A British ethnolinguistic study described the language behavior of 12 preschool children during their first experience in a formal educational setting where they constituted a linguistic minority. All were third-generation, British-born children of Moslem parents of ethnic Pakistani background; their home language was a vernacular Panjabi. Data were drawn from naturally-occurring classroom discourse, recorded on individual tape recorders, and observation of interactions. Data analysis focused on patterns of language use. Specifically, it looked at when individuals chose to speak, preferred interlocutors, choice of language, the individual's role in discourse (initiating, responding, terminating), silence, and discourse topic. The first level of analysis demonstrates the creation of social contexts through language use. Tape-recordings allowed reconstruction of each student's movements around the nursery, time spent on selected activities, and roles of other participants in those activities. The second level of analysis was of emerging social networks, the dynamics of group membership, and related patterns of language use. The report focuses on the language use of one child in particular, and applies the concept of the linguistic ecosystem to this context to explain the language preferences exhibited. A brief bibliography and activity and social network maps for the child are appended. (MSE)
ECOLINGUISTIC BIOGRAPHIES

Social Networks in a Nursery School

Linda Thompson
University of Durham
UK

Paper presented at the Third International Conference on Maintenance and Loss of Minority Languages

Noordwijkerhout
The Netherlands

1-4 September, 1992.
1. Introduction

Despite the heterogeneous linguistic composition of present day Britain, English remains the only official language taught in compulsory mainstream education. This has prevailed despite numerous influential sources which suggest change may be appropriate. As early as 1975 the Bullock Report stated that 'no child should be expected to caste off the language of home as s/he crosses over the school threshold' (DES, 1975: Chapter 5:20). The 1977 EEC Directive on The Education of the Children of Migrant Workers (July 77/4861), Article 3 stated that it required the member states:

in accordance with their national circumstances and legal systems and in co-operation with the state of origin, to promote the teaching of the mother-tongue and culture in accordance with normal education

Council of European Community 1977:02

Britain's response to this directive was to issue an interpretation of it for local education authorities, that is, those responsible for the provision of education at local level. Circular 5/81 issued on 31 July 1977 stated:

for local education authorities in this country, (the directive) implies that they should explore the ways in which mother-tongue teaching might be provided, whether during or outside school hours, but not that they are required to give such tuition to all individuals as of right

(DES, 1981:02)

An EC Report (1984) on the implementation of the 1977 Directive showed that Britain was, at that time, lagging behind other member states in complying with the Directive, with only 2.2% of primary school children from homes where languages
other than English were spoken, receiving home language tuition at school, compared with 80% of children in the Netherlands, for example.

The education provision reflects the societal attitudes to languages other than English and the minority groups who speak other languages. This attitude prevails not only towards EC nationals resident in Britain but also towards British born migrant communities now permanently settled in the UK.

The English language is therefore central to learning and academic success in British schools and since 1988 it has been declared as the only official language of teaching within the compulsory curriculum.

Evidence from other multilingual societies suggests that legislation and formal language planning at national level can have dramatic impact on the languages not recognised within the national plans. The result is often a change in the domains and hence opportunities to use the non-recognised languages. While there is little disagreement over the occurrence of language shift (LS), opinion varies on whether it is a negative (e.g. Fishman, 1991) or merely inevitable linguistic trend (Romaine, 1989).

2. The Cleveland Study

The Cleveland Study, an ethnolinguistic description of the language behaviour of a group of twelve children, 6 girls and 6 boys, during their first term in formal education where they constitute a linguistic minority, was an attempt to describe the language experience provided by mainstream education where English is the official language for linguistic minority children.

The informants are third generation, British born, to Moslem parents of ethnic Pakistani background. Their home language is Mirpuri, vernacular Panjabi. They
were aged between three years and four months (3.4) and four years and eight months (4.8). They represent an homogeneous linguistic group. Theirs has been described as one of the twelve most commonly found languages in present day British Schools (Linguistic Minorities Project, 1985).

The project was planned in three phases: Phase 1 Preparation; Phase 2 Data Collection and Phase 3 Data Analysis. A detailed description is beyond the scope of this paper but can be found in the Project Report (Thompson, forthcoming). Phase 2, the data collection phase, will be summarised briefly. Data were collected from two complementary sources. Naturally occurring discourse data were gathered using lightweight Sanyo Micro Talkbook (TRC 6000) audio-recorders. These were used in preference to the radio microphones used by previous researchers (Tizard & Hughes, 1984; Willes, 1982; Wells, 1987) because they allowed for the unfettered movement of individuals around the nursery school, both indoors and outside. The 5 metre range of the microphone allowed all language within the hearing range of each informant to be collected. This provided a comprehensive linguistic environment that formed the basis for the reconstruction of the ecolinguistic biographies identified as part of Phase 3 of the Project. The recording equipment was concealed within specially designed protective jackets worn by each of the informants. It is usual practice for the children to wear protective clothing at nursery school. Placebo jackets were worn by other children in the nursery who were not participating in the project.

'Thick' (Geertz, 1975) contextual data recording the activities in which the informants engaged were noted. This included the presence of other people (potential participants) and aspects considered helpful to the retrospective illumination of the audio-tape recordings. The researchers were not always within hearing distance of the informants. This method of data collection was used in preference to the structured observation schedules favoured by previous studies (eg Sylva et al, 1980) because it allowed for the idiosyncratic behaviour of individuals to be noted.
These data provide complementary aspects of the nursery setting. They combine to provide a description of the ways in which the informants were learning to be communicatively competent in their new social context.

3. Data Analysis

The focus of the data analysis was the informants' preferred language use in the contact situation of the nursery school where they were a linguistic minority. Using Hymes' (1972) taxonomy as a guide, the analysed data provide a pattern of individual's preferred language use (language choice) in social interaction.

The analysis addresses:

- when individuals chose to speak
- the preferred interlocutors
- the preferred language of interaction i.e. language choice
- the individual's role in the discourse eg initiating, responding, terminating
- elected non-participation i.e. silence
- the discourse topic

The analysed data provide a pattern of individual's preferred language use with preferred participants in the nursery school setting.

4. Creating Social Contexts through Discourse

The study presented here draws from a number of theoretical perspectives. The first is the Hallidayan tradition of systemic linguistics which describes discourse as semantic choice in social contexts. Since Malinowski (1923/66), context has been integral to linguistic description. Rooted in this linguistic tradition is the Hallidayan description
of language as social semiotic which presents the notion of language as a dynamic process which not only facilitates social encounters and supports social action but which actually creates those social contexts. In 1978, Halliday proposed the formulation of language as social semiotic, which presents language as functioning as an expression of, and a metaphor for, the social processes it creates and the social contexts in which it occurs. Inherent in this description of language is the notion of language as a dynamic process in which it is possible for individuals to create a whole range of modes and meanings, from the concrete to the creative, because language not only facilitates everyday encounters, but it actually creates them.

Semiotically speaking, all social encounters consist of meanings negotiated by the participants. Language is socially constructed. Language use is the negotiation of potential meanings between participants. A social semiotic description of a social context accounts for the social fact that people speak to each other, not in sentences, but in naturally occurring, interactive, connected exchanges, that we know as discourse. This description of language as discourse, allows for an exchange of meaning to take place in interpersonal contacts. It presents the view that language is not merely a feature of interpersonal contact in social contexts but that it actually creates these social context through personal encounters.

The contexts where these meanings are negotiated and constructed cannot therefore be devoid of personal values. Nor can personal value systems be isolated completely from societal values. Language, and the contexts which it creates, cannot therefore be value free. The context of speech becomes a semiotic structure taking its form and values from the culture (or sub-culture) in which it occurs, embracing its mores and values. It is this form which helps participants to predict prevailing features of previously encountered registers and settings. Each society and its sub-group has its own underlying rules which govern acts of communication within the speech community. These rules of appropriate linguistic behaviour are learned. Language
therefore becomes a means by which an individual becomes a member of a speech community and a culture. It is the means by which one participates in a culture (and can learn to participate in other cultures). Learning a new language is learning to behave linguistically in a new culture. Learning a first or subsequent language requires understanding how everyday encounters are organised linguistically in that speech community. Thus, individuals who have successfully learned the rules are able to present themselves as members of that (speech) community.

In the tradition of grounded theory (Glaser & Strauss, 1967) the language behaviour of one informant, Ishtiaq, will be used to demonstrate the range of analyses carried out on the data collected from all twelve informants.

The first level of analysis demonstrates the creation of social contexts through discourse. Using the audio-taped recordings of the discourse data, it is possible to demonstrate ways in which the participants constructed a range of social contexts, including learning situations, through their use of language. It is possible to reconstruct the informants' experience of nursery school and to demonstrate the ways in which social contacts were established and to observe the ways in which these interactions developed into social encounters.

Using the audio tapes it is possible to reconstruct from the discourse data, the informants' movements around the nursery. By charting these movements it is possible to construct a map of a day's experience, demonstrating how each child spent time on selected activities and to identify the role of other participants in these activities.

Figure 1 represents a reconstruction of Ishtiaq's first day at school. Similarly, Figure 2 is a reconstruction of a subsequent day. These figures demonstrate the pattern of his
behaviour. How, in the words of Halliday (1978) he creates social situations through the use of language.

5. Emerging Social Network or Coterie of Significant Others

Combining the data from the audio-tapes with the 'thick' contextual observations, it is possible to provide a second level of analysis to the data. The use of network analysis is already established in sociolinguistics (Barnes, 1954; Milroy, 1980). Milroy suggests that it is a principle capable of universal application and is hence less ethnocentric than other descriptions of social groupings, for example, caste or class. We are alerted by Milroy (1980) to the possibility of the researcher being an outsider to some social contexts. This must be true of the classroom setting where the adult is marked by age and perhaps gender. It is particularly true of the presence of a white researcher in the black child culture of the classroom. This dilemma adds one more facet to Labov's Observer's Paradox. However, individuals will construct differently, even those experiences which are shared. Researchers should remain sensitive to the fact that their presence can exert undue influence on informants and hence on the data. It is important to remain mindful to the dangers inherent in accepting the white-adult perspective on the black-child world of the classroom.

The social network concept is appropriate to observational studies of this kind where the white adult is an outsider to the black child world under investigation. It is particularly appropriate for an observational study of the Mirpuri community because it corresponds to biradari, a kinship network based on ancestral links within the community and which transcends extended family groupings and geographical distances. A biradari can simultaneously include members living in the north-east of England and Pakistan.
A second level of analysis identifies people present in the contact situation of the nursery, their ages, gender and ethnicity. These people can be regarded as potential participants with whom Ishtiaq may choose to interact. The group comprises:

**39 children**
- 11 bilinguals of shared ethnic Pakistani background
- 25 monolingual English speakers
- 3 other bilinguals from non-shared ethnic backgrounds

**5 Adults**
- 1 bilingual of ethnic Pakistani background
- 2 monolingual English speakers
- 2 monolingual English researchers

All of the adults were perceived by the children as teachers, although professional qualifications varied.

A social network analysis of the participants with whom Ishtiaq elected to interact during his first day at school is summarised in Figure 3. These networks developed during the observation period into established networks with a stable membership.

Analysis of the networks reveals a dense network of preferred participants with whom Ishtiaq did interact and a loose network of potential participants with whom he did not. This dense network of preferred interlocutors is akin to Halliday's *coterie of significant others*. The child interlocutors present the emergence of a *peer network*, drawn from both girl and boy pupils. The peer network develops and is consolidated over subsequent days at school. Analysis of this emerging peer network is important. It is summarised in Figures 3 and 4.

A summary of Ishtiaq's loose and dense social network ties reveals a dense network of two individuals with whom he initiates interactions. He sustains interaction in two ways: through participation in shared activity and through discourse participation.
The preferred language use or language choice of this dense network is presented alongside the networks in Figures 3 and 4.

The network analysis reveals both dense and loose network ties. The dense network comprises both the boy and two girl members. The girl members of the dense network are noted by the physical features of their ethnic identity which includes emblems such as clothes (*shalwa-kameez*, traditional ethnic Pakistani dress), hairstyle, jewellery (nose-pin and glass bangles, again ethnic Pakistani). Both the boy and the girls carry physical features of their ethnicity including skin and eye colour.

The loose network again comprises both boy and girl members. It differs from the dense network in a number of ways. The girl members all carry physical features of their ethnic Pakistani origins, but also included in this group is a number of white, monolingual boys. Interaction within the loose network is not always direct as this sample of discourse data demonstrates. G and N are monolingual boys. The teacher and the other participants are all bilingual, ethnic Pakistani.

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>Setting 1</th>
<th>Pretend Kitchen</th>
<th>20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biling. Teacher 1: Panjabi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Ishtiaq:</em> Panjabi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mushtiaq: Panjabi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Ishtiaq:</em> Panjabi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biling. Teacher 1: G. and N. are you swearing Panjabi</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the data that Ishtiaq's presence in the network has a pivotal function. On the one hand he has been conducting a sustained interaction with a bilingual teacher, two bilingual girls, (SA & RN) and a bilingual boy (MI). Simultaneously, he has been listening to a conversation between G and N which was conducted in English. He takes the opportunity to report swearing, inappropriate school behaviour, to the teacher. By doing this he is demonstrating not only an understanding of the English language but also an understanding of the social conventions associated with
taboo language use. He uses the opportunity when the teacher interacts with the two boys to consolidate the dense network membership, as they move away to continue playing together in another area of the nursery, the Wet Sand Area, Domain 12.

This small sample of language behaviour demonstrates one way in which language is used to consolidate group boundaries.

A summary of the preferred language use across the networks which emerged on Day One, shows that within each setting, Panjabi was the dominant language. The dominant or matrix language is determined on the basis of the number of turns spoken in that language and the discourse function which each turn fulfils. The only occasion when English is the dominant language is in the Setting 5, on Day One. The painting activity is shared by the usual coterie of significant others, two girls, Sabia and Rabila (SA & RN) and a boy, Mushtifaq (MI). The difference however, in this setting, is the presence of two monolingual adults. Consider the following sample of data from the corpus.

**DAY 1
Setting 5  Painting  15 minutes**

Mono. Teacher 1: You're all going to paint

**Ishtiaq:** Yeah
Mono. Teacher 1: You need one of these (paintbrush) Ishtiaq and Shazia that's right Shazia watch me watch Shazia watch Ishtiaq there's water in here Ishtiaq water in here you put the brush in the water

**Ishtiaq:** Yeah
Mono. Teacher 1: and then into the paint

**Ishtiaq:** Yeah
Mono. Teacher 1: and then put the paint in there

**Ishtiaq:** Yeah
Mono. Teacher 1: and then you can paint that on the paper

**Ishtiaq:** mmm
Mono. Teacher 1: You show me what to do take a brush then some water for it then some paint and into you palette that's it Ishtiaq when you want to use another colour wash your brush in the water wash your brush in the water wash it really well then choose another colour put it in here again that's right

**Mushtifaq:** Yeah
Mono. Teacher 1: Red that's bright red

**Ishtiaq:** red
Mono. Teacher 1: What colour have you painted it Ishtiaq what colour's this

Ishtiaq: red

Mono. Teacher 1: now wipe your brush I think it needs to be washed a little bit more than that's it still ... put it back in the water or it'll make your paints dirty that's better, no not straight onto your paper now on the paper, mmm, what colour are you going to choose now? what do you like start again or? it's a lovely colour isn't it?

Ishtiaq: yellow

Mono. Teacher 2: Who brought you today? I've never seen your daddy before is that your daddy? Ishtiaq you can do

to Mushtifaq

Mono. Teacher 1: Who's that for Ishtiaq? you've got an apron have you come out here con... over here here we are I don't think you'll reach the paint if you don't come round here Look into the water ... don't very well ... anyway is there any paint on your paper it's a lovely colour it's a lovely red

Mono. Teacher 2: Come and see what's going on here look at this what lovely colours.

Mono. Teacher 1: The little ones can't reach very well there it's too far you could oh look at that beautiful green you've got let me see that green

Mono. Teacher 2: I can't make a good green it's not the best green is it?

YTS: Put the blue and the yellow put the yellow and ...

Mono. Teacher 1: in the palette

Mono. Teacher 2: Are you any good at green? then you get green you're trying to put too much on that's a beautiful green isn't it

The interaction in bold between Mushtifaq and Ishtiaq is particularly noteworthy. This is the first time, using the data as evidence, that Ishtiaq has used English as the language of interaction with Mushtifaq. The utterance: You can do, is unformed but carries the communicative force to include Mushtifaq in the painting activity and the dense network. The utterance combined with the act of getting an apron (appropriate painting clothing) achieves this. However, the action and utterance (probably unheard) are misinterpreted by Teacher 1, who proceeds to overtly include him in the activity.

It is important to note that Ishtiaq chose English as the preferred language to initiate interaction with Mushtifaq. In posing the question Why? it is important to seek plausible explanations. Since this is the first time that this language choice has occurred in the data, it is necessary to compare the setting in which it occurs with others where Panjabi was the preferred language. There are a number of features to note. Firstly, of the eleven settings mapped from two days of observations, Setting 5
on Day One is the only setting where English is identified as the matrix language. So Ishtiaq's choice of English could be explained by his desire to remain consistent in his language use in this particular setting. This lacks plausibility in comparison with other features from the data.

There is an equally plausible explanatory factor that can be identified from features of the setting which differ from features found in the other ten settings. This is the presence of the monolingual adults (the teachers). Sylva et al (1980) suggest that the presence of an adult can influence child behaviour. If this is so, then the implications of this will be that language shift (LS) towards English, the dominant societal language, may occur. Figure 5 presents a summary of Ishtiaq's linguistic repertoire. It identifies preferred language use with preferred interlocutors. From this it can be seen that Panjabi only is no longer a language choice. It has disappeared from his repertoire. This shift occurred after only three months in formal education.

At this point, I should like to introduce the concept of ecolinguistic biographies to account for the patterns of preferred language use, or language choice, observed among the informants.

6. Ecolinguistic Biographies

The concept of ecology arrived to linguistics from the natural sciences and sociology. Haugen (1972) was the first to link it to linguistics in work on bilingualism and language contact. More recently, Haarmann (1988:04) proposed the following general framework:

\[ \text{INDIVIDUAL} : \text{GROUP} : \text{SOCIETY} : \text{STATE} \]

There are of course problems in associating the language use of individuals with hierarchical societal structures that embrace state and nationhood. This is particularly true of the region known as the former state of the Panjab, which since 1947 has become three independent nations. These are from west to east Pakistan, India and
Bangladesh, each with its own official state language, respectively, Urdu in Pakistan, Hindi in India and Bengali in Bangladesh. This linguistic heritage has direct bearing on the linguistic group described here. However, leaving aside the ascription and linkage of language to state, the concept of ecolinguistics remains useful because of its sympathy with existing descriptions of language use. For example, this concept is particularly appropriate as a framework for describing individual bilingual speakers and their language behaviour. It is a concept concomitant with the notion that natural language has no independent existence outside social groups. Language is always created by, and is therefore linked with, an individual speaker (or groups of speakers). The individual speaker is the locus of language use. The term ecolinguistic is sensitive to this and to the interdependence of speakers and the social context which they create through their language use. Ecolinguistics acknowledges the consequences of even small changes in language use, on other aspects within the contextual setting. It particularly accommodates the affective aspect of individual language use and the ways in which these can be seen to be influential on the linguistic and even physical behaviour of other interlocutors present in the contextual setting. The changes which individuals can precipitate across the linguistic chain, reinforce the notion of the individual speaker as an active agent of linguistic change. Even the small changes and accommodations which take place between individuals in their interactions can have repercussions which resound across coexisting quarters. I suggest that the notion that ecolinguistics has three features: Relativism, Coexistence and Interdependence of speakers.

The Relativism of preferred language use (PLU) or language choice (LC) refers to the ways in which speakers change the language of their interactions and codeswitch between English and Panjabi. No category of switch can be described as conclusive or a determiner predictor of subsequent language choices. There is no way of absolutely predicting an individual's language choice in one particular setting with any individual or group of potential interlocutors.
The Co-existence of speakers is evident from the influence that an individual may exert on other speakers. For example, the mere presence of an adult exerts an influence on the language used by the children. This can be seen in Ishtiaq's use of English to Mushtifaq when he says: You can do. The interdependence of the speakers and the contexts which they create through their use of language can be demonstrated by the ways in which discourse topics precipitate changes in preferred language use and the subsequent impact this has on individual interlocutors. For example, some monolingual pupils withdraw from play activity when the language shifts to Panjabi.

The actual language use is however one dimension. There are other non-linguistic features which are equally influential. These include the perceived status of individual speakers. For example, the presence of an adult authority figure can also be seen to influence PLU.

The three features suggested as components of ecolinguistics: Relativism, Co-existence and Interdependence of speakers concur with more established descriptions of language as a dynamic process, which not only facilitates but which actually creates social situations (cf Halliday, 1978). To encapsulate this phenomenon of ecolinguistics as characterised by the three features outlined above, I shall use the term *linguistic eco-system*. The use of this term will not include a linkage of individual speakers or language use to the existence of state or nation. The absence of the link to higher social orders distinguishes this description from existing ones (cf Barth, 1969; Haarmann, 1988).

7. Summary and Discussion

The data presented demonstrate one facet of the ecolinguistic biographies of the children in the Cleveland Project. It describes the school dimensions to their ecolinguistic biography. However, it has been demonstrated that even in this context there is significant evidence of language shift in individual repertoires. This
demonstrated shift in individual's preferred language use away from Panjabi towards English, the matrix, language demonstrates the impact that formal language planning policy at national level exerts on individual speakers in public domains. This shift is summarised diagrammatically in Figure 5. None of the bilingual children speak only Panjabi even within the dense network of preferred interlocutors.

Fishman (1991:395) identifies education as an important institution for addressing Reversing language shift (RLS). The imposition of English as the sole language of educational institutions in the UK, through the 1988 Education Reform Act is certain to have impact on a bilingual's linguistic repertoire beyond the school gates.

The central tenet of a linguistic ecosystem is the effect experienced across a range of domains, interlocutors, and social contexts that even small changes precipitate. It is therefore possible to speculate that the shift in language use towards the dominant societal language, English, as experienced in the school context, will have repercussions across individual's linguistic repertoire and will influence the use of language in other domains and other settings with other participants. If raised to a hypothesis, this speculation can only be verified by a longitudinal study to follow up the language use of these children as they progress through school. A follow-up study could include observations of preferred language use in other social settings, for example, in the family and local community etc.

Acknowledgements

I should like to acknowledge the University of Durham Research and Initiatives Committee who provided the financial support to buy the recording equipment for this project; Anne McNamara whose patience and persistence contributed so much; the teachers and pupils of Box Hill Nursery, whom professional etiquette prevents me from naming individually. My warm thanks to you all.
References


Activity 1  Domain 18  Kitchen  Sustained Behaviour for 20 minutes
Activity 2  Domain 12  Wet Sand  Fleeting Behaviour
Activity 3  Domain 14  Water Area  Fleeting Behaviour
Activity 4  Domain 8  Outside Play Area  Fleeting Behaviour
Activity 5  Domain 9  Paints  Sustained Behaviour for 15 minutes
Activity 6  Domain 15  Washbasins  Related Activity
Activity 7  Domain 8  Outside Play Area  Sustained Behaviour for 38 minutes

Figure 1
Activity 1  Domain 6  Books  Sustained Behaviour for 25 minutes
Activity 2  Domain 28  Corridor  2 minutes
Activity 3  Domain 28  Corridor  Sustained Behaviour for 6 minutes
Activity 4  Domain 5  Home Corner  Sustained Behaviour for 8 minutes
Activity 5  Domain 18  Kitchen  Sustained Behaviour for 18 minutes
Activity 6  Domain 11  Junk Table  Sustained Behaviour for 15 minutes

Figure 2
Setting 1  Pretend Kitchen  20 minutes  Panjabi

Setting 2  Wet Sand  Panjabi

Setting 3  Water Area  Panjabi

Setting 5  Painting  15 minutes  English

Setting 7  Outside Play  38 minutes  Panjabi

Figure 3
Setting 1  Book Area  25 minutes  Panjabi

Setting 2  Corridor  2 minutes  Panjabi

Setting 3  Corridor  6 minutes  Panjabi

Setting 4  Home Corner  8 minutes  Panjabi

Setting 5  Pretend Kitchen  18 minutes  Panjabi

Setting 6  Junk Table  15 minutes  Panjabi

Figure 4

KEY
- Informant
- Girl
- Boy
- Monolingual Teacher
- Bilingual Teacher
Figure 5