh] [heh]	

		005	A	[ (0.4) ] [ god ] (.) what is she up to?	<i>this pause is assumed as A is silent whilst B talks, and it is therefore unnecessary to show it</i>
--	--	-----	---	--	--

The correct transcription format is:

<i>column 5</i>				
		001	A	guess h- d'you know who I saw yesterday
		002	B	oh <u>not</u> Jane!
		003	A	yep (.) what a nerve
		004	B	heh heh [ heh ]
		005	A	[ god ] (.) what is she up to?







	038	D	yeah	
	039	T	no, [where's Diana? [((holds RH palm up))]]	both look at book
	040	D	uh /ma/ [ /ba/ one ] ((pointing to photo))	D looks at T
00:01:04	041	T	[where is she?]	Eye contact maintained
	042		were you [on the bus?] Diana was already on the bus? [((points)) ]	
	043	D	[Diana not here= [((shakes head and holds both hands palms upwards))]]	
	036	T	[=Oh. Diana was there!] [((nods head)) ]	
	037	D	[ /ea/ [((gestures with RH in downwards motion))]]	
	038	T	I think you were hiding.	both look at book
	039		(2.3)	
	040		I think you were [over here. ] [((points to a picture))]	
	041	D	No! ((shakes head and holds both hands palms upwards))	D looks from book to T
	042	T	hiding.	
	043	D	[ /me aba/ (.) look. Where she gone ] [((gesture with both hands, palms upwards))]	D looks back at book
	044	T	[Where's she gone? Where is Diana? Diana. ]Where are [((RH palm upwards bangs on table)) ]	D looks at T then back at book
	045		you.	
	046	D	[off off off! [((hand moving up neck towards head with each word)]]	D looks at T
	047	T	I think you might be [here. ] [ ((pointing to picture))]	T looks at book
	048	D	off off! ((same gesture as previous turn))	D and T make eye contact
	049	T	you went to see the giraffe?	eye contact maintained
	050	D	off! ((same gesture again))	

00:01:54

051 T you took your [head off? ] D'you think?  
 [((touches neck))]

052 D ((D nods)) off.

053 T oh no! ((D makes cutting motion)) you cut it off!

054 D cut cut ((making cutting motion round neck))

055 T oh no! poor Diana. Diana, where were we going?

056 ((hold up picture)) Where did we go in the bus. We D looks at book then  
 back at T

057 went to the:: ((points to picture))

058 D /Nu/!

059 T to the zoo didn't we!

060 D /le le le/

061 T shall we have a look. Lets have a look

062 D ((D turns page, bangs book with hands))/berne/ look D looks at book then at T

063 T [There's ] Diana. You didn't have your head cut  
 [((points to D))]

064 off! Ha ha! [Silly. ] D looks at book and  
 [((LH downward gesture))]

065 D [Diana Barney ] ((gestures someone next to her))  
 [((hits book twice))]

066 Barney D looks at T

067 T Barney and Diana went together and did you [hold Eye contact maintained  
 [((makes

068 hands? ]  
 hand hoding gesture with RH))]

069 D ((nods))

070 T yes? D looks at book

071 D [Abraham! ] D looks at T  
 [((bangs book] then puts hand to head))]

072 T Where is Abraham, I don't know. Had we forgotten

073		him. [Look. What did we see here.] [((points to picture)) ]	D looks at book
074	D	Look! ((pointing to picture))	D looks at T
075	T	What was it? (.) [what is it ]	D looks at book
076	D	((bangs book)) [ /weh/ ] monkey	D looks at T
077	T	[one monkey. One monkey ] [((holding up 1 finger)) ]	
078	D	/weh/ monkey	D looks at book then at T
079	T	[where are the monkey's. ] [((raises RH palm upwards))]	
080	D	[ monkey monkey ] [((points twice)) ]	D looks at book
081	T	so how many monkey's have we got.	D looks at T then at book
082	D	MONKEY! ((raises palms upwards then hits them on book))	
083	T	[we're got one. two monkeys ] [((counting on fingers)) ]	
084	D	((turns page in album. bangs twice on table)) two	D looks at T
085	T	two what?	
086	D	[ monkey ] [((bangs once))]	D looks at book
087	T	yeah? =	
088	D	=one ((hold up one finger))	
089	T	how many have we got. Wh, what are, Diana. Diana.	
090		Look, [what are they ] [((points to book)) ]	D looks at T
091	D	monkey ((does monkey action))	D looks briefly at book
092	T	they're not monkeys!	D looks at T then at book
093	D	[elephant ] [ ((homesigns elephant))]	D looks at T
094	T	elephants! They've [ got big long trunks ] haven't they. [ ((gestures trunk)) ]	eye contact maintained

