
**Discourse Patterns in First Language Use at Home
and Second Language Learning at School:
an Ethnographic Approach**

Mariella Baldo

Thesis submitted for the Degree of Ph.D. in Education

**University of London Institute of Education
March 1987**



Abstract

In many multilingual countries the medium of instruction from the early grades of Primary School is a second language (L2) scarcely used in the community, where a first language (L1) is the medium of communication. School teachers are bilingual but do not consider the children's competence in L1 as relevant to the learning of the L2. Language mismatch is often blamed for the high failure rate at school. In underdeveloped countries this situation is worsened by scarce resources available, teachers' limited competence, and pressures to acquire literacy in the L2, often the language of former colonization.

It is argued that knowledge of the community's 'ways of talking' in L1 is an inexpensive resource teachers can use to facilitate the learning of the L2 at school. This study provides an example of how information on children's discourse patterns in L1 may explain difficulties and suggest improvements in classroom activities for the learning of oral communication skills in the L2.

The analysis of discourse patterns in L1 was derived from a study of conversations. Conversational sequences in the family setting between adults and 20 children (mean age: 6.9) using their L1 (Tsonga), were selected from transcripts of audio-recorded naturally occurring verbal interactions of children with adults and peers in a rural village in Southern Mozambique. Discourse patterns in the structure of conversation, in the use of clarification exchanges and in the exchange of information were identified, analyzed and contrasted with those of texts used in Grade 1 classrooms for oral practice in L2 (Portuguese).

Discrepancies were found in the strategies used for the cooperative construction of meaning that could easily be redressed if a culture-sensitive pedagogy of language teaching permeated Teacher Education.

The main theoretical framework of the study is Vygotsky's theory of the social origin of language and cognition, but it also draws on studies in conversation analysis, interactive models of language development, ethnography of communication, literacy and bilingual education.

Contents

	Page
List of Figures and Tables	6
List of Abbreviations	8
List of Annexes	9
 The Aims	
1.1 General aim of the study	10
1.2 The ethnographic approach	11
1.3 Overview of the study	18
 The Literature	
2.1 Language in Education policies	
1. Colonialism and language	22
2. Traditional and colonial education	25
3. Linguistic minorities	28
4. Bilingual programmes in education	29
2.2 Oral language and Literacy	
1. Literacy and cognitive processes	33
2. Differences between oral and written language	35
3. Oral discourse, oral text and school literacy	37
4. Bilingualism and development of literacy	39
2.3 The socio-historical school in Soviet Psychology	
1. Introduction	42
2. Basic concepts	43
3. The role of the adult in education	47
4. Context and meaning	50
5. Relevance for education in underdeveloped countries	52
2.4 Adult-child conversation	
1. Adults' role in language development	54
2. Question-answer patterns	56

2.5 Ethnography of communication	
1. Cross-cultural variation in adult-child interaction	58
2. Dyadic interaction and adults' input	59
3. Children as conversational partners	61
4. Facilitating structures of adults' talk	63
5. Adult-child Question and Reply patterns	64

The Setting

3.1 The linguistic situation in Mozambique	
1. African languages and Portuguese	66
2. Language policies of colonial Portugal	71
3. Language during the war and after Independence	73
3.2 Education in Mozambique	
1. Colonial education	77
2. The educational policy of <i>FRELIMO</i> .	79
3. Primary education and its Teachers	83
3.3 Language learning in the First Grade	86
3.4 The <i>I.N.D.E.</i> Project	90

The Method

4.1 Overview	95
4.2 Problems in naturalistic research	
1. Naturalistic methods	96
2. Collection and processing of data	98
4.3 The subset of data	
1. From interaction to adult-child conversations	101
2. The analysis of adult-child conversational sequences	103
4.4 The coding system	
1. Definitions	105
2. The Codebook	108
Examples of coded Conversational Sequences	116
4.5 From home data to educational practice	
1. Home conversations and classroom interaction	121
2. First and second language acquisition	126

Interpretation of Results

5.1 Overview	129
5.2 Participants, topics and purpose of interaction	
1. Home conversations	131
2. Classroom dialogue texts	135
5.3 The sustaining of interaction	
1. Home conversations	137
2. Classroom dialogue texts	144
5.4 Clarification exchanges	
1. Home conversations	147
2. Classroom dialogue texts	151
5.5 The exchange of information and explanation	
1. Home conversations	153
2. Classroom dialogue texts	160
5.6 Conclusion: interaction in the classroom	
1. The development of L2 oral competence	162
2. The interlanguage perspective	165
3. Classroom discourse	168

Implications of the Study

6.1 The teacher as protagonist	170
6.2 The teacher as restraint	173
6.3 An ethnographic approach to Teacher Education	
1. Language, cognition and culture	177
2. The Zone of Proximal Development at home and at school	178
3. Translating culture into education	181
4. Conclusion	187

Annexes	189
References	214
Acknowledgments	232

List of Tables and Figures

The Setting

Table 3.1	Illiteracy Rate in Population over 7 Years of Age in Mozambique, 1980	68
Table 3.2	Percentage of School Attendance by Age Group in Mozambique, 1980	68
Fig. 3.1	Percentage of Population over 10 Years of Age and Educational Qualifications in Mozambique, 1980	69
Table 3.3	Educational Provision in Colonial Mozambique and Other Countries	78
Table 3.4	School Enrolment in Mozambique in Selected Years, 1975-84	81
Table 3.5	Number of New Graduates and Teachers in Mozambique in Selected Years, 1975-1984	81
Fig. 3.2	School Coverage by Sex and Age Group in Mozambique in Selected years, 1967-84	82

The Method

Table 4.1	The Codebook	107
Table 4.2	Differences between Home and School Talk	122

Interpretation of Results

Table 5.1	Identity of Speakers in Conversational Sequences	131
Table 5.2	Participants in Conversational Sequences	132
Table 5.3	Main Topics in Conversational Sequences	133
Table 5.4	Main Purpose of Conversational Sequences	155
Table 5.5	Main Functions of Utterances by Speaker in CSs	138
Table 5.6	Basic functions of Utterances by Speaker in CSs	138
Table 5.7	Influence of Distribution of Basic Functions	139

Table 5.8	Sustaining and Non-sustaining Utterances by Speaker	140
Table 5.9	Adults' Requests for Information and Explanation	153
Table 5.10	Form of Adults'Requests for Information and Explanation	154
Table 5.11	Information Value of Adults' Requests for Information and Explanation	144
Table 5.12	Children's Offers of Information and Explanation in the Dynamic of Conversational Sequences	157
Table 5.13	Children's Offers of Information and Explanation: detailed Functions	158
Table 5.14	Children's Offers of Information and Explanation: Type and Complexity	158
Table 5.15	Questions and Rhetorical Questions by Speaker in CSs	159

Implications

Table 6.1	A Model for Teacher Education	183
-----------	-------------------------------	-----

Abbreviations

C.C.R. = *Conselho Coordenador do Recenseamento* (Maputo)

Census National Office

C.N.P. = *Comissão Nacional do Plano* (Maputo)

National Planning Commission

FRE.LI.MO. = *Frente de Libertação de Moçambique*

Mozambique Liberation Front; now Party

I.N.D.E. = *Instituto Nacional de Desenvolvimento da Educação* (Maputo)

National Institute for the Development of Education

L.C.H.C. = Laboratory of Comparative Human Cognition

L1 = First Language

L2 = Second Language

M.E.C. = *Ministério da Educação e Cultura* (Maputo)

Ministry of Education and Culture (now Ministry of Education)

U.N.I.N. = United Nations Institute for Namibia (Lusaka)

S.N.E. = *Sistema Nacional de Educação*

National Educational System

Z.P.D. = Zone of Proximal Development

List of Annexes

	Page
The Aims	
1.1 Contrasting Ethnographic and Quantitative Approaches	190
1.2 Contrasting Positivist and Naturalistic Axioms	191
The Literature	
2.1 Societal and Linguistic Goals and their Relation to Educational Policies	192
2.2 Prerequisites for L2 Learning/situation in Selected Countries	193
2.3 Werth's Model of Conversation	194
2.4 Mishler's Types of Discourse	195
The Setting	
3.1 Map of Mozambique's main Languages	
3.2 List of Dialogues in Textbooks and Teacher's Manuals	197
3.3 Textbook Dialogue: No.8	198
3.4 Textbook Dialogue: No.10	199
3.5 Textbook Dialogue: No.11	200
3.6 Example of a Transcript from the <i>I.N.D.E.</i> Study	202
Interpretation of Results	
5.1 Identity of Speakers in Conversational Sequences	203
5.2 Basic Functions of Utterances by Speaker	204
5.3 Main Functions of Utterances by Speaker	205
5.4 Main Functions of Requests by Speaker	206
5.5 Sustaining and Non-sustaining Utterances by Speaker	207
5.6 Dynamic of Interaction by Speaker	208
5.7 Questions as Reply Moves by Speaker	209
5.8 Adults' Requests for Information and Explanations and their relation to the Dynamic of Interaction	210
5.9 Clarification Requests by Speaker	211
5.10 Sustaining Moves by Speaker	212
5.11 Clarification Requests by Speaker	213

The Aims

1.1 General aim of the study

The purpose of the study is to develop an ethnographic approach to communication and second language learning for Teacher Education Programmes in multilingual, underdeveloped countries, by providing an example of how teachers could apply knowledge of language patterns used at home to language learning activities in the classroom. It is suggested that the study of the children's 'ways of talking' outside school would enable teachers to make a principled use of current syllabi and participate in educational innovation.

The study is based on data from Mozambique, where I worked in Teacher Education and in a Research Project on Bilingualism; it may be relevant, however, to other situations where:

- the language used at home by the children (L1) is different from the country's official language (L2) used at school;
- the medium of instruction is L2 from the beginning of Grade 1, with no use of the L1;
- children have little or no exposure to L2 and literacy before entering and outside school, and their classmates are in the same position;
- teachers are bilingual, but poorly trained; they constitute the sole L2 learning resource for oral communication, and can rely only on scarce teaching materials;
- curricula and syllabi are designed at national level.

1.2 The ethnographic approach

The study is based on the assumption that an ethnographic approach is advisable because :

- it makes teachers aware that children's language skills have to be considered in a broader framework of culturally acquired communicative competence, which is already developed and should not be ignored;
- it enables teachers to build on children's strengths, for example, by using in the classroom familiar patterns of language for the development of communicative competence;
- it fits in with ideological positions and economic realities in underdeveloped (1) countries, recognizing human rather than technological resources as their main asset in the struggle for development;
- it fosters a positive attitude towards studies based on local reality versus application of strategies devised in non-comparable settings (i.e. rich countries).

The growing interest in naturalistic and qualitative research in education may be due to dissatisfaction with the experimental methods and the impossibility of 'culture-free' tests (Cole,1985b), or to a reaction against ethnocentric claims to universality, or simply to the availability of new audio or video-tape based analytical techniques coupled with enlarged computing facilities. The ethnographic approach cuts across different disciplines and forms new areas of investigation (ethnography of communication, of classroom interaction, of learning situations etc.), the common underlying assumption being that the context of social interaction is a crucial factor for learning.

(1) The term is used in the sense of 'having been underdeveloped, crippled in their development' (Rodney,1972).

While traditional ethnography aimed at giving a full description of social units to provide a general understanding of how they function, microethnography seeks to give a description of a particular type of interaction defined by specific settings (classroom interaction, adult-child communication at home, patient-therapist dialogues, etc.). While the method of traditional ethnography prescribed observation by total immersion in the observed culture, original data not being accessible or replicable, microethnography involves systematic data collection through recording, data being available for re-examination. In a more recent development, experimental ethnography, '... natural events are triggered automatically through the experimental creation of specific contexts'. (Trueba and Wright, 1981:149).

If '... a discipline is defined not by what it studies but by the questions it seeks to answer' (Halliday, 1985:6), the main question ethnographers pose is

what people need to know in order to do what they do in ordinary social interaction. They emphasize not simply behaviour but the knowledge necessary to produce that behaviour. (Erickson, 1981:29)

It comes as no surprise, then, that naturalistic studies end up revealing 'disadvantaged' children's linguistic competence and mothers' adequate language input, while experimental studies tend to stress the opposite (Wells, 1981; Tizard, 1984): the more we study children's talk, the better speakers we discover them to be. Another consequence is that members of the community under investigation are more than a mere source of data, as they may provide insights into the patterns and meaning of observed social interaction.

So much of an ethnographic approach consists in turning into explicit knowledge what is implicit, taken-for-granted knowledge about the way people act, in an effort to 'understand the conventions and unpack the ideology' (Street, 1984:40). Comparative knowledge of other conventions and ideologies is necessary for the identification and interpretation of patterns, but in situations where different cultural groups exist and/or society is undergoing a process of rapid socio-economical change (as in

underdeveloped countries), this knowledge is easily available; sometimes it is in itself a source of conflicts as it threatens long-established beliefs. Perhaps it is not too optimistic to say that

... of all forms of scientific knowledge, ethnography is the most open, the most compatible with a democratic way of life, the least likely to produce a world in which experts control knowledge at the expense of those who are studied. The skills of ethnography are enhancements of skills all normal persons employ in everyday life. (Hymes,1981:59)

Ethnography and Education

Ethnographic studies of classroom interaction have focused on cultural congruence of teaching styles, sociocultural rules of interaction, acquisition of social competence required to participate in it, and communication/miscommunication in the classroom (see Trueba and Wright, 1981 for a review). With the expansion of bilingual education programmes in the U.S.A. and other Western countries, these issues have become politically controversial and more looked into, especially the problem of language proficiency assessment (Rivera,1983). These studies have helped to

... bring the child's culture into the consciousness of the teacher, but also (to) bring the teacher's culture into his own consciousness (Guthrie and Hall,1981:11).

Lack of responsiveness and feedback from the pupils is experienced by teachers when confronted with children from a different cultural background; when these children are a tiny minority, the educational system tends to force them into conforming to established patterns of classroom interaction; when they constitute a sizable number or a majority, as in multicultural countries, the system is forced to reconsider some of its assumptions: responsiveness is then found to be 'highly situation-specific' (Au,1981), as are expectations (Gumperz, 1977), 'participation structures' (Philips,1972) and verbal productivity (Labov,1970; Cole et al.,1978).

Conclusions from many studies on classroom interaction with minority children in the U.S.A. may be summarized in the following points:

- culturally inappropriate learning contexts lead to poor performance; 'a context is inappropriate for a certain group of children if its construction violates their cultural norms' (Au,1981:92);
- successful educational strategy at school is connected to discourse modes prevalent in the children's community;
- it is necessary to identify the characteristics of learning contexts children have experience of, in order to create culturally appropriate learning situations at school.

The series of studies related to K.E.E.P. (Kamehameha Early Education Program) in Hawaii is particularly important because they document how the introduction of 'culturally appropriate' classroom practices actually resulted in improved reading performances. Drawing from an extensive ethnographic literature, classroom interaction was structured as close as possible to the community's 'speech economy': rules governing speaking and turn-taking, adult intervention, asking and replying to questions in the community were studied, discussed with the teachers and used at school; the structure of the 'talk story', a major speech event in Hawaiian culture, was taken as the model for teacher-children interaction (Au,1981; Boggs,1972 and 1985).

Community and family ethnography provides essential background for understanding what goes on in classrooms and is a source of hypotheses for designing and adjusting classroom practice (Jordan,1985:11).

A similar successful intervention is documented with Native American children (Mohatt and Erickson,1981). These efforts represent a research direction that moves away from the search for individual characteristics of either the child or the teacher that would account for school failure; it also goes beyond the sociological explanation in terms of 'mismatch' (see 4.5.1) between the middle class values of the school and those of minority children, in that teachers are not seen as necessarily belonging to or having accepted the values of the class supposed to promote the hidden curriculum. This may be an explanatory model for Western

countries, but cannot be transferred to poor countries where the class dynamic is different and much more fluid.

Ethnography and Teacher Education

As the interaction in the classroom is organized by the teacher, it is the teacher who must be aware of the importance of the competence children bring with them to school: this competence should be seen as an asset on which to build, and a challenge to any dogmatism in pedagogy. 'Cooperative ethnographic monitoring' (Hymes,1981) usually involves educationalists, ethnographers and teachers, but requires teachers with conceptions of cognitive and linguistic development and of the learning process that fully recognize the centrality of sociocultural mediation. Pre-service and in-service training courses may be structured along these lines, and there are experiences which show the feasibility and results of this approach (Heath,1983; Simic-Dudgeon and Rivera,1983; Au,1981; Troike and Saville-Troike,1982).

... it was an 'aha' experience for them [the teachers in training]. They said that they now saw the cultural patterning of things that they had previously taken for granted. (Mohatt and Erickson,1981:119)

It is argued that this approach is particularly relevant for underdeveloped countries: it makes full use of human resources, it is not very expensive, it stresses assets and not deficiencies, it makes teachers more equipped to confront the imposition of models developed abroad (Altbach,1984; see 6.3.3, conclusion), it trains teachers in simple research methods and encourages them to engage in curriculum development on the basis of their own findings.

The question remains open as to whether educational systems can afford such an ideological threat: but this problem is not confined to underdeveloped countries.

Ethnography and Theory of Knowledge

Ethnographic studies and naturalistic or qualitative methods in research are often considered synonyms. In fact, there is no inherent contradiction in using quantitative methods in qualitative research, provided that 'the primary concern is with deciding what makes sense to count' (Erickson,1981:18), and naturalistic observations can complement experimental studies.

In some fundamental aspects, however, an ethnographic approach is not only radically different from quantitative or experimental methods, but also irreconcilable; these aspects are more related to conceptions and theories of knowledge than to research techniques. Ethnography seems able to avoid much of the criticism currently directed to the 'positivist paradigm' of science, and it has indeed a large body of experience to offer in the construction of alternative 'new paradigms' in research (Reason and Rowan,1981).

The 'post-positivist' paradigm is also called 'naturalistic' (Lincoln and Guba,1985), and it shares with ethnography many of its axioms: in ontology, it considers realities as holistic and not fragmentable; in epistemology, it does not accept the traditional division between the knower and the known; in axiology, it considers inquiry as value-bound, and phenomena as taking their meaning from their contexts as much as from themselves; and it fundamentally questions the possibility of generalization and cause-effect relationships that are at the basis of positivist science. The two tables reproduced in Annexes 1.1 and 1.2 show the affinity between the ethnographic approach and the post-positivist paradigm in their dimensions of contrast with, respectively, the quantitative approach in research and the positivist paradigm of inquiry.

These positions are not confined to social sciences; on the contrary, the reaction to positivism started in 'hard' sciences such as physics and geometry, where alternative principles of inquiry have opened up new developments:

We shall take the position that the positivist posture, while discredited by vanguard thinkers in every known discipline, continues to guide the efforts of practitioners of inquiry, particularly in the social or human sciences. (Lincoln and Guba,1985:15)

It has been suggested that the metaphor for the world is changing from the 'machine' to the 'hologram', where the appearance of the object depends on the perspective of the viewer, and complete information can be stored in each part of the whole; this view of reality has consequences for research, for example:

- the criterion for sample construction is radically changed from statistical to informational (i.e., 'its purpose is to maximize information, not facilitate generalization'- Lincoln and Guba,1985:202).
- the criterion for transferability of findings becomes one of ecological 'fittingness, [i.e.] the degree of congruence between sending and receiving contexts' (ibidem, page 124).

The experience of cultural diversity in classrooms is forcing a re-consideration of educational practice and theories; the same issue of diversity, in a world wide perspective, might be forcing a radical search for new paradigms in theories of knowledge.

1.3 Overview of the study

When children go to school for the first time, they have to adapt to a setting which is new to them in a number of aspects. They are confronted, among other things, with new discourse patterns (Willes,1983): some are related to the teachers' personality , but most of them seem just typical of classroom interaction or other tutoring situations (Sinclair and Coulthard,1975; Wells,1981).

As language plays such an important part in school, it is regarded as one of the main factors accounting for the failure of certain children. (Kohl,1967; Ogbu,1982). In particular, stress has been put on differences in language varieties, uses of language and discourse patterns (Labov,1972; Blank,1982; Heath,1983; Philips,1972). When learning and interacting in school is processed through a language different from the children's L1, the mismatch between home and school is even greater, although bilingualism is not in itself a source of academic failure (Cummins,1979).

Communication in the classroom should be facilitated for the L2 learner to acquire oral language skills that will enable him to participate fully in classroom activities: as it is easier to understand familiar patterns, compatible with the listener's expectations of how conversation is structured (Brown et al.,1984), teachers should use as much as possible those discourse patterns the children use in their L1 and through which they have developed their communicative and learning competence. This is particularly valid for classroom activities for the development of oral skills in the L2.

In underdeveloped countries we often have the situation whereby communication in the primary classroom is processed through a language that is an L2 for both children and teachers. They may share the same

L1 and cultural background, but teachers have difficulties in using the children's L1 to facilitate the learning of the L2. Teachers may find methodologies and syllabi incongruent with their own conceptions of language, teaching and learning; the rapid pace of change may have created a cultural divide between them and their own community, with the teacher identifying with the 'modern' versus the 'traditional' culture. This is more evident in rural areas, and may prevent the appreciation and the pedagogical use of the linguistic and cognitive competence children had developed before entering school.

Knowing the 'ways of talking' of the children seems an appropriate focus for teacher education in all multicultural settings, if one takes as a basic assumption an interactive model of language acquisition and development (Wells, 1981 and 1985). Children develop their communicative and cognitive competence interacting with peers and adults; in social groups like the one considered in the study, children spend more time with peers than with adults; however, the study focuses on adult-child interaction because at school most of the communication in L2 is between teacher and children, as the teacher is in a dominant position, being the only competent speaker of L2.

The analysis of home talk has to permit the identification of features in adult-child interaction that in turn would make it possible to find out what discourse structures the pupils will recognize as familiar and compatible with their expectations. For example: how do children and adults contribute to the flow of conversation? How is interaction sustained (mainly through question/answer exchanges or through other means)? What are the most common ways of adults asking for information and explanation? Are clarification requests used often? What type, and for what purpose? How are they elaborated on? In what context are rhetorical questions used?

The study intends to provide an example of how information on children's out-of-school experience may be used in the classroom: in particular, how the study of discourse patterns in L1 home conversations may explain the

difficulties encountered by children in oral practice for the learning of the L2 at school.

The study will try to identify and describe patterns in the structure and process of interaction in naturally-occurring L1 conversations between adults and children, at home. These patterns will be contrasted with those of texts used in the classroom for the development of L2 oral communication skills. Recommendations will be formulated within the limits of the specific situation outlined in 1.1. Finally, implications of the study for Teacher Education will be discussed.

Chapter 1 indicates the aims of the study and the grounds for the ethnographic approach.

Chapter 2 provides a review of the literature considered relevant to the present study. Language policies during the colonial and post-independence periods are sketched to provide a background to the setting of the study; differences between British, French and Portuguese colonial policies are indicated. The situations of linguistic minorities in developed countries and of rural populations in underdeveloped countries are compared to show the extent to which studies on bilingual language programmes carried out in the North are relevant to the South.

Studies on the cognitive consequences of literacy and bilingualism are reviewed in 2.2, in particular those which criticize the polarity between written and oral language and stress the importance of L1 competence in the learning of the L2.

The socio-historical school in Soviet psychology and the theories of Vygotsky on the social origin of language and cognition are briefly presented in 2.3; it is argued that they provide a solid foundation for understanding the nature of the interaction between adults and children in the process of language acquisition, that they anticipated and provide a theoretical background to recent developments in linguistics that focus on the centrality of context for the interpretation of meaning, and that their pedagogical implications respond to the problems of underdeveloped countries more adequately than other theories.

Studies in adult-child conversation and in the ethnography of communication are examined (2.4 and 2.5) in order to point out the cross-cultural variation, and five aspects of adult-child interaction are examined to show how Western, white, middle class patterns are not applicable to other cultural groups.

Chapter 3 provides information on Mozambique, where the data for the study were collected. The language policies of the Portuguese and of the revolutionary governments (3.1) and the development of the educational system (3.2) are discussed, in particular the methods and problems of language learning in the first grade and the training of teachers (3.3). The *I.N.D.E.* Research Project on Bilingualism and Cognitive Development carried out in Maputo, for which the data of the present study were collected, is presented in 3.4.

Chapter 4 discusses the design and method of the study within the naturalistic paradigm and the limitations of the data base, provides the working definitions, and describes the coding system devised to classify the data. It also discusses to what extent it is legitimate to contrast home and classroom interaction, and to use data in L1 to investigate the learning of L2.

Chapter 5 presents the results of the analysis of home conversations, contrasting their characteristics with those of texts used for classroom practice. Their topics and purpose are described, and patterns in the sustaining of interaction, the use and function of clarification requests, and the exchange of information are identified. The discussion is focused on the development of oral fluency in L2.

Chapter 6 discusses the implications of the study for Teacher Education in underdeveloped countries, in a perspective that makes use of the construct of 'Zone of Proximal Development' and of the contributions of ethnography to education. The limitations of comparative studies of home-school interactions are indicated; it is suggested that teachers should be able to select relevant features from the out-of-school experience of the children, and their 'ways of talking', for classroom use.

The Literature

2.1 Language in Education Policies

2.1.1 Colonialism and language

As pointed out on page 2, in this study 'underdeveloped countries' means 'having been underdeveloped, crippled in their development'. This term is preferred to 'developing' because it does not conceal two basic facts about poor countries: a) that they have been drained of much of their resources by the slave trade and colonial pillage, and b) that they are kept in a state of dependence in the interest of the dominant world economies: the gap between South and North is progressively widening.

The colonial situation is taken to be the crucial experience for the underdeveloped world, even if a few cases exist of countries which have never been colonized but share nonetheless the same problems of third world poverty (Watson, 1982). Stressing the centrality of the colonial experience for language and education issues does not mean failing to recognize the importance of multilingual contacts, traditional educational practices and school systems developed by social groups long before European conquest : rather, it allows the identification of the problems of culture and cultural domination as the main constructs for analysis.

Colonialism imposed its control over the social production of wealth through military, political and cultural domination, i.e. the control over

the mental universe of the colonized. It has been argued that colonialism develops only insofar as there are colonizers who are prepared to carry out certain roles, and colonized who accept -or defy- the demands posed upon them by the colonial power (Mannoni,1950): while many studies consider the colonial situation as an institutional framework, others look at its complex psychological components. (Memmi,1966; Fanon,1952 and 1961; Clignet,1984 for a review).

The dialectics of the colonial situation involve, on the colonizer's side, the assignment of absolute values to his culture, or pseudo-universality (Clignet,1984:84) and , for the colonized, the deprivation of the tools of self-definition in relation to time, space and the outside world (Freire's 'culture of silence',1972; Vieira,1979; wa Thiong'o,1985; Fanon, 1961). Examples of this alienation are the deliberate attempt to erase the significance of the oppressed people's past, the distorted image offered of the metropolitan culture, and the second-class status accorded to local languages and arts as opposed to those of the metropolis.

The study of language offers a vantage point to examine the complex relationship between culture, oppression and liberation in colonial and neocolonial situations. Moderate and radical authors differ sharply in the role they attribute to the *comprador* bourgeoisie and therefore to the phenomenon of 'assimilation', which in turn assumed different characteristics among the various colonizing powers. Wa Thiong'o emphasises the dual character of language, as a means of communication (in production, in literature and in orature, i.e. oral literature), and as a carrier of culture:

Language as culture ... mediates between me and my own self;
between my own self and other selves; between me and nature.
Language is mediating in my very being. (1985:117)

The introduction of European languages in school, for administrative purposes and for virtually all written communication is seen as breaking this harmony: the colonized is made to perceive his L1 as an inadequate tool for mediation.

This '*glottophagie*' went through two stages: at first, the foreign language is adopted by those who are closer to the colonial power, who represent it or work for it along a class axis; later the linguistic differentiation spreads along a geographical axis, dividing town and country. At this macro-level, the result is a L2 monolingual dominant class, a bilingual urban population and a L1 monolingual rural population (Calvet,1974). This involves a complex process of L2 language acquisition and use, as part of the dominant class and the whole urban population were at one time L1 monolinguals. In the classical colonial situation,

The recognition by the colonized of the inferior position imposed on him leads him to try to beat the colonizer at his own game. He attempts ... to reduce the differences that the colonizer has defined as being at the origin of his second-class status. This reduction is attempted in terms of language. Insofar as the colonized is evaluated in terms of distance from the colonizer's cultural model, he is tempted to speak the colonizer's language with more refinement than his 'master' himself and to avoid any verbal pattern that would betray his own origin. (Clignet,1984:86)

Assimilation became the ideology used by the colonizing power to assert its own culture as universal without restricting it to the citizens of the metropolis, a move which would not permit a full exploitation of the colony. Assimilation as overt aim of colonial policy is usually considered to be more typical of the French and Portuguese (see 3.3.1 and 3.3.2) than of the British (see page 26), but differentiation tends to blur in the realm of language policy, if not in that of language in education policies:

Without going as far as to credit British colonialism with a label of 'linguistic liberalism', one must recognize that its institutional and ideological components are less savage, less paranoic than the French. ... But the relationship between dominant and dominated languages remains [the same] ... right until now : in Anglophone Africa, English is as much a language of class as French is in Francophone Africa. (Calvet,1974:84 and 85 - my translation from French).

Mastery of the colonial language was at one time the price for and the sign of successful assimilation in all the colonized world: a 'credit card'

(wa Thiong'o,1985) that bought the way into the system, securing individual upward mobility.

2.1.2 Traditional and Colonial Education

Practices and theories of traditional education have been widely studied, and it is difficult to summarize their central characteristics, primarily because of their enormous heterogeneity and loose definition. The social organization of knowledge, including learning and teaching, has been radically transformed by industrial society:

Knowledge is now incremental, transformational, and innovative. Its structure is formal, relational, and generative. No trans-generational reliability of meanings, but doubt and critique. ... The basic function of direct experience is replaced by the basic function of learning, on the basis of vicarious experience, for the acquisition of higher-order vicarious experience. (Elderstein,1981:67 and 69).

In predominantly oral cultures, the suggestive power of words is stronger, and the relation between meaning and referents is enriched by the frequent use of analogy and allusions (Erny,1981); written texts acquire and transmit their meaning in the course of social, oral interaction (Heath,1983; see 2.2). Formal and informal education are aspects of growing up in all social systems, and although the mix varies quantitatively from one society to another, formal learning situations are by no means limited to societies where literacy is more widely spread; school systems, on the other hand, were established in some countries before (and continued despite) Western school models were imported (Bray,Clarke and Stephens,1986).

Some aspects of traditional education have been identified and used to suggest clear-cut differences between traditional education and the 'school' education that developed in industrial societies and was extended

to the colonies. For example, it has been claimed that in traditional education

learning is not depersonalized but continues to be bound up with the social status of the persons acting as teacher (Scribner and Cole, 1973:555)

or that learning is mostly by observation without much verbal explanations, or that it is rarely 'decontextualized' (Bruner, 1972); (Western) school learning would have the opposite characteristics, and this would promote abstract thinking.

It seems possible to criticize this position along the same lines used by Street (1984) in his criticism of the 'great divide' between oral and literate language : at a closer examination, the differences are not so sharp and they tend to be stressed mainly because of the ideological need to justify the enormous expense on Western-type educational systems (see 2.2.2).

Differences among colonial educational systems are also to be taken into consideration. In general, the education policy in the colonies reflected the conventional wisdom of the time in the metropolitan countries (Watson, 1982). The most striking difference between the French and Portuguese policies on the one hand and the British on the other, were on the issues of centralization of the educational system, the role of the missionary Churches in education, and the extension of school provision. In the British Colonies, policies in different countries, and even towards different ethnic groups in the same territory, were markedly varied, and the particular interests and attitudes of the governors were an important factor in the education system: only in the 1920s was a committee on Education formed and guidelines issued, ending the tradition of *laissez faire*. By contrast, the French and the Portuguese exported the highly centralized educational system of the metropolis, with the same tight control of curriculum, staff, language policies, in tune with their policy of assimilation. It is also to be noted that, while the British Missionaries societies were many and their staff not always British, the Portuguese Catholic Church had almost the monopoly of African education

in the colonies, and non-Portuguese missionaries were often held in suspicion for not being loyal to Portugal (Bertulli,1974): this prevented progressive stands also in educational matters.

Decolonization varied considerably across countries and continents, was in a few cases the result of mass participation in a revolutionary process, but in most cases represented the transfer of political power to the indigenous dominant class. Everywhere independence was seen as a liberation in both cultural and structural terms, but particular political configurations in each country gave different meaning to this aspiration across a wide spectrum of policies. Independent young nations had to reconcile the divergent demands of cultural specificity and uniformity to models still well in charge of the world economic order.

In Africa, the typical neocolonial solution consisted in considering uniformity paramount, while paying lip services to an African culture demoted to folklore, and reacting to the excesses of the colonial period; in education, the split was more clearly along class lines, with a narrowly 'African' curriculum for the peasantry and a 'European' one for the urban élites. Only where a new culture had been created in the process of a long, popular struggle for independence was this dualism demystified: some nations did not find much pride in proving that they were able to carry on the colonial policies on their own, but rather wanted to use the newly found confidence in their own culture to transform the modes of social production ('... national liberation is necessarily an act of culture' - Cabral,1980:143).

Between these extremes, the majority of African nations struggled with problems of production, war, natural disasters, and with ill-defined language and education policies, while launching far-reaching programmes of Africanization in the attempt to avoid mass reactions to 'the post-independence betrayal of hope' (wa Thiong'o,1985:122). But it is interesting to note that

... while the necessity of an Africanization of the curriculum is recognized, too little attention is paid to the problems raised by an Africanization of the teaching style. It looks as if cultural

relativeness is an accepted notion with regard to the *content* of communications but not as far as their *processes* are concerned.

...

The beginning of all colonial situations did generate a number of myths. So does their end. (Clignet, 1984:92 and 93).

2.1.3 Linguistic minorities

Parallels between the black colonized masses and the working class in industrialized countries are a common feature of political and sociological studies based on Marxian theory. Revolutionary movements in underdeveloped countries in the early '70s were able to direct their struggles not against the colonists, but against colonialism (considered the expression of the interests of the dominant classes in the metropolis, and as such likely to be continued by local élites restricted to a nationalist outlook). Certain combinations of structure of the labour force and its ethnic segmentation lead to forms of internal colonialism, in many countries often very different on other parameters. It is in this context that some similarities may be noted between the formerly colonized 'majorities' of underdeveloped countries and linguistic 'minorities' in industrialized countries.

One is somehow forced to contrast the two groups because the policy, psychology and pedagogy of bilingualism have been studied for a longer time and with larger resources to tackle the problems of groups labelled as 'linguistic minorities', even if these are numerically less massive. A major problem for the researcher is to select those studies and lines of research that can be relevant in such different contexts as rural areas in underdeveloped countries.

One could perhaps find some similarities also in the sequence of stages the linguistic and ethnic minorities went through in their struggle for

survival: the first approach that grew out of contact between the 'host country' and immigrants needed as labour force was that of assimilation. The immigrant was made to feel inferior, among other things, because of his difficulty in mastering what for him was the L2, and so he found it convenient to try to become part of the mainstream culture. As minority groups progressively found this impossible, they rediscovered their identity, and their language and culture were variously revindicated as equal, beautiful, alternative, different etc. (for a comprehensive study, see Skutnabb-Kangas, 1983 and 1986; Phillipson and Skutnabb-Kangas, 1986).

Differences among successive generations and origins of immigrants, and in the socio-economic conditions and policies of the host countries combine into an extreme variety of situations. While some studies on bilingualism and education adopt a strictly psychological approach (see 2.2.4) and tend to isolate the learner and his task, a more articulate approach studies the sociolinguistics of the bilingual situation, and its influence on the individual's learning.

It seems to me that what is transferable from studies of situations as different as those of the linguistic minorities in industrialized countries, and of the rural majorities in underdeveloped countries, cannot be a format for a bilingual curriculum or a teaching strategy; but rather an approach that stresses the complex interplay of factors, related to the context (internal and external, Cummins, 1984:75), the learner, the two or more languages and the aims of education.

2.1.4 Bilingual programmes in education

As bilingual situations differ considerably, so do language policies and educational programmes : these may be submersion, immersion, maintenance or segregation type of programmes, (for a definition of these concepts see Skutnabb-Kangas, 1983, chapter 7) and each is related to the societal

and political goals of the country (assimilation of minorities, generalized bilingualism, perpetuation of stratification, apartheid (see Annex 2.1).

The status of the two languages, the class position of the bilingual group, its being a minority or the majority group are all important factors that have consequences for the learning situation. A model with 16 prerequisites for learning of a L2 has been identified (Phillipson et al.,1986), under four headings:

- . organizational factors
- . learner-related affective factors
- . L1-related linguistic, cognitive and social factors
- . L2-related linguistic, cognitive and social factors

Annex 2.2 compares different countries adopting contrasting policies using this model.

Many studies in sociolinguistic patterns and language planning in 'developing' countries were published between 1968 and 1972, when the enthusiasm for the recently-granted Independence was still at its height; in the seventies the phenomenon of 'growth without development' was being experienced by many countries, as was the realization of the impossibility of financing an ever expanding educational system which produced so many failures. Language was singled out as an important factor and educational policies were reconsidered (Bangbose,1976; Bokamba and Tlou,1977; Hawes,1979).

Any discussion on language in education in underdeveloped countries usually begins with a reference to the 1953 UNESCO policy paper stating that 'it is axiomatic that the best medium for teaching a child is his mother tongue' (UNESCO,1953:11). Critics pointed out the economic unfeasibility of such a proposal, in terms of teachers' mobility, production of materials etc., not to mention the political considerations that prevented even Ministries of Education sympathetic to the UNESCO position on pedagogical grounds from adopting or seriously proposing it; given the great number of languages spoken, it was said that many

children would end up having to learn in a language unknown by their teachers (Bull,1964).

The success of the Canadian Immersion Programmes contradicts the UNESCO position too, but several of the preconditions for immersion programmes for L2-medium learning do not exist in underdeveloped countries, where situations seem more likely to produce submersion type of programmes, i.e. those which were found the least successful (Skutnabb-Kangas,1983). Indeed, in some rural areas it would be more adequate to call the L2 a 'foreign' language, as the opportunities to use it outside the classroom are so reduced.

While challenging the misconception that 'the mother tongue is always the better medium for learning', the Canadian experience does not prove that a certain method to teach the L2 for L2-medium learning is effective, but rather that language, cognitive and pedagogical variables are insufficient to account for differential school progress in bilingual situations (see the debate in Rivera,1984). The success of the Canadian experience, like the lack of success in mother tongue learning by Blacks in South Africa or by Turk immigrants in West Germany, point to the fact that the non-replicability of their results (taking the language of instruction as the independent variable), is not a limitation but the major lesson to be learnt.

It is not the intention of the present study to review the variety of language policies and the formats of bi/multi-lingual programmes in underdeveloped countries: it is the interdependency between method and aim, the definition of minority and majority in terms of power relationship and the criterion chosen for the definition of bilingualism that situate educational programmes along many different typologies of what is summarily called 'bilingual education'. Examples of typologies are the works of Fishman (1968, 1972), Skutnabb-Kangas,(1983), and others reviewed in the latter. For the characterization of the situation in which the subjects of this study find themselves as children and as pupils, see Chapter 3).

Language in education policy is such a delicate issue that it is perhaps one of the fields where it is easier to accept that political rather than educational considerations would be the basis for decisions. In conclusion, I would like to quote two contrasting but equally well founded views: the first from one of the best researched projects carried out in Africa (Nigeria) and the second from a study on the future language policy of independent Namibia elaborated at the United Nations Institute for Namibia:

The results of the Six-Year Primary Project at Ife have shown most clearly that children can receive their primary education in elementary science, maths, and social and cultural studies through the medium of their mother tongue alone and yet most efficiently learn [at secondary school in English]... without any intervening intensive English language course after their primary education. (Afolayan,1984:15)

It will be remembered that the South African régime [illegally occupying Namibia] has to date capitalized on and exploited the existence of various languages in Namibia. ... In the case of Namibia struggling to overcome the effect of mother tongue education put to wrong use, and anxious to manipulate an international language for rapid economic development, there may be strong pressures to introduce English as early as possible into the language curriculum. ... In support of English medium instruction are points such as the relative ease of pursuing a single language policy throughout the educational system and then the likelihood of greater fluency for all in English due to longer exposure. (1) (U.N.I.N.,1981:37 and 62).

(1) English is spoken by approx. 1% of the 1.5 million population of Namibia, where there are 10 main languages.

2.2 Oral language and Literacy

2.2.1 Literacy and cognitive processes

Oral and written language are different in many ways: it is claimed that written language requires conscious learning, often in specialized institutions, implies a detachment of the writer from his product, gives as result the permanency of text and accuracy in the reproduction of knowledge, and requires for its production a transformation of text through decontextualization (Goody,1968; Olson,1977a).

The consequences of literacy on the thought processes have been the subject of many investigations, and among the first was that of Luria and Vygotsky in the '30s: the purpose of their expedition to Central Asia was to determine how changes in cultural conditions (mainly literacy) had affected intellectual functions (Luria,1976; Schubert,1983; Scribner and Cole,1981). Comparing non-literate farmers with other residents of the same villages with either minimal or full literacy on reasoning tasks, it was found that the first group tended to solve the problems in a concrete, context-bound way, while the literate group was more responsive to the conceptual and logical relationships in finding the solution, the minimally literate falling in between. According to Luria, his results confirmed Vygotsky's theories about sociocultural changes being the basis for the development of higher mental functions (see 2.3.2); however, recent advances in the ethnography of literacy activities point to methodological shortcomings (Cole,1985a:151). Luria's study also showed that it is impossible to disentangle literacy from other factors like schooling and changed socio-economic conditions. A similar investigation was conducted decades later by Greenfield (1972) in Senegal, with similar results but also with the same basic problem:

This covariation of literacy with other major changes in life experience -a pervasive condition in almost all settings- is a formidable obstacle to research on educational effects [of literacy]... The attribution to literacy of causal significance in cognitive development remained, as with Vygotsky, on the hypothetical level. (Scribner and Cole,1981:10 and 12).

