PRIMARY PUPILS' IDENTIFICATION OF LISTENING BEHAVIOUR IN OTHERS

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ABSTRACT

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The aim of the study was exploratory: to discover which characteristics of behaviour young children recognize as indicative of listening in others.

Although there has been previous research into listening, there is virtually none into children's own ideas of what listening means.

Several questions were formulated which embodied the objectives of the research.

The subjects were drawn from an East Barnet primary school. Three age cohorts were formed, each of sixteen children (eight boys, eight girls). Cohort I consisted of the youngest children - reception class infants in their first term of formal school; Cohort II consisted of junior children in the middle of their primary schooling; Cohort III consisted of children in their last term of primary education. To obtain a different perspective, sixteen primary teachers were offered some of the same stimulus materials and their responses were compared with those made by the children.

The subjects were presented with two kinds of stimulus: picture recognition tasks and activities with dolls. They were asked to say who was listening in the pictures and how they could tell that they were listening. The children were asked to arrange the dolls in listening postures. They were also interviewed.

Results showed a development in the children's descriptions of listening behaviour, both linguistically and socially. The findings were inconclusive in showing any differences between boys and girls. Older children, by their negative descriptions of listening, demonstrated the socializing influence exercised presumably by the school.

The conclusions have implications for teachers to become increasingly aware of their pupils' perspective: children in school may not share their teachers' expectations of listening behaviour; teachers need to recognize the significance of nonverbal messages in an interaction. Pupils, for their part, need guidance to realize their role as a reactive listener in a teaching situation.

C O N T E N T S

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CHAPTER ONE

INTRODUCTION

The aim of this research was exploratory: to find out how young children identify listening.

The Shorter Oxford English Dictionary (1983) gives as its first definition of "listen","to hear attentively". Other languages make a similar distinction between "hear" as auditory perception and "listen" as hearing plus attention, for example "entendre"/ "écouter" in French, "udire"/ "ascoltare" in Italian, "hören"/ "zuhören" in German. The Shorter Oxford Dictionary definition is one which would probably find acceptance among most mature native English speakers. It might,however, be expected that young children would fail to understand either the word "attentively" or the concept that it represents.

It is curious that the concept of "attention" has attracted the interest of psychologists as one worthy of study as a distinct subject (Lindsay & Norman,1977) while "listening" has been ignored, although listening is one kind of attention.

The dictionary definition given above is of necessity a condensed explanation of a highly complex activity which involves many different aspects: the physical activity of hearing; aspects of cognition such as

memory; linguistic aspects such as verbal comprehension and register of discourse; social situation, as well as the influences of individual personalities and interests. There are, in addition, kinds of listening: appreciative, critical, casual, accurate and so on.

Listening has been defined by an educationist as "the process by which spoken language is converted into meaning in the mind"(Lundsteen,1971). This seems to ignore the "attention" component of listening, which the Dictionary emphasizes. Lundsteen does, however, make it clear that this is intended as a working definition, not arrived at as the result of research. Many of the complexities involved in listening,such as attention and memory ,may be assumed as part of Lundsteen's summary.

For the purpose of this research, however, it is not necessary to arrive at an agreed definition of listening. Most previous educational research into listening has reflected the interest of researchers and teachers in listening as a language skill or set of skills.The focus of this study is children's constructs of listening as revealed in their descriptions of children and adults identified as listening. The purpose was to draw attention to the children's views on listening and to consider how far their perspective may differ from adults'.

Children's knowledge about listening behaviour is something even teachers may have taken for granted. Pedagogic tradition accepts certain norms of appropriate behaviour from pupils in a listening "mode": pupils are expected to be relatively quiet and to face the speaker. The children's viewpoint has been ignored. There are two kinds of knowledge about listening behaviour: implicit and explicit (Kingman, 1988). First, implicit knowledge, which is shown by appropriate social behaviour; second, explicit knowledge, which is shown by the ability to describe those activities which constitute listening behaviour. Teachers have, in the past, expected or even demanded "correct" listening behaviour without giving heed to the possible limitations of their pupils' understanding of such behaviours. The intention of this study was to discover the extent of the second kind of knowledge in primary school children; in other words, to elicit from young children what characteristics in the behaviour of other children and of adults they recognize as indicative of listening.

The objectives of the research were embodied in the formulation of several questions:

1) How far can young children make explicit their knowledge of listening?

2) How do older children's explanations of listening

behaviour differ from those made by younger children?

3) Are there differences in the ways in which boys and girls identify listening?

4) Are there differences in the ways in which children identify boys and girls as listening?

5) Do children distinguish between listening to a teacher and listening to another child?

6) How far do children allow for listener responses in their own conversations?

It was predicted that the children's descriptions would show a development and that there might be differences related to sex. The aim, however, was, as has been stated at the outset, exploratory. This seemed to be a fruitful area for investigation in educational research.

The subjects for study were three age cohorts within the Barnet Primary School where the researcher is a full-time teacher (see Table 1.i). The children were presented with three types of stimulus materials and also interviewed. To obtain a different perspective, sixteen Primary School teachers were also presented with two of the same sets of stimulus materials and their answers were

compared with the responses made by the children.

TABLE 1i

CHILDREN WHO TOOK PART IN THE STUDY

YEAR GROUP	AGE RANGE from	to	MEAN AGE	GIRLS (N)	BOYS (N)	TOTAL (N)
Reception Infants	4y6m	5y3m	4y10m	8	8	16
1st Year Juniors	7y6m	8y5m	8y0m	8	8	16
Top Juniors	10y9m	11y8m	11y5m	8	8	16

The study was in this way confined to a single primary school with all the attendant limitations of background and social class which that implies. The school in question contained approximately 375 pupils, organized as a one-form entry infant department and a three-form entry junior department. All the classes were of mixed ability. The school embraced a wide range of ability levels and different social backgrounds. There were a number of children from different cultures. Children who were not native English speakers were excluded from the study by the means described in Chapter Three. Their inclusion in the study might have introduced a wide range of linguistically and culturally induced variables. The views of children of different cultural backgrounds on listening behaviour could form the subject for a further study. Such an investigation would surely prove valuable

in illuminating possible cultural differences in attitudes to listening.

Terms

Listening Behaviour

The term, listening behaviour, needs explanation, since in this study the meaning it carries is not necessarily the same as when it has been used in other contexts by other researchers.

Listening behaviour throughout this report means what people may be observed to do when they are perceived to be the recipients of auditory communication. Behaviour may be verbal, non-verbal or para-linguistic. Verbal behaviour may include voiced comments such as "yes", "I agree", "well", which are indicative of attention and imply listening. Non-verbal behaviour refers to all observable movements and postures that are not vocal, including nods and shakes of the head, physical attitudes, facial expressions and gaze. Para-linguistic features are responsive vocal sounds which are not words. Examples would be grunts and "mm"s.

Characteristics

The term "characteristics" in this research means observable features and refers to the observations reported by the subjects in the sample.

Attributions

In the present research, "attributions" does not carry the added significance it has been given in "Attribution Theory" by psychologists or in "Symbolic Interactionism" by sociologists as interpretations of information based on biased schemata (Salomon, 1981). Here, it refers to the descriptions made by some subjects of thoughts, feelings or intentions which were of high inference because they were not directly observable.

Comment

In this research, "comment" was used to describe a unit of spoken utterance, by analogy with the "sentence" of written text. However, there is a significant difference between spoken "comments" and written sentences in length, density and vocabulary. "Comment" is further defined in Chapter Four in the section which deals with the linguistic analysis of the data.

Summary of Contents

The following chapter includes a review of previous research into listening and non-verbal behaviour relevant to this study. Government documents which refer to listening are examined, as are studies sponsored by Government. Research carried out by educationists is assessed, although most of this has been concerned with

schemes for training and testing listening. Also included is a summary of work on children's language, cognition and behaviour in so far as this work concerns listening. Precedents for the methodology are also discussed.

The design of the research and the research materials are described in Chapter Three together with the methods used to collect data and the techniques for their analysis. Details of the sample are given. In this chapter, the researcher explains why the sixth research question was abandoned at the piloting stage and also outlines the other pilot investigations.

Chapter Four contains the results in answer to the first two research questions concerning the developmental nature of children's identification of listening behaviour. The results of the analyses of language and content of the children's data are compared with those obtained from the teachers in the sample.

Chapter Five sets out the sex related findings in answer to the third and fourth research questions.

Chapter Six focuses on the differences found between listening to a teacher and listening to another child in answer to the fifth research question.

In Chapter Seven, the reader will find accounts of the unexpected findings which emerged in the course of the analysis of data and which were not predicted in the original research design.

Chapter Eight contains criticisms of the research design and a discussion of the findings.

The final chapter, Chapter Nine, summarizes the findings and draws conclusions that may indicate possible areas of interest for further research. Implications for teachers and for classroom practice are also discussed.

CHAPTER TWO

REVIEW OF THE LITERATURE

LISTENING AS THE SUBJECT FOR RESEARCH

Listening features in the literature of several related disciplines. As one of the four designated "Communication Skills": reading, writing, speaking and listening, it is the subject of writing and research in the field of Education (Bullock, 1975; English from 5 to 16, 1984). As a language activity, it is involved in psycholinguistic studies (Wells & Nicholls, 1985). As a thinking activity, it is subsumed in psychological studies of cognitive development (Donaldson, 1971). Except in the case of listening to a recorded message, or to television, radio or film, listening presupposes the physical presence of the communicator. Thus it is essentially a social activity and a matter of interest also for students of sociolinguistics (Cherry, 1979) and for behavioural psychologists (Dittman, 1978). These related disciplines of necessity frequently overlap.

Research into Children's Listening

In this research, the situation is further complicated because the focus is not upon listening itself but specifically upon children's identification of listening behaviour in others. The literature on non-verbal behaviour is copious, but not,

however, with reference to listening. The literature on children's non-verbal behaviour is sparse indeed. There are many reports of children's talk, but few reports of children's expressed views or opinions of what people are doing in everyday situations such as listening. One of the aims of this study is to fill some of the hairline cracks between these inter-related disciplines, or at least, more modestly, to show that such gaps exist.

GOVERNMENT DOCUMENTS

Government documents have been produced on English Language teaching and learning in schools which include references to listening.

The Bullock Report

The bulky Bullock Report, "A Language for Life"(1975), contained only five references to listening, of which two were to talking and listening taken together. Nevertheless, the other three references, though a tiny proportion of the whole document, did acknowledge the importance of listening and deplored its relative neglect up to that time:

> "The difficulty of listening is commonly underestimated and it is another aspect of communication that deserves to be better understood ... Of time devoted to listening, speaking, writing and reading, well over half is taken up by the first." (10.19)

The authors of the document also commented on the experiments and programmes originating in the USA which had been designed to isolate listening skills and improve them,

concluding "there is no assurance that these are effective." The report recorded that in an American experiment, the actual listening behaviour of a group of adults bore little relation to their test scores. (It needs to be noted here that "listening behaviour" in the American experiment did not carry the same sense that it bears in this present piece of research as defined in the "Terms" section of the previous chapter. It would be of interest to know how, in this context, "listening behaviour" was defined or measured, but this was not made clear.) The Bullock Report observed that such tests and training programmes of listening skills were based on a situation where a group listened to an individual reading aloud a prepared passage, only one of the multitude of listening situations that occur in real (or even in school) life.

> "Listening ability is part of a highly complex process in which it is related to the individual situation and to the knowledge and experience of the listener, the nature of his motivation and the degree of his involvement."(10.21)

The Report advocated the development of listening ability as part of normal class work in association with other learning experiences. This echoed Wilkinson's (1972) emphasis upon "total communication", a reminder of the importance of other forms of communication as well as language in the classroom.

The present study into listening behaviour can thus

be seen as a natural development from this wider view of listening mentioned briefly in the Bullock Report.

English from 5 to 16

The publication, English from 5 to 16 (1984), radically redressed the imbalance shown by the Bullock report by according equal space and emphasis to listening as to the other three communication skills. However, it noted that the "four modes constantly interrelate," and it is this essential inter-relationship that was picked up by the critics of the document in the Responses (1986).

> "Some [readers] noted that in the objectives section, talking and listening were handled separately: they were keen to stress the inter-relatedness of the two, the artificiality of their separation and its ineffectiveness for developing active understanding. This important qualification is wholly accepted."

The Conclusions reported the widespread expressions of support for increased attention to the spoken word (speaking and listening) but few suggestions as to how improvements might be achieved. It was suggested that this pointed the way for a national development project.

The Kingman Report

The most recent Government report, under the chairmanship of Sir John Kingman (1988), appeared after the rest of this Literature Search was completed. It endorsed the sentiments of the Bullock Report that "listening should not be ignored." It likewise deplored

the use of "so-called listening exercises" which in the recent past have been "mechanistic drills with little relevance to the experience or interest of pupils." In addition, it took on board the thinking in Government-sponsored studies (by Wilkinson et al.(1974) and by Maclure & Hargreaves (1986) for the Assessment of Performance Unit) that pupils should become more critical in their listening. The Kingman Report did, however, go further in its recommendations as to how teachers may help their pupils listen better, by suggesting that teachers "monitor pupils' ability to listen with attention" and "encourage pupils to identify unclear messages".

> "Teachers can help pupils who have difficulty in listening carefully at appropriate times by identifying for them the occasion when it is important for them to listen carefully and checking that they have done so."

There seems to be, then, an area developing which may well be called "contextual listening."

The present researcher would suggest that this is a practice already engaged in as a matter of course by many experienced teachers. What, however, was not mentioned in the Kingman Report (and is not a matter of general practice) is the advisability of teaching pupils techniques of listening behaviour,that is, ways of showing that they are listening.

At the time of writing (Summer,1989), further documents are being produced in preparation for the

introduction of the National Curriculum. The future implications for listening will be assessed in the final Chapter.

Government documents have been supported by work from the Assessment of Performance Unit and from the Schools Council Research Studies.

GOVERNMENT SPONSORED STUDIES

Listening was given a timely new prominence in national educational thinking by Wilkinson, Stratta and Dudley(1974):

> "Since the advent of CSE in 1965, a great deal of attention has also been paid to speaking. Listening has been largely ignored, especially at a time when technical advances in radio, TV and recording equipment have tended to throw a greater emphasis on this essential aspect of communication."

This book emphasized the "total" nature of human communication: that context is vital, that it conveys both cognitive and affective information and that it uses non-linguistic as well as linguistic channels. Teachers by their behaviour send out messages they are unaware of. Classes, by raised hands, looks of attention, nods, give the impression that all the pupils understand, when only a few do. This emphasizes the teachers' need for signals which indicate children's listening. There is, however, no reciprocal attention to the children's

standpoint: no effort to discover how or whether children look for such signals in others and, if they do, when and in what situations does such awareness appear?

The present research, by eliciting what children think people are doing when they are listening, aimed at a clarification for teachers of how children may identify such signals and interpret them. The process could, and possibly does, lead to misinterpretations by both teacher and learner.

One of the confessed aims of Wilkinson and his colleagues (1974) in the Schools Council Project based at Birmingham University was "to construct measures [of listening] for 11-18." A similar aim motivated the APU publication, Speaking and Listening, Assessment at Age 11 (Maclure & Hargreaves, 1986). The authors recommended a departure from considering listening skills as such, divorced from speaking. To correspond with "literacy" they offered the term "oracy" to describe by analogy those skills required for different communicative purposes.

> "Listening and speaking should be considered as reciprocal and integrated aspects of pupils' communicative ability...Listening and speaking have often been assessed independently of one another. But listening is very seldom done as an activity in itself for the private acquisition of information. Much more frequently we listen in order to speak next or later and of course we speak with listeners in mind. e.g. we listen in order to take our turn in a conversation or to tell others what we have learned or to pass on a story or joke or to follow instructions and

directions."

In view of these considerations, the authors proposed that pupils' listening and speaking skills be often assessed in conjunction with one another. In Section 6 on Assessment Procedures, there is a discussion of orientation to a listener: nonverbal behaviours such as eye contact and gesture. The assumption is made that giving eye-contact and making responsive gestures are necessary signals in the communicative process. The effectiveness of such non-verbal behaviours is not examined. They are adopted as an appropriate basis for assessment without reference to relevant research findings.

These official documents, either issued or sponsored by government agencies, do not always reflect the thinking of educational theorists, researchers and teachers.

RESEARCH BY EDUCATIONISTS

Time Spent Listening

Researchers' interest in listening goes back many years (Devine, 1978). Nichols documented poor student listening in 1949 (Wilkinson, Stratta & Dudley, 1974). In a study of school time carried out in 1950, Wilt, using timed observations, found that the elementary school children in her sample spent an average 57.5% of their time in the classroom listening, which amounted to

two hours, thirty eight minutes daily. The large proportion of school time spent in activities where the pupils are expected to listen has often been remarked upon. For examples see Children Don't Listen (S.W.Herts.Teachers' Centre, 1982).

On the other hand, in classrooms in this country, teachers have often taken it for granted that their pupils are listening to them (Lindsay, 1984).

Confusion between Children's Listening and Adults Listening to Children

Some work, under the title of "Listening", is actually not about children's listening, but about adults listening to children talking (Tough, 1976). In one of her infrequent references to children's listening, Tough recommends that "in reality there should be energetic inner activity...reflection and imagination"; and that the listener should participate through "interpretation and projection," though she doesn't elaborate on what she means and expects by "projection." Children's listening is not, however, the focus of her research.

Listening as a "Communication Skill"

As well as taking a large share of children's time at school, listening is generally accepted to be one of the four communication skills. As such, it has a special

claim upon the teacher's attention. As with reading, writing and talking, it is evidently the language teacher's responsibility to teach, monitor and assess listening. Unfortunately, unlike the other three language skills, pupils' listening has no directly observable product. Children may be heard reading aloud or talking; their writing may be read. Their listening may only be inferred from what they produce as a result of having listened or from their behaviour when supposedly engaged in listening. This may account for the comparatively little notice that listening attracted from researchers. The Birmingham project was intended to go some way to redress this balance (Wilkinson, Stratta & Dudley, 1974).

Children's behaviour while listening has been virtually ignored by educationists. The bulk of research into listening has tended to concentrate upon the aspect of listening as a teachable skill or set of skills. The work of Wilkinson et al.(1974) and of Maclure & Hargreaves (1986) can be seen as a reaction to the many attempts to treat listening separately. The present reseach can be seen as an attempt to widen further the sphere of interest relevant to listening.

As has already been remarked, the body of educational research into listening is comparatively small. Most of it has been concerned with the

improvement of so-called listening skills. The emphasis on this aspect of listening has to be recorded here. It seems superfluous from the point of view of the present research to document in detail the literature on listening skills and listening comprehension, but a brief review will help to outline approaches to date.

"Listening Skills"

Listening has been compared to reading as a receptive communication activity.

> "On commonsense grounds one would expect a fair relationship between reading and listening as they are both receptive skills".
> (Wilkinson & Stratta, 1972; Devine, 1978).

This analogy of listening with reading without doubt influenced the thinking on listening skills which originated in the USA. According to Wilkinson et al.(1974), American thinking has been conditioned largely by Nichols(1949) and Brown (1949). Their work led to Pratt's formulation (1956) of a taxonomy in which receptive listening was distinguished from reflective listening. These analyses of listening laid the groundwork for devising ways of teaching and testing listening.

Six references to articles on teaching listening were given by Wilkinson between 1953 and 1956 and The British Education Index cites many more for the years 1972 to 1987.

"Listening Tests"

Different test builders offered different descriptions of what constituted effective listening. They defined listening by saying, in essence, that listening is what their tests measure (Devine, 1978). Certainly, such programmes produced improvements, at least in doing the tests, if in nothing else. There was a danger that the tests would become an end in themselves and encourage teachers to believe that their pupils' improved test scores meant that they had in fact become better listeners. The question remained whether any real or lasting benefits resulted.

Moreover, as Stubbs (1981) pointed out, in his criticisms of Wilkinson, there is an inherent contradiction involved in trying to test informal language in a formal test.

Schemes for Improving Listening

Several groups of teachers have endeavoured to tackle the popularly acknowledged problem that "children don't listen!" One such attempt made by the South-West Hertfordshire Teachers' Centre (1982) offered an example of a possible programme to help 9-10 year old children become "active and effective listeners." The sixteen skills to be learned were matched against thirty-two activities, although the methods for implementing the "programme" were not made explicit. It would be difficult to implement a

demanding listening programme amid the demands of a modern crowded primary school curriculum, impossible within the secondary school. Interestingly, the document emphasized the role of the listener in providing adequate response for the speaker and noted that

> "the larger the group of children the less the situation can be one of give and take as it becomes increasingly difficult for individual interaction."

As the size of the group increases so listener feedback decreases. Indeed, a speaker would find it impossible to respond to such a multiplicity of interacting messages. Perhaps, nevertheless, teachers need to be more aware of the interactive processes taking place while they are in front of a class. Perhaps also, pupils should be made aware of their responsibility to provide the teacher with information about the success or failure of his/her communication. Such information would be conveyed by communicative signals indicative of listening to supply appropriate "feedback" to the teacher. The "asymmetry" of speech (Bruner, 1983), where mother or teacher are the agent and the child the experiencer, possibly needs a conscious readjustment so that both sides of an interaction become more aware of the active role of the listener. The communicative relationship would, however, still be on unequal terms in respect of the adult's greater social experience.

In 1985, Sarah Tann produced a detailed framework for analysing classroom listening at the United Kingdom

Reading Association conference. She identified levels, conditions and components of listening skills. She set these within a matrix of activities or audience situations and suggested practical ways in which they could be exercised (Appendix F). Her approach is open to the same criticisms made above of the proposals made by the South-West Hertfordshire teachers. The organization of a programme of listening activities would be impossible at the present time of radical adjustment to the demands of the National Curriculum.

RESEARCH INTO CHILDREN'S LANGUAGE

The principal medium used in the present inquiry to elicit children's opinions has been children's language. As well as being the source of information on their views of listening behaviour, the children's language itself has been regarded as data in the linguistic analysis carried out (Woods in Adelman, 1981). In regarding the language itself as data, not as medium, the model of language adopted by the researcher has been that of language as structure (Stubbs, 1981), that is a lexico-syntactic model. However, this is subordinated to a semantic analysis with social implications. From the point of view of the methodology, the model of language used here corresponds to that of language as action (Stubbs, 1981). The researcher deliberately adopted a form of interaction with her subjects which consisted of

two rather than of three moves since the purpose was not to teach, but to elicit language and opinion. Teaching "exchanges" typically differ from other kinds of conversational interaction because they consist of three "moves": a teacher's initiating question, a pupil's answer followed by another comment from the teacher evaluating the answer and providing the pupil with positive or negative "feedback" (Edwards & Westgate, 1987; Sinclair & Coultard, 1975). The "two-move" scheme of interaction will be further described in the following chapter.

Crystal (1976) documented in detail a child's acquisition of language in terms of phonology, grammar and semantics. His seventh stage in the acquisition of grammatical structure occurs after the age of four and a half, thus supporting the contention made in the present research that children's linguistic development continues after starting school. He did not, on the other hand, emphasize the later development of meta-linguistic abilities.

The Language of Pre-school Children

The language of pre-school children has been and is being extensively researched, for example by Wells (1981 i) and by Wells and Nicholls (eds, 1985) in the project based at Bristol University. It has been established that most children, before starting

school, have acquired a considerable degree of communicative competence.

> "When children begin formal schooling, their fundamental communication skills, speaking and listening, are well developed but limited in scope and range." (Work, 1978)

> "Some of these [language] skills have already been learned in the home and are easily transferred to a new setting (i.e. the classroom), some have to be newly acquired." (Edwards & Westgate, 1987)

Mary Willes, in her book Children into Pupils(1983), attests to the children's readiness to acquire new socio-linguistic skills.

The format of the interactions in the present study relied upon the ability of young children to understand the linguistic and social conventions of providing explanations.

> "Present findings indicate that young children [three-year-olds] have a secure grasp of the rudiments of the ability to explain." (Donaldson, M.H. 1986)

Children's Language after Starting School

The findings of the present research bear out conclusions of other researchers that, though apparently proficient, the young child still has much to learn before s/he is a fully competent communicator. Viewed linguistically and socially, the language of the youngest children in the study demonstrated a dearth of certain features shown by mature communicators.

"Relatively little research has been carried out

> into the language development of children after the age of five largely because the average five-year-old appears to be so proficient in saying what he wants to that he may give the impression of having little left to learn."(Perkins,1983).

Nevertheless language development does continue and several investigations have been undertaken which demonstrate this, for example,Carol Chomsky's work (1969) on the development of syntax after age five. The present study confirmed the evidence adduced by Perkins that modal expressions, such as "would", "might" and "probably", appear late in the development of language. Of course, there is no proof that the youngest children in the investigation were unable to use such expressions, but, with few exceptions, they did not do so. It is quite possible that they understood the meanings of common modal expressions addressed to them, although they did not employ them in the experiments reported here.

> "It is a great mistake to suppose that once knowledge has been gained the practical application of that knowledge comes automatically."(Donaldson,M.1971).

This comment of Margaret Donaldson's illustrates a problem inherent in the design of the research. Children were required to make explicit their views and beliefs about listening behaviour. They may in fact have known much more than they said. They may even have chosen not to express all they knew. Donahue (1984) described how younger children and learning disabled children proved less likely to request clarification of uninformative messages: they

did not recognize when to use skills they had.

In the present research situation the children's linguistic competence, their cognitive ability and their social knowledge were all involved and it was impossible to disentangle the three strands. Morag Donaldson (1986) described her work on explanations as "one of many areas where language and cognition interact in an interesting manner". This is evidently another.

Children's Language and Cognition

Margaret Donaldson (1971) has argued that the thinking of young children is "embedded" in action and that the awareness of language as a distinct system emerges later. Hakes (1980) has asserted

> "children's abilities to use language about language develop later than the ability to use language to communicate."

The emergence of these metalinguistic abilities thus parallels Piaget's identification (in Donaldson,M.1971) of middle childhood as a time of major cognitive developmental changes,even though the use of language for communication is already well established by this time.

The children who took part in the present study were asked to use language about language. There was a marked difference between the way the children in the youngest cohort responded to this challenge and the way the other two groups responded, which Hakes' findings would have led one to predict.

Language and Social Behaviour

Language in addition to being cognitive is also a social phenomenon (Cherry, 1979). As one cannot speak usefully without thinking, so one cannot speak effectively without an audience. Listening and speaking presuppose the presence of other people. Schools are essentially social institutions (Handy & Aitken, 1986). Donaldson (1971) suggests that the ability to "make sense" of what people do is primary. Children "react" positively to situations, that is, they interpret each situation according to their own expectations. Children are naturally social as well as thinking beings.

In addition to the high level of communicative competence (Hymes in Pride & Holmes, 1972) which many children have already attained before starting school, they bring with them a range of general, social abilities which may be collectively summed up as "cultural competence".

> "Even the youngest of pupils enter school with a measure of cultural competence which they can variably display."
> (Hustler & Payne, 1985)

There are thus three socially conditioned contributions to the classroom: the teachers', the children's and the school's.

> "The child brings to the classroom a socially conditioned way of behaving, both verbal and nonverbal, which reflects both the maturational process and sociocultural conditioning, and a socially conditioned view of what the norms of the dominant society are and what that society expects of him or her. The school attempts to

> transmit the cultural heritage in the form of certain basic social values and practices and in the "correct" usage of the national language. Teachers also bring to the classroom their own socially conditioned ways of behaving and a value system on which they interpret their role as teachers and the goals of the school, and they accept, reject or attempt to modify the behaviour of the children. Thus there are three sets of rules in operation in a school setting, each in interaction with the other two."(Matluck,1978).

In the same way as meta-linguistic cognition seems to develop later than straightforward communication, so it takes time for children to develop a mature perception of other people. The present research focused on children's perceptions of other people as "listeners". According to Rogers (1977), this should be a valuable and fruitful area:

> "If we wish to understand the social behaviour of children we must also attempt to understand their understanding of other people's behaviour. A developmental study of person perception will also provide useful tests of the adequacy of our understanding of similar processes in adults."

Rogers also noted that young children do not perceive other people in the same way as do mature adults:

> "The socially experienced and cognitively mature adult perceives other people on at least two levels...physical...and...psychological. The actions of other people are not merely observed, they are also interpreted. These interpretations involve the making of inferences of thoughts, feelings and, most importantly, intentions."