	095	Look. ((points))	D looks at book, T leans over and points at photo
	096	D ((turns the page then covers it up, then picks up book))	D looks at book
	097	T oh what can you see? What is it? Um let me guess,	D looks at T
	098	shall I guess.	eye contact maintained
	099	D /bengwen/	
	100	T Penguins! Were they? Ah!	T draws back in surprise. D glances at book
	101	D (( D raises R hand palm upwards)) [there. ] [ ((points)) ]	
	102	T did the penguin=	D looks at T
	103	D =(squeals) (( D points to several photos in book))	D looks at book
00:03:31	104	T tell us. What.	D looks at T
	105	D [ monkey ] ((bangs on table)) [ ((doing monkey action)) ]	
	106	T they're not monkeys	
	107	D /bengwen/	D looks at book
	108	T Penguins, yeah look	
	109	D /miau/	D looks at T then at book
	110	T he was an old penguin	both look at book
	111	D huh?	D looks at T questioningly
	112	T he was an old penguin	
	113	D /bengwe/ ((blows out cheeks)) /bengwen/ ((blows out 114 cheeks and holds hands out))	D looks at book then at T
	115	T yeah. He was a bit fat, wasn't he and a bit cold maybe.	eye contact maintained
	116	D ((turns page)) oh. [ Bye bye ] /nu/ [ ((waving)) ]	D looks at book
	117	T what did you say bye bye to?	D looks at T then at book

118	D	uh?	D looks at T
119	T	what did they say [bye bye ] to? [ ((waving)) ]	D looks at book
120	D	(squeals and points to book)	
121	T	what's this? ((points to picture))	
122	D	/bamu/	D looks at T
123	T	who?	
124	D	/bamu/ ((points to picture))	D looks at book
125	T	There were [two men (.) two men ] [ ((holding up 2 fingers)) ]	D looks at T
126	D	[/bamu/ /bamu/] [ ((points twice)) ]	D looks at book then at T
127	T	yeah and look (.) [no lions. Where were the lions?] No [ ((RH palm upwards)) ]	eye contact maintained
128		lions	
129	D	lion go [sleep [ ((sleeping homesign)) ]]	
130	T	we think maybe the lion went to [sleep]. Yes, he was [ ((sleeping homesign)) ]	
131		hiding	
132	D	lion [scare [ ((homesigns scared)) ]]	
133	T	yes.	
134	D	lion in there ((points to right))	D looks to her right
135	T	yes that's right	
136	D	[in there ] [ ((points to R)) ]	D looks back at T
137	T	I think so. I think he'd gone to bed. Was scared of you.	eye contact maintained
138	D	oh! [ :::::::::: ((makes scared face)) ]	
139	T	[ he said ooh Diana's scary. ] Diana's scary.	

	140	D	lion come on ((beckons)) oh! ((scared face))	D looks to the right then back at T
	141	T	she said come on lion ((beckons))	eye contact maintained
	142	D	[no! ] [(shakes finger)]	
	143	T	no?	
	144	D	((shakes head)) go! ((makes go away gesture))	
00:04:50	145	T	go away lion. What about this one though. What was	D looks at book
	146		that?	
	147	D	aiger! [(turns page)]	D looks at T
	148	T	[a tiger. Diana? ]Diana. Did you like the tiger=	D looks at book
	149	D	=/da/ ((imitates herself in the photograph and laughs))	D looks at T
	150	T	((looks at picture)) What were you doing? ((imitates	D looks at book with T
	151		D)) Diana! I think you were [waving ] at Mrs [(waves)]	D looks at T
	152		Flower. Did you say [“hello Mrs Flower”] [(waves) ]	D looks at book
	153	D	No ((gets up and imitates her pose in the picture, then laughs))	
	154	T	Very funny	
	155	D	[silly ]	
	156	T	very [funny very] silly. Look at Ellie, she’s being silly.	
	157	D	/ae/	D looks at T
	158	T	and is Batosh being silly? She’s hiding.	D looks at book
	159	D	((turns page and pulls a funny face))	D looks at T
	160	T	((points to picture)) he’s got a funny face! What’s this.	D looks at book
	161	D	/awa uh eni/ ((gesture with both hands palms up)) /lu/	
	162		((points to picture and homesigns food))	D looks at T
	163	T	what are you doing there Diana?	eye contact maintained