The position that literate cultures have in the written language an 'amplifier' of cognitive capacities and therefore 'push cognitive growth better, earlier and longer than others' (Greenfield and Bruner,1969) was challenged by the important study on Vai literacy (Scribner and Cole,1981), where it was possible for the first time to separate schooling from literacy, as Vai people had developed their own script which was learned at home. The conclusion of the study was that literacy per se does not produce all the cognitive effects generally ascribed to school, which are the result of a particular kind of literacy.

It is suggested that the main characteristic of school literacy , or 'essayist style' (Scollon and Scollon,1981), is that all the meaning must reside in the text, independently of its nonlinguistic interpretative context : it is language which creates its own context for interpretation. (Olson,1977b). So, the difference between 'text' and 'utterance', according to Olson, is that in the first meaning is intrinsic to language, in the latter it is extrinsic, as the listener has access to other features of the communicative situation (contextual cues and paralinguistic information) to interpret the speaker's intentions. This position has important theoretical consequences for the acquisition of literacy skills at school, and also for any discussion on oral language, as it is widely held that its development is a necessary prerequisite for the learning of literacy. Bruner (1975) had already introduced the differentiation between 'communicative' and 'analytic' competence, the latter being typical of the context-free elaboration required by formal schooling. It is by de-contextualizing knowledge that school learning would promote analytic competence and thus transform the nature of the thought process. A similar approach is in Donaldson's (1978) distinction between 'embedded' and 'disembedded' cognitive processes. Cummins based his distinction between 'Basic Interpersonal Communicative Skills' and 'Cognitive-Academic Language Proficiency' (1980) on Olson's position, and

used it for his own influential theories on bilingualism (see 2.2.4). Because of its consequences for education and language learning, in both L1 and L2, the question of the comparison between oral versus written language is further examined.

2.2.2 Differences between oral and written language

It seemed easy to relate the difference between text and utterance to the difference between oral and literate traditions (including ways of knowing and approaching learning), and consequently to consider children's sole or predominant exposure to oral language, typical of non-literate or minimally-literate groups and considered highly contextualized, as a possible cause of learning difficulties at school. The critique of the positions briefly presented above must begin with a rejection of their starting point, i.e. the polarization of the differences between oral and written modes of communication (the 'great divide' theory).

This has been done by many authors from the domains of anthropology, linguistics, pragmatics and sociolinguistics, who pointed out that:

- 'the traditional oral-literate dichotomy does not capture the ways other cultural patterns in different societies affect the uses of oral and written language' (Heath,1983:344);
- literacy as a specific societal activity within a culture cannot be equated with literacy in other cultures or in other times (Zebroski,1982);
- features that have been associated exclusively with literacy are also found in oral communication, and the reverse, e.g.:
 - . rhetorical strategies (Tannen,1982a,b)
 - . structural ambiguity of the meaning of a text (Stubbs,1980)
 - . cohesion and coherence of text and discourse (James,1980; Craig and Tracy,1983; Werth,1981)

- . active role to be played by the reader/listener in relating the writer/speaker's background knowledge to the text in order to make sense of it (Simon and Murphy,1986)
- . activation of cognitive schemas for comprehension (Wells,1985, Cole,1981);
- the tendency to equate oral communication with conversation should not obscure the fact that certain types of oral discourse are as little dependent on the immediate context, depersonalized, acquired in special institutions, permanent and reproducible as written texts, an example being ritual communication in non-literate societies (Akinnsaso,1982a and b);
- the model of literacy is to a large extent defined by discourse properties, and therefore it is in the discourse patterns that one finds the mismatch (Scollon and Scollon,1981);
- neither schooling nor literacy are responsible for logical thought but only contribute to the range of problems than can be solved logically (Orasanu and Scribner, 1982).

Street (1984) offers the most comprehensive exposition and critique of the 'great divide theory' and one of its main proponents, Goody:

He would explicitly replace the theory of a 'great divide' between 'primitive' and 'modern' culture, which had been employed in earlier anthropological theory and which is now discredited, with the distinction between 'literate' and 'non-literate'. He believes that the distinction is similar to, but more useful than, that traditionally made between 'logical' and 'pre-logical'. This, he claims, is because of the inherent qualities of the written word Writing ... 'enforces' the development of 'logic', ... the emergence of scientific thought (Street,1984:5)

Street then sets out effectively to refute Goody's claims and the consequent 'autonomous model of literacy', that is Olson's position with its related educational consequences stressing the intrinsic qualities of literacy, believed to foster cognitive flexibility, abstract thought and decontextualization. An alternative 'ideological model of literacy' is proposed: while proving the orality-literacy continuum, it stresses that writing is only the medium through which an ideologically-loaded social knowledge is acquired (page 221), that social practices and conceptions

of reading and writing (i.e. literacy) are more complex phenomena than just the 'essay-text form of literacy' (page 41) and that most cultures are likely to offer a mix of oral and written activities and 'literacies', according to the particular contexts and ways in which power relations are embedded (page 8). Street (1984) draws many arguments from social history studies as well as from anthropology and linguistics, and develops many of the points presented above when discussing the differences between oral and written communication. His argument is even more persuasive, however, when contributions from pragmatics and discourse analysis have been further explored (as in Street, 1986).

2.2.3 Oral discourse, oral text and school literacy

Literacy-related activities during pre-school years, like reading bed-time stories or shared reading, have been considered important for the subsequent acquisition of literacy at school (Dombey, 1983; Williams et al., 1982; Heath, 1982b); but the extent to which the child acquires text-related, context-reduced language skills has been considered to be a more crucial variable (Snow, 1983 and 1984). Consequently, the characteristics of oral language that were identified as potentially facilitative for literacy learning would be those more typical of the written language, like distance between sender and receiver, explicitness of reference, fictionalization of sender and receiver, complexity of syntactic structure, permanency of information, autonomous rather than interactive narrative skills, high degree of cohesion (Tannen, 1982a).

These are the characteristics of decontextualized language use. Literacy is normally decontextualized, and literate activities normally show these features. But if oral discourse can have these characteristics and be used in a decontextualized way, so too can literate activities be context-bound. (Snow, 1983:186)

An example of decontextualized oral discourse is ritual communication (Akinlasi 1982b), and an example of contextualized literacy is Vai

literacy (Scribner and Cole,1981). Snow (1984) reviews studies on the contextualized/decontextualized distinction and concludes that

Despite the wealth of speculation [on such distinction], only very little evidence is available to confirm the claim that skills with the two language types are separable. (Snow, 1984:15)

In my opinion, the fact that all definitions of 'decontextualization', in all their nuances, rest on a basic differentiation between utterance and text of the sort proposed by Olson makes the definition difficult and the issue of the transition to/acquisition of literacy rather confused. If one takes as starting point a discorsal/pragmatic approach to language and stresses the similarities rather than the differences between spoken and written forms, the text vs. utterance distinction may be dropped in favour of that of discourse-as-a-process vs. text-as-a-product (Brown and Yule,1983). In this perspective, what is studied is

... the record (text) of a dynamic process in which language was used as an instrument of communication in a context by a speaker/writer to express meaning and achieve intentions (discourse). (Brown and Yule,1983:26)

This model applies to both written and oral language:

... participants' prior knowledge ... powerfully influence their interpretations of discourse and hence the connections which they perceive, and impose, on a stretch of speech or a piece of writing. ... In written language, knowledge of genre and of communicative intentions form an important framework for an audience's expectations and inferences. (Collins and Michaels,1986:209)

The model of conversation ... is a co-operative venture in which the participants seek to increment the commonly-accepted set of propositions by contributing further propositions that are relevant to it. (Werth,1981:134)

The observations by Snow presented above now sound more to the point, as the connection between oral and written language is clearer: they both rely on interpretation of information provided by the context, by the background knowledge and by the particular cohesion devices used.

Many studies have shown a strong correlation between oral language skills and written language achievement, and the correlation has proved useful in predicting children at risk (Blank,1982); but instead of concentrating the attention on those aspects of oral language which are considered relevant to literacy in that they mirror those of written language, the structure of and processes involved in oral interpersonal communication could be explored, and discourse patterns identified that would be useful in the transition to literacy and to L2. This seems a good research direction because it values the learners' competence developed before and outside school (see 4.5): that competence is an asset for all, even for those children living in non- or minimally-literate social groups, that is, the environment for the majority of the children in the world.

2.2.4 Bilingualism and development of literacy in L2

Early studies on bilingualism and I.Q. generally concluded that bilingualism was responsible for lower levels of verbal skills and eventually for poor academic achievement, while more recent studies suggest that bilingualism can positively influence academic and cognitive functioning (Reviewed in Cummins,1979 and Skutnabb-Kangas,1983). The conflicting results of studies on bilingualism are due to the better control of socioeconomic variables in the subjects; results from French Immersion Programmes in Canada show that learning in L2 at school does not necessarily cause academic difficulties: it is clear that bilingual situations differ widely, and so many types of bilingualism exist, which lead to different results (see 2.1.3 and 4).

A first distinction is between an 'additive' form of bilingualism, where another language is added to the repertoire without questioning the status of the L1, and a 'subtractive' form of bilingualism, where the L2 is meant to gradually replace the L1, a language of lower status. The thesis has been put forward (Cummins,1979) that 'a cognitively and

academically beneficial form of bilingualism can be achieved only on the basis of adequately developed L1 skills'. This thesis is based on:

- the 'developmental interdependence hypothesis' : the development of competence in L2 is partially a function of the type of competence already developed in L1 at the time when intensive exposure to L2 begins;
- the 'threshold hypothesis': those aspects of bilingualism which might positively influence cognitive growth are unlikely to come into effect until the child has attained a certain minimum level of competence in the L2;
- and on the postulated

significant relationships between communicative activities in different languages which make similar contextual and cognitive demands on the individual. (Cummins,1979:122).

It is also necessary to distinguish between surface fluency and cognitive uses of language in both L1 and L2, as at school the bilingual child must function in cognitively demanding situations through the medium of a language he has not mastered. Cummins's (1983) conceptualization of language proficiency along two continua (from context-embedded to context-reduced and from cognitively demanding to cognitively undemanding), which led to the distinction between B.I.C.S. and C.A.L.P., (Cummins,1983:114, see page 34, bottom) has been revised by the author after criticisms on a number of grounds (see debate in Rivera,1984).

While the decontextualization dimension remains controversial also in view of the arguments presented in the above section, the less explored cognitive demand dimension seems to me more interesting: it can be linked on the one hand to Vygotsky's 'scientific concepts' and the activity theory in Soviet Psychology (see 2.3; Leont'ev,1981; page 177), and, on the other hand, to information processing theories applied to discourse comprehension. (Discourse is used here in the sense of structures beyond the semantic level). With reference to the latter: in processing information the reader/listener makes use of two complementary sets of data, i.e. what is available in the text as words, sentences etc.,

and his previous knowledge organized in schemata, which provides expectations and prediction abilities (Cole,1981). This does not only apply to 'phonetic to semantic' aspects of language, but also to discorsal aspects, as the phenomenon of Discourse Transfer suggests (Lopes,1986). Therefore

The difficulty or not of processing [information in a new language] depends on the familiarity with the discorsal and cognitive structures. (Lopes,1986:98)

The problem of school literacy in L2 could then be posed in the following terms:

- what are the cognitive demands imposed on a learner who has to process imperfectly-mastered L2 discourse structures in order to comprehend (= make sense of) information?;
- can learning be facilitated by acting on schemata as well as on text, i.e by using discourse patterns easily predictable (in that they are those of the learner's L1) for the learning of/in L2?

Discourse structures are already well established when children come to school to learn literacy: can they be considered an asset on which to capitalize in a 'learner language approach' (Faerch, Haastrup and Phillipson,1984)

2.3 The socio-historical school in Soviet Psychology

2.3.1 Introduction

The socio-historical or socio-cultural tradition in Soviet psychology (Vygotsky-Luria-Leont'ev) and in particular Vygotsky's theories on language and cognition have been taken as the main theoretical base, on three grounds:

- they provide a solid foundation for understanding the nature of the interaction between adults and children in the process of acquisition of language and literacy; more recent studies confirm Vygotsky's intuitions about the sociogenesis of communication and language, the importance of adults' interaction and the function of language and literacy in cognitive development;
- they anticipated and still provide a theoretical background to recent developments in linguistics and ethnography that focus on the centrality of context for the interpretation of meaning in discourse;
- their pedagogical implications seem to respond to the problems of underdeveloped countries more adequately than other, Western, theories.

2.3.2 Basic concepts

Tools and signs.

In Marx and Engel's historic materialist theory of social development, the relationship between Man and nature is dialectical and reciprocal. Man transforms nature by the use of tools, and the process of tool use

transforms his own nature. The interaction is mediated in increasingly complex ways as the system of tools (technology) becomes more complex.

Vygotsky extended this concept of mediated interaction to the use of signs, and suggested that it is the semiotic mediation of tool use that creates the truly human forms of activity (Wertsch,1983; Lee,1985). 'Signs' are socially created symbol systems like language, writing, number systems. Some psychological processes rely on perceptual contexts, but higher mental processes rely on sign-mediated activity and are uniquely human.

The use of artificial means, the transition to mediated activity, fundamentally changes all psychological operations just as the use of tools limitlessly broadens the range of activities within which the new psychological functions may operate. In this context, we use the term higher psychological functions ... as referring to the combination of tool and sign in psychological activity.
(Vygotsky,1978:55)

Linguistically-mediated social origins of higher mental functions.

The socio-historical tradition challenges one of the main assumptions, seldom made explicit, of Western psychology, i.e. that 'the boundaries of the individual provide the proper framework within which psychological processes can be adequately analyzed' (Wertsch and Sammarco,1985:276). This assumption underlines the traditional dichotomy between psychology (as the study of individual processes) and anthropology (as the study of group cultural products). One attempt to bridge the gap, namely cross-cultural psychology, goes no further than considering 'culture [as] an important source of independent variables for the study of psychological dependent variables' (Cole,1985a:147).

The Soviet approach maintains that the origins and explanations of the highly complex forms of human consciousness must be sought in 'external processes of social life, in the social and historical forms of human existence' (Luria,1981:25). Its focus on how cultural variables become transformed into psychological processes is important because (a) it

transcends artificial divisions between disciplines, and (b) it avoids the two opposite traps of reductionism, whereby explanations of social processes can be reduced to principles that govern individual phenomena, or the opposite (Kohlberg and Wertsch,1981).

Vygotsky considered cognitive processes as 'internalized transformations of socially prevalent patterns of interpersonal interaction' (Cole,1985a:148). According to his 'General genetic law of cultural development', any higher psychological function, including language, first appears on the social ('inter-psychological') level, and only later on the individual ('intra-psychological') level (Vygotsky,1978:57), as it is born out of social relations. Cognitive development is treated as a process of acquiring culture by participating in, and gradually mastering, social interaction; the use of language, or more generally of signs, is central in this transition from social to mental activity.

We place this transition from a social influence outside the individual to a social influence within the individual at the center of our research and try to elucidate the most important factors that give rise to this transition. (Vygotsky,1960 -a text in Russian quoted in Kohlberg and Wertsch,1981:36).

In contrast to Piaget, we hypothesize that development does not proceed towards socialization but towards the conversion of social relations into mental functions. (Vygotsky,1981:164).

As is well known, one of the main differences between Piaget and Vygotsky is the different role they attribute to language in cognitive development: for the latter, the introduction of linguistic mediation causes a major qualitative change in the development of thought:

The most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously completely independent lines of development, converge. (Vygotsky,1978:24).

Both Piaget and Vygotsky attach a crucial importance to symbolic thinking for cognitive development, but for Piaget language is not decisive in the formation of the semiotic function, as priority is given to action and construction.

For an accurate, yet concise, comparison between the basic tenets of cognitive theories in the Western (American and French) and the Soviet psychological traditions, see Hedegaard (1986).

The Zone of Proximal Development (ZPD)

Both the French and the Soviet traditions put greater emphasis on the processes and potentials of human mental development than on its quantifiable products, and structure development in stages, a construct that does not fit comfortably with quantitative models more typical of Anglo-American psychology (Sutton, 1980b). The notion of Zone of Proximal Development exemplifies this qualitative approach:

We must determine at least two developmental levels. The first level can be called the actual development level, that is, the level of development of a child's mental functions that has been established as a result of certain already completed developmental cycles. ... [but] what children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone. ... The zone of proximal development is the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978:85-86).

The fact that Vygotsky's theory draws on Engel's law of dialectics explains why for him development is not a linear model, but an alternation of periods of growth (i.e. slow, quantitative change) and crises of development (i.e. sudden, qualitative change):

We believe that child development is a complex dialectical process characterized by periodicity, unevenness in the development of different functions, metamorphosis or qualitative transformation of one form into another, intertwining of external and internal factors, and adaptive processes... Laps in the child's development are seen ... as no more than a moment in the general line of development. (Vygotsky, 1978:73).

The dynamics of the movement are generated by the 'inner contradictions', or conflicting tendencies that develop in every stage as a result of the very process of development. The major contradiction is between the

child's skills and the type of social relationships: as skills become more and more complex, relationships become inadequate and eventually will pose limits to the development of skills; at that point a crisis will erupt and new relationships will have to be established, thus marking the beginning of a new stage. This model for ontogenesis, close to that devised by Marx to explain social history, has been translated into graphic form using a mathematical construct called Catastrophe Theory (Sutton,1980a).

The concept of activity

'Activity' is the most fundamental working concept in Soviet psychology (Wertsch,1981). Human psychology studies the activities of concrete individuals. Human activity is integrated in the system of social relations, as it uses objects, tools and psychological tools (i.e.signs) historically developed. Activity is the uniquely human form of rule-governed, tool-mediated, goal-directed action: it includes the motives, the goals, and the conditions operating on the subject (Cole,1985a, Wertsch,1985b). This may be seen an elaboration of Marx's famous differentiation between the worst architect and the best of bees. Higher mental functions are developed in the course of activity:

Any higher mental function was external because it was social at some point before becoming an internal, truly mental function. (Vygotsky,1981:162)


The process of internalization is the bridge between external and internal activity (Vygotsky,1978:28; Zinchenko,1985; Wertsch,1979), but:

... the process of internalization is not the *transferral* of an external activity to a pre-existing, internal 'plane of consciousness': it is the process in which this internal plane is *formed*. (Leont'ev,1975, quoted in Zinchenko,1985:107).

The unit of analysis

Following Marx, Vygotsky wanted to find the 'living cell' or 'microcosm of consciousness that reflects all its aspects' (Wertsch 1985b:193), an interesting parallelism with 'holistic' paradigms of inquiry (see pages 16-17).

By unit we mean a product of analysis which, unlike elements, retains all the basic properties of the whole and which cannot be further divided without losing them. (Vygotsky, 1962:4).

Zinchenko (1985) notes that, in the history of Psychology, the choice of the unit of psychological analysis has important consequences for the structure of the theory: units like sensation, relationship  figure-ground, reflex or behaviour were bound to prove insufficient for the analysis of complex cognitive processes.

Vygotsky 'the methodologist' went beyond Vygotsky 'the psychologist' (Wertsch, 1985b) as he tried to systematize the requirements for the units and methods of psychological analysis (e.g., must be capable of self development - Zinchenko, 1985). He suggested 'meaning' as the unit of analysis for the study of thought and language; using his criteria, but more influenced by Leont'ev in this aspect, contemporary Soviet scholars suggest 'activity' or 'goal-directed action' as the unit of analysis for psychology.

... the human individual's activity is a system in the system of social relations. It does not exist without these relations. (Leont'ev, 1981:47)

2.3.3 The role of the adult in education

The function of the adult consists in providing instruction not at the level of actual development (lower limit of ZPD, which would reinforce the

child's relative level), but at the level of potential development (upper limit of ZPD). The adult must recognize the child's striving towards change, change his relationship towards him, provide new and more complex types of activities in which the child can test his new skills. Educational intervention is geared towards establishing contradictions rather than achieving equilibrium.

The relationship between learning and development is seen as one where learning must lead development:

What the child can do in cooperation today, he can do alone tomorrow. Therefore the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the ripe as at the ripening functions. (Vygotsky,1962:104).

Some decades later, studies on early language acquisition have in a sense confirmed this: the child develops communication and language as a result of the mother considering him a competent conversationalist, reading meanings in his first verbal exercises, treating them as if they were communicative (McTear,1985; Snow,1977). The 'enabling, sustaining' mother (Wells,1981) uses direct request forms, for example, well beyond the child's ability to understand them :

... it is as if adults were tutoring the child on how to interpret communicative moves ... they use directives which require a definition of the situation somewhat beyond the child's level, and then coach the child on how to respond. (Wertsch.1979:20).

Cole's redefinition of ZPD as 'the structure of joint activity in any context where there are participants who exercise differential responsibility by virtue of differential expertise' (Cole,1985a:155) seems particularly effective in this context.

Considering now the problems connected with the initiation to literacy, this is considered in Soviet psychology as a 'developmental crisis': it is the passage from 'everyday, spontaneous concepts' (where the iconic relationship among objects in the context still structures the subject's activity) to 'scientific' concepts, in which

the relationship to an object is mediated from the start by some other concepts. Thus the very notion of scientific concept implies a certain position in relation to other concepts, i.e. a place within a system of concepts. (Vygotsky, 1962:93).

The system referred to is the semantic system of language (Wertsch, 1983):

The schooling's emphasis on using language to talk about language as opposed to talking about non-linguistic reality is an important force in the emergence of scientific concepts. (Kohlberg and Wertsch, 1981:44).

The significance of schooling lies not just in the acquisition of new knowledge but in the creation of new motives and formal modes of discursive and logical thinking divorced from immediate practical experience. (Luria, 1976:133).

These ideas were later developed by Bruner (1975), Cole (1980), Donaldson (1978) and Snow (1984). They have also been inappropriately used in support of positions emphasising the existence of and need for 'decontextualized language' in the acquisition of literacy (see 2.2.3).

But the development of scientific concepts is something different from the learning of an 'essay-text form of literacy' which passes for literacy in many schools: in fact it is just the opposite. The image of children learning mostly by manipulating materials, extracting information from books and producing essays is typical of the Anglo-American pedagogy; social relations between adults and children in the learning process are stressed in the Soviet tradition to the point that dialogue is considered the critical tie between all language activities, including reading and writing (external dialogue is internalized as inner speech and this is then externalized as writing - Volosinov, 1973). The Vygotskian school also 'attributes great importance to reflection in the instructional process' (Zebroski, 1982:61) encouraging metalinguistic awareness of oral and written discourse.

2.3.4 Context and meaning.

The shift of interest in linguistics towards pragmatics can be seen as the result of a progressive dissatisfaction with units of analysis in the study of language. From phoneme to word, from utterance to discourse, the trend is clearly pointing to the importance of context for the interpretation of meaning.

Context was virtually absent in Saussure's 'speaking circuit', appeared in the behaviourist model of Bloomfield, but only to include objects or situations directly relevant to the elicitation of speech. It is the functionalist/systemicist tradition (Gardiner, Firth, Jacobson, Halliday), significantly close to the anthropological influence of Malinowski, which insists that context, including the irrelevant details which are not selected by the speakers, gives the ultimate meaning to otherwise unintelligible exchanges:

... the real linguistic fact is the full utterance within the context of situation. (Malinowski, 1935)

... elements to be included in the analysis of context of situation: cultural context, types of linguistic discourse, personal interchanges, and types of speech functions. (Firth, 1930)
(Both quoted in Bailey, 1985:4-5)

For more recent approaches focusing on communicative competence,

context ... is not simply some additional details that one attaches to findings about language; rather context provides the very vantage point from which to observe and study language. (Zebroski, 1982:55)

Pragmatics and ethnography of communication study the rules of language use in context (Bates, 1976) and the background assumptions of shared experience (intersubjectivity - Rommetveit, 1978; linguistic competence necessarily entailing social competence - Hymes 1974) that make communication possible: '... a conversational context ... specifies what can be taken for granted in making the next speech act' (Karttunen, 1977, quoted in Werth, 1981:131).

Definitions of context may be narrow or wider but as long as they include the 'assumptions about what participants know or take for granted', they refer to the culturally-constructed repertoire that reflects the regularities of life within a society, with a particular social structure, ideology, conceptual systems, ecology, history etc.

This background provides a definite direction and structures our expectations about what is going to take place ... all this tacit knowledge has its origins beyond the individual, and it is its sociocultural basis that forms the interpretive background of our individual minds. (Hundeide,1985:310-311).

The Vygotskian theory not only provides a philosophical base to these recent developments in linguistics and ethnography, but offers an explanation of the mechanisms by which culture is transformed into cognition via language, with its differentiation between spontaneous and scientific concepts and his focusing on the mediational capacities of signs. Human beings use signs to organize and plan sign-using activity itself: whether oral or written, 'language becomes its own context' (Hickmann,1985:240; Wertsch,1985b).

Considering the choice of the unit of analysis, Cole (1985a:153) finds a close 'correspondence between the Soviet concept of activity and the anthropological notions of event or context'. What constructs like 'literacy event' (Heath,1983), 'literacy practice' (Street,1984), 'speech event' (Saville-Troike,1982), 'speech economy and speaking performance' (Bauman and Sherzer,1974), 'participation structure' (Philips,1972) have in common is the attempt to consider as object of study the microcosm of individuals engaged in a social activity in certain situational contexts for certain functions. The emphasis is not simply on behaviour but on the knowledge necessary to produce that behaviour: it is in this respect, among others, that contemporary anthropological research fits well with socio-historical theory:

Because the statement of functional relevance considers relations between parts and the whole, such work involves systems thinking. It is in this sense that ethnographic work is 'holistic', not because of the size of the social unit but because units of analysis are considered analytically as wholes... . (Erickson,1981:19).

As for the relationship between Vygotsky's theory and discourse theories, Hickmann found the notion of the 'organizing function' of speech useful to explain children's ability to organize discourse, in particular narrative discourse, and observes that no other developmental theory have⁶ made 'interactive processes an inherent part of the developmental process' (Hickmann,1985:237).

Crucially for a picture of development, discourse theory recognizes that language has evolved in history and that it presents for children socially maintained ways of speaking and writing, connected to specific experiences and embedded within institutional and ideological frameworks. If this is acceptable as a way of seeing language, than it seems no more than an extension of Vygotsky's socio-cultural theory to envisage development as an active, dialectical and potentially critical internalization of the positions and possibilities of developed discourse. (Burgess,1984:217).

2.3.5 Relevance for education in underdeveloped countries

A number of considerations indicate the relevance of theories developed in the Soviet Union to the enormous educational problems faced by underdeveloped countries. Unlike the course of scientific development in Western countries, there was in the USSR of the '20s and '30s a deliberate commitment to develop an educational psychology functional to the demands posed by the massive programmes of democratization and reconstruction made possible by the Revolution. The body of theories which emerged as a result was constructed in a situation of permanent assessment of their educational results: where social processes are more advanced than theory, a theoretical framework is required to advance through contradictions and, at the same time, it is constantly revised in the light of its effectiveness.

In Vygotsky's times, the Soviet Union would have been considered an underdeveloped country (although in many aspects much better off than

today's Third or Fourth world Countries); even in more recent decades, when she was confronted with the ambitious task of offering equal and free education for all, a theory stressing the critical importance of early experiences for later development could not be afforded in economical and political terms:

The psychology that was to emerge would have not only to include an optimistic view of the malleability of human potential, it would also have to offer the theoretical tools whereby that potential would be achieved, however unpromising might appear the initial human material. (Sutton, 1980b:200).

Today's underdeveloped countries cannot afford either a philosophy of education or a psychology based on social and ontological determinism: it would not be a case, as for industrialized countries, of promoting compensatory programmes for groups with special needs, but of providing 'special' education programmes for the whole population, virtually all the children suffering from symptoms related to 'deprivation' or 'mismatch' syndromes.

In other aspects underdeveloped countries might find Western educational psychology unfitting: they are not 'commodity-intensive' societies (Illich, 1983) and cannot afford the wealth of learning materials involved in much of the child-centred model of learning and schooling now prevalent in the rich West; particularly in rural areas, adults represent the main source of mediated knowledge, as oral culture dominates over media; materials, which are not commodities, are used sparingly. The teacher, often the most learned person in the village, is seen as an agent of change, and he is expected to play a central role in the classroom and in the community (see 6.1). And Independence, despite all the problems, has set in motion a dynamic which probably is the opposite of that of the 'old' world:

Just as we have come to accept the facts of poverty in the slums of Northern Philadelphia, we have come to accept that many children will not learn to read, and will not make it [^]our society. ... Strangely enough, it is the rich society that believes that the poor will always be with us, and the poor society that does not. (Labov, 1982:150).

2.4 Adult-child conversation

2.4.1 Adults' role in language development

In language development literature, the emphasis has shifted from interest in the construction of children's grammar to interest in communicative competence; with the emergence of pragmatics and discourse analysis, children's conversations have become a major focus of research, along different lines:

- studies on the development of conversational competence, mainly the ability to initiate and sustain contingent discourse (McTear,1985);
- studies on the difference between home and school conversation (Tizard *et al.*,1982; Tizard,1984; MacLure and French,1981);
- studies on the difference between child-child and child-adult conversations (Camaioni,1979);
- studies on different adults' interactive styles (Wells 1983; Olsen-Fulero,1982);
- studies on the qualities of social cognition in communicative interaction (Sypher and Applegate,1984);
- studies on requests and replies (reviewed below).

The Bristol study concluded that

... there was clearly observed variation in the quality and quantity of the conversational experience that the children enjoyed with adults and this was associated with differences in the ease and speed of their language development. Some parents more than others appeared intuitively to know how to facilitate their children's learning. (Wells,1985:415).

The adjustments adults make in their way of speaking are of various types (Cross,1977), but the features that were found to be significantly associated with rapid progress in language learning are not so much

those related to the formal properties of utterances (lexico-syntactic complexity, well-formedness) (Wells and Gutfreund,1984), but those that maintain the child's active verbal interaction, in particular 'topic incorporation', i.e. the semantic relatedness of adults' utterances to the child's previous utterance (Wells and Robinson,1982).

The facilitation provided by adults does not consist in utterances considered in isolation, but in their appropriateness in the sequence of conversation, where the child learns the 'essentially collaborative nature of interaction (Barnes et al.,1983). It was the frequency with which the adults picked up, extended and elaborated the child's topic or activity (the contingent nature of adults' speech) that was associated with the greatest amount of measured progress in language acquisition (Wells,1983a).

The main points of the Bristol study related to the quality of adults' input may be summarized as follows:

- it is extending rather than questioning which is associated with the language progress of the child, because it provides opportunities for him to enter into meaningful interaction (Barnes et al.,1983). This enhances the motivation to interact as the child has, on the one hand, a feedback on the organization of the language system to check the appropriateness of his language in conveying information (French and Wobl,1981), and on the other, a structure through which rules of social interaction are discovered (see page 150);
- direct requests in context of control (directives) were found to be significantly correlated to measures of child's progress, as often they lead to participative interaction, one reason being that the locus of reference is of immediate interest for the child and it is easy for him to discover the relationship between form and intended meaning (Barnes et al.,1983; Wells,1985; see page 144);
- parents differ in their style of interaction and in particular in the contingent appropriateness of feedback they provide (Wells,1983b). The

'enabling' adult secures and maintains attention, ensures mutual comprehension (expanding, reformulating, extending the child's utterances), and sustains the desire for conversation by enlarging child-initiated topics (Wells and Gutfreund,1984; Wells,1986; see the example of conversation on page 142);

- in order to analyze adult-child conversation and Request/Response patterns, a functional analysis of utterance is not enough: it is necessary to elaborate a model that can capture the utterance's potential for interaction (Wells and Robinson,1982), in particular the way adults acknowledge the response and return the floor to the child (see 5.3).

2.4.2 Question/answer patterns

The structure of conversation refers to 'the ways in which conversational turns combine into larger units as well as the permissible orders of occurrence of turns' (McTear,1985:29). The most used device to allocate turns consists in asking a question, a move that returns the floor to the interlocutor. As adult-child conversations tend to be asymmetrical, the questions posed by adults and the ways in which the adults reply to children's questions are important for the maintenance of the conversation.

This latter point has been taken into consideration by a number of studies focusing on adults' questions, and adults' turns moves conducive to child's participation have been given many labels:

- . turnabout sequences (Kaye and Charney,1980)
- . leading questions (Corsaro,1979)
- . verbal and action-reflective questions (McDonald and Pien,1982)
- . return questions (Cole *et al.*,1978)
- . turn-transfer questions (Berninger and Garvey,1981).

Many models of analysis of conversation can be found in the literature, that of Werth (1981) is one of the most comprehensive (see Annex 2.3). When focusing on conversations involving children, however, most of the models are based on studies of very young children (Malzone and Parker, 1979); Holzman, 1972; Brown, 1980), or refer to child-child conversations (van Hekken and Roelofsen, 1982), or consider children's conversations with teachers in informal settings (Cole, Dore et al., 1978). Others are restricted to a functional classification of conversational acts (Dore, 1979).

One of the few models which focuses on the interactive structure of adult-child conversations is Mishler's (1975 and 1978). A 3-turn unit is taken as the basis of conversation: Request-Reply-Confirmation. The confirmation turn is the turn of the initial speaker which immediately follows the response of the second speaker (as Sacks suggests, 'one rule for 2-party conversations is that a questioner has a reserved right to talk again' - quoted in Mishler, 1978:282). This resembles Sinclair and Coulthard's (1975) 'follow up', which is a restricted version of confirmation turn typical of classroom and didactic discourse. In informal conversations, however, the range of verbal activities available to anyone answering an opening is wider, including refusals to answer, requests of justification as to why the question was posed etc. (called 'challenging moves' by Burton, 1981).

Mishler goes beyond the unit and indicates 'modes of connection between interrogative units' such as 'Chaining', 'Arching' and 'Embedding' (see Annex 2.4) that can be applied to a variety of conversational events. An example is Williams et al., 1982, who apply and elaborate on the model in analysing parent-child interaction in book-sharing situations. One limitation of this model, however, is that it applies only to units opened by a question.

2.5 Ethnography of communication

2.5.1 Cross-cultural variation in adult-child interaction

Considerable attention has been given in sociological and psychological literature to differences between social classes or cultural/ethnic subgroups within Western societies. Following the line of research of Bernstein, attempts have been made to single out what differentiates working class and middle class families in relation to the development of language competence in children; there has been a reconsideration of previous conclusions about some groups being confined to a 'restricted code' of language use in, for example, question-reply patterns, by the same authors who suggested such a characterization (Robinson and Rackstraw, 1972), mainly after having introduced alterations in methodology:

To be able to show that there are within-class mother-child linkages like the between-class differences further weakens the feasibility of any hypothesis that asserts a strong generalized confinement to a restricted code of language use by members of low socio-economic status groups. (Robinson, 1981:166).

The main criticism of the 'deficit position' consists in pointing out the arbitrariness of inferring competence from performance, when the subjects are asked to perform in manners and situations inconsistent with their cultural experience (Cole and Bruner, 1972).

The power of the middle class has rendered differences into deficits because middle class behaviour is the yardstick of success. (Cole and Bruner, 1971:869).

Enlarging the analysis of how communicative interaction is organized in societies other than the Western provides an even wider perspective and raises problems of universals (Lloyd and Gay, 1981). Current descriptions

and models of analysis of adult-child interaction may sound very familiar because in psychological and linguistic studies the researcher, the reader and the subjects of study usually share the same cultural background and assumptions. This can prove to be a 'mixed blessing' (Ochs and Schieffelin,1982): ethnographic studies show how societies differ in their expectations of what a child can and should communicate, and how the mismatch of sociolinguistic assumptions affects communicative performance (Saville-Troike,1982; Scollon and Scollon,1981). The acquisition of communicative competence reflects the child's learning of more general norms of social behaviour and this socio-cultural knowledge is acquired prior to language. Therefore,

The process of language acquisition must be understood as the process of integrating code knowledge with socio-cultural knowledge. (Ochs and Schieffelin,1982:60)

This reflects the lines of research in linguistics and psychology reviewed in the previous sections. Some aspects of adult-child interaction are examined now from anthropological and cross-cultural literature to show how Western, White, Middle Class (WWMC) patterns (Ochs and Schieffelin,1982) are not applicable to other cultural groups.

2.5.2 Dyadic interaction and adults' input

The bulk of the literature on adult-child interaction has analyzed two-party communication in the form of dialogue because in WWMC groups interaction tends to be dyadic, between the principal caregiver, usually the mother, and her child. In other groups, the typical communicative situation is multi-party, as children are cared for by a number of persons and tend to be often in company of peers, siblings, neighbours and other members of the family (Blount 1972, 1977a and b; Lasky,1983; Schieffelin,1979).

Sometimes communication takes the form of a three-party interaction, with older siblings acting as a link between the mother and the young children, monitoring and reporting their behaviour and interpreting their meanings (Ochs,1983). This is common in the data considered in the present study.

The role of siblings as caretakers has been analyzed in a study considering a controlled sample of 186 societies chosen for their relatively detailed ethnographic data on children (Weisner and Gallimore,1977). It was found that, after infancy, the role of principal caretaker was being performed by siblings or peers in approximately 60% of the situations examined; the predominant social experience for young children was to spend up to 70% of their time in the sole company or in charge of siblings. In another study covering 5 non-Western cultures (Whiting and Whiting,1975), siblings and cousins were found present during observations in 50% of the cases.

All this has important consequences:

- for infants, it means that the majority of verbal input is not from adults;
- for children older than 5 or 6, it means that they relate with adults from a position of being already in a responsible role;
- given this circumstances, continuous dialogue is rare (Harkness,1977);
- older children spend less time interacting with adults than the youngest; they are also less talked to, and the social content of mothers' verbal interaction shifts to greater proportion of directives related to the caretaking function (Harkness and Super,1977);
- older children develop a characteristic commentary style, connected with their role as 'reporters' of events (see page 132), which corresponds to what was coded as 'descriptive' in the *INDE* study (see 3.4, page 92).

In family structures different from the Western, there may be comparatively little direct input in terms of language addressed by adults to children: this does not necessarily mean, however, low quality input. A comparative analysis of adults' and children's (4-8 year old) talk to younger children (2-3 year old) in a rural Kenyan village showed

no significant differences in the use of repetitions, expansions and elicitation of speech, so that

...we cannot conclude that the language environment provided by adults is qualitatively superior in all respects to that provided by other, slightly older children. (Harkness,1977:315).

The same for a study of 'Mastery Skill Communication' in Hispanic families in the USA, with large number of children, where siblings' interaction with younger children was found very similar to mothers'; the children studied produced more grammatically complex sentences talking among themselves than with their mothers (Lindholm and Padilla,1981).

Studies concluding that peers' input is inadequate were often based on data on twins, on birth order, and on institutionalized children, so that other confusing variables were present, and within the (outdated) paradigm of child egocentrism (Reviewed in Bates,1975). It is also important to note that ranking systems among children differ, according to cultural norms, and to different conceptions of childhood as they are perceived by both children and adults. In societies where the school is the major locus of peer socialization, peer groups tend to be structured along the lines of school organization and their power structure does not extend to the family environment; in other societies the ranking system is based on age, groups tend to be of mixed ages, and precise social roles are attributed to the older children which are recognized by the community. (Reynolds,1986; Parkin,1977).

2.5.3 Children as conversational partners.

The line of research on Baby Talk and the indications emerging from the Bristol study point to the importance of mothers' attitudes in establishing and maintaining effective communication with their children. General conclusions about the process of language acquisition have been

drawn from these studies suggesting that children develop their language competence through the opportunities for the negotiation of meaning they are given in conversational sequences with more competent speakers, usually adults. This implies willingness on the part of the adult to consider the child a viable, if not proficient, partner in conversation, either as an addressee or a speaker.

On this point, ethnographic literature reports that in societies where there are competent conversation partners at hand, adults usually do not attempt to engage in conversation with children 'until they are seen as realistic sources of information' (Heath, 1982 and 1983). Mothers may not share WVMC assumptions on the necessity of talking with children as means of developing their language abilities, and believe that children learn better by talking with their peers; they may find it worth engaging in conversation when there is a real need to exchange information; in particular they tend to expect their children to report verbally on siblings' behaviour or report news to the higher-rank members of the community (Ochs and Schieffelin, 1982). This is likely to generate different uses of language in the family environment.

Some studies suggest that comprehension more than production is the most important language skill by traditional criteria. This matches with beliefs and values of obedience, respect and responsibility highly appreciated in some societies (Childs and Greenfield, 1980; Goody, 1977). However, the ability to 'play with language' in the production of riddles, tricks and satire is also noted (Heath, 1983; Erny, 1981).

In some groups, children are 'less often spoken to than spoken about'. They often perform the role of audience: they may not be necessarily the centre of adults' attention, but their behaviour is reported, commented on, sanctioned etc. verbally by older siblings and adults. Children can check the appropriateness of their behaviour according to the socio-cultural norms of the group, and these rules are spelled out verbally, though they may not be addressed directly to them. (Ochs and Schieffelin, 1982). On the other hand, children may be 'more talked at than with' (Heath, 1982), adults and peers using a considerable amount of directives and

statements, in one-liners which call for reciprocity in action, not necessarily in verbal response.

Children in the societies examined nevertheless become fluent and competent speakers.

2.5.4 Facilitating structures of adult talk.

Simplified features of caregiver talk that have been described in Western studies are neither universal nor necessary for language acquisition (Ochs and Schieffelin, 1982). Although special types of speech register may be used for children, they are part of the general sociolinguistic rules of addressing less competent members or foreign speakers, or lower rank individuals. Simplification is culturally organized and assumes different forms and meanings, according to the general attitude towards children and learning.

What Ochs and Schieffelin (1982) suggest is that there are two basic orientations towards children: in some societies there is a general accommodation by adults to the needs of the children, in others the children are expected to adapt to the requirements of situations as structured by social norms. WVMC society is an example of the first type, with its miniature toys, special equipment for children, frequent intervention and overt facilitation of language (intonation, expansions, and generally taking the perspective of children when conversing with them). Other societies expect children to develop early independence and reliability, and it is basically up to them to make their speech intelligible to the addressee (Ochs, 1984):

...rather than offering possible interpretations or guessing what a child is saying or meaning, caregivers make extensive use of clarification requests such as 'huh?, what?' ... caregivers tend not to guess, hypothesize or otherwise interpret [such unclear] utterances and acts ... [but] will prefer to wait until the meaning becomes known. (Ochs and Schieffelin, 1982:43).

