

Thesis
4168

LEARNERS' PERCEPTIONS OF
TEACHERS' NON-VERBAL BEHAVIOURS
IN THE FOREIGN LANGUAGE CLASS

Daniela Sime

A Thesis Submitted in Fulfilment
of the Requirements for the Degree of
Doctor of Philosophy
at the Faculty of Human Sciences,
University of Stirling

August 2003

DS

USE OF THESIS

This thesis is the property of University of Stirling. The author's literary rights must be respected. Any passage of findings from this thesis can be quoted or paraphrased only with the acknowledgement of the source. If a user intends to publish a paper or written work containing paragraphs or paraphrases from the thesis, action which could constitute an infringing of the Copyright Act, he or she must ask the author's written permission first.

ABSTRACT

This study explores the meanings that participants in a British ELT setting give to teachers' non-verbal behaviours. It is a qualitative, descriptive study of the perceived functions that gestures and other non-verbal behaviours perform in the foreign language classroom, viewed mainly from the language learners' perspective. The thesis presents the stages of the research process, from the initial development of the research questions to the discussion of the research findings that summarise and discuss the participants' views.

There are two distinct research phases presented in the thesis. The pilot study explores the perceptions of 18 experienced language learners of teachers' non-verbal behaviours. The data is collected in interviews based on videotaped extracts of classroom interaction, presented to the participants in two experimental conditions, with and without sound. The findings of this initial study justify the later change of method from the experimental design to a more exploratory framework. In the main study, 22 learners explain, in interviews based on stimulated recall, their perceptions on their teachers' verbal and non-verbal behaviours as occurring within the immediate classroom context. Finally, learners' views are complemented by 20 trainee teachers' written reports of classroom observation and their opinions expressed in focus group interviews. The data for the main study were thus collected through a combination of methods, ranging from classroom direct observations and videotaped recordings, to semi-structured interviews with language learners.

The research findings indicate that participants generally believe that gestures and other non-verbal behaviours play a key role in the language learning and teaching process. Learners identify three types of functions that non-verbal behaviours play in the classroom interaction: (i) cognitive, i.e. non-verbal behaviours which work as enhancers of the learning processes, (ii) emotional, i.e. non-verbal behaviours that function as reliable communicative devices of teachers' emotions and attitudes and (iii) organisational, i.e. non-verbal behaviours which serve as tools of classroom management and control.

The findings suggest that learners interpret teachers' non-verbal behaviours in a functional manner and use these messages and cues in their learning and social interaction with the teacher. The trainee teachers value in a similar manner the roles

that non-verbal behaviours play in the language teaching and learning. However, they seem to prioritise the cognitive and managerial functions of teachers' non-verbal behaviours over the emotional ones and do not consider the latter as important as the learners did.

This study is original in relation to previous studies of language classroom interaction in that it:

- describes the kinds of teachers' behaviours which all teachers and learners are familiar with, but which have seldom been foregrounded in classroom-based research;
- unlike previous studies of non-verbal behaviour, investigates the perceiver's view of the others' non-verbal behaviour rather than its production;
- documents these processes of perception through an innovative methodology of data collection and analysis;
- explores the teachers' non-verbal behaviours as perceived by the learners themselves, suggesting that their viewpoint can be one window on the reality of language classrooms;
- provides explanations and functional interpretations for the many spontaneous and apparently unimportant actions that teachers use on a routine basis;
- identifies a new area which needs consideration in any future research and pedagogy of language teaching and learning.

DECLARATION

I certify, to the best of my knowledge and belief, that this thesis does not:

- (i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
- (ii) contain any material previously published and written by another author, except where due reference is made in the text;
- (iii) contain any defamatory material.

ACKNOWLEDGEMENTS

Writing a thesis is without doubt a philosophical experience: the more you find out about your topic, the more you realise how much is there left to discover. I started my quest of human behaviour with an avid curiosity for its intricacies and unpredictability and convinced that our hands and bodies communicate in a language which we do not yet completely understand. With the naïve enthusiasm of the beginner in research, I initially thought to find the rule and explanation of how and why teachers communicate non-verbally and with what relevance for the learners of a foreign language. Although with the passing of the years I realised that we will never entirely know the 'rules' of our behaviour, my attempt to understand it from the learners' perspective was very stimulating, challenging and a rewarding experience.