164 D ((shakes head))

165 T didn't like to eat. No. Come and sit down, sit down. D looks at book  
 [((touches chair)) ]

166 Look. Did you say oh I don't like this sandwich. It's D looks at T

167 not very nice.(( D shakes head)) Did you throw it away. eye contact maintained

168 D ((nods))

169 T did you. What about Joshua. ((T points)) D looks at book

170 D /obin/. ((gestures pulling something apart)) D looks at T

171 /obin/ (.) /bip/ ((points to herself then to book)) eye contact maintained

172 T Did you look for something else in your bag?What was

173 in there? What was in there.  
 [((points to picture))]

174 D there  
 [((points downwards))]

175 T what.

176 D lion

00:06:36 177 T where. In here? What was in there.  
 [((points to picture))]

178 D no lion. /donk/

179 T no, not::

180 D not lion, go sleep ((sleeping homesign))

181 T you think the lion was in your lunchbox?

182 D ah! ((nods and pulls scared face)) (squeals)

183 T no!

184 D yeah!

185 T d'you think he was going to eat you?  
 [((points to D))]

186 D yeah.

187 T really? Did he say I'm going to eat  
 [((brings hands

together))]

188 Diana for my dinner.

189 D no [eat eat, /mikhəl/  
 [((imitating T's gesture towards T twice)) ]

190 eat [you. ]  
 [((points to T))]

191 T he's gonna eat Miss Handel? I'll cry ((pretends to cry))

192 D ((turns page)) D looks at book

193 T oh you've missed a page, look you've missed a page, T leans over to help with  
 pages

194 lets go back, look what's this? ((turns pages back)) Not

195 that one ((turns forward a page)) this one. Come and sit D looks at T then at book

196 [down. ](2.4) [There's Diana ], she's riding:: both look at book  
 [((touches D)) ] [((points)) ]

197 D mia D looks at T

198 T on the deer, isn't she. D looks at book

199 D /dan/ ((raises both palms upwards))

200 T what's [Rosie riding ] on?  
 [((points)) ]

201 D Rosie D looks at T

202 T what's that one D looks at book

203 D [/fe/  
 [((homesign for fish))]

204 T a fish! And what's this one Joshua's on

205 D no! D looks at T then at book

206 T what's he riding both look at book

207 D Diana.

208 T ((looks at picture)) that's not Diana! What's this.  
 ((pointing))

209 D /ba ba ba/

	210	T	what about this one? ((pointing))	
	211	D	/babababa/ (.) /nawaba/ ((turns page)) (squeals)	looks at T as she squeals
	212		((points to picture. homesigns food)) /neu/ /miau/	eye contact maintained
	213	T	what did they [eat. ] what did they [((homesigns food))]	
	214		[eat. ] [((homesigns food))]	D looks at book
	215	D	no. elephant. /fe/ /miau/ ((points to picture smiling))	D looks up at T as she smiles
	216	T	who's that?	eye contact maintained
	217	D	[mummy ] [((pointing to self))]	
	218	T	[mummy? Is that mummy?] You look like your [((points to picture)) ]	T looks at book then at D
	219		mummy, do you?	D looks at book
	220	D	yellow ((pointing to picture))	
	221	T	that's Rosie's mummy's got [yellow, orange hair ] [((points to picture))]	D looks at T then at book
00:08:27	222		orange hair. ((pointing to picture))	D continues to look at book
	223	D	no that not, not Rosie! that /barne/	D looks at book then at T
	224	T	that's Rosie's mummy!	eye contact maintained
	225	D	yeah.	D looks at book
	226	T	look. What's this? ((points to photo))	
	227	D	do /uh/ oh! ((arms in the air gesturing bending over))	D looks up at T
	228	T	did it bend down and look at you=	T leans towards D bending down
	229	D	=big!= ((stands up with hand in air above her))	
	230	T	=it was very big!	T sits back D look sat book
	231	D	yeah. /bac/ go [bye bye! ] [((waving))]	