2.5.5 Adult-child Question-Response patterns

Questions have been considered important for the acquisition of communicative competence (see page 56). The use of questions varies in numerous aspects across sub-groups and cultures, as frequency and type of questions are related to the specific way the environment is socially organized. Among some groups, questions are not considered highly relevant to the learning process, both for learners and teachers (Goody,1977). A strikingly low frequency of questions and explanations was found in a study of Mexican weavers instructing trainees, while commands and statements constituted the great majority of verbal interaction (Childs and Greenfield,1981).

As this appears to be a general trend for all 'traditional' societies, conclusions were drawn about the educational process being minimally verbal and mostly directive, and about the use of 'inquiry' interrogative style in the classroom being culturally unfit (see Campbell,1986 for a subsequent reassessment). A closer look at the type of verbal interaction, however, gives a different picture, with the rate of questions increasing and of commands decreasing as the learner becomes more proficient. A statement is sometimes interpreted as explanation and again there is the tendency to leave to the less competent member of the group the burden of making sense of the situation (Childs and Greenfield,1980).

Learning by observation or self-initiated testing does not imply many questions (Philips,1972). Question exchanges are subject to precise rules of status and roles:

... in small-scale societies there are two sources of constraints on questioning reinforcing each other. Those defined as subordinate - and children are always defined as subordinates- cannot freely question superiors without appearing to challenge them ... [and the fact that] an individual occupies several roles in respect to the same person simultaneously. (Goody,1977:40).

The combination of these two constraints may lead to the children being trained early to attend above all to the command form of questioning, the securing of information becoming secondary to consideration of status.

In a study comparing the use of questions in three groups in USA (working class black children in their families / working class white children in their families / their 'town' white teachers' families, where teachers were observed interacting with their own children), Heath (1982a) concluded that:

- assumptions about the use of questions were different, as ^{to} their frequency, purpose, type and topic;
- teachers asked at school the same type of questions they asked their children at home;
- teachers' children were trained as question-answerers
- teachers as mothers tended to answer themselves the questions they posed to their children, and they expected them to come out with the same answers; they did the same at school;
- parents in black families did not use questions to give children the opportunity to show their knowledge
- in black families, questions where the questioner has the information were rare, and also those where the answerer has the information were not frequent, questions being used for other functions like soliciting story-telling, or verbal games.

A particular type of question considered in ethnographic studies is the rhetorical question: it shares with the test question the characteristic of the information being known to the addresser (as it is to the addressee), but does not require a verbal response, . It is similar to a directive in that it requires an action response The rhetorical question may have a challenging value and is more about relationship than information; it is frequent in situations where consensus is needed and agreement, not information, is sought (Goody,1977). Rhetorical questions reveal the incomplete nature of questions and how reciprocity may not be met, and so altering the basic characteristic of the adjacency pairing (Saks, Schegloff and Jefferson,1974).

The Setting

3.1 The linguistic situation in Mozambique

3.1.1 African Languages and Portuguese

Mozambique is a multilingual country. In describing the linguistic panorama, it is important not only to report on the number of languages spoken, but also the degree of their mutual intelligibility : all African languages used belong to the Bantu group of languages and present therefore some similarities, but the number of varieties is quite large . Some of the languages have lingua franca function, and are used in a wider speech community. This traditional bilingualism is to be taken into consideration, as it is part of the linguistic environment of the child entering school (Meijer,1980), but it refers more to adults entering into contact with other groups through travel or work than to schoolchildren. However, a survey conducted in Maputo shows that between 11 and 14% of school children aged 10-11 are multilingual, i.e. know more than one African Language (INDE 83a). It is estimated that 5 or 6 languages (see Annex 3.1) would secure an effective communication in the country (Meijer,1980); radio stations broadcast in 7 languages that are called 'National Languages', and are used occasionally in political displays alongside the Portuguese text. The policy of assimilation of the colonial regime had as one consequence little interest in linguistic research on Mozambican languages, but as all of them (with the exception of Makua) are spoken in neighbouring countries, information can be drawn from

studies in the British tradition. Some grammars, collections of proverbs and religious literature are available in Mozambican languages. There are adults who are literate in these languages (Yai,1982), mainly as a result of education by non-Catholic Missions.

Since Independence (1975), the major conferences, seminars and political discussions on the problems of information and education have been the arena for debates and official declarations on the importance of the national languages in the process of development (Yai,1982), but no official document on policy lines has been produced, and declarations of principles are interpreted from different angles. Little action to promote the use of national languages is taken. However, the attention given to language problems in various institutions, the publication of some literature in Changane, the opening of a Degree Course in Linguistics and the training of some Mozambicans in this field may lead to developments in the next few years.

Portuguese is 'the official language and language of national unity'. It is the L1 for Mozambicans of Portuguese and Goan descent and for a restricted number of urban Africans. The extent to which Portuguese is spoken and used as an L2 by the vast majority of Mozambicans is difficult to assess. The 1980 Census puts the illiteracy rate of the population over 7 years of age at 72.2% (see Table 3.1). The breakdown of the population over 10 years by its educational qualifications (see Figure 3.1) gives the figures of 70.4% of illiterates, 22.2% of literates without formal certificate, and 7.4% of people who completed Grade 4 (Primary Education) or more. For Census purpose^s, 'illiterate' is defined as 'a person older than 7 who is unable to read and write' (C.C.R.,1983:4), but the popular version is rather of a Mozambican who is unable to read and write Portuguese, a telling fact in itself (De Lemos,1967). It is generally agreed that the completion of Grade 4 provides the basic competence in L2, enabling the student to use Portuguese in its spoken and written form (Gonçalves, Louzada and Meijer, 1982). The relation between literacy and use of Portuguese is not a simple one to one correspondence, (INDE 1983c), since some may be able to use spoken Portuguese but cannot read and write in any language, or may be literate without formal education.

Table 3.1

 Illiteracy Rate in Population over 7 Years of Age in Mozambique, 1980

<u>Total Country</u>	<u>72.2%</u>
Men	59.0%
Women	84.6%
 <u>Rural Areas</u>	 <u>77.1%</u>
Men	64.6%
Women	88.5%

Source: Census 1980 (C.C.R., 1983)

Table 3.2

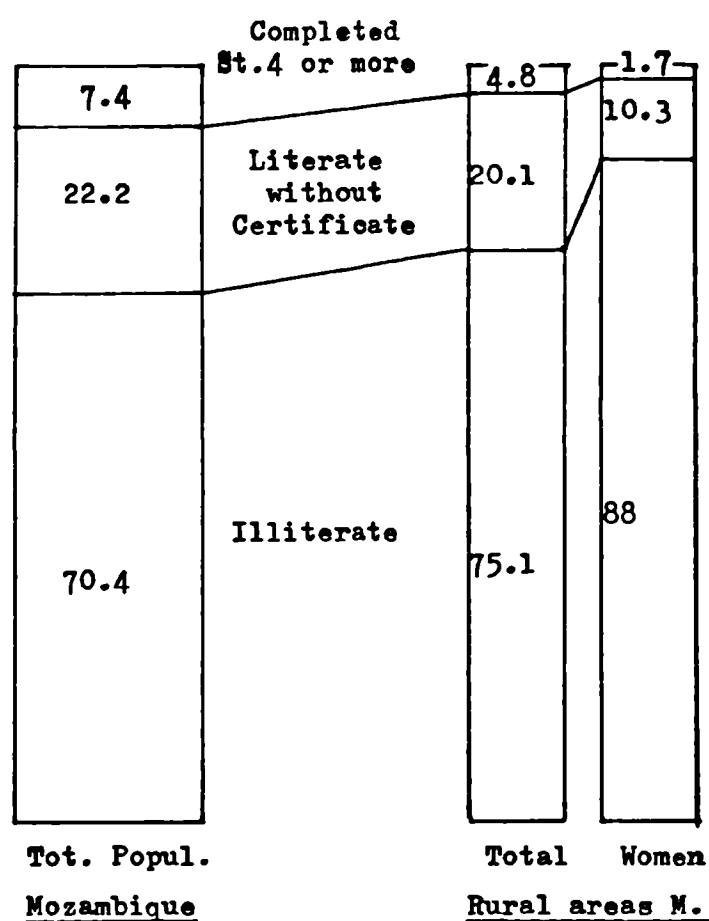
 Percentage of School Attendance by Age Group in Mozambique, 1980

Age	6	% cover	33.4
	7		39.9
	8		44.8
	9		47.6
	10		62.8
	11		55.6
	12		65.6
	13		54.8
	14		44.3

Source: Johnston, 1984:40

Figure 3.1

Percentage of Population over 10 years of age and Educational Qualifications in Mozambique, 1980



Adapted from Census 1980 figures (C.C.R.,1983)

The degree of L2 use differs very widely in urban and rural areas and across sexes and ages; in rural areas, where 86.8% of the population live (C.C.R.,1983), the situations of communication in Portuguese are very limited, and often confined to the classroom (Gonçalves, 1985); few old people have been to school and youngsters are more likely to have learnt it; women have fewer opportunities to learn Portuguese at the workplace, if not at school.

Impressive literacy campaigns and post-literacy courses have been carried out after Independence, but their impact on the effective use of Portuguese in rural settings is difficult to assess; they have mainly been organized in collective enterprises like cooperatives and communal villages or women's groups (Marshall, 1985). It is likely that literacy skills acquired in Portuguese with extreme difficulty, given the poor training of the instructors and the scarcity of materials, disappear quite soon, if not sustained through the use of the language in communicative situations.

Children's exposure to Portuguese in rural villages may be limited to contacts with a few fluent adults who use it on formal occasions (political events, presence of visitors), with older children already at school (when they like to show off), and to broadcasts. Going to larger villages or nearby towns may provide more opportunities to listen to spoken Portuguese, but 'gatekeepers' (Scollon and Scollon,1981) usually are bilingual and respond in the language they are addressed, or use interpreters. Schoolchildren, however, are likely to be addressed in Portuguese by nurses, shopkeepers, Government extension workers or staff of development project who are from another area. In the family, the presence of elders would inhibit other members from using Portuguese even if they knew it.

As for the type of Portuguese spoken in Mozambique, there is much discussion about the Standard form (the 'Portuguese of Portugal') still being considered the normative pattern and the local variants not being recognized (INDE,1983b; Lopes,1986). The Portuguese spoken is in fact an interlanguage, where the most varied syntactic and semantic structures

are tried out in the constant attempt to elaborate effective communication strategies (Davies et al.,1984).

Interlanguage, normally a transitory phase in the acquisition of L2 at individual level, seems established in Mozambique [as a rather permanent feature], becoming itself the pattern.(Gonçalves et al.,1982:6).

Portuguese is the language of the public administration, of the school, of political mobilization and development projects: the exposure to it, even in rural areas, should increase if the country is to continue in her 'difficult road to Socialism' (Saul, 1985). Meanwhile, the problem remains of how people make their voice heard in the political process, which rely so much on communication (Marinis,1982).

3.1.2 Language policies of colonial Portugal

The backwardness of Portuguese colonialism is well known, as the country that was at the centre of the 'Empire' was in turn one of the poorest of Europe, while properties and investments in the colonies were heavily controlled by British and South African interests. However, the Portuguese were very proud of their records and theories on the colonial question and eager to stress their differences with the British.

All colonial powers were interested in safeguarding their supremacy in the African continent, yet aims and methods differed: while British imperialism was based on the philosophy of 'separate development', the Portuguese insisted in the 'assimilation' model, similar to the French policy of forming "évolués" (Azevedo,1980; Mateene 1980; see 2.1.1). The 'structural catholicism' (Ferreira Rosa,1973) of the Portuguese compelled them to accept the basic equality of men as a principle, but did not prevent the ranking of men on a scale of civilization : from the bottom end (the primitives, *indígenas*) to the top (the civilized, the Portuguese).

The people they have conquered ... can only claim any sort of equality by actually becoming 'Portuguese'. ... This is the policy of 'assimilation', which lies at the base of the Portuguese claim to non-racialism. The theory is that every inhabitant of the Portuguese Empire has the opportunity to absorb Portuguese civilization, and that if he does this, he will then be accepted on equal terms with those born Portuguese, irrespective of colour or origin. (Mondlane, 1969:37).

The official census book of 1958 gave this definition of *assimilado* :

A civilized population is the number of whites, yellow and mixed-blood individuals and also those of the negro race that satisfy the following conditions:

- 1) Speak Portuguese;
 - 2) Do not practice ways and customs of the natives;
 - 3) Have a profession, are engaged in commerce and industry, or own property for their living.
- Those who do not satisfy these conditions are uncivilized. (Azevedo, 1980:204).

The ability to speak Portuguese, as much as being a Catholic, became then synonymous with civilization, for both the handful of blacks who succeeded (1.4% in 1970) and for the many excluded. (See Mondlane, 1969 for an account of the inferior status in which the *assimilados* were kept, despite official propaganda). It has been noted that, among the conditions required, language was the only one that could not be simulated in face-to-face encounters (INDE 1983b). School was the main agent of Portugalization via language and religion: Africans had to attend Mission schools, while the State schools were for the Portuguese and the *assimilados* (N.E.C. 1980). The Missionary Statute of 1941 established that

... in schools the teaching and use of the Portuguese Language is compulsory. Outside school too, missionaries and auxiliary staff will use the Portuguese Language. In religious instruction, however, native languages may be used. (Art.69).

The relationship between 'being fluent in Portuguese' and 'being civilized' constitutes the base of the attitudes towards Portuguese that are still very strong today: particularly in urban areas, parents recognize its higher status and try to use it with their children even if their own competence is very limited; and Maputo schoolchildren interviewed for a sociolinguistic survey responded that Portuguese is their mother tongue

or family language in unrealistic percentages for working class families (INDE 1983b). That relationship constitutes also a powerful restraining factor in communication: the lack of confidence due to the perceived difficulty in producing acceptable Portuguese in conversation with fluent speakers results in over-correction and silence : the culture of shame and guilt, where the speaker is made to feel ashamed of his poor L2, and the 'error' becomes a factor of social discrimination (Skutnabb-Kangas,1983).

Whatever the long-range prospects for this approach, the intermediate result has been the creation of a small class that looks down upon its own traditional language and culture, but is not sufficiently educated to use Portuguese efficiently. (Mondlane,1969:60).

3.1.3 Language during the war and after Independence

The history of the adoption of the Portuguese language as a unifying factor, levelling off the differences between the various ethnic groups, started with the founding of *FRELIMO* in 1962. The great majority of the founding members of the three organizations that constituted the Liberation Front were not fluent in Portuguese, nor did they use it as a means of communication : they used English or Swahili, the languages of the exiled. But at the 1st (founding) Congress, it was agreed to consider Portuguese the operational language of the Front, since it allowed a better knowledge of the enemy and also it avoided making decisions on linguistic matters which might have threatened the unity thus far reached. (Ganhão, 1979).

The launching of the armed struggle and the consolidation of liberated areas in the North of the country made the process that eventually resulted in Independence quite different from that of other African Countries : in Mozambique there was a 10 year long popular war against

the colonial power, during which wider parts of the country passed under *FRELIMO*. control: these liberated areas provided a laboratory in which new systems of production, social relations and services were being experimented, and a new culture created and consolidated (see 2.1.2.). Education was a high priority, and schools and literacy courses were set up as the army took control of a new area. (see 3.2.3). During the armed struggle, Mozambicans from different parts of the country and with different languages had to work together, and this was a new as well as difficult experience; the building of a national consciousness beyond the ethnic groups was of paramount importance to win the war, and one of the main aims of the new education in *FRELIMO*. schools (Machel, 1978).

A Seminar held in 1971 addressed to the issue of colonialism and culture was clear about the language choice:

In our country there is no dominant language. Choosing one of the Mozambican languages would be an arbitrary decision which might have serious consequences; moreover, the technical and personnel resources are too scarce to embark on the type of research necessary to turn a [Mozambican] language operational, particularly for science studies. We are forced therefore to use Portuguese as the medium of instruction and communication among us. (*FRELIMO*. 1971)

Later documents go out of their way to find a mode of analysis of political and linguistic concepts which explains how in Mozambique the language of the colonial power was transformed into a weapon for liberation, while in other countries it retained its role as tool for exploitation. It is basically argued that Portuguese was the language of political mobilization against the oppressor, which spread the ideology of *FRELIMO*. across ethnic divisions and in which the new culture and national identity was forged and developed (Machel, G. 1979, Ganhão, 1978). This was true for the militants and the army, mainly peasants and workers, but they still had to use African languages in their contacts with the population which provided the essential support for the guerrilla army as it advanced into new territory: the impressive literacy work done by the cadres and, later, by trained teachers in the liberated areas could not transform peasants with almost no contact with the colonial administration into speakers of Portuguese for daily

communication. A common comment of *FRELIMO* members and soldiers fighting in the liberated areas was that the population there 'accepted them as sons', although they came from other parts of the country and didn't speak the same language (Mondlane, 1969). The situation was different in the towns, but there the Portuguese were still in control, and *FRELIMO* could not involve the population in new modes of social production, by which new cultural values are developed.

After Independence, the policy was essentially geared towards extending the experience of the liberated areas to the whole country, as the South and part of the Centre had no direct experience of war and *FRELIMO* was present there only as underground structure. An intense job of political mobilization started, carried out in Portuguese whenever possible; speaking Portuguese was becoming the symbol of political involvement in the construction of the revolutionary society which abhorred tribalism and obscurantism (i.e. those aspects of traditional culture that were considered regressive). Literacy campaigns were launched and there was a genuine drive to study in ordinary people who had been denied education for generations. 'Learn', 'school', 'education', 'literacy' meant very much 'learning Portuguese'. Meanwhile, studies were done in the modernization of African languages, mainly in order to translate new concepts (Rzewuski, 1979), but normally Portuguese words for 'ante-natal clinic', 'comrade', 'cooperative' or 'revolution' were integrated into the local languages. At the Beira Seminar in 1975 the decision was taken to discard the whole colonial syllabus and re-write all the textbooks, but this meant basically a revision of topics and political outlook, while the methodology for language teaching continued to be based on the equivocal assumption that Portuguese was the L1.

The problem of the language of instruction was only addressed at the 1st National Seminar on the Teaching of Portuguese in 1979. On that occasion, the Minister of Education recognized that Portuguese was the second language for the great majority of the population and an L2 approach was to be used in its teaching. The children's mother tongues, however, would only be used as contrast to explain grammatical and phonetical differences (Machel, G. 1979). Rather naively, she predicted that the

literacy campaigns, especially directed at women, would spread the use of Portuguese in the families, and that

... adults would adopt it as the day-to-day language, for intimate and personal matters; it would become, as the mother tongue, the language used in current communication, in the moments of happiness and sorrow of the family, in conversations among friends. (Machel, G. 1979:11).

Group reports to the Seminars included recommendations to extend the period devoted in schools to the acquisition of oral communication skills, introducing reading and writing only when the child had already mastered the process of communication, and not to prohibit the use of mother tongues among children at school. They also gave a more realistic picture of usage patterns, arguing that the spreading of Portuguese depended upon opportunities and need for its use gradually created in the process of development.

A 1982 UNESCO study was indirectly critical of current language policies and recommended the development of Mozambican languages and their use in education as the only model which would put the *FRELIMO* principles of popular participation into practice. It argued that the proposed model of 'functional bilingualism' (M.E.C., 1980b) would limit the use of Mozambican languages to subordinate functions while Portuguese would remain the language of high prestige (Yai 1982).

The characteristics of the language situation, in their historical context, make it difficult to place Mozambique in typologies of linguistic policies or practices (see Annex 2.1): while multilingualism is a fact, it is not recognized as such in the educational system; on the other hand, the former colonial language has not the same function as in other independent African Countries, or rather, it is not meant to have it in the overt policy of the Government; teaching methods are still closer to the 'submersion-type programmes'; and one perhaps can talk of 'neoplacement' (Portuguese introducing new language functions), rather than 'displacement' or 'replacement' (partial or intended complete substitution). Neoplacement may be, however, just the first phase of the others (Phillipson and Skutnabb-Kangas, 1986b).

3.2 Education in Mozambique

3.2.1 Colonial education

As in Mozambique the colonial economy was less developed than in other colonies, education was comparatively more backward. Colonial Mozambique, consistently over the years, fell well behind practically all Africa in educational provision on measures like primary and secondary school enrolment, literacy, number of schools and Universities, technical education and educational expenditure. African education was particularly neglected (see Azevedo, 1980 for a comparative study, and Table 3.3 on the following page). Even the accelerated expansion of the mid-sixties and early seventies, due to the combined pressure of the armed struggle and of international criticism, did not produce standards comparable with other African countries.

There were 3 types of schools: schools for whites and *assimilados* funded by the Government, Catholic Mission schools for the *indigenas* (Africans) about 90% supported by the Government, and few, self supporting, non-catholic Mission schools.

There was a maximum age limit to enter the final primary school examination (Grade 4) and for rural African children, who started school at an older age, and had to go through a 'rudimentary' course designed to teach Portuguese before even beginning the official 4-years course, there were few chances of succeeding. They were consequently barred from secondary schools because of tuition costs and boarding expenses in the towns, where the schools were situated. (Mondlane, 1969; M.E.C., 1980a)

Mission schools adopted the curriculum used in Portugal without any revision, and insisted on the catechism more than academic subjects; pupils were used as agricultural labour force to improve the mission

Table 3.3

 Educational Provision in Colonial Mozambique and Other Countries

	Mozambique	Other Countries
Literacy rate (1960 and 1970)	2 - 2	Tanzania 10 - 15/20 Swaziland 25 - 36 Kenya 25 - 25 Zambia 10 - 15/20 Con/Zaire 49 - 58 Angola 3 - 3
% of Population 5-19 yrs. enrolled in schools (1964)	26	Rhodesia 62 Ghana 31 Swaziland 49 Lesotho 66 Zambia 47 Angola 10
No. of University Students (1964)	357	Ibadan (1964) 1.100 Dakar (1961) 1.398 Makerere (1961) 912
% of Budget spent for Education (1961-62)	5.6	Nigeria 38.8 Zambia 19.1 Ghana 13.4 Kenya 16.9

Source: Azevedo, 1980: 195, 199, 201, 203

finances. This was known as *xipadre*, as *xibalo* was the forced labour, a common practice in the Portuguese administration (Hedges, 1982 - quoted in Marshall, 1985).

I studied at the mission, but we weren't well taught. In the first place, they taught us only what they wanted us to learn-the catechism; ... Then every morning we had to work on the mission land. They said our fathers didn't pay for our food or our school things. The mission also received money from the government, and our families paid them fees. After 1958 our parents even had to buy the hoes with which we cultivated the mission land. (Gabriel M. Nantimbo, quoted in Mondlane, 1969:72).

While even the French, whose policy was also assimilationist, revised their curricula in Africa several times to conform to local conditions, the Portuguese stuck to their policy

... for the cultural and spiritual elevation [of the natives] through the spread of Christian doctrine and education, and for national integration, through an intensive Portugalization. (Ferreira Rosa,1973:36 - my translation from Portuguese).

In 1961 Mozambique was declared a Portuguese Province and therefore an integral part of Portugal - not a Colony - to avoid U.N. and international pressure; as all Africans became full Portuguese citizens, they would share the same curriculum and syllabus with their compatriots in mainland Provinces: under the map of Mozambique, divided into the main ethnic groups, was the caption: ' Mozambique is Mozambique only because it is Portugal' (Paul,1975:92).

3.2.2 The educational policy of *FRELIMO*.

The Second Congress of *FRELIMO* in 1968 saw the victory of the revolutionary line against the reformists. The contrast was particularly felt in the area of education, with the closing of the only *FRELIMO* secondary school, then still in Tanzania; this slowed down the training of cadres, but allowed a clarification of policies, and a more radical characterization of education along socialist principles.

As the armed struggle progressed, *FRELIMO* schools multiplied and experience was gained in educational work: education was linked to production and the community, women's emancipation was actively promoted, schools were to be run as democratic centres, and all those who were literate had to teach others, even if they were only a few lessons ahead of their pupils. Particular attention was given to the political education

of the teachers. The principle of 'counting on our own resources' was imperative, as school buildings, books, pens, chalk and maps had to be improvised out of local materials. By the end of the armed struggle, 'more than 30.000 Mozambicans had received primary-level or literacy training inside liberated Mozambique' (Marshall,1985:166).

At Independence, the new Government was confronted with a dramatic situation: the staggering 93% illiteracy rate may be taken as a symbol of the colonial legacy well beyond the educational domain. The primary concern was to dismantle the colonial system and spread the new model of education through the whole of the country (Ganhão,1978). *FRELIMO* had by then a considerable experience in education, gained, however, in the very particular socio-political context of the liberated territories.

The Bill for the nationalization of all types of schools was one of the first passed 'to facilitate the building throughout the country of an educational system oriented and directed by the Party and the State'(Ganhão,1978:33): this meant the end of racially discriminatory types of schools, of inequalities in the distribution of resources and teachers, and of the Catholic Church's monopoly over African education. Religious instruction was eliminated from the curriculum. (C.E.A.,1984)

The enormous expansion of education is documented in Tables 3.4 and 3.5 and in Figure 3.2. in the following pages.

Curricula had to be changed, and textbooks written, as hundreds of teachers and missionaries returned to Portugal, and enthusiastic but young cadres were confronted with the task of administering the system for the whole country with a chronic lack of resources and qualified personnel. Politically more important, education was to create the 'New Man', who would transform Mozambique into a Socialist Country (Vieira,1979). In the first years of 'crisis management' the basic structure of the colonial system was retained (Johnston,1984:23), while massive literacy and teacher education programmes were carried out: the illiteracy rate dropped from 93% (1975) to 72% (1980 - C.N.P.,1985).

The political pressure for education was high, but in 1980 the Government had to take the unpopular decision to limit the enrolment of pupils, as teachers were in short supply and could not cope with dramatically overcrowded classes and double shifts

Table 3.4

School Enrolment in Mozambique in Selected Years, 1975-1984

Year	Primary	Secondary	Technical	Higher
1975	671,617	26,354	8,891	2,433
1976	1,276,500	37,255	n.a.	1,251
1978	1,426,282	67,416	n.a.	1,177
1979	1,494,729	92,815	13,008	1,588
1982	1,333,050	94,411	13,438	1,112
1984	1,303,650	123,398	12,836	1,151

Table 3.5

Number of New Graduates and Teachers in Mozambique in Selected Years

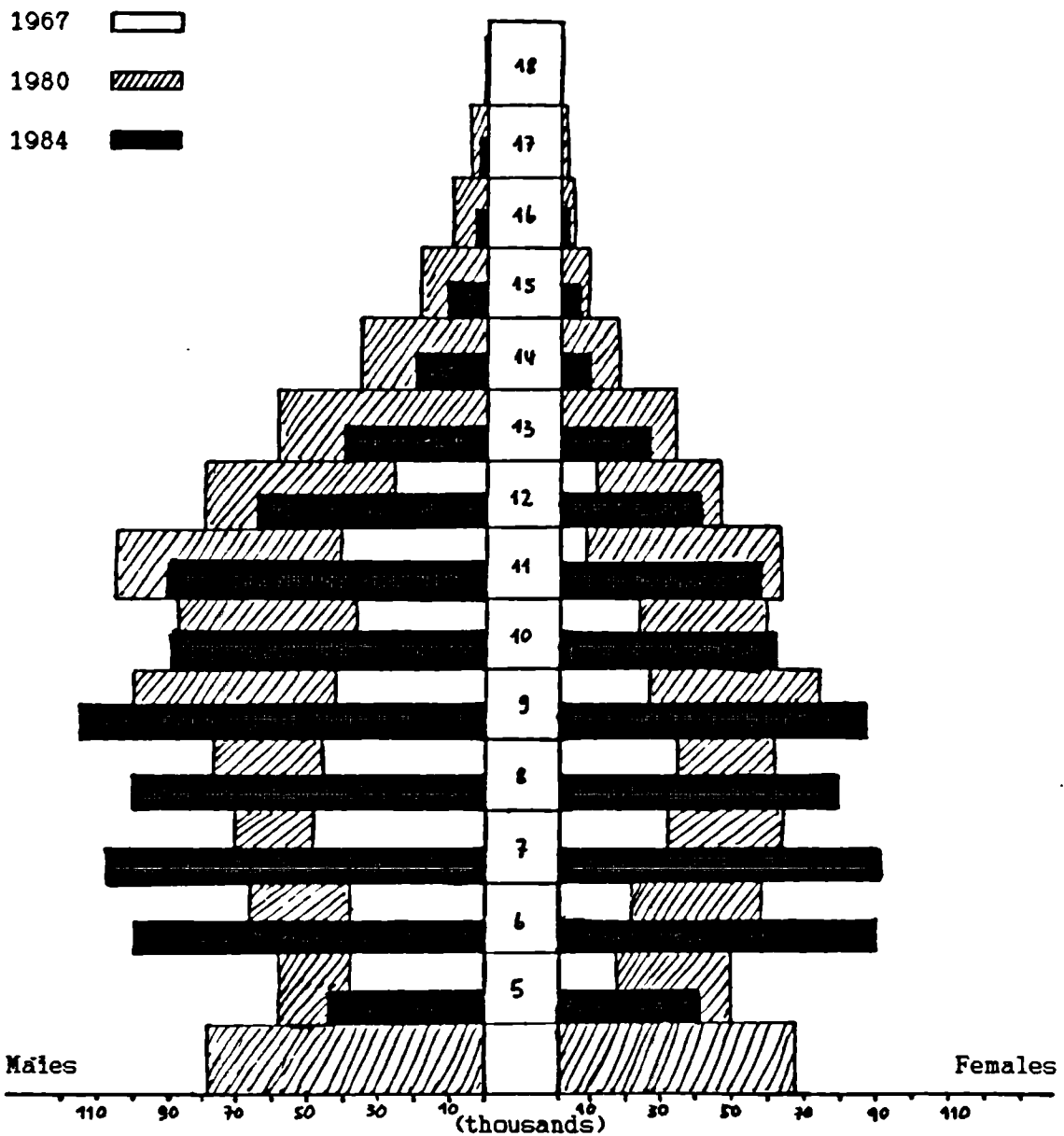
	1975	1981	1983
No. of Graduates			
Primary School	19,660	83,393	65,225
Secondary School	4,395	18,346	16,172
Technical Schools	n.a.	2,805	2,479
Higher Education	56	133	67
No. of Teachers			(1984)
Primary School	10,281	18,751	21,045
Secondary Schools	n.a.	2,211	3,066
Technical Schools	n.a.	907	949

Source for both Tables : C.N.P., *Comissão Nacional do Plano*, Maputo, 1985.

Figure 3.2

School Coverage by Sex and Age Group in Mozambique in Selected Years

School Age Pyramid



Source: Johnston, 1984:40 for years 1967 and 1980
 Personal communication for 1984

3.2.3 Primary Education and its Teachers

In 1980 work began on the elaboration of the new National Education System (S.N.E.) which was to start in 1983. The SNE envisages 7 years of compulsory schooling for all, starting from the age of 7 (or earlier if so wished, as in the case of town children).

Schools function in three shifts, the 3rd shift being for evening classes. The maximum number of children per class should be 75, with a national teacher-pupil ratio of 1:55 (1:88 before 1980) (Johnston,1984). The medium of instruction is Portuguese from the beginning of Grade 1. At the end of each year the pupils have to pass an exam to be admitted to the following year.

... the Ministry of Education calculates that 12% of 1st grade entrants complete 4th Grade in four years. ... Repetition rates for 1st and 2nd Grade are around 30%. (Johnston,1984:47 and 48).

In 1983 the pass rate from 1st to 2nd Grade was 61% (1982 = 51%) and from 2nd to 3rd Grade was 65% (Machel,G.,1985a)

In evaluating repetition and drop-out figures, it is important to consider other factors before going into pedagogical reasons:

- 1982 is considered the last year when education, and indeed the whole country, was not severely affected by the drought and the war (Machel,G.,1985b) : by mid-1984, 840 schools were destroyed or damaged by the counter-revolutionaries (Machel,1984:52) and by the end of the year 280.000 children were unable to continue their classes (Machel,G.,1985a);
- children, especially in rural areas, miss school very often, for a number of reasons such as poor health, families needing them to work at home, absence of teachers, long distances to walk to school; parents may interrupt their studies to send them to initiation ceremonies involving appropriate preparation;

- girls are still removed from school when they reach puberty, although the percentage of girls in primary schools went up from 33.9% in 1975 to 43.2% in 1984 (Machel,G.,1985b), a result of the commitment of *FRELIMO* to promote the liberation of women from the double oppression of traditional and colonial attitudes (Mugomba,1980; Urdang,1985; Isaacman and Stephen,1984);
- many children are undernourished and too weak to engage in school work. Teachers may be in the same condition;
- the material conditions of many schools, mostly rural, are completely inadequate in terms of buildings, sanitation, furniture and equipment. Textbooks, exercise books and pencils, distributed by the Ministry central planning offices, do not always reach the village schools, even if great efforts are put into overcoming disheartening transport problems.

Subjects of study in the primary school are Portuguese, Arithmetic, Manual Work and Production, Physical Education in the 1st Grade, with History, Geography, Natural Sciences and Political Education being introduced in later years. Materials are being produced so that every year a new grade of the SNE is introduced, a new syllabus, Teacher's Manual and children's textbooks are available.

Teachers are regarded as the key factor in Education (Machel,1981). The number of teachers trained since Independence documents well the effort of the Government (14,355, between 1976 and 1983 - *C.N.P.*,1985) , but the scarcity of graduates available for teacher education and the ever increasing requirements of schools still leave the percentage of untrained teachers in primary schools at 64% in 1981 (Johnston,1984:44); for Grade 5 and 6 only, the percentage of untrained teachers was 46% in 1984 (Machel,G.,1985b). 75% of the teachers are aged under 30 (Jonhston,1984).

The definition of 'trained teacher' in official statistics is sometimes confused by the fact that many, varied refreshment courses and in-service programmes have been carried out since Independence, many in the form of crash courses to face urgent upgrading requirements. In the 17 Teacher Training Centres for Primary Education (Grades 1 to 5) in operation,

trainees were admitted with a minimum qualification of completion of Grade 6 schooling themselves, for a 1 year course. From 1983, according to the SNE, trainees with the same entry qualifications will stay on the training course for 3 years, during which they will also acquire higher academic qualifications. Eventually, trainees will be admitted only if they have finished grade 10 (N.E.C.,1981).

The Centres are located in all the provinces and have a local intake. They also function in difficult logistic conditions and with shortage of materials and qualified trainers. According to an independent study, teaching methods in the Centres themselves are generally authoritarian and dogmatic, with little time devoted to teaching practice, and the Centres fail to educate teachers to be agents of transformation in the rural areas (*Centro de Estudos Africanos*,1984).

The low academic qualifications of both untrained and trained teachers are in themselves a severe limitation on any development; mastery of Portuguese is often inadequate, and literature consists in notes taken during workshops or courses.

Teaching is not a prestigious profession: trainees are often placed in Teacher education courses against their will (as many would prefer to continue academic courses), pay is low and conditions of work, accommodation and amenities in the rural areas very off-putting; prospects of higher training or promotion are subordinate to higher academic qualifications unobtainable outside towns. A programme of distance teaching for rural teachers, in preparation, should improve some of these conditions. Upon completion of courses, teachers are assigned to schools according to a central planning system.

In both primary schools and Teachers' Centres, the problem for the teachers seem to be basically the same: low qualification / training / motivation and scarcity of resources lead easily to a non-creative teacher-centred approach to learning.

3.3 Language learning in the 1st Grade

Most children in rural areas of Mozambique enter Grade 1 at age 7 with native competence in L1 and little or no previous exposure to Portuguese, which is nevertheless the only medium of instruction and the language in which they acquire literacy. The curriculum and syllabus are centrally planned, as are school regulations and the provision of all educational materials; the National Institute for the Development of Education (I.N.D.E.), which is the Ministry of Education Research and Curriculum Centre, publishes the textbooks and the related Teacher's Manuals for each grade. These books, often the only literature in the hands of the teachers, effectively disseminate the methodology that has been researched and approved for the 'teaching and learning process' of all subjects.

The Teacher's Manual for the 1st Grade (INDE/NEC, 1983) consists of six volumes with a total of 635 pages, and it is companion to the two-volume pupil's textbook. It gives step-by-step guidelines where classroom activities are exemplified in the greatest detail for each and every day of the school year. Its language and style are very simple and all teachers attend courses or workshops on its use. This extreme form of intervention by the Ministry is not meant to be a device for control, but rather an effort to counterbalance the poor training of the teachers, and to support both their performance and morale. As such, it is welcome and appreciated by the teaching profession.

The Teacher's Manual for Grade 1 opens with a presentation of the educational objectives for the year, and a brief explanation of the methodology of language teaching and learning. Portuguese is recognized as L2:

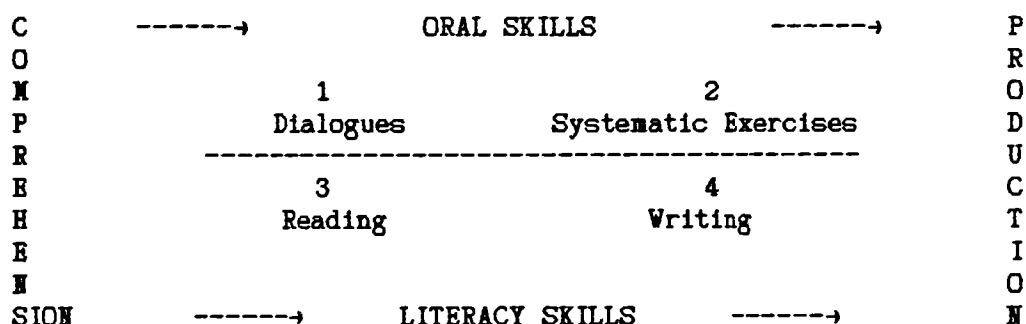
The SNE suggests a new methodology for the teaching of Portuguese, the language of national unity in Mozambique. For the

majority of the children beginning school, Portuguese is a second language. Because of this, its learning will have to be different. [i.e., from the way it is learnt at school by native speakers] (INDE/NEC,1983; TM 1:2)

According to the Teacher's Manual, 'on completing Grade 1 the pupils should be able to use Portuguese in situations related to the life of the school, the community and the area where they live' (INDE/NEC,1983,TM1:8), in particular they should be able to:

- . understand and use about 400 words;
- . understand and use about 50 [grammatical] patterns in communicative situations;
- . express concepts of space and time;
- . enact the dialogues [of the textbook];
- . know the 19 graphemes studied, through key words;
- . write, in running handwriting, words and short sentences using the graphemes learned;
- . read words and short sentences written in running handwriting and type;
- . copy words and short sentences from a model, in order to improve handwriting;
- . use capital letters at the beginning of sentences and names.

It is explained that when the language of instruction is not the child's L1, oral communication skills in L2 have to be 'taught' : oral comprehension is developed through the dialogues presented in the textbook, and oral production through systematic exercises (i.e., controlled oral practice) and dramatization, according to the following model: (INDE/NEC,1983,TM 1 14)



The dialogues are considered the base for the development of oral communication skills; they are texts of conversations between children, peers and adults illustrated with pictures, and present events of day-to-day family and community life (see list and examples in Annexes 3.2 to 3.5). They aim at giving samples of genuine language interaction in L2. Lexicon and structures introduced in the dialogues are to be consolidated through controlled oral practice. Oral skills are to be developed before and alongside the introduction of literacy; reading and writing instruction begins in Unit 8, that is at the beginning of the 14th week of school.

This is the sequence of classroom activities recommended to develop oral skills throughout the 1st year (cfr. *INDE/NEC*, TM 1:14-19):

1. The teacher introduces the pictures (in posters or in the textbooks) illustrating the dialogue, and reads it twice, pointing to the characters;
2. he identifies and labels the things, people, animals etc. in the pictures, using gestures or real objects;
3. he explains the new words or grammatical patterns;
4. having understood the dialogue, the pupils repeat its sentences with the correct intonation;
5. the pupils repeat the dialogue in the correct sequence with the help of the pictures, in order to memorize it;
6. the pupils use lexicon and structures of the dialogue in a small drama session, so that learning is consolidated;
7. the teacher uses the dialogue for controlled oral practices (questions, games etc.) so that pupils will apply the acquired lexicon and structures to different situations (systematic exercises).

This methodology presents some difficulties for children without previous exposure to the L2, and point 3 in particular is very problematic. According to the Manual, the teacher gives the explanation in Portuguese, providing a variety of gestual, vocal and visual clues to the interpretation of the situated meaning of the new words he introduces. It is acknowledged that many teachers do use the children's L1 or a lingua franca in their explanation, although this is never offered as a

suggestion in the Teacher's Manual. There is apparently a range of different attitudes on the part of the teacher educators and supervisors about this practice, from ignoring it to considering it an open secret, or accepting it as the last resort. It remains a controversial issue also in in-service training courses or workshops, and this may prevent discussion based on teachers' real experience.

Another reason for concern is point 6, or the dramatization of dialogues. This is often interpreted by the teachers as rote exercise, so that no alteration of the text is allowed. On the other hand, it is difficult to expect children to 'express in creative form the events presented in the dialogue' (INDE/NEC,1983 TM 1:17) when the only verbal communicative means allowed are the few new words they are supposed to learn in steps 1 to 5. Parrot-like acts, or silence, are likely even if comprehension were achieved, because of the limited number of alternatives at hand.

The failure of many children to develop oral and written skills in Portuguese is the result of a number of interconnected factors, 'the most important of which are of a material nature and can only be superceded gradually in accordance with the socio-economical development of the country' (Meijer,1984:7). Therefore, when considering classroom teaching strategies, it is essential to retain the overall picture of teachers and administrators struggling every day to overcome logistic and manpower hurdles of proportions unknown in the industrialized world.

3.4 The I.N.D.E. Project

The *Instituto Nacional do Desenvolvimento da Educação* is the Ministry of Education Institute for Curriculum Development and Educational Research in Mozambique. It is based in the capital Maputo; its staff are specialists in curriculum, teachers and researchers from Mozambique and many different countries. The Institute receives financial assistance from UNESCO.