I began working on this study thanks to a scholarship funded by The Faculty of Human Sciences at the University of Stirling. I am therefore grateful to the members of the Faculty for their financial generosity and insight into the relevance of non-verbal behaviour to classroom-based research and applied linguistics.

Research reports are never written by the author alone and this thesis is certainly no exception. I am particularly grateful to the participants in the study, who enabled me to make a little more sense of our complicated and fascinating behaviour. The teachers in the former Centre for English Language Teaching at the University of Stirling were willing to be observed and videotaped during the classes. The learners in their classes volunteered to be interviewed and shared in an open manner their impressions on the lessons they attended. The trainee teachers observed and commented on teachers' non-verbal behaviours, under the encouragement of Anne Robinson, who was an authentic and valuable 'gate-keeper'. I wish to thank all of these teachers, teachers-to-be and learners, whose anonymity we agreed to protect, for their open minds and enthusiasm when participating in the research. I also thank Fred Phillips for the technical assistance given with the photos shown in the thesis.

The people who provided encouragement and stimulation constantly over the years are my supervisors, Professor Mike Breen and Doctor Richard Badger. During our first meeting on a rainy day of March in a Scottish castle, Mike was as sceptical of the topic as any applied linguist of his calibre was right to be. However, together with Richard, we came to form a harmonious trio who spent many hours together, trying out

ideas and furthering my knowledge and skills, with the normal stages of frustration and confusion in between. As a student, I used to always see the barrier between academics and disciples in the fashion of the more rigid culture I was brought up in. With my supervisors, the barrier was never there and they always seemed able to guide with mastery and understand my faults and frustrations, even when I was not able to. I am indebted to them both for constant guidance, inspiration and mentoring to the highest standards and sometimes even beyond their duty. As both my supervisors have recently left the University of Stirling, I consider the thesis a memento of a unique formative experience and opportunity to work with two great masters of language teaching practice and research. I hope they both value the ideas presented in the thesis.

I thank all my previous teachers, from the enthusiastic Psychology professor to the romantic Math wizard and the strict primary school teacher. They all inspired and motivated my desire to become part of their professional group and later on to investigate classes as a researcher.

I also wish to express my gratitude to my family and friends, who, from Scotland or from abroad, supported my efforts and encouraged me over the years to continue and fulfil a dream. My heartfelt thanks go to my boyfriend Jordi, who initially participated as a subject in this project and then became my companion in everything, including the thesis writing process. His constant support, sense of humour and unfailing enthusiasm for my work made my belief that love lightens any efforts and makes almost anything possible.

I finally thank the examiners of this thesis, Prof. Rosamund Mitchell, Dr. Hugh-Trappes Lomax and Prof. Richard Johnstone, for their constructive comments made during the viva examination.

TABLE OF CONTENTS

USE OF THESIS	ii
ABSTRACT	iii
DECLARATION.....	v
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS	viii
LIST OF TABLES.....	xiv
LIST OF FIGURES.....	xv
DEFINITIONS, ABBREVIATIONS AND CONVENTIONS USED	xvii
PART ONE: INTRODUCTION TO THE STUDY.....	1
CHAPTER 1 FOCUS AND ORGANISATION OF THE STUDY.....	2
1.1. Identifying the problem	2
1.2. The focus of the study.....	4
1.3. Selecting the research framework.....	4
1.4. The stages of the study.....	5
1.5. The organisation of the study.....	7
1.6. Summary.....	8
CHAPTER 2 NON-VERBAL BEHAVIOUR THEORY AND RESEARCH.....	10
2.1. Overview.....	10
2.2. Terminological distinctions	10
2.2.1. The terms 'verbal' and 'non-verbal'.....	10
2.2.2. The terms 'communication' and 'behaviour'	11
2.3. The non-verbal subcodes.....	12
2.3.1. Facial expressions	13
2.3.2. Eye contact and gaze.....	15
2.3.3. The use of physical space and posture	17
2.4. Gestures	19
2.4.1. Defining gestures	20
2.4.2. Physical properties of gestures	21
2.4.3. Gesture and speech - two systems of communication.....	23