035	T	[Dia]na going shopping	T turns pages of book
036		(2.5)	
037	D	duh ((points to pages being turned and shakes head))	
038		no!	
039	T	no. (.) there, look	arrives a first page of story.
040	D	<u>sleeping</u>	looks to T
041	T	Diana's sleeping, think so, maybe she's tired	
042		(2.2)	
043	D	((points to the picture then puts both hands to her mouth)) get! ((stamps feet and reaches both hands up above her head)) no! no!	looks at book then to T as raises hands. Looks back to book
044	T	no, why what's happened?	D looks at T
045	D	go. mah bah ((hits book))	
046	T	what's [mummy doing? ] [ ((points to picture)) ]	D looks at book
047	D	[mummy ] (2.1) baby. [ ((points to book)) ]	looks at T during pause
048	T	mummy's [holding the [baby ] isn't she?] [ ((gestures holding baby)) ]	D looks at T eye contact maintained
049	D	[ ((mimick's T's gesture) ]	
050	T	mummy's holding the baby	
051	D	uh. Wake up! ((jumps as if I surprise))	
052	T	oh, she's telling [Diana to wake up?] [ ((points to book)) ]	
053	D	((nods))	
054	T	maybe. "wake up [Diana!" 'n there's the dog ] [ ((points to book)) ]	D looks at T
055	D	[ woof ]	
056	T	[the d]og's looking	
057	D	woof woof woof!	D stands up

058	T	barking I think he's	
059	D	yeh	D sits down looks at T
060	T	I don't think he's barking there I think he's looking	D looks at book
061	D	((makes thumb up gesture)) du	D looks at T
062	T	yeh I think he's <u>waiting</u>	
063	D	((imitates waiting sign))	D looks at book
064	T	say "can I come"	
065	D	huh?	D looks back at T questioningly
066	T	"can I come"	
067	D	((nods))	D looks at book
068	T	["can I come with you" ]	T adjusts D's hearing aid
069	D	[ dell dellu can I dellu ]	D turns page
070		T adjusts D's hearing aids (11.45)	
071	T	Did you turn your hearing aids down	D and T hold gaze
072	D	((nods))	
073	T	when you went outside did you turn it down? I think so	
074	D		[ yeah ]
075		Susan ((makes gesture of pulling hearing aid off)) ee	
076		put off	
077	T	no not Susan, [ you. when you went outside ] [ ((points to D then outside)) ]	
078	D	((nods))	
079	T	susan's not there susan's upstairs	
080	D	((nods))	
081	T	mm.	both look back at book
082	D	ooh oh. [ Comeback ] <u>wake up!</u>	D looks at T

		[((makes beckoning gesture))]		
	083	T	oh she's woken up, Diana's woken up (1.5) mummy	D looks back at book
	084		says to the dog [ "get in the::" ] [((wags finger))]	D looks at T
	085	D	[ "get in the::" ] [((wags finger))]	D uses same intonation as T
	086	T	what's this? ((pointing at book))	
	087	D	(3.2) window	looks back and forth between book and T
	088	T	ok, yeah well it's the door. She's opened the door	D keeps watching T
	089	D	uh ((nods slightly))	
	090	T	she says [ "go in that door ] and get into the car" [((wags finger)) ]	
	091	D	oh	looks back at book
00:02:51	092	T	"jump in the car, come on dog, in you go (.) and I'm	
	093		going to [ shut the door" ] [ ((gestures pushing door)) ]	
	094	D	[ bye! ] [((waves))]	D looks at T
	095	T	I think mummy's going as well	
	096	D	[ Diana bye ] [ Diana ] [((waves)) ] [((points to self))]	
	097	T	Diana's saying bye bye? But the dog's coming (.) dog's	D looks at book
	098		gonna come with them doesn't need to say bye bye.	
	099		That man's saying bye bye ((points to book))	D looks at T
	100	D	((nods))	
	101	T	He's looking like this "where are they going?"	D smiles and looks at where T is pointing in book
	102		(4.6)	
	103	T	and there's some children playing	D looks at book



104	D	((makes pat-a-cake gesture))	D looks at T
105	T	are they playing pat-a-cake ((lifts up book to look))	
106		maybe. yeah or they're having a little chat	
107	D	[uh ja                   ] [mummy                   ] [((points to book))][((points to book))]	D looks at T
108	T	Ois it0	
109	D	[Susan                   ] [Diana] [((points to book))]	
110	T	[So Susan's waiting there	
111		at home	
112	D	((points to herself))	T looks at book
113	T	Susan's waiting at home=	
114	D	=Diana [up ooh!                   ] [((points up in air))]	
115	T	Oh look, [here goes a car                   ] [((points at book))]	D looks at book with T
116		(6.3)	Both look closely at book
117	D	((points to a different page)) oh. baby	
118	T	yeah the [lady's got a baby] on her:: ((pats D's back)) [((points to book))]	D looks at T
119		(2.4)	
120	D	((nods))	
121	T	back it's [on her back]	
122	D	[back                   ] ((points to self)) [me]	
123	T	[ther]e's	
124		[a (.) green car                   ] [((points to book))]	D look of surprise as she looks at picture
125	D	ah! green?	D looks at T in surprise
126	T	yeah is it green?	

127 D NO! ((shakes head and stamps feet, smiling))

128 T oh

129 D red

130 T red car?

131 D ((nods))

132 T [there's a yellow car]  
 [((points to book)) ] D rests her elbow on  
 table, head in RH  
 looking at book

133 D ((nods)) (.) [urr!  
 [((makes hands into fists, looks frustrated)) ] D looks at T smiling  
 slightly

134 (.) blue

135 T a blue car

136 D [look ]  
 [((points to book)) ]

137 T [and mummy's in the car]:: ((points to book)) D looks at book  
 [((points to book)) ]

138 (2.1)

139 D do (.) in the car, D looks at T

140 T the dog's in the car,:: ((points at book))

141 D Diana (.) in the car,

142 T Diana's in the car, and the:: ((points to book)) D looks at book

143 D mummy= D looks at T

144 T =it's the baby D looks at book

145 D baby in the car D looks at T

146 T the baby's in the car. [The cat's not in the car], the  
 [((points to book)) ]

147 cat's [climbed up the tree ]  
 [((makes running motion with fingers on book)) ]

148 (.) climbed [up the tree ]

149 D [((squeals and covers picture with hands)) ]

150	T	scared the cat's scared "he::lp" ["miaow!"]	D looks at T
151	D	["he::lp"]	
152	T	"help me down"	D turns page
153	D	uh baby ((points to book)) h baby ((points))	looks at T as she points second time
154	T	what's the baby doing	
155	D	baby. Mum "oh" ((puts hands on hips)) ["uh ja!"] [((makes fists))]	
156	T	what's	
157	D	[angry. [((raises both fists in air and shakes them))]]	
158	T	who's angry? [Diana? She's not angry, she's got a ]	D looks at T then D looks at book
159	D	[((puts hands on hips and pulls angry face))]	
160		[book Diana's got a book ] to read (2.3) and the [((points to book)) ]	
161		dog's [looking ], and the [baby:: ] think the baby's [((points)) ] [((points)) ]	
162		looking at the dog	D looks at T
163	D	((nods slightly))	
164	T	baby's looking at the dog	
165	D	go "ar" ((biting gesture then wags finger and shakes head))	looks at T as shakes head
166			D and T hold gaze
167	T	no dog's not going bite. D'you [like that ] [((points to picture))]	
168		dog? D'you like	
169	D	((nods head, smiles and makes thumbs up gesture))	
170	T	Does [Diana ] like dogs? Mm mm. [((pointing to D))]	
171		((both T and D shake heads simultaneously))	
172	T	Diana doesn't like dogs, [you ] don't	



005 D [four months]

006 D yeah. (.) always crying

007 T2 is she?

008 D she shouting

009 T2 she shouts and cries? She [wasn't crying ]  
 [((points, shakes head))]

010 then

011 D cos she was ((makes sucking motion)) in bottle

012 ((gestures holding bottle up to mouth))

013 T2 She wants her bottle. and her dummy. and what abo::ut

014 does she li::ke looking at you? leans in towards D

015 D ((nods)) she looking and [then I ] went  
 [((looks to left))]

016 I'm looking and then [marian go that way and ]  
 [((makes gesture with both  
 hands tipping head back)) ] D looks upwards

017 me go [ that way. ]  
 [((leans forward)) ] D looks back to T

018 T2 you fell over?

019 D [no. ] Marian went to sleep, D looks upwards  
 [((touches face))]

[box, yeah ] and then went to  
 [((makes box shape with hands))]

020 [sleep and then me go ] "wake up!" D looks at T, eyes wide  
 [((tips head back, eyes shut))]

021 [and she's ] (.) over ?? D looks upwards  
 [((touches eyes then tips head back))]

022 and she [can't that way and can't that way ]  
 [((points R then L with hands)) ]

023 then [ ? yeah that's Diana . ] D looks back at T  
 [((points to face then to top of her head))]

024 T2 Oh and she can see you? Do you sleep in the same

025 bedroom?

026 D ((nods hesitantly))

026 T2 do you sleep in Marian's or does Marian sleep with mummy?

027 D Marian [sleep with my mummy ] looks away then back to T  
 [((points to her R with R thumb))]

028 T2 what about you? eye contact maintained

029 D [me sleep ] with Susan  
 [((points to herself then to her head))]

030 T2 you sleep with su.. oh yeah. I re[member ] a little  
 [((points to D))]

031 while ago, Miss S said that [you ] still slept  
 [((points to D))]

032 with mummy.

033 D ((smiles))[yeah I'm not sleep with mum ]  
 [((shakes head and points to R with R thumb))]

034 T2 not any more.

035 D [every day I'm sleep with Susan. ]  
 [((makes gesture with both hands))]

036 T2 you sleep with [Susan now ] where does  
 [((nods and touches hair))]

037 Oscar sleep?

038 D Oscar sleep [Oscar's room ] D looks away briefly as  
 [((points ahead of her))]

039 T2 he's got his own room has he? (.) so one room for

040 Oscar

041 D ((nods slightly))

042 T2 and another room for Diana and Susan and

043 another room for mummy?

00:01:31 044 D and daddy.

045 T2 and daddy and [Marian ]

046	D	[Mari ] Marian but in there	D looks to side and 'draws' a rectangle shape in the air
047	T2	In a box or [ a cot ]	
048	D	[yeah] (.) [box. ] [ ((draws box shape on table)) ]	
049	T2	a [box! ] (.) Oh (1.2) that's [funny! ]	
050	D	[ ((furrowed brow, slight nod)) ] [it white]	uncertainty. Draws shape again
051	T2	a white box. Is it called a cot?	
052		(2.1 )	D body posture 'ready to answer' then drops shoulders
053	D	cot or box ((questioning gesture both palms upwards and shrugs))	
054	T2	I think it's called a cot. Has it got [bars on it? ] [ ((draws bars in	
055		the air with hands)) ]	
056	D	ah! ((smiles))	
057	T2	mm it's called a cot	
058	D	and it waves	D rocks from side to side with arms out
059	T2	oh a crib, a crib yeah [and y]ou can rock it backwards	
060	D	[ mm ]	
061	T2	and forwards yeah it's called a crib or a cot	
062	D	yeah	D looks away as bell sounds and looks back
063	T2	yeah. You don't sleep in there	eye contact maintained
064	D	huh?	
065	T2	you don't sleep in a cot	
066	D	((shakes head)) only Marian	

00:02:08 067 T2 only Marian. And do you think mummy's gonna have D plays with hands  
068 another baby? Or is she finished now.  
069 D finish  
070 T2 finished. No more babies  
071 D ((shakes head)) [one ]  
((holds up one finger))  
072 T2 [d'y ]ou like. Only  
073 one baby? [No she's got = ]  
[ ((holds up four fingers)) ]  
074 D =but don't like boy I like girl  
075 T2 you like girls? You- what about Oscar does he want a  
076 brother?  
077 D hmm? D looks at T  
questioningly  
078 T2 what did Oscar want, did he want a boy, a brother? T scratches ear  
079 D (( raises R hand in air)) yeah. He want it. He don't like eye contact maintained  
080 girl.  
081 T2 who Oscar?  
082 D ((nods))  
083 T2 hasn't he got a girlfriend yet?  
084 D I think he's joking  
085 T2 pardon?  
086 D Oscar joking, he like girls, he's joking=  
087 T2 =I think he likes girls, yeah I think he'd have a  
088 girlfriend soon now he's getting a bit older. Does he  
089 like his new school?  
090 D ((smiles and nods))  
091 T2 does he like it?





114 D ((nods))

115 T2 ((nods)) they're gonna go to school together

116 D ((nods))

117 T2 is it near your house?

118 D huh?

119 T2 a school near your house. So she wont have to go

120 [on the bus ] any more  
 [((shakes head))]

121 D ((shakes head))

122 T2 no so only [Diana ] will be on the bus.  
 [((points to D))]

123 D ((nods and smiles))

124 T2 before, [last year Oscar, Susan and Diana ]  
 [ ((makes sign for 'before' then counts names  
 on fingers)) ]

125 [ this year ] [Susan and Diana, ] eye contact maintained  
 [((points to floor))][((counts names on fingers))]

126 and [next year only Diana! ] (.)  
 [((points to side then puts one thumb up))]

127 Only one left on the bus. [ 'll be funny ] h h

128 D [yeah ]

129 T2 d'you go with Vivien, Viv is she your- the lady that

130 looks after you, your escort

131 D [yellow hair and short hair ]  
 [((puts hands to her hair)) ]

00:04:11 132 T2 short hair. Is Sophie in your- on your bus? D adjusts hearing aid

133 D yeah

134 T2 Sop[hie ] (.) who else

135 D [and] [Sophie, Annie, Arthur and ] D looks away as she lists  
 [((counts them off on her children

136 Emma. ]  
fingers))]

137 T2 There's a lot of children D looks back at T

138 D ((nods)) and Mark!

139 T2 and Mark?

140 D y- the driver

141 T2 oh Mark's the driver, he drives your bus. D chews thumb

142 D [he brown ]but [no no hair, bald! ]  
[((pointing to face))] [((points to top of head))]

143 T2 h h is he bald! Hasn't got any hair D plays with her hair

144 D ((nods)) D contiunes to play with her hair

145 T2 he's got a [brown face ]  
[ ((points to her face))]

146 D [yeah ]  
[((nods))]

147 T2 but no hair

148 D ((shakes head))

149 T2 like Voisal

150 D yeah

151 T2 someone's shaved Voisal's hair off

152 D [yeah]

153 T2 [d'you] think his mummy did it

154 D a girl

155 T2 yeah

156 D why they [take it off? ] D is still continuously  
[ ((gestures pulling something away from her playing with her hair  
head)) ]

157 T2 I don't know, I'm not sure. It's a funny thing to do, I

158 don't like it very much. I hope it's going to grow D continues to play with her hair

159 quickly

160 D [have a growgrow grow ]  
 [((gestures hair growing moving hands upwards from head)) ]

161 T2 yeah [grow quickly]

162 D [that will [muh] my hair not bald(.) My hair go- ] looks away briefly then  
 [((lifts strands of her own hair)) ] back at T

163 T2 [no you' ]

164 re not bald no, you've got lovely hair. Do you put

165 [henna ] in your hair? You put something  
 [((points to D's hair))]

166 [in your hair ] cos it's gone a bit [red  
 [((points to her own hair))]

on top ]  
 ((points to D's hair))]

167 D yeah D continues to play with her hair

168 T2 put henna

169 D a [dark, a darker ]  
 [((waves R hand facing T))]

170 T2 da- darker

00:05:15 171 D a [dark black or red ] D uses LH to adjust  
 [((waves R hand, palm facing herself)] hearing aid and looks at hands as she gestures

172 T2 yeah it's called henna D looks back at T

173 D yeah eye contact maintained

174 T2 did mummy put that in your hair

175 D no auntie looks away as she says no then back at T

176 T2 auntie (.) put henna in your hair D continues to adjust hearing aid

177 D [long time ago ] eye contact maintained  
 [((signs before))]

178 T2 really? Oh when you went on holiday

179 D (.)yeah and [when the holiday ]the  
 [((points behind her with R thumb))]

180 auntie [pick up my hair ] looks away as she  
 [((gestures with movement of both hands))] gestures then back at T

181 [and then waiting. ] [wash ]  
 [((touches her hair))][((washing motion in hair))]

182 [and then red! ]  
 [((pulls strand of hair either side of face))]

183 T2 oh I know, when you, is that when you went-

184 D and then [brush and she's ] looks to L then back at T  
 [((gestures brushing a strand of hair))]

185 (.) D plays with her hair.  
 Eye contact maintained

186 T2 she put henna in your hair and you have to [wait  
 [((RH

187 ]for a while and you've put the [dye D adjusts her hearing aid  
 palm facing D))] [((R

188 in=  
 H moving over hair))]

189 D =yeah=

190 T2 [=and you wait and it turns a different colour=]  
 [((RH touching hair)) ]

191 D =um=

192 T2 =and then you can wash it out

193 D and then um (.) [brush it, off and then wear a clothes looks to L then back at T  
 [((gestures brushing hair then touches

194 ]((gestures curling hair and smiles))  
 her clothes)) ]

195 T2 and you curled it? eye contact maintained

196 D ((smiles and poses twice with RH under chin))

197 T2 Ah you made it look beautiful, were

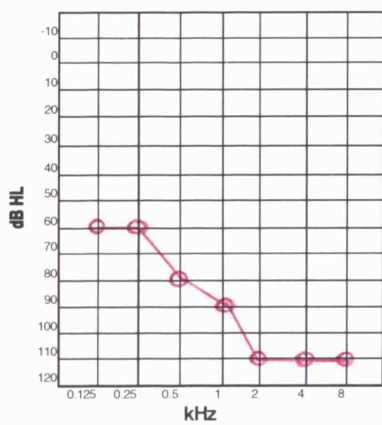
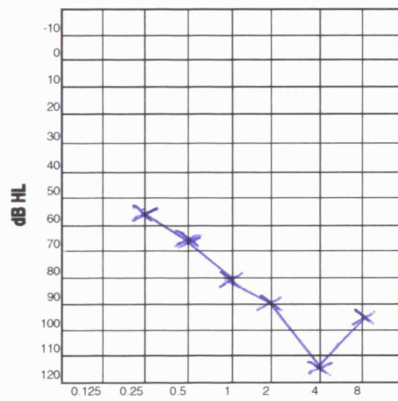
198		you going to a party? (.) Or a wedding?	D plays with her hair
199	D	((looks away briefly)) (.)party	
200	T2	a party and you looked beautiful. Was it when you	eye contact maintained
201		went on the aeroplane? to Syria?	
202	D	[in the aeroplane. (.) not in the aeroplane] [((waves RH pointing and shakes head))]	
203		[ 'nother one in the home ] [((looks away and makes pushing away motion with RH)) ]	
204	T2	yeah, you went on the [ <u>aeroplane</u> ]	
205	D	[auntie aun_tie's <u>house</u>	
206	T2	to auntie's house. In- in a different country	
207	D	[yeah ] [((nods))]	
208	T2	yeah. And auntie did your hair nicely	
209	D	yeah	
210	T2	and then you've come back to London	
211	D	yeah	
212	T2	come home to England. You didn't stay there this time	
213	D	a London li- a London we <u>come back</u>	looks away from T
214		my dad <u>come back!</u>	looks back at D
215			
00:06:27	216	T2	he's come back now, hasn't he

Appendix III

Audiometric Data for participant known as 'D'

Audiological results

Left Ear



Right Ear