Low pass rates at primary school level have always been a cause for concern, and the acquisition of literacy in a L2 has been singled out as one of the most problematic areas to be investigated. In 1982 a Research Project was started on 'Bilingualism, Cognitive Development and Pre-school Experience of Mozambican Children', in order to:

- ... analyze the pre-school experience of Mozambican children in the communicative and cognitive use of their mother tongue ...
- ...analyze the communicative and cognitive demands of the school which the learning of Portuguese as well as its use as the medium of instruction place upon the pupils, especially in the lower grades, and to evaluate the degree of mismatch between these demands and the [home] experience.
- ... elaborate ... suggestions ... of how to profit from the child's communicative and cognitive skills developed in its L1, in order to diminish or eliminate the psycho- and sociolinguistic barriers that affect school achievement, guaranteeing a greater continuity between the child's pre-school experiences and formal education, in spite of the obvious discontinuity provoked by the transition from L1 to Portuguese. (INDE,1982:3)

It was the first large research project with a focus on language in education, and the first attempt to investigate the particular form of school bilingualism in Mozambique, by focusing on rural children's competence in L1, especially on those cognitive aspects believed to be critical for school learning; it did not question the political decision to use Portuguese as medium of instruction.

The research team was directed by G.Mejier, a linguist from the University of Amsterdam who had been working in Mozambique for some years, and included 2 young Mozambicans with a B.A. in Education, two psychologists (a Danish and an East German), and myself on a part-time basis. The project was part of the activities of the Institute; the equipment was donated by the Dutch Government.

The study adopted a naturalistic rather than an experimental approach: the method used in data collection consisted of recording episodes of the spontaneous talk of rural children at home in L1, and of teacher-pupil interaction in the first 2 years of school in L2.

The sample consisted of:

- 20 children (mean age 6.9) from a Communal Village in Southern Mozambique living with their families and speaking Tsonga as L1;
- 20 children (mean age 6.10) from a Communal Village in Northern Mozambique living with their families and speaking Makua as L1;
- 5 classrooms and their teachers (40-60 children per class) in a village in Southern Mozambique.

The children at the time of recording in their homes (March-April and June-July 1983) had started school a few weeks earlier, or were going to start a few months later. The recording of classroom interaction, carried out in October 1984, did not involve the same children but a comparable sample. The villages where the children lived had a population between 2,000 and 3,500; the families were large, with relatives and neighbours living close and sharing many outdoor activities; with the exception of one, adults were non-literate or minimally literate (using the Census definition).

The team of researchers lived in the rural villages for two months, and got to know the children and their families. Radio microphones and transmitters were sewn into garments worn by the target children, so that their talk with peers and adults could be taped by a recorder within a radius of 200 metres, while the investigators took notes on the context and on adults and children's activities. A total of 180 hours of talk in the extended family environment (4½ hours for each child) was

recorded; at school, about 30 hours of classroom interaction in Portuguese were recorded by microphones worn by the teachers and others visibly placed in the room.

The home recordings were transcribed, translated into Portuguese, and divided into utterances and episodes (see Annex 3.6 for an example of the original transcripts). The number of utterances transcribed was about 68.000, approximately half of which are Target Children's (TC) utterances. The translation was made by research assistants who were native speakers of the L1 and fluent in Portuguese, although not professional translators or linguists, and checked by a fully bilingual member of the team.

The analysis was carried out only for the data collected in the southern village in the District of Marracuene, and consisted of:

1. functional analysis of Target Children's utterances in spontaneous talk at home (20 Tsonga speaking children only);
2. functional analysis of pupil-teacher interaction at school in L2;
3. analysis of TC's complex cognitive utterances and cognitive demands on TCs in spontaneous talk at home (20 Tsonga speaking children only);
4. analysis of complex cognitive utterances and teachers' cognitive demands on TC at school in L2.

Classification systems were elaborated by the team on the basis of adaptations of Tough's and Tizard's models (Tough,1976 and 1977; Tizard,1984).

For the functional analysis of children's talk at home, the main categories used in coding utterances were:

- social functions: self-regulative; directive; relational; routines;
- cognitive functions
 - . descriptive: monitoring,labelling; describing; reporting;
 - . analytic: sequencing; associating; recognizing contradictions; explaining how, what for, why; giving reasons; drawing conclusions; generalizing;
 - . projective: predicting; anticipating; projecting; imagining;

- questions: social; descriptive; analytic; projective;
- other: reciting; repeating; etc.

For the analysis of children's complex cognitive utterances, all the utterances coded as analytic and projective, including questions and with the exception of sequencing, associating, and imagining, were considered Complex Cognitive Utterances (CCUs). The conditions under which these CCUs were produced by the Target Children were studied, noting the addressee, the form, the topic, the dynamic of interaction, the locus of reference, and the relation with the context. Cognitive Demands made on Target Children by others, that would result in TC's Complex Cognitive Utterances or not, were also analyzed under the same headings.

The classroom data were analyzed along similar lines, but the categories were adapted to the school situation:

- Teacher elicits: repetition or word completion;
reading, writing, counting;
identification, description, information;
analysis, explanation, generalization, rule;
action.
- Teacher produces: reading, counting;
identification, description, information;
analysis, explication, generalization, rule.
- Teacher organizes
interaction: acknowledgment, turn allocation;
assessment.
- Pupil/chorus respond
providing: completion, repetition;
reading, counting;
identification, description, information;
analysis, explication, generalization, rule;
confirmation.
- Pupil elicits: participation;
clarification.

The final report is not yet complete; reference here is made to *INDE*, 1984, personal notes taken and discussions had during my six-month field work in 1985. The main results of the project may be summarized as follows:

- children before entering school have developed a full range of language use. Approximately 40% of all their utterances have a social function, 37% a cognitive function (descriptive:18%; analytic:12%; projective:7%) and 12% are questions;
- children have developed in their L1 cognitive functions of language which are not expressed, used or developed at school for at least 2 years, their L2 restricting them to the use of less cognitively complex functions;
- children's linguistic production at school consists mainly of chorus replies repeating or confirming teachers' openings, while exchanges involving cognitive use of language are very rare;
- at home in L1, instances of complex cognitive uses of language occur mainly in conversations with peers (which constitute the great part of all interaction) and in half of the cases refer to future, past or non-present events; the majority (70%) are children's unsolicited contributions to the on-going conversation and not result of direct elicitation; they consist of explanations, reasons given or asked, and predictions;
- cognitive demands made on children have a question form in one third of the cases, and are posed proportionally more by adults than by peers; children respond adequately to cognitive demands in 23% of the cases, otherwise they do not reply (39%), reply inadequately (28%) or with yes/no replies (10%).

The development and follow up of the project have been severely affected by the combined effects of the drought and the war, that have disrupted many development projects in Mozambique in recent years.

The Method

4.1 Overview

Chapters 2 and 3 have indicated the main research directions relevant to the present study, and given the background knowledge necessary to place the data in context. Now the methodology will be presented, and its appropriateness discussed, in relation to the specific aims proposed in Chapter 1 (see page 20).

The study adopts a naturalistic method of data collection, which is in line with the ethnographic approach justified in Chapter 1; however, it is necessary to elaborate on:

- . why more experimental techniques have not been used to complement the naturalistic data;
- . to what extent the conditions under which the data were collected and processed guarantee their spontaneity and authenticity;
- . to what extent the sample is representative;
- . the criteria for the selection of features;
- . the reliability of the coding;
- . to what extent it is legitimate to contrast home and classroom patterns of discourse;
- . to what extent it is legitimate to use data in L1 for the learning of L2.

The methodological limitations of the study will become evident in the course of the discussion.

4.2 Problems in naturalistic research

4.2.1 Naturalistic methods

The strengths and limitations of the naturalistic and experimental methods in contemporary child language research have been widely discussed in Wells (1985, chapter 3). On closer inspection, some of the criticisms made of the experimental method apply to the other as well, the problem being, in both cases, that of making inferences about linguistic competence from a limited sample of observed behaviour. In an experimental paradigm the researcher tries to control as many external conditions as possible, while in a naturalistic paradigm priority is given to the authenticity of the speech event; nonetheless,

... the determinants of the child's behaviour ... are to be found in the total context *as the child construes it*. That is not under the researcher's control in either paradigm. ... Inferences from 'incorrect' or irrelevant responses are thus as difficult to make from test as from spontaneous data. (Wells, 1985:127)

Whatever its size, the corpus of recorded 'spontaneous' data is just a tiny sample of the linguistic abilities of the subjects, and the researcher is left to wonder how they would respond to different elicitation contexts. However, in the case of the present study the experimental alternative was not realistic given the cultural bias of the available instruments developed in the West and the lack of locally elaborated ones.

Some of the limitations of naturalistic data reviewed by Wells, on the other hand, seem more worrying in the case of longitudinal studies of the type he directed in Bristol: I refer here to the danger of overestimating the child's abilities when investigating the emergence of certain linguistic systems, the difficulty of establishing a minimum frequency as

evidence of acquisition, or the 'risk of making the opposite, false negative error - that of treating non-occurrence as evidence of non-acquisition' (Wells,1985:132). Some of these errors, I feel now, were in fact made in the *INDE* study presented in 3.4. The present study attempts to avoid these pitfalls in that it does not pretend to be a pronouncement on acquisition, only on frequency of use.

Within the naturalistic paradigm, a number of different recording techniques are available. Reynolds (1986) discusses the advantages and disadvantage of four of them in a valuable paper on Participant Observation with Children in Southern Africa, and as a result of years of anthropological work she appeals for 'consciousness of the limitations inherent in any recording technique' (p. 25) and suggests the use of combinations of them . The discussion of different recording techniques is superfluous here, given that my study is an extension of a previous investigation (the *INDE* Project), and it is based on a subset of data selected from the larger corpus of data collected for that research. The method and techniques of data collection are described in 3.4 and in the following pages.

Wells similarly concludes that the combination of naturalistic and experimental methods, ideally in a cyclical relationship within the same research, would be the best solution, for they are complementary. Indeed, this was the original design of the *INDE* project: semi-experimental situations were created by means of games and other set activities and the elicited talk recorded. But in our small *INDE* team, as in the Bristol large one, 'we did not succeed in articulating the two approaches as we intended, for the major part of our resources were taken up by the more labour-intensive collection and analysis of the samples of spontaneous conversation' (Wells,1985:128). As for my study, complementary methods of data collection, such as through elicitation under controlled conditions, or further checks using triangulation (Adelman,1981; Cohen and Manion,1985) had to be ruled out because of my insufficient competence in the subjects' L1.

4.2.2 Collection and processing of data

The main issues in the phase of data collection within a naturalistic paradigm are the authenticity and representativeness of data. These are functions of a good number of variables connected with the role of the observer in the study, like unobtrusiveness, the problem of selective inattention and the so-called 'overload' (Spradley, 1980).

If the main advantage of the naturalistic method consists in using spontaneous and not artificially elicited and produced talk as data, how can the researcher ensure the spontaneity of talk? A great deal of ingenuity has been used to avoid the 'observer paradox' in observational research. In the collection of the data used in the present study, the usual precautions were taken (Hughes *et al.*, 1979) like letting the children familiarize themselves with the equipment and the members of the research team, not using the recordings of the first day the children wore the clothes with the microphone, making children wear clothes with dummy microphones etc.

In our particular case, the presence of the research team obviously influenced the life of a rural village where novelties are rare, and 'town people', some not even Africans, are seldom seen to share the joys and inconveniences of a frugal, mostly outdoor life. So, there was great curiosity in everybody's eyes and particularly in the children's. Some recorded conversations are about or refer to the investigators and the equipment; the fact that children talked freely about it, and the sharp comments on the investigators, however, show that the equipment did not inhibit the children much.

Adults were more aware, and this is reflected in some conversations where adults clearly made the children talk. These parts were not transcribed or included in the analysis. This was an arbitrary decision, based on the investigators' categories of what 'display talk' means. In fact, these talk events may be useful in order to investigate the parents' conceptions of what constitutes 'proper talk', or their interpretations of

the research. But these issues were not explored in the study. An example of a sequence which was not included in the analysis is that of a mother asking her own child his name, where he goes to school and the like.

More problematic is the representativeness of the sample. Not so much for the selection of the subjects or the village: the 20 Target Children were all the children of the village who had been admitted to Grade 1 for the first time and had not attended the pre-school; the village was considered representative of the general socio-economic conditions of rural populations living in villages (INDE,1984). The sampling of the episodes of talk is a more complex issue, as it should cover the widest possible range of contexts. The children of the INDE study were observed and recorded at different times of the day, in a rota system, from 5.30 a.m. to 8 p.m. excluding school time, while engaged in a variety of tasks.

Processing and analysis of data confront researchers with a common problem: the legitimate use of their interpretative skills in operations like transcribing, delimiting utterances / turns / episodes, translating, and coding. The cultural distance between the subjects and the researchers may be a limitation, although not necessarily so (see 2.5.1). This distance is more evident in some investigations than others, but in fact adult investigators and young subjects very rarely share the same cultural and class background, or attribute similar meanings to events like schooling or telling stories. 'Classic' cross-cultural research 'has come home' (L.C.H.C.,1986) in that its culture-sensitive approach is recognized as much needed in any investigation. In the ethnomethodological tradition,

... the researcher does explicate how he used his knowledge as a member of the culture to categorise, clarify and give significance to the talk. (Adelman,1981:4).

Interpretation is part of the process of assigning or constructing meaning to texts and in discourse (see 2.2.2), for both subjects and investigators. The danger of imputing unwarranted meaning intentions is always present in language interaction; the investigator is particularly aware of it and tries to avoid major errors by cross-checking his

interpretation and collecting contextual clues as much as possible. However, the theoretical impossibility of coding speakers' intentions is pointed out by McTear (1985). For a deeper discussion of the use of interpretative analysis, see Wells, 1985, Chapter 2.

The logistics of the field work and the limited expertise and resources on which the *INDE* team could rely, possibly exacerbated these problems, in that not enough attention has been given to the details of context description: the identity, age, social and family relationship status of the person interacting with the Target Child remain in some cases uncertain; the activities they carry out are briefly discussed, but the referents are often missing; transcription of paralinguistic and prosodic features is sketchy and record of eye and face movement non-existent.

On the other hand, a good part of the tapes were roughly transcribed in the evening of the same day of recording by the same researchers who were taking the field notes while the children were being recorded, so that the reconstruction of the situation to interpret the talk was easy. On the basis of that first transcription and re-play, the transcripts were edited in their final form and translated into Portuguese. Great care has been taken over the accuracy of the translation (see 3.4 and page 102).

4.3 The subset of data

4.3.1 From interaction to adult-child conversations

My work for the present study consisted in an extension of the INDE project: adult-child conversations were identified as the area of inquiry, and a subset of data from the project was selected and analyzed according to the aims of the study. I was already very familiar with the main corpus of data because I had participated, on a part-time basis, in almost all phases of the INDE project, from its inception in 1982 to the conclusion of its first part (analysis of home data, July 1984) and for 6 months in 1985 (draft of the final report).

The reasons for the focus on adult-child conversation were varied and based on an appreciation of Vygotsky's theories and the line of research of Wells and Tizard:

- I wanted to see what the school might learn from the home experience of the children;
- parents and teachers interacting with children are examples of situations where adults extend the upper level of the Zone of Proximal Development;
- the culture of the population studied tends to value the intervention of the adult in learning, especially at school;
- the teacher is often the only competent speaker of the L2 in a school where children have to learn through that L2;
- the examples of verbal interaction on which the learning of L2 at school is based are mostly adult-child conversations, but no previous research had been done on their structure;
- adults' talk with children is a cheap and available resource that could be better used in education in poor countries, one field being teacher education.

I also felt that the effort and work put into the *INDE* project made further investigation of the main corpus of data worthwhile, but this had to be reduced to a size adequate to the capacities of an individual.

The criterion used in the selection of the subset of data for my study was: the Target Child had to be engaged in a conversational sequence (i.e., an episode of talk on the same subject, with a minimum of 3 turns, ended by a change in subject or by the adult or the child moving out of earshot - Tizard, 1984) with an adult (i.e. a person older than 15 or already a mother). According to an ethnographic study of a village very close to the one examined in the present study, 'the Rjonga do not consider anyone who has not several grown children to be an adult or a person' (Binford, 1971).

As only 9% of the Target children utterances were included in units that comply with such a definition, the data base was fairly reduced from the 4½ hours recorded per child and may not 'maximize the chances of obtaining an adequate representation of the speakers' repertoire' (Wells, 1985:128). It represents, however, all the instances of adult-child conversation, according to the definition, in the 90 hours of talk recorded in that village.

A sample, consisting of 20% of conversational sequences, was additionally checked by an independent (i.e. not connected with the *INDE* project) native speaker of the L1, who found the translation into Portuguese 'satisfactory'.

Given the limitations of the processed data illustrated above, and the fact that I was working on the translation with reduced chances of checking the originals in L1, some units of talk that had been identified as conversations were not included in the subset because of insufficient detail on speakers and context. My guiding principle has been that it was better to reduce the number of cases considered rather than stretching the use of interpretative analysis.

4.3.2 The analysis of adult-child conversational sequences

Once the Conversational Sequences (CSs) had been extracted and copied into cards, it was necessary to identify which were the features to be analyzed on the basis of their relevance to the aims of the study. Here the main problem has been not to fall into the double methodological error that Stubbs has criticized in educational research using linguistic data. Although Stubbs refers to studies of classroom interaction, much of his criticism can be extended to other studies using naturalistic observation of talk for educational purposes :

I am, then, using the term 'unprincipled' to refer to studies in which surface features of language [in use] are picked out at random and not related to underlying linguistic statements or descriptions. ...

First: linguistic items are selected, usually with no explicit justification, from several different levels of language [i.e. lexis, syntax, semantics, language function, discourse].

Second: these items ... are then often related directly to social-psychological categories, rather than being first *related to the linguistic and sociolinguistic systems and structures in which they are terms*. (Stubbs, 1981:117)

In my study, the second consideration does not seem to apply, as linguistic features are not taken as evidence of cognitive or social characteristics of phenomena other than the discourse itself (examples of wrong inference reported by Stubbs are the use of pronouns said to be evidence of children's intellectual orientation or teachers' style of social control).

The first seems to apply if one takes a look at the codebook, where linguistic features like 'function of utterance', 'form of interrogatives' and 'complexity of reply' belong to the same list as 'dynamic of interaction', i.e. a discourse-level consideration. However, as the study is primarily on discourse patterns, the dynamics of the interaction have a predominant role, while other features are examined in relation to that. As an example, the function of utterances has been classified because it only serves to pin-point particular categories whose importance for discourse structure is discussed; similarly, the complexity of reply is

relevant in that it is related to the distribution of turns. This argument also explains the extreme simplification of some categorizations (variables): as an example, for a study aimed at a functional analysis of utterances, the 26 mutually exclusive alternatives (values) would be insufficient.

Studies in conversation analysis always differentiate between Structure, Process and Principles of conversation. In this study the focal point has been the sustaining of conversation because it was considered important for the development of fluency in L2 practice (see 4.5).

The elaboration of the coding system for this study (see Codebook at page 107) brought the same problems that are usually connected with this type of instrument, and which are systematically exposed in Wells, 1985, chapter 2. The principle of allowing only one coding per item (the dominant value) has been adopted even if it is unnecessary in principle (Wells, 1985:87) and cumbersome in practice. A major limitation of the analysis is that no independent reliability checking was possible. Despite sustained efforts, I was unable to find a Tsonga and/or Portuguese-speaking person with some experience in linguistics who would code part of the transcripts in order to check my own coding. A limited checking was done using the same computer programme employed for the elaboration of the data: a sample of 300 utterances that had been given the same values was examined and found sufficiently homogeneous.

The coded data were fed into the University of London mainframe computer, and the S.P.S.S.(X) programme was used for the statistical elaboration. This was kept as elementary as possible, considering the nature and limitations of the data, and consisted in frequency counts, crosstabulations and lag analysis.

4.4 The Coding System

4.4.1 Definitions

CONVERSATIONAL SEQUENCE (CS)

'An episode of talk between a target child (TC) and an adult on the same subject, ended by a change in subject or by the adult or child moving out of earshot'

TURN

'The communicative message sent by one of the speakers before another speaker switches from the role of addressee to that of sender' (adapted from Williams et al., 1981:332).

Both verbal and vocal nonverbal messages are considered.

A turn may consist of one or more utterances.

UTTERANCE

'One independent unit of verbal / vocal communication, as part of or constituting a turn.'

Turns and Utterances are identified as defined in the original transcripts of the main corpus of data; CSs were defined and identified in the subset of adult-child CSs. Units were identified in the process of coding.

UNIT

'A stretch of turns in a Conversational Sequence between 2 or more participants, initiating with a Request by the speaker who will retain control of the unit by means of sustaining the interaction'.

A unit ends when another speaker acquires control and sustains the interaction or when the interaction ends.

CS may consist in 1 or more units.

As long as the sequence 'Request-Response-Confirmation' is maintained in the interaction without switch of initiative, the 1st speaker is 'sustaining' the unit. (See example on following page).

In a Unit, the following moves are identified:

REQUEST MOVE

The act of seeking information/explanation/clarification from, or control over, the addressee.

May or may not be in interrogative form.

The Request is acknowledged as such by the addressee in that a Response is provided.

REPLY MOVE

The addressee's act of acknowledging an act as Request and giving information/explanation/clarification, or performing the action, or probing with further questions .

CONFIRMATION MOVE

The addresser's act of acknowledging that a response has been given by the addressee, by commenting on it and/or proceeding with further Requests.

CS 14.06, 1 to 15 Participants: T=TC's aunt, TC=Target Child Antonio

- | | | | |
|----|----|---|---|
| 01 | T | <i>That small sugar cane that was inside here, was it taken ?</i> | |
| | | | unit and CS starts here, T sustaining interaction |
| 02 | TC | <i>Where?</i> | unit continues |
| 03 | T | <i>Here!</i> | " " |
| 04 | TC | <i>Eh! [no]</i> | " " |
| 05 | T | <i>You took it</i> | " " |
| 06 | T | <i>But it isn't there any more!</i> | " " |
| 07 | TC | <i>Ah! You're lying, auntie</i> | unit ends here |
| 08 | TC | <i>Inside here?</i> | new unit starts, TC sustaining |
| 09 | T | <i>Yes, it isn't there</i> | unit continues |
| 10 | T | <i>I'm going to see, perhaps it's inside the house, there</i> | |
| 11 | TC | <i>Get it open, and look for it</i> | unit continues |
| 12 | T | <i>I'm going to look, yes!</i> | unit continues |
| 13 | TC | <i>Are you going there?</i> | " " |
| 14 | T | <i>Where?</i> | " " |
| 15 | TC | <i>To the shop</i> | end of unit and CS |

Table 4.1

The Codebook

Column 1	Column 2	Column 3	Column 4
No. of Child TCN	No. of CS CSN	No. of utterance UTN	No. of Utterance in CS UCN

Column A	Column B	Column C	Column D
SPEAKERS SPK	CONTEXT CTX	DYNAMIC OF INTERACTION DYN	FUNCTION
1= Adult to TC	1=Isolated Utterance the Utt.constitutes a turn	1=Request Move,initiating a Unit	1.1=Seek informa here and no
2=TC to Adult			1.2=Seek infor past/fut/?
3=TC to child	2=Utter. is part of turn is accompanied by other utt.as explanation/elab.	2=Request Move, non initiating a Unit	1.3=Seek ack info pr
4=child to TC	4=unclear	3=Reply Move, Request	2.1=Seek @ behav
5=child to ?	5=Utter. is part of turn but not as in 2	4=Conf.Move, Request	2.2 Seek
6=Adult to ?		5=Rq.Move,Rq repeated as Rp to clarif. Rq.	3.1=See?
7=TC to ?		6=Reply Move, Response	3.2=Ar
8=child to Ad.		7=Reply Move,Rp. after a clarificat.exchange	3.3=?
9=Ad. to child		8=Utter. concluding a Unit	4.1
0=Unclear		9=Conf.Move, Statement	4.
		0=Unsolicited contribu- tion by other speaker	4
		11=Rq initiating a unit and a CS	

4.4.2 The Codebook

Columns 1 to 4 are the case identifiers:

Column 1 - Number of TARGET CHILD - TCN - From 01 to 20

Column 2 - Number of CONVERSATIONAL SEQUENCE - CSN - From 01 to last N
of Conversation per TC

Column 3 - Number of UTTERANCE - UTN - As in the original transcripts

Column 4 - Number of UTTERANCE IN THE CS - UCN - From 01 to last N of
utterance in CS

Columns A to G are the Variables considered in the coding. For each variable, a brief description and examples for its Values (on the left hand side) are given.

Column A - SPEAKERS - SPK -

-
- 1 = Adult addressing the Target Child
 - 2 = Target Child addressing an Adult
 - 3 = Target Child addressing another child
 - 4 = Child other than the TC addressing the Target Child
 - 5 = Child addressing an unidentified speaker
 - 6 = Adult addressing an unidentified speaker
 - 7 = Target Child addressing an unidentified speaker
 - 8 = Child other than the target Child addressing an Adult
 - 9 = Adult addressing a child other than the Target Child
 - 0 = Speaker unidentified

Column B - CONTEXT - CTX -

The purpose of this variable is to describe the position of the utterance in relation to the turn of the speaker.

1 = Isolated Utterance: the turn of the speaker consists of just 1 utterance.

2 = The utterance is part of a larger turn; in the turn there is another utterance, preceeding or following, which provides explanation, elaboration or comment, as in:

CS 09.06, 02-04

02 Grmother *isn't [like] that one?* (1)

[looking at a passing airliner]

03 TC *it isn't [like] that* (2)

04 TC *we didn't board one like that* (2)

5 = The utterance is part of a turn, but the other utterances are not explanations, elaborations or comments.

Column C - DYNAMIC OF INTERACTION - DYN -

This variable describes the position of the utterance in relation to the others, and the column will be read vertically (adapted from Mishler, 1978; see definitions page 105).

11= Request Move, utterance initiating a Unit and a Conversation.

This is the utterance that marks the beginning of a conversation.

1 = Request Move, utterance initiating a Unit.

This utterance marks the switch in dominance, at a certain point during the conversation. Previous value in the same variable is always an (8).

2 = Request Move, utterance is a request or statement but does not initiate a unit, as in the following example:

CS 01.14, 01 to 04

01	T Child	<i>Daddy!</i>	(11)
02	T Child	<i>they are calling you!</i>	(2)
03	Father	<i>What?</i>	(3)
04	TC	<i>they are calling you!</i>	(5)

- 3 = Reply Move that is itself a request: the addressee responds with a question (see 5.3). In many cases it is a clarification request, as in the example above, but not always.
- 4 = Confirmation Move, utterance is a further request. The speaker sustaining the conversation acknowledges the previous response and uses his turn to place another request (a turnabout utterance), as in CS 02.06 below
- 5 = Request Move, utterance is a request repeated because the addressee asked a clarification request, as in the example above
- 6 = Reply Move, utterance is a response, as in the example below.
- 7 = Reply Move, utterance is a response after a clarification exchange, as in the example below.

CS 02.06, 01 to 06

01	Mother	<i>When you saw them, had they already eaten the sweet potato?</i>	(11)
02	T Child	<i>[do you mean] brother Phanso?</i>	(3)
03	Mother	<i>yes</i>	(9)
04	T Child	<i>when I saw him they had already eaten it</i>	(7)
05	Mother	<i>and did they leave a bit of it for you?</i>	(4)
06	T Child	<i>they only left me Santinho's [potato]</i>	(6)

- 8 = Utterance concluding a Unit or a Conversation.
When concluding a unit it signals that the speaker lost his dominance and the sustaining role is taken up by the other speaker. See as example CS 07.12, page 119)
- 0 = Unsolicited contribution by other speaker, who intervenes in the conversation.

Column D - FUNCTION -FUN -

(1) to (4) indicate utterances that SEEK or SOLICIT information/explanation/control/clarification through requesting the other speaker to provide information/explanation/ clarification or to perform an action.

(6) to (9) indicate utterances that GIVE information/explanation/clarification/comment on action, not necessarily as a response to a request.

1.1 / 6.1 = Seek/give information related to events, things or people that are part of the setting around the speakers.

1.2 / 6.2 = Seek/⁴ information related to events in the past, or in the future, or distant, or hypothesis about events, as in:

CS 03.04, 01 to 04

01	Mother	<i>Whose mat is this?</i>	(1.1)
02	T.Child	<i>I don't know</i>	(6.1)
03	Mother	<i>who gave it to them?</i>	(1.2)
04	T Child	<i>must have been 'mana' Cineta</i>	(6.2)

1.3 / 6.3 = Seek/give acknowledgment of information already provided, as in:

CS 06.20, 08 to 12

08	Father	<i>Did you get them at the station?</i>	(1.2)
09	T Child	<i>yes</i>	(6.2)
10	Father	<i>oh yes?</i>	(1.3)
11	T Child	<i>yes</i>	(6.3)
12	T Child	<i>inside the carriage</i>	(6.2)

2.1 / 7.1 = Seek/give explanation, reasons for people's behaviour, as in:

CS 16.14, 03 to 06

03	T Child	<i>So, where are you going?</i>	(1.2)
04	Mother	<i>why [do you say so] ?</i>	(2.1)
05	T Child	<i>because you're having a bath!</i>	(7.1)
06	Mother	<i>Come on!</i>	(9.3)

2.2 / 7.2 = Seek/give explanation of a phenomenon per se, independently of who carries on the action (generalizations), as in:

CS 13.04, 08 and 09

08 Neighbour *And what's '7'?* (2.2)

09 T.Child *it's 'sete' [in Portuguese]* (7.2)

3.1 = Seek the performance of an action by the hearer

3.2 = Seek permission to perform an action

3.3 = Solicit attention

4.1 = Seek clarification, non-specific request, ex: 'what ? huh ?'

4.2 = Seek clarification, request for repetition of a particular word,
i.e.: 'get that chair' 'that what ?'

4.3 = Seek clarification, specification asked but no guess attempted,
i.e.: 'give them the biscuits' 'to whom ?'

4.4 = Seek clarification, specification asked by guessing the possible
answer, i.e.: 'where did you get this ?' 'the thread ?'

8.1 = Give Clarification, total repetition of the previous utterance

8.2 = Give Clarification, reduction, repetition of part of the previous
utterance, as in:

CS 14.06, 01 to 03

01 Aunt *That sugar cane that was inside here,
was it taken?* (1.2)

02 T.Child *where [was it]?* (4.3)

03 Aunt *here!* (8.2)

8.3 = Give Clarification, elaboration, repetition of previous utt. with
added information, as in:

CS 06.08, 23 to 25

23 T.Child *If you want I can fetch it to show it to you*
24 Aunt *the skirt you're talking about?* (4.4)

25 T.Child *yes, the short one* (8.3)

8.4 = Give Clarification, repetition of previous utterance, with variations:
substitution of words or reordering of sequence, as in :

CS 04.02, 01 to 03

01 Mother *Make some tea!* (3.1)

02 T.Child *what?* (4.1)

03 Mother *you have to make some tea!* (8.4)

8.5 = Give Clarification, yes or no confirmation, as in;

CS 06.06,54 to 56

54 Mother *And why did you come back?* (2.1)

55 T.Child me? (4.3)

56	Mother yes	(8.5)
----	------------	-------

57 T.Child *I've got to study!* (7.1)

9.1 = Give comment on other people's actions or behaviour
i.e.: 'you're lying'

9.2 = Give comment on action while performing it,
i.e.: *I can't get the water from the tank* [while trying to]

9.3 = Give acknowledgment, as in CS 16.14, 06 (page 111).

(adapted from Dore,1979 and Garvey,1979)

Column E - FORM - FOR -

Applies only to: Requests for Information, Explication and Action FUN 1.1 to 3.3)

1 = Polar Interrogatives, questions structured so that a minimal reply (yes or no) is expected from the addressee.

2 = Disjunctive Questions, the speaker gives the choice between two alternatives, as in:

CS 06.20, 03 (Father sees his child with some fruits, and asks:)

03 *did you get or buy them ?*

3 = Open Question, unstructured question, the speaker is open to any form of reply, e.g.: *where did you get this ?*

4 = Non-interrogative: statements with illocutionary force of request (mostly imperatives)

5 = Non-interrogative where an explicit interrogative form is added, as in:

CS 06.30, 13

13 Mother *You know him, he's the grandchild of Mwambalani, isn't he?*

Column F - INFORMATION VALUE - INF -

Applies only to: Requests for Information and Explanation (FUN 1.1 to 2.2)

1 = Test Question, verbal reply expected, information is known by questioner

e.g.: see CS 07.12 page 119, line 28, and page 156.

2 = Real Question, expects verbal reply, information is not known by questioner.

3 = Rhetorical Question, does not expect verbal reply, information is known by both questioner and answerer, as in:

CS 09.27, 06

06 Grdmother *And you, if you want to finish all the little sugar [we have], what will you have tomorrow?*

COLUMN E - COMPLEXITY - COM

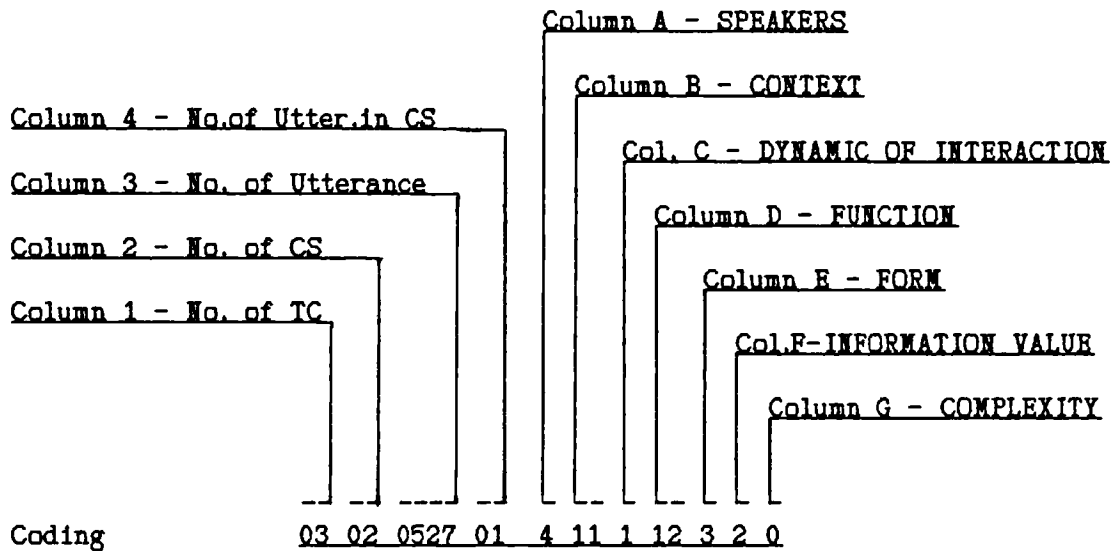
Applies to Replies only

1 = Low Complexity Reply, 1 word or incomplete word, or *I don't know*, or non-lexical terms

2 = Middle Complexity Reply, more than 1 word up to a complete clause —

3 = High Complexity Reply, an elaborate sentence with subordinate clause

Example 1: CS 03.02



Speakers: Georgina (Target Child), her mother, and R.(another child).

Context: Georgina has just come back from the market.

Afternoon, in the yard near Georgina's house.

03 02 0527 01

R.(Child) *I wonder what they've got
(for sale) at the shop*

4 1 11 12 3 2 0

Child to Target Child
Utterance constitutes a turn
Request Move initiates a unit
and a CS
Seeks information, hypothesis
Open interrogative
Real question
Non applicable

03 02 0528 02

Mother *At the co-op?*

9 1 0 44 0 0 0

Adult to child
Utterance constitutes a turn
Unsolicited contribution
Seek Clarification, guessing
Not applicable
Not applicable
Not applicable

03 02 0529 03

R.(Child) *Yes*

8 1 5 85 0 0 1

Child to Adult
Utterance constitutes a turn
Request Move, request repeated as

	<p>reply to clarificat. request Gives clarificat., confirmation Not applicable Not applicable Low complexity reply.</p>
<p>03 02 0530 04 Georgina <i>They've got kangas</i></p>	<p>3 1 8 62 0 0 2 Target Child to child Utterance constitutes a turn Utterance concluding a unit Gives information about a distant event Not applicable Not applicable Middle complexity reply</p>
<p>03 02 0531 05 Mother <i>They've got kangas?</i></p>	<p>1 1 1 42 0 0 0 Adult to Target Child Utterance constitutes a turn Request Move, initiates a unit Seeks clarification, specific repetition Not applicable Not applicable Not applicable</p>
<p>03 02 0532 06 Georgina <i>Yes</i></p>	<p>2 1 6 85 0 0 1 Target Child to adult Utterance constitutes a turn Reply Move is a Response Gives clarification, confirmation Not applicable Not applicable Low complexity reply.</p>
<p>03 02 0533 07 Mother <i>Where?</i></p>	<p>1 1 4 13 1 3 0 Adult to Target Child Utterance constitutes a turn Confirmation Move is a request Seeks confirmation of informa- tion previously given Polar interrogative Rhetorical question Not applicable</p>
<p>03 02 0534 08 Georgina <i>At the coop</i></p>	<p>2 1 6 63 0 0 2 Target Child to adult Utterance constitutes a turn Reply Move is a response Gives information previously given Not applicable Not applicable Middle complexity Rp.</p>

03 02 0535 09		1 1 4 12 3 2 0
Mother	<i>When (on what day)</i>	Adult to Target Child
	<i>did they arrive?</i>	Utterance constitutes a turn
		Confirmation Move is a Request
		Seeks informat. about past event
		Open interrogative
		Real question
		Not applicable
03 02 0536 10		2 1 6 62 0 0 3
Georgina	<i>(They are)the ones that</i>	Target Child to adult
	<i>arrived by tractor</i>	Utterance constitutes a turn
		ReplyMove is a response
		Gives informat. about past event
		Not applicable
		Not applicable
		High complexity Rp.
03 02 0537 11		1 1 4 12 1 2 0
Mother	<i>Hadn't they already</i>	Adult to Target Child
	<i>sold (them)?</i>	Utterance constitutes a turn
		Confirmation Move is a request
		Seeks information about past event
		Polar interrogative
		Real question
		Not applicable
03 02 0538 12		2 1 6 63 0 0 1
Georgina	<i>Yes</i>	Target Child to adult
		Utterance constitutes a turn
		Reply Move is a Response
		Gives information,confirmation
		Not applicable
		Not applicable
		Low complexity Rp.
03 02 0539 13		1 1 4 12 1 2 0
Mother	<i>And then did they say</i>	Adult to Target Child
	<i>that they'll be selling</i>	Utterance constitutes a turn
	<i>them today?</i>	Confirmation Move is a request
		Seeks information about past event
		Polar interrogative
		Real question
		Not applicable
03 02 0540 14		2 1 8 63 0 0 1
Georgina	<i>Yes</i>	Target Child to adult
		Utterance constitutes a turn
		Utterance concluding a unit
		Gives information,confirmation
		Not applicable
		Not applicable
		Low complexity Rp.

Example 2 : CS 07.12

Speakers: E = Ernesto (Target Child), GM = Grandmother

Context: E. is looking at the pictures of his school book, and 'reads' them to the old lady.

Afternoon, in the yard

Note: underlined words are in Portuguese in the original text, the rest are in Tsonga.

Joana and Paulo are characters in the textbook.

Full coding on the following page, right hand side.

- 01 E His mother Joana says come in. Paulo
- 02 E [and he] says thank you
- 03 GM it's not Mpaulo, it's Paulo
- 04 E what I'm saying is Paulo
- 05 E I'm not saying Mpaulo
- 06 GM what did you say?
- 07 E I say that it's Paulo
- 08 GM [unclear]
- 09 E am I mad to say Mpaulo?
- 10 GM is one mad for saying Mpaulo then?
- 11 E yes!
- 12 GM do you know what a madman [mad person] is?
- 13 E yes
- 14 GM do you know one?
- 15 E that one we met...
- 16 GM you're lying
- 17 E ... on our way from the fountain
- 18 GM [unclear]
- 19 E ya! long ago
- 20 GM whom were you with?
- 21 E I was with Aventina
- 22 E and he...he... was going that way

23 GM the madman
 24 E yes
 25 GM [unclear]
 26 E no, he didn't see us
 27 GM he didn't see
 28 GM how would a
 29 E "madman"? oh! [I don't
 30 GM how would a
 31 E "madman"?
 32 GM yes
 33 E oh! [I don't know]
 34 GM ... do you know
 35 E yes
 36 GM that madman
 37 E yes
 38 GM his name is
 is not in the Grandmo
 39 E is 'vadió'?
 40 GM is 'vadió'
 41 E ya
 42 GM do you know
 43 E yes
 44 GM what is it?
 45 E it's 'vadió'
 46 GM [unclear]
 47 E when he feels like it
 48 E he's mad, that man, he
 49 E when he feels like it,
 imitates him]
 50 E oh, oh! he's a 'vadió'!
 51 E I'll ... I'll teach him,
 52 GM what!?
 53 E I'll say that it's 'vadió'
 54 E [unclear]
 55 E 'madman' is 'vadió', 'v

4.5 From home data to educational practice

4.5.1 Home conversations and classroom interaction

I will consider now to what extent it is legitimate to contrast home conversations and classroom interaction for pedagogical applications.

After the controversy on 'deficit' versus 'difference' interpretations of the language abilities of children entering school, the current focus on pragmatics has added a new dimension to the 'difference' explanation: beyond the basic argument that teachers and pupils may use different language varieties and may not share the same cultural background, it is argued that there is a considerable variation among preschoolers in the range of uses of language at home and therefore some children find the transition between home conversational experience and classroom interaction more difficult than others, with consequences for learning and attainment. This position will be referred to as the 'Discontinuity' or 'Mismatch' model. Table 4.2 in the following page presents a summary of the differences found between home conversations and classroom interaction.

The mismatch theory has been criticized on different grounds. Ogbu compared different minority group children in the USA and, drawing also on contrasting evidence from his own Ibo culture, notes that the mismatch model

... has not been applied to immigrant minorities and other groups who differ from their public school teachers in communicative strategies and interpretation of situated meanings but nonetheless are more successful in school and in learning to read than black Americans. (Ogbu,1982:124)

McTear argues that the discontinuity theory is extremely controversial :

Table 4.2

Differences between Home and Classroom Talk

Characteristics more likely in HOME talk	Characteristics more likely in CLASSROOM talk	according to:
Conversation is symmetrical	asymmetrical	Camaioni,1979
Child knows the rules of the game	must discover them	Willes,1983
Background is shared	is less shared	Willes,1983
Adults' control is challenged	is not challenged	Tizard,1982
Child's initiations are frequent	are rare	Cole et al.,78
Adults' style is supportive	is tutorial	Wells,1981
Clarification requests are frequent	are rare	Mehan,1979
Child has more chance to talk	has less chance	MacLure/French,81
Test-type Questions are rare	are frequent	Tizard,1982
Structure of conversation is varied	is Initiation-Response-Feedback	Burton,1981

Firstly, there have been few detailed analyses of the linguistic interaction of the home and school which could provide empirical support for such a theory. Secondly, those studies which do exist [such as the Bristol study] have not shown the clear-cut discontinuities which have been proposed. (McTear,1985:21)

McLure and French (1981) and Wells and Montgomery (1981) dispute the mismatch theory, on the evidence provided by their longitudinal study: 'There is no sharp discontinuity between the interactive styles of home and school' (Wells and Montgomery,1981:232). Although many features of interaction have been pointed out as more likely to occur at home than in the classroom, the same studies also stress the great variations in the range of communicative styles of both parents and teachers. Willes (1983) shows how most children learn the rules of communication in the classroom quickly and without formal instruction. Children are exposed to Test Questions at home as well, and supportive or tutorial styles of interaction are to be found in both settings (Wells,1985. See also 2.4).

The construct of 'Zone of Proximal Development' (see page 45) helps us to consider a very important characteristic of both parents' and teachers' roles in their interaction with the language learning child: both recognize the limited level of competence of the child, and make the most of it, and both organize the interaction in terms of a 'launching platform' (Brown,1977:15) for the child to try more complex forms of communication, at a more adult or advanced level. This was confirmed by the Bristol study:

The evidence found in the present investigation of a general tendency for items to show an increase in relative frequency timed to occur slightly before their emergence in the speech of the children, could be the outcome of the operation of just such a strategy by the children's interlocutors. (Wells, 1985:378)

This complex state of affairs calls into question the legitimacy of drawing pedagogical conclusions from descriptive studies without the necessary mediation imposed by the peculiarities of the educational process (the teaching and learning at school). The same criticism by Stubbs (see quote on page 103) can be extended from the linguistic to the pedagogical system, which also has its aims, taxonomies and structures.

It is indeed the problem of all disciplines applied to education (Brumfit,1985:43). And it is here that the attitude of the researcher towards qualitative versus quantitative approaches (not techniques) becomes clear.

I will give as an example the case of Test Questions, but the same could be said for many other features of language use. Test Questions represent a type of question which is consistently found very frequently in the classroom and not so frequently in home conversations. A number of different conclusions may be drawn from this relative frequency:

- a) 'Children are not familiar with Test Questions before going to school, therefore the teacher should avoid them in classroom interaction to minimize the adverse effects of the mismatch'.

There are two problems with this position. First, it is impossible to determine in quantitative terms the threshold after which Test Question would be considered a familiar experience, whatever criteria one uses. The same applies to the assessment of the child's competence in replying correctly to such questions: is this ability a sign of the emergence of the phenomenon or of its acquisition?

Second, school cannot possibly avoid test questions because one of the features of education as a system is evaluation, and one of the methods teachers use to evaluate is asking test questions. Therefore the recommendation in (a) is both unprincipled and unrealistic.

- b) 'Children have some experience of Test Questions at home, so the Teacher can legitimately use them in classroom interaction'.

The recommendation in (b) is too general: verbal interaction in the classroom is used in different events and for different functions such as presenting new material, evaluating, debating issues for concept development and/or language practice, management, etc. Test Questions are appropriate only for certain events and functions, not for others.

- c) 'Children have some experience of tutorial events at home, in which adults ask Test Questions and they reply with appropriate discourse features; therefore they are likely to reply appropriately to Test

Questions in similar situations at school if and when the event is recognized as tutorial from the discourse features. Teachers should know the discourse patterns of tutorial events at home, and restrict their use to similar situations (e.g. assessment), especially in the first years of school.

This position seems principled, realistic, and capable of using quantitative data in order to go beyond them ('working back and forth between etic and emic units of analysis' - Erickson,1981:21). It encourages the teacher to learn from the out-of-school experience of the child and use it, not mechanically apply it, to improve his teaching.

In conclusion, if there are differences between the teaching/learning experiences outside and inside school,

... the solution is not necessarily to arrange a 'match'... the existing successful systems mix, match, and sometimes invent novel educational activities. ... culture-sensitive pedagogy can make a difference where it is possible to be explicit about cultural patterns and there is not much cultural heterogeneity in the classroom. (L.C.H.C.,1986:1055)

Different features of the child's home language have different degrees of generalization for use in the classroom. Patterns of discourse can only provide some general hints for the structure of teacher - pupils interaction, for example, in large group discussions or in the presentation of new material; but they are more directly relevant in language lessons, particularly those aimed at the development of oral skills and fluency, in small groups, or whenever the teacher needs to use a text of 'genuine' language for further elaboration. For this reason, in the present study the discourse structure of home conversations is contrasted with that of the dialogues used in textbooks and in oral language practice, while only few, general parallels are made between home and classroom discourse.

4.5.2 First and second language acquisition

Finally, I will have to justify the relevance of a study on L1 use to the learning of a L2.

Those who take the study of language as the study of the development of communicative competence have always insisted that the contexts which motivate communicative intent and provide a responsive environment are the most effective for learning of L1 and L2. This seems a natural consequence of the overall approach : the experiences of participating in the alternating roles of speaker and listener, of testing the adequacy of rules and hypotheses in conversation and in its breakdowns, and the demands created in the course of interaction to use language as successfully as possible to negotiate meanings, are seen as the most powerful factors in language acquisition. This has also lead to the disregarding of the distinction between L1 acquisition and L2 learning and between language learning and use, and, furthermore to the blurring of the differences between home and school as institutions, stressing the common principles underlying the process of language learning that should be guiding the encounters between speakers at various stages of competence: L2 teacher-pupil as parent-child, peer-peer, native-foreign~speakers. etc. (see Ellis,1985 for a review).

The sequence of emergence of linguistic items in the many interlocking systems (such as the pragmatic, semantic and syntactic, Wells 1985) has been studied, adopting Lock's starting point that 'language is *imported* into situations which have already become socially intelligible to the child' (Lock,1980:195), and therefore the initial emphasis is in pragmatics. These studies, when replicated in a wide range of settings, should provide valuable information on a crucial question for L2 learning, i.e. 'what is the sequence from simple to complex, from easy to difficult ' for language learners, allowing for cultural variability.

The similarities of the processes characterizing first and second language acquisition were stressed by Vygotsky in a paper, The Question

of Multilingualism in Childhood, written in 1935 (it is discussed in John-Steiner,1985), where he insisted on the importance of cognitive strategies developed in the L1 for the subsequent acquisition of the L2. More recent empirical work in the Vygotskian tradition (Frawley and Lantolf,1985) confirms this position, across different age groups.

The 'communicative movement in language teaching' reveals the attempt to use these conceptions on the nature and development of language to L2 learning in the classroom, with a variety of settings, purposes, learners and resources. The tendency to stress the assets rather than the deficits of the learner when confronted with an L2 is consistent with the views on bilingualism presented in 2.1 and 2.2, even if it may not inform the practice of expensive bilingual education programmes (Moll and Diaz,1985). What the L2 learner brings to the task is a general knowledge of linguistic systems, his competence in learning and using another language and therefore his abilities to find effective learning strategies (metacommunicative and metalinguistic awareness, interlanguage: Faerch et al.,1984).

Again, the problem for appropriate uses of theory in the classroom is that teaching is not the same thing as describing or understanding, and mediation is necessary when the linguistic , psychological and sociological systems are connected with the pedagogical. Power relationships, hidden curriculum, degrees of teachers' competence and self-assurance, financial constraints, (bad) definitions of aims, structural asymmetry of the teaching and the learning process, simple availability of target language speakers and of course learners' interests are just some of the factors that prevent the classroom from being a context for L2 learning such as the family is for L1 acquisition. Again, then, it is a problem of selecting which features of the L1 acquisition process are worth studying because they have direct applications to L2 learning, and to which of the many aspects of language teaching they can be legitimately and practically related.

In the present study, the selection of discourse features of L1 communication to be studied was based on criteria of applicability to the oral

practice of L2 as prescribed in the syllabus: for example, the sustaining of conversations has been given relevance because it is directly related to the development of fluency in L2. Problems like initiation, turn distribution or turn-getting were examined only in relation to discourse sustenance, considering the fact that in the specific classroom setting it is the teacher who always assigns turns. On the other hand, clarification exchanges were given prominence as a way of developing or sustaining the interaction within the given distribution of turns. Again, different degrees of generalization have to be adopted for the dynamic of controlled oral practices and of general classroom discourse.

To sum up, in the present study:

- 1 Naturally occurring conversational sequences in L1 between 20 children (age 6-7) and adults observed in their homes were identified and selected from the corpus of data collected for a previous study.
- 2 The conversational sequences were coded for topics and for selected features considered relevant to the teaching of L2 to comparable children in a classroom context.
- 3 Using simple frequency and contingency tables, patterns were found in the discourse structure and strategies.
4. Those patterns were contrasted with those of dialogues for the development of L2 oral communication skills, as they appear in textbooks and are recommended to teachers for oral practice in Grade 1.
5. Discourse features of home talk compatible with and relevant to the learning of L2 oral skills at school and, in a limited way, to classroom interaction, were identified, and suggestions made about their use by teachers.

Interpretation of Results

5.1 Overview

A Total of 235 Conversational Sequences (CSs) was studied, amounting to 3251 utterances. Only 3090 utterances (95.1%) were included in the analysis, i.e. those clearly identified as either uttered by an adult to a child or by a child to an adult. The number of utterances by children other than the 20 Target Children (TC) to adults was so small (No.=30) that no distinction has been made in the analysis.

The number of Dialogue Texts (DT) studied was 14, i.e. all those between adults and children, out of a total of 18 in the 1st Grade Textbooks and Teachers' Manuals (see 3.3, page 87-89 and Annexes 3.2 to 3.5). The total number of utterances in the Dialogue Texts considered is 164. The analysis of Dialogue Texts is not as detailed as that of Conversational Sequences, because of their reduced number.

Tables and examples have been inserted in the text, and comprehensive figures are given in the Annexes. All statistics refer to valid cases.

The Participants, Topic and Purpose of home Conversational Sequences are examined, and contrasted with those of classroom Dialogue Texts. The same comparison is made of:

- . patterns in the sustaining of interaction;
- . the use and function of clarification exchanges;
- . the elicitation and offer of information;

. the use of rhetorical questions.

A note on the terminology used:

Interaction = verbal communication between children and adults in both home and classroom, in L1 or L2

Conversational Sequences (CS) or Conversation = spontaneous interaction at home in L1 as recorded in the transcripts

Dialogue Texts (DT) = texts of dialogues, in L2, as printed in Grade 1 Textbooks and Teachers' Manuals

Dialogues = dialogues enacted in role play or used in oral practice, in L2, on the basis of the corresponding dialogue texts.

5.2 Participants, Topic and Purpose of Interaction

5.2.1 Home Conversations

As measured by number of utterances, children at home talk slightly more than adults, but, considering also the distribution of turns, the balance is even.

Table 5.1

see also Annex 5.1

Identity of Speakers in Conversational Sequences

Speaker	No. of Utterances	%
Adult to Child	1475	45.4
Child to Adult	1615	49.7
Child to Child	52	1.6
Unidentified addressee	93	2.9
Unidentified speaker	16	.4
<hr/>		
Total No. of Utterances in CS	3251	100.0

Most of the Conversational Sequences are between 1 child and 1 adult; few involve other children and some involve children and adults. (see Table 5.2 in the following page). In most cases, other members of the family or neighbours are present but do not join in the talk: in fact, 'unsolicited contributions by other speakers' are quite rare ($N=80$, 2.5% of all utterances - see Annex 5.6), mostly by children who intervened to back up

something said by the Target Child, but almost never interrupting or adding to what adults said if not explicitly addressed.

The length of Conversational Sequences varies between 5 and 21 turns per child. About half of the conversations are of medium length (7 to 21 turns), more than a third are short (3 to 6 turns) and about 20 are long (more than 22 turns). There are noticeable differences among children, and the long conversations are clustered with the 3 most talkative children.

Table 5.2

Participants in Conversational Sequences

Participants	No. of CS	%
Target Child and 1 Adult	175	74.5
TC, 1 Adult and other children	13	5.5
TC and more tha 1 Adult	47	20.0
Total	235	100.0

The main topics discussed are household tasks and reports on what is going on in the village. Children seem to have special roles as 'reporters' to the adults on many events, both from inside and outside the family, and this relies more on the exchange of distant information than being engaged in a joint activity with the adults (see page 62). As households are close and life spent mostly outdoors, children are often sent on errands and are expected to report back. Although it is not the aim of the study to offer a systematic ethnographic description of the joint activities of children and adults, the data do provide an insight into what it means to be a child in that community: the tasks expected, the rules to obey and the roles to perform in relation to other age groups (see Table 5.3).

Table 5.3

Main Topics of Conversational Sequences

	No. of CS	%
Asking/discussing/preparing food	58	24.6
Discussing house-related activities: fetching water, cleaning, asking neighbours	67	28.5
Minding babies, reporting on other children's behaviour	26	11.0
Reporting on and discussing observers	18	7.6
Reporting on and discussing school activities	19	8.0
(Literacy events): looking at printed materials children showing books to adults parents teaching the use of money parents teaching how to tell the time	15	6.3
Reporting on happenings in the village	19	8.0
Talking about self/plans for the future	11	4.6
Parents teaching good behaviour	2	0.8
Total	235	100.0

Binford's ethnographic study (Binford, 1971) reports that all siblings and cousins are called by the same term, but there is a definite, and also lexical, distinction on the basis of age. Two siblings in consecutive order of birth have a special relation, and they refer to each other and are referred to by different terms. The older, regardless of sex and absolute age, takes care of the younger even before weaning, carrying him on his back and being responsible to the mother for him, and can be stricter than the mother would be. The younger respects the authority of the older and may call him by the term for 'mother' and 'father'. As in many other parts of the world (see 2.5 and Reynolds, 1986), children

contribute substantially to the family economy in terms of services provided, are therefore given definite responsibilities and duties to carry out, and perform a wide range of roles from very early ages. This is evident in the topics, and, as will be discussed later, has consequences for, the structure of conversations. To someone from an urban European background the impression is given that 6-7 year old children are considered very much 'grown up'.

As one would expect, literacy-related activities are scarce, though not totally absent, since adults are mostly non-literate by school standards. There is an interesting sequence of a grandmother and a child looking at a magazine, where somehow the tutorial roles are reversed, as the child explains the pictures to the old woman. Children talk about school or read textbooks with older siblings who are in higher grades, and with adults who have never been pupils:

What songs do they teach you at school? Tell me, my son! You know, I never went to school ... whenever I hear you sing there in the distance, I feel sorrow, because I never had the chance.
(A neighbour to Luís)

Children also like to 'play the teacher' with younger ones, acting like the teachers in their classrooms, using very telling reproductions of 'classroom talk'; these sequences, however, are not in conversations with adults.

As for the main purpose of Conversations, a broad classification taken from Wells (1985) shows that approximately a third of conversations have the function of 'controlling the present and future behaviour of one of the participants', approximately two thirds of conversations have the function of exchanging information, while very few are tutorial ('with a deliberate didactic intention by one of the speakers'): see Table 5.4. Characteristics of adults and children's talk in tutorial situations and literacy events are discussed in 5.5.

Table 5.4

Main Purpose of Conversational Sequences

	No. of CS	%
Control	84	35.7
Exchange of Information	140	59.6
Tutorial	11	4.7
<hr/>		
Total	235	100.0

5.2.2 Classroom Dialogue Texts

How do Conversational Sequences compare with Dialogue Texts on aspects like participants, topic and purpose? In Dialogue Texts there is no substantial difference in the distribution of talk between adults and children, measured both in number of utterances and of turns, (43% and 46% respectively are children's). However, in most Dialogue Texts the participants are several adults and several children, so that dyadic interaction is less prominent. There is a slight difference in the average number of children's utterances per turn, with adults tending to produce longer turns than children.

As for topics, they are fairly similar, with DT being about meals, hygiene, the family garden, the village shop etc. There is one text where the father explains the movements of the sun and stars. Of course it is impossible to replicate the variety of topics of home interaction in such a limited number of texts, and, quite rightly, other pedagogical considerations suggested the inclusion of texts on hygiene and political education. Children in the texts, however, do not appear as autonomous as in the home conversations, and their role in the family does not seem to

match those of rural children. There are no children reporting on events or in charge of younger brothers.

As the textbooks are published for use in the whole country, they must be suitable for all children, and the image of family and community to be presented in the illustrations that accompany the texts, in the activities portrayed and in the related talk was thoroughly debated at *INDE*, where the Textbooks were produced. The result is a compromise, with a nuclear family in a brick house that could belong to a small successful farmer or a semi-skilled worker in a commercial farm. This is not the environment for the majority of the children, but is the model set in accordance with the overall political aims, and as such is pedagogically justified. It remains a rural setting, where the majority of children live.

The purpose of the dialogues is twofold, as it is clearly that of a prop for language practice. But insofar as their aim is to offer samples of communication in a family setting, one can identify their main purposes as being the same as in home conversations. There is perhaps an emphasis on control over information, one dialogue is clearly tutorial, and four are designed to present social skills in situations outside the home (in the coach to town, at the Health Centre).

In summary, participants, topic and purpose of interaction are not very different in home interaction and in texts used for language learning at school. If one of the aim of the texts is to present a setting that could be perceived as 'familiar' by the rural children, the image presented seems reasonably appropriate at this first level of analysis. If the aim was also that of presenting a sample of 'genuine ' language, however, a further level of analysis is required.

5.3 The sustaining of Interaction

5.3.1 Home Conversations

The sustaining of discourse is a function of:

- the purpose of the interaction and the roles of the participants, as they are perceived by the participants themselves, which influence the communicative intentions;
- the process of the interaction, that is the way initiations are made, turns allocated and breakdowns repaired;
- the structure of the interaction , that is the combination of utterances and turns into larger units (like adjacency pairs, exchanges, or other hierarchical taxonomies) ;
- the general principles governing interactions (like the Gricean maxims for cooperative conversation).

All these elements are interlocked and culturally based, as participants make use of their background knowledge with varying degrees of awareness.

First, the relationship between dominance (who sustains the discourse) and function of utterances will be examined. In general terms, there is no great difference between adults and children in their use of language in home interactions (see Table 5.5). However, there is a marked difference between adults and children in the use of the two basic functions of language in social interaction: adults tend to seek (information, action, acknowledgment), while children tend to give (information, comment, acknowledgment) (see Table 5.6)

Table 5.5

see also Annex 5.3

Main Functions of Utterances by Speaker in CSs.

Function	Ad. to Ch.		Ch. to Ad		Total	
	No.	%	No.	%	No.	%
Exchange Information and Explanation	712	49.9	929	58.4	1641	54.4
Exchange Clarification	195	13.6	215	13.5	410	13.6
Exchange Acknowledgment	241	16.9	268	16.9	509	16.8
Give Comment	40	2.8	81	5.2	121	4.0
Solicit Action	240	16.8	95	6.0	335	11.1
Totals	1428	100.0	1588	100.0	3016	100.0

Table 5.6

see also Annex 5.2

Basic Functions of Utterances by Speaker in CSs

	Adult to Child as Percentage of Total	Child to Adult No. of Utterances
'Seek' or 'Solicit' function	67.9	22.2
'Give' function	32.1	77.8
Total	100.0	100.0

It is important to keep in mind this difference, because the comparative frequency of some functions may be misleading if considered in absolute terms. For example, the number of clarification requests happens to be the same for adults and children, and their percentage of the total number of utterances is not so different; but if their percentage of the

total number of requests only is considered, there is a marked contrast. (See Table 5.7).

The converse is true for action requests: their percentage of the total number of utterances suggests that adults request children to act much more than children do adults, but when considered in the context of requests only, children request adults to act as much as adults do children : see Table 5.7.

Table 5.7 see also Annex 5.3 for(*) and Annex 5.4 for(+)

Influence of Distribution of Basic Functions in CSs

	Adult to Child	Child to Adult
Clarification requests	No.=119	No.=119
% of N. of Utterances (*)	8.3	7.5
% of N. of Requests (+)	11.9	33.3
Action requests	No.=240	No.=95
% of N. of Utterances (*)	16.8	6.0
% of N. of Requests (+)	24.0	26.6

'Solicit' and 'Give' functions are not to be interpreted as Requests and Responses or even more narrowly as Questions and Answers: a speaker can 'offer' a proposition without being asked or solicited to do so, and information is often given as a statement in Initiation Moves or in Confirmation Moves (see Table 5.13). In other words, the solicit function is more consistently 'prospective' (i.e., sets up predictions and constraints about the next utterance), while the give function is not necessarily 'restrospective' (i.e., fulfils the predictions of the previous utterance).

The great discrepancy between the basic functions is bound to have consequences on the sustaining of conversations. Conversations tend to be

initiated by adults; only 38% of conversations and 27% of units within conversations are initiated by children addressing an adult (see Annex 5.10). Conversations are also mainly sustained by adults: about two third of adults' utterances perform a sustaining role, while less than one third of children's utterances do (see table 5.8). Sustaining utterances are considered those in Initiating, Request and Confirmation Moves, while utterances in Reply Moves are non-sustaining ones; utterances concluding a unit or a CS were not included (see Definitions, page 104).

Table 5.8

see also Annex 5.5

Sustaining and Non-sustaining Utterances by Speaker in CSs

	Adult to Child as Percentage of the Total No. of Utterances	Child to Adult as Percentage of the Total No. of Utterances
Sustaining Utterances	73.1	29.6
Non-sustaining Utterances	20.8	59.9
Concluding Utterances	6.1	10.5
Total	100.0	100.0

This classification, however, is insufficient to give the whole picture, and one has to consider Moves as well as utterances. There are Reply Moves which consist of requests, i.e. when the addressee responds with a request (10% of all utterances, with no difference in absolute number of occurrences between adults and children, see Annexes 5.6 and 5.7). This type of Move shifts the addressee from the role of responder to that of questioner for that particular exchange. It is interesting to note here again how the function of the utterance relates to dominance: requests in Reply Moves are mostly Requests for Clarification and Acknowledgment, and as such they do not question dominance, prompting the other speaker to respond with a Clarification Reply and resume his sustaining role. This happens for both adults and children, and it is quite common for a child

to respond to an initiation by an adult with a request: it happens in 30% of the units initiated by adults. It is only when the request in Reply Move has other functions, like Seeking Information or Explanation, that a real shift in dominance is possible: then, the speaker performing the sustaining role in the conversation finds himself confined to Reply Moves, and loses the dominant role (see example in CS 14.06, page 106).

And it is exactly in the frequency of these latter cases of Requests in Reply Move that one finds differences between adults and children: when adults are in a Reply Move and make a request, the request tends to be for Information and Explanation in 43% of cases, and for Clarification in 35%, and it very often produces a shift in dominance; on the contrary, when children are in Reply Move and make a request, the request tends to be for Clarification (49% of cases), and does not produce a shift in dominance. In most conversations (82%) the speaker who initiates it will sustain it until the end; in 42 conversations, however, there is more than one unit and therefore a shift in dominance; but in only 8 (of a total of 52) of these shifts does the child acquire control in a conversation initiated and sustained by an adult, for the reason given above.

In some studies (Tizard, 1984) the children at home were found sustaining the interaction more often than at school, but the criteria for defining who sustained the conversation were simply the number of questions, commands and demands posed, without further elaboration.

It is also important to study how conversations are sustained. In the home data, the most common way for adults to sustain interaction consists in using the Confirmation Move to place a further request to the child. This happens in 58% of the cases, and confirms the findings of other studies on a wide range of age and cultures (see 2.4, page 56). On the other hand, the most common way for children to sustain interaction consists in limiting themselves to a statement in their Confirmation Move (50% of cases, see Annex 5.10 for details). It is possible that this difference is due to a bias in the coding, as it is difficult to interpret the speaker's intention as to whether he wants to place a request or just to comment on, or add to, the previous utterance, even if the separate

coding of columns C and D actually helped in the task by keeping distinct the function of the utterance from its position in the dynamic of the interaction.

In looking for patterns in the sustaining of interaction, though, it is necessary to go beyond the level of the utterance. On the basis of types of discourse suggested by Mishler (1978, see Annex 24) and Williams et al.(1982), the conversations which were more than 10 turns long were considered (No.=99). In these, children are unlikely to sustain conversation for long stretches, and often lose the initial dominance. The most common pattern was found to be an alternation of 'Chaining' , and 'Arching', as in:

CS 01 05, 01 to 13 Child = TC Moises, M = Mother
in the open-air kitchen while preparing food

- | | | | |
|----|-------|--|---|
| 01 | M | <i>Noisés, carry the firewood to Granny Angelina</i> | (Initiation) |
| 02 | Child | <i>what for?</i> | (Request in Reply Move) |
| 03 | M | <i>for her to cook with</i> | (Statement in Confirmation Move) |
| 04 | M | <i>it's not too much</i> | (Request in Confirmation Move) |
| 05 | Child | <i>I'll take all this to her</i> | (Response in Reply Move) |
| 06 | M | <i>was it you who chopped all that?</i> | (Request in Confirmat. M.) |
| 07 | Child | <i>yes</i> | (Response in Reply Move) |
| 08 | M | <i>so get some of that for her!</i> | (Request in Confirmation Move) |
| 09 | Child | <i>I'll get some for her</i> | (Response in Reply Move) |
| 10 | M | <i>(...) [unclear]</i> | (probably Request in Confirmation Move) |
| 11 | Child | <i>ah! [no]</i> | (Response in Reply Move) |
| 12 | M | <i>are you going to carry it?</i> | (Request in Confirmation Move) |
| 13 | Child | <i>yes</i> | (Conclusion) |

The 'Dynamic of Interaction' of this conversation has been coded as 1-3-9-4-6-4-6-4-6-4-6-4-8. The 'Arching' exchange is in 02 and 03, but does not question the dominance of the adult.

Compare the following, where the child is in control:

CS 07 08, 01 to 16 Child = TC Ernesto, GM =Grandmother

they are chatting in the kitchen and Ernesto is holding a knife; 'bandits' are the counter-revolutionaries, 'maforeira' is a kind of tree

- 01 Child *Look, this can even cut a person, it is scaring, this*
(Initiation)
- 02 GM *hem?* (Request in Reply Move)
- 03 Child *one can cut anybody to death, with this*
(Statement in Confirmation. Move)
- 04 GM *the knife?* (Request in Reply Move)
- 05 Child *yes* (Statement in Confirmation Move)
- 06 GM (...) [unclear] (Response or Request in Reply Move)
- 07 Child *hi! if somebody were on top of this 'maforeira' ...*
if it is cut and if [the somebody] fell from there, he would
make 'boom'! (Statement in Confirmation Move)
- 08 GM *and the bandits?* (Request in Reply Move)
- 09 Child *hem? [what?]* (Request in Confirmation Move)
- 10 GM *and the bandits?* (Request in Reply Move, repeated after
a Clarification Request)
- 11 Child *even the bandits, when they go up there and this is cut, can*
fall and get hurt (Statement in Confirmation Move)
- 12 Child *yes* (the same)
- 13 Child *even if they get up a eucaliptus, they can fall* (the same)
- 14 Child *even from the tractor, that day, the hat fell from the*
tractor and then it [the tractor] stopped (the same)
- 15 GM *and then, who got it? [the hat]* (Request in Reply Move)
- 16 Child *the man who got off the tractor got it.* (Conclusion)

This conversation was coded for the 'Dynamic of Interaction' as 1-3-9-3-9-(6/9)-9-3-4-5-9-9-9-3-8. There is a prominence of 'Statements in Confirmation Moves' as the trend is in Conversations sustained by children. Note that 4 of the 6 questions are made by the non-sustaining partner in 'Arching' exchanges.

The basic patterns of 'Chaining' and 'Arching' get more complex when more than 2 speakers are present: then, 'Embedding' is the norm (see Annex 2.4). A fourth pattern can be identified as 'Nesting', when a series of Clarification Requests is linked as in a Russian doll (see page 148).

Is the frequency of 'Arching' in the basic 'Chaining' pattern related to some particular features? Leaving aside the cases where the 'Arching' consists in Clarification Exchanges, it seems that its frequency is not connected with the dominant speaker being adult or child, but with the purpose of the interaction and the social roles of the speakers. 'Arching' tends to be less frequent, leaving therefore the non-dominant partner confined to the role of responder, in the following cases:

- 1- in conversations whose main purpose is control, although they tend to be short and therefore few cases were found;
- 2- in conversations whose main purpose is tutorial;
- 3- in conversations where information is taken from printed material;
- 4- in conversations between fathers and children, whatever the topic or purpose;
- 5- in conversations where the child is reporting on distant events.

Conversely, 'Arching' tends to be more frequent in conversations that are heated discussions or quarrels.

The conclusion seems to be that the pattern of interaction reflects the status attributed to the interlocutor for different reasons: social rules (in 4), recognition of his role at that moment (in 1, 5), respect for whoever acts as a tutor (in 2, 3).

5.3.2 Dialogue Texts

The Dialogue Texts are now examined from the point of view of the relationship between function of utterances and dominance, and in the context of participants, topic and purpose.

Dialogue Texts tend to be short: 9 turns on average. The distribution of the basic functions of 'Solicit' and 'Give' follows the same pattern as in the home conversations, but the difference between adults and children is not so wide. Moreover, what adults solicit are actions (more than 50% of all adults' utterances), many acknowledgments, and almost no information, and what children give are acknowledgments and comments on their own actions, but very little information; they ask permission and little information. There is not a single clarification exchange, and adults are always the sustaining partner. The pattern of interaction is basically 'Chaining' with almost no 'Arching' (see Annexe 3.3).

All this is consistent with the fact that the texts are mainly about situations of control where the adult is in charge. Many comments may be made in this connection:

- 1- directives are useful to learn a language because they 'make transparent the relationship between form and meaning intention' (Wells,1985:402); they were found significantly correlated to measures of child's progress in the Bristol study (see 2.4, page 55). The problem in the Dialogue Texts is that the meaning of the situation must in turn be interpreted from the illustration;
- 2- the patterns typical of control interactions are also used in other situations, so the impression one gets is that adults are always giving orders;
- 3- the fact that children seldom make requests, of Clarification or other, in their Reply Move, and that adults give many acknowledgments makes the interaction similar to the classic classroom pattern of (teacher's) Initiation / Reply / Follow- up. Perhaps this is because teachers were mainly responsible for the production of materials;
- 4- the dialogues do not have a coherent structure, as utterances relate more to the side illustrations than to the preceeding and following utterance (see page 164);
- 5- if the texts were to be used only as reading materials, or were exclusively a source of lexical terms to be used in controlled oral practice, these limitations 'would not be too crucial; but they are supposed to be the base for 'role play'. Teachers complain that children are unable to perform the various characters, but in fact it is the texts that are not suitable for this purpose.

The problem lies, in my opinion, in the concept of what is 'easy' or 'familiar' for the L2 learner. It is assumed that a context for interaction is familiar when it reproduces or matches the environment of the learner, for example his house and family group. It is also assumed that a familiar context helps the learning of a L2. This view is based on a conception of language, and language acquisition, that reduces language learning to labelling and imitating, so that the learner would give new (L2) labels to familiar experiences. This does not respond, however, to the communicative needs of the learner, as there is no sense, for example, in practising meals etiquette in a language that is not used or needed at meal time. In the functional and communicative approach to language acquisition and learning, the context is not seen as the backdrop (scenery) for action, but the source of activity and consequent language. A dialogue in L2 on the use of chalk or pencil between a 1st and a 3rd grader who introduce themselves as speakers of two different L1s would be perhaps more effective as its context is genuinely conducive to verbal interaction. Almost all Dialogue Texts present situations that are unnatural and unfamiliar in sociolinguistic terms, except Dialogue 16, where a mother takes the son to a medical surgery: often doctors are not speakers of the local language in Mozambique.

If language is learned through the collaborative negotiation of meaning, then Dialogue Texts should be about speakers of different L1s who try to interact in a common lingua franca (L2), making use of strategies like Clarification Requests, repetitions etc. in their effort to communicate. This is in fact a common situation in Mozambique: the agriculture extension worker, the truck driver, the nurse, the shopkeeper can have different L1s, and the multilingualism of the country could then be used as an asset for interactions in learner language. In fact, children in their L1 conversations use a variety of communicative strategies because they talk in more cognitively demanding situations. It is along this cognitive dimension that simplification should be introduced in L2 learning in the classroom, while maintaining the complexity of genuine language communication.

How can we reconcile the context-of-use principle with the shorter-is-easier-to-process principle? (Brown, 1986:289)

5.4 Clarification exchanges

5.4.1 Home Conversations

In home conversations, adults make three times more requests than children, and their requests are mostly for information, explanation and action; only 12% of their requests are for clarification. Children's requests, on the other hand, are mostly for clarification and information (33% and 32% respectively of all children's requests, see Annex 5.4). If we consider only children's questions (i.e. children's requests in interrogative form), we find that 40.6% of all questions posed by children to adults are Clarification Requests.

As for the type of clarification exchanges, there is no great difference between adults and children: for both, the most common types are the Non-specific Request for Repetition (about half of all clarification requests, see Annex 5.9) and the Confirmation or Negation Reply (about one third of all clarification replies, see Annex 5.11).

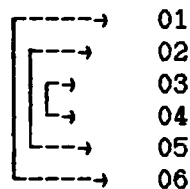
There is a vast literature on clarification exchanges between adults and children, even if it tends to refer to young children. Generally, clarification exchanges are treated as a repair mechanism for failed communication or breakdowns in conversation (Cherry,1979), but Corsaro (1977) notes that they have other functions, e.g. as markers of acknowledgment or surprise, or they can be turn-fillers, or devices for delaying tactics; Garvey (1979) stresses their importance as examples of 'finely engineered and co-operatively achieved production' (Garvey,1979: 372). It is this latter aspect that I will develop. Although it is impossible to compare the frequency of clarification exchanges in my data with that of other studies, it is certainly striking to find so often

units like the following, and still to consider clarification exchanges only as repairs to mishearing or miscommunication.

CS 14 07, 01 to 06 Child = TC Antonio, N = Neighbour

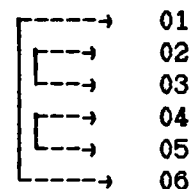
N is showing something to Antonio

- | | | | |
|----|-------|---------------------------------|--|
| 01 | N | <i>Where did you find this?</i> | (12) Request for Information |
| 02 | Child | <i>the thread?</i> | (44) Rq. for Clarif., specification with guess |
| 03 | N | <i>hem?</i> | (41) Rq. for Clarification, non specific |
| 04 | Child | <i>the thread?</i> | (81) Clarification Reply, total repetition |
| 05 | N | <i>yes</i> | (85) Clarification Reply, confirmation |
| 06 | Child | <i>just there.</i> | (62) Response, give Information |



This is a 'Nesting' pattern (see page 143), where the reply to a question comes five turns later.

Another example of 'Nesting', but slightly different, is this:



CS 16 04, 01 to 06 Child = TC Jójó, N = Mother

'mana' Julieta is an older cousin

- | | | | |
|----|-------|--|--|
| 01 | N | <i>Did you see 'mana' Julieta today?</i> | (12) Rq. for Information in (11) Initiating Move |
| 02 | Child | <i>today?</i> | (42) Request for Clarification, specific repetition, in (3) Reply Move |
| 03 | N | <i>yes</i> | (85) Clarification Reply, confirmation, (9) Statement in Confirmation Move |
| 04 | Child | <i>or yesterday?</i> | (44) Request for Clarificat., specification with guess, in (3) Reply move |

05 M today (82) Clarification Reply, reduction,
(9) Statement in Confirmation Move
06 Child I haven't yet seen her today, [I saw her] only yesterday
(62) Response, give Information, in (8) Concluding Move

The two examples are quite representative of the way the meaning structure is built up over several turns and utterances, each of them allowing a further probing into the interlocutor's knowledge and intentions. In both conversations the adult is sustaining, but this does not prevent the child from asking questions that would give him all the information he needs in order to make sense of the initial question. In the second example (CS 16 04) one suspects that the child's questions are designed with some other consideration in mind, and in fact some five conversations later, when 'mana' Julieta finally shows up, Jójó's mother asks her to go and fetch water, since she has not yet done it that day. This shows how complex may be the process of interpretation that goes on in apparently simple interactions.

In the early '70s, when studies on adult-child talk were mostly concerned with adults' input, extensions, expansions and recasting were considered important strategies that adults use to facilitate and model children's talk; differential use of these strategies among 'caretakers' was related to children output and some pronounced more effective than others. Now it is suggested that the modelling function was 'only incidental to the major function, which is that of negotiating an interpretation for the child's utterance' (Wells,1985:405). Cross-cultural and ethnographic studies (see 2.5.4, page 63) have added further dimensions to the issue, noting for example how even small children are given responsibility in the assignment of meaning, and how adults do not facilitate or model children's talk in the same ways as among other groups.

It seems that in the community examined in this study, clarification exchanges are one of the most common strategies to negotiate meaning in interactions among adults and children, without great differences in discourse patterns between them. This consideration is based on the frequency and distribution by speaker and by type of clarification

exchanges, including the fact that only 11% of conversations do not present such exchanges, and on the observation that there is no apparent relationship between the type of clarification requests and the type of clarification replies. In fact, there is no consistent pattern as to what is more likely to trigger a total repetition or a confirmation, and this seems to suggest that the type of clarification reply is shaped more according to the interests of the respondent than to the form in which the clarification request is formulated. As adults tend to sustain conversations, clarification requests in the Reply Move (see 5.2, page 141) are a common way for children to participate in the process of construction of meaning: clarification requests account for half the requests made by children in their Reply Move. While clarification exchanges may be considered 'the result of suspension of interpretive procedures in adult-child conversation in American Society' (Corsaro,1977:205), they seem to perform the opposite role in the data of the present study.

Text-contingent exchanges ... seek to repair breakdowns in communication or clarify inadequate messages. ... they offer the potential for learning more about the the language system and about the conditions necessary for successful communication. (Robinson and Robinson, quoted in Wells,1986:81)

Another role of clarification exchanges in the joint construction of meaning is that of allowing topic incorporation and coherence. The first is seen (Wells,1985:389) as the way speakers incorporate previous utterances by the other speaker in their turn, and has been studied mostly in adults' talk to children. By incorporating the interlocutor's topic, one speaker provides positive feedback to the other that his utterance was in some ways 'taken in'. Clarification exchanges provide this feedback across many utterances and turns, and in this way they secure discourse coherence (i.e., 'the relationship between illocutionary acts, Widdowson,1978:31). While cohesion has to do with text, coherence is related to discourse (James,1980:103), and clarification exchanges secure coherence by maintaining the flow of conversation temporarily stopped because of formal or functional inappropriacies, or enriched by new contributions: the line of the argument and the pattern of interaction is resumed without difficulty even after complex clarification exchanges.

5.4.2 Classroom Dialogue Texts

No doubt the complete absence of clarification exchanges makes Dialogue Texts sound like artificial and non genuine interactions. If clarification exchanges are considered exclusively as repairs for misunderstanding, they are quite rightly considered redundant in a written text; but, even taking this view of clarification as mere repair work, Dialogue Texts are supposed to represent oral discourse for further oral practice, and in a L2 where misunderstandings are all too common. In fact, a significant increase in clarification exchanges is expected when speakers have to rely on fewer background cues, or cultural interpretations are not necessarily shared (Corsaro,1977, Schwartz,1980). Repair work is a feature of learner's language, and even if it is often signalled non-linguistically, it is crucial for the learner to know how to ask a clarification request. Fluency is not confined to the utterance, and one aspect of fluency is the ability to regulate conversation, including the use of gambits to signal the intention of taking, keeping or giving the floor; fluency is also a function of the way clarification is sought in cases of mishearing, misunderstanding, or in order to probe further into the meaning and intentions of the interlocutor's utterances.

Brown points to the importance of analyzing comprehension strategies in interaction, comprehension being necessarily as selective and interpretive as production:

One crucial skill in coping with [the less-than-ideal messages typical of] normal language lies in the ability to recognize when the message you have just heard is inadequate (Brown,G.,1986:298)

Clarification requests are clear signals that more or different meaningful information is needed, and are therefore an essential component of learner's language, in L2 activities and in classroom discourse (see pages 149 and 158):

Comprehension takes place when input and knowledge are matched against each other. ... In order to 'bridge' gaps in either input or knowledge, the recipient activates *inferencing* procedures, i.e.

qualified guesses made on the basis of any information available. (Faerch and Kasper, 1986:265).

But it is in their role of topic incorporation and coherence devices that clarification exchanges are also missed in the Dialogue Texts. Examine for example Dialogue Text 8 (see Annex 3.3). The exchanges at Figures 1 and 2 allow for propositional development in that the second part of the exchanges (Paulo's turns) follows coherently the first. But taken together as part of a conversation, there is no relationship between the 2 exchanges. The same applies to Text Dialogue 10 (Annex 3.4). This will prove an obstacle for their use in role-play (see 5.6.1). A clarification exchange, perhaps with a reply offering elaboration, would provide the necessary link, and would allow for more participation on the part of the child.

Again, if Dialogue Texts took into account the setting of multilingual communicative events in the country, and the characters used the L2 as lingua franca, much of the ordinary patterns of interaction could be used productively in the learning of the L2: for example, clarification exchanges would be a common and justified feature, with the double advantage of reproducing familiar discourse patterns and providing the children with the appropriate linguistic forms and conventions used to ask clarification in the L2.

5.5 The exchange of information and explanation

5.5.1 Home conversations

Requests for Information and Explanation account for 51% of all adults' requests to children, (see Annex 5.4). Adults enquire mostly about events outside the context of present action and time, and this is possibly linked to the role of children as 'reporters' (see page 132); the (few) explanations requested are justifications of human behaviour rather than explanations of phenomena per se. (see Table 5.9).

Table 5.9

Adults' Requests for Information and Explanation in CS

Function of Utterance	No.	%
Seek information on 'here and now' events	121	23.7
Seek information on past, future, distant events	309	60.6
Seek explanation of behaviour	59	11.6
Seek explanation of phenomena (generalization)	21	4.1
Totals	510	100.0

The great majority (71.5%) of them are in single-utterance turns, few (9.6%) are accompanied by an explanation and some (18.8%) by another utterance. Most of these requests (62.2%) are in Confirmation Moves and some (15.2%) are in Moves initiating a unit or a conversation (see Annex 5.8). Almost all are in interrogative form, and are mainly open questions.

The number of disjunctive and tag questions is negligible:

Table 5.10

Form of Adults' Requests for Information and Explanation

Form of Requests	No.	%
Open Questions	318	62.4
Polar Interrogatives	180	35.3
Questions with Tag	3	.6
Disjunctive Questions	6	1.2
Requests in Non-interrogative form	4	.4
Unclear	1	.2
<hr/>		
Totals	510	100.0

As for the Information Value, almost all are Real Questions, where the information is not known by the questioner, with few Rhetorical Questions (information is known by both speakers) and Test Questions (information is known by the questioner). This is expected, because children often possess information needed by adults:

Table 5.11

Information Value of Adults' Requests for Information and Explanation

Type of Questions	No.	%
Test Questions	42	8.2
Rhetorical Questions	46	9.0
Real Questions	417	81.8
Not Applicable	4	.8
Unclear	1	.2
<hr/>		
Totals	510	100.0

Test Questions are of particular interest, even if their frequency is not high, for their pedagogical implications. The Test Question, or Request for Known Information, is not a feature common to spontaneous conversation, as it

violates one of the defining characteristics of request for information, that the [questioner] does not have the information. In response ... the listener may provide the information or a reason why the information cannot be provided; the first speaker then provides an evaluation of the adequacy and appropriateness of the response (Cherry,1979:123)

42 cases were found in the data, and they are clearly related to the function of the utterance, the purpose of the conversation and the dynamic of interaction. Almost all cases of adults asking for explanation of phenomena (generalizations, see Table 5.9) are test questions. The Test Questions are clustered in five conversations, and three of them involve the same child; there are no isolated cases. The five conversations are tutorial events dominated by the adults, and interaction is structured along a 'Chaining' pattern with 'Arching' restricted to very few clarification requests (see page 145).

Examples of Test questions by adults in tutorial events are:

CS 06.17 Otilia is with her parents. Father gives her permission to go and buy some cakes; she goes ^{to} and fetch the money. Mother wants Otilia to count the money, asks the value of the coins, checks if the child has understood, tries to get Otilia to make some simple operations (see text in the following page);

CS 13.04 A neighbour tests Luís on his knowledge of Portuguese, asking him to translate Tsonga words into Portuguese and the reverse;

CS 07.12 Ernesto is with his Grandmother in the yard, and is reading (the pictures of) a school textbook to her. A conversation develops where she wants Ernesto to learn the Portuguese word for 'madman' (see full text at pages 119-120).

In CS 09.06, 07, 08 and 09 it is the child who is in a tutorial position: Ilda is with her Grandmother and is reporting on a plane trip to the Central Province of Zambézia. The child explains the routines of take off, and how air hostesses serve the meals, to the old woman. But, although

the pattern of interaction is typical of tutorial events, Ilda does not 'violate' the norms of conversation by asking known information. As she is aware that her grandmother has no experience of airliners, she uses attention-getting devices and gives information and explanations. In some conversations with younger siblings not included in the present study, however, Target Children used Test Questions when 'playing school' or doing homework.

CS_06.17, 01 to 15 and 25 to 33 Child = Otilia, M = Mother

Otilia is coming back from the house with the money to
buy the cakes

- | | | | |
|----|-------|---|-------------------|
| 01 | M | <i>So, you found [the money] ... how much is this?</i> | (1 1 11 11 1 1 0) |
| 02 | Child | <i>it is yours</i> | (2 1 6 61 0 0 2) |
| 03 | M | <i>yes, I'm saying: how much is this?</i> | (1 1 4 11 1 1 0) |
| 04 | Child | <i>oh ! [I don't know]</i> | (2 1 6 61 0 0 1) |
| 05 | M | <i>count it then!</i> | (1 5 4 31 4 0 0) |
| 06 | M | <i>how much money is it?</i> | (1 5 4 11 1 1 0) |
| 07 | Child | <i>oh!</i> | (2 1 6 61 0 0 1) |
| 08 | M | <i>no, no, count it then, what's this then?</i> | (1 5 4 11 1 1 1) |
| 09 | M | <i>how much is here?</i> | (1 5 4 11 1 1 1) |
| 10 | Child | <i>ten</i> [in Portuguese] | (2 1 6 61 0 0 1) |
| 11 | M | <i>is it <u>ten</u>?</i> | (1 1 4 13 1 3 0) |
| 12 | Child | <i>yes</i> | (2 1 6 63 0 0 1) |
| 13 | M | [mixing the coins] <i>ya, ya, ya ... and how much is this?</i>
<i>how much is it now?</i> | (1 1 4 11 1 1 1) |
| 14 | Child | <i>oh!</i> | (2 1 6 61 0 0 1) |
| 15 | M | <i>and this money, how much is it?</i> | (1 1 4 11 1 1 1) |
| | | [goes on with the same pattern for 9 more turns] | |
| 25 | Child | <i>it's <u>ten</u></i> | (2 1 6 61 0 0 2) |
| 26 | M | [showing another coin] <i>and this?</i> | (1 1 4 11 1 1 0) |
| 27 | Child | <i>it's <u>ten</u></i> | (2 1 6 61 0 0 2) |
| 28 | M | [pointing at the two coins very close one another]
<i>and if they are like this, how much?</i> | (1 1 4 11 1 1 0) |
| 29 | Child | <i>it's <u>ten</u></i> | (2 1 6 61 0 0 2) |

30	M	what?	(1 1 4 41 0 0 0)
31	Child	it's <u>ten</u>	(2 1 6 81 0 0 2)
32	M	isn't this <u>twenty</u> ?	(1 5 4 11 1 1 0)
33	M	it isn't <u>ten</u> , it is <u>twenty</u> , this.	(1 5 9 72 0 0 0)

This example shows how in tutorial events initiated by an adult, the child is confined to the role of respondent, does not make requests in his Reply Move, does not challenge dominance and generally does not contribute much to the interaction, and as a result of this the adult finds it difficult to use strategies for topic incorporation. It is to be noted that, while the motivation of the child to learn the value of coins at that particular moment might have been low, nonetheless the tutoring event was very well keyed in with the on-going activity, a feature of home learning which is often praised (Tizard,1984, Wells,1981).

Focusing now on how children give information and explanation, the analysis of home conversation shows that about a third of the children's talk consists of utterances providing information and explanations: they account for more than three quarters of all the 'give' acts (see Annex 5.3). Children give information mostly as a response to an adult's request, (see Table 5.12) and therefore the function frequency follows that of the adults' requests (cfr. Table 5.9 and 5.13), but in about a quarter of the cases, children 'offer' information without it being elicited.

Table 5.12

Children's Offers of Information and Explanation in the Dynamic of CS

	No.	%
Initiating a Unit or CS	35	4.6
As Response in a Reply Move	470	60.7
Concluding a Unit or CS	81	10.1
As Statement in a Confirmation Move	177	22.0
Others, including unclear	26	3.2
Totals	799	100.0

Generalizations are rare, but children give information which is not confined to the activity they are engaged in; on the contrary, information about distant events (in space and time) is prevalent (see Table 5.13). This is related to the children performing the role of 'reporters'.

Table 5.13

Children's Offers of Information and Explanation: detailed functions

Function of Utterance	No.	%
Give information on 'here and now' events	189	23.7
Give information on past, future, distant events	516	64.6
Give explanation of behaviour	56	7.0
Give explanation of phenomena (generalization)	38	4.8
<hr/>		
Totals	799	100.0

It is also interesting to note that almost half of children's utterances giving information and explanation are not replies to questions, although they may be in a Reply Move:

Table 5.14

Children's Offers of Information and Explanations: type and complexity

Type	No.	%
Low Complexity Reply to Question	94	11.8
Medium Complexity Reply to Question	270	33.8
High Complexity Reply to Question	73	9.1
Statement (not prompted by a Question)	361	45.2
Unclear	1	.1
<hr/>		
Totals	799	100.0

About a quarter of the utterances considered are accompanied by another utterance in the same turn providing an explanation or an elaboration of the first utterance, and only half are in single-utterance turns. This means that while the actual reply may be minimal, the response can be complex.

An interesting item deserving further comment is the Rhetorical Question, i.e. a question that does not expect an answer because the information is known to both interlocutors. Most of the cases found in home conversations had the function of requesting acknowledgment of information previously given, and can be considered mainly a device for turn distribution or specific ~~of~~^{to} tutorial events (and are asked mainly by adults). Leaving these latter cases aside, there remain some 87 Rhetorical Questions. Given that adults ask children four times more questions than children do adults, it can be said that children make use of Rhetorical Questions as much as adults, and for certain types, even more than adults.

Table 5.15

Questions and Rhetorical Questions by Speaker in CSs

	Adult to ch.		Child to Ad.	
	No.	%	No.	%
Total Number of Questions	642		152	
of which, (1) Rhetorical Questions	167	26.0	40	26.3
(2) Rhetorical Q. other than Requests of Acknowledgement of Inf. prev. given	59		28	
Percentage of (2) over (1)		35.3		70.0

Rhetorical Questions perform various functions:

- to get or focus the attention of others, as in CS 09.12, 50, Ilda is showing a picture magazine to her grandmother: *don't you see, they got on the same place, on the donkey, and they fell?*

- to challenge an order, as in CS 06.22, 04, Otilia to her father who is scolding her for not having carried water: *how would I have been able to carry that bucket full?*
- to give reasons, as in:
CS 20.09, 03 and 04, Father and Fernando commenting on a visitor
 02 Fath. *Why didn't you give him a chair?*
 03 Child *yeah, there, there where we were, how could I have brought a chair?*
- to make sense of events, as in CS 06.03, 35, Mother to Otilia, asking why some children had got bread and Otilia had not: *would that mean that they go to buy the bread without telling you?* [that the bread has been delivered to the shop]
- to make others think of a solution, as in
CS 04.02, 08 to 12 Sara and Grandmother making tea
 08 Child *I can't get the water from the tank* [while trying to]
 09 GM *can't you?*
 10 Child *no*
 11 GM *and now? how are we going to have tea?*
- to scold, as in CS 12.04, 13, Grandmother to Antonieta: *You are teasing me, am I your sister-in-law?* [i.e., somebody you can tease?]

In all cases, in Rhetorical Questions speakers refer to some commonly shared rules and invoke their authority in support of their own argument, in the situation where children challenge adults. In most cases Rhetorical Questions are in multiple-utterance turns, as the questioner does not expect a reply.

5.5.2 Classroom Dialogue Texts

The analysis of Dialogue Texts shows that some patterns in information exchange are consistent with those of home interactions and others are not. It has already been noted that Dialogue Texts consist mostly of

exchanges in contexts of control, and this factor has consequences for the pattern of interaction. Children seem to have little or no information adults need or want to get.

The information exchanged in Dialogue Texts is always related to the 'here and now', to the on-going activity. This is due, on one hand, to the limited roles performed by the children, which do not include reporting on younger siblings or on events in the village, and, on the other hand, to the fact that verbal forms in Dialogue Texts are limited to the present tense, the present continuous and the future continuous, so that the exchange of information cannot concern past or hypothetical events. While the principle of grading the difficulty of the linguistic items introduced is not questioned, it can be argued that a grammatical criterion for the grading is not necessarily the best, as some of the forms most commonly used may be grammatically complex. It is because of their complexity that, according to the textbooks, children will express hypothetical conditions in Portuguese only in Grade 3, while the cognitive and linguistic competence to use hypothetical forms in L1 discourse is already well developed before they enter Grade 1 (INDE,1984). This is an argument often put forward to support the thesis of 'semilingualism', but I do not think it applies in the specific situation of Mozambique, where contact with the L2 is limited to a few hours a day.

Certainly the utilization in the Dialogue Texts of the familiar role of 'reporter', using the present continuous tense in the beginning, would facilitate children's identification with the characters and the use of texts for role play. Children could report on their younger siblings, and situations of referential communication, conducive to explicit narration, could be easily introduced.

Dialogue Texts do not include tutorial situations, and adults' questions in them are mostly Real Questions; they tend, however, to be Polar Interrogatives more than Open Questions, while Disjunctive and Tag Questions are as rare as in the home conversations. Children in Dialogue Texts tend to reply with single-utterance turns and never volunteer information but always offer it in reply to adults' questions.

5.6 Conclusion: interaction in the classroom

5.6.1 The development of L2 oral competence

Texts of dialogues between adults and children used for classroom oral practice in L2 have been examined to see to what extent they reflect patterns prevalent in adult-child interaction at home. Their setting, topics and the purpose were found to be consonant with the out-of-school experience of children in rural settings, but discourse patterns in the structure and process of interaction were found to be discrepant in a crucial aspect of communication: the cooperative negotiation of meaning. Dialogue Texts do not represent samples of genuine communication because speakers do not employ their usual communicative strategies to construct meaning nor make use of turns and moves to sustain interaction as they would do in more natural settings. The contexts of Dialogue Texts are not likely to motivate talk, in that the sociolinguistic conditions for communication are not adequate.

Texts that appear more concerned with the medium than the message are common in language teaching materials, and need not be a cause for great concern in syllabuses adopting a coherent grammatical approach favouring reading and translation. It is when a 'communicative' approach is espoused, which stresses the need for oral competence and fluency, that problems arise if discourse and text in teaching materials do not match. As long as they are presented as models of 'natural' interactions, texts should simply be records of discourse (see page 38). The pitfalls of a language methodology which claims to teach language as and for communication without accepting the full implications of such^a position are discussed in Widdowson (1978, 1984).

Considering now the type of controlled oral practice that is suggested to Mozambican teachers for use in the classroom (see page 87 and 88), it seems that the Dialogue Texts examined are as good as any other 'non-genuine' text for the teacher to present, explain, apply and check the comprehension of linguistic items, from phonology to syntax. The methodology suggested includes standard language exercises to explore the linguistic items introduced, like focusing on a particular structure and using it in a variety of forms and in combination with different other structures. This is expected to be done mainly by means of the teacher nominating the pupil who would repeat, expand or apply the target linguistic item contained in the teacher's utterance. In practice, because of the large number of pupils (55 per class in average, see 3.2.3), chorus repetitions of the teacher's sentences are the norm (see page 94).

The code-communication dilemma ('to what extent should instruction be directed at raising learners' consciousness about the formal properties of the L2, as opposed to providing opportunities for them to engage in natural communication?', Ellis, 1985:243) is a key issue in language pedagogy, but if no firm conclusion on the role and effectiveness of formal instruction in its various forms is considered safe enough to be drawn from research (Ellis, 1985), no firm criticism of the chorus repetition as an effective method is possible either. Chorus drills are perhaps an extreme form of non-engagement in communicative activity by the learner, but even in individual or small group 'situational' drills, the language used 'is not discourse: it is language put on display' (Widdowson, 1987:53).

A useful distinction is that between accuracy and fluency:

We need ... classroom activities for accuracy, and these will relate to new input as specified by the syllabus, and we need classroom activities for fluency, and these will relate to the most effective language use possible with the system which the student currently operates. (Brumfit, 1985:68)

The study of discourse patterns in L1 is more likely to be relevant for fluency work, and that is where the discussion will be focused. The syllabus and the Teacher's Manuals examined in this study in fact make

this distinction, and fluency is supposedly developed through role play on the basis of the Dialogue Texts. The problem is that fluency work, besides being given less emphasis, status and classroom time than accuracy work, is also based on inadequate material, and the result is that it is neglected altogether: teachers complain that children do not 'interpret' the characters but merely learn the script by heart, and teachers themselves are not sufficiently trained to use texts creatively or invent activities conducive to language use in communicative situations.

Why are the Dialogue Texts not suitable as basis for role play and fluency work ?

- they do not allow for propositional development beyond the exchange level and sometimes even beyond the utterance level (see page 152), so that the flow of conversation is impaired by the difficulty of predicting the next utterance and the tacit prohibition to ask for clarification; language then is imitated, not used, as the meaning structure is built over several contributions;
- they attribute restricting roles to both parents and children, so that the dynamic of interaction is consequently restricted to severely limited scripts. If '... the functions which utterances perform are reciprocal and depend upon the roles of the participants in the interaction' (Wells 1985:380), so do patterns in the sustaining of discourse. As long as children only respond to directives without the possibility of challenging them, no conversation is likely to develop (in this aspect Dialogue Text 11 is a good example of a child asking questions, see Annex 3.5). Directives are appropriate in other language-learning activities (see page 145) when the situation offers the clue for interpretation of the meaning, for example when instructions are given in physical education or games.

Furthermore, the use teachers make of Dialogue Texts for role play is not likely to develop fluency because:

- learners' communicative resources are restricted to the particular L2 lexical items and structures introduced in the unit, and the use of other communicative resources like non-verbal communication or L1 is not allowed;

- linguistic items introduced in a lesson are not likely to be immediately available for use to the learner.

In conclusion, Dialogue Texts present culturally-adequate settings but pragmatically inadequate contexts for communicative activities: they can be suitable for controlled oral practices aiming at accuracy, but not for communicative activities aimed at fluency.

5.6.2 The interlanguage perspective

Alterations could be made to the texts or to the methodology suggested to teachers in the use of Dialogue Texts: for example, if a learner language or interlanguage perspective was adopted, more emphasis would be put on 'what learners can do and what they know *while learning*' (Davies, 1984: xii). In consequence, the use of a variety of communicative strategies would be allowed, including the L1 and non-verbal means when necessary, clarification exchanges would also be permitted, and the accepted communication in L2 would be in terms of progressive approximation to the target language and not in terms of accurate imitation. The L2 would rather be considered a lingua franca that enables communication beyond one's L1, not instead or in spite of it. It has already been pointed out that minor alterations would be enough to modify the setting and contexts of Dialogue Texts for the characters realistically to use Portuguese as lingua franca (pages 136 and 141), as in fact is the case in many language encounters in the world outside school.

The cognitive strategies that learners use in their L1 are also taken into account in an interlanguage perspective. Prediction and inference strategies are particularly important in comprehension (see page 151), and they may be triggered by patterns of discourse already established in the L1. For example, a child may expect a clarification request as a signal to elaborate on his utterance, or would ask one himself at a certain point of the interaction, according to his models of discourse.

Re-phrasing, requests for repetition, or acknowledgment of information already given, confirmation moves etc. may similarly be expected from the other speaker, or be felt necessary to produce. The structuring of the interaction according to L1 discourse patterns, then, should facilitate the learning of the L2 because it activates known learning strategies.

An interlanguage approach would make language use at school more similar to that of the home, in that in both settings the language-learner children 'constantly need to express ideas which are beyond their linguistic resources' (Ellis,1985:13), and to do so they use strategies that are common to L1 and L2. It would also relieve teachers of some pressure, as they are aware that their competence in Portuguese is limited while at the same time they are regarded as model speakers, and reduce the ambiguity of the classroom situation where everybody pretends not to know each other's language.

Such an approach would be useful as a guideline for the grading of input presented and of the corresponding competence in use expected: the concern for grading would be not only in the selection of materials, tasks and controlled practice, but also in the communicative demands made on the learner gradually to incorporate the input into his developing interlingual system, while at the same time making use of his cognitive abilities already developed.

If the suggested alterations to the Texts are indeed minor, the attitude teachers must have in order to make them, or invent other communicative situations, imply major changes in outlook. This is because their own position towards Portuguese (its political ideology), and therefore towards the code-communication dilemma, their roles as teachers and their pedagogical beliefs are called in question. For, in the last instance, 'fluency involves the capacity to be able to put what one wants to say into words with ease' (Faerch et al.,1983:143), and one communicates effectively only when has something worth telling and is not denied the opportunity of drawing on personal experience. The key issue then is how teachers conceptualize the learner and value the out-of-school experience of both children and community: it is not so much a question of syllabus

or materials but of teachers and methodology. Before laying the blame on teachers or syllabuses, however, it would be useful to look at the primary classroom as an L2-learning environment in the specific situation of rural areas in Mozambique, and the resources available.

Most of the prerequisites for L2 learning indicated by Phillipson *et al.* (see Annex 2.2) or Ellis (1985:161) are not met. For example: teachers are non-native L2 speakers, have limited training and experience, opportunities to speak the L2 outside school with peers are scarce, there is no perceived need to communicate in the L2, there is a high level of anxiety in pupils towards school success which is considered as dependent on L2 skills, there is no control over topic choice by the learners, and material resources are scarce. In fact the combination of teacher centredness, submersion strategies and Portuguese being in many respects a foreign language is hardly a good mix for L2 learning environment (1). On the other hand, there is a marked cultural and linguistic (in L1) homogeneity in the learners, a general motivation in the pupils to learn the L2, the cultural content of materials is appropriate; there are opportunities to develop the L1 outside the school, teachers are competent in the children's L1 or in a variety of it, and children have already developed a linguistic competence in L1 on which to build; the general attitude towards the L2 in the community is favourable, as it is associated with positive changes, and situations where a lingua franca is necessary are likely to become more frequent. The problem remains of how to use effectively the assets of the situation in order to minimize the disadvantages.

A communicative methodology or an interlanguage approach pose many problems to teachers and the educational system as a whole: if the learning of the L1 and of L2 have so much in common, and adults are

(1) Portuguese can be defined as a second language, by adopting a criterion of origin (i.e. the language that is learned after the first), but not of function (i.e. the language that is most used outside the family or immediate environment), with the exception of the urban areas. Throughout the study, L2 has been used adopting a criterion of origin.

crucial in both settings but learning seems more effective in the family, does this mean that trained teachers have to learn from illiterate parents? This issue will be discussed in Chapter 6.

5.6.3 Classroom discourse

Teachers and pupils constantly interact in the classroom, well beyond language lessons. Is there anything in the 'ways of talking' at home that could be relevant to general principles of classroom discourse? It is not realistic to apply patterns in turn-taking, in the sustaining of interaction or dominance prevalent in home discourse to the classroom, where the interaction is between 1 adult and 50-60 pupils.

General guidelines, however, can be used to suggest to teachers what discourse expectations children are likely to have when they start Grade 1. The analysis of home interactions in the particular group considered in the study indicates that open questions are more used in natural conversation than closed, and are probably more effective in developing interaction; teachers should make an effort to consider that there are many different ways to reply to a question, and that process is often more important than product. Disjunctive questions should be introduced gradually, as they are not a familiar type of questions. Rhetorical questions are a way of using background cultural knowledge to stress a point, and it is likely that children find them natural in contexts of control or in problem solving. Teachers should leave children the time to add another utterance in their turn, as often they give information in more than one utterance and not necessarily as a reply to a question. Test questions are better kept for assessment, when the situational context is clearly tutorial and a certain type of reply is sought, as they tend to produce minimal utterances (see also Wells, 1986). Clarification requests by children are almost impossible in large group lessons, as 'it would be virtually impossible to observe a rule about

raising your hand to be given a turn and then make one of these requests' (Mehan, quoted in Cazden, 1983:40), but the practice should be encouraged in small group work.

The potential of small group classroom organization should be explored, particularly with groups of pupils of different ages and grades: older children could perform the role of more competent partners in learning and in experiencing new tasks, as they do at home (Jordan et al., 1981).

The problems involved in the appropriate pedagogical use of descriptive and comparative studies of home and school interaction have been already indicated (pages 123 to 125). But, as the actual mediator between the two settings is not the researcher but the teacher, the attention ^{would} ~~would~~ be focused now on teachers.

Implications of the Study

6.1 The teacher as protagonist

Teachers are seen as the keystone of the educational process in many underdeveloped countries, and quite rightly so: human resources are more abundant than high technology ones, and perhaps the only chance to turn domination by the latter into joint development is to exploit the full potential of the former. Child-centred pedagogy may seem ^{more} adequate in countries that have to rely mainly on human resources than in high-technology affluent countries, but in fact it is not, because that child-centredness requires a wealth of materials, and a conception and organization of learning in the classroom structured along a supermarket model; poor countries cannot afford either, while being at the same time confronted with educational problems on a scale not experienced in the West.

Pedagogical reasons for giving teachers such a central role may be shared worldwide, as they are inherent to the education process: teachers are the major influence on what happens in the classroom whatever philosophy of education and methodology are officially recommended, and they are likely to use those they find logically consistent with their own principles and suitable to what they perceive be the constraints of the classroom situation. In this sense they act as a filter for suggestions or prescriptions from curriculum planners, syllabi and educational researchers. Planners and researchers may well mistake the filter for a barrier

against innovation, but it has at least provided some consistency across the ever changing fashions of a commodity oriented academy .

Cultural and political reasons for the central role of teachers in the educational process, however, may be typical of underdeveloped countries. Groups differ in their conceptions of the role of the adult in the socialization process, and societies that have still to come to terms with or adjust to the rapid pace of overall change tend to regard elders as masters of experience and unquestionable guides to the younger. This is reflected not only in the relationship between adults and children but also between children of different ages. Theories elaborated in certain groups which stress the joint discovery of knowledge by adults and children at home and at school, or restrict the universe of children to peer groups are not easily or legitimately exportable, and are likely to clash with contrasting conceptions elaborated in other groups, as the same mechanisms which operate to construct knowledge produce different outcomes.

The political function of teachers in affluent and poor countries is also different: in the latter they are considered the main agents of change, which in turn is overtly spelled out and its direction necessarily the monopoly of centralized structures of government. The phase when it was so in Western, rich countries has long passed, and consequently there teachers are presently either a non reliable force or an ineffective one when compared with others, or both. Underdeveloped countries differ in the degree of control over teachers and education, and in the political role they manifestly attribute to teachers: those whose independence was the result of an mass armed confrontation tend to be at one extreme of the continuum, at least for the first decade after independence, but no ruling class can afford to disregard the opportunities offered by the joint demand for education willingly paid for by the population, and the network of controllable agents reaching all the corners of the land.

All the above considerations lead to the characterization of teachers as:

- educators
- who have to interpret curricula and syllabi
- in order to adapt them to:
 - their own beliefs
 - the perceived needs of the learners
 - the constraints of the classroom
- in the socio-political context of the country.

In this perspective, it would be necessary to study the background wisdom and knowledge which teachers use for such interpretations, and the criteria they employ to assess curricula and syllabi as fit for the job. This analysis would offer indications of how to involve teachers in the processes of training and innovation. No such a study has been done in Mozambique, where Teacher Training Courses tend to start from socio-political considerations, to proceed to the pedagogical, but do not present the teacher as a professional who interprets the curriculum or questions his own beliefs.

It is the aim of this concluding chapter to suggest how an ethnographic approach to Teacher Education could invert such an order of priorities and link education with cognition and culture for both learners and teachers. Language learning and teaching will be used as an illustrative paradigm because of the nature of this study, but it is believed that wider applications are possible.

6.2 The teacher as restraint

Too often practitioners are seen as, and see themselves as, end points on a linear research model - either they are the subjects on the one extreme or the consumers on the other. In both positions their role is that of passive object of the experts' attention. For ethnographers this model represents a perversion of their perspective. Practitioners, in the context under investigation, are not subject; to be studied but informants, the ones who have the information, and collaborators in the process of reaching understanding (Gilmore and Smith,1982:14)

One could then start by having teachers and teacher trainees analyze their conceptions about language teaching and learning in school, trying to trace their rationale and the way they contrast with those recommended in curricula and syllabi. On the basis of my own experience, as systematic studies are still scarce, it is likely that Mozambican Teachers would present the following views:

1 Medium is more important than message in language learning.

This conception is based on the ideological role Portuguese performed in colonial times, which shaped a great part of the teachers' own education. The prestige socially attributed to the command of the colonial language (see 3.1.2 and 3.2.1) set the criterion for judging the professional competence of teachers, which was the accuracy of the pupils' spoken and written Portuguese. The power structure reinforced the assumption that pupils had nothing to say or worth saying in whatever language, and the methodology of teaching Portuguese in the colonies or Latin in the metropolis was the same, as their political function was the same. Current policies and methodologies as they emerge in the Teacher Manuals, however, continue the colonial tradition in this aspect, and therefore teachers find them in harmony with their own conceptions. The mismatch is at another level, as the role attributed to Portuguese after Independence is presented as different in official documents (see page75). However, if an attempt to introduce interlanguage-inspired methodologies

was made, in tune with declared government ideology, it would probably be found alien and rejected.

2 Input is more important than interaction in language teaching.

This conception reflects what Freire (1972) would call a 'bank-like conception of knowledge' and the consequent perceived function of the teacher as the repository and transmitter of knowledge, somebody one learns from, not with, that can be derived from practices of formal education in traditional societies (for example initiation schools) as well as from pedagogical models prevalent at the time of colonization. The current teacher-pupil ratio and the scarcity of materials actually reinforces this position and therefore teachers are likely to use these arguments to justify their rejection of 'communicative' methodologies - a rejection which actually has deeper roots. Theories in linguistics and psychology which tend to blur the distinction between learning and acquisition in general, and of the L2 in particular, would as a result be difficult to accept, as would those in pedagogy which suggest that school learning is not exclusively the result of teaching. Yet these are the theories that are at the basis of the emphasis on oral practice as a prerequisite for the acquisition of literacy, and of the importance of the fluency component in language teaching. Teachers do not feel strongly about them and this may explain the lack of creativity in devising activities for language use within the constraints of crowded classrooms. Alternatively, the importance given to input may be the result of particular cognitive strategies for learning not fully explored by Western educational researchers and therefore dismissed by them (as hinted at by studies on 'rote' learning in Quranic schools, see Wagner *et al.*, 1986)

3 Schooling promotes modernity while family environment impedes it.

This is a key belief that deserves careful consideration because it undermines all efforts to link home and school, parents and teachers, out-of-school experience and classroom learning, real life and teaching, and is ultimately responsible for the split in personality and roles experienced by teachers. How can teachers maintain their social role and at the same time recognize the skills of illiterate parents in promoting effective learning? How can they reconcile the onerous responsibility

forced upon them with their limited competence, often covered up by authoritarian attitudes? How can teachers appreciate the cognitive and linguistic competence of their pupils on entry to school, if it is the school that is supposed to develop such competence? How can they ever value the contribution of the L1, often an oral-only language, to cognitive development and to the learning of the L2, if their function is to make children literate in L2? And if families are such good places to learn, why bother with schools and school failure? These themes have been touched on in various parts of the study and particularly in 2.2. and 4.5.

The position of teachers is structurally ambiguous, and the contradictions are likely to come to the surface when the relationship between school and the community, local and national, is focused on. In a sense, the whole historical and sociological transition from tradition to modernity, from old to new, from regressive to progressive (see page 75) is reproduced in the classroom, and personalized in the teacher, who in turn is expected to be, and act as, the competent mediator. Unlike other African countries, Mozambique could not rely on an emerging African middle class as a reservoir on which to draw for the teaching profession, partly because of its colonial legacy, and partly because of a deliberate Government choice to encourage the training of youngsters from workers' and peasants' families: for example, more than half of my students at the Faculty of Education's Teacher Training College had illiterate parents, and only a quarter of them had parents who were educated beyond Grade 4. This type of young University student is himself caught between two worlds, bridged just over one generation.

The contradiction between 'given' and 'new' in sociological terms is reflected in linguistic theory:

It is a rather old idea that was originally formulated by the Prague School of linguists to embody a discourse-sensitive version of the subject-predicate distinction. In their functional view, a subject (or topic) is that which is shared in the consciousness (or intersubjectivity, to use the more fashionable term) of speaker and listener. A predicate is that which introduces something new, a comment upon the topic or subject that is in joint consciousness. The given in discourse is the unstressed, the unmarked, the easily pronominalized, the background. The new is

the stressed, the marked, the fully nominalized, the foregrounded.
(Bruner, 1985:31).

In other words, there is an historical and social dimension which is constitutive of discourse: it is what enables the subjects to 'make sense' of it, to understand. Walkerdine (1982) gives an example of how intersubjectivity in discourse can be extended to thought processes and subsequent activity.

It can be argued that teachers in situations of rapid change, or whenever asked to introduce innovation in their practice, have first to interpret the 'new' ^{as a} function of the 'given', in order to understand it, to give meanings to the new:

'These meanings are located in, and understood in terms of, actual social practices, represented in speech as discourse. It is by analysing the form and content of discourse, the processes of selection and combination, ... , that we can account for the origins and processes of reasoning. (Walkerdine, 1982:153).

In the community where the teacher lives, changing social practices at all levels promote new kinds of situations, and consequent 'discourses'. But as a professional, the teacher is also part of an environment of colleagues, principals, administrators and trainers. As intersubjectivity is important for discourse at interpersonal level, so it is at institutional level, for example between teachers on one side and education theorists and planners on the other: breakdowns in communication are due to assumptions that turn out to be not fully shared, and repair is possible by further questioning.

What has to be questioned, however, are fundamental roles that all those involved will find hard to reconsider: the teacher that of leading community figure (shopkeeper), the curriculum planner that of disseminator of theories (middleman) and the researcher that of producer of theories (manufacturer for the foreign market). The local and international division of labour has to be taken into account (Altbach, 1984; Phillipson and Skutnabb-Kangas, 1986).

6.3 An ethnographic approach to Teacher Education

6.3.1 Language, cognition and culture

An approach to teacher education that could respond adequately to the issues presented above, would need:

- a theory of ontogenesis capable of articulating language and cognition in the developing child with the cultural construction of knowledge in a developing society;
- a theory of education capable of explaining the commonalities and differences of home and school learning within the above framework;
- a model of teacher education enabling teachers to integrate cultural assumptions and innovation in education.

Vygotsky's theory of human development appears to offer an adequate explanation of the role of language and culture in the development of the uniquely human forms of higher mental processes: mediational means (tools and signs) provide the mechanisms for sociocultural change while transforming the nature of cognition itself (see 2.3). Many aspects of Vygotsky's theory are in need of revision in light of subsequent advances in social sciences (they are identified and discussed in Wertsch,1985b). The core of his approach, however, remains valid and particularly useful for an integrated approach to communication, learning and educational change, largely because Vygotsky was not constrained by artificial disciplinary boundaries. A communicative approach to language teaching, an interactionist view of language development, schema theories of cognition, linguistic theories of discourse and ethnomethodology, all would find Vygotsky's general genetic law of cultural development (see page 44) a necessary precondition; the concept of 'intersubjectivity' (Rommetveit,1978) is an example of a notion that is shared in all those areas and in tune with Vygotsky's approach. Conversely, Vygotsky's

criticism of Piaget is supported and elaborated on by recent trends in some of the fields mentioned above.

Language development is not only one of the major areas of inquiry in the construction of Vygotsky's general theory:

The acquisition of language can provide a paradigm for the entire problem of the relation between learning and development. Language arises initially as a means of communication between the child and the people in his environment. Only subsequently, upon conversion to internal speech, does it come to organize the child's thought, that it becomes an internal mental function (Vygotsky,1978:89)

Internalization and Zone of Proximal Development (ZPD, see pages 45 and 48) are the two main constructs that are relevant to the present discussion on teachers and L2 learning.

6.3.2 The Zone of Proximal Development at home and at school

If teachers conceptualize the relationship between instruction and development in general, or learning and acquisition of language in particular, in terms of ZPD, they would see the adult as the one who 'awakens and rouses to life an entire set of functions which are in the stage of maturing, which lie in the ZPD' (Vygotsky, 1934, quoted in Wertsch,1985b:71). This reflects what parents do quite spontaneously in their interactions with children (see pages 123 and 149): when they sustain conversations and probe meanings, they 'gently lead [the child] to elaborate his approximative system' (Corder,1981:78). Adults constantly push further the boundary between 'given' and 'new' in the sense that the 'given' incorporates more and more of the shared experience, and becomes the background for new predicates, which in turn are expected to become more complex and articulate. In this sense, adults transform the

interactive event into a more general learning experience, as instruction in the ZPD

puts in motion an entire series of internal processes of development. These processes are at the time possible only in the sphere of interaction with those surrounding the child and in collaboration with companions, but in the internal course of development they eventually become the internal property of the child (Vygotsky, 1956, a text in Russian quoted in Wertsch 1985b:71).

Teachers do the same at school as they also provide instruction in the ZPD and in doing so they act upon the process of internalization of experience. The difference with the home resides in the different nature of the activity predominant in the classroom (see page 46 and Leont'ev, 1981). Work activity and instructional activity are quite different:

- in work activity the younger is the apprentice, and the more experienced participant has the efficient execution of the goal-directed action as his highest priority. The product is more important than the process and error is what prevents completion of the task; the message is more important than the medium.
- in instructional activity the younger is the learner, and the more experienced participant, the teacher, has the understanding of semiotic means (scientific concepts, see page 49) as his highest priority. The process is more important than the product and error is what may give more insights; medium and message are not separable.

Activities are not simply determined by physical contexts or tasks, but by the relationship between the participants, and so they can occur in school, home or workshop; the hierarchy of what is to be maximized, however, is different, and the aim of school is predominantly that of promoting instructional activities. The case of learning an and in the L2 in the first grades of school, however, presents specific issues:

- in the development of fluency the pupil is more an 'apprentice' than a 'learner', and the teacher should try to reproduce at school the conditions under which he developed his L1. The teacher or other 'more capable peers' (Vygotsky, 1978:86) should take the role of the adult at home, the activity should have communication or communication-

producing tasks as action; errors would be considered only those that impede communication, but before reaching this point, adequate repair devices or alternative codes would have been used; the message, not the medium, would be the main focus;

- in the development of accuracy, the pupil is the learner, and the teacher should have the specific skills to make him aware of the relationship between the different items in the linguistic system, so that he can move within the model and search the appropriate structures to match the communicative demands of the situation; errors would be those that reveal inadequate mapping of the system, and therefore would be carefully checked out and would indicate the duration and quality of further tutoring; the adequacy of linguistic means in promoting sign-mediated activity (for the development of scientific concepts) would be the main focus.

In conclusion, the Zone of Proximal Development and the concept of Activity seem to provide the means to explain the common ground and specificities of home and school as instructional settings for language learning. From these models, a methodology for the learning of L2 at school could be worked out: an interesting point to develop, in the context of the specific setting of this study, would be that of the role of 'more capable peers' (McLane and Wertsch, 1986) at school, as it would reflect familiar practice in the home (see pages 123 and 169). The 'CHILD to child Programme' for health education in Africa is an example of an effort in this direction (1). Another area worth exploring refers to the implications for the methodology of transition from oral to literate classroom activities and the relative importance given to oracy and literacy all along the first years of school. Moreover, the introduction of 'culturally-appropriate learning contexts' (see page 14) would be theoretically justified.

As the focus here is on teacher education and not on training teachers to

Based at the Institute of Child Health, London, the Programme produces various materials for community workers, and primary readers (Lowe, 1985).

use a specific methodology (Larsen-Freeman,1983), one can note how the ZPD model would be helpful in explaining some of the contradictions teachers feel when they bring together their own conceptions, the syllabi proposing a communicative approach and the constraints of the classroom:

- the role of school would be clarified and the importance of teachers' specific competence emphasized while at the same time teachers could study the learning process in the home as a model for some aspects of their teaching;
- the relationship between input and interaction and between accuracy and fluency would be conceived in dialectic terms, with the teacher taking principled decisions on error management, use of L1 in the classroom, selection and appropriate use of texts for language practice, types of interaction appropriate for fluency development etc.;
- hopefully, the teachers' own attitude towards the L2 as 'high language' would be modified as the complexity and cognitive value of the L1 would become evident through studying the pupils' ways of learning it at home.

6.3.3 Translating culture into education

Ethnography can be conceived as a method where three aspects of inquiry are united: a contrastive insight, the seeking of specific information and a general interpretation (Hymes,1982). It is in this light that it becomes relevant to teacher education, not in the comprehensive or topic-oriented procedures of classic ethnographic descriptions (see page 12); it retains the principles of systematic observation and hypothesis-oriented investigation of early work, but these are characteristics shared with other methods of inquiry, while its criterion of validity is distinctive:

For ethnographic enquiry, *validity* is commonly dependent on accurate knowledge of the meanings of behaviors and institutions to those who participate in them. (Hymes,1982:25)

An ethnographic approach would then start by having the trainees analyze and question their own existing conceptions; it would proceed to introduce them to culturally-compatible theories of education; the trainees would verify and enrich the models through the systematic observation of learning events in the out-of-school world of the community to which the pupils belong; they would learn the skills necessary to adapt and improve the recommended syllabus and methodology on the basis of the 'ways of learning' of the students and the constraints of the classroom; they would gradually build up their own culturally-relevant pedagogy open to innovation (see Table 6.1).

Learning through the process of educating is thus a careful and conscious blend of awareness, attitude, knowledge, and both trainable and educable skills. (Larsen-Freeman,1983:269).

This approach applies equally well to both pre- and in-service training of teachers, often exclusively school-centred (for a review of recent studies on INSET, see Crossley and Guthrie,1987).

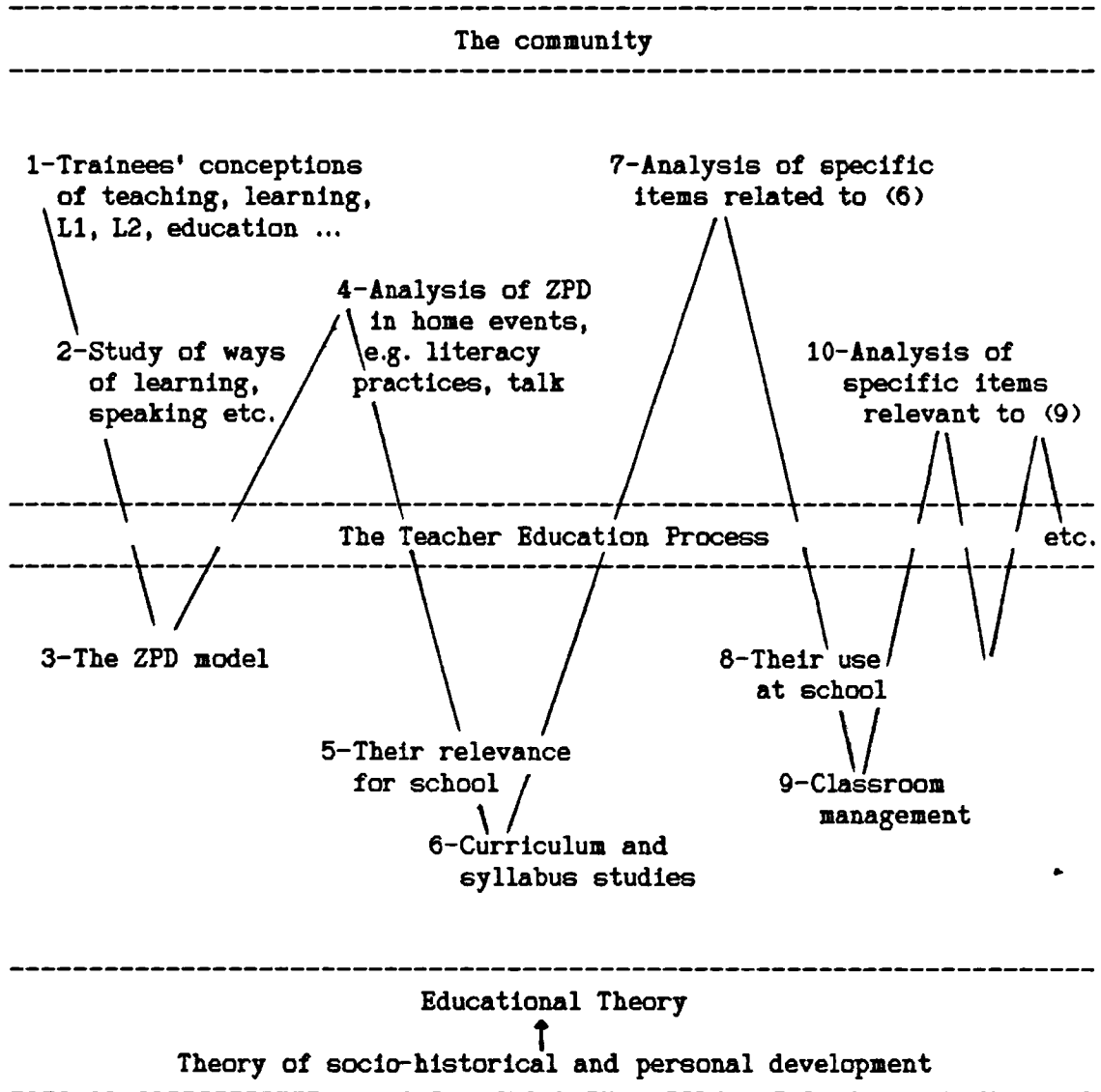
The experience of the KEEP Project (see page 14) is relevant here not for its results but for its methodology and its specific approach to ethnography and education in research and teacher education. Some points are summarized here:

1 Culture is used as a guide for selection, not as a model.

Educational practice should be compatible with the culture of the children being educated and the teachers' conceptions. This does not mean that classroom practice and principles should reproduce the local culture at school or even be culturally-specific. This approach will inevitably clash with general educational policies at macro level responding to the needs of a developing country, and would increase the contradictions at the micro level. One of the consequences would be, as it is often the case, the reduction of culture to folklore: the characters in the textbooks would have local faces and would sing local songs and cook local food, and some grandparents would occasionally be welcome in the classroom to tell stories praising the great past of the local people.

Table 6.1

A model for Teacher Education



The point of cultural compatibility is that the culture of the community is used as a 'guide in the selection of educational program elements so that academically desired behaviors are produced and undesired behaviors are avoided' (Jordan,1985:10), according to the goals of education.

2 Principles in translating ethnographic information into improved classroom practice.

One principle is that of 'strategy of least change', i.e. existing curricula and syllabi for students and trainees should be adapted more than changed, at a pace acceptable to the teachers. This also means that innovation in schools cannot be seen as the desired effect of educational research, but as the response of teachers involved in cultural translation. Another principle is that of 'selection rather than invention' of classroom practices: ethnographic information is used 'as a guide in selecting, shaping and combining practices that are already part of the repertoire' of teachers (Jordan,1985:12). If behaviour is context-sensitive, ^{then} teachers should be trained to discover and characterize the features of those naturally-occurring contexts (at home or at school) that elicit from the children particular behaviours, skills, cognitive operations or communicative performances that are relevant to school goals, and then to select the appropriate educational practice.

3 Need for interdisciplinary effort.

In research, as in curriculum planning or teacher education, the combination of different disciplines is needed and its importance should be learnt in practical, joint activity. Teacher education may be characterized as a 'responsive' search, with a focus on the community and the classroom, for information and theories that would develop a culture-sensitive pedagogy.

On the basis of these considerations, a critique can be made of studies designed to compare the children's linguistic experience at home and school, focusing on patterns of interaction, as for example the Bristol longitudinal study. Its importance as ^adescriptive account of language development is unquestionable, as is its authority to dispel myths about the language environment provided by working class parents:

... when we consider that it has often been claimed that one of the chief functions of the first school is to compensate for the linguistic deficiencies believed to be characteristic of many lower class homes, it is ironic to see just how restricted are the opportunities provided in many classrooms for children to exploit the linguistic resources they show evidence of possessing in their interactions with adults at home. (Wells,1986:89)

Children's talk with teachers, as opposed with parents, was found of lower syntactic complexity, more restricted to the 'here and now', and reduced to short utterances; teachers' style of interaction was found less conducive to elaboration of meanings (and reducing children's participation 'into an exercise of guessing what is in the teacher's mind', page 86).

But when it comes to suggesting what teachers can do about it, it amounts to giving more individualized attention and instruction to the children, which teachers will find hard to implement, especially with large classes. It seems that a situation is envisaged where the 'good' teacher will try to replicate the patterns of interaction of the home and adopt them as his model of classroom discourse (Wells,1986:89-92). The importance of teachers' recognition that children have developed learning strategies outside the classroom is pointed out (Wells,1986:92), but the implications for teachers are not developed; not enough consideration is given to the nature of teaching and schooling, so that the teachers' tendency to regard parents as antagonists is not thoroughly challenged.

More convincing examples of integration of home experience and school learning are to be found in studies within the ethnographic tradition; they tend to be less generic as they address specific issues, for example:

- cohesion in oral discourse strategies of children's narratives at home and possible ways of using them for written narratives at school (Michaels,1981; Collins and Michaels,1986)
- literacy events at home and the utilization of their characteristics to introduce children to literacy (Heath,1983)

- discourse patterns prevalent in a variety of learning events at home and their use to structure learning experiences in the classroom (Jordan,1985).

As settings and issues vary so widely, the work of 'translating culture' for classroom use cannot follow ready-made prescriptions. If an ethnographic approach is taken seriously, it necessarily entails a teacher with the attitudes and skills necessary to use the tools of ethnographic research to find out children's 'ways of knowing' in their out-of-school experience that can be incorporated in the classroom learning activities.

In the work of Heath, for example, teachers are 'learning researchers, who used knowledge from ethnographies of communication to build a two-way channel between communities and their classrooms' (Heath,1983:354): when they asked themselves the question 'what makes reading easy?', their response was not to further investigate the psychological processes of reading, or new teaching methods, or new forms of classroom organization and discourse - but to go and study the literacy events in the houses of the children, what reading means for one brought up in that community, and to devise specific, ingenious methods for classroom literacy activities that would build on existing practice. Teachers' purpose 'was not to bring children's folk culture back into the classroom for study' (Heath,1983:340); but rather, to find out how culture shapes the process of acquiring, integrating and controlling knowledge: the ways of learning in the community shape the ways of doing in the classroom. This is more than simply suggesting the use of ethnographic techniques (such as participant observation) in teacher education for the study of classroom interaction (Woods,1985), or having teachers adopt the results of naturalistic studies of home interaction as models for classroom discourse.

6.4 Conclusion

The conclusion of this study is that teachers should be educated to work within a pedagogical framework centred on the socio-historical development of thinking, language and knowledge construction; on this basis, educational practices can be elaborated by teachers, which are culture-sensitive, and integrative of school and community beyond simplistic transfers.

It can be argued that this study does not itself meet the basic requirements of an ethnographic approach: the language of the community was not shared by the researcher, and the validity of the procedure and instrument used (including the coding system) has not been developed with the people concerned, or checked against their system of meanings and values : it still reflects an 'etic' approach, whereby 'meanings and categories ... are imposed on the data from outside, usually from a theory or model, i.e., the researcher's viewpoint' (Jacob, 1982:125; see Annex 1.1). Research and teacher education adopting an ethnographic approach carried out locally by members of the same culture can overcome this limitation, so that the subjects participate in the process, and expand the example provided in this study to areas other than L2 language learning, or use it in wider educational policies.

A basic condition for 'emic' studies, however, is that researchers, trainers and policy makers use meanings and categories that are recognized by the members of the culture being studied. This is not necessarily the case even when research is carried out by local investigators, who often adopt a 'top-down' perspective, so that

Issues are not identified as they become relevant in the experience of those who live them, but rather as they become relevant to administrators (Callaway, 1981:468).

This comment calls into question the paradigm of inquiry and, ultimately, epistemological considerations (see page 16).

Teachers in underdeveloped countries are being educated on the basis of theories constructed in different socio-historical contexts. These theories are, at best, adapted to suit local conditions (e.g. cross-cultural Piagetian studies). While some theories may fit better than others, locally-generated theories will not necessarily be more valid because of their cultural relevance. What is to be questioned is the axiom that the aim of research and inquiry is to develop a body of knowledge in the form of generalizations that are statements of truth beyond time and context (a 'nomothetic' body of knowledge, see Annex 12). This axiom still informs much research in affluent countries, even if minor theoretical adjustments are introduced to allow for local flavour; and an area where it is most crudely applied is teacher education in underdeveloped countries, where it operates at various levels:

- teachers trainees must conceptualize and study how their children learn, think, talk etc. using theories elaborated in other contexts;
- they can introduce local adaptations and sometimes question their explanatory power, but they must accept the axiom of generalizability, presented as a main tenet of Science and Scientific Research, which goes beyond ideologies and theories;
- they are then taught to apply knowledge from psychology, sociology, linguistics etc. to the educational process in ways that are consonant with those theories and therefore biased in favour of certain outcomes;
- the most likely conclusion of all this is that teachers convince themselves that they could never participate in innovation and research.

While the positivist paradigm of inquiry and the corresponding conception of science are being questioned in affluent countries, spin-offs of obsolete theories continue to be sold in underdeveloped countries, to staff in Universities, Curriculum Centres and Ministries of Education, who are under too many pressures to be able to decide whose 'ways of talking' are worth listening to.

Annexes and References

Annex 1.1

Contrasting Ethnographic and Quantitative Approaches

(from Jacob, 1982:125)

*Methodological Characteristics of Ethnographic
and Quantitative Approaches*

<i>Dimensions of Contrast</i>	<i>Approaches to Research</i>	
	<i>Ethnographic</i>	<i>Quantitative</i>
Hypothesis Formulation	Formulated throughout study	Formulated at beginning of study
Hypothesis Reformulation	Open to reformulation	Not open to reformulation
Questions Asked	Descriptive, process	Descriptive, causal
Data Used	Qualitative	Quantitative
Methods of Data Collection	Naturalistic participant observation, open-ended interviews	Nonparticipant observation, questionnaires, experiments
Concern for Context	Central concern (ethnohistorical and immediate)	Minor concern
Approach to Generalization	Nonstatistical	Statistical
Concern for Validity	Central concern	Not of central concern
Concern for Reliability	Not of central concern	Central concern
Approach to Meaning	Emic ^a and locally relevant	Etic ^b
Types of Categories Used	Emic ^a and locally relevant	Etic ^b

^aEmic refers to meanings and categories that are recognized by members of the culture being studied, i.e., the native's viewpoint.

^bEtic refers to meanings and categories that are imposed on the data from outside, usually from a theory or model, i.e., the researcher's viewpoint.

Annex 1.2**Contrasting Positivist and Naturalistic Axioms**

(from Lincoln and Guba, 1985:37)

<i>Axioms About</i>	<i>Positivist Paradigm</i>	<i>Naturalist Paradigm</i>
The nature of reality	Reality is single, tangible, and fragmentable.	Realities are multiple, constructed, and holistic.
The relationship of knower to the known	Knower and known are independent, a dualism.	Knower and known are interactive, inseparable.
The possibility of generalization	Time- and context-free generalizations (nomothetic statements) are possible.	Only time- and context-bound working hypotheses (idiographic statements) are possible.
The possibility of causal linkages	There are real causes, temporally precedent to or simultaneous with their effects.	All entities are in a state of mutual simultaneous shaping, so that it is impossible to distinguish causes from effects.
The role of values	Inquiry is value-free.	Inquiry is value-bound.

Annex 2.1

Societal and Linguistic Goals and their Relation to Educational Policies

(from Phillipson, Skutnabb-Kangas and Africa, 1986:80)

	Segregation LDS		Programmes Maintenance HDS		Submersion LDS		Immersion HDS
Dominant medium of education	L1				L2		
	Africa Namibia Bantu education	Europe Bavaria FGR Turkish migrants	Asia Uzbekistan 7 main groups	Europe/USA Sweden, USA, Finns, Chicanas	Africa Zambia All main groups	Europe Most WE indig. and immig. min.	North America Canada anglophones
Linguistic goal	Dominance L1	Dominance L1	Bilingualism	Bilingualism	Elites: L2 dom., masses: L1 dom.	Dominance L2	Bilingualism
Societal goal	Apartheid	Repatriation	Equity and Integration		Perpetuation stratification	Assimilation, marginaliza- tion	Ling. and cult. enrichment, job prospects
Majority/Minority	Majority	Minority	Majority	Minority	Majority	Minority	Majority
Status of group (high/low)	Low	Low	High	Low	High	Low	High
Country industri- alized/under- developed (Ind/Und)	Und.	Ind.	Ind.	Ind.	Und.	Ind.	Ind.
Group has been (C) or is (C+) coloni- zed by L2 country	C+	—	C	C	C	C/—	—
Language of group — official	+	—	+	—	+	—	+
— standardized and has teaching materials	+	+	+	+	—	+	+
L2 official	+	+	+	+	+	+	+
L2 standardized and teaching materials	+	+	+	+	+	+	+

Note: LDS = Low Degree of Success. HDS = High Degree of Success.

Annex 2.2

Prerequisites for L2 Learning and situation in Selected Countries

(from Phillipson, Skutnabb-Kangas and Africa, 1986:86-87)

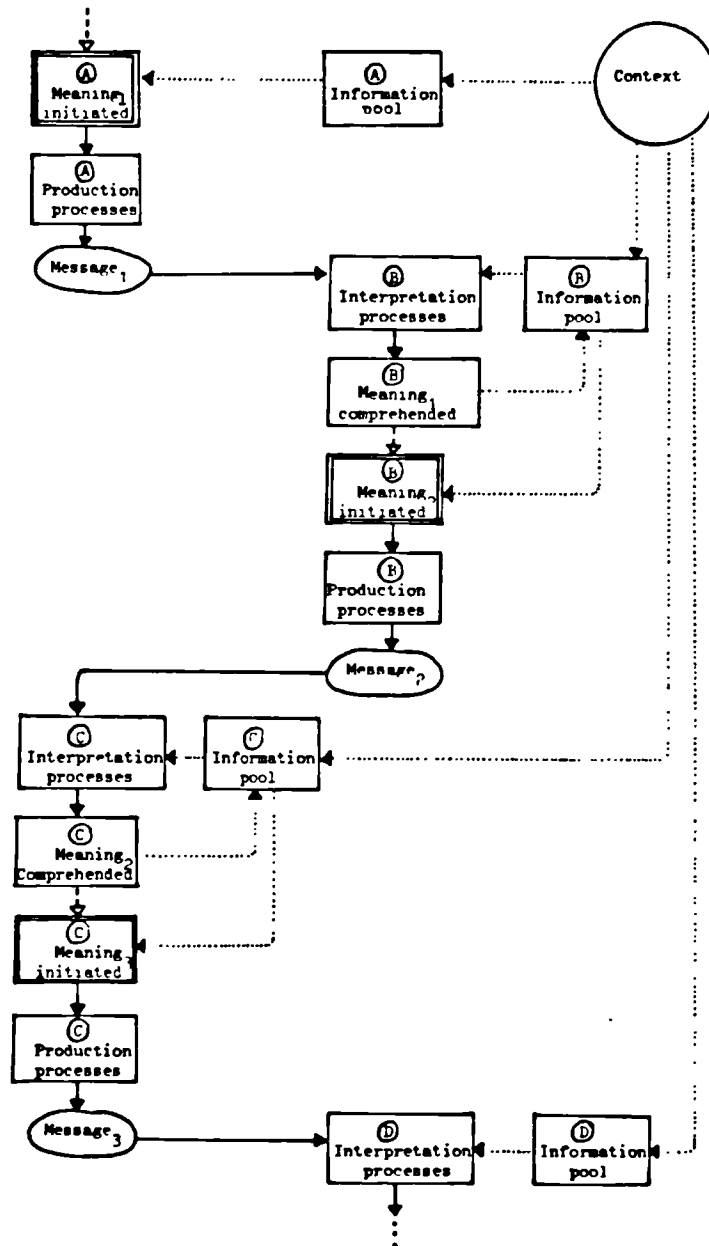
Dominant medium of education	Programmes						
	Segregation LDS		Maintenance HDS	Submersion LDS		Immersion HDS	
	L1				L2		
	Bantu	Turks	Uzbekistan	Finns Chicanas	Zambia	W. Europe minorities	Canada
<i>Organizational factors</i>							
1. Alternative programmes available	—	—	+	+	—	—	+
2. Pupils equally placed vis-à-vis knowledge of ME	+	+	+	+	—	—	+
3. Bilingual (B), Trained (T) teachers	B	B or T	BT	BT	B	T	BT
4. Bilingual materials (e.g. dictionaries) available	—	+	+	+	—	—	+
5. Cultural content of materials appropriate for pupils	—	—	+	+	—	—	+
<i>Learner-related affective factors</i>							
6. Low level of anxiety (supportive, non-authoritarian)	—	—	+	+	—	—	+
7. High internal motivation (not forced to use L2, understands and sympathetic with objectives, responsible for own learning)	—	—	+	+	—	—	+
8. High self-confidence (fair chance to succeed, high teacher expectations)	—	—	+	+	—	—	+
<i>L1-related linguistic, cognitive, pedagogical and social factors</i>							
9. Adequate linguistic development in L1 (L1 taught well, badly or not at all in school)	B	B	W	W	—	—	W
10. Enough relevant, cognitively demanding subject matter provided	—?	+?	+	+	—?	—?	+
11. Opportunity to develop L1 outside school in linguistically demanding formal contexts	+?	—	+	—	+	—	+
12. L2-teaching supports (+) or harms (–) L1 development	+	+	+	+	—?	—	+
<i>L2-related linguistic, cognitive, pedagogical and social factors</i>							
13. Adequate linguistic development in L2 (L2 taught well, badly or not at all in school)	B	B	W	W	B	B	W
14. L2 input adapted to pupils' L2 level	+	+	+	+	—?	—	+
15. Opportunity to practise L2 in peer group contexts	—	—	+	+?	—	—	—
16. Exposure to native speaker L2 use in linguistically demanding formal contexts	—	+	+	+	—	+	+

Note: LDS = Low Degree of Success. HDS = High Degree of Success.

Annex 2.3

Werth's Model of Conversation

(from Werth, 1981:135)



Annex 2.4

Mishler's Types of Discourse

(from Mishler, 1978:283)

Examples of Types of Discourse: Different Modes of Connection
Between Interrogative Units^a

1. Chaining

-
- Q S1: Did you really finish all your work before everybody else?
 R S2: Yeah.
 C/Q S1: What kind of work was it?
 R S2: Well. We jus had a piece of paper and it had all the names on it. And we had to see if it was odd or even.
 C/Q S1: Do you know all the odd numbers and all the even numbers?
 R S2: Uh huh.
 C/Q S1: How far up can you count?

2. Arching

-
- Q S1: Whaddya mean? He is (S) *He's*
 R/Q S2: (S) *Is he under water?*
 C/R S1: He is. See now here's a scuba suit on him.
 C S2: I think he's dead.

3. Embedding

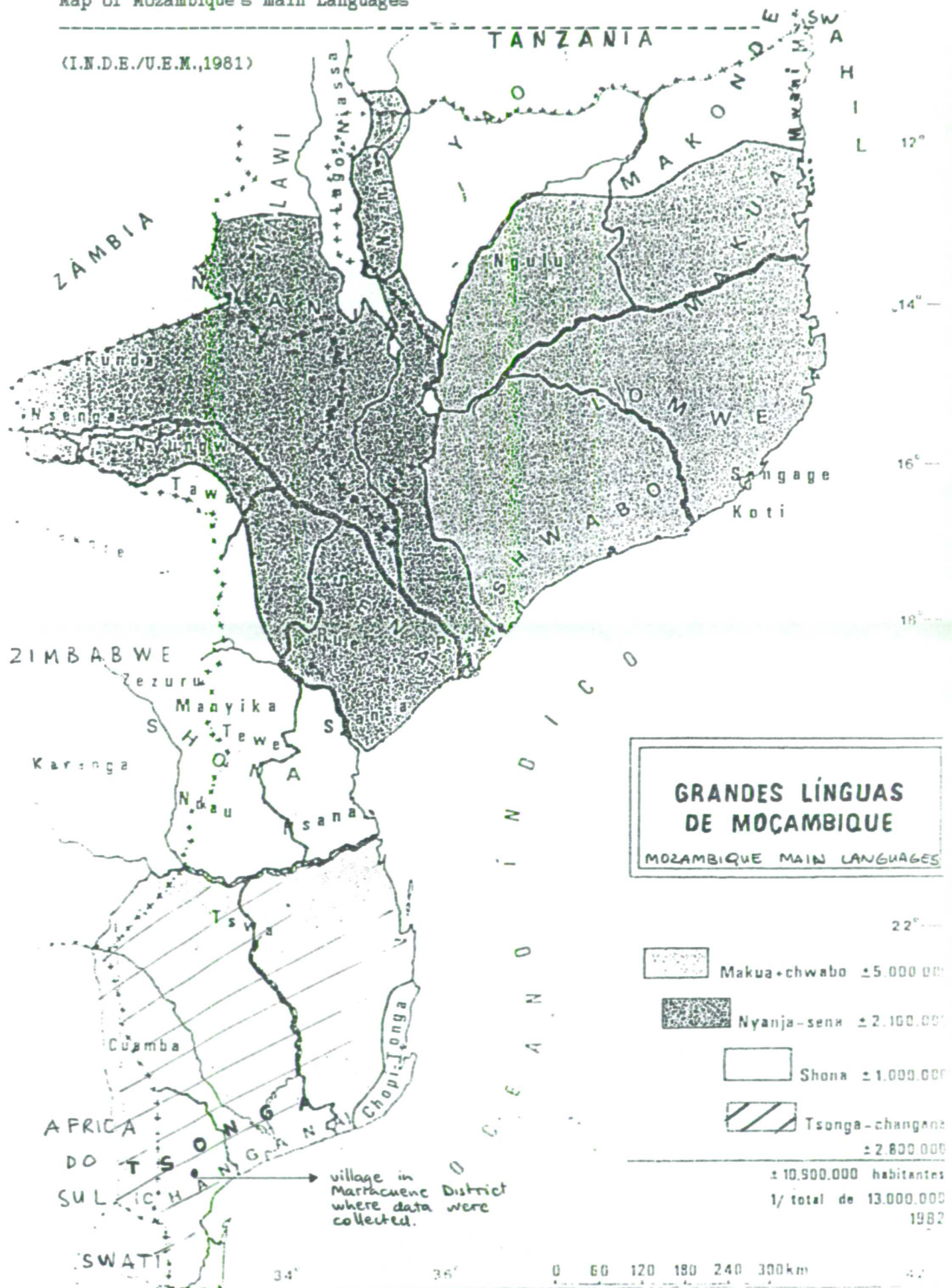
-
- Q S1: Ohhh. What's he got on here?
 R S2: (S) *Skiis.*
 ER S3: (S) *Skiis.*
 C S1: Woooow. I would love to ski.
-

^aThe separate functions of each utterance as question, response, and confirmation are marked as Q, R, C. Multiple functions of utterances in different but connected interrogative units are indicated as C/Q or R/Q. In the chaining example, the third utterance functions as a confirmation in the first IU and a question in the second IU, and is marked as C/Q. In the arching example, the second utterance is a response in the first IU and a question in the second, thus R/Q; the third utterance is a confirmation in the first and a response in the second IU, and noted as C/R. In embedding, one response was treated as primary and marked as R, the embedded response as ER. The notations of (S) and underlining indicate utterances, or parts of utterances that occur at the same time, that is, they are instances of simultaneous speech. Fragments and false starts, such as "He is" in the arching example, are included in the typescript without punctuation.

Annex 3.1

Map of Mozambique's main Languages

(I.N.D.E./U.E.M., 1981)



Annex 3.2

List of Dialogues in Textbooks and Teacher's Manuals for Grade 1

(from *I.N.D.E./M.E.C.*, 1983, vols.1 to 6)

Unit	Vol. Page	Speakers	Topic
1	1:54	2 ch.	Introduction of the 2 characters
2	1:74	2 ch. 1 ad.	A friend is introduced to the family
3	1:96	1 ch. 1 ad.	Sharing lemon juice
4	1:114	1 ch. 1 ad.	Mother asking about father
5	2:5	1 ch. 1 ad.	Mother telling what to do
6	2:69	1 ch. 2 ad.	Having a meal in the family
7	2:39	3 ch. 1 ad.	Having tea, and discussing about sugar
8	2:99	1 ch. 1 ad.	Doing domestic chores
9	3:2	3 ch.	Playing a game
10	3:30	1 ch. 2 ad.	Talking about clothes
11	4:23	2 ch. 2 ad.	Talking about stars
12	4:48	1 ch. 1 ad.	In the family plot
13	4:90	3 ch.	Talking about a dog
14	5:6	1 ch. 2 ad.	At the village shop
15	5:46	3 ch. 1 ad.	Helping a lady
16	5:78	1 ch. 2 ad.	At the Health centre
17	6:6	2 ch. 2 ad.	In the coach to town
18	6:35	no text	Photographs of the liberation war

Annex 3.3

Textbook Dialogue No. 8

(from I.N.D.E./M.E.C. 1983, vol.2:99)

Diálogo 8 - "Em casa do Paulo"



Imagem 1

Mãe - Onde vais?

Where are you going?

Paulo - Vou brincar.

I'm going to play



Imagem 2

Mãe - Antes, vamos lavar a louça.

Before that, let's do the washing up

Paulo - Está bem, mamã!

All right, mum



Imagem 3

Mãe - Traz os pratos, por favor.

Bring the dishes, please

Pai - Posso ajudar?

May I help?

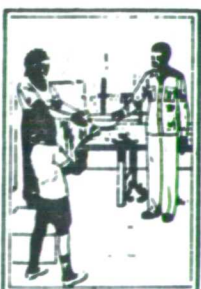


Imagem 4

Mãe - Pois claro. Traz a bacia com água limpa.

Sure, Bring the basin with clean water

- E tu Paulo trazes os copos?

And you, Paulo, will you bring the glasses?

Paulo - Sim, trago mamã.

Yes, I am bringing them, mum

- Depois vou brincar?

And then I'll go and play?

Mãe - Sim, depois podes ir brincar.

Yes, you can go later.

Annex 3.4

Textbook Dialogue No. 10

(from I.N.D.E./M.E.C. 1983, vol.3:30)

Diálogo 10 - "Em casa da Aida"Imagem 1

Mãe - Meninos, acabou o jogo.
 - Vamos tomar banho.

*Children, the game is over**Let's go and have a bath*

João - Está bem, mamã.

All right, mumImagem 2

Mãe - Lavem-se bem!

Wash yourselves thoroughly!

- Aqui está o sabão.

Here is the soapImagem 3

Aida - Onde está o meu vestido azul?

Where is my blue dress?

Mãe - Está no armário, Aida.

It's in the wardrobe, AidaImagem 4

- Agora vamos comer.

Now we're going to eatImagem 5

Pai - Arruma os livros na sacola!

Put your books in the bag!

João - Sim, papá.

Yes, daddy

Pai - Depois vou contar uma história.

And then, I'll tell you a story.

Annex 3.5

Textbook Dialogue No. 11

(from I.N.D.E./M.E.C. 1983, vol.4:23)

Diálogo 11 - "A noite"



Imagem 1

O dia acabou. Agora é noite.

Isabel - Onde está o sol? *The day is over. Now it's night*

Where is the sun?



Imagem 2

João - Está atrás dos montes.

It's behind the mountains



Imagem 3

Pai - Olha a lua e as estrelas.

Look at the moon and the stars

João - É tão bonito!

It's so beautiful!

(cont.) Annex 3.5



Imagem 4

Isabel - Mas o sol amanhã aparece outra vez?
But tomorrow, the sun comes again?
Pai - Sim, amanhã ele aparece outra vez.
Yes, tomorrow it comes again



Imagem 5

Isabel - Onde?
Where?
Pai - Ele aparece daquele lado.
It comes on that side



Imagem 6

Pai - Agora vamos para a cama. É hora de dormir.
Now let's go to bed, It's time to sleep



Imagem 7

João e Isabel - Boa noite mamã. Boa noite papá.
Good night mum, Good night, dad,

Annex 3.6

Example of a Transcript from the I.N.D.E. Study

BILINGUISMO. DESENVOLVIMENTO COGNITIVO E EXPERIÊNCIA PRE-ESCOLAR DA CRIANÇA MOÇAMBICANA

CONTA-DOR	PA-LANTE	Nº DO ENUC.	
	R	529	im
			sim
	G	530	kuni ma k
			há capu
	MG	531	kuni ma
			há capu
	G	532	im
			sim
	MG	533	2 kuni
			on
	G	534	2 kor
			há
	MG	535	mabi
			her
	G	536	law
			2
	MG	537	2
			2

Annex 5.1

Identity of Speakers in Conversational Sequences

SPK

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT
Adult to Target Child	1	1445	44.4	44.7
TC to Adult	2	1585	48.8	49.0
TC to Child	3	30	.9	.9
Child to TC	4	22	.7	.7
Child to ?	5	28	.9	.9
Adult to ?	6	37	1.1	1.1
TC to ?	7	28	.9	.9
Child to Adult	8	30	.9	.9
Adult to Child	9	30	.9	.9
Speaker unidentified	.	3	.1	MISSING
Speakers unidentified	0	13	.4	MISSING
		-----	-----	-----
	TOTAL	3251	100.0	100.0
VALID CASES	3235	MISSING CASES	16	

Annex 5.2

Basic Functions of Utterances by Speaker

		SPK				
COUNT		I				
COL	PCT	Iadult	child			ROW
		I to	chil	to adul		TOTAL
		I	101	201		
FUN		-----+	-----+	-----+		
	1	I 1001	I 358	I		1359
solicit		I 67.9	I 22.2	I		44.0
		-----+	-----+	-----+		
	2	I 474	I 1257	I		1731
give		I 32.1	I 77.8	I		56.0
		-----+	-----+	-----+		
	COLUMN	1475	1615			3090
	TOTAL	47.7	52.3			100.0

Annex 5.3

Main Functions of Utterances by Speaker

		SPK					
		COUNT	I				
		COL PCT	Iadult	child			ROW
			Ito child	to adult			TOTAL
			I	10I	20I		
FUN		-----	+	-----	+	-----	+
	1	I	431	I	115	I	546
seek inform.		I	30.2	I	7.2	I	18.1
			+		+		+
	2	I	80	I	15	I	95
seek explanation		I	5.6	I	.9	I	3.1
			+		+		+
	3	I	240	I	95	I	335
seek action		I	16.8	I	6.0	I	11.1
			+		+		+
	4	I	119	I	119	I	238
seek clarific.		I	8.3	I	7.5	I	7.9
			+		+		+
	5	I	110	I	255	I	365
give acknowl		I	7.7	I	16.1	I	12.1
			+		+		+
	6	I	201	I	799	I	1000
give informat		I	14.1	I	50.3	I	33.2
			+		+		+
	8	I	76	I	96	I	172
give clarific		I	5.3	I	6.0	I	5.7
			+		+		+
	9	I	40	I	81	I	121
give comment		I	2.8	I	5.1	I	4.0
			+		+		+
	13	I	131	I	13	I	144
seek acknowl.		I	9.2	I	.8	I	4.8
			+		+		+
		COLUMN	1428		1588		3016
		TOTAL	47.3		52.7		100.0

NUMBER OF MISSING OBSERVATIONS = 236

Annex 5.4

Main Functions of Requests by Speaker

		SPK						
		COUNT	I					ROW
		COL PCT	Iadult	child				TOTAL
			Ito child	to adult				
			I	10I	I	20I		
FUN			+	+	+	+		
	1	I	431	I	115	I		546
seek	informat	I	43.1	I	22.2	I		40.2
			+ <td>+<td>+<td>+<td></td><td></td></td></td></td>	+ <td>+<td>+<td></td><td></td></td></td>	+ <td>+<td></td><td></td></td>	+ <td></td> <td></td>		
	2	I	80	I	15	I		95
seek	explanat	I	8.0	I	4.2	I		7.0
			+ <td>+<td>+<td>+<td></td><td></td></td></td></td>	+ <td>+<td>+<td></td><td></td></td></td>	+ <td>+<td></td><td></td></td>	+ <td></td> <td></td>		
	3	I	240	I	95	I		335
seek	action	I	24.0	I	26.6	I		24.7
			+ <td>+<td>+<td>+<td></td><td></td></td></td></td>	+ <td>+<td>+<td></td><td></td></td></td>	+ <td>+<td></td><td></td></td>	+ <td></td> <td></td>		
	4	I	119	I	119	I		238
seek	clarificati	I	11.9	I	33.3	I		17.5
			+ <td>+<td>+<td>+<td></td><td></td></td></td></td>	+ <td>+<td>+<td></td><td></td></td></td>	+ <td>+<td></td><td></td></td>	+ <td></td> <td></td>		
	13	I	131	I	13	I		144
seek	acknowledam	I	13.1	I	3.6	I		10.6
			+ <td>+<td>+<td>+<td></td><td></td></td></td></td>	+ <td>+<td>+<td></td><td></td></td></td>	+ <td>+<td></td><td></td></td>	+ <td></td> <td></td>		
	COLUMN		1001		257			1258
	TOTAL		73.7		26.3			100.0

NUMBER OF MISSING OBSERVATIONS = 71

Annex 5.5

Sustaining and Non-sustaining Utterances by Speaker

		SPK					
COUNT		I					
CCL	PCT	Iadult		child		ROW	
		Ito child		to adult		TOTAL	
		I	10I		20I		
DYN		-----+		-----+			
	1	I	1059	I	475	I	1534
sustaining	utter	I	73.1	I	29.6	I	50.2
		-----+		-----+			
	2	I	301	I	962	I	1263
non-sustaining		I	20.8	I	59.9	I	41.4
		-----+		-----+			
	8	I	88	I	169	I	257
		I	6.1	I	10.5	I	8.4
		-----+		-----+			
	COLUMN		1448		1606		3054
	TOTAL		47.4		52.6		100.0

NUMBER OF MISSING OBSERVATIONS = 197

Annex 5.6

Dynamic of Interaction by Speaker

DYN

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT
Unsolicited	0	80	2.5	2.5
Rq. move, Initiating	1	53	1.6	1.6
Rq. Move, Non initiating	2	108	3.3	3.3
Reply Move, request	3	344	10.6	10.6
Confirmation Move, Request	4	701	21.6	21.6
Rq. Move, Repeated	5	62	1.9	1.9
Reply Move, Response	6	912	28.1	28.1
Reply Move, after Clarif.	7	48	1.5	1.5
Concluding	8	280	8.6	8.6
Rq. Initiating Unit and CS	9	424	13.0	13.1
Unclear	11	235	7.2	7.2
	.	4	.1	MISSING
TOTAL		3251	100.0	100.0
VALID CASES	3247	MISSING CASES	4	

Annex 5.7

Questions as Reply Moves by Speaker

FUN	COUNT COL PCT	SPK			ROW TOTAL
		I	adult	child	
		I to child	to adult		
		I 10I	20I		
seek informat	1	I 5E	I 40	I	96
		I 35.9	I 24.2	I	29.9
seek explanat	2	I 11	I 5	I	16
		I 7.1	I 2.0	I	5.0
seek action	3	I 11	I 11	I	22
		I 7.1	I 6.7	I	6.9
seek clarificati	4	I 54	I 102	I	156
		I 34.6	I 61.8	I	48.6
seek acknowledgm	13	I 24	I 7	I	31
		I 15.4	I 4.2	I	9.7
COLUMN		156	165		321
TOTAL		48.6	51.4		100.0

NUMBER OF MISSING OBSERVATIONS = 13

Annex 5.8

Adults' Requests for Information and Explanations and their
relation to the Dynamic of Interaction

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT
Unsolicited	0	7	1.4	1.4
Rq. move, Initiating	1	14	2.7	2.7
Rq. Move, Non initiating	2	22	4.3	4.3
Reply Move, request	3	67	13.1	13.1
Confirmation Move, Request	4	317	62.2	62.2
Rq. Move, Repeated	5	10	2.0	2.0
Reply Move, after Clarif.	7	1	.2	.2
Concluding	8	8	1.6	1.6
Rq. Initiating Unit and CS	11	64	12.5	12.5
		-----	-----	-----
	TOTAL	510	100.0	100.0
VALID CASES	510	MISSING CASES	0	

Annex 5.9

Clarification Requests by Speaker

		SPK					
COUNT		I					
COL	PCT	Iadult	child			ROW	
		Ito child	to adult			TOTAL	
		I	10I	20I			
FUN		-----+	-----+	-----+	-----+		
	41	I	60	I	50	I	110
Non-specific		I	50.4	I	42.0	I	46.2
		-----+	-----+	-----+	-----+		
	42	I	28	I	28	I	57
Specific repetit		I	24.4	I	23.5	I	23.9
		-----+	-----+	-----+	-----+		
	43	I	10	I	10	I	20
Specificat, no su		I	8.4	I	8.4	I	8.4
		-----+	-----+	-----+	-----+		
	44	I	20	I	31	I	51
Specificat., ques		I	16.8	I	26.1	I	21.4
		-----+	-----+	-----+	-----+		
	COLUMN		119		119		238
	TOTAL		50.0		50.0		100.0

Annex 5.10

Sustaining Moves by Speaker

DYN	COUNT COL PCT	SPK			ROW TOTAL
		I	child		
		I adult	I to chil	I to adul	
		I 10I	I 20I		
		I	I	I	
	1	I 37	I 14	I	51
Rq.Move,Init.U.		I 3.5	I 2.9	I	2.2
	2	I 50	I 49	I	99
Rq.Move,Request		I 4.7	I 10.3	I	6.5
	4	I 618	I 72	I	690
Conf.Move,rq.		I 58.4	I 15.2	I	45.0
	5	I 42	I 18	I	61
Rq.move,rq.repe I		I 4.1	I 3.8	I	4.0
	9	I 177	I 239	I	416
Conf.Move,stat		I 18.7	I 50.3	I	27.1
	11	I 124	I 83	I	217
Rq.Move,init.CS		I 12.7	I 17.5	I	14.1
	COLUMN	1059	475		1534
	TOTAL	69.0	31.0		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Annex 5.11

Clarification Requests by Speaker

		SPK					
COUNT		I					
COL	PCT	Iadult	child			ROW	
		Ito child	to adult			TOTAL	
		I	10I	20I			
FUN		+	+	+	+		
	B1	I	10	I	14	I 24	
Total repetition		I	13.2	I	14.6	I 14.0	
		+ <th>+</th> <th>+</th> <th>+</th> <th></th>	+	+	+		
	B2	I	20	I	21	I 41	
Reduction		I	26.3	I	21.9	I 23.8	
		+ <th>+</th> <th>+</th> <th>+</th> <th></th>	+	+	+		
	B3	I	18	I	29	I 47	
Elaboration		I	23.7	I	30.2	I 27.3	
		+ <th>+</th> <th>+</th> <th>+</th> <th></th>	+	+	+		
	B4	I	3	I	1	I 4	
Substitution		I	3.9	I	1.0	I 2.3	
		+ <th>+</th> <th>+</th> <th>+</th> <th></th>	+	+	+		
	B5	I	25	I	31	I 56	
Confirmation or		I	32.8	I	22.2	I 32.6	
		+ <th>+</th> <th>+</th> <th>+</th> <th></th>	+	+	+		
COLUMN		76		96		172	
TOTAL		44.2		55.8		100.0	

NUMBER OF MISSING OBSERVATIONS = 0

References

- AFOLAYAN,A. (1984) The English language in Nigerian Education as an agent of proper multilingual and multicultural development. Journal of Multilingual and Multicultural Development, 5:1-22.
- ADELMAN,C. (1981) Introduction. In: ADELMAN,C.(Ed.) Uttering, muttering. Collecting and Reporting Talk for Social and Educational Research. London, Grant McIntyre.
- ALTBACH,P.G. (1984) The distribution of knowledge in the Third World: a case study in Neocolonialism. In: ALTBACH,P.G. and KELLY,G.P. (Eds.) Education and the colonial experience. N.Brunswick, Transaction Books.
- AKINNASO,F.N. (1982a) On the difference between spoken and written language. Language and Speech, 25:97-126.
- AKINNASO,F.N. (1982b) The literate writes and the nonliterate chants: written language and ritual communication in sociolinguistic perspective. In: FRAWLEY (Ed.)
- ANDERSON,A. et al.(1984) Teaching talk: strategies for production and assessment. Cambridge, C.U.P.
- AZEVEDO,M. (1980) A Century of Colonial Education in Mozambique. In: MUGOMBA and NYAGGAH (Eds.)
- AU,K.H. (1980) Participation structures in a reading lesson with Hawaiian children: analysis of a culturally appropriate instructional event. Anthropology and Education Quarterly, XI:91-115.
- BAIN,B. (1983) (Ed.) The sociogenesis of language and human conduct. New York, Plenum Press.
- BAILEY,R.W. (1985) Negotiation and Meaning: revisiting the 'Context of Situation'. In: BENSON,J.D. and GREAVES,W.S. (Eds.) Systemic Perspectives on Discourse, Vol.1. Norwood, Ablex Publ.Corp.
- BANGBOSE,A. (Ed.)(1976) Mother Tongue Education. The West African Experience. London, Hodder and Stoughton and UNESCO Press.
- BARNES,S.; GUTFREUND,M.; SATTERLY,D. and WELLS,G. (1983) Characteristics of adult speech which predict children's language development. Journal of Child Language, 10:65-84.
- BATES,E. (1975) Peer relations and the acquisition of language. In: LEWIS,M. and ROSENBLUM,L.A. (Eds.) Friendships and peer relations. New York,Wiley.

- BATES,E. (1976) *Language and context: the acquisition of pragmatics* N.Y., Academic Press.
- BAUMAN,R. and SHERZER,J. (1974) (Eds.) *Explorations in the ethnography of speaking*. Cambridge, CUP.
- BERNINGER,G. and GARVEY,C. (1981) Questions and the allocation, construction and timing of turns in child discourse. Journal of Psycholinguistic Research, 10:375-402
- BERTULLI,C. (1974) *A cruz e a espada em Moçambique*. Lisboa, Portugalia Editora
- BINFORD,M.B. (1971) *Stalemate: a study of cultural dynamics*. Unpublished Ph.D. Thesis, Michigan State University.
- BLANK,M. (1982) Language and school failure: some speculations about the relationship between oral and written language. In FEAGANS and FARRAN (Eds.)
- BLOUNT,B.G. (1972) Parental speech and language acquisition: some Luo and Samoa examples. Anthropological Linguistics, 14:119-130
- BLOUNT,B.G. (1977a) Ethnography and caretaker-child interaction. In: SNOW and FERGUSON (Eds.)
- BLOUNT,B.G. (1977b) Parental speech to children: cultural patterns. In: SAVILLE-TROIKE,M. (Ed.) *Linguistics and Anthropology*, Washington, D.C., Georgetown University Press.
- BOGGS,S.T. (1972) The meaning of questions and narratives to Hawaiian children. In: CAZDEN,C.B.; JOHN,V.P. and HYMES,D. (Eds.)
- BOKAMBA,E.G. and TLOU,J.S. (1977) The consequences of the language policies vis-a-vis Education. In: KOTAY,P.F.A. and DER-HOUSSIKAN,H. (Eds.) *Language and linguistic problems in Africa*. Columbia, Hornbeam Press.
- BRAY,M.; CLARKE,P.B. and STEPHEN,D. (1986) *Education and society in Africa*. Arnold
- BROWN,G. (1986) Investigating listening comprehension in context. Applied Linguistics, 7:284-302
- BROWN,G. and YULE,G. (1983) *Discourse Analysis*. Cambridge, C.U.P.
- BROWN,R. (1980) The maintenance of conversation. In: OLSON,D.R.(Ed. *The social foundations of language and thought*. New York, W.W.Norton.
- BRUMFIT,C. (1985) *Language and literature teaching: from practice to principle*. Oxford, Pergamon Press.

- BRUNER, J. (1975) Language as an instrument of thought. In: DAVIES, A. (Ed.) Problems of language and learning. London, Heinemann.
- BRUNER, J. (1975) The relevance of education. Penguin Books.
- BRUNER, J. (1985) Narrative and paradigmatic modes of thought. In: EISNER, E. (Ed.) Learning and teaching the ways of knowing. Chichago, N.S.S.E.
- BRUNER, J. (1985a) Vygotsky: a historical and conceptual perspective. In: Vertsch (Ed.) 1985a
- BULL, W.E. (1964) The use of vernacular languages in education. In: HYMES, D. (Ed.) Language, culture and society. New York, Harper and Row.
- BURGESS, T. (1984) Language in classroom: a theoretical examination of different research perspectives and an outline of a socio-cultural approach to classroom discourse. Unpublished Ph.D. Thesis, University of London.
- BURTON, D. (1981) Analysing spoken discourse. In: COULTHARD, M. and MONTGOMERY, M. (Eds.) Studies in discourse analysis. London, RKP.
- CABRAL, A. (1980) Unity and struggle: speeches and writings. London, Heinemann.
- CALVET, L.J. (1974) *Linguistique et Colonialisme: petit traité de glottophagie*. Paris, Payot.
- CALLAWAY, H. (1981) Women's perspectives: research as re-vision. In: REASON, P. and ROWAN, J. (Eds.).
- CAMAIONI, L. (1979) Child-adult and child-child conversations: an interactional approach. In: OCHS and SCHIEFFELIN (Eds.)
- CAMPBELL, D.R. (1986) Developing mathematical literacy in a bilingual classroom. in: COOK-GUMPERZ, J. (Ed.).
- CAZDEN, C. (1983) Peekaboo as an instructional model. In: BAIN, B. (Ed.)
- CAZDEN, C.; JOHN, V. and HYMES, D. (Eds.) (1972) Functions of language in the classroom. Columbia, Teachers College Press.
- CENTRO DE ESTUDOS AFRICANOS (1984) *A Formação do Professor Primário e a sua Actuação no Meio Social*. Maputo, U.E.M., mimeo
- CHERRY, L.T. (1979) A sociocognitive approach to language development and its implications for education. In: GARNICA, O.K. and KING, M.L. (Eds.) Language, Children and Society. Oxford, Pergamon Press.
- CHILDS, C.P. and GREENFIELD, P.M. (1980) Informal modes of learning and teaching. The case of Zinacanteco weaving. In: WARREN, M. (Ed.) Studies in Cross-Cultural Psychology. London, Academic Press.

- CLIGNET, R. (1984) Damned if you do, damned if you don't: the dilemma of colonizer-colonized relations. In: ALTBACH, P.G. and KELLY, G.P. (Eds.) Education and the colonial experience. N. Brunswick, Transaction Books.
- COHEN, L. and MANION, L. (1985) Research Methods in Education. London, Croom Helm.
- COLE, M. (1981) Society, Mind and Development. In: KESSEL, F.S. and SIEGEL, A.W. (Eds.) The child and other cultural inventions. Houston Symposium 4. N.Y., Praeger
- COLE, M. (1985a) The zone of proximal development: where culture and cognition create each other. In: WERTSCH, J.V. (Ed.) (1985a)
- COLE, M. (1985b) Mind as a cultural Achievement implications for IQ testing. In: BISNER, E. (Ed.) Learning and teaching the ways of knowing (part 2). Chicago, N.S.S.E.
- COLE, M. and BRUNER, J. (1971) Cultural differences and inferences about psychological processes. *American Psychologist*, 26:867-876)
- COLE, M. and BRUNER, J. (1972) Preliminaries to a theory of cultural differences. In: GORDON, I.J. (Ed.) Early childhood education. Chicago, N.S.S.E.
- COLE, M.; DORE, J.; HALL, W.S. and DOWLEY, G. (1978) Situation and task in young children's talk. *Discourse Processes*, 1:119-176.
- COLE, M. and GRIFFIN, P. (1980) Cultural amplifiers reconsidered. In OLSON, D.R. (Ed.) The social foundation of language and thought. New York, W.W. Norton
- COLLINS, J. and MICHAELS, S. (1986) Speaking and writing: discourse strategies and the acquisition of literacy In: COOK-GUMPERZ, J. (Ed.).
- COMISSÃO NACIONAL DO PLANO (1985) *Informação Estatística 1975-1984*. Maputo, C.N.P.
- CONSELHO COORDENADOR DO RECENSEAMENTO (1983) *Primeiro Recenseamento Geral da População. Informação Pública*. Maputo C.N.P.
- COOK-GUMPERZ, J. (1986) (Ed.) The social construction of literacy. Cambridge, C.U.P.
- CORDER, P. (1981) Error analysis and Interlanguage. Oxford, Oxford University Press
- CORSARO, W.A. (1977) The clarification request as a feature of adult-interactive styles with young children. *Language and Society*, 6:183-207.

- CORSARO, W.A. (1979) Sociolinguistic patterns in adult-child interaction. In: OCHS and SCHIEFFELIN (Eds.)
- CRAIG, R.T. and TRACY, K. (1983) Introduction. In: CRAIG, R.T. and TRACY, K. (Eds.) *Conversational coherence. Form, Structure and Strategy.* Beverly Hills, Sage Publications.
- CROSS, T.G. (1977) Mother's speech adjustments: the contribution of selected child listener variables. In: SNOW, C. and FERGUSON, C.H. (Eds.).
- CROSSLEY, M. and GUTHRIE, G. (1987) Current research in developing countries: INSET and the impact of examinations on classroom practice. *Teaching and Teacher Education*, 3:65-76.
- CUMMINS, J. (1979) Linguistic Interdependence and the Educational Development of Bilingual Children. *Review of Educational Research*, 49:222-251.
- CUMMINS, J. (1980) The cross-cultural dimensions of language proficiency: implications for bilingual education and the optimal age issue. *Tesol Quarterly*, 14:175-187.
- CUMMINS, J. (1983) Language proficiency and academic achievement. In: OLLER, J.W.Jr. (Ed.) *Issues in language testing research.* Mass., Newbury House.
- CUMMINS, J. (1984) Language proficiency and academic achievement revisited: a response. In: RIVERA, C. (Ed.)
- DAVIES, A. (1984) Introduction. In: DAVIES, A.; CRIPER, C and HONWATT, A.P.R. (Eds.) (1984) *Interlanguage.* Edinburgh, Edinburgh University Press.
- DE LEMOS, V. (1967) *Evolution Politique de l'Enseignement au Mozambique.* *Presence Africaine*, 64:113-126
- DOMBEY, H. (1983) Learning the language of books. In: MEEK, M. (Ed.) *Opening moves.* Bedford Way Papers n.17, Institute of Education; London, Heinemann
- DONALDSON, M. (1978) *Children's minds.* Fontana
- DORE, J. (1979) Conversational acts and the acquisition of language. In: OCHS and SCHIEFFELIN (Eds.)
- ELLIS, R. (1985) *Understanding second language acquisition.* Oxford, Oxford University Press.
- ELDERSTEIN, W. (1981) Cultural constraints on development and the vicissitudes of Progress. In: KESSEL, F.S. and SIEGEL, A.W. (Eds.) *The Child and Other Cultural Inventions.* N.Y., Praeger.
- ERICKSON, F. (1981) Some approaches to inquiry in school-community ethnography. In: TRUEBA, H.; GUTHRIE, G. and AU, K. (Eds.)

- ERNY,P. (1981) *The child and his environment in Black Africa*. Nairobi, Oxford University Press
- FAERCH,C.; HAASTRUP,K. and PHILLIPSON,R. (1984) *Learner language and language learning*. Clevedon, Multilingual Matters.
- FAERCH,C. and KASPER,G. (1986) The role of comprehension in second-language learning. *Applied Linguistics*, 7:257-274.
- FANON,F. (1952) *Peau Noire, Masques Blancs*. Paris, Seuil.
- FANON,F. (1961) *Les damnés de la terre*. Paris, Maspero
- FEAGANS,L. and FARRAND,D.(Eds.) (1982) *The language of children reared in poverty*. New York, Academic Press.
- FERREIRA ROSA,M. (1973) *O ponto e o rumo do ensino ultramarino*. Angola, Lello
- FISHMAN,J.A. (1968) ²¹ National Languages and Languages of Wider Communication in the Developing Nations. In: FISHMAN,J.A. (Ed.)
- FISHMAN,J.A. (1972) (Ed.) *Language in sociocultural change*. Stanford University Press.
- FRAWLEY,W. (Ed.) (1982) *Linguistics and Literacy*. New York, Plenum Press.
- FRAWLEY,W. and LANTOLF,J.P. (1985) Second language discourse: a Vygotskian perspective. *Applied Linguistics*,6:18-44.
- FREIRE,P. (1972) *The pedagogy of the oppressed*. Penguin.
- FRE.LI.NO. (1971) *Seminário sobre a Influência do Colonialismo no Artista no seu Meio e no Público nos Países em Desenvolvimento*. Dar-es-Salaam, UNESCO.
- FRENCH,P. and WOOD,B. (1981) Context, meaning and strategy in parent-child conversation. In: WELLS (Ed.).
- GANHÃO,F. (1978) The Struggle Continues: Mozambique's revolutionary experience in Education. *Development Dialogue*, 2:25-36.
- GANHÃO,F. (1979) *O Papel da Língua Portuguesa em Moçambique*. Paper presented at the 1st *Seminário Nacional sobre o Ensino da Língua Portuguesa*, Maputo, mimeo.
- GARVEY,C. (1979) Contingent queries and their relation in discourse.In: OCHS and SCHIEFFELIN (Eds.)
- GILMORE,P. and SMITH,D.M. (1982) A retrospective discussion of the state of the art in ethnography and education. In: GILMORE,P. and GLATTHORN,A.A. (Eds.)

- GILMORE,P. and GLATTHORN,A.A. (1982) (Eds.) Children in and out of school. Ethnography and education. Washington, D.C., Center for Applied Linguistics.
- GONÇALVES,M.P. (1985) *Situação actual da Língua Portuguesa em Moçambique*, *Tempo*, 12 and 19.5 1985.
- GONÇALVES,M.P.; LOUZADA,N.C. and MEIJER,G. (1982) *A Língua Portuguesa em Moçambique: elementos para uma análise de erros*. Maputo, U.E.M.,mimeo.
- GOODY,J.(Ed.) (1968) Literacy in traditional societies. Cambridge, C.U.P..
- GOODY,E. (1977) Towards a Theory of Questions. In: GOODY,E. (Ed.) Questions and Politeness: strategies in Social Interaction. Cambridge, C.U.P.
- GREENFIELD,P.M. (1972) Oral and written language: the consequences for cognitive development in Africa, the U.S. and England. *Language and Speech*, 15:169-178.
- GREENFIELD,P.M. and BRUNER,J. (1969) Culture and cognitive growth. *International Journal of Psychology*, 1:89-107.
- GUMPERZ,J.J. (1977) Sociocultural knowledge in conversational inference. In: SAVILLE-TROIKE,M. (Ed.) G.U.R.T. in Language and Linguistics. Washington, Georgetown University.
- GUTHRIE,G.P. and HALL,W.S. (1981) Introduction to TRUEBA,H.; GUTHRIE,G.P. and AU,K. (Eds.)
- HALLIDAY,M.K.A. (1985) Systemic Background. In: BENSON,J.D. and GREAVES,W.S. (Eds.) Systemic perspectives on discourse, Vol.1. Norwood, Ablex Publications.
- HARKNESS,S. (1977) Aspects of social environment and first language acquisition in rural Africa. In: SNOW and FERGUSON (Eds.)
- HARKNESS,S and SUPER,C.M. (1977) Why African children are so difficult to test. In: ADLER,L.L. (Ed.) Issues in cross-cultural research. New York. Annals of the N.Y. Academy of Science.
- HAVES,H. (1979) Curriculum and reality in African Primary Schools. Harlow, Longman.
- HEATH,S.B. (1982a) Questioning at home and at school: a comparative study. In: SPINDLER,G.(Ed.) Doing the Ethnography of Schooling. New York, CBS College Publications.
- HEATH,S.B. (1982b) What no bed time stories means: narrative skills at home and school. *Language in Society*, 11:49-76.
- HEATH,S.B. (1983) Ways with words. Cambridge, C.U.P.

- HEDEGARD, M. (1986) Two approaches to thinking and knowledge acquisition. Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 8,2:58-63
- HICKMAN, M.E. (1985) Discourse skills and developmental theory. In: VERTSCH, J.V. (Ed.) (1985a)
- HOLZMAN, M. (1972) The use of interrogative forms in the verbal interaction of three mothers and their children. Journal of Psycholinguistic Research, 1:311-336.
- HUGHES, M.; CARMICHAEL, H.; PINKERTON, G. and TIZARD, B. (1979) Recording children's conversations at home and at nursery school: a technique and some methodological considerations. Journal of Child Psychology and Psychiatry 20:225-232
- HUNDEIDE, K. (1985) The tacit background of children's judgements. In: VERTSCH, J.V. (Ed.) (1985a)
- HYMES, D. (1974) Foundations in sociolinguistics: an ethnographic approach. Philadelphia, Univ. of Pennsylvania Press.
- HYMES, D. (1981) Ethnographic monitoring. In: TRUEBA, H.; GUTHRIE, G. and AU, K. (Eds.)
- HYMES, D. (1982) What is ethnography? In: GILMORE, P. and GLATTHORN, A.A. (Eds.).
- ILLICH, I. (1983) Vernacular values and education. In: BAIN, B. (Ed.).
- I.N.D.E. (1982) Bilingualism, Cognitive Development and Pre-school Experience of Mozambican Children - Project Proposal. Maputo, mimeo.
- I.N.D.E. (1983a) *A atitude linguística de alunos do Grande Maputo perante a Língua Portuguesa*. Paper submitted for the Seminar on Sociolinguistic Research. Maputo, mimeo.
- I.N.D.E. (1983b) *Abordagem Sociolinguística do Português falado em Moçambique*. Paper submitted for the Seminar on Sociolinguistic Research. Maputo, mimeo
- I.N.D.E. (1983c) *Método de Pesquisa: a fase preparatória*. Paper submitted for the Seminar on Sociolinguistic Research. Maputo, mimeo
- I.N.D.E. (1984) *Relatório Parcial da Primeira fase do Projecto "Bilinguismo, Desenvolvimento Cognitivo e Experiência Pré-escolar da Criança Moçambicana"*. Maputo, mimeo.
- I.N.D.E./M.E.C. (1983) *Livro do Professor, volumes 1-6*. Maputo, INDE.
- I.N.D.E./M.E.C. (1983) *Vamos Aprender Português, volumes 1-2*. Maputo, INDE.

- ISAACMAN,B. and STEPHEN,J. (1984) *A Mulher Moçambicana no processo de Libertação*. Maputo, INLD.
- JACOB,B. (1982) Combining ethnographic and quantitative approaches: suggestions and examples from a study on Puerto Rico In: GILMORE,P and GLATTHORN,A.A.(Eds.)
- JAMES,C. (1980) Contrastive analysis. Harlow, Longman.
- JONHSTON,A. (1984) Education In Mozambique, 1975-84. Stockholm, SIDA.
- JORDAN,C.; D'AMATO,J. and JOESTING,A.K. (1981) At home, at school and at the interface. Educational Perspectives 20 (1):31-37.
- JORDAN,C. (1985) Translating culture: from ethnographic information to educational program. Anthropology and Education Quarterly, 16:105-122.
- JOHN-STEINER,V. (1985) The road to competence in an alien land: a Vygotskian perspective on bilingualism. In: WERTSCH,J.V. (Ed.) 1985a
- KAYE,K. and CHARNEY,R. (1980) How to maintain dialogue with 2 year olds. In: OLSON (Ed.) The social foundations of language and thought. New York, Norton.
- KOHL,H. (1967) 36 children. Penguin.
- KOHLBERG,L. and WERTSCH,J.V. (1981) Language and the development of thought. (xerocopy from the Authors).
- KONEFAL,J.A. and FOKES,J. (1984) Linguistic analysis of children's conversational repairs. Jrn. Psychol. Res., 13:1-11.
- LABORATORY OF COMPARATIVE HUMAN COGNITION (1986) Contributions of Cross-Cultural Research to Educational Practice. American Psychologist 10:1049-1058
- LABOV,W. (1970) The logic of non-standard English. In: WILLIAMS,F. (Ed.) Language and poverty. Chicago, Markham.
- LABOV,W. (1972) Language in the Inner City. Philadelphia, University of Pennsylvania Press.
- LABOV,W. (1982) Competing value systems in the inner-city schools. In: GILMORE,P. and GLATTHORN,A.A. (Eds.).
- LARSEN-FREEMAN,D. (1983) Training teachers or educating a Teacher. In: ATLATIS,J.E.; STERN,H.H. and STREVEVS,P. (Eds.) Georgetown University Round Table on Language and Linguistics, Georgetown University Press.

- LARSKY,R.E. et al. (1983) Social interactions of Guatemalan infants - The importance of different caretakers. Journal of Cross-cultural Psychology 14, No.1.
- LEE,B. (1985) Origins of Vygotsky's semiotic analysis. In: WERTSCH,J.V. (Ed.)
- LEONT'EV,A.N. (1981) The problem of activity in Psychology. In: WERTSCH,J.V. (Ed.) The concept of activity in Soviet Psychology. N.Y., Sharpe.
- LEONTIEV,A.A. (1981) Psychology and the language learning process. Oxford, Pergamon Press.
- LINCOLN,Y.S. and GUBA,E.G. (1985) Naturalistic inquiry. Beverly Hills, Sage Publications.
- LINDHOLM,K.J. and PADILLA,A.A. (1981) Socialization via communication: language interaction patterns used by Hispanic mothers and children in Mastery Skill Communication. In: DURAN,R.P. (Ed.) Latino languages and communicative behaviour. Norwood, ALEX Publ.
- LLOYD,B. and GAY,J. (Eds.)(1981) Universals of human thought. Cambridge, Cambridge University Press.
- LOCK,A. (1980) The guided reinvention of language. London, Academic Press.
- LOPES,A.J.P. (1986) Interlingual Discourse Transfer: Mozambican-Portuguese to English. Unpublished PhD. Thesis, University College of North Wales.
- LOWE,K. (1985) Teaching Thomas. Harlow, Longman.
- LURIA,A.R. (1976) Cognitive development. Its cultural and social foundations. Edited by M.Cole. Cambridge, Harvard Univ. Press.
- LURIA,A.R. (1981) Language and cognition. Selected writings edited by J.V.Wertsch. N.Y., Wiley Interscience.
- MACHEL,G. (1979) *Discurso de abertura, 1ro Seminário Nacional sobre o Ensino da Língua Portuguesa*. In: N.E.C.(1979).
- MACHEL,G. (1985a) *Avanços na Educação são encorajadores*. (Interview with the Minister of Education), *Notícias*, Maputo, 15.4.1985.
- MACHEL,G. (1985b) *Nacionalização do Ensino: Igualdade de Oportunidades*. *Notícias*, 25.6.85
- MACHEL,S. (1978) *Educar o homem para vencer a guerra, criar uma sociedade nova e desenvolver a Pátria*. Maputo, FRELIMO.
- MACHEL,S. (1981) *A Escola é a forja do Homem Novo*. Maputo, mimeo

- MACHEL,S. (1984) *Discurso de abertura na Sessão Solene da Assembleia Popular. In: Pela Paz - Acordo Nkomati*. Maputo,INDL.
- MacLURE,M. and FRENCH,P. (1981) A comparison of talk at home and at school. In: WELLS (Ed.).
- MALZONE,D. and PARKER,E. (1979) Question form analysis in discourse agreement between a mother and a language learning child. Journal Psycholinguistic Research,8:21-28.
- MANNONI,O. (1950) *Psychologie de la colonization*. Paris, Le Seuil.
- MARINIS,H. (1982) *Lingua, Poder, Desenvolvimento*. Maputo, UEM,mimeo.
- MARSHALL,J. (1985) Making Education revolutionary. in: SAUL,J (Ed.)
- McDONALD,L. and PIEN,D. (1982) Mother conversation behaviour as a function of interactional intent. Journal of Child Language, 9:337-358.
- McLANE,J.B. and WERTSCH,J.V. (1986) Child-child and adult-child interaction: a Vygotskian study of dyadic problem systems. Quarterly Newsletter of the Laboratory of Comparative Human Cognition, University of California, San Diego, 8:98-105
- McTEAR,M. (1985) *Children's conversations*. Oxford, B.Blackwell.
- M.E.C. (1979) *Primeiro Seminário sobre o Ensino da Lingua Portuguesa*. Maputo, MEC, mimeo
- M.E.C. (1980a) *Sistemas de Educação em Moçambique*. Maputo, MEC, mimeo.
- M.E.C. (1980b) *O Sistema Nacional de Educação e a Situação Multilingue do País*. Maputo, MEC, mimeo.
- M.E.C. (1981) *Sistema Nacional de Educação*. Maputo, MEC, mimeo.
- MEHAN,H. (1979) *Learning lessons*. Cambridge, Harvard University Press.
- MEIJER,G. (1980) *Diversidade linguística e comunicação*. Maputo, INDE,mimeo.
- MEIJER,G. (1980) Bilingualism and Education for Cognitive Development :the case of Mozambique. Paper presented at the International Symposium 'Education for Cognitive Development' .Utrecht, mimeo.
- MEMMI,A. (1966) *Portrait du colonisateur et portrait du colonisé*. Paris, Pauvert
- MICHAELS,S. (1981) Sharing Time: children's narrative styles and differential access to literacy. Language and Society, 10:423-442.
- MISHLER,E.G. (1975) Studies in dialogue and discourse II. Types of discourse initiated and sustained through questions. Journal of Psycholinguistic Research, 4:99-121

MISHLER, B.G. (1978) Studies in dialogue and discourse III. Utterance structure and utterance function in interrogative sequences. Journal of Psycholinguistic Research, 7:279-305.

MOHATT, G.V. and ERICKSON, F. (1981) Cultural differences in teaching styles in an Odawa school: a sociolinguistic approach. In: TRUEBA, H.; GUTHRIE, G. and AU, K. (Eds.)

MONDLANE, E. (1969) *The Struggle for Mozambique*. Penguin.

MUGOMBA, A.T. (1980) Revolutionary development and educational decolonization in Mozambique. In: MUGOMBA and NYAGGAH (Eds.)

MUGOMBA and NYAGGAH (Eds.) (1980) *Independence without freedom: the political economy of colonial education in Southern Africa*. S.Barbara, ABC-Clío.

OCHS, E. (1983) Cultural dimensions of language acquisition. In: OCHS and SCHIEFFELIN (Eds.) *Acquiring conversational competence*. London, RKP.

OCHS, E. (1984) Clarification and culture. In: G.U.R.T. on language and Linguistics, Georgetown University Press.

OCHS, E., KEENAN, E., SCHIEFFELIN, B.B. and PLATT, M. (1977) Questions of immediate concern. In: GOODY, E. (Ed.)

OCHS, E. and SCHIEFFELIN, B.B. (Eds.) (1979) *Developmental Pragmatics*. London, Academic Press.

OCHS, E. and SCHIEFFELIN, B.B. (1982) Language acquisition and socialization: three developmental stories and their implications. In: BAUMAN, R. and SHERZER, J. (Eds.) *Case studies in the ethnography of speaking. A compilation of research papers in sociolinguistics*. Austin, Southwest Educational Development Laboratory.

OGBU, J.U. (1982) Societal forces as a context of ghetto children's school failure. In: FEARGANS and FARRAN (Eds.)

OLSEN-FULERO, L. (1982) Style and stability in mother conversational behaviour: a study of individual differences. Journal of Child Language, 9:543-564.

OLSEN-FULERO, L. and CONFORTI, J. (1983) Child responsiveness to mother questions of varying type and presentation. Journal of Child Language, 10:495-520.

OLSON, D.R. (1977a) Oral and written language and the cognitive processes of children. Journal of Communication, 27:10-26.

OLSON, D.R. (1977b) From utterance to text: the bias of language in speech and writing. Harvard Educational Review, 47:257-281.

MOLLY, L.C. and DIAZ, S. (1985) *Ethnographic Pedagogy Promoting effective bilingual education instruction*. In: GARCIA, E. and PADILLA, K. (Eds.) *Advances in bilingual education* - Tucson, AZ, University of Arizona Press -

- ORASANU, J. and SCRIBNER, S. (1982) The development of verbal reasoning: pragmatic, schematic and operational aspects. In: FRAWLEY, (Ed.).
- PARKIN, D. (1977) Emergent and stabilized multilingualism: polyethnic peer groups in urban Kenya. In: GILES, H. (Ed.) Language, ethnicity and intergroup relations. London, Academic Press.
- PAUL, J. (1975) Mozambique. Memoirs of a Revolution. Penguin.
- PHILIPS, S. U. (1972) Participant structures and communicative competence: Warm Spring children in community and classroom. In CAZDEN et al. (Eds.).
- PHILLIPSON, R. and SKUTNABB-KANGAS, T. (1986) English as a Language of Wider Colonization. Paper presented at the 11th World Congress of Sociology, New Delhi, August 1986
- PHILLIPSON, R. and SKUTNABB-KANGAS, T. (1986a) Linguicism rules in education. ROLIG Papir No. , Roskilde, Roskilde Universitetscenter.
- PHILLIPSON, R.; SKUTNABB-KANGAS, T. and AFRICA, H. (1986) Namibian educational language planning: English for liberation or neo-colonialism ?. In: SPOLSKY, B. (Ed.).
- REASON, P. and ROWAN, J. (1981) (Eds.) Human inquiry. A sourcebook of New Paradigm research. Chichester, J. Wiley and Sons.
- REYNOLDS, P. (1986) Through the looking glass. Participant Observation with Children in Southern Africa. Paper delivered at a Workshop on the Ethnography of Childhood, Cambridge, July 1986, mimeo.
- RIVERA, C. (Ed.) (1983) An ethnographic/sociolinguistic approach to language proficiency assessment. Clevedon, Multilingual Matters.
- RIVERA, C. (Ed.) (1984) Language proficiency and academic achievement. Clevedon, Multilingual Matters.
- ROBINSON, W. P. and RACKSTRAW, S. D. (1972) A question of answers. London, P. R. Hawkins, & K. P.
- ROBINSON, W. P. (1981) Mothers' answers to children's questions: from socio-economic status to individual differences. In: ROBINSON, W. P. (Ed.) Communication in development. London, Academic Press.
- RODNEY, W. (1972) How Europe underdeveloped Africa. London, Bogle-l'Ouverture.
- ROMMETVEIT, R. (1978) On Piagetian cognitive operations, semantic competence and message structure in adult-child communication. In: MARKOVA, I. (Ed.) The social context of language. New York, J. Wiley.
- RZEWUSKI, E. (1979) *A lingua pertence ao Povo, a língua reflecte a sociedade.* Interview in: *Notícias da Beira*, 31.1.79.

- SACKS,H.; SCHEGLOFF,B.A. and JEFFERSON,G. (1974) A simplest systematization for the organization of turntaking in conversation. *Language*, 50:696-735.
- SAVILLE-TROIKE,M. (1982) *The ethnography of communication*. Oxford, B.Blackwell
- SAUL,J. (Ed.)(1985) *A difficult road: the transition to Socialism in Mozambique*. New York, Monthly Review Press.
- SCHIEFFELIN,B.B. (1979) Getting it together: an ethnographic approach to the study of the development of communicative competence. In: OCHS,E. and SCHIEFFELIN,B.B. (Eds.) *Developmental Pragmatics*. London, Academic Press.
- SCHUBERT,J. (1983) The implications of Luria's theories for cross-cultural research on language and intelligence. In: BAIN,B. (Ed.).
- SCHWARTZ,J. (1980) The negotiation for meaning: repair in conversation between second language learners of English. In: LARSEN-FREEMAN,D. (Ed.) *Discourse analysis in second language research*. Rowley, Newbury house.
- SCOLLON,R. and SCOLLON,S.B.K. (1981) *Narrative, literacy and face in interethnic communication*. New Jersey, ALEX Publ.Corp.
- SCRIBNER,S. and COLE,M. (1981) *The psychology of literacy*. Cambridge, Harvard University Press.
- SIMIC-DUDGEON,C. and RIVERA,C. (1983) Teacher training and ethnographic / sociolinguistic issues in the assessment of bilingual students' language proficiency. In: RIVERA,C. (Ed.)
- SINCLAIR,J.and COULTHARD,R.M. (1975) *Towards an analysis of discourse: the English used by teachers and pupils*. London, Oxford University Press.
- SIMON,H.D. and MURPHY,S. (1986) Spoken language strategies and reading acquisition. In: COOK-GUMPERZ,J. (Ed.).
- SKUTNABB-KANGAS,T. (1983) *Bilingualism or not: the education of minorities*. Clevedon, Multilingual Matters.
- SKUTNABB-KANGAS,T. (1986) Who wants to change what and why. Conflicting paradigms in minority education research. In: SPOLSKY,B. (Ed.)
- SNOW,C.E. (1977) Mothers'speech: from input to interaction. In SNOW and FERGUSON (Eds.)
- SNOW,C.E. (1983) Literacy and language. Relationship during the preschool years. *Harvard Educational Review*, 53:165-189.
- SNOW,C.E. (1984) Development of decontextualized language skills in preschool children. Proposal submitted to W.I.C., mimeo.

- SNOW,C.B. and FERGUSON,C.H. (Eds.)(1977) Talking to children. Cambridge, C.U.P.
- SPOLSKY,B. (Ed.) (1986) Language and education in multilingual settings. Clevedon, Multilingual Matters.
- SPRADLEY,J.P. (1980) Participant observation. New York, Holt, Reinhart and Winston.
- STREET,B.V. (1984) Literacy in theory and practice. Cambridge, C.U.P.
- STREET,B.V. (1986) Literacy practices and literacy myths. Paper presented at the Symposium on Literacy, Boston Conference on Language Development.
- STUBBS,M. (1980) Language and literacy. London, R.K.P.
- STUBBS,M. (1981) Scratching the surface: Linguistic data in educational research. In: ADELMAN,C. (Ed.)
- SUTTON,A. (1980a) Measures and Models in Developmental psychology. Educational Studies 6:111-127.
- SUTTON,A. (1980b) Cultural disadvantage and Vygotsky's Stages of Development. Educational Studies 6:199-209.
- SYMPHER,H.E. and APPLGATE,J.L. (1984) Interpersonal communication of children and adults: Cognitive and social processes. Beverly Hills, Sage Publications.
- TANNEN,D. (1982a) Spoken and written language; exploring orality and literacy. Norwood, ALEX Publ.
- TANNEN,D. (1982b) The myth of orality and literacy. In: FRAWLEY, (Ed.)
- TIZARD,B. (1984) Young children learning. Talking and learning at home and at school. London, Fontana.
- TIZARD,B.; CARMICHAEL,H.; HUGHES,M. and PINKERTON,G. (1980) Four year olds talking to mothers and teachers. In: HERSON,L.A.; BERGER,M. and NICOL,A.R. (Eds.) Language and language disorders in childhood. Oxford, Pergamon.
- TIZARD,B. et al. (1982) Adults' cognitive demands at home and at nursery school. Journal of Child Psychology and Psychiatry, 23:105-116.
- TOUGH,J. (1976) Listening to children talking. London, Ward Lock
- TOUGH,J. (1977) The development of meaning. London, Allen and Unwin.
- TRUEBA,H.; GUTHRIE,G. and AU,K. (Eds.) (1981) Culture and the bilingual classroom: studies in classroom ethnography. Rowley, Newbury House.

- TRUEBA, H.T. and WRIGHT, P.G. (1981) A challenge for ethnographic researchers in bilingual settings: analyzing Spanish/English classroom interaction. Journal of Multilingual Multicultural Development, 2:243-257
- TROIKE, R.C. and SAVILLE-TROIKE, M. (1982) Teacher training for bilingual education; an international perspective. In: HATFORD, B.; VALDMAN, A. and FOSTER, G.R. (Eds.) *Issues in International Bilingual Education*. N.Y., Plenum Press.
- U.N.E.S.C.O. (1953) *The use of vernacular languages in education*. Paris.
- U.N.I.W. (1981) *Toward a language policy for Namibia. English as the official language: perspectives and strategies*. Namibia Studies Series, 4. Lusaka, UNIN.
- URDANG, S. (1985) *The last transition? Women and development*. In: SAUL, J. (Ed.).
- van HEKKEN, S.M.J. and ROELOFSEN, W. (1982) More questions than answers: a study of Q-A sequences in a naturalistic setting. Journal of Child Language, 9:445-460
- VIEIRA, S. (1979) *O Homen Novo é um processo*. Maputo, mimeo.
- VOLOSINOV, V. (1973) *Marxism and the philosophy of language*. N.Y., Seminar Press
- VYGOTSKY, L.S. (1962) *Thought and language*. Cambridge, M.I.T. Press.
- VYGOTSKY, L.S. (1978) *Mind in Society. The development of higher psychological processes*. Edited by M.Cole, S.Scribner et al., Cambridge, Harvard University Press.
- VYGOTSKY, L.S. (1981) The genesis of the higher mental processes. In: VERTSCH, V. (Ed.) *The concept of activity in Soviet Psychology*. New York, Armonk/Sharpe.
- WAGNER, D.A.; MESSICK, B.M. and SPRATT, J. (1986) Studying literacy in Morocco. In: SCHIEFFELIN, B.B. and GILMORE, P. (Eds.) *The acquisition of literacy: ethnographic perspectives*. N.Y., Ablex.
- WALKERDINE, V. (1982) From context to text: a psychosemiotic approach to abstract thought. In: BEVERIDGE, M. (Ed.) *Children thinking through language*. London, E.Arnold.
- waTHIONG'O, N. (1985) The language of African literature. New Left Review 150:109-127
- WATSON, K. (1982) Colonialism and educational development. In: WATSON, K. (Ed.) *Education in the Third World*. London, Croom Helm.
- WEISNER, T.S. and GALLIMORE, R. (1977) My brother's keeper: child and sibling caretaking. Current Anthropology, 18:169-190.

- WELLS,G. (1981) Learning through interaction. Cambridge, C.U.P.
- WELLS,G. (1983a) Success and failure in language learning: some findings from the Bristol study. B.A.A.L. Newsletter, Sept.83.
- WELLS,G. (1983b) Styles of interaction and opportunities for learning. Paper presented at the 3rd language and Language Acquisition Conference, 'Pragmatics and Education' Gent, Belgium, March 83.
- WELLS,G. (1985) Language development in the pre-school years. Cambridge, C.U.P.
- WELLS,G. (1986) The language experience of five-year-old children at home and at school. In: COOK-GUMPERZ,J. (Ed.)
- WELLS,G. and GUTFREUND,M. (1984) The conversational requirements for language learning. Paper presented at the meeting on 'Language Development and Communication Problems of the Handicapped', Oxford, Jan.84.
- WELLS,C.G.and MONTGOMERY,M. (1981) Adult-child interaction at home and at school.In: FRENCH,P. and MacLURE,M. (Eds.) Adult-Child conversation. London, Croom Helm.
- WELLS,G. and ROBINSON,W.P. (1982) The role of adult speech in language development. In: FRAZER,C. and SCHERER,K. (Eds.) Advances in the social psychology of language. Cambridge, C.U.P.
- WERTH,P. (1981) The concept of 'relevance' in conversational analysis. In: WERTH,P (Ed.) Conversation and Discourse. London, Croom Helm.
- VERTSCH,Y. (1979) From social interaction to higher psychological processes. A clarification and application of Vygotsky's theory. Human Development 22:1-22.
- VERTSCH,Y. (1983) The role of semiosis in L.S.Vygotsky's theory of human cognition. In: BAIN,B.(Ed.)
- VERTSCH,J.V. (1985a) (Ed.) Culture, Communication and cognition: Vygotskian perspectives. Cambridge, C U.P.
- VERTSCH,J.V.(1985b) Vygotsky and the social formation of mind. Cambridge, Harvard University Press.
- VERTSCH,J.V. and SAMMARCO,J.G. (1985) Social precursors to individual cognitive functioning: the problems of units of analysis. In: HINDE,R.A.; PERRET-CLERMONT,A.M. and STEVENSON-HINDE,J. (Eds.) Social relationships and cognitive development. Oxford, Clarendon Press.
- WIDDOWSON,H.G. (1978) Teaching language as communication. Oxford. Oxford University Press.

- WIDDOWSON, H.G. (1984) *Explorations in Applied Linguistics 2*. Oxford, Oxford University Press.
- WHITING, B. and WHITING, J.W.M. (1975) *Children of six cultures* Cambridge, Harvard University Press.
- WILLES, M.J. (1983) *Children into pupils*. London, R.K.P.
- WILLIAMS, R. *et al.*, (1982) Early reading experiences: some linguistic perspectives on parent/child interaction in book sharing situations. In: FRAWLEY, (Ed.)
- WOODS, P. (1985) Sociology, Ethnography and Teacher practice. Teaching and Teacher Education, 1:51-62.
- YAI, O.B. (1982) *La Republique Populaire de Mozambique. Les elements pour une politique de promotion des langues nationales. Rapport technique*. Paris, UNESCO. N.Y., Academic Press.
- ZEBROSKI, J.T. (1982) Soviet Psycholinguistics: implications for the teaching of writing. In: FRAWLEY, W. (Ed.)
- ZINCHENKO, V.P. (1985) Vygotsky and units for the analysis of mind. In: VERTSCH, J.V. (Ed.)

Aknowledgments

I feel I cannot write a proper acknowledgment page: I don't have a wife to thank for putting up with my moods and demands, and for ~~for~~ being a sponge to mop up my emotional mess of lone researcher in a foreign land; I don't have a typist either, only a W.P. I am grateful, however, to the following for their support, advice and collaboration:

At the University of London Institute of Education:

- . Angela Hobsbaum (Supervisor), John Versey and Maureen Shields of the Department of Child Development and Educational Psychology
- . Euan Reid (Supervisor), Peter Skehan and Tony Burgess of the Department of English to Speakers of Other Languages
- . Trevor Coombe of the Department of International and Comparative Education
- . James Rantell of the Dept. of Mathematics, Statistics and Computing

At the *Instituto Nacional do Desenvolvimento da Educação*, Maputo:

- . Luis Filipe (Director), Guus Meijer, Zaida Gulli, Clotilde Waddington and Nadja Manghesi (Research Staff)

At the University 'E.Mondlane', Faculty of Education, Maputo:

- . Arlindo Siteo, Armando J.P. Lopes and Matheus Katupe

Barbara Tizard, Thomas Coram Research Unit, London

Brian Street, University of Sussex, Department of Social Anthropology

The British Council and the University of London Institute of Education for financial assistance

The Rabkin Family, London

Piero McCarthy and his family, London.