2.4.4. Gesture and speech - how do they convey meanings?	25
2.4.5. Communicative properties of gesture	28
2.4.6. From gesture to sign languages.....	32
2.4.7. The focus on gestures in the present study	35
2.4.8. Taxonomies of speech-related gestures.....	35
2.5. Models of non-verbal behaviour	38
2.5.1. Traditional models of non-verbal behaviour.....	38
2.5.2. Communication and cognitive models of non-verbal behaviour.....	39
2.5.3. Observer versus participant perspective	42
2.6. Non-verbal behaviour and culture	43
2.7. Summary	47
CHAPTER 3 NON-VERBAL BEHAVIOUR, SOCIAL NORMS AND THE LANGUAGE CLASSROOM.....	48
3.1. Overview.....	48
3.2. The effects of social norms on individuals' production of non- verbal behaviour	48
3.3. The effects of social norms on individuals' perceptions and interpretations of others' non-verbal behaviour	51
3.4. The attribution approach	53
3.5. Models of attribution.....	57
3.6. Attributional inaccuracy.....	61
3.7. Social stereotypes.....	63
3.8. Summary - Human perception and attribution	65
3.9. Current issues in the field of foreign language classroom research	65
3.9.1. Research trends and the relevance of the social context in the language class.....	66
3.9.2. Studies on gestures and foreign language learning.....	71
3.10. The key features of this study	75
3.11. Summary.....	76
PART TWO: RESEARCH METHODOLOGY	77
CHAPTER 4 THE PILOT STUDY	78
4.1. Overview.....	78
4.2. Justifying the pilot study	78
4.3. Selecting the setting.....	79
4.4. Getting familiar with the field	80
4.5. Selecting the sample	82
4.6. Finding a suitable method of data collection.....	83

4.6.1. Overview of the methods used for investigating learners' perspectives in current SLA research	83
4.6.2. Designing the interviews	86
4.6.3. Conducting the interviews.....	87
4.6.4. After the interviews.....	88
4.7. Analysing the data.....	89
4.7.1. Generating coding categories and labelling them.....	89
4.7.2. Identifying emerging themes and categories.....	92
4.7.3. Classifying behaviours into functional categories.....	94
4.7.4. Writing analytic notes on categories.....	98
4.8. Findings of the pilot study.....	99
4.9. Outcomes of the pilot study	101
4.10. Identifying the research questions of the main study.....	102
4.11. Summary.....	104
CHAPTER 5 METHOD OF DATA GATHERING.....	105
5.1 Overview.....	105
5.2. Designing of the study.....	105
5.2.1. Characteristics of qualitative research.....	107
5.2.2. Developing the research design	108
5.3. Gathering the data.....	110
5.3.1. Videotaping classes	111
5.3.2. The profiles of the interviewed learners	115
5.3.3. Using the stimulated recall methodology.....	116
5.3.4. Interviewing the language learners.....	118
5.3.5. Obtaining data from the trainee teachers.....	120
5.3.6. Conducting group interviews with the trainee teachers .	123
5.3.7. Researching with narratives.....	125
5.3.8. Considerations on triangulating the data	126
5.3.9. Overview of gathered data.....	127
5.4. On ethical issues.....	128
5.4.1. When are participants volunteering?	128
5.4.2. Informed consent forms	128
5.4.3. Confidentiality	129
5.5. Summary.....	129
CHAPTER 6 DATA ANALYSIS.....	130
6.1. Overview.....	130
6.2. Processes of data analysis.....	130
6.2.1. Transcribing the visual data of teachers' NVB.....	131
6.2.2. Analysing the interviews with the learners.....	134