Between the ages of seven and fifteen the child's focus of attention shifts from discrete and directly observable actions to underlying intentions. Adelman (1981) also concluded:

> "It is very unusual for children of four or five years of age to be able to give accounts of the intention of another's

utterances."

PREVIOUS USE IN RESEARCH OF AGE COHORTS

Piaget identified the age of six/seven years as the approximate time for the change from egocentric to socialized speech, when the speaker begins to consider the listener (Dittman, 1972).

In the present study, three cohorts were used as subjects, consisting respectively of children aged between four and five, seven and eight, and ten and eleven years in an attempt to chart the linguistic/ cognitive/ sociolinguistic progress made by those age groups in listener identification. Rogers (1977) quotes several studies in which cohorts of children in different age groups were used. One instance is Flapan's research (1968) into children's understanding of social interaction, where three groups of boys aged six, nine and twelve years were questioned concerning the thoughts, feelings and intentions of actors in a film.

RESEARCH INTO NON-VERBAL BEHAVIOUR

The bulk of the raw data obtained by the present research programme is in the form of language. The subject matter, however, of this verbal expression was, to a large extent, nonverbal, since the children were asked to describe the features that made people look as if they were

listening. Listening behaviour evidently includes nonverbal as well as verbal and vocal responses (as defined in Chapter One in the section on "Terms").

> "An obvious characteristic of conversation is that speakers (and listeners) seldom remain perfectly still during it "(Beattie,1983).

The body of research into nonverbal behaviour is vast and mainly originates from the USA. Most research into nonverbal behaviour is in the field of psychology and the definitions and behaviour classifications are related to that discipline. Birdwhistell (1970) devised a system for recording and categorizing nonverbal behaviours. Distinct aspects of nonverbal behaviour have formed the basis of many separate investigations, for example,"posture " by Mehrabian (1969), "body movement" by Dittman (1978), "distance" by Hall (1969).

RESEARCH INTO ADULTS' NONVERBAL COMMUNICATION

Ekman (quoted by Zivin in Feldman,1982) proposed a two-division taxonomy of all nonverbal behaviours based on the functional distinction between emotional expressions and conversational actions.

> "Conversational actions include both movements that aid or stand for spoken meaning and those that negotiate conversational moves and roles."

Since the present focus was upon recognizing the nonverbal behaviour of listeners, the literature on nonverbal communication was particularly relevant.

It has been suggested that 65% of the social meaning of a communication interaction is nonverbal (Stephens & Valentine, 1986). One possible implication of the present research might be to increase teachers' sensitivity to this aspect of communication in the classroom.

Some examples may serve to illustrate the range of nonverbal communicative behaviours which have formed the focus for research projects.

> "A person's nonverbal expression of interest in a communicative interaction will include head nods both affirmative and negative, smiles, eye contact and a slightly forward postural lean." (Stephens & Valentine, 1986)

"Visual orientation", "gaze direction", "eye contact", or just "looking", as it has been variously described, has been shown to be the most commonly employed feature of listener responses (Kendon, 1967).

> "Average time spent looking while listening is 62%." (Beattie, 1983)

> "Probably the most regularly employed nonverbal control signal is visual orientation." (Rosenfeld, 1978)

Ekman and Friesen (1969) classify Listener Responses as one of three types of conversational actions or signals. They give as examples, head nods and "umhmms", that is

> "signals that show how the listener is playing the role of listener and that s/he wants to speak, break off the conversation, etc."

An aim of the present study was to discover at what age and to what extent children acquire knowledge of such "signals".

RESEARCH INTO CHILDREN'S NON-VERBAL BEHAVIOUR

Most research has been into adults' nonverbal behaviour. Scherer & Ekman's extensive Handbook of Non-Verbal Research Methods (1982) includes only three references to research on Infants. One concerns body movement, the other two facial expression, which Oster found different in neonates and infants from young children and adults (Oster & Ekman, 1978). Infant nonverbal behaviour also attracted the attention of Izard (1981), but has shared this general neglect with research into the nonverbal behaviour of the old. Camras (1977) studied children's facial expressions in a conflict situation. Still, gaps in this field remain to be filled.

> "Little is known about the contribution of developmental processes in the acquisition of conversational control skills...Elementary school children begin to recognize the communication functions of...facial reactions" (Rosenfeld, 1978).

Interest in children's interpretation of nonverbal messages has often been adult-centred. The concern of some past research has been to find out how children interpret teachers' communication, rather than that of other children. For example:

> "When students listen they hear the words (hopefully) and they observe the behaviours and expressions of the teacher to obtain further information."(Galloway, 1979)

It appears that nonverbal communication is

inevitable, but not always clear, and that the cues are uncertain.

> "Pupils need to develop sophisticated techniques for determining what they should do and how well they are doing it." (Woolfolk & Brooks, 1985).

The above quotations illustrate the preoccupation of some researchers with children's need to learn to interpret correctly teachers' nonverbal signals. It was hoped that the present research might draw teachers' attention to the ways some children may in fact be interpreting such signals, although it must be reiterated that the sample in the present instance was small and the research exploratory.

> "Research on the nonverbal behaviour of individuals should help us understand how the nonverbal messages of adults might be interpreted by children."(Woolfolk & Galloway, 1985)

There is a need for both sides of each communication, the communicator and the receiver, to be more conscious of the signals that are being sent constantly throughout each and every interaction. The teacher requires clearer indications from the pupils that they are in fact listening and attending or, conversely (and more importantly) that their concentration has lapsed. The pupils, for their part, need to be aware of their responsibility to provide the communicator with adequate feedback. It may be instructive for teachers to learn which features in other children have been regarded by children as indications that they are

listening and to compare those indications with their own notions of listening children's behaviour. The present study provides a starting point for such a comparison.

R.S. Feldman's compilation of papers (1982) is one of the few books on the development of children's nonverbal behaviour. Several themes can be traced throughout the various chapters which may be illustrated by quotations. One such theme is the functional distinction first made by Ekman (1979) between emotional expression and conversational actions which was mentioned above.

> "For nonverbal behaviours which are not emotionally expressive but rather contribute to the flow of conversation and interactions, almost no early developmental work has been done". (Zivin, Chapter 3 in Feldman, 1982)

> "Nonverbal behaviour involves both innate and learned aspects...it is simultaneously a biological phenomenon involving the expression of emotion and a learned phenomenon analagous to, and interacting with language." (Buck, Chapter 2 in Feldman, 1982)

As Saarni remarks (Chapter 5 in Feldman), these two functions of nonverbal behaviour identified by Ekman, the communicative or social and the expressive or affective, coincide or co-occur. They are really integrated. Saarni was writing here about the <u>sender's</u> meta-messages, not the listener's, but the same would seem to apply: that the communicative and the expressive functions of a listener's nonverbal behaviour are integrated as are those of a speaker.

Another recurrent theme in Feldman's book is

developmental, for example:

> "Communication skills develop with age... Older children are less egocentric and thus better able to take the role perspective of someone else..There is an increase in the control of non-verbal behaviours with an increase in age." (Morency & Krauss, Chapter 7 in Feldman, 1982)

However, Feldman, White and Lobato (Chapter 10 in Feldman, 1982) take as a basic hypothesis for their research that "the ability to use and control nonverbal behaviour is a developmental skill," since most research has been with reference to the emotions. There is apparently little research support for the "notion that there are changes in the use and control of nonverbal behaviour during childhood."

> "Despite a large body of research examining how verbal language is modified to meet the demands and characteristics of the listener, there is little analogous reseach on the ways in which children learn to modify their nonverbal behaviour." (Feldman, White & Lobato, 1982)

Again, though the reference here is to the nonverbal behaviour of the child speaker, it is evident that the nonverbal behaviour of the child listener is in similar need of further investigation. The research of Volkmar and Siegel (Chapter 9 in Feldman, 1982) suggests that older children give more weight in their interpretations to nonverbal rather than verbal signals where these are discrepant:

> "The relative dominance of nonverbal over verbal cues increases with age presumably reflecting increasing competence in interpreting nonverbal communication."

Another theme which recurs in the chapters of

Feldman's book is the influence of social factors upon communication:

> "Developmental changes in ability at decoding and interpreting verbal and non-verbal messages... likely to be affected by socialization variables to which the growing child is exposed."
> (Blanck & Rosenthal, Chapter 8 in Feldman, 1982)

> "Effective social/interpersonal adaptation throughout the lifespan no doubt calls for complex mixtures of controlled and spontaneous nonverbal expressions which vary in relative proportion in different social domains... Laboratory studies are excellent for providing profitable leads in a new area such as children's nonverbal communication, but ultimately the ecological validity of our findings must be tested in field settings."
> (Shennum & Bugental, Chapter 4 in Feldman, 1982)

The present research may be viewed as one attempt to expand knowledge in this relatively new field of interest.

Other researchers have observed the combination of social and of cognitive factors:

> "The degree to which children's deficiencies in nonverbal conversation control can be attributed to less well-developed information processing skills and to less well established social habits has not been determined."(Rosenfeld, 1978)

This quotation reinforces the point already made about the difficulties of disentangling the interrelated strands in child development. Here, the cognitive and the social aspects are mentioned. There remains also the linguistic question, to what extent are children able to express verbally what they may understand and could perform.

Atkinson (1981) recognized the interplay of linguistic and social factors in his examination of the social organization of talk in naturally occurring settings. In his article, "Inspecting Classroom Talk", he equates "turn-taking" in conversations with both linguistic form and social function.

RESEARCH INTO CHILDREN'S LISTENER RESPONSES

There has been research into children's development of listener responses. Dittman(1972) described a repertoire of listener responses. Paralinguistic vocal responses he defined as half way between verbal and nonverbal behaviour. (Paralanguage refers to vocal interjections which are yet not words, such as "mm", for which Yngve coined the term "backchannels"(1970)). Dittman distinguished two theoretical threads: linguistic and social.

> "Listener responses are tied to the rhythmical structure of spoken language and serve a social function in conversational situations."

Dittman noted that listener responses develop at a much later age than speech and suggested that there could be a connection between this phenomenon and Piaget's "decentring" which occurs at around the age of seven. By "decentration" Piaget meant the ability to move freely from one point of view to another so as to come close to an "objective" view of the whole (Margaret Donaldson, 1971). There is here an evident similarity with a child's

increasing awareness of the other participants in an interaction.

Neill (1986), quoting Morency and Krauss in R.S.Feldman (1982), noted that "children's ability to interpret nonverbal signals made by other children and adults is well advanced by the age of twelve."

One would expect children's ability to interpret others' nonverbal signals to emerge after their own use of such signals was well developed. It was predicted therefore that the older children in the present study would, in their answers, report more frequently on a wider range of listener responses than the younger children. It was also to be expected that the answers of the youngest children might lack awareness of listening indicators as recognized by adults and as defined by researchers.

CHILDREN'S OWN CONCEPTS OF LANGUAGE

Of especial relevance to this study are those instances of research where children have been asked to interpret what is going on in a language situation.

J.F.Reid (1966), reported by Donaldson (1971), showed that some young children had no clear idea at all about what kind of an activity "reading" is.

> "some children, even after three or four months in school, cannot say how the post-man knows which house to bring a letter to or how their mothers know which bus to

> take. And they do not really have any understanding of what an adult is doing when he holds a newspaper in front of his face and says to them:'Now you be quiet!' "

In 1970, Denis Hadley carried out an investigation into young children's concepts about reading as part of his M.A degree. He interviewed fourteen five-year-olds in their first year of Infants' school, twice, at an interval of four months. Among other questions, he asked them "What do Mummy and Daddy do when they read?" In his summarized conclusions, Hadley found that

> "The children showed individual confusion as to what was involved in reading when questioned verbally."

But

> "Less confusion was shown when they were questioned during play situations, i.e. with concrete stimuli."

After the four month interval

> "Children were becoming better able to differentiate among words, pictures, letters and numbers... Confusion still remained, however, about the purpose of reading."

The present research may, in a similar way, throw light upon what young children think people are doing when they listen.

The range of literature summarized above which is relevant to the present research covers several interrelated fields: education policy, education theory, language, cognition, social awareness and nonverbal behaviour.

Listening has been acknowledged to be a complex

activity:

> "We hear with our ears but we listen
> with our eyes and mind and heart
> and skin and guts as well."(Pope & Denicolo,1986)

Children are at the centre of some of these spheres, such as education, psycholinguistics and developmental psychology. In others, such as sociolinguistics, they are the subject of interest. In the field of nonverbal behaviour, the developmental aspect has attracted relatively little research.

It was hoped that the present research into an important and relatively ignored aspect of classroom interaction would provide a novel perspective: not the teachers', nor the researchers', but the children's.

CHAPTER THREE

RESEARCH DESIGN AND METHODS OF ANALYSIS

DESIGN OF THE RESEARCH

Different research methods were used to find answers to the six questions posed initially.

Question 1) "How far can young children make explicit what they know about listening?"

Two pictorial stimulus tasks were used to find answers to this question. They will be described under the headings, Task 1a and Task 1b.

Question 2) "How do older children's explanations of listening behaviour differ from those made by younger children?"

Data from Task 1a, Task 1b, Task 2 and from the Interviews were all used to find answers to this question, regarded by the researcher as the most important because it was predicted that the children's understanding of listening was developmental as well as socially influenced.

Question 3) "Are there differences in the ways in which boys and girls identify listening?"

Question 4) "Are there differences in the ways in which children identify boys and girls as listening?"

To answer the third and fourth questions, a third task was employed using dolls. This will be described as Task 2.

Question 5) "Do children distinguish between listening to a teacher and listening to another child?"

The children were interviewed. The interview questions will be reproduced later.

Question 6) "How far do children allow for listener responses in their own conversations?"

Three attempts were made to operationalize this last question. The pilot studies will be described later and explanations offered for their lack of success.

The children in the sample were thus required to perform three kinds of activities: two recognition tasks using drawings and photographs as pictorial stimuli; and one simulation exercise using dolls. They were also interviewed.

Task 1a

MATERIALS

The stimulus materials used in the first task consisted of eight drawings of individual children in school contexts. The drawings were selected from a large number of sketches made by the researcher of children in various listening postures. They were chosen as representative examples of children's attitudes in listening situations as noted and sketched by the researcher over the course of several days. By these

means, it was hoped that the final choice of drawings would fairly represent the range of naturally occurring poses and attitudes. (The drawings and photographs are reproduced in Appendix C.)

The selection deliberately included three drawings which could be interpreted as "looking at" or "giving eye contact to" the viewer. Two were of children looking to the left and right respectively. Two were looking straight down facing "front": one supposedly looking at a book and one kneeling on the floor. The last was seated presumably on the floor and looking down towards the right.

It was felt inadvisable to make use of videotapes as a basis for the drawings, as was done by Neill (1986) in a pilot study of children's responses to Teachers' nonverbal signals. At that time, there were difficulties in obtaining video recording equipment and a competent operator to use it unobtrusively. If the research were to be repeated, it might be more objective to use videotapes as a basis for the drawings, although it is not clear how some degree of subjectivity could be avoided in making the final choices of drawings to be used as research stimulus materials.

The number of drawings, eight, was chosen as a reasonable number for the youngest children to cope with after the pilot study. Eight drawings also fitted conveniently onto a single sheet of A4 card. It was preferable not to overburden the youngest group with a

daunting array of complicated research materials: the presentation of the experiments was designed to be simple and to appeal to the youngest children, while at the same time providing a sufficiently interesting stimulus for the older children.

PROCEDURE

The subjects of the study were invited to "say who was listening in the drawings."

Questioning Strategies

The subjects were reassured that there were no right or wrong answers. With every child, the same form of words was used, but the questions were essentially open-ended. No directions were given about which or how many of the drawings the children were expected to comment upon (Simons, 1981).

Throughout each interaction with each child, the researcher endeavoured to minimize her role as teacher. After the opening elicitation, direct questions were for the most part avoided as tending to promote brief and non-thoughtful answers (Dillon, 1987). Instead, when the subject identified a child in a drawing as listening by pointing or saying, for example, "that one," the researcher supplied the eliciting prompt "because?" with an upward inflection. It was predicted that all the children would recognize this as an invitation to supply explanations, since children as young as three years old

have been shown to have an understanding of the language of explanations (Donaldson M. H.,1986).

Further contributions were elicited when the children's own momentum flagged by prompting, for example "and?" or "Anything else that shows you that s/he is listening?" Where it seemed to the researcher that the child needed reminding of the initial request to "say who was listening", she asked "Is there anyone else who looks as if they are listening?" Several children in the youngest group repeated a previous comment. When this occurred, the researcher prompted "Is s/he listening?"

Directive speech acts were consciously avoided by the researcher (Sinclair & Coultard,1975) as were evaluative responses both verbal and non-verbal. Willes (1983) applied Sinclair and Coulthard's system of analysis to the Primary classroom. Typically, classroom discourse is distinguished from discourse situated elsewhere by its three-move exchanges. The first, initiating, move is answered by the response and followed up by a third move supplying feed-back. As Driver (1978) expressed it:

> "Three moves are required to accomplish an inquiry sequence, a question, a reply and an evaluation. The status of a reply as answer or non-answer is not determined until a questioner contributes his evaluation... A replier does not know how his reply fits into an ongoing conversation until the questioner reacts to it."(Driver,1978)

It has been remarked elsewhere that this feature forms part of the pattern of control exercised by teachers over classroom talk:

> "In classroom talk, there is a pervasive expectation that the pupils' answers will be followed by the teacher's evaluation of them." (Edwards & Westgate, 1987)

The researcher therefore deliberately withheld the third expected, evaluative move, supplying instead a neutral "mm". In this way, it was hoped to adopt a "counselling" rather than a "teaching" mode within which the subjects would express their own opinions rather than the opinions they thought were wanted. As will be seen from the discussion of the findings in Chapter 8, it is possible that the interviewing techniques adopted only partially achieved their purpose with the youngest subjects.

It was found necessary on some occasions to interrupt a child's utterance. This happened when, for instance, a child's meaning was not clear, or when, as occurred not infrequently, a child mimed his/her response. In the former situation, the researcher repeated as closely as possible what she thought had been the child's words for confirmation; in the latter situation, the researcher described the mime (though this was afterwards considered superfluous since it was the elicitation of the child's own verbal description which was the aim of the experiment).

An audio cassette recorder was used to record the children's responses which were later transcribed.

Task 1b

MATERIALS

The pictorial stimulus materials in the second recognition task were photographs of groups of children in various school situations which involve listening (Appendix C). Still photographs have frequently been used in experiments designed to elicit information on nonverbal behaviour (Scherer & Ekman, 1982).

One day, the researcher's daughter came into school and took seventy unposed photographs of groups of children in a variety of listening situations. The selection of listening situations was based upon Sarah Tann's matrix (1985) which she devised as a framework for analysing classroom listening. She distinguished the following activities involving listening:

Assembly
Story
Radio)
Television)
Class lesson
Group task
Pair activity

The day when the photographer came did not entirely follow the normal course of the curriculum. Some lessons, such as Assembly and Television, were rearranged to take place specially to provide appropriate listening situations. However, the children who were being photographed appeared not to notice the deviation from their customary routine. After the initial novelty, they accepted the photographer without fuss.

Nine photographs were selected by the researcher for inclusion in the research materials. The final choice of photographs is open to the same criticism as the final choice of drawings: that it was based on subjectivity. In this instance, the situations were appropriate for listening (Tann, 1985) and the children in the photographs conformed to criteria for adult listening behaviour identified by research.

It was hoped that by varying the stimulus materials in this way, it would be easier to retain the interest of the subjects, particularly the very young children who might be expected to have a short span of concentration. It was also predicted that the group photographs might be more effective than the drawings in eliciting descriptions which gave evidence of social awareness.

PROCEDURE

The same procedures were adopted as in Task 1a and the same means of eliciting information were employed. The nine photographs were spread out in front of each subject and they were invited to "say who is listening in the photographs." Again, the choice of which order to take the photographs or which to comment on was left entirely to the subject. In fact, some of the subjects commented on all the photographs while others commented on just a few.

The subjects' comments were again recorded on a portable cassette recorder.

Task 2

MATERIALS

The researcher used two dolls, one intended to be female, one male. The dolls were constructed from pipe cleaners covered in "flesh" coloured zinc oxide plaster. The dolls were then dressed in clothes made from scraps of material. The female wore a flowered skirt and a short-sleeved blouse, the male wore a blue sweater and black corduroy jeans. They both had black shoes cut from shiny adhesive tape. They both had curly brown hair cut from the fingers of an old pair of gloves, the female's long, the male's short. Their faces were without expression but with rudimentary features. They were thus fairly crude representations. To avoid the possibility of confusion as to each doll's sex, the researcher explained this briefly to each child at the commencement of this task.

PROCEDURE

The researcher explained that the two dolls were intended to be a boy doll and a girl doll. It was demonstrated to each subject that s/he could move every part of both dolls: heads, arms, hands, legs, feet, without risk of damage to them.

The children were invited to make each doll in turn look as if s/he was listening to the other doll.

The researcher noted the details of the way in which

each doll was arranged. The children's comments while they performed the task were also recorded.

This task was designed to elicit answers to the third and fourth research questions relating to sex differences in children's identification of listening behaviour.

Interviews

The children were asked four questions: 1) What do you do that shows your teacher that you are listening? 2) What does your teacher do that shows you that s/he is listening? 3) Who do you know who is a good listener? 4) Who do you like telling things to?

Each question was intended as an invitation to which the children might respond as freely as they wished, although one objective was the elicitation of answers to the fifth research question, "Do children distinguish between listening to a teacher and listening to another child?" The interviews were recorded and transcribed.

PILOT STUDIES FOR QUESTION 6

Three separate attempts were made within the School to formulate experiments to find answers to the sixth question: "How far do children allow for listener responses in their own conversations?" Each was abandoned after piloting. The reasons for this are set out below.

First of all, a situation was set up with two children seated opposite each other. One child was asked to describe a picture-story in the form of a comic-strip to the other who could not see it. There were two stories. Each was a set of six pictures in sequence (Appendix C).

In the first, two children playing with a football are shown breaking the window of a house; the house door opens, a man appears and seizes one of the children while the other runs away. In the second, a child is shown planting and caring for a seed which grows into a strange-looking plant bearing a fish instead of a flower.

The idea of using picture stories came from those produced by the Assessment of Performance Unit (Maclure & Hargreaves, 1986) for assessing children's "Oracy". The actual plots of the stories were suggested by "comic strips" in the Teacher's notes for the ITV Schools series, "Talk, Write and Read" (1986).

After the first child had described what s/he saw in the pictures, the second child was required to retell the story, still without seeing the pictures.

In practice, this situation resembled a training session. It was formal. It reminded the researcher forcibly of Stubbs' (1981) criticism of Wilkinson et al.(1974), that there is a contradiction involved in trying to test informal language in a formal test. Moreover, the children in the three pilot tests withheld feedback from

each other until the completion of the tasks when they merely commented "That's right."

The researcher next attempted to observe how far children allowed for listener responses in their own informal conversations by observing pairs of children interacting naturally within the classroom. It proved impossible to do this. Even with the use of a video camera, it would have been hard to focus on whichever pairs of children were interacting at a given moment without distracting them.

A third attempt was made. It had been impossible to observe in a naturalistic setting the way children allowed for their listeners' responses. This time, children who were observed having a conversation were asked afterwards how they knew that their partner had been listening. This meant a slight shift in the last question from "How far do children allow for listener responses in their own conversations?" to "How far are children aware of listener responses in their own conversations?" It might also supply the kinetic and verbal information which Tasks 1a and 1b were unlikely to stimulate. The four groups approached in this way offered two or three brief comments. This might be a fruitful approach if it could be adopted systematically. However, it was felt at this stage that the sixth research question could form the subject of a separate investigation at a later date.

PILOT STUDIES FOR THE OTHER RESEARCH QUESTIONS

Pilot studies were carried out initially with neighbours' children near the researcher's home. The drawings and photographs were shown to six children with ages ranging from four to nine years old. This gave the researcher practice in exercising the neutral stance that she had decided to adopt as more appropriate than her more customary teaching manner. This by no means came easily. The researcher learned to wait for a response that did not come immediately and to withhold the expressions of approval and disapproval that she used habitually in other aspects of her professional life. Problems were experienced in the use of the audio cassette recorder. Some replies were inaudible, and, after trial and error, the researcher found the optimum position for the machine in relation to herself and her subject. At this stage, the tape recorder developed a spasmodic fault of spontaneous ejection and required treatment.

Following these initial trials, the researcher used the research materials and procedures with eleven children at her school: three five-year-olds, five eight-year-olds and three eleven-year-olds. The pilot studies all took place in June and July of 1986, in the academic year preceding the one in which the main research was to be carried out. In this way, none of the children in the pilot study would be eligible for participation in the main

research project.

The pilot exercises proved useful to the researcher in four ways: in becoming familiar with the unaccustomed interaction between researcher and subject; in establishing the exact words to be used to each subject; in the presentation of the stimulus materials and in the use of the recording equipment.

THE SAMPLE

The subjects of the study were drawn from the school where the researcher was a full-time class-teacher. There were about 375 pupils in the school, which included both Infant and Junior departments. Three distinct age groups were identified in order to discover answers to the second research question of whether older children's explanations of listening behaviour show a development, which was the main focus of investigation. The first group was from the bottom, the second from the middle and the third from the top of the school. The school operated a one-form entry system in the Infants and a three-form entry system in the Juniors.

Children for whom English was a second language were excluded from the study, since their linguistic development might be expected to differ from that of native English speakers. Their cultural expectations might also be different. These children were identified after consultation with the teachers.

The size of each cohort was determined by the Reception Infant class since this was the only class for four- and five-year-olds in the school. After eliminating the children who spoke English as a second language, the largest cohort that could be formed from this class, with equal numbers of girls and boys, was one of sixteen children. The other two cohorts were formed by putting together the three class lists from each age group which were arranged in order of age. The researcher then picked out every fourth name for inclusion in the sample (Table 1i).

In order to gain another perspective on the data obtained from the three children's samples, Tasks 1a and 1b were also presented to sixteen teachers and their responses were compared with those made by the children. Thirteen were teachers attending an in-service course at the Middlesex Polytechnic; three were members of staff at the researcher's school. All were Primary teachers. (For full lists of participants, see Appendix B.)

CONDITIONS IN WHICH DATA WAS COLLECTED

The Researcher's Role

As has already been mentioned above, the sample of children was drawn from the school in which the researcher was a teacher. The data were also collected within the school. This carried certain advantages as well as

disadvantages. The researcher had no difficulty gaining the children's acceptance since she was already a familiar figure. This was of particular value with the youngest children who might have been expected to feel shy and ill-at-ease with a stranger. On the other hand, she was familiar as a teacher, a role which has implications even for such novice pupils as the four-and-a-half year olds (Willes, 1985). None of the children in the study was taught by the researcher, although a few had siblings who were or had been her pupils. This was, however, thought to be a negligible influence on their possible responses.

Places and Times for Collection of Data

The researcher has already described above the means taken to avoid the characteristic pattern of teacher/pupil interaction. Additional procedures were adopted to reduce the effect on the children of her status in the school (Cohen & Manion, 1985).

Whenever it was practical, interviews with children in the two older cohorts were held in neutral rooms, not in the researcher's own classroom. The music practice room was used on many occasions. For the youngest age-group, the Infant Activities Room was preferred as it had the advantage of being an environment that was both familiar to the children and welcoming.

The interviews took place during the dinner hour for

the two older groups. The youngest children were interviewed during their lesson time.

The children were accustomed to being summoned by an adult to participate in various tasks, but on this occasion they were invited in a way that allowed them the option of refusal. None in fact did refuse.

With the two older groups, a form of words was used similar to the following:

> "I would just like you to do a few easy tasks for me and answer some questions so that I can find out what you think people are doing when they are listening."

With the youngest children, the invitation was issued by the class teacher, who varied the precise form of words to suit the individual child. To the researcher's relief, no child declined. Two of the youngest group said they would "do it tomorrow" and were as good as their word.

Once in the room designated for the research, the situation very much resembled a teaching situation, with child and adult seated on opposite sides of a small table with a cassette recorder between them. It should be pointed out that the children were accustomed to interacting in this way, not just with teachers, but with welfare assistants, parent helpers, medical auxiliaries and students from local schools and colleges, so that this was not an arrangement adopted exclusively for the purpose of teaching.

TIME SCALE FOR DATA COLLECTION

One schooL term was allowed as the period of time within which to collect the data from one age cohort. A certain order presented itself as being most suitable.

First, it seemed advisable to talk to the youngest children as soon as possible after their admission into full-time schooling. In this way it was hoped that these young children would have experienced the minimum of influence from school and teachers. Interviews, however, could not start immediately after the commencement of the school year, because it seemed unreasonable to involve the children with yet another new situation until they had settled down and become accustomed to their own teacher and to the school routine. As agreed then with the class teacher, interviews started with the youngest cohort on 15th, October, 1986, and were continued as and when convenient to the researcher and to the class teacher.

Another problem that presented itself was that not all the Reception class were admitted to the school in the course of the same term. The class was eventually to consist of twenty-three children. After elimination from the list of those children for whom English was a second language, sixteen remained. Ten of these children were admitted in September and interviewed by the researcher between October and December, 1986. The remaining six were

admitted in January, 1987, and interviewed in that month, that is, as soon as practicable after their entry into school.

It was decided to investigate the second age cohort of seven/eight-year-olds in the second term when they would be approximately half way through their primary schooling. They would have spent three years in the Infant department of the school and would have completed half of the first of their four years in the Junior school. All the interactions with this group took place during February and March, 1987.

The third term of the school year was devoted to researching the third cohort of children aged between ten and eleven. The purpose here was to gain the children's views as close as possible to the end of their primary school careers when they had all spent nearly seven years in full-time education. These meetings took place in May and June, 1987.

As has been described above, sixteen teachers also took part in the study. Seven of the Polytechnic course members were interviewed on 5th January, 1987; six were interviewed on 7th December, 1987. The three teachers at the researcher's school were interviewed at weekly intervals between 23rd November and 8th December. The Polytechnic members were interviewed in one of two rooms available at the time in the Polytechnic's Reading Centre.

No-one else was present beside the subject and the researcher. The three members of staff were each interviewed in their own classrooms during the school dinner hour.

ADDITIONAL DATA

After the interviews had been conducted and the data had been collected, the researcher noticed a phenomenon that appeared in the language of some of the youngest children, but not in the language of the older individuals. Some of the children repeated what they had already said about a former item of the research materials in precisely the same form of words. One boy, for example, repeated his description of being "quiet" seven times; he also repeated the phrase "not noisy" six times. One of the girls repeated the phrase "sitting down" eight times. Further details of these "stereotyped responses" or "stock answers" are reported at greater length in Chapter 7.

There was some doubt in the researcher's mind that, despite the care she had taken to pilot the research materials, her inexperience might in some way be the cause of these repetitious answers. To test this hypothesis, the researcher repeated the experiments with eight members of the new Reception class's intake in November, 1987: five boys and three girls. The language of two of

these children (both boys) contained many repetitions. At this stage, the researcher decided that the observed phenomenon need not be a function of her inexperience.

ANALYSES OF DATA

There were two forms of data obtained from the activities and interviews: the transcribed utterances in response to the three tasks, 1a, 1b and 2, and to the interviews; and the researcher's notes of what the children did with the dolls in Task 2.

It was the researcher's intention to subject the children's language (which would form the main bulk of the data) to two forms of analysis, linguistic and semantic.

Tasks 1a and 1b were designed to provide answers to the first question posed at the outset of the research about possible language differences between different age groups. The children's language was to be analysed. The methods of linguistic analysis will be described.

It was intended that the whole body of transcribed verbal data would form the basis for answers to question 2) about the developmental nature of children's identifications of listening behaviour and to question 3) about differences between boys' and girls' identifications. These methods of analysis will also be described in detail.

Task 2 was designed specifically to answer the fourth question about possible differences in the ways boys and girls were perceived as listening. The tabular scheme

adopted to record these results will be described.

In the course of the interviews, it was hoped to elicit possible differences between listening to a teacher and listening to another child as suggested by the fifth research question. In addition, in the course of the interviews, open ended questions were asked to which it was hoped the children would reply expansively, thus providing more evidence of their opinions about listening behaviour.

Linguistic Analysis

Question 1) referred to language since it asked how far young children can make explicit what they know about listening.

It seemed probable that the language of the older children would exhibit a greater structural complexity than that of the younger children. If this proved to be the case, then it was predicted that they would also verbalize their ideas of listening behaviour in a more sophisticated way.

On the other hand, if the youngest children were unable to produce utterances beyond the elementary two-word stage in the research situation, then the limitations of their language might act as a constraint on the expression of their views of listening behaviour.

The children's transcribed responses to Tasks 1a and 1b were subjected to two forms of linguistic analysis:

a count was made of the syntactic structures each subject used according to Granowsky and Botel's Syntactic Complexity Formula and the body of data obtained from each child was examined to see if the child anywhere produced utterances of at least three lexical items.

Granowsky and Botel's Syntactic Complexity Formula was applied (1974).

According to the Formula, numbers are assigned to syntactic structures. The structures within each sentence are counted and the total count of the whole is divided by the number of sentences to give an arithmetical mean average. (See Appendix E)

It was necessary to adapt the Formula which was devised for analysing the syntactic complexity of written texts and not for spoken language. A written text is presented in distinct sentence units marked off conventionally by punctuation: a capital letter at the beginning, commas etc. in the middle and a full stop at the end. Spoken language lacks a corresponding punctuation system. Also, written text is tighter, with more embedded clauses, than the freer structure which spoken language uses.

Other means have been devised for measuring the complexity of written language, for example, Hunt's "T-unit" (described in McKenzie & Kernig, 1975), or Chafe's "Idea Unit" (1985). Despite claims, neither of these seems

to be readily applicable to spoken language.

> "A T-unit...can be said to be any bit of language, main clause or main clause plus subordinate clauses which can stand alone grammatically as a sentence." (McKenzie & Kernig, 1975)

Although the concept of grammatically correct written English may be generally accepted, the same is not true for spoken language. One-word utterances, for example, may leave much grammatically understood. This would seem to be an obstacle to the accurate application of the T-unit measurement technique to spoken language.

Similarly, Chafe's "Idea Units", though intended for application to spoken or written language, are open to criticism. Certainly, the recordings obtained in the present study often failed to conform to Chafe's criteria:

> "A prototypical idea unit has the following properties: (1) It is spoken with a single coherent intonation contour, ending in what is perceived as a clause-final intonation; (2) it is preceded and followed by some kind of hesitation, ranging from a momentary break in timing to a filled or unfilled pause lasting several seconds; (3) it is a clause - that is, it contains one verb phrase along with whatever noun phrases, prepositional phrases, adverbs and so on are appropriate; and (4) it is about seven words long and takes about two seconds to produce. Idea units do not always conform to this prototype,..."(Chafe, 1985)

Within Chafe's own list of properties, contradictions are possible, for example, between number (1) and number (4). An utterance may be "spoken with a single coherent intonation contour ending in...a clause-final intonation" and yet be much longer than seven words and take much longer than two seconds to produce. The

adults in Chafe's sample, it must be noted, were recorded in two situations, each of which was very different from the present research situation: they were either delivering a lecture or entertaining each other at a dinner party. In the recordings obtained in the course of the present research, it often took a speaker far more than seven words and longer than two seconds to reach what might be perceived as a "clause-final intonation." This was particularly true of the adult subjects whose utterances might have been expected to conform somewhat to Chafe's criteria. The notion in number (2) of "some kind of hesitation" seems essentially subjective.

Although Granowsky and Botel's Syntactic Complexity Formula was also not ideal for the measurement of spoken language, yet it appeared to be the most suitable, when certain adaptations had been made.

In order to disclose a unit for the spoken language of the data which might correspond to the sentence of conventional written text, the researcher marked in the transcriptions the points at which the speaker's voice suggested an end to that particular comment. This was sometimes in the form of a pause of several seconds, but most commonly indicated by the pitch of the voice. The unit so defined is referred to in the following chapter as a "comment" and was used as the basic unit for analysis instead of the "sentence" of written texts.

Another feature of spoken language is its redundancy. Where a speaker repeated words, the repetition was ignored for the purpose of the analysis. (The phenomenon of frequent repetitions or "stock answers" will be dealt with in Chapter 7.)

Account was also taken of another feature of these transcriptions. As has been described above, the researcher prompted the subjects where this seemed appropriate. With the children, the most commonly used form of prompt was the word "because?" offered with an upward inflection. Sometimes the children did not require this assistance and supplied their own explanatory language unprompted.

Some children and some teachers in the sample used a form of words such as "This person is listening because..." but sometimes omitted this, assuming that the person in the drawing or photograph was listening and immediately launching into the explanation. Accordingly, it was considered preferable not to include this particular use of "because" in the syntactic count since sometimes the subject used it, sometimes the researcher prompted with it and sometimes it was implied rather than actually said. Thus, if for example, a subject said "This person is listening because...." the causal dependent clause was not counted. If, however, "because" was used in any other

context, it was counted.

Count of Three Lexical Items

A second form of linguistic analysis was applied. It was argued that a child could express an identification of listening behaviour if s/he was capable of putting together a comment consisting of three lexical items, for example, "he is looking at his teacher." Identifications might well be made with fewer than three (e.g. "she is looking" or "nodding"), but it was still possible that a child's failure to make identifications could be due to linguistic inadequacy. Accordingly, each child's comments were analysed to find out whether s/he had used comments consisting of at least three lexical items. If s/he had done so, then this demonstrated that s/he did possess the linguistic development necessary to express knowledge about listening.

It could be argued at this point that information about each child's linguistic stage of development could have been obtained by administering some kind of verbal test. However, the researcher was concerned that the research should not be related to any kind of external formal or informal assessment of each child's ability. What was wanted was a random cross-section of pupils' views on listening behaviour without reference to individual ability. It may be that a child's shyness on this occasion

or a reticent personality precluded a fuller response. It is hard to see how this could have been avoided.

Semantic Analysis of Identifications Made

It was central to the project to analyse the semantic content of the subjects' replies to discover what they knew about listening behaviour.

Cohen and Manion (1985), in Chapter 10 of their book on Research Methods in Education, discussed various qualitative methods which have been used to analyse data obtained from accounts.

The data from the present research were obtained, not from accounts or questionnaires, but in response to the stimulus materials already described. Nevertheless, Cohen and Manion's discussion suggested ways in which these data might be effectively categorized.

Kitwood (1977, quoted in Cohen & Manion, 1985) identified eight methods for dealing with his tape-recorded accounts. Of these, Method 5, "Tracing a Theme", seemed to offer the most appropriate start to an analysis of the data on listening behaviour.

> "This type of analysis transcends the rather artificial boundaries which the items themselves imply. It aims to collect as much data as possible relevant to a particular topic regardless of where it occurs in the interview material."(Cohen & Manion, 1985)

It was predicted that certain themes would emerge throughout the data. An expected theme was a

correspondence in the subjects' descriptions to listener behaviours already identified by research. Behaviours corresponding to those found by psychological research into the listening reactions of adults include eye contact, vocal and verbal interjections, non-verbal head nods, facial expressions. A category including such descriptions was predicted. Other themes, however, were not predicted, but would hopefully become evident and possibly illustrate some differences between children's thinking about listening behaviour and adults' known listening indicators.

The intention was, after identifying certain themes, to categorize them with the help of a network.

> "Networks can be seen as an aid in helping display categories and their connections, able to be used to communicate ideas in a compact and succinct way."(Bliss, Monk & Ogborn,1983)

As summed up in Cohen and Manion (1985)

> "Essentially, network analysis involves the development of an elaborate system of categories by way of classifying qualitative data and preserving the essential complexity and subtlety of the materials under investigation."

In practice, the final network was not elaborate. Several preliminary attempts were made at formulating a network before one evolved that was considered workable. As Bliss, Monk and Ogborn caution:

> " It is not a ready-made scheme of analysis. Each network is individually designed to serve the purpose of that research."

Preliminary Versions of the Network

When use of a network was first envisaged, the plan was to base it upon an analysis of each "utterance", defined as everything a subject had to say in response to a single stimulus item or interview question, rather than upon the "comment", the unit of speech chosen for the language analysis. However, it was soon found that a single "utterance" might include observations of different categories. For example "There's no work on their desks and they're probably looking towards their teacher " includes a negative description as well as a description of gaze direction which corresponds to research. It was therefore decided to base the analysis upon each verbal phrase spoken by all the subjects in the sample (children and teachers). The verbal phrases were assigned to different categories and the numbers of occurrences of descriptions in each category were totalled.

It was then felt that the resulting numbers did not represent adequately the balance of the children's ideas. If one child offered many descriptions of a single kind, this tended to distort the findings. Instead, then, the decision was taken to count only once what each subject said in each category in response to each research activity. To give examples, in the youngest cohort of subjects, physical descriptions were often given. One boy said "he's sitting down", "his leg's up", "he's bending down", "he's sit down on a chair", "she's folding her

arms", "she's doing jumping," and several other things in response to the drawings in Task 1a. It was recorded only that this subject (Boy 5 in Cohort I) made physical descriptions in response to Task 1a. Similarly, Girl 3 in Cohort III gave two negative descriptions in much the same words in her interview: "she sits and doesn't do anything really" and "they just sit there like they're not doing anything really." The two responses were counted once as a negative category response by this girl in the interview.

All the transcribed data were examined in the network analysis of semantic content. Only the transcribed responses to Tasks 1a and 1b had been subjected to linguistic analysis, since these constituted the bulk of the data and seemed to offer sufficient material for analysis.

Only positive identifications of listening behaviour were analysed. Identifications of not listening, inaudible replies, failures to respond, repetitions of the researcher's words, answers of "don't know" or "I've forgotten" were not included in the semantic analysis, since they were irrelevant to the purpose of the study. They are, however, recorded in Appendix D.

The network in its final form is reproduced and described in Chapter Four.

As the subjects had a free choice of which, if any, of the drawings and photographs they commented on, counts were made of the range and of the frequency of response which each item attracted. Tables showing the results of these counts are displayed in Chapter 8.

Analyses of Sex Differences

The boys in each sample cohort were to be listed separately from the girls in all the tables displaying results of the analysis of the verbal data, in order to facilitate the comparison required by question 3), "Are there differences in the ways in which boys and girls identify listening?"

Task 2, the activity with the two dolls, designed to give answers to question 4), produced two kinds of data: researcher's notes and transcribed speech. The children were invited to arrange male and female dolls in listening postures. It was hoped that they would spontaneously accompany their actions with verbal descriptions.

A chart was devised to illustrate the nonverbal answers to question 4): "Are there differences in the ways in which children identify boys and girls as listening?" The resulting charts are reproduced in Appendix D. The arrangements of the dolls were analysed according to two criteria: their individual posture and/or movement,

and the relationship between them. It was noted whether the subject had treated both male and female dolls in the same way or differently.

Analysis of Interviews

The interview answers were scrutinized to see if they gave evidence of differences in the identifications made of listening to teachers and to other children in order to find answers to question 5) and to see whether such differences presented any pattern or common theme.

In conclusion, different types of research materials were utilized to obtain answers to the different research questions. Two picture recognition tasks were intended to stimulate answers to form the basis for a linguistic analysis. These tasks, together with the verbal data from the activities with dolls and the interviews, would provide evidence for answering question 2) about developmental changes. All the data would also provide answers for question 3), since boys' and girls' responses would be recorded separately. The activities with dolls would provide data to answer question 4). The interviews would be the basis for answers to question 5).

The sixth research question was abandoned at the piloting stage.

Pilot studies were carried out in the researcher's neighbourhood and in her school.

The sample consisted of three age cohorts of children at the researcher's school and sixteen Primary school teachers.

The data were collected between October, 1986, and December, 1987.

Appropriate methods of analysis were adopted for categorizing the different forms of data.

CHAPTER FOUR

FINDINGS CONCERNING THE DEVELOPMENTAL NATURE OF CHILDREN'S RECOGNITION OF LISTENING BEHAVIOUR

In this chapter, answers are recorded for the first two of the six research questions posed at the outset.

1) How far can young children make explicit what they know about listening?

2) How do older children's explanations of listening differ from those made by younger children?

Language Development

The first question demanded a linguistic answer. Whatever young children may know about listening, they may not possess the linguistic development needed to express that knowledge.

The subjects' transcribed responses to Task 1a and Task 1b were analysed in two ways. The two methods of analysis have been described in detail in the previous chapter.

It should be reiterated at this stage that the subjects were invited to say "who was listening." The choice of what to comment on or even whether to comment was left to them. Thus, they did not necessarily choose to comment on all the research items and the response to each item was partial. The partial nature of the response is taken up again in Chapter 8. This procedure was adopted for reasons

outlined in the previous chapter to lessen the resemblance to a teaching situation where the teacher dictates the scope of the task.

Results of the Linguistic Analysis

Syntactic Complexity Count

The children's descriptions made in response to the two kinds of pictorial stimulus were subjected to a syntactic complexity count using the formula devised by Granowsky and Botel (1974). The over-all results of the Syntactic Complexity Count can be seen in Table 4i. The detailed results are set out in tables in Appendix D.

Table 4i

TABLE SHOWING SYNTACTIC COMPLEXITY OF COMMENTS IDENTIFYING LISTENING

COHORT	TOTAL NO. of COMMENTS	TOTAL COMPLEXITY COUNT	ARITHMETICAL AVERAGE
I			
8 Boys	141	53	0.4
8 Girls	82	16	0.2
16 Children	223	69	0.3
II			
8 Boys	98	176	1.8
8 Girls	94	108	1.1
16 Children	192	284	1.4
III			
8 Boys	98	170	1.7
8 Girls	95	203	2.2
16 Children	193	373	2.0
16 TEACHERS	445	1742	4.0+

Although the formula was designed to be applied to written, not spoken, language as a measure of readability, it

was used here with the intention of disclosing the structure of the language used by subjects in the study.

Certain comments were excluded from the count: inaudible comments, "don't knows", identifications of not listening and unrelated comments, such as ""something bumpy in my ear." Repetitions of comments using identical words were also excluded. (See discussion in previous chapter.)

The comments of few of the children in the sample scored more than 4. Rather than count separately the unusual comments which included six or eight syntactic structures, it was decided to subsume these in a single category as "more than 4".

There is a dramatic difference between the table for Cohort I and the tables for the older children in Cohorts II and III. The Teachers' table also shows some striking differences.

In Cohort I, out of a total of 223 comments, 166 had a syntactic complexity count of 0. This meant that most of the comments made by the youngest children consisted of two or three lexical items only.

However, this method of analysis takes no account of lexical complexity. The sentence "he is looking up" has the same count according to this method of analysis as, for example, "the hippopotamus is masticating the meringue". In practice, of course, the vocabulary used was not exotic, although if it had been, the application of the Syntactic Complexity Formula would not have revealed it. The method of

analysis employed had been chosen as a way of disclosing the structural development in children's language.

Five of the sixteen children in the first cohort (one boy, four girls) used only the basic sentence structure which, according to the formula, is awarded a count of 0. Examples are "sit on the mat", "turned her head", "opening her book". The language of a single child, a boy, included comments of a syntactic count of more than 1 (Appendix D). This boy commented, for example, ""Oh, I think they're listening though, cos a teacher might be standing here."

This contrasted with the language of Cohort II (Appendix D), where no children used only the basic sentence structure (count 0) and none of the more complex structures. Out of 192 counted comments, there were 45 with a syntactic count of 0. Three children (one boy, two girls) used no basic structures. All the children in this Cohort used comments with a count of 1 and there were 70 such comments altogether. Examples are "the girl's made a face at her"; "they're looking the same way"; "she's probably thinking ". It will be seen that this was the largest group of comments for this cohort. Unlike the youngest Cohort, all but two of the children (both girls) used sentences with a count of 2, for example, "she's not talking or anything" and "her head's sort of facing that way". Seven boys and three girls used comments which counted 3 and there was a smattering of count 4 and >4 comments, for example, "he's sitting quietly waiting for someone to speak."

The differences shown by the table for Cohort III are not so striking but nevertheless interesting. Of the 193 comments counted, a comparatively few (eighteen) were of the basic structure,0. Seven children (three boys and four girls) used no such comments. In this group, there were more comments in the count category,2, than in any of the other categories, for example "he's stopped what he's doing" and "he's just sitting down doing nothing." All the children used comments within this category except one girl (who in any event made only three comments identifying listening). There were eleven more comments in count category 4 than were made by Cohort II, made by four more children, although there was one less in count category >4, made by the same number of children.

The Teachers' language, again, presented strikingly different features, as was to be expected. Their replies were more expansive. They made a total of 445 comments identifying listening, approximately twice as many as the first children's cohort who provided the next biggest number. Of these, 241 (more than half) had a syntactic complexity count of >4, for example, "they may just be looking daydreaming as children often do" and "the angle of her head looks as if she's about to reply". All the teachers used these more complex structures, as well as many simpler forms of comment with lower structure counts.

Repetitions

Other linguistic features emerge from an inspection of this analysis. The phenomenon of "repeated comments" deserves attention and will be dealt with more fully in Chapter Seven as one of the findings that were additional outcomes of the research. Comments were categorized as "repetitions" where an identical form of words was used again to describe another picture. Thus, the syntactic complexity of a comment was counted only once. If it was used again, the repetition was recorded for further treatment in Chapter Seven.

Count of Three Lexical Items

The second form of linguistic analysis was applied to discover whether the children demonstrated an ability to use three lexical items within a single comment (Table 4ii).

Table 4ii

TABLE SHOWING NUMBERS OF CHILDREN WHO USED COMMENTS CONSISTING OF THREE LEXICAL ITEMS

COHORT	BOYS/GIRLS	TOTAL	PERCENTAGE
I	8/5	13	81.25%
II	8/8	16	100%
III	8/8	16	100%

All the children gave evidence of their ability to do this with the exception of three girls in the youngest group. There may have been personality traits which inhibited their production of more advanced utterances, but the discovery of these was beyond the scope of the research. Thus, all

except three of the children showed that they had reached a sufficiently advanced stage of language development to enable them to make explicit their knowledge of listening behaviour.

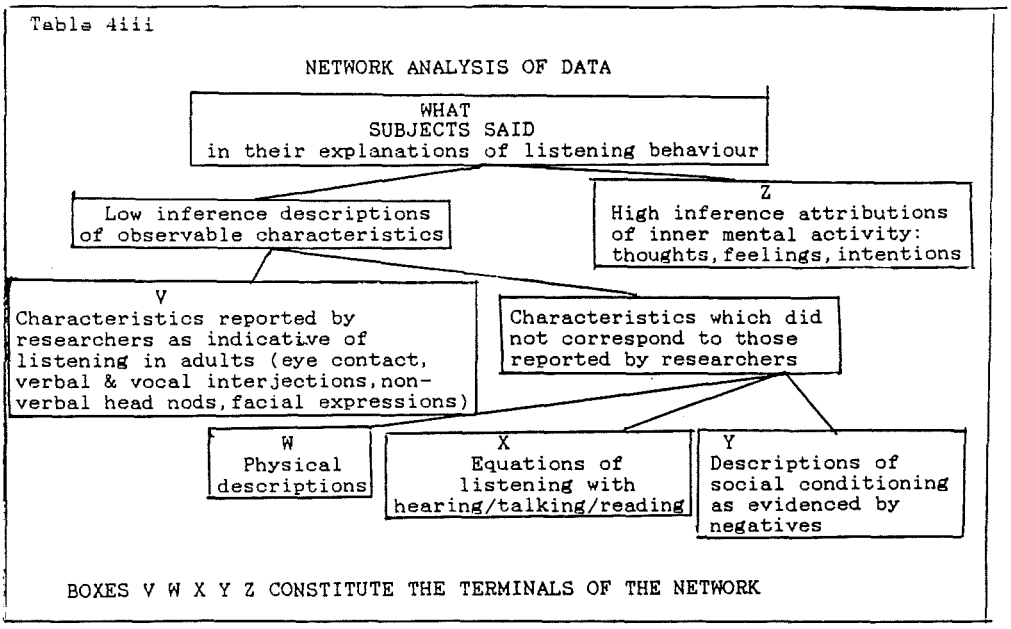
Cognitive and Social Development

The above analysis of the children's language answered the first research question by demonstrating how far the youngest children were able to make explicit their knowledge of listening behaviour. The emphasis of this enquiry was, however, not on children's ability to make verbal explanations generally, but specifically upon children's ability to explain listening behaviour. The network analysis was designed to find answers to the second research question as to whether there is a development in children's explanations of listening behaviour. The means of analysing the content of what they said are fully described in the preceding chapter.

Results of the Network Analysis

The final form of the network is displayed in Chart 4iii. The basic data for the network analysis consisted of the semantic content of every verbal phrase within the whole corpus of transcribed utterances made by each subject.

Table 4iii



The data were to be analysed with reference to the findings of psychological research into adults' listening behaviour. A comparison would be made between what the children in the study said were characteristic of listeners and what had been found by psychological researchers. It was predicted that the data would produce descriptions of listener responses which corresponded to those described in the literature, although it was necessary to keep in mind that the literature was based upon adult, not child, listener responses. There was also a significant difference in focus between the literature and the present study: the psychologists' identifications of listener responses were based upon observations of what listeners

do, not on people's opinions of what they do; the focus of the present research was upon children's descriptions of what constitute listener responses.

The psychologists' findings were based upon low inference descriptions of observed characteristics. Evidently, when opinions are being sought, these may be low or high inference. Observers may note that someone looks as if s/he is listening because, for example, s/he is looking (low inference) or because, for example, s/he is pleased (high inference). Accordingly, the first stage in the network analysis was a distinction created between low inference descriptions of observable characteristics and high inference attributions of inner mental activity: thoughts, feelings and intentions.

The low inference descriptions were further subdivided into two exclusive categories: characteristics reported by researchers as indicative of listening in adults (eye contact, verbal and vocal interjections, nonverbal head nods, facial expressions); and characteristics which did not correspond to those reported by researchers. This second category was then divided into three sub-groups: physical descriptions; equations of listening with hearing or reading or talking; and descriptions of social conditioning as evidenced by the use of negatives, e.g. "not fiddling about."

Thus, the final network presented five terminals, designated V, W, X, Y and Z.

The total numbers of subjects who mentioned each category are shown by Table 4iv.

Table 4iv

NUMBER OF SUBJECTS IN EACH COHORT WHO MENTIONED EACH CATEGORY				
CATEGORY	COHORT I	COHORT II	COHORT III	TEACHERS
V	10	16	16	16
W	16	6	1	0
X	11	6	5	0
Y	4	7	15	11
Z	2	9	13	16

V - Descriptions which corresponded to characteristics reported by researchers as indicative of listening in adults. As Table 4iv demonstrates, all the subjects in all the cohorts except one gave evidence that they recognized in children the same characteristics of listening behaviour that researchers had identified. Only in one cohort, the youngest, were there six subjects who failed to give such descriptions.

The listener response most commonly noted by researchers was gaze direction or eye contact (Kendon, 1967). All subjects mentioned this except for six of the youngest group (Table 4v). Two of these were two of the three girls who had used no sentences containing three lexical items.

Table 4v

TABLE SHOWING NUMBERS OF SUBJECTS WHO MENTIONED EYE CONTACT OR GAZE DIRECTION			
COHORT	BOYS/GIRLS	TOTAL	PERCENTAGE
I	5/5	10	62.5%
II	8/8	16	100%
III	8/8	16	100%
TEACHERS	-	16	100%

W - Purely physical descriptions not corresponding to research. As Table 4iv shows, all of the four- and five-year-old children produced descriptions of this kind. Examples were "he is sitting", "she's folding her arms", "his leg's up". In contrast to this, only six of the seven- and eight-year-olds (two boys, four girls) made physical attributions, and one ten year old boy. The teachers made none.

The researcher gained the impression that, in many cases, the youngest subjects were merely describing what they saw in the pictures rather than giving heed to the researcher's request to "say who was listening in the drawing/photograph." For example, one child identified a figure in a drawing as listening because he was "touching his tummy." Such misunderstandings might have been avoided if video recordings had been used as stimulus materials instead of static, silent pictures. This possible limitation of the research design is examined in Chapter 8.

Pillow and Flavell (1985) found ambiguity in young children's interpretation of the phrase "looks Like" when asked to respond to a pictorial stimulus. Three and four year old children's interpretations of "looks like" contributed to "intellectual realism", that is, they also included unseen aspects when asked for a strictly perceptual report. In this experimental situation, the youngest children did not usually include unseen aspects. They reported what they saw, but not necessarily with

reference to listening. The similarity to Pillow and Flavell's findings lay in the fact that these children reported their observations regardless of the researcher's specific instruction. Pillow and Flavell found:

> "Children report an object's identity when asked about its appearance."

In the present research, the children reported what the figures in the pictures were doing, not whether they exhibited the characteristics of a listener.

Some of the youngest children in the present study, in common with Pillow and Flavell's subjects, evidently failed to understand a drawing convention. One of the drawings depicted a child sitting at a table. Two boys misinterpreted the shading intended to represent a wooden surface. They assumed it was water, although there was a book on it, and said "he's in the water" and "swimming in the water" respectively.

The physical descriptions offered by children in Cohort II were not quite so irrelevant to listening behaviour, e.g."he's sitting."

The only purely physical example in Cohort III was from Boy 3 who said of children in the photographs in Task 1b, "they're listening cos they're sitting down that's all."

X - Confusions of listening with hearing, reading or talking.

Downing (1970) has shown that young children's metalinguistic concepts develop later than their abilities to use language, in other words, they are able to use language to communicate before they are able to use language about language. Confusion is common, for example, when young children are asked to distinguish between words and letters. Similarly, in this research, many of the children failed to make a clear distinction between listening and hearing; while many children in the youngest group also confused listening with reading or with talking. Adults may confuse "hearing" and "listening" in certain contexts because of the semantic similarity between the two words, for example, "Did you hear what I said?" meaning "Have you listened/understood?". However, in the context of the experiments in the present research, none of the adult subjects made such a confusion.

In the youngest group, eleven subjects (six boys, five girls) did this. Girl 7 confused listening with hearing when she said her brother was a good listener because "he's got earphones on." An example of the confusion between reading and listening was "that one<is listening> because she's reading a book"(from boy 1 in Task 1b). This confusion is especially understandable in the case of novice school children when one remembers that their experience of reading is mainly of reading aloud.

When someone reads in the Infant Reception class, almost invariably someone listens to the reading. An example of the confusion of listening with talking was supplied by Boy 1 who said that the figure in drawing h(was listening because "she's talking".

In the second group, six children confused listening with hearing (four boys, two girls).

Boy 7, for example, said "Man's over there and he's talking very quietly so he can't hear him so he's listening to him but the man's trying to speak then he can hear him."

However, none of this age group confused listening with either reading or talking as some of the younger children had done.

In the third group, again, no children confused listening with reading or talking. Four children (three boys, one girl) said that listening was the same as hearing. It is interesting that all four did so in the context of Task 2 when they were invited to arrange the dolls in listening postures, but at no other time. Boy 8, for instance, bent the male doll's right hand up to his ear, saying as he did so "He's going like that, 'Will you speak louder I can't hear.'" It may be that this type of response was encouraged by the nature of the research materials. The children may have seen Task 2 as a challenge to do something physical with the dolls. They may therefore have contrived activities for the dolls so that they could respond, as they saw it, appropriately to the researcher's request, despite their understanding that

listening is not necessarily demonstrated by physical activity. This result will be further discussed in Chapter 8.

None of the Teachers confused listening with anything else, which was to be expected of mature communicators in a formal research experiment when their views on listening were the focus of interest.

Y - Descriptions of the socially conditioned role of the listener as evidenced by negatives.

In Cohort I, only four children gave such descriptions (three boys, one girl) and of these, three were given in the course of the interviews. Boy 4 gave this reason for knowing that his friends were listening to him: "but they don't go and do something else they just stay and listen to me." The only example given in response to the Tasks was in Task 1a by Boy 7. This respondent was one of those who provided stereotyped answers. He frequently used a form of words, such as " she's not noisy" or "she's not making a noise" or "he's not making any noise." He used the same or a similar phrase six times. He also repeated "s/he's quiet" eight times. He did, however, in addition, make identifications that corresponded to research reports: "cos he's looking to that boy," and "she's opening her eyes and she's looking the right way."

In Cohort II, seven children made such

identifications (three girls, four boys). To give examples:

Girl 1 said while doing Task 1a, "not playing about with anything."
Girl 8 said in the interview:"not fiddling with anything."
Boy 3 offered also in the interview:"don't look around".
Boy 7 in Task 1b: "she's not talking or anything."

In Cohort III, fifteen children reported their awareness of listening as a socially conditioned behaviour in negative terms (seven boys, eight girls).

Boy 7 said in his interview, "we're not fiddling around with things and all that. We're not talking to somebody else."
Boy 7 again in Task 1b: "Them two they're just sitting there doing nothing and there's nothing on the desk no work or nothing."
Boy 1 in Task 1b: "They're not mucking around or anything like that, they're just listening."
Boy 2 in the interview: "If we're chatting then we can't be listening to him nor fiddling about with anything."
Girl 7 in Task 1a : "cos he's stopped working."
Girl 8 in Task 1b: "she's not fiddling or yawning."

Eleven Teachers mentioned this category. Jenny, for example, said "he's not fiddling with anything or looking elsewhere" in response to Task 1a. In response to Task 1b, she said "she's not fiddling with anything and her attention is on whoever is speaking she's not looking at her friends or fiddling with them or interfering with them so she's listening."

Z - High inference attributions of inner mental activity: thoughts, intentions, feelings.

A development was clearly seen in the children's ability to make these kinds of identifications. There were two children in the first group, nine in the second, fourteen in the third. This compared with all sixteen of the Teachers.

In Cohort I, in Task 1a, Boy 7 said "That one. He's not grumpy," thus interpreting the feelings of the boy in the drawing. It will be recalled that the pattern of this boy's answers was unusual and that he used many repetitions, although he also reported gaze direction, the commonest listener response recorded by researchers. Girl 7 said "she's holding her hand up cos she wants to tell the teacher something," thus attributing intentions to the girl in the drawing. These were the only two examples offered in this category by the children in this age group.

In Cohort II, six boys and three girls supplied many more examples.

Examples of attributions of thoughts:
Girl 6 said in Task 1a "he seems sort of thoughtful".
Girl 4 in Task 1a: "probably listening to the teacher or someone and seeing what she meant."

Example of attributions of feelings:
Girl 5 in Task 1a: "She's listening to this other girl but she doesn't like the way she 's talking to her."

Examples of attributions of intentions:
Boy 2 in Task 1b said "he's looking what the teacher's going to say so he's know what he's going to do afterwards".
Boy 5 in Task 1a: "as if she's about to give somebody his or her come-uppance ".

In Cohort III, six boys and seven girls made attributions of inner mental activity, in other words, only three of the children did not offer this kind of description. Mostly, they described supposed thoughts. There were many such examples, a few of which may serve to give their flavour.

Girl 1 in Task 1a : "he's...closing his eyes to imagine what the person's saying like if it was in real life as

though it was happening trying to imagine what he's saying"
Boy 4 in Task 1b: "she just might be concentrating".
Boy 5 in Task 1a: "listening intently as if he's taken up by it."
Girl 5 in the interview: "she understands me".
Girl 7: "looks as if he's concentrating".

There were attributions of feelings.

Boy 1 in Task 1b: "that girl there...she looks as though she's listening she looks like she's enjoying whatever it is".
Boy 3 in the interview: "...quite a few ... sort of enjoy what I'm saying to them."
Girl 1 in Task 1a: "as though she's heard something surprising."

The children in this group also gave their opinion that some listeners had inner intentions, for example:

Girl 8 in Task 1a: "she must be to answer a question."

All the Teachers made many high inference attributions of thinking, feeling and intending. Two examples may suffice.

Pat in Task 1a said "she hopefully has understood what the question was."
Yvonne in Task 1b said " he's anticipating a gap in the conversation so that he can interject."

The above five categories: V,W,X,Y and Z, are mutually exclusive. They account for the bulk of the data. There were, still, utterances made by the subjects which did not fit into these categories.

Findings outside the Network

Awareness of Listening as an Interactive Process

Although they were not asked to do so, many subjects gave evidence of their awareness of the listener as part of the interactive process of communication. They

mentioned that there was or should be someone for the listener to be listening to. All the children in the older two groups and all the teachers did this and eleven of the youngest group (seven boys, four girls).

Examples are:
From Cohort I, "he's looking that way at his teacher"(Girl 7, Task 1b).
From Cohort III, "as if he's looking at somebody" (Boy 2, Task 1a).

The focus of the enquiry was upon the children's understanding of the behaviour of a listener, not upon their understanding of listening as an interactional two-way process. Nevertheless, it must be recorded that the data did include many references to the listener as one side of a communication. All the children, with the exception of five of the youngest, as stated above, showed that they knew that a listener must be listening to someone or something (Table 4vi).

Table 4vi

TABLE SHOWING THE NUMBERS OF SUBJECTS WHO SHOWED AWARENESS OF LISTENING AS AN INTERACTIVE PROCESS

COHORT	T A S K 1a b/g	T A S K 1b b/g	T A S K 2 b/g	INTERVIEW b/g	T O T A L S b/g	%
I	4/2= 6	6/3= 9	0/1= 1	3/4= 7	7/4=11	68.75%
II	7/6=13	8/8=16	2/0= 2	8/8=16	8/8=16	100%
III	6/6=12	8/8=16	0/3= 3	8/8=16	8/8=16	100%
Teachers	14	16			16	100%

Phrases which could not be Categorized as V, W, X, Y or Z

There were other phrases which, for a variety of reasons defied analysis into one of the five categories. Some of them, the researcher surmised, were produced as a

result of the social conditioning effected by the school, but as they were not couched in a distinctively negative form of words, this was hard to demonstrate objectively.

Examples were: "he listens cos he does quite a lot of work" (Cohort II, Girl 4), and "when she does <listen> she gets on with her work all the time she gets a lot done" (Cohort II, Girl 5).

The word "quiet" or "quietly" was used to describe listeners by one boy in each of the two younger cohorts and two boys and two girls in the third.

Girl 5 in Cohort II said "and she's listening because it looks like she's sitting nicely," where "nicely" appears to be socially influenced adverb. Perhaps also Cohort III's Boy 4 showed a similar effect when he said "sitting there peacefully."

It is difficult to know whether these children were thinking of a typical listener's state as "quiet" in the sense of "not talking" or whether they did have the added implication suggested here that "being quiet" means in school "being good." Considering that the pictorial stimulus materials supplied were silent, these children were not making low inference assertions based on observable physical characteristics. They could not see that the people in the pictures were "being quiet". They were making high inference descriptions which were not, however, attributions of inner mental activity, since being "quiet" is not a description of a mental state or

activity.

Another phrase which defied analysis, but which may show a social influence, was "paying attention" used by no-one in the two younger groups, but by four boys in the oldest group and by two of the Teachers. It is not clear how the children themselves would interpret this phrase. It may be that they would see it as a physical explanation of outwardly observed characteristics, whereas an adult might see it as an inference of a mental attitude. It certainly sounds familiar in a classroom context. Many children must be accustomed to hearing their teachers instructing them to "sit up and pay attention."

Additional phrases which did not fit into any of the categories as defined were "he's sort of showing off"(from Girl 8 in Cohort II), and "she's half asleep" (from Boy 8 in Cohort II and Girl 6 in Cohort III).

There were several cases where children imitated an action or expression physically rather than describing it verbally. This was done by three boys and one girl in Cohort I, one boy and one girl in Cohort II and by one boy and two girls in Cohort III. None of the Teachers did this!

One child (Girl 3 in Cohort III) mentioned the possibility of listening "at the same time as doing other

things". A similar qualification was repeated by five of the Teachers, though by none of the other children in the study.

The Teachers showed their awareness of the high inference nature of the task they were asked to undertake by qualifying many of their responses. They regarded listeners, or rather, listening children as exhibiting a wide range of subtle and often deceptive features. Three teachers said that children may appear not to be listening when they really are listening. Two teachers said that children might be supposed or expected to listen, but may not in fact be listening. Three teachers said that children sometimes pretend to listen. One said that children might pretend to read but really be listening. Several teachers mentioned "partial" or "half" listening; listening to "bits" or "intermittent" listening; "switching in and out of listening". One teacher mentioned "internalized" listening, another being "ready to listen," another "listening without hearing". Two teachers expressed their opinion that, from the appearance of children, it was "impossible to know whether children are listening."

To summarize, both types of linguistic analysis showed a development in the children's language: the Syntactic Formula Analysis showed that the older subjects

used structurally more complex forms of comment. Three of the youngest children did not offer comments containing three lexical items.

The network displayed five terminal categories showing developmental changes in the children's descriptions of listening behaviour. The younger children made far more physical identifications and far fewer identifications which corresponded to research findings than the older groups. They also showed more confusion about what kind of activity listening is. The older children made many more negative attributions which may show the influence of schooling and they showed keener awareness of an external audience.

CHAPTER FIVE

SEX RELATED FINDINGS

The third and fourth research questions were related to possible sex differences in the identifications made by boys and girls about boys and girls.

3) Are there differences in the ways in which boys and girls identify listening?

4) Are there differences in the ways in which children identify boys and girls as listening?

Answers to Research Question 3

BASED ON VERBAL DATA

To see if the boys' descriptions differed from the girls', a comparison was made based on all the children's verbal responses to all the research tasks: to Tasks 1a and 1b, to Task 2 and to the interviews.

The results of this comparison are shown for each task separately in Table 5i.

The figures for the separate tasks were then collated in Table 5ii.

The nonverbal data from Task 2 were also consulted in tabulated form (Appendix D).

As the numbers were small (eight boys and eight girls in each of the three age cohorts, twenty-four of each sex altogether), differences are not statistically

significant. Nevertheless, emerging patterns may be noted.

Table 5i

TABLES COMPARING BOYS' AND GIRLS' DESCRIPTIONS OF LISTENING BEHAVIOUR IN THE DIFFERENT CATEGORIES:

	COHORT	C A T E G O R Y				
		V	W	X	Y	Z
		b/g	b/g	b/g	b/g	b/g
IN TASK 1a	I	3/5	8/7	4/0	1/0	1/1
	II	8/4	1/4	3/2	0/3	6/3
	III	6/7	0/0	0/0	2/5	5/6
	TOTALS	17/16	9/11	7/2	3/8	12/10
IN TASK 1b	I	3/4	7/6	3/1	1/0	0/0
	II	7/8	1/1	1/0	2/0	2/1
	III	7/8	1/0	0/0	4/4	5/5
	TOTALS	17/20	9/7	4/1	7/4	7/6
IN TASK 2	I	0/1	0/0	1/0	0/0	0/0
	II	0/0	0/0	3/0	0/0	0/0
	III	0/3	0/0	3/2	0/0	0/0
	TOTALS	0/4	0/0	7/2	0/0	0/0
IN INTERVIEWS	I	1/2	3/4	3/4	2/1	0/0
	II	8/7	0/0	0/0	3/2	2/0
	III	8/7	0/0	0/0	7/8	5/5
	TOTALS	17/16	3/4	3/4	12/11	7/5

Comparison of boys' and girls' total responses

Table 5ii shows a close similarity between the boys' and the girls' responses in four out of the five categories.

Table 5ii

TABLE SHOWING TOTAL RESPONSES IN EACH CATEGORY TO ALL TASKS AND INTERVIEWS BY BOYS AND GIRLS IN EACH COHORT

COHORT	V	W	X	Y	Z
	b/g	b/g	b/g	b/g	b/g
I	5/5	8/8	6/5	3/1	1/1
II	8/8	2/4	4/2	3/4	6/3
III	8/8	1/0	3/1	7/8	6/7
TOTALS	21/21	11/12	13/8	13/13	13/11

In categories V and Y, the numbers for boys and girls are identical. Twenty-one boys and twenty-one girls made identifications corresponding to those found by researchers. Thirteen boys and thirteen girls recognized listening behaviour as a socially conditioned activity. In category W, one more girl identified listening as a purely physical activity (eleven boys and twelve girls). In category Z, two more boys than girls made attributions of inner mental activity (thirteen boys and eleven girls).

In category X, however, a difference appears: thirteen boys confused listening with hearing, talking or reading, as compared with eight girls. When one looks at the figures for each cohort, the differences are slight: six boys compared with five girls in Cohort I, four boys against two girls in Cohort II and three boys against one girl in Cohort III. Yet the pattern remains consistent throughout the three cohorts of more boys than girls making

this confusion.

Comparison of boys' and girls' responses to individual tasks

Again, when one looks at the numbers of boys and girls confusing listening with other activities in response to each individual task, in each task the confusion was made by more boys than girls. Seven boys, two girls in Task 1a; four boys, one girl in Task 1b; seven boys, two girls in Task 2. Only in the interviews was the position reversed: three boys appear in category X compared with four girls.

Similarities

In thirteen of the twenty totals (produced by five categories in four research situations), the numbers of boys and girls mentioning each category in each task resemble each other: three are identical, six differ by one, four differ by two.

Differences

There are seven instances where there is a wider discrepancy. Three of these involve confusions between listening and other language activities and as such have already been described above. Of the remaining four, one occurs in Task 1a, two in Task 1b and one in Task 2.

In response to Task 1a, three boys' descriptions gave evidence of social conditioning compared with eight

girls'.

However, in response to Task 1b, this situation was adjusted, with seven boys, compared to four girls, giving evidence of social conditioning. Also in their response to Task 1b, seventeen of the boys, compared with twenty of the girls, gave descriptions of listening behaviour which corresponded to those identified by researchers.

In response to Task 2, no boys, but four girls made identifications which corresponded to research. Task 2 did, however, elicit less verbal response than did either of the other tasks or the interviews. There was no verbal response to Task 2 in categories W, Y and Z.

The boys' and girls' responses in the interviews resembled each other closely: there were no discrepancies of more than two.

Cohort II's responses to Task 1a showed the most and the widest discrepancies between boys and girls in four of the five categories. All eight boys, but only half the girls, made identifications according to research findings. One boy, but four girls offered physical descriptions. No boys, but three girls gave evidence of the influence of social conditioning. Six boys, but only three girls made attributions of inner mental activity. Task 1a presented the children with drawings of individuals. In Task 1b, which presented photographed

groups, the boys' and girls' reactions resembled each other more closely, and in two of the five categories the boys' and girls' positions were the reverse of those in Task 1a: seven boys and all eight girls made identifications according to research; two boys and no girls made socially conditioned identifications.

Both Task 1a and Task 1b were pictorial recognition tasks which therefore were alike in the nature of their stimulus. When the results for the two tasks were collated, most of the differences described above disappeared (see Table 5iii).

Table 5iii

TABLE COMPARING BOYS' AND GIRLS' DESCRIPTIONS OF LISTENING BEHAVIOUR IN THE DIFFERENT CATEGORIES COLLATED FOR BOTH TASK 1a AND TASK 1b

COHORT	V	W	X	Y	Z
	b/g	b/g	b/g	b/g	b/g
I	4/5	8/8	5/1	1/0	1/1
II	8/8	2/4	3/2	2/3	6/3
III	8/8	1/0	0/0	4/6	6/6
TOTALS	20/21	11/12	8/3	7/9	13/10

The differences between boys' and girls' verbal responses represent the exception within the total response. The biggest differences between boys and girls appear in response to a single task. They are all adjusted in the responses to the other tasks and to the interviews, so that the final total responses of boys and girls within the categories show little difference, apart from those in category X, where five more boys than girls

confused listening with something else.

Nowhere in the data did boys and girls diverge markedly from each other. There were no instances of eight of one sex offering a description in a category offered by none of the other; nor even of seven compared with one.

The category which threw up the most differences was X: that of confusing listening with other language activities.

BASED ON NONVERBAL DATA

Task 2 was designed primarily to provide answers to Research Question 4, that is, to see whether there were any differences in the ways the male and female dolls were arranged. Task 2 also provided additional nonverbal data for Question 3) in the form of the researcher's notes on what the boys and girls in the study did with the dolls. These notes might give evidence that the boys regarded listening behaviour differently from the girls and so help to give fuller answers to the third question, "Are there differences in the ways boys and girls identify listening?"

This question will be returned to after the next section, which deals more fully with the responses to Task 2.

Answers to Research Question 4

Task 2 (activities with dolls) was designed to elicit answers to this question. The children, it will be

remembered, were, in this task, given two dolls, a female and a male, with the invitation to "make one doll look as if s/he is listening to the other." The researcher took notes of what the children did with the dolls and their verbal responses were recorded.

The verbal responses were included with the rest of the transcribed language as the basic data for the developmental analysis already described in the previous chapter. The researcher's notes on Task 2 formed the basis for a comparison between the actions that the children made the male and female doll perform as supposed listeners.

There were two purposes in using the dolls. First, it was predicted that the younger children would need variety in the range of tasks they were required to do in order to maintain the same level of interest throughout. A task which presented itself as one of physical manipulation was thought to be attractive and appropriate to the youngest subjects. Second, it was hoped that all the children would be stimulated by the activity to comment verbally on what they were doing with the dolls, thus providing further language data to supplement those obtained by the other research materials.

As it turned out, all the children tackled the arrangement of the dolls with a fair degree of enthusiasm. A minority of them, however, took the opportunity to comment verbally. As can be seen from Table 5iv, only seventeen of the forty-eight children in the sample made

any verbal comments at all while they were engaged on this task and most of these comments were of just a few words.

Table 5iv

TABLE SHOWING THE NUMBERS OF CHILDREN WHO COMMENTED VERBALLY ON TASK 2

COHORT	A FEW WORDS		SEVERAL PHRASES		TOTAL
	Boys	Girls	Boys	Girls	
I	1	3	1	0	5
II	3	1	0	0	4
III	2	4	1	1	8
TOTALS	6	8	2	1	17

Evidently, the task was construed by most of the children as a physical one not requiring commentary. This question will be further explored in Chapter 8.

Classification of Activities with Dolls

From the researcher's notes, two main categories emerged. First, the individual physical pose into which each child arranged each doll: this included the positioning of limbs and head. Second, the relationship of the dolls to each other.

In addition, the main heading, "Individual Posture", was subdivided into five physical categories. The categories were not pre-set, but reflected all the physical actions which the children made the dolls perform. The five categories were "sitting", "standing", "walking", "arms moved" and "hand to ear." There was only one action which could not be thus classified: one boy in Cohort III

made the female doll kneel. Beneath the other main heading, "Relationship between Dolls", three categories were subsumed: "facing", "side by side" and "turned towards".

A comparison was made between the ways in which the children arranged the male and the female dolls. Table 5v displays a summary of the results of this comparison, showing the numbers of similarities and differences. Details of the researcher's observations of Task 2 are set out in additional tables in Appendix D.

Table 5v

TABLE SHOWING SIMILARITIES & DIFFERENCES IN CHILDREN'S ARRANGEMENTS OF MALE & FEMALE DOLLS

COHORT	INDIVIDUAL		RELATIONSHIP	
	SAME b/g	DIFFERENT b/g	SAME b/g	DIFFERENT b/g
I	6/6=12	2/2=4	6/5=11	2/3=5
II	4/5=9	4/3=7	5/8=13	3/3=6
III	0/7=7	8/1=9	6/8=14	2/0=2
TOTALS	10/18=28	14/6=20	17/21=38	7/6=13

In the majority of cases, the children arranged both male and female dolls in the same ways. But the numbers of subjects were too small for this to be statistically significant.

ARRANGEMENTS MADE BY SUBJECTS IN COHORT I

Individual

In their individual posture arrangements, there were

only four instances where the male and female dolls were arranged differently: two children had the female seated while the male stood; one girl moved the female doll's arms forward and one boy placed the female's arms at her sides.

Twelve children arranged the male and female dolls in the same individual posture.

Relationship

In showing the relationship between the two dolls, there were five differences: two girls and one boy turned the male doll to face the other; one girl and one boy turned the female.

Eleven of the sixteen children arranged both dolls in the same relationship to each other.

ARRANGEMENTS MADE BY SUBJECTS IN COHORT II

Individual

In the arrangement of the dolls into individual poses, nine children made the male and female look the same as each other; seven made some difference between them. Three of the differences were created by three boys who moved the female doll's hand up to cup her ear (a phenomenon which will be discussed in Chapter 9). One boy made the female stand while the male sat, while one girl did the opposite. Two girls moved a doll's arms (one the male's, one the female's),

Relationship

In showing a relationship between the dolls, all eight girls arranged both dolls to face each other. Three of the boys made extra adjustments in turning the dolls around: two to the female, one to the male. However, in thirteen cases the arrangements were the same.

ARRANGEMENTS MADE BY SUBJECTS IN COHORT III

Individual

There were more variations here in the ways in which the male and female dolls were arranged individually. Again, most of the differences are accounted for by children moving a hand of one of the dolls to cup its ear (six children did this to the male doll, one to the female and one to both). As has been promised, this will be discussed more fully in Chapter 8.

Relationship

It is interesting that all the children made the dolls more or less face each other and that none placed them side by side.

Thus, the children in this age group more frequently arranged differently the individual postures of the male and the female dolls.

It is, however, still unclear whether this was

because the older children expected boys and girls to behave differently in a listening situation; whether they expected boys and girls to behave differently in any social situation; or whether they were merely enjoying the activity and using their more developed motor skills and manual dexterity in order to make more varied and finer adjustments to the flexible dolls than the younger children were able to do.

Implications for Research Question 3

At this point, it is necessary to return to question 3) to see whether the findings from Task 2 throw any further light. Did the boys, while engaged on nonverbal activity with the dolls, do anything different from the girls while similarly occupied?

From a re-examination of Table 5v, one difference is obvious: that is the discrepancy in the third cohort between the eight boys who discriminated in their individual arrangements of the male and female dolls in contrast to the single girl who did so. The classification illustrated by Table 5v here is misleading, in that it masks some actual differences. It seems to show that the differences in arrangement of the male and female dolls were all but one made by the boys in the group. However, although six girls moved the arms of male and female dolls, only two of them did exactly the same thing with both dolls.

The boys still performed a slightly greater variety of dissimilar actions with the male and female dolls. By contrast with their treatment of the dolls individually, this cohort exhibited a greater uniformity in their arrangements showing the relationship between the dolls.

The nonverbal results from Task 2 thus gave inconclusive answers to both question 3) and question 4), since the differences between the arrangements of the male and female dolls, and between the boys' arrangements and those made by the girls were not significantly different.

The body of verbal data obtained from the whole research project also gave inconclusive answers to question 3), as no significant differences emerged between the boys' and the girls' replies.

CHAPTER 6

DIFFERENCES FOUND BETWEEN LISTENING TO A TEACHER AND LISTENING TO ANOTHER CHILD

In this chapter, the findings are reported in answer to the fifth research question: Do children distinguish between listening to a teacher and listening to another child?

Only a partial comparison is possible

The interviews included a specific question about listening to a teacher: "What do you do that shows your teacher that you are listening to him/her?" The answers to this interview question thus supplied data about what children thought they were doing when they were listening to a teacher. The interview did not include a contrasting question, "What do you do that shows your friend (or another child) that you are listening to him or her?" Such a question might have brought out children's views on what they were doing when listening to another child. If, however, this question had been asked, it is possible that the close similarity of this question to the previous one would have elicited a very similar reply, by association - at least, from the youngest children.

The rest of the research materials did not require the subjects to make explicit whether they were describing

listening to a teacher or listening to another child. In Tasks 1a and 1b, it was not specified whether the children in the drawings or the photographs might be listening to each other or to a teacher. Sometimes, the subjects in the study volunteered the information that they thought the children in the pictures were listening to another child or to another teacher. Sometimes, they did not. In Task 2, the subjects were invited to make the boy and girl dolls look as if they were listening to each other, so in this case the children were describing listening to another child. However, as has already been shown, the limited verbal response to the stimulus of Task 2 was unforeseen.

Because of the limitations of the research design, a direct comparison cannot be made between what the children said about listening to a teacher and listening to another child. A comparison can be made, however, between what the children said about listening to a teacher specifically and what they said about listening behaviour generally.

Analysis of Subjects' Replies about Listening to a Teacher

The children's answers to the interview question about listening to their class teacher were analysed according to the same five categories applied to all the rest of the verbal data: V, W, X, Y and Z. The pattern of categories which emerged for each child from those answers

was then compared with that child's pattern of categories throughout his/her total response.

All the comparisons satisfied one of four conditions: identical categories; some categories the same; no similarity between the descriptions of listening behaviour generally and the descriptions of listening to a teacher; no answer given (see Table 6i).

Table 6i

TABLE COMPARING CHILDREN'S DESCRIPTIONS OF LISTENING TO A TEACHER WITH THEIR DESCRIPTIONS OF LISTENING BEHAVIOUR GENERALLY

	IDENTICAL DESCRIPTIONS b/g	SOME SIMILARITY b/g	NO SIMILARITY b/g	NO ANSWER b/g	TOTAL b/g
I	1/0=1	4/4=8	0/1=1	3/3=6	8/8=16
II	0/1=1	7/6=13	1/1=2	0/0=0	8/8=16
III	2/4=6	6/4=10	0/0=0	0/0=0	8/8=16
TOTALS	3/5=8	17/14=31	1/2=3	3/3=6	24/24=48

Findings

There are interesting differences which one may surmise are developmental. There was a nil response from six of the youngest group. Out of the forty-eight children who took part, thirty-one offered descriptions of listening to a teacher which resembled those they made of listening generally; eight were identical; only three bore no resemblance. In the two younger groups, only one child in each made identical descriptions. However, of the oldest group, six offered descriptions of listening to a teacher which shared the identical categories borne by their

general identifications of listening behaviour; the identifications often bore some resemblance and none were totally dissimilar.

In this way, more of the older children's identifications of listening to a teacher resembled their ideas of general listening behaviour. Perhaps it would be more accurate to express this finding in the opposite way: more of the older children's ideas about general listening behaviour resembled their notions of listening to a teacher.

To summarize the findings of this chapter, the research design did not permit a direct comparison between identifications of listening to a teacher and listening to another child. However, the older children's ideas of general listening behaviour more closely resembled the terms in which they described listening to a teacher. It may be surmised that they received these ideas from their teachers as a result of the school's process of social conditioning.

CHAPTER SEVEN

UNEXPECTED FINDINGS

In the course of analysing the data, several features emerged which, though not predicted in the original research plan, seemed interesting enough to warrant inclusion in the final report, especially since the aim of the research was exploratory.

Modal Language

One developmental characteristic of the children's language that emerged from close study of the transcribed data was the increasing use by the older children of modal language (the language of possibility). The children's use of modal expressions is set out in Table 7i.

Table 7i

TABLE SHOWING NUMBER OF OCCURRENCES OF MODAL EXPRESSIONS IN LANGUAGE OF CHILDREN IN THE SAMPLE

MODAL EXPRESSION	NUMBER OF OCCURRENCES COHORT I	COHORT II	COHORT III
MIGHT	6	29	15
I THINK	4	23	11
PROBABLY		8	9
MUST		7	5
COULD		2	8
I DON'T THINK		4	4
WOULD		6	
SEEMS		2	1
KIND OF		3	
MAYBE		2	
OBVIOUSLY			1
I SUPPOSE			1
HAS TO		1	
TOTALS	10	87	55

Modal language was largely lacking in the speech of the youngest group, although the middle group used more modal expressions than the oldest group. It does not mean that the children did not understand or were unable to use a wider range of modal expressions, but simply that they did not do so in the recorded interactions.

There is a review of the literature on children's modal language in Modal Expressions in English (Perkins, 1983). Perkins used data from the Polytechnic of Wales Language Development Project as the basis for his own analysis of the speech of children aged between six and twelve. The data consisted of tape-recordings and transcriptions of the spontaneous conversation of his subjects while they were engaged in building with Lego. Since the data in the present research were not obtained from spontaneous talk, but from talk specifically orientated towards the identification of listening, a narrower range of language was to be expected than in Perkins' study. As Perkins suggests:

> "the children only used those expressions which they felt were necessary to get across the meanings they wished to express, and the expressions they did use were thought to be adequate in the particular situation in which they were involved."

Thus "can", which Perkins found to be the most frequently used of modal expressions, was used not at all by any age group in this study, since it was not appropriate to this particular context.

It was notable that modal language was almost

entirely absent from the speech of the youngest children. "Might" was used six times (four times by one boy) and "think" four times. The recorded language of the other two groups contained "might", "could", "would", "must", "probably", "maybe", "seems", "I think", "I don't think", "kind of", "obviously", "I suppose", "has to" (See Table 7i). The second group used eighty-seven such expressions, the third group fifty-five. There was thus a decrease in the use of modal language between the second and third groups.

The third group in the present study of listening behaviour was of children aged between ten and eleven. These results confirm Perkins' finding that:

> "Although there is a clear correlation between age and frequency of use of modal expressions between the ages of 6 and 10, the data suggest that after 10 this frequency decreases rather sharply...Clearly some further factor is involved which has not been taken into account."

Perkins also took social background into account, a factor which the present research ignored:

> "It appears that children from a more favoured social background use modal expressions more frequently than children from a less favoured social background."

Interestingly, personal information from the class teacher supplied the researcher with the knowledge that one of the three youngest users of "might" came from a "favoured social background."

The teachers used more frequently a much wider

variety of modal expressions than any of the children, as might be expected when adult native speakers are invited for their opinions about a high inference subject like listening. They used vocabulary that none of the children used, such as "supposed", "appear", "possibly", "certainly", "could well be", "as though", "actually","sort of", "impression", "I can tell", "suggest", "hopefully" and many more.

Stock Answers

In Chapter Four, the phenomenon of stock answers or stereotyped replies was mentioned as a feature of the language of the youngest children which had not been predicted. There were thirty-six repetitions of a response using identical words from the youngest group, eight from the second and one fom the third. The teachers, despite the greater volume of their response, made none.

Of the five children in the second group who repeated themselves, none did so more than twice. Of the seven in the first group, one girl produced no fewer than fourteen repetitions, one boy produced nine and another girl five. This characteristic repetition in the spoken language of some young children, at least in an experimental situation, has been noted by other researchers (Willes,1983; Freeman,1979; Haslett,1987).

> "Of the 42 children in the younger group <4/5 year-olds> a minority (nine in all) fastened on a single answer which they repeated in response to everyone, irrespective of whether or not it was

appropriate"(Willes,1983).

This phenomenon has been variously described as "stereotyped responses" or "stock answers" and explanations have been offered. The experimenters in Freeman's study (1979) of much younger children found that:

> "they <the children> would slip into the production of stock reponses, apparently unaware of whether or not they were suitable, and that this sort of production was associated with a high degree of rapport between the subject and the observer."

As Willes (1983) pointed out: "Teachers will, for good educational reasons, not accept such answers." She suggested that the children might have been able to adapt their strategies if she had provided the expected evaluation.

> "It may be that some of them needed unmistakable feedback from me, and could have made good use of an unmistakable indication that stock answers were NOT acceptable, together with examples of the sort of response I was looking for - a more teacher-like approach, in fact, than at this stage I was ready to adopt."

In other words, Willes's subjects interpreted her lack of feedback as approval and accordingly continued to produce the responses they understood had been favourably received. This does not perhaps account for the absence of stock answers in the language of the older children.

There may be another explanation. Young children obviously lack experience in social situations. They are at an earlier stage in cognitive and of language development. When faced with the request to identify who was listening in the pictures and to give reasons, they had

a limited range of experiences from which to draw. Similarly, in comparison with older children, their ability to interpret what they saw was more limited as was their command of language. They may have repeated a previous utterance because they simply could think of nothing else to say on the conversation topic.

In the present research, those children who used stereotyped responses did not repeat them invariably. The girl who used most (fourteen) mainly alternated two comments: "sitting down" and "looking". She did, however, also say "standing", "he's on his knees" and "looking down at the floor". She was generally unresponsive: there were frequent lengthy pauses when she said nothing; she looked away from the pictures and engaged in other activities such as rearranging her clothes and picking her nose. It is possible that she just could not think of anything else to say about "who was listening in the pictures." The boy with the next highest "score" of nine repetitions also for the most part alternated two comments: "quiet" and "not noisy". But he did say other things as well, for example, "She's putting her sock on and her shoe;" "She's shut her eyes and she's listening." The girl with the third highest count of repeated comments (five) reiterated "he's got his mouth shut and he's sitting down" even though she agreed with the researcher that the boy in the photograph was actually standing up! Like the other children who

uttered stock answers, she made other comments, for example, "turned her head."

The situation here is not quite the same as with Willes's and Freeman's subjects who repeated the same stock answer in response to each question. The children in this study who relied upon stock answers did so only partially. They represent perhaps a halfway stage between total reliance upon stock answers and the ability to respond afresh to each new stimulus. A likely explanation seems to be that their experience, language and understanding were not yet adequately developed to produce different, reasoned explanations for similar situations. It is also probable that the absence of "negative feedback" from the researcher encouraged the production of stock answers.

Awareness of an external audience - in this research

In the course of the interviews, the children were encouraged to talk about their own experiences of people listening to them: their teachers and their friends and family. Within Cohort I, several of the children failed to give evidence that they understood the standpoint of an external audience. None of the children in either of the two older groups had any difficulty in interpreting the researcher's questions on this aspect of listening behaviour.

Unequivocal failures to answer such questions were:

"I've forgotten" (from one boy) and "don't know" (from three boys and two girls). "We play...we have to sit down" (from Girl 8) does not constitute a conventionally acceptable, direct answer to the question "What does your teacher do that shows you she is listening to you?"

The replies of several of the other children may indicate that they too failed to understand the standpoint of a listening audience, for example, "stand up" (from one boy), which does not correspond to conventionally recognized listening behaviour; "sits down" (a stereotyped response from Girl 4). "She talks to you" (from Girl 2) may represent a confusion between listening and talking or it may indicate expected feedback from the teacher showing that she has listened. "She shows me a thing what's pink" (from Girl 7) may or may not be an indication of a failure of understanding. It depends on the context of recent events in the classroom. Girl 6 said, in reply to the question of how she knew that her teacher was listening to her, "she's quiet...got her mouth shut." On the face of it, this looks like a clear instance of a child who did understand the question. However, in the context of her total verbal response, this was a stock or stereotypical answer which Girl 6 used on six other occasions in response to other stimuli and so the situation is not as clear as at first appears.

Replies which did seem to show an awareness of an exterior audience came from four children in Cohort I

(three boys, one girl). Of his teacher, one boy said, "cos she doesn't talk when you tell her something." Another said "if I say can I do a drawing, she lets me." Of his friends, Boy 4 said "they don't go and do something else just stay and listen to me." Girl 1 said of her teacher "she watches you."

To sum up, seven children in Cohort I gave no indication that they understood the role of someone listening to them; five may have understood - their replies leave this ambiguous; four gave evidence that they did understand their listener's role. All the older children appeared to understand the ststandpoint of an exterior audience. This phenomenon again seems to parallel Piaget's observation of the young child's inability to "decentre" (in Donaldson, M., 1971).

Awareness of an external audience - in previous research

As Wells (1981 ii) expressed it:

> "In order to communicate successfully one has to modify one's message to take account both of the situation and of the knowledge and purposes of one's listener."

Other researchers have found evidence of the developmental nature of children's awareness of their audience.

> "Communication skills develop with age...Older children are less egocentric and thus better able to take the role perspective of someone else." (Morency and Krauss in Feldman, 1982)

Pappas and Brown (1988), in their account of the

development of children's sense of the written story register, referred to Bruner (1983) and Wells (1981 i), with their assertion that

> "in everyday face to face encounters...pre-school children acquire conventional strategies and develop linguistic procedures in order to take turns and collaborate with others in the construction of meaning..."

They further described how young children come to adapt their language according to the social context, including the listener.

> "...They learn to calibrate their linguistic choices to the features of particular social contexts - the setting, the participants and the specific task at hand."

Further support for the increasing sophistication of children's skills as social communicators comes from Peterson, Danner and Flavell (1972) in their investigation into the developmental changes in children's response to three indications of communicative failure.

> "Both four and seven year old children readily reformulated their initial messages when explicitly required to do so by the listener and both failed to reformulate when confronted only with nonverbal, facial expression of the listener's non-comprehension. In contrast, only seven year olds tended to reformulate their messages in response to an implicit rather than explicit verbal request for additional help, e.g. 'I don't understand.'"

Thus, the findings from the present research support those of previous researchers that awareness of an external audience is related to development.

To sum up, the additional findings that were not

predicted in the original plan of the research include two linguistic features of young children: their comparative lack of modal language and their production of "stock answers", at least in an experimental situation. The young children in this study also appeared to lack social awareness of an external audience.

CHAPTER EIGHT

LIMITATIONS OF THE RESEARCH DESIGN AND DISCUSSION OF THE FINDINGS

Certain aspects of the research design are open to criticism.

Range and Frequency of Response to Stimulus Materials

The pictorial stimulus materials are reproduced in Appendix C.

It was intrinsic to the design of the research that the subjects should be allowed a free choice of which, if any, of the pictures in Task 1a and Task 1b to comment on. This was deliberately done in order to reduce the resemblance to a teaching situation where a teacher controls the interaction. (See page 44 for the section in Chapter 3 on questioning strategies.) As it is, children often expect an adult to play the dominant role.

> "...Children already have extensive experience of playing subordinate parts in their encounters with adults." (Edwards & Westgate, 1987)

Hence, the response was partial. Some of the subjects did indeed comment on every item of the research materials, but most did not. The details of each subject's response to each item in Task 1a and Task 1b are set out in Appendix D. The response which each item attracted is set out in Table 8i and Table 8ii. None of the drawings or photographs attracted a hundred percent response.

Range of Subjects' Responses:- to drawings in Task 1a

Table 8i

TABLE SHOWING RANGE OF SUBJECTS' RESPONSE TO DRAWINGS IN TASK 1a

NO. OF DRAWINGS ATTRACTING RESPONSE	NUMBER OF SUBJECTS WHO RESPONDED				
	I b/g total	II b/g total	III b/g total	TEACHERS	TOTAL
0	0/1=1	0/0=0	0/0=0	0	1
1	0/1=1	0/0=0	0/1=1	0	2
2	0/0=0	2/0=2	0/0=0	1	3
3	0/0=0	2/4=6	3/3=6	1	13
4	0/1=1	1/0=1	3/2=5	1	8
5	2/0=2	2/1=3	2/1=3	1	9
6	3/0=3	1/3=4	0/1=1	3	11
7	1/4=5	0/0=0	0/0=0	2	7
8	2/1=3	0/0=0	0/0=0	7	10
TOTALS	8/8=16	8/8=16	8/8=16	16	64

In Cohort I, two boys and one girl positively identified as listening all eight children in the drawings. No boys identified fewer than five drawings; but the range among the girls was much greater, with one girl identifying none and another identifying one.

In Cohort II, none of the children identified all eight drawings. The range for the boys was between two and six; for the girls, three and six.

In Cohort III, again, none of the children identified all the drawings. The range for boys was between three and five; for the girls, between one and six.

Seven of the Teachers commented on all the drawings. The lowest number of drawings a teacher chose to comment on

was two.

Range of Subjects' Responses: - to photographs in Task 1b

Table 8ii

TABLE SHOWING RANGE OF SUBJECTS' RESPONSE TO PHOTOGRAPHS IN TASK 1b

NO. OF PHOTOS ATTRACTING RESPONSE	NUMBER OF SUBJECTS WHO RESPONDED				
	I b/g total	II b/g total	III b/g total	TEACHERS	TOTAL
0	0/1=1	0/0=0	0/0=0	0	1
1	0/1=1	0/0=0	0/0=0	0	1
2	0/2=2	1/1=2	0/1=1	0	5
3	1/1=2	2/2=4	0/0=0	0	6
4	4/0=4	1/2=3	3/0=3	1	11
5	0/0=0	1/1=2	1/4=5	1	8
6	0/0=0	3/1=4	2/1=3	2	9
7	0/1=1	0/0=0	0/1=1	5	7
8	1/1=2	0/0=0	2/0=2	4	8
9	2/1=3	0/1=1	0/1=1	3	8
TOTALS	8/8=16	8/8=16	8/8=16	16	64

In Cohort I, two boys and one girl chose to comment on all nine photographs. (One of the boys had also commented on all the drawings in Task 1a). The range for boys lay between three and nine; for girls, between zero and nine.

In Cohort II, one girl identified all the photographs, but none of the boys did this. The range for boys was between two and six; for girls, between two and nine.

In Cohort III, no boys but one girl commented on all the items. The range for boys was between four and eight; for girls, between two and nine.

Three of the teachers commented on all the photographs. They responded to between four and nine of the stimulus items in Task 1b.

Frequency of Response: - to drawings in Task 1a

Table 8iii

TABLE SHOWING FREQUENCY OF RESPONSE TO DRAWINGS

DRAWING	NUMBER OF SUBJECTS WHO IDENTIFIED LISTENING				
	I	II	III	TEACHERS	TOTAL
a	9	11	14	14	48
b	14	14	15	16	59
c	12	4	2	6	24
d	9	9	7	9	34
e	10	3	3	9	25
f	10	14	11	15	50
g	12	4	2	9	27
h	11	7	6	11	35
TOTAL	87	66	60	89	302
POSSIBLE TOTAL	128	128	128	128	512
%	68%	52%	47%	70%	59%

A hundred percent response to a drawing would have registered sixty-four responses. It will be observed from Table 8iii that drawing b attracted response from the largest number of subjects (59), with drawing f next (50) and drawing a third (48). There was then a gap before the next largest response which was attracted by drawing h (35) with drawing d (34) close behind. The drawing which attracted least response was c (24), while e attracted only one more (25) and g attracted three more (27).

The frequency of the responses thus fell into three groups: most, b, f and a; least, c, e and g with h and d in the middle.

A reference to the actual drawings, reproduced in Appendix C, suggests a possible explanation for the varying frequency of the responses to the different drawings. In the three most frequently mentioned , a, b and f, the children in the drawings appear to be looking out of the picture at an observer. This accords with the feature of listening behaviour most often recorded by researchers, eye-contact. The two in the middle, d and h, are looking sideways, possibly achieving eye contact with a person talking beside them. The least often mentioned, c, e and g ,are all looking down, thus seeming to avoid eye contact.

Only a guess might be made at a reason for the discrepancies in the volume of response from the four groups of subjects. The youngest (Cohort I) and the oldest (Teachers) made very similar numbers of total responses to the whole body of drawings: eighty-seven and eighty-nine respectively. Cohort II (66) and Cohort III (60) made somewhat fewer.

Frequency of Response: - to Photographs in Task 1b

Two of the photographs attracted the most frequent comment: 3(53) and 7 (54). Number 6 photograph attracted the least(24), with all the others scattered

between these extremes. (See Table 8iv)

Table 8iv

TABLE SHOWING FREQUENCY OF RESPONSE TO PHOTOGRAPHS

PHOTO	NUMBER OF SUBJECTS WHO IDENTIFIED LISTENING				
	I	II	III	TEACHERS	TOTAL
1	7	6	8	11	32
2	9	10	14	13	46
3	11	14	12	16	53
4	9	8	10	16	43
5	11	6	12	12	41
6	11	3	2	8	24
7	11	15	14	14	54
8	9	6	9	13	37
9	11	7	7	7	32
TOTAL	89	75	88	110	362
POSSIBLE TOTAL	144	144	144	144	576
%	62%	52%	61%	76%	63%

One might hazard a guess that photograph 3 attracted so much attention because it depicts two children apparently in conversation with one another. Perhaps photograph 7 was selected because of the arguably focused attention of the children in it. But these are only guesses. Why photograph number 6 proved less attractive is also far from obvious. It shows two girls seated with books in a paired reading situation. Possibly, the situation was interpreted by some subjects as two children reading individually and therefore not listening to each other.

In conclusion, it should be made clear that, whereas the two tasks, 1a and 1b, were presented separately, the

subjects had an open choice as to which (or of course any) of the items they selected to talk about and in which order they took them. The labelling of the items with letters and numbers was arbitrary and expedient for the convenience of the researcher. None of the letters or numbers appeared on the research materials when the subjects saw them. Although the photographs were always laid out on the table in the same order, it was up to the subject to start where s/he wished.

Because of the voluntary nature of the research design described above, it is impossible to make direct comparisons between what was said about each item. It is hard to see how this disadvantage could have been removed without reintroducing a situation that closely resembled a teaching-type interaction between researcher and subject, which the researcher took such pains to avoid.

Limitations of Stimulus Materials

The stimulus materials used in this research were essentially silent and static. Because the drawings and photographs were silent, they were unlikely to generate identifications of verbal or vocal listener reactions. For example, when looking at a photograph, it was not probable that a subject would say "s/he's listening because s/he said 'mm'," and it is not surprising that none did. Similarly, because they were still pictures, subjects were

unlikely to comment on head nods, although some did in fact do this. In their activities with the dolls, the children could have made the dolls nod or shake their heads; but none did so. A video recording of listeners would widen the scope of the identifications likely to be made. This study, however, was exploratory in its intention. The point will be returned to in the discussion of the implications for further research.

Neill (1986), who carried out research into secondary pupils' perceptions of teachers' nonverbal signals and also used static, silent drawings, warned of the drawbacks inherent in using materials of this kind:

> "Considerable caution is needed in extrapolating from the experimental situation used here. First, the signals were presented in a static, drawn form, divorced from any social and verbal context and indeed from the stream of nonverbal behaviour. Secondly, the children were required to record a verbalized response to them rather than reacting behaviourally and intuitively. Both these difficulties could be unrepresentative of a real classroom."

Influence of Context on Children's Response to Task 2

It was perhaps surprising that, in the findings relating to boys' and girls' descriptions of listening behaviour in the different categories (See Table 5i), children in the oldest group nowhere confused listening with another activity (Category X) except when they performed Task 2. The reason for this may lie in the nature of the task, that is, the context.

There is an intrinsic problem in drawing cognitive conclusions from children's performance of physical tasks. The children were asked to "make the doll look as if s/he is listening to the other one." An adult respondent might well have countered such a request with objections, for example, "sometimes you can tell that someone is listening by the look in their eyes"; or "sometimes you can tell that someone has been listening by their verbal response"; or "sometimes you can tell that someone is listening by their facial expression." This hypothesis cannot be tested in the present research since Task 2 was not offered to the Teachers on the grounds that it was inappropriate for adults.

The children generally tried to accede to the researcher's request as well as they could. The task presented itself as a physical one. They were asked to manipulate the dolls and this they did with enthusiasm. As Margaret Donaldson observed (1971), children's responses are more dependent upon the precise form of the stimulus than those made by adults. They are more bound by the context of the experiment. A number of the children, when invited to make the doll look as if it was listening, moved one of its hands up close to its ear as a way of showing the act of hearing physically (See Appendix D). They were attempting to meet the researcher's request literally. They seemed to accept that the researcher was tacitly making the assumption that there is a specific physical

manifestation of listening as there is, for example, of running. Donaldson (1971) suggested that some of Piaget's young subjects reacted as they did in conservation experiments because of the context provided by the situation, although they perhaps might have been able to demonstrate their ability to conserve had the presentation been different.

One five-year-old boy in the present study answered "Yeah I do that" when the researcher queried his placing of a doll's hand to cup its ear. He was insistent that that's what he did when he was listening. His teacher laughed her disagreement when asked for confirmation of this.

It was, however, when it came to analysing the actions of the oldest group of children that this feature seemed strangest. It was not to be predicted from their verbal answers while engaged in the other tasks and the interviews, that any of this age group of children would confuse listening with anything else. But, in fact, as has been recorded in Chapter Five, eight children (six boys, two girls) moved a hand of one or both of the dolls up to its ear as an illustration of listening behaviour.

It is hard to see how the experiment could have been redesigned to avoid this shortcoming. Other forms of words were considered, for example, "These children are listening to each other. Show me what s/he is doing." However, it seems likely that the same physical responses might have

followed this stimulus too.

The lack of verbal response from Task 2 was not predicted. An explicit instruction to "Tell me what s/he is doing" might have provided the desired incentive to talk about the dolls, although, in the light of the researcher's experience, it seems probable that, in at least some cases, the reply would have been "S/he's listening." Fuller commentaries on their activities with the dolls might have been elicited by the words "Tell me what you are doing." Were the research to be repeated, this approach could be explored in a further pilot investigation.

The Fifth Research Question

The limitations of the research for finding answers to the fifth research question have already been discussed in Chapter 6. The fifth question asked whether children distinguish between listening to a teacher and listening to another child. It was suggested in Chapter 6 that a reformulation of the interview questions might have been effective in eliciting the required data although doubts were expressed whether this would, in fact, have been the case.

Reasons for the youngest group's largely physical descriptions

All the youngest children in the study offered, as evidence of listening, physical descriptions of what the figures in the pictures were doing (Category W) which did not correspond to researchers' descriptions of listening behaviour.

If they genuinely recognized as indications of listening such actions as "sitting" or "standing", then they had little notion of conventional, social listening. If their replies would have been the same whatever they were asked to describe, then this may mean either that their conversational skills were limited or that they did not understand much about listening.

This could be tested to some extent by a research project presenting a similar group of infants with similar drawings and photographs to those used in this research as stimulus materials and asking them a different question, not "Who do you think is listening in the pictures?" but something else. An alternative question might be "Who do you think is thinking in the pictures?" Even four and a half year old children might be expected with confidence to have a construct of "thinking". If their answers were more relevant than those given in the present research, it would seem that these infants understood little about listening. However, if the pattern of their replies were similar to those in the present

research, this would indicate a lack of communication skills in children of this age generally, rather than a failure in the present subjects to understand the nature of "listening" specifically. It would not, however, prove that the youngest children in this research did understand any more about listening; it would merely demonstrate that their language mediated their knowledge. They may have known more , but if they had, they were unable to express their knowledge.

In this chapter, some limitations of the research design have been discussed: the partial response to stimulus materials which was, however, intrinsic to the aim; the limitations imposed by the static and silent nature of the research materials and the possible influence of physical context upon the children's response to Task 2. The failure of the fifth research question, fully discussed in Chapter 6, has again been referred to. Explanations have also been offered for the reliance of the infant children in the sample upon physical descriptions of listening not corresponding to those identified by research.

CHAPTER NINE

SUMMARY AND CONCLUSIONS

The aim of this research was to explore an area which, so far, has attracted little attention from either researchers or educators. Teachers' interest in listening has been mainly from the point of view of "listening skills" and "listening comprehension" and research has, for that reason, been focused in that direction. Teachers and researchers have tended to ignore the social aspect of this form of communication although, as they acknowledge, listening takes up a high proportion of school time. The findings of the present research have implications for research, involving the entangled strands of language, cognition and social adaptation in a developmental context. There are implications for teachers to become more conscious of an important aspect of classroom interaction.

SUMMARY

The chief objectives were to discover whether there was a development in children's descriptions of listening behaviour and whether there were sex differences. These objectives were embodied in the research questions.

Question 1) asked how far young children could make explicit, that is, verbalize, their implicit knowledge of listening behaviour.

Most of the data produced by the research was in the

form of the subjects' transcribed verbal responses to the various stimuli offered. Whatever the subjects knew about listening behaviour was expressed in the form of utterances and therefore their knowledge was mediated by their verbal proficiency. They may indeed have known more than they were able to express, but what they said provides our only evidence of their knowledge.

It is thus not clear to what extent the children's descriptions were limited by their language competence. It has been shown that the spoken language of the reception class infants had certain limitations when compared with the speech of mature adult communicators and even with that of older children. Three of these infant children did not demonstrate the ability to formulate utterances containing three lexical items. All of the infants used mainly short, simple utterances of a few words in their replies. Hardly any of them made any use of modal language. Several of them resorted to repetitions, either because they could think of nothing new to say on the topic or because they lacked the necessary ability to express it verbally.

Whichever the reason, the youngest children in the study made explicit what they knew about listening only to a limited extent.

Question 2) embodied the main thrust of the research, by asking how older children's explanations of

listening behaviour differ from those made by younger children. The findings did show a development in children's descriptions. A development was evident within each of the five categories which emerged as the five terminals of the network used in the semantic analysis of the verbal data.

In category V, six of the youngest children failed to supply evidence that they recognized or understood any of the features identified by research as characteristic of adult listener responses. All the other subjects in the older groups were able to recognize at least eye contact or gaze direction as an indication of listening.

In category W, the youngest children all offered instead, as evidence of listening behaviour, purely physical descriptions which have not been associated with listening by researchers. A minority of older children and none of the adult group of teachers did this.

Categories V and W together suggest that the Infant children had only a hazy idea of what kind of activity listening is. On the one hand, six of them failed to supply any descriptions which correspond to features identified by researchers as listening responses. On the other hand, it is not clear whether the physical descriptions that they offered did indeed represent their opinions about listening behaviour; or whether they would have said the same whatever they had been asked to describe.

In category X, eleven of the youngest children showed some vagueness in their ideas of what listening is. They confused listening, not only with hearing, as did some of the older children, but with talking and reading as well. This confusion declined with age. (In fact, it may only be the design of the research in Task 2b that resulted in the oldest children exhibiting a confusion that may not actually be present in their usual thinking.)

In category Y, there was evidence that, as children grow older, their ideas about listening, at least within the school context, have been influenced by their social conditioning. The older children often used negative expressions which they may have "picked up" from their teachers. Most of the sixteen teachers in the sample offered similar descriptions.

It seems that, during the course of their primary schooling, some children may acquire a confused notion that listening is a negative state. The word, "attention", which is subsumed by the dictionary definition of listening and which features frequently in pedagogic vocabulary, becomes connected in pupils' minds with a negation of activity. Teachers may encourage such an association by their ready use of such expressions as "pay attention", "don't talk", "don't turn round", "don't fiddle about","stop what you're doing and listen,"etc.

The association between listening and "not doing anything" hinders pupils' understanding of their role in

what, after all, is a two-way communication. They are not encouraged in this situation to recognize their responsibity for indicating "feedback" to their teachers.

It follows that teachers might acknowledge a need to reassess the teaching techniques and strategies which have produced such a negative understanding of listening in some pupils.

In category Z, again, there was evidence of developmental changes: two of the youngest children, nine of the middle group and thirteen of the oldest group showed their awareness of the inner mental activity of a listener. The older children showed more insight into the possible thoughts, intentions and feelings of an external audience.

All the children, except for five of the youngest, spoke of listening in the context of an interactional process. Several of the youngest children gave no indication in the research programme that they appreciated the role of an external audience in relation to an addressor.

Questions 3) and 4) asked if there might be differences in identification associated with sex. The findings here were inconclusive. Significant differences did not emerge, either between the ways boys and girls identified listening, or between the ways they identified boys and girls as listening.

Question 5) asked about differences in listening to a teacher or to a child. The research design did not give opportunities for a direct comparison between children's descriptions of listening to a teacher and their descriptions of listening to another child. However, the older children described listening generally and listening to a teacher in similar terms.

The sixth question was abandoned after the unsuccessful preliminary trials.

To summarize, the findings of the research clearly confirmed that there is a development in children's recognition of listening behaviour. Some four and five year old children either did not understand or could not verbalize their understanding of listener responses or their awareness of an external audience. They were confused about the nature of listening as an activity. The older children's descriptions showed a closer correspondence to research findings about adult listening. Their frequent use of negative descriptions gave evidence of the school's socializing influence. They also showed an appreciation of an external listener's point of view. No significant sex-related differences emerged.

IMPLICATIONS FOR FURTHER RESEARCH

Question 5) asked whether children would describe in different terms listening to a teacher and listening to another child. The design of the research did not permit a direct comparison between the two. This might be clarified by further research.

Question 6) did not proceed beyond the piloting stage. This, too, may be a fruitful area for further investigation. The question asked "How far do children allow for listener responses in their own conversations?" Children's use of "backchannels" (Yngve, 1970) is still under-researched (Rosenfeld, 1978). Children may know, in the social sense of being able to perform, much more about the listening role than they can express verbally, that is, make explicit. An interesting research project can be envisaged where children's naturally occurring listener responses are compared with their descriptions. There has been little research into children's listener responses, still less into their accounts of them.

For such a project, video recording equipment could supply the auditory and kinetic elements which the present research lacked. A wider range of listener responses would then, no doubt, be available for observation and comment.

IMPLICATIONS FOR CLASSROOM PRACTICE AND TEACHER TRAINING

Teachers are still insufficiently aware of the possible limitations of children's language when they start school, still less do they seem to be aware of children's social inexperience in a listening situation. Though apparently linguistically competent, young children may still lack metalinguistic skills to comment on aspects of language. It seems also that many of them do not have ideas about listening that correspond to those of their teachers. Sarah Tann (1988) observed such a "mis-match of perceptions" in her research into primary school topic work.

> "A ...survey of children's and Teachers' perceptions of topic work showed wide discrepancies. For the children, topic work was knowledge orientated...For the Teachers, topic work was process orientated. ...Somehow, the Teachers' purposes were not communicated to the children."

Some reception infants may still be confused about the meaning of the word "listening" as it is used by their teachers.

There has been research into children's interpretation of teachers' nonverbal signals (Neill,1986). Perhaps teachers need to learn more about children's nonverbal behaviour. There is a two-way responsibility to clarify nonverbal messages.

It is the researcher's suggestion that teachers as well as children need to be more aware of the unspoken messages they project when they stand before a class.

Unconsciously, they may have been projecting the idea that listening (or even, perhaps, more generally, being a pupil!) is a negative state: that listening is equivalent to being the passive recipient of a one-way process. "Attention", acknowledged as a significant component of listening, appears to some children as a non-activity - as the absence of undesirable occupations - because of the way in which the word is used by their teachers. Many teachers may not habitually encourage active response from their pupils and perhaps this teaching style needs to be re-examined. Such techniques as giving eye-contact to pupils and allowing reactive responses from them should perhaps form a part of the training programme for student teachers. At the time of writing, no indication has been received that such a programme is to be encouraged by the National Curriculum proposals.

Thought might be given to devising a scheme for teaching pupils the appropriate use of "backchannels" in class. At the very least, trainee teachers could be made more aware of their need for "feedback" from their pupils and helped to develop techniques of observation so that they can tell when their messages are being understood, misinterpreted or ignored.

There are particular problems inherent in listener participation in a group situation, such as a class. Listeners, whether in a class or lecture or at a concert or performance of any kind, are accustomed in our society to

listening more or less passively and only reacting at the end, or if specifically invited to contribute. "Pop" culture, however, has different expectations and, at a pop concert, a degree of participation is welcomed. Similarly, at a Pentecostal Church service, the members of the congregation will be expected to join in as and when the mood takes them and not just with set hymns and prayers. There seems to be no self-evident reason why pupils in school classrooms should not learn to take responsibility for providing their teachers with appropriate listener responses. Although it is usually well-known to both teacher and pupil what constitutes an inappropriate listener response, the concept of "appropriate feedback" needs clarification.

In classrooms at present, the situation often obtains, where the teacher holds certain expectations of appropriate pupil listener behaviour, but holds these expectations implicitly. The teacher should make explicit to the pupils what these expectations are and how they may be fulfilled. The children need to learn how they may use the vital role of the listener to convey facilitating messages to their teachers.

Teachers need to develop a sharper insight into their own expectations of their pupil audience. They could learn more about the variety and importance of nonverbal responses. They need to monitor, and if necessary, reformulate their messages, both verbal and

nonverbal, to ensure that they convey the concept of listening as a positive activity.

There are far-reaching implications in the possible extension of this work within a multi-cultural context. In the same way as some pupils' views on listening have been seen to differ from those of their teachers, there is a possibly much wider divergence between the expectations of teachers and pupils from different ethnic or cultural backgrounds. Mis-matches between teachers' and pupils' interpretations of verbal and nonverbal messages must offer a fertile area for misunderstanding. Further research might illuminate the causes of such conflict and lead the way to their elimination. Hopefully, this would lead to a clearer understanding and a higher level of harmony between teachers and pupils.

The present research has shown that young children's views of listening do not necessarily correspond to those held by their teachers. In the case of pupils from a different cultural environment, such discrepancies may well be even more acute.

BIBLIOGRAPHY

Adelman C.(ed) (1981) Uttering Muttering. Grant McIntyre

Atkinson P. (1981) Inspecting Classroom Talk. Chapter 6 in C.Adelman (ed) Uttering Muttering. Grant McIntyre

Barnes D. (1982) Practical Curriculum Study. Routledge & Kegan Paul

Beattie G. (1983) Talk - An Analysis of Speech & Non-verbal Behaviour in Conversation. OUP Milton Keynes

Birdwhistell R. (1970) Kinesics & Context. Philadelphia P.A. University of Pennsylvania Press

Blanck & Rosenthal (1982) Developing Strategies for Decoding "Leaky" Messages. Chapter in R.S.Feldman (ed) Development of Nonverbal Behavior in Children Springer Verlag

Bliss J.,Monk M.,& Ogborn J. (1983) Qualitative Data Analysis for Educational Research. Croom Helm

The British Education Index (1972-1987) University of Leeds

Brown J.I (1949) The Construction of a Diagnostic Test of Listening Comprehension. Journal of Experimental Education vol 18 pp139-46

Bruner J. (1983) Child's Talk: Learning to use Language. New York: Norton

Buck R. (1982) Chapter Two in R.S.Feldman (ed) Development of Nonverbal Behavior in Children. Springer Verlag

Bullock Sir A. (1975) A Language for Life. HMSO

Camras L. (1977) Facial Expressions Used by Children in a Conflict Situation.' Child Development, 48, pp1431 - 1435

Chafe W.L. (1985) Linguistic Differences Produced by Differences Between Speaking and Writing. Chapter in D.R.Olson, N.Torrence & A Hildyard (eds) Literacy, Language & Learning. CUP

Cherry L. (1979) A Socio-cognitive Approach to Language Development & its Implications for Education. Chapter in Garnica & King (eds) Language, Children & Society. The Effect of Social Factors on Children Learning to Communicate. Pergamon

Chomsky C. (1969) The Acquisition of Syntax in Children from 5 to 10. Cambridge Massachusetts Institute of Technology Press

Cohen L. & Manion L. (1985) Research Methods in Education. Croom Helm

Crystal D. (1976) Child Language, Learning & Linguistics. Edward Arnold

Devine T.G. (1978) 'Listening - What do we Know after Fifty Years of Research and Theorizing?' Journal of Reading 21(4) pp296-304

Dillon J. (1987) quoted in A.D.Edwards & D.P.G. Westgate Investigating Classroom Talk. The Falmer Press

Dittman A. (1972) Developmental Factors in Conversational Behavior. Journal of Communication Vol 22 pp 404 - 423

Dittman A. (1978) Role of Body Movement in Communication. Chapter in Siegman & Feldstein (eds) Nonverbal

Behavior & Communication
Hillsdale New Jersey - Lawrence Erlbaum Association

Donahue M. (1984) Learning Disabled Children's Conversational Competence: An attempt to activate the inactive listener. Applied Psycho-linguistics vol 5 no.1 pp21-35

Donaldson M. (1971) Children's Minds. Fontana

Donaldson M.H. (1986) Children's Explanations. CUP

Downing J. (1970) Children's Concepts of Language in Learning to Read. Educational Research 12, pp106 - 112

Driver B. (1978) Children's Negotiation of Answers to Questions. Working Papers in Sociolinguistics no. 51 South West Educational Development Lab., Austin Texas

Edwards A. & Westgate D. (1987) Investigating Classroom Talk. The Falmer Press

Ekman P. (1982) quoted in R.S.Feldman (ed) Development of Nonverbal Behavior in Children Springer Verlag

Ekman P.& Friesen W. (1969) The Repertoire of Nonverbal Behavior: Categories, Origins, Usage & Coding. Semiotica 1 (1) pp49-98

English from 5 to 16 (1984) Curriculum Matters 1 an HMI series HMSO

English from 5 to 16 (1986) Second Edition (incorporating responses to Curriculum Matters 1 an HMI series) HMSO

Feldman R.S. (1982)(ed) Development of Nonverbal Behavior in Children. Springer Verlag

Feldman, White & Lobato (1982) Social Skills & Nonverbal

Behavior. Chapter in
R.S.Feldman (ed) Development of Non-verbal Behavior in Children
Springer Verlag

Flapan D. (1968) Children's Understanding of Social Interaction.
New York Teachers College Press

Freeman N. et al.(1979) Collaborative Action Rules in Young Children's Understanding of Locative Instructions.
Unpublished presentation at Conference of Social Psychology & Language, University of Bristol.

Galloway C.M. (1979) Teachers & Nonverbal Behavior in A. Wolfgang (ed) Nonverbal Behavior: Application & Cultural Implications. N.Y.Academic Press

Granowsky A.& Botel M.(1974) Syntactic Complexity Formula.
The Reading Teacher Vol 28(1)
pp34-35

Hadley D. (1970) An Investigation into Young Children's Concepts about Reading.
MA thesis, University of London Institute of Education

Hakes D.T. (1980) The Development of Metalinguistic Abilities in Children.
Springer Verlag

Hall E.T. (1969) Listening Behavior: Some Cultural Differences. Phi Delta Kappa 50
pp379-380

Handy C. & Aitken R. (1986) Understanding Schools as Organizations. Penguin

Haslett B. (1987) Children's Strategies in Sustaining Interaction with Peers. Unpublished paper presented to Third International Conference Social Psychology & Language,University of Bristol

Hunt K. (1975) in McKenzie & Kernig (eds) The Challenge of Informal Education. Darton, Longman & Todd

Hustler D. & Payne G. (1985) Ethnographic Conversation Analysis: An Approach to Classroom Talk. Chapter 10 in R.Burgess(ed) Strategies of Educational Research The Falmer Press

Hymes D. (1972) On Communicative Competence. In J.B.Pride & J. Holmes(eds) Sociolinguistics. Penguin

Izard C.E.(ed) (1981) Measuring Emotions in Infants & Children. CUP

Kendon A. (1967) Some Functions of Gaze Direction in Social Interaction. Acta Psycologica, 26, pp22 - 63

Kingman Sir J. (1988) Report of the Committee of Inquiry into the Teaching of English Language. HMSO

Kitwood T.M.(1977) Values in Adolescent Life: towards a critical description. Unpublished PhD dissertation quoted in L.Cohen & L. Manion Research Methods in Education(1985) Croom Helm

Lindsay A. (1984) What about Listening? Teaching English 17(2) pp13-18

Lindsay P.& Norman D.(1977) Human Information Processing. An Introduction to Psychology. Academic Press, Inc

Lundsteen S. (1971) Listening: its impact on reading & the other language arts. Urbana III National Council of Teachers of English

McKenzie N.& Kernig W.(eds)(1975)The Challenge of Informal Education. Darton, Longman & Todd

Maclure M. & Hargreaves M.(1986) Speaking & Listening. Assessment at Age 11. Assessment of Performance Unit NFER Nelson

Matluck J.(1978) Cultural Norms & Classroom Discourse. Communication Problems in the Multi-ethnic School Setting. Paper presented at a meeting of the American Educational Research Association Toronto Canada

Mehrabian A. (1969) Significance of Posture & Position in the Communication of Attitude & Status Relationships. Psychology Bulletin 71 pp359 - 371

Menig-Peterson C.(1975) The Modification of Communicative Behaviour in Pre-school Children as a Function of the Listener's Perspective. Child Development 46 pp1015 - 1018

Morency N.& Krauss R.(1982) Children's Nonverbal Encoding & Decoding of Affect. In R.S.Feldman (ed) Development of Nonverbal Behavior in Children Springer Verlag

Neill S.R.St J. (1986) Children's Reported Responses to Teachers' Nonverbal Signals, a pilot study. Journal of Education for Teaching Vol 12 no.1 pp53-63

Nichols R. (1949) Teaching of Listening. Chicago School Journal 30 pp273 - 278

Oster & Ekman P.(1978) Facial Behavior in Child Development. In A. Collins(ed) Minnesota Symposium on Child Development Vol II Hillsdale N.J. Erlbaum

Pappas C.& Brown E.(1988) The Development of Children's Sense of the Written Story Register: An Analysis of the Texture of Kindergarteners' "Pretend Reading" Texts. Linguistics & Education I

pp45-75

Perkins M. (1983) Modal Expressions in English. Frances Pinter

Peterson C., Danner F.& Flavell J.(1972) Developmental Changes in Children's Response to Three Indications of Communicative Failure. Child Development vol 43 pp1463 - 8

Piaget quoted in Donaldson (1971) Children's Minds Fontana

Pillow B.& Flavell J.(1985) Intellectual Realism: The Role of Children's Interpretations of Pictures & Perceptual Verbs. Child Development vol 56 pp 664-70

Pope M. & Denicolo P.(1986) Intuitive Theories - a Researcher's Dilemma: some practical methodological implications. British Educational Research Journal vol 12 no 2 pp153-166

Pratt E. (1956) Experimental Evaluation of a Program for the Improvement of Listening. Elementary School Journal 56 pp315-20

Pride J. & Holmes J.(eds) Sociolinguistics. Penguin

Reid J.F. (1966) Learning to Think about Reading Educational Research 9 1 pp56-62

Rogers C. (1977) Child's Perception of Other People. Chapter in H.McGur(ed) Issues in Childhood Social Development. Methuen

Rosenfeld H.M. (1978) Conversational Control Functions of Nonverbal Behavior. In Siegman & Feldstein(eds) Nonverbal Behavior & Communication. pp291-328 Hillsdale NJ Erlbaum

Salomon G.(1981) Communication in Education: Social

& Psychological Interaction. Sage Publications

Saarni (1982) Social & Affective Functions of Nonverbal Behavior: Developmental Concerns. Chapter in R.Feldman(ed) Development of Nonverbal Behavior in Children. Springer Verlag

Scherer K.& Ekman P.(1982) Handbook of Nonverbal Research Methods. CUP

Shennum & Bugental (1982) Development of Control over Affective Expression. Chapter in R.S.Feldman(ed) Development of Nonverbal Behavior in Children. Springer Verlag

The Shorter Oxford English Dictionary (1983) OUP

Simons H. (1981) Conversation Piece. Chapter in Adelman (ed) Uttering Muttering. Grant McIntyre

Sinclair J.& Coulthard R.(1975) Towards an Analysis of Discourse: the Language used by Teachers & Pupils. OUP

South West Hertfordshire Teachers' Centre (1982) Children Don't Listen. Thinking about the Development of Listening Skills. S.W. Herts. Teachers' Centre

Stephens P.& Valentine J.(1986) Assessing Principal Non-verbal Communication. Educational Research Quarterly v 10 n 3 pp 60 - 68

Stubbs M. (1981) Oracy & Educational Linguistics - the quality (of the theory) of listening. First Language vol 2 pp21-30

Talk, Write & Read (1986) Teachers' Notes.ITV Schools' Publications

Tann C.S. (1985) Listening Information. Workshop material from UKRA Conference.

Tann C.S.(ed) (1988) Developing Topic Work within the Primary School
The Falmer Press

Tough J. (1976) Listening & Interpreting.
Ward Lock Educational

Volkmar & Siegel (1982) Responses to Consistent & Discrepant Social Communication.
Chapter in R.S.Feldman(ed) Development of Nonverbal Behavior in Children.
Springer Verlag

Wells G. (1981 i) Learning through Interaction.
A Study of Language Development.
CUP

Wells G. (1981 ii) Describing Children's Linguistic Development at Home & at School.
Chapter in C.Adelman(ed) Uttering Muttering. Grant McIntyre

Wells G.& Nicholls J.(eds)(1985) Language & Learning - an Interactional Perspective. CUP

Wilkinson A.(1972) The Importance of Other Forms of Communication as well as Language in the Classroom.
English in Education 6 3 pp55-62

Wilkinson A.& Stratta L.(1972) Listening & the Study of Spoken Language.
Educational Review 25 pp3-20

Wilkinson A., Stratta L & Dudley P.(1974) The Quality of Listening. Schools Council Research Studies Macmillan

Willes M. (1983) Children into Pupils. Routledge & Kegan Paul

Wilt M.E. (1950) A Study of Teacher Awareness of Listening as a Factor in Elementary Education. Journal of Educational Research 43 pp 626-39

Woods P. (1981) Understanding through Talk. Chapter in C.Adelman(ed) Uttering Muttering Grant McIntyre

Woolfolk A.& Brooks D.(1985) The Influence of Teachers' Nonverbal Behaviors on Students' Perceptions & Performance. Elementary School Journal 85 pp513-528

Woolfolk A. & Galloway C. (1985) Nonverbal Communication & the Study of Teaching. Theory into Practice vol 24 no. 1 pp77-84

Work W. (1978) Competence in Speaking and Listening.' Paper presented at the American Association of School Administrators Summer Conference Minneapolis

Yngve V.H. (1970) On Getting a Word in Edgewise. Paper from the sixth regional meeting Chicago Linguistic Society.

Zivin G. (1982) Developmental Study of the Mastery of Signal Use. Chapter in R.S.Feldman Development of Nonverbal Behavior in Children. Springer Verlag

A P P E N D I C E S

APPENDIX A

Paper presented at the Third International Conference

Social Psychology and Language

Bristol University

APPENDIX A

PAPER PRESENTED BY JE COHEN AT THE THIRD INTERNATIONAL CONFERENCE SOCIAL PSYCHOLOGY AND LANGUAGE HELD AT BRISTOL UNIVERSITY JULY 1987

The aim of my research is an exploratory one: to elicit from young children what characteristics of behaviour they recognize as indicative of listening. I shall outline briefly the background to my research.

BACKGROUND

Listening has been and still is the "poor relation of the four communication skills: reading, writing, speaking and listening. It is the most used but the least taught and certainly the least well researched. The Bullock Report twelve years ago acknowledged that listening is "another aspect of communication that deserves to be better understood." Later also in the report it is remarked that "of time spent devoted to listening, speaking, reading and writing, well over half is taken up by listening." Nevertheless, this bulky report on "A Language For Life" itself contains only five references to listening.

The growing dependence of our society upon oral means of communication has led to an increased awareness by educators of the power of the spoken word and of the need to equip pupils to be critical and sensitive listeners. In the document English from Five to Sixteen published three years ago, listening receives equal space with the other three communication skills. It is, however, doubtful whether our knowledge has increased significantly during the intervening years.

Sara Lundsteen produced a definition of listening, which, it should be pointed out, is a working, common sense definition. She defines listening as "the process by which spoken language is converted to meaning in the mind." She adds the caution "BUT such a complex activity cannot be adequately summed up by a sentence or even by a paragraph."

Nevertheless, listening tests have been produced which are of necessity crude. Generally, the situation which they encompass has been one of groups listening to an individual reading aloud, only one of many possible listening situations. In effect, the listening test

builders have defined listening as what their tests measure (Devine, 1978) This, despite Bullock's comment that listening "is part of a highly complex process in which it is related to the individual situation and to the knowledge and experience of the listener, the nature of his motivation and the degree of his interest." In this way, teachers have been encouraged to believe that their pupils' improved performances in the tests means that they have become competent listeners.

C. Sarah Tann in 1985 produced a detailed framework for analysing classroom listening in which she identified three elements: levels, conditions and components. Each of these three elements was elaborated into further categories. She also provided a matrix in which the items could be trained and assessed. A glance at this shows to anyone with any school experience that such a programme would prove much too complicated to implement within a modern crowded curriculum.

Most recently, in Responses to English from Five to Sixteen (1986) the attempt to handle speaking and listening separately has now been abandoned. Speaking and listening are now to be considered as "reciprocal and integrated aspects of pupils' oral communicative ability." "Oracy" is in practice to be assessed by assessing "talking." (APU, 1986)

While sympathising with this decision to integrate the assessment of speaking and listening, I feel that some aspects of Listening may still be illuminated by research.

AIMS AND HYPOTHESES

My modest aim in this study is to try to elicit from Primary School children what characteristics of behaviour they recognize as indicative of listening in other children and in adults. This may have implications for teachers who look for such behaviours and it may be interesting for them to compare their own expectations with those offered by the children in my study.

There are two kinds of knowledge about Listening : knowing what to do, that is social knowledge, which is shown by doing it; and awareness of what one does, which is shown by describing it. It can be seen that the bias of my research is towards the second kind of knowledge.

At the outset I posed myself six questions:

1. How far can young children make explicit what they know about listening?

2. Do older children's explanations of listening behaviour differ from those made by younger children?
3. Do children distinguish between listening to a teacher and listening to another child?
4. Are there differences in the ways boys and girls identify listening behaviour?
5. Are there differences in the ways children identify boys and girls as listening?
6. How far do their descriptions of listening behaviour correspond to their actual listener responses?

I hypothesized that older children would be better able to verbalize their knowledge and that their descriptions might show evidence of the school's socializing conventions.

As will be apparent, several strands of interrelated theory underly the research: developmental psychology, linguistics, psycho-linguistics, socio-linguistics.

METHODOLOGY

I operationalized my first five questions in the following way: I selected three age cohorts from the primary school where I am a full-time class teacher, sixteen children from each group, eight boys and eight girls. These were selected at random from class lists after first eliminating children for whom English is a second language.

First: 4/5 year olds who have recently started school.

Second: 7/8 year olds, first year juniors in the middle of their primary schooling.

Third: 10/11 year olds, top juniors about to leave school.

I also interviewed a group of seven primary school teachers attending an in-service course and compared their responses with those made by the children.

My sixth question is to be operationalized in the following way: pairs of children are to be asked to describe a picture story to each other while their responses are monitored. This approach is still being piloted.

The children were offered three types of stimulus materials: dolls, drawings and photographs. The two dolls were entirely flexible, constructed on a pipe-cleaner framework, covered with zinc oxide plaster and each dressed

conventionally, one as a male, one as a female. The drawings I made of eight individual children in various listening poses. Nine photographs were used of groups of children in different school situations. The children were invited to say who they thought looked as if they were listening and to give reasons for their answers. The drawings and photographs were also shown to the primary school teachers, though not the dolls, as being inappropriate for their age and experience.

FINDINGS

As I said, the study is exploratory and I allowed the categories to emerge from my perusal of the data.

1. My first finding was a linguistic one which I had not hypothesized: that was an increased use by the older children of modal verbs and generally of language of possibility for example, might,could, possibly, perhaps, maybe. In the first age cohort fourteen of the children made no such uses. Two children were responsible for the six instances, all of "might", four of these from one child whom the class teacher described as exceptionally mature both linguistically and socially. In the second group, six of the children used none. There were sixty-seven uses of which twenty-nine were from one child and fifteen from another. In the third group, only four of the children used none. There were fifty-four such uses and these were much more generally distributed. These results compared with 107 such uses by the seven teachers.

2. Whereas the younger children's emphasis was upon direct observation of physical characteristics, the older children were capable of attributing intentions, thoughts and feelings. In the first group, 174 of their attributions were physical, by far the biggest category of response in this group. In fact, eleven children may have been merely "labelling" the pictures, rather than responding to the request to say "who is listening". This hypothesis has yet to be tested. Seven attributions of inner activity were offered. In the second group, sixty-six physical attributions were made and forty-seven attributions of inner mental activity. In the third group, sixty-nine physical attributions were made and eighty-four of inner activity. This compares with the 102 mental attributions and eighteen physical ones made by the seven teachers. Seven of the youngest group either gave no answer or said they didn't know when asked what someone did that showed them s/he was listening to them. This question caused no problem for any of the others. This may illustrate the development of audience-awareness and a growth in the

ability to interpret others' thoughts, intentions and feelings (Adelman, 1982).

3. A feature that may have interesting implications for teachers is the oldest children's references to NEGATIVE behaviours which I hypothesize may be socially induced. Eighty-eight negative attributions were made by this age group e.g. "not doing anything else", "not drawing, writing, fiddling , fidgeting, mucking about" etc. There were twenty-nine from the second group and seventeen from the first. There were eight from the seven teachers.

4. Compared with two instances given by the youngest children for listening situations, the second group offered sixty-seven and the third seventy-nine. The teachers gave forty-seven.

5. All groups gave weight to direction of gaze.

6. There were between twenty and thirty explanations from each of the two older groups of listening behaviour as a response or reaction and nine from the teachers. Only two of the youngest children made a similar observation.

7. There were ten references by the teachers to the possibility of deceptive messages being projected: either that children looked as if they were listening but were not really, or that they were in fact listening despite appearances. Only one eleven year old mentioned this and none of the other children.

8. All three children's groups to some extent confused listening with hearing which none of the teachers did. All the teachers actually made the point of distinguishing between listening and hearing.

9. No differences seem yet to have emerged in the ways boys and girls identify listening behaviour or are identified as listeners, although this may be because of the crudeness of the research materials.

10. Also of interest is the confusion between listening and reading made by the youngest children. When one considers that a young child's experience of reading is invariably of reading aloud, this becomes understandable.

PROBLEMS

Certain problems arose in association with the methodology. They were problems involving either the school situation or my own dual role as teacher/researcher. The difficulties

caused by the school situation were relatively minor: all interviews had to take place during the dinner hour and most were conducted in an Infant Activities Room or in a Music Practice Room - both neutral areas. However, when it rained, everything had to be transported to my own classroom. In each case, only the researcher and the subject were present, but there were occasional interruptions from members of staff or from other pupils. A graver problem may have been posed by my dual role. To overcome this, I included in the study none of the children I teach - an easy enough thing to do, since my class is of 8/9 year olds. It may even have been of some advantage that I am a familiar figure to the children. At the start of each interview I reassured the child that there were no right or wrong answers. I tried to avoid the familiar pattern of teacher/child interaction: offering a stimulus, evaluating the response, feeding back approval or disapproval (Edwards & Westgate, 1987). I did indeed offer stimulus materials and ask questions, but I offered no evaluation, either positive or negative, verbal or nonverbal. My neutrality may have been interpreted by some of the youngest children as approval and this may account for the stereotyped responses I received from five of these children(four girls, one boy). Whatever the nature of the stimulus or the questions, these five repeated their first reply e.g. "sitting" or "looking", "quiet" or "not noisy" or "don't know". Mary Willes reports the same phenomenon of "stock answers" (1983) also noted by Norman Freeman (1979) and Beth Haslett(1987). Explanations have been suggested , but the failure to give reasoned answers must be attibutable to the children's cognitive and/or linguistic immaturity. They have not yet developed their abilities to make explicit what they may instinctively know. They have not yet reached that stage of communicative competence.

THIS PAPER WAS PRESENTED ON 21ST JULY 1987 AS A CONTRIBUTION TO THE SYMPOSIUM ON THE DEVELOPMENT OF COMMUNICATIVE COMPETENCE AT THE THIRD INTERNATIONAL CONFERENCE SOCIAL PSYCHOLOGY AND LANGUAGE HELD AT BRISTOL UNIVERSITY.

APPENDIX B

THE SAMPLE

Children and Teachers who took part in the research

APPENDIX B

The Sample

CHILDREN WHO TOOK PART IN THE RESEARCH

Ages are at time of interviews in years and completed months.

COHORT I

Boys		Girls	
Randall	5.3	Michelle	5.3
Neville	5.2	Gaia	5.1
Oliver	5.2	Nicola	5.1
James	5.0	Zoe	4.11
Richard	4.8	Emma	4.10
Ellis	4.7	Abigail	4.8
Christopher	4.6	Laura	4.8
Stephen	4.6	Alex	4.6

AGE RANGE 4.6 - 5.3
AVERAGE AGE 4 YEARS 10 MONTHS

COHORT II

Boys		Girls	
Neil	8.5	Helen	8.4
Ian	8.3	Yvette	8.2
Lee	8.2	Emma	8.1
Lewis	8.2	Hayley	7.10
Adam	8.0	Danielle	7.9
Thomas	7.11	Jessica	7.9
Leo	7.8	Leanne	7.7
Lewis	7.8	Suzie	7.6

AGE RANGE 7.6 - 8.5
AVERAGE AGE 8 YEARS 0 MONTHS

COHORT III

Boys		Girls	
Arlen	11.8	Victoria	11.7
Paul	11.7	Nicole	11.6
Mark	11.6	Josephine	11.6
Michael	11.5	Michelle	11.5
Xavier	11.5	Judy	11.2
Ross	11.2	Natasha	11.2
Matthew	11.1	Angela	11.1
Spencer	10.11	Laura	10.9

AGE RANGE 10.9 - 11.8
AVERAGE AGE 11 YEARS 5 MONTHS

TEACHERS WHO TOOK PART IN THE RESEARCH

TEACHERS ATTENDING AN IN-SERVICE COURSE	TEACHERS AT RESEARCHER'S SCHOOL
Alan	Bill
David	Jenny
Graham	Yvonne
Steve	
Wilf	
Janine	
Jeannie	
Margaret	
Maria	
Pat	
Ruby	
Salma	
Tina	

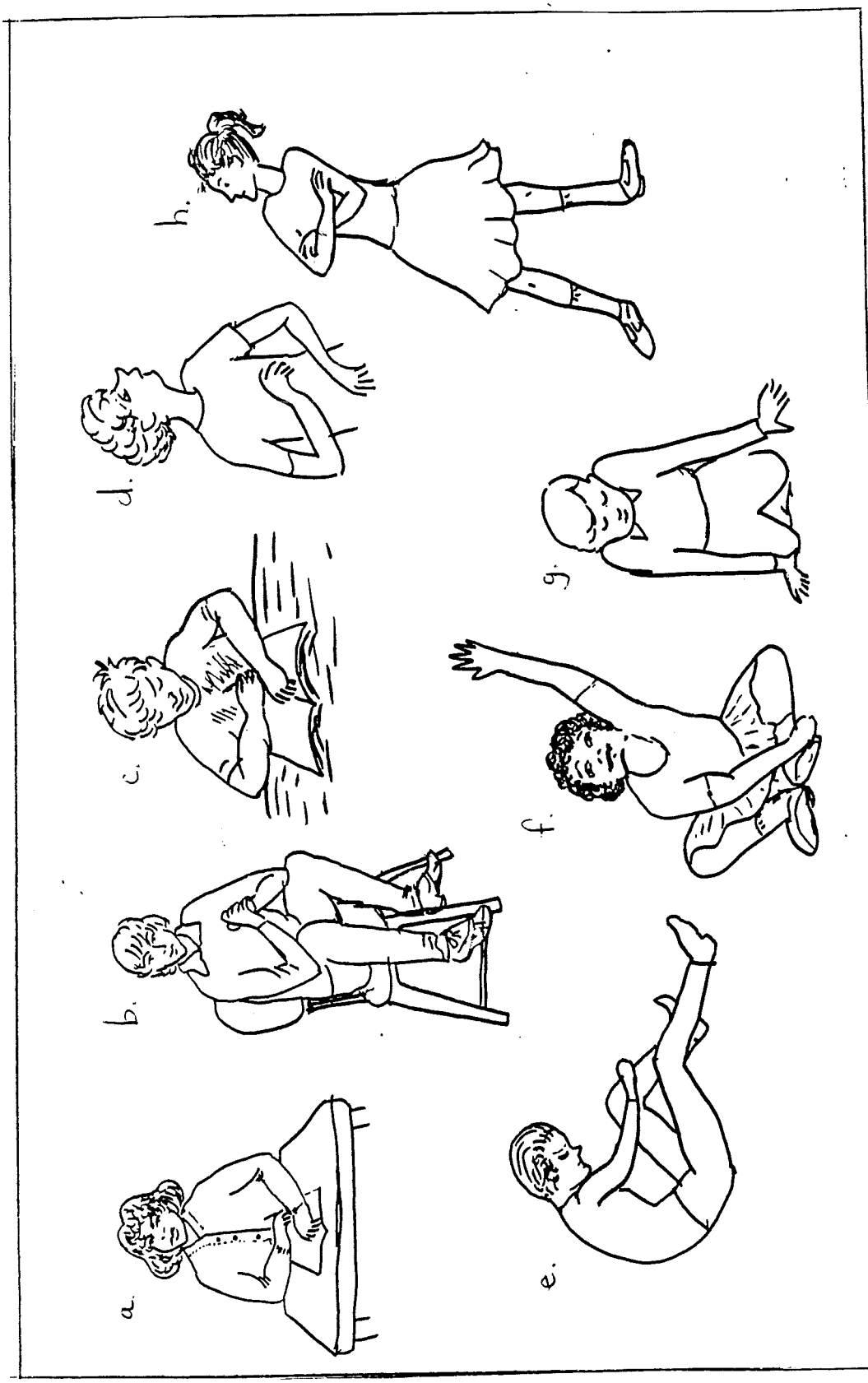
A P P E N D I X C

Research Materials

The dolls used in Task 2 are not included.

APPENDIX C
Research Materials

Drawings used in Task 1a - 65% of original size

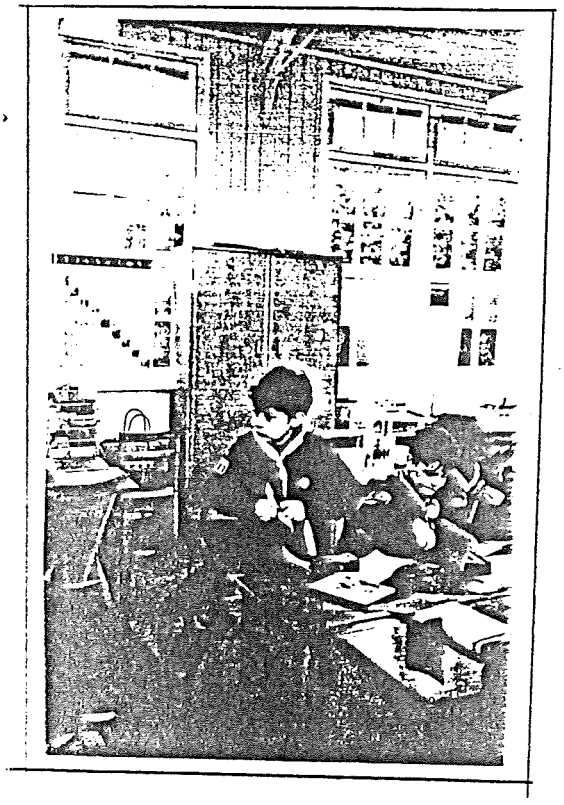


APPENDIX C

The nine photographs used in Task 1b reproduced here and on the following pages in black and white - 65% size of coloured originals.

1. Group task 2. Radio 3. Pair activity
4. Class lesson 5. Television 6. Pair activity
7. Story 8. Assembly 9. Class lesson

1.



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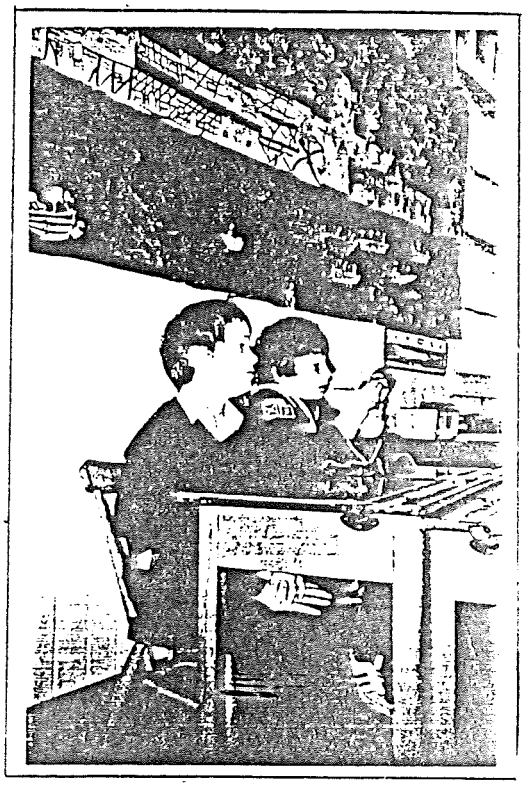

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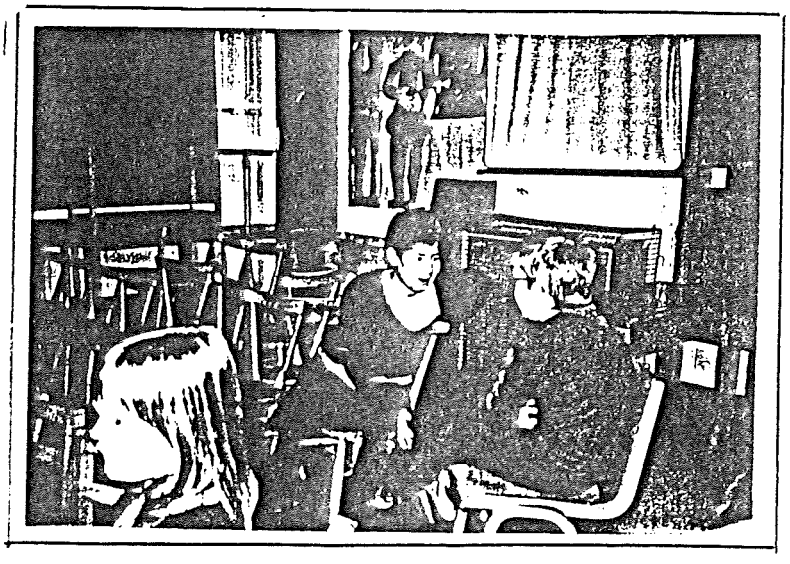
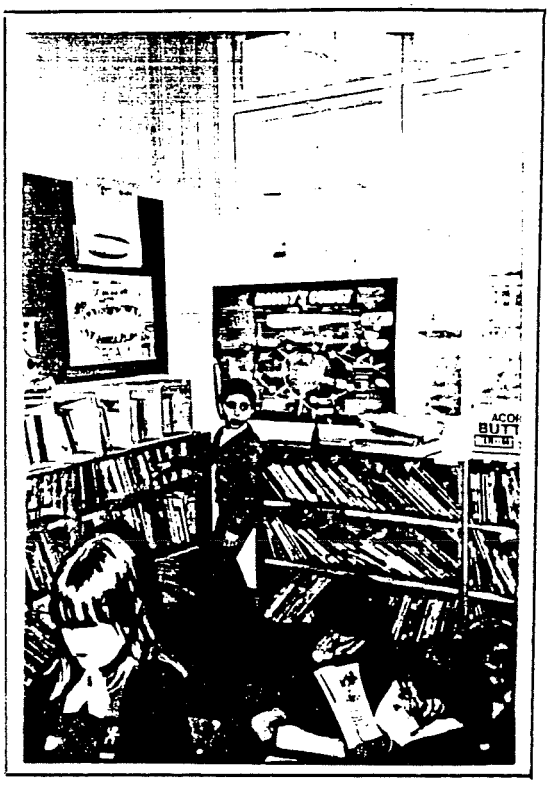


4.



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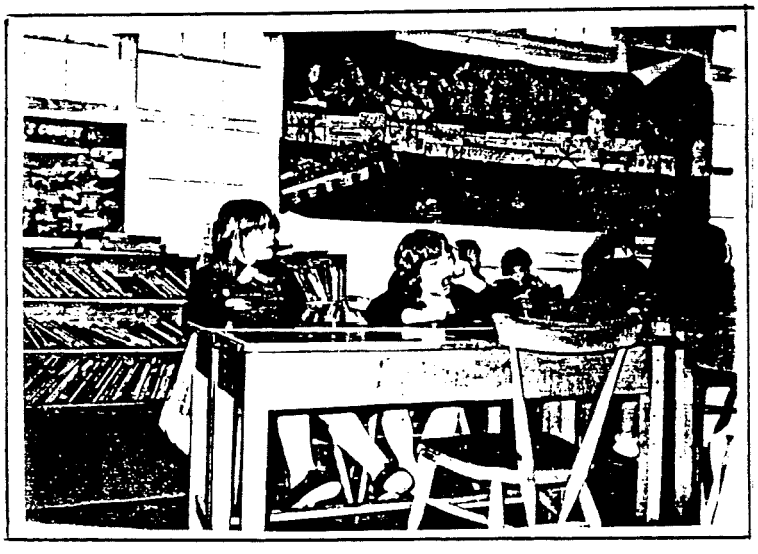


6.

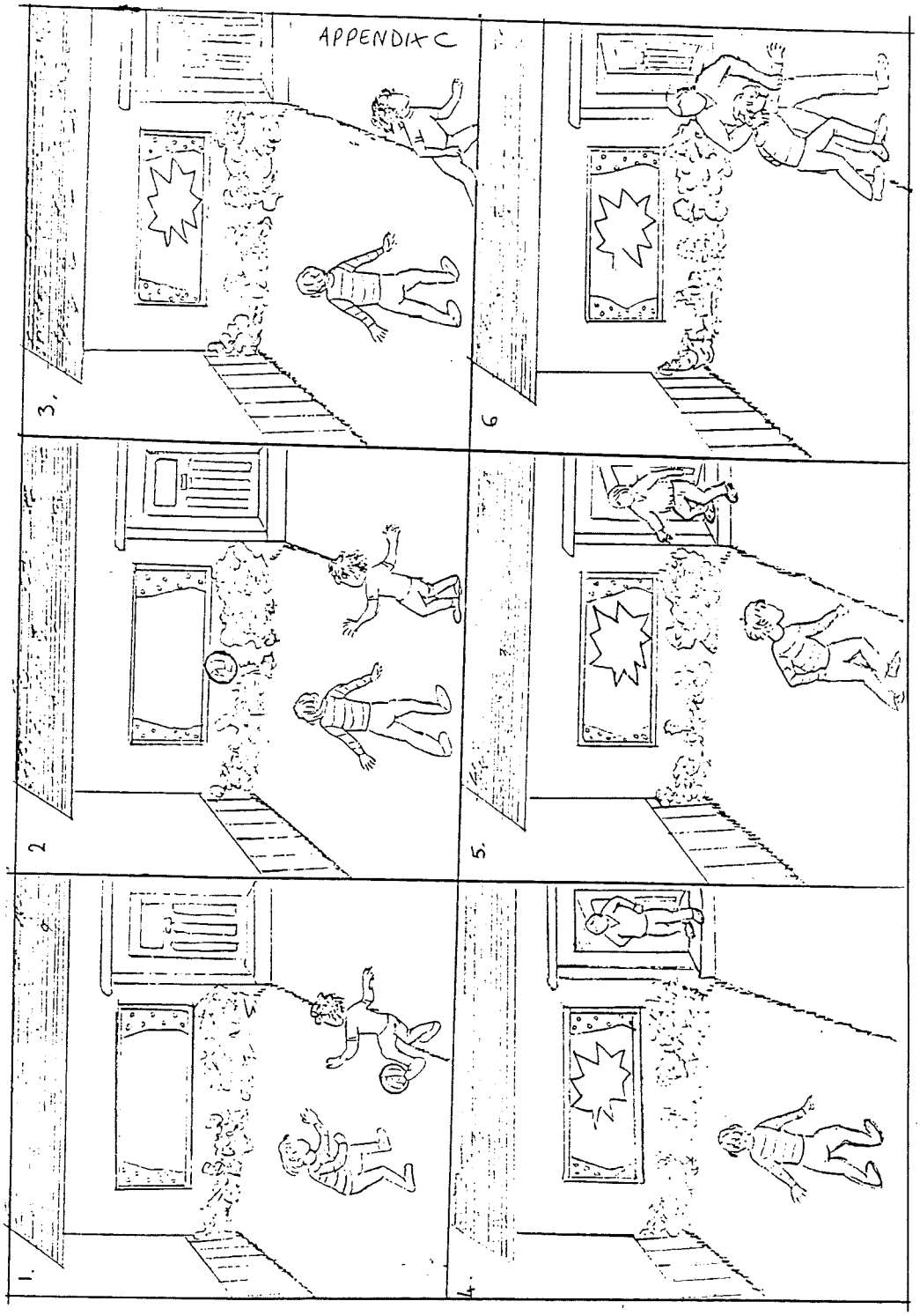
7.

8.

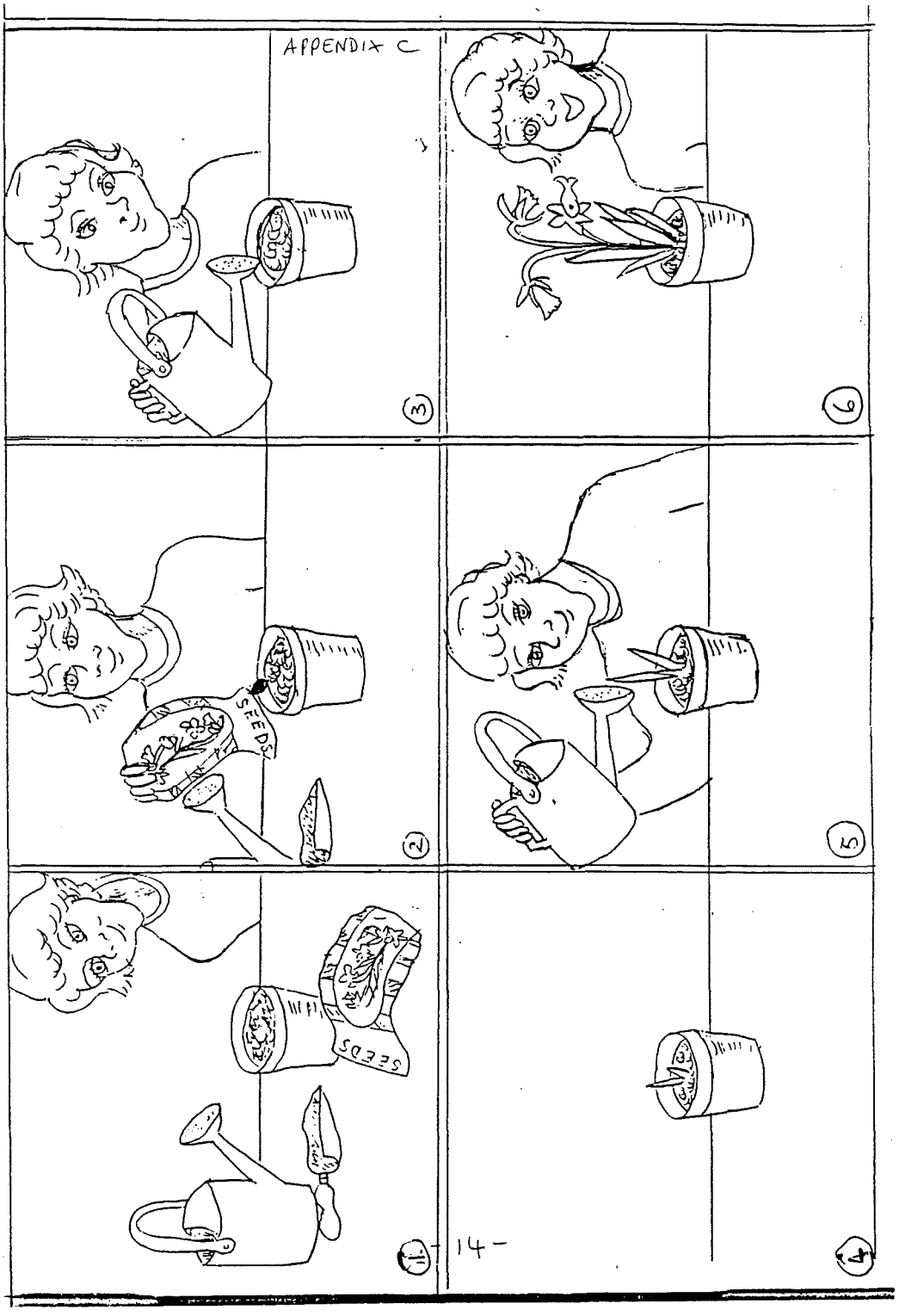
9.

APPENDIX C

On this and on the following page are the two picture stories used in preliminary trials of experiments for finding answers to the sixth research question. They appear here at 65% of their original size.



APPENDIX C



A P P E N D I X D

Supplementary Tables

APPENDIX D

Ai SYNTACTIC COMPLEXITY TABLES

Table showing syntactic complexity of comments made by Cohort I identifying listening.

Child	M/F	Syntactic Complexity Count						Total no. of comments	Total Count	Mean average
		0	1	2	3	4	>4			
	M									
1		22	5					27	5	0·2
2		13	4					17	4	0·2
3		7	1					8	1	0·1
4		5	7	5	2	1		20	27	1·4
5		24	4					28	4	0·1
6		11						11	0	0·0
7		8	10					18	10	0·6
8		10	2					12	2	0·2
	F							141	53	
1		8						8	0	0·0
2		3	1					4	1	0·3
3		2						2	0	0·0
4		20	1					21	1	0·0
5		2						2	0	0·0
6		8	5					13	5	0·4
7		8	9					17	9	0·5
8		15						15	0	0·0
16	8/8	166	49	5	2	1	0	223	69	0·3
		74·4	22	2·2	0·9	0·5	0	%		
								82	16	

Boys M.A. = 0·4

Girls M.A. = 0·2

Totals

Table showing syntactic complexity of comments made by Cohort II identifying listening.

Child	M/F	Syntactic Complexity Count						Total no. of comments	Total Count	Mean Average
		0	1	2	3	4	>4			
	M									
1		2	3	2	1			8	10	1·3
2		1	3	4	2	2	2	14	35	2·6
3			4	3	2			9	16	1·8
4		1	2	1	1	1	1	7	16	2·3
5		4	7	2	4	1		18	27	1·6
6		5	4	1				10	6	0·6
7		1	2	7	3	1		14	29	2·0
8		3	7	2	2		4	18	37	2·1
	F							98	176	
1		5	3					8	3	0·4
2		5	6					11	6	0·5
3		4	2	1				7	4	0·6
4			3	2		1	1	7	16	2·3
5			9	6	4		1	20	33	1·7
6		3	5	3	1	1		13	18	1·4
7		10	2	1				13	4	0·3
8		1	8	3	2	1		15	24	1·6
16	8/8	45	70	38	22	8	9	192	284	1·4
		23·4	34·4	19·8	11·5	4·2	4·7	%		
						1		94	108	

Boys M.A. = 1·8

Girls M.A. = 1·1

Totals.

APPENDIX D

Table showing syntactic complexity of comments made by Cohort III identifying listening.

Child	M/F	Syntactic Complexity Count. 0	1	2	3	4	>4	Total no. of comments	Total Count	Mean Average
	M									
1		1		3	4	1		9	22	2·4
2			7	6	2	1		16	29	1·8
3		3	1	1				5	5	1·0
4		5	10	1		1		17	16	0·9
5		1	3	4	2	1		11	21	1·9
6			5	10	2	1		18	35	1·9
7			3	7	1	2		13	28	2·2
8		1	4	3		1		9	14	1·6
	F							98	170	
1			3	9	4	4	1	21	54	2·6
2			1		1		1	3	9	3·0
3			4	5			1	10	19	1·9
4		1	4	2	1	2		10	19	1·9
5		2	2	3	1			8	11	1·4
6		2		2	3	4	2	13	27	2·1
7			3	7	4	1		15	33	2·2
8		2	6	2	2		3	15	31	2·1
16	8/8	18	56	65	27	19	8	193	378	2·0
		9·3	2·9	33·7	14·0	9·9	4·1	%		
								95	203	

Boys M.A = 1·7

Girls M.A = 2·2.

Table showing syntactic complexity of comments made by Teachers identifying listening.

Name	M/F	Syntactic Complexity Count 0	1	2	3	4	>4	Total no. of comments	Total Count	Mean Average
	M									
Alan				5	1	3	1	15	24	100	4·2
Bill		1	1	2	2	4		26	36	157	4·4
David		1		9	8	7		7	32	105	3·3
Graham				2	2	4		29	37	171	4·6
Steve		1	2	3	3			20	29	117	4·0
Wilf.			1		2	5		27	35	162	4·6
	F									
Janine			1	3	3	7		5	19	69	3·6
Jeannie		2	3	4	2	2		8	21	65	3·1
Jenny		1		2				6	9	34	3·8
Margaret		3	8	8	11	5		15	50	152	3·0
Maria			1	3	3	1		16	24	100	4·2
Pat			1	3	4	3		12	23	91	4·0
Ruby			1	2	4	5		5	17	62	3·6
Salma		1	1	2	2	3		17	26	108	4·2
Tina		1	1	6	4	7		20	39	153	4·0
Yvonne		1	2		3	5		13	24	96	4·0
16	6/10	12	23	54	54	61		241	445	1742	4·0
		2·7	5·1	12·1	12·1	13·7		54·2	%		

APPENDIX D

Aii TABLES SHOWING CATEGORIES MENTIONED BY SUBJECTS BY TASKS

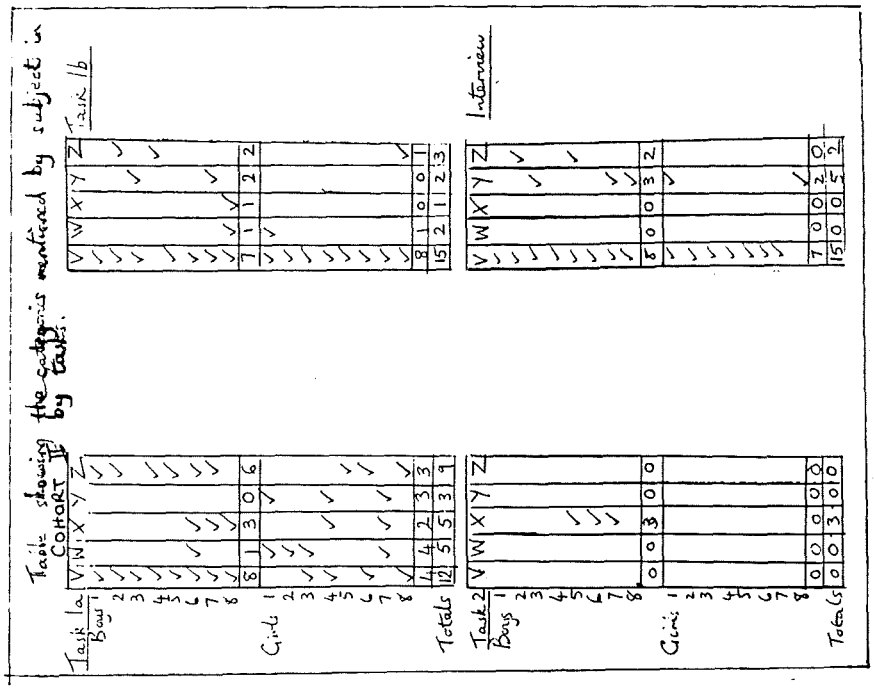


Table showing the categories mentioned by subjects in COHORT II by tasks.

Task 1a

	V	W	X	Y	Z
Boys 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Girls 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Totals	8	1	3	0	6
	8	1	3	0	6
	4	4	2	3	3
	12	5	5	3	9

Task 1b

	V	W	X	Y	Z
Boys 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Girls 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Totals	7	1	1	2	2
	8	1	0	0	1
	15	2	1	2	3

Task 2 Interview

	V	W	X	Y	Z
Boys 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Girls 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Totals	0	0	0	0	0
	0	0	3	0	0
	0	0	3	0	0

	V	W	X	Y	Z
Boys 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Girls 1	✓				✓
2	✓				✓
3	✓				✓
4	✓				✓
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Totals	8	0	0	3	2
	7	0	0	2	0
	15	0	0	5	2

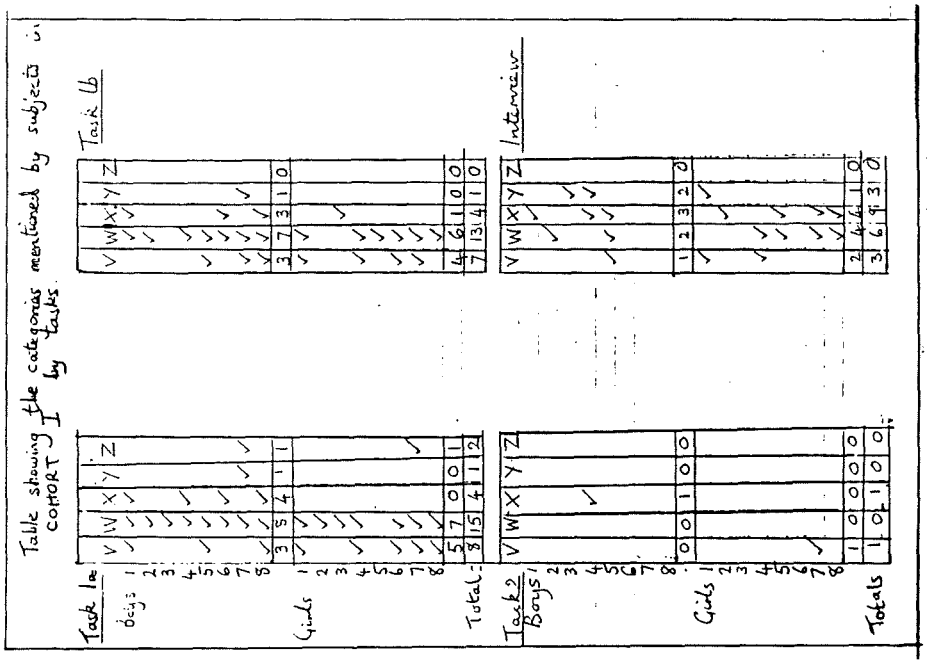


Table showing the categories mentioned by subjects in COHORT I by tasks.

Task 1a

	V	W	X	Y	Z
Boys 1	✓	✓	✓		
2	✓				
3	✓				
4	✓				
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Girls 1	✓				
2	✓				
3	✓				
4	✓				
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Total:	3	5	4	1	1
	5	7	0	0	1
	8	15	4	1	2

Task 1b

	V	W	X	Y	Z
Boys 1	✓				
2	✓				
3	✓				
4	✓				
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Girls 1	✓				
2	✓				
3	✓				
4	✓				
5	✓		✓		✓
6	✓		✓		✓
7	✓		✓		✓
8	✓		✓		✓
Total:	3	7	3	1	0
	4	6	1	0	0
	7	13	4	1	0

Task 2 Interview

	V	W	X	Y	Z
Boys 1			✓		
2					
3			✓		✓
4			✓		✓
5			✓		✓
6			✓		✓
7			✓		✓
8			✓		✓
Girls 1			✓		
2					
3			✓		✓
4			✓		✓
5			✓		✓
6			✓		✓
7			✓		✓
8			✓		✓
Totals	1	0	1	0	0
	1	0	1	0	0
	2	0	2	0	0

	V	W	X	Y	Z
Boys 1			✓		
2					
3			✓		✓
4			✓		✓
5			✓		✓
6			✓		✓
7			✓		✓
8			✓		✓
Girls 1			✓		
2					
3			✓		✓
4			✓		✓
5			✓		✓
6			✓		✓
7			✓		✓
8			✓		✓
Totals	0	0	1	2	0
	1	2	3	2	0
	3	6	9	3	0

Table showing the categories mentioned by subjects in COHORT III by tasks.

Task 1a	V	W	X	Y	Z
Boys 1					✓
2	✓			✓	✓
3	✓				✓
4	✓				
5	✓				✓
6	✓			✓	
7	✓				
8					✓
	6	0	0	2	5
Girls 1	✓			✓	✓
2				✓	✓
3	✓				✓
4	✓			✓	
5	✓				
6	✓				✓
7	✓			✓	✓
8	✓			✓	✓
	7	0	0	5	6
Totals	13	0	0	7	11

Task 1b	V	W	X	Y	Z
	✓			✓	✓
	✓			✓	
		✓			✓
	✓				✓
	✓				✓
	✓			✓	
	✓			✓	
	✓				✓
	7	1	0	4	5
	✓			✓	✓
	✓				
	✓				
	✓				✓
	✓				
	✓			✓	✓
	✓			✓	
	8	0	0	4	5
	15	1	0	8	10

Task 2	V	W	X	Y	Z
Boys 1					
2					
3			✓		
4			✓		
5					
6					
7					
8			✓		
	0	0	3	0	0
Girls 1					
2					
3	✓				
4					
5					
6			✓		
7	✓		✓		
8	✓				
	3	0	2	0	0
Totals	3	0	5	0	0

Interview	V	W	X	Y	Z
	✓			✓	✓
	✓			✓	
	✓			✓	
	✓				✓
	✓				✓
	✓			✓	
	✓			✓	
	✓			✓	✓
	8	0	0	7	5
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	
	✓			✓	✓
	✓			✓	
	✓			✓	✓
	7	0	0	8	5
	15	0	0	15	10

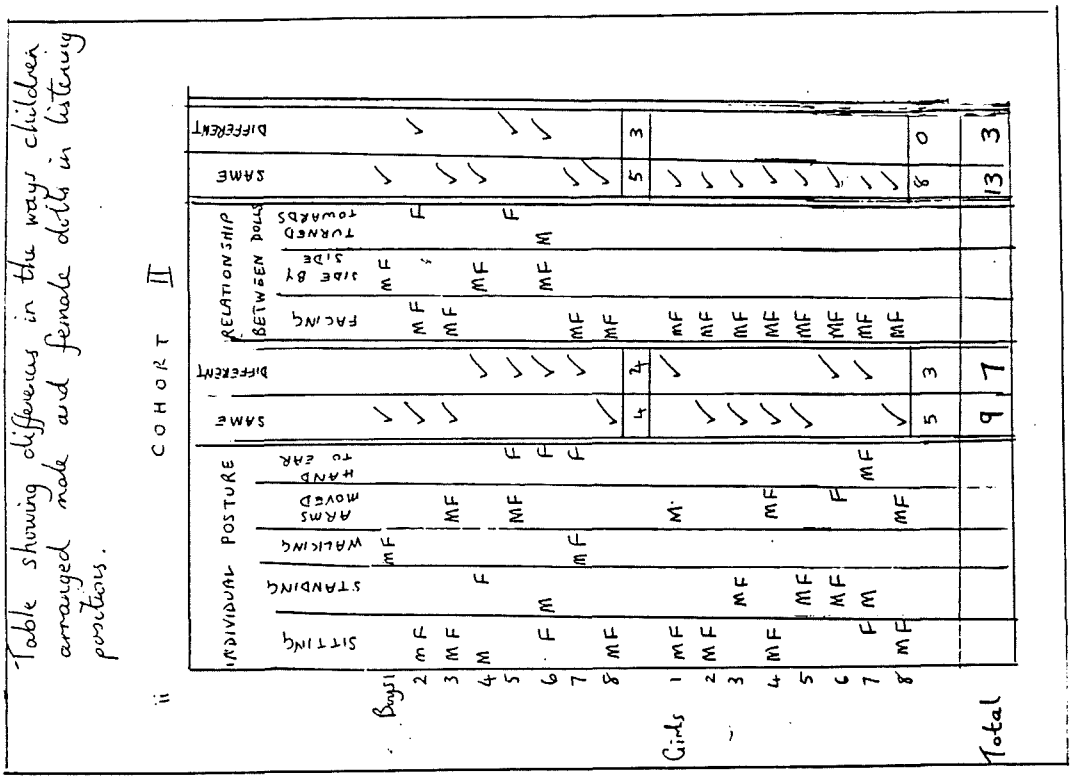
Table showing the categories mentioned by the TEACHERS by tasks.

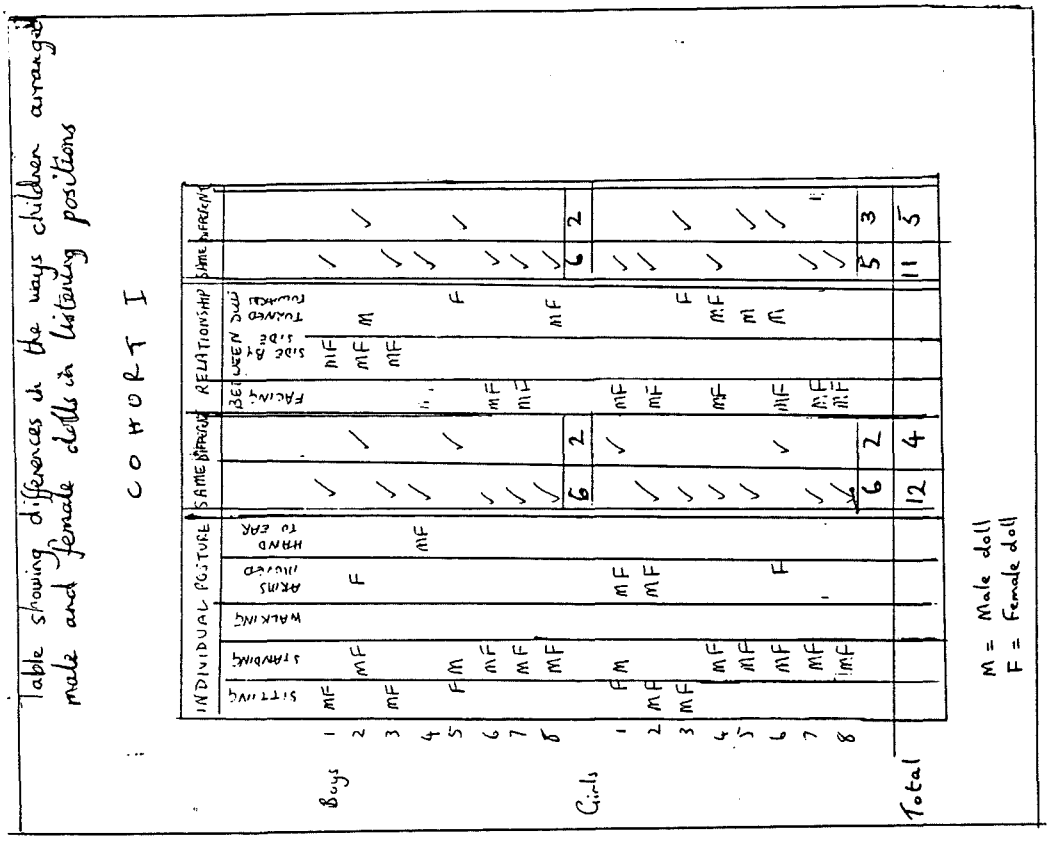
Task 1a	V	W	X	Y	Z
Alan	✓				✓
Bill				✓	✓
David	✓				✓
Graham	✓				✓
Steve	✓				✓
Wilf					✓
Janine	✓			✓	✓
Jeannie	✓				✓
Jenny	✓			✓	✓
Margaret	✓				✓
Maria	✓				✓
Pat	✓			✓	✓
Ruby					✓
Selma	✓				✓
Tina	✓				✓
Yvonne	✓			✓	✓
Totals	13	0	0	5	16

Task 1b	V	W	X	Y	Z
	✓			✓	✓
	✓			✓	✓
	✓				✓
	✓				✓
	✓				✓
	✓			✓	✓
	✓				✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	✓			✓	✓
	15	0	0	9	16

APPENDIX D

Aiii TABLES SHOWING DIFFERENCES IN GIRLS' AND BOYS' ARRANGEMENTS OF MALE AND FEMALE DOLLS





APPENDIX D

Table showing differences in the ways children arranged male and female dolls in listening positions

COHORT III

		INDIVIDUAL POSTURE					SAME	DIFFERENT	RELATIONSHIP BETWEEN DOLLS				SAME	DIFFERENT
		SITTING	STANDING	WALKING	ARMS MOVED	HAND TO EAR			FACING	SIDE BY SIDE		TURNED TOWARDS		
Boys	1	M			MF			✓	MF				✓	
	2	MF			MF	M		✓	MF				✓	
	3	MF			MF	M		✓	MF				✓	
	4		MF			F		✓	MF			M		✓
	5		MF			M		✓	MF			F		✓
	6	F	M			M		✓	MF				✓	
	7	M	F		M			✓	MF				✓	
	8		MF			F M		✓	MF				✓	
							0	8					6	2
Girls	1	MF			MF		✓		MF				✓	
	2	MF			MF		✓		MF				✓	
	3	MF			MF		✓		MF½				✓	
	4	MF			MF		✓		MF½				✓	
	5	MF			MF		✓		MF				✓	
	6		MF			MF	✓		MF				✓	
	7		MF			M		✓	MF				✓	
	8	MF			MF		✓		MF				✓	
							7	1					8	0
Total							7	9					14	2

APPENDIX D

Aiv TABLES SHOWING SUBJECTS' RESPONSE TO STIMULUS ITEMS IN TASKS 1a AND 1b

COHORT I

TASK 1a (DRAWINGS)	1	2	3	4	5	6	7	8	Total b	1	2	3	4	5	6	7	8	Total g	Total
a	✓	✓		✓	✓	✓		✓	6	✓			✓		✓	✓	✓	5	11
b	✓	✓	✓	✓	✓	✓	✓	✓	8	✓		✓	✓		✓	✓	✓	6	14
c	✓	✓	✓		✓	✓	✓	✓	7	✓					✓	✓	✓	4	11
d	✓		✓	✓	✓	✓	✓	✓	7	✓			✓		✓			3	10
e	✓	✓	✓		✓		✓	✓	6		✓		✓		✓	✓	✓	5	11
f	✓	✓	✓	✓	✓		✓		6	✓	✓		✓		✓	✓	✓	6	12
g	✓	✓		✓	✓	✓	✓		6	✓	✓		✓		✓	✓	✓	6	12
h	✓			✓	✓		✓	✓	5	✓	✓		✓		✓	✓	✓	6	11
TOTAL	8	6	5	6	8	5	7	6		7	4	1	7	0	8	7	7		
TASK 1b (PHOTOGRAPHS)																			
1	✓	✓		✓			✓		4				✓		✓	✓	✓	4	8
2	✓		✓		✓		✓	✓	5				✓			✓	✓	3	8
3	✓			✓	✓		✓		4	✓			✓		✓	✓		4	8
4	✓				✓	✓	✓		4	✓			✓			✓	✓	4	8
5	✓		✓		✓		✓	✓	5				✓			✓		2	7
6	✓	✓	✓		✓	✓	✓	✓	7			✓				✓	✓	3	10
7	✓	✓		✓	✓	✓	✓		6			✓	✓			✓	✓	4	10
8	✓	✓			✓		✓		4				✓		✓	✓	✓	4	8
9	✓			✓	✓	✓	✓	✓	6				✓	✓		✓	✓	4	10
TOTAL	9	4	3	4	8	4	9	4		2	0	2	8	1	3	9	7		
TOTAL	17	10	8	10	16	9	16	10		9	4	3	15	1	11	16	14		

COHORT II

TASK 1a (DRAWINGS)	1	2	3	4	5	6	7	8	Total b	1	2	3	4	5	6	7	8	Total g	TOTAL
a	✓	✓			✓	✓			4	✓	✓	✓	✓	✓		✓	✓	7	11
b		✓	✓		✓	✓	✓	✓	6	✓	✓	✓	✓	✓	✓	✓	✓	8	14
c		✓						✓	2					✓			✓	2	4
d		✓		✓		✓	✓		4		✓		✓		✓	✓	✓	5	9
e					✓				1		✓					✓		2	3
f	✓	✓	✓	✓	✓	✓		✓	7	✓	✓	✓		✓	✓	✓	✓	7	14
g						✓			2					✓				1	3
h	✓	✓			✓		✓		4		✓			✓			✓	3	7
TOTAL	3	6	2	2	5	5	3	4		3	6	3	3	6	3	5	6		
TASK 1b (PHOTOGRAPHS)																			
1		✓			✓			✓	3					✓		✓		2	5
2	✓	✓			✓	✓		✓	5		✓	✓		✓		✓	✓	5	10
3	✓	✓	✓	✓	✓		✓	✓	7	✓	✓		✓	✓	✓	✓	✓	7	14
4	✓	✓			✓		✓		4			✓		✓		✓		3	7
5		✓	✓		✓	✓			4	✓				✓				2	6
6				✓				✓	2					✓				1	3
7	✓	✓	✓		✓	✓	✓	✓	7	✓		✓	✓	✓	✓	✓	✓	7	14
8	✓					✓		✓	3	✓				✓			✓	3	6
9									0			✓	✓	✓	✓	✓	✓	6	6
TOTAL	5	6	3	2	6	4	3	6		4	2	4	3	9	3	6	5		
TOTAL	8	12	5	4	11	9	6	10		7	8	7	6	15	6	11	11		

APPENDIX D

COHORT III

CHILDREN

		Boys								Girls								
TASK		1	2	3	4	5	6	7	8	total	1	2	3	4	5	6	7	8	total	TOTAL
1a DRAWINGS	a	✓	✓	✓	✓	✓	✓	✓	✓	8	✓		✓	✓	✓	✓	✓	✓	7	15
	b	✓	✓	✓	✓	✓	✓	✓	✓	8	✓	✓		✓	✓	✓	✓	✓	7	15
	c			✓			✓			2									0	2
	d		✓		✓	✓	✓			4			✓	✓			✓		3	7
	e						✓			1	✓								1	2
	f	✓	✓	✓	✓			✓		5	✓			✓	✓	✓	✓	✓	6	11
	g	✓								1	✓								1	2
	R		✓						✓	2	✓		✓			✓	✓		4	6
TOTAL		4	5	4	4	3	5	3	3		6	1	3	4	3	4	5	3		

TASK																				
1b PHOTOGRAPHS	1	✓	✓		✓	✓		✓	✓	5	✓		✓				✓		3	8
	2	✓	✓	✓		✓	✓	✓	✓	7	✓	✓	✓	✓		✓	✓	✓	7	14
	3	✓	✓		✓	✓		✓		5	✓		✓	✓	✓	✓	✓	✓	7	12
	4		✓		✓	✓		✓	✓	5	✓			✓	✓	✓	✓		5	10
	5		✓	✓		✓	✓	✓	✓	6	✓			✓		✓	✓	✓	5	11
	6									0	✓						✓		2	2
	7	✓	✓	✓	✓	✓	✓	✓		7	✓	✓	✓	✓	✓			✓	7	14
	8		✓	✓	✓		✓	✓		6	✓		✓		✓	✓		✓	5	11
	9	✓	✓				✓	✓		4	✓				✓	✓			3	7
TOTAL		4	8	4	5	6	4	8	6		9	2	5	5	5	6	7	5		
TOTAL		8	13	8	9	9	9	11	9		15	3	8	9	8	10	12	8		

TEACHERS

		Alan	Bill	David	Gordon	Steve	Wilf	Jamie	Jeanie	Jenny	Margaret	Maria	Pat	Ruby	Salma	Tina	Yvonne	TOTAL
TASK																		
1a DRAWINGS	a	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14
	b	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16
	c	✓	✓	✓			✓	✓	✓				✓	✓	✓	✓	✓	11
	d	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		12
	e	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓				10
	f	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16
	g	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓		11
	R	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓		12
TOTAL		8	7	8	5	3	8	8	8	2	6	6	8	8	6	7	4	

TASK																		
1b PHOTOGRAPHS	1		✓	✓	✓	✓	✓	✓			✓	✓		✓		✓	✓	11
	2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	14
	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16
	4	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14
	5	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	12
	6	✓	✓	✓	✓			✓	✓		✓	✓		✓	✓	✓	✓	12
	7			✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	12
	8	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓		12
	9	✓	✓	✓	✓		✓		✓			✓	✓	✓	✓	✓	✓	12
TOTAL		6	8	7	7	7	6	8	8	4	7	9	5	9	7	9	8	
TOTALS		14	15	15	12	10	14	16	16	6	13	15	13	17	13	16	12	

APPENDIX D

Av

TABLE SHOWING COMMENTS WHICH DID NOT IDENTIFY LISTENING

TABLE SHOWING NUMBERS OF COMMENTS WHICH DID NOT IDENTIFY LISTENING.

COHORT	B/G	INAUDIBLE	DON'T KNOW	NOT LISTENING	REPETITIONS	UNRELATED COMMENTS
I	B	21	18	11	14	23
	G	10	12	2	22	3
Totals		31	30	13	36	26
II	B	3	5	11	2	10
	G	3	0	4	6	0
Totals		6	5	15	8	10
III	B	7	0	4	1	0
	G	5	4	12	0	0
Totals		12	4	16	1	1
TEACHERS		31	31	38	0	56

APPENDIX E

Granowsky and Botel: Syntactic Complexity Formula

APPENDIX E

SYNTACTIC COMPLEXITY FORMULA

Syntactic Complexity Formula 1974

A Granowsky and *M Botel*

The authors were concerned about the widely recognised shortcomings of the more 'traditional' readability formulae. They proposed a technique for analysing the syntactic complexity of texts. The results do not give a reading age for a piece of text but they do alert the teacher to the density of sentences.

Frequently a very complex sentence can be embedded within text which would not necessarily be identified by readability formulae –

eg 'Dom remembered the tribes last hunt in the old land. The old ones and the boys set off on either side in two separate lines, moving in the direction of the wood but fanning away at oblique angles. After fifty yards one in each line halted.'

This passage (extended to 100 words) received a readability level of 11 years on Fry yet the second sentence was so complex that over 50% of eleven year olds were unable to understand what was happening.

Our thanks go to Dr Elizabeth Goodacre for her valuable work in presenting the syntactic formula in the following way. An extended version can be found in 'The Reading Teacher' Vol 28 (1) October 1974.

[0] Count structures

Sentence pattens with 2 or 3 lexical items:

(a) Subject – Verb or adverb: He ran. He ran home. The boy had gone (home).
(b) Subject – Verb – Object: He kicked the ball. She hit it.
(c) Subject – Verb – complement: (noun, adjective, adverb) He is good. The girl seemed big.
(d) Subject – Verb – Infinitive: She wanted to play. Those girls will want to eat.

Simple transformations:

(a) Interrogatives (including tag-end questions). Who did it? He did it, didn't he?
(b) Exclamations: What a game! How wonderful!
(c) Imperatives: (You) Get the milk.(!) Go to the shop.(!)

Co-ordinate clauses joined by 'and': He came and he stayed.

Non-sentence expressions: Hello, wow, so long, you know, surely, etc.

[1] Count structures

Sentence patterns with 4 lexical items:

(a) Subject – Verb – Indirect object – Object: He threw HER the ball. SV1O
(b) Subject – Verb – Object – Complement: They made him HAPPY. SVOC

Noun modifiers:

(a) Adjectives: The BIG man ate here.
(b) Possessives: The hat fits his SON'S head.
(c) Pre-determiners: ALL OF the players won the game (one of, two of, many, both of).
(d) Particles used as adjectives: The CRYING boy ran home.
(e) Prepositional phrases: The boy ON THE BEACH was crying. Bob wanted to go BEFORE Bill.

Other modifiers:

(a) Adverbials (including prepositional phrases) when they don't immediately follow the verb in the S-V-Adverb pattern e.g. He ran to the shop LATER.
(b) Modals: He might have won the game (could, dare to, has to, may, ought to, should etc).
(c) Negatives: He did NOT see it. (No, not, neither, never, n't).

(d) Set expressions: Once upon a time, many years ago, more or less etc.
(d) Gerunds, when used as a subject: RUNNING is fun.
(f) Infinitives, when they don't immediately follow the verb in a S-V-Infinitive pattern: They wanted the baby to SLEEP.

Co-ordinates:

(a) Co-ordinate clauses (joined by but, for, so, or, yet).
(b) Deletion in co-ordinate clauses: They swim *OR* they fish. John was thin *BUT* HEALTHY.
(c) Paired co-ordinate clauses 'both . . . and . . . ' eg BOTH BILL AND Bob did it.

[2] Count structures

Passives: The ball was hit by Bob. The ball was hit. (By Bob understood).
Paired conjunctions: neither . . . nor, either . . . or, not . . . but, etc.
Dependent clauses (adjective, adverb or noun): I went BEFORE you did.
Comparatives: as . . . as, same . . . as, er . . . than, more than.
Participles: Boiling, the water overflowed the pan. The water, boiling etc.
Infinitives as subjects: To RUN is healthy, TO SLEEP is important.
Appositives (which set off by commas): John, my friend, is here.
Conjunctive Adverbs (however, thus, nevertheless) THUS the day ended.

[3] Count structures

Clauses used as Subjects: WHAT HE DOES, is his concern.
Absoluted: THE PERFORMANCE OVER, Mr Smith lit his pipe.

APPENDIX F

C.S.Tann: Framework for Analysing Classroom Listening

APPENDIX F

FRAMEWORK FOR ANALYSING CLASSROOM LISTENING

APPENDIX F

S. TANN'S FRAMEWORK FOR ANALYSING CLASSROOM LISTENING

(United Kingdom Reading Association Conference Workshop, 1985)

a. Levels of listening: expectations/perceptions for different purposes
   - marginal
   - appreciative
   - attentive
   - critical

b. Conditions: physical, psychological, social.
   - where - familiar/unfamiliar
   - what - known/unknown, interesting/uninteresting
   - how long - concentration span short/long
   - to whom - source (human/electronic), size and composition of audience (class/group/pair, adult/peers/juveniles)
   - why - receptive, pro-active, re-active, interactive

c. Components: linguistic, cognitive, social.
   - concentration
   - decoding (phonic, lexical, syntactic levels)
   - comprehension (information, inferences, arguments)
   - review (adequacy/ambiguity) of message
   - reply (confirmation/clarification) to speaker
   - responsive turn-taking within group

MATRIX	Levels and Components of Listening Skills	
Activities/Audience	M. Ap. At. C.	Con. Dec. Com. Rev. Rep. Res.
Assembly		
Story		
Radio		
T.V.		
Class lesson		
Group task		
Pair activity		