6.2.3. Analysing the focus group interviews with the trainee teachers	136
6.2.4. Analysing the written reports of the trainee teachers ..	136
6.3. Writing the analysis.....	138
6.3.1. Developing the narrative	138
6.3.2. Giving voice to 'voices'	140
6.4. Summary	140
PART THREE: THE FINDINGS FROM THE DATA	141
CHAPTER 7 COGNITIVE FUNCTIONS OF TEACHERS' NON-VERBAL BEHAVIOURS	142
7.1. Introductory note	142
7.2. Overview	142
7.3. Participants' general attitudes to teachers' non-verbal behaviour	143
7.4. Enhancing comprehension through gestures	147
7.4.1. Identifying through pointing	150
7.4.2. Illustrating meanings	156
7.4.3. Emphasising for relevance	170
7.4.4. Making comparisons and marking contrasts	173
7.4.5. Eliciting or giving clues for meanings	178
7.4.6. When gestures fail to clarify meanings.....	183
7.5. Creating the conditions for learning.....	186
7.5.1. Orienting attention	186
7.5.2. Facilitating retention and recollection.....	190
7.6. Reacting to learners' output	191
7.6.1. Agreeing and acknowledging contribution.....	192
7.6.2. Asking for clarifications.....	194
7.6.3. Disagreeing and correcting learners' output	195
7.7. Summary	198
CHAPTER 8 EMOTIONAL FUNCTIONS OF TEACHERS' NON-VERBAL BEHAVIOURS	201
8.1. Overview.....	201
8.2. Making an impression	202
8.2.1. Factors that learners considered to determine teachers' NVB style.....	202
8.2.2. Looking relaxed and supportive	204
8.2.3. Showing nervousness or lack of motivation	206
8.3. Interacting with individual learners	208
8.3.1. Encouraging individual participants.....	209
8.3.2. Avoiding the public humiliation of learners	212

8.3.3. Reacting to learners' non-verbal messages.....	213
8.4. Creating a positive group atmosphere.....	215
8.4.1. Non-verbal strategies for energising classes	215
8.4.2. Accommodating cultural differences	218
8.5. Summary	223
CHAPTER 9 ORGANISATIONAL FUNCTIONS OF TEACHERS' NON- VERBAL BEHAVIOURS	225
9.1. Overview.....	225
9.2. Fulfilling the leader's role.....	225
9.2.1. Distributing roles in interaction.....	227
9.2.2. Checking individual participation.....	229
9.2.3. Manipulating classroom space and objects	231
9.3. Controlling speech turns.....	235
9.3.1. Giving the speech turn.....	235
9.3.2. Maintaining or denying the learners' speech turn	239
9.3.3. Listening to the learners.....	242
9.4. Classroom non-verbal rituals.....	244
9.5. Summary	247
PART FOUR: CONCLUSIONS	249
CHAPTER 10 OVERALL RESEARCH FINDINGS AND DISCUSSION ..	250
10.1. Overview.....	250
10.2. The research focus of the present study	250
10.3. Research findings	252
10.4. Discussion of findings.....	254
10.5. Conclusion	281
10.6. Summary	282
CHAPTER 11 OVERVIEW OF THE STUDY AND IMPLICATIONS FOR FURTHER RESEARCH.....	283
11.1. Overview	283
11.2. The main characteristics of the study.....	283
11.3. The importance of the present study.....	285
11.4. The limitations of the study	286
11.5. Recommendations for further research	287
11.5.1. The research approach.....	287
11.5.2. The research tools.....	288
11.5.3. Potential areas of further investigation.....	290
11.6. Endnote.....	293
REFERENCES.....	294

APPENDIX A LETTER AND INFORMED CONSENT FORM- TEACHERS	320
APPENDIX B INFORMED CONSENT FORM- LEARNERS	322
APPENDIX C TRANSCRIPTS OF THE VIDEOTAPED CLASS EXTRACTS USED IN THE INTERVIEWS WITH THE LEARNERS	323
APPENDIX D TRANSCRIPT OF AN INTERVIEW WITH A LEARNER	362
APPENDIX E ABSOLUTE FIGURES OF TEACHERS' USE OF NON- VERBAL BEHAVIOURS	376
APPENDIX F ABSOLUTE FIGURES OF NON-VERBAL BEHAVIOURS IDENTIFIED BY LEARNERS IN EACH FUNCTIONAL CATEGORY	377
APPENDIX G OBSERVATION SHEET- TRAINEE TEACHERS	379
APPENDIX H A TRAINEE TEACHER'S REPORT ON CLASS OBSERVATION.....	382

LIST OF TABLES

Table 2.1. Differences between contact and non-contact cultures	46
Table 3.1. Hofstede's dimensions of culture (1980, 1983).....	56
Table 4.1. Trainee teachers' background	82
Table 4.2. Transcript segment and sample coding	91
Table 4.3. Perceived cognitive functions of teachers' NVBs.....	93
Table 4.4. Perceived emotional functions of teachers' NVBs	94
Table 4.5. Perceived organisational functions of teachers' NVBs	94
Table 5.1. The profile of the classes videotaped	114
Table 5.2. The profile of the interviewed learners	116
Table 5.3. The profile of the participating trainee teachers.....	121
Table 6.1. Descriptors for the NVB codes.....	131
Table 7.1. Cognitive functions of teachers' NVBs identified by participants and the NVBs associated with them.....	200
Table 8.1. Emotional functions of teachers' NVBs identified by participants and the NVBs associated with them.....	224
Table 9.1. Organisational functions of teachers' NVBs identified by participants and the NVBs associated with them.....	248

LIST OF FIGURES

Figure 2.1. The relationship between information-behaviour-communication	12
Figure 2.2. The four zones of personal space (Hall, 1966)	17
Figure 2.3. An illustration of gestural spaces	22
Figure 2.4. The stages of a gesticular unit	23
Figure 2.5. Kendon's continuum	32
Figure 6.1. Extract from a transcript of video recording	133
Figure 7.1. A combination of concrete pointing and metaphoric gestures.....	151
Figure 7.2. Deictics used in direct relation with the addressees or with a specific location.....	152
Figure 7.3. Abstract deictics and teachers' use of gestural space	153
Figure 7.4. Mixed syntax gesturing.....	155
Figure 7.5. An illustrating gesture which anticipates the lexical equivalent	158
Figure 7.6. An illustrating gesture for the word 'reflex'	161
Figure 7.7. An illustrating gesture for the word 'copy'	161
Figure 7.8. Use of a concrete gesture to illustrate an abstract idea	163
Figure 7.9. An illustrating gesture, used to elicit a word and then to confirm it.....	164
Figure 7.10. Iconic gesture illustrating the meaning of the word 'to tie'	165
Figure 7.11. Iconic gesture illustrating the meaning of the construction 'intonation patterns'	165
Figure 7.12. Iconic gesture illustrating the meaning of 'cutting a film'..	166
Figure 7.13. Metaphoric gesture to suggest the word 'paragraph'	167

Figure 7.14. A combination of abstract deictics and illustrating gesture to suggest different temperatures around the world 167

Figure 7.15. Emblem gesture to suggest the expression 'a little bit' 168

Figure 7.16. Using beats to mark the important parts of a sentence 171

Figure 7.17. Abstract deictic gestures used to identify the use of past tense after the connective 'as a result of this' 175

Figure 7.18. Metaphoric gestures suggesting a comparison between two different concepts or ideas..... 176

Figure 7.19. Eliciting the word 'physical' through an emblematic gesture produced in the absence of speech 180

Figure 7.20. Gestural illustration for the word 'subtitle' 184

Figure 7.21. Gestural illustration for the word 'dubbed' 184

Figure 7.22. Orienting attention of group through pointing 187

Figure 7.23. Gestures perceived as orienting learners' attention to an object or to selective words written on the board 188

Figure 7.24. Emblems used to ask for clarifications 194

Figure 7.25. Emblem gestures indicating disagreement or intention to stop a student speaking..... 197

Figure 8.1. Teachers' NVBs encouraging learners to speak 210

Figure 8.2. The OK emblem to praise an answer or learning outcome..... 213

Figure 9.1. Deictic gestures for distributing roles in the interaction ...227

Figure 9.2. Manipulatory actions involving objects.....234

Figure 9.3. Deictic gestures of turn giving237

Figure 9.4. Emblems used to deny the speaker's turn.....240

Figure 9.5. Complex of NVBs involved to deny the speaker's turn..... 241

Figure 9.6. Iconic gesture suggesting the transition to a new topic 241

Figure 10.1. An illustration of the functional model of perceived NVB ..264

DEFINITIONS, ABBREVIATIONS AND CONVENTIONS USED

DEFINITIONS

Non-verbal subcodes

- Eye contact Individuals' use of eye contact with an interlocutor or gaze at an interlocutor, in order to communicate a message and influence the interaction.
- Facial expressions Individuals' use of face in order to show expressions corresponding to emotions or attitudes in an interaction.
- Gestures Spontaneous, speech-related movements of the hand, arms or head, that can acquire a communicative value in an interaction through the conjoint interpretive effort of a speaker and an interlocutor.
- Posture The positioning of one's body (leaning, standing, sitting) during an interaction.
- Use of space Individuals' use of physical space and distance between themselves and an interlocutor during an interaction.

Gestural categories

- Beat A gesture which reflects the speaker's conception of the discourse and adds emphasis to the perceived important elements in speech (word, phrase etc.).
- Deictic A pointing gesture, which indicates a physical location in space or a narrative space, where the referent is not physically present.
- Emblem A gesture which has a standard form and meaning and its meaning is shared by a specific group, culture or sub-culture.
- Iconic A gesture which illustrates a property of a concrete aspect of reality discussed by the speaker.
- Metaphoric A gesture which resembles an iconic through its pictorial content, but it reflects an abstract idea or a concept.

ABBREVIATIONS

EC	Eye contact
EFL	English as a Foreign Language
FE	Facial expression
FL	Foreign Language
FLA	Foreign Language Acquisition
L1	First or native language
META	Metaphoric gesture
NV	Non-verbal
NVB(s)	Non-verbal behaviour(s)
NVC	Non-verbal communication
S	Student
SLA	Second Language Acquisition
SR	Stimulated Recall
T	Teacher

CONVENTIONS

1. Single quotation marks were used to quote the work of others or a term or phrase to which reference is being made.
2. Extensive quotations from others' work or from the participants' interviews are indented and italicized.
3. To avoid confusion between chapter sections and data lines in transcripts, the former are referred to with the word 'Chapter' or 'Section (in a chapter)' attached (e.g. Section 4.2.) and the latter are referred to by the sign '#' attached in front of the quoted line from the transcript (e.g. line #4.2.)

PART ONE :
INTRODUCTION TO THE STUDY

CHAPTER 1

FOCUS AND ORGANISATION OF THE STUDY

1.1. Identifying the problem

Anybody who has ever participated in any interaction in a foreign language class or a foreign culture knows how important it is to pay attention to an interlocutor's actions, from hand gestures to eye gaze or facial expressions. Actions that, in routine interactions, are not consciously given importance become of extreme relevance when people have problems in understanding each other due to their language difficulties. If asked, the majority of us tend to accept that the non-verbal messages sent by an interlocutor are in many situations very helpful for understanding, if not more reliable and trustful than words. Not surprisingly then, in a language learning context learners would appear to rely heavily on their teachers' and colleagues' non-verbal messages, mainly to ensure understanding, but not only for this purpose. Individuals in general seem to hold the view that an expressive and dynamic interlocutor makes a more pleasant interaction. Similarly, learners of a foreign language would probably appreciate a teacher who shows enthusiasm and dynamism during the class. A comment about the behaviour of the language teacher made by a learner I knew contains the variety of research foci of this study:

When you learn a foreign language you need a smart teacher who to know when you don't understand some things by just looking at you and then to show you the meanings with his hands or body, like in a silent movie. Of course that I might not understand it at all, but someone else in the class might.

This comment could seem unremarkable through its familiarity and apparent banality, as anyone might remember from own language learning experience the intuitive belief that a good teacher needs to anticipate learners' difficulties and use alternative strategies of ensuring comprehension. However, the comment above generates the basic principles of classroom non-verbal interaction, which, for a long period, literature on FLA research has taken for granted. First, non-verbal behaviours (NVBs) might be perceived by the participants in the interaction and interpreted as relevant in

certain contexts. Second, different individuals might make sense in different ways of each other's actions and these interpretations may nevertheless affect the subsequent development of the interaction. Finally, in a language learning context, learners might attribute different meanings and functions to teachers' NVBs, due to the particular context of the interaction and their own individual cultural and educational backgrounds.

Such a variety of issues regarding the perception of an omnipresent aspect of social interaction seem worthy of investigation. It is the main purpose of this thesis to explore this aspect of classroom interaction. Teachers' non-verbal behaviour (NVB) and its impact on learners is a casually dismissed topic by current research on the EFL class, despite the fact that it represents an intrinsic aspect of any human encounter. Do learners in a FL class value in any ways teachers' non-verbal actions, such as gestures or facial expressions, and if yes, in what contexts do these become relevant? What are the meanings and functions, if any, that learners attach to their teachers' non-verbal behaviours? When deciding on the focus of this study, I considered that an aspect of human interaction that parallels speech at any moment constitutes a rich and worthy area of enquiry. It has always intrigued me, as I sat in a class as a language learner and later on as a teacher, that both roles require an attention to each other's actions as well as words. Teachers and learners do not talk about the ways in which they make sense of each other's gestures as they do about interpreting each other's words, probably because of the familiarity and casualness of these actions or just out of a routine of not thinking about their relevance.

The aim of any layperson is to attempt to understand and predict the behaviour of others in diverse social contexts in similar ways we do with words. If we or the others we encounter behave unpredictably, our interactions would collapse and disintegrate. Usually, people use their common sense as well as previous similar experiences to interpret the others' words and actions and to decide on the appropriate reaction. However, this process is inevitably biased and subjective due to our different experiences of the world. In a language class, learners bring with them this social luggage that conditions the ways in which they will interpret their teachers' and colleagues' actions. This and other aspects such as the participants' different motivations, beliefs, cultural rules of behaviour etc. make the language classroom a special territory for investigating how participants make sense of the visible aspects of interaction.

1.2. The focus of the study

This thesis is the report of my research enquiry as I explored together with the learners and trainee teachers participating in the study their perceptions of teachers' NVBs. It is a study of human behaviours that are so commonplace that they are assumed to be unimportant, and so fleeting and ephemeral that they sometimes operate below the threshold of learners' consciousness: the nodding of the head after a good answer; the hand pointing to the board to indicate a key word; the frowning face to disapprove of unacceptable behaviour; the look in the eye to give someone the turn to speak; the hands drawing a circle in the air to suggest something round in shape etc. These are the types of classroom events that constitute the focus of this study, as I suspected that their perceptions and interpretations might condition the whole process of classroom interaction and language learning. I wanted however to record not only the occurrence of such events during the class interaction, but to explore their significance for the participants. How were behaviours such as the ones mentioned, apparently unrelated to the actual teaching of the language, linked to learners' perceptions of the whole class activity? In this sense, exploring what students identified as 'relevant' in their teachers' behaviours became the only way to understanding how the main actors themselves constructed their interpretations and used them in continuing the interaction and developing their knowledge.

1.3. Selecting the research framework

When I started to investigate the subject of non-verbal behaviour (NVB), I first realised that the bulk of the existent studies in the field were of a quantitative nature. They all had a mainly experimental design, aiming to measure and compare the ways in which individuals of various ages, genders or cultural backgrounds *use* their hands and bodies in the interaction. Very few studies seem to exist on the perceivers' perspective and almost none on the interpretations that participants in the interactions give to each other's actions. Meanings arise from our necessity of acting and interacting with each other, but they are situated in the mind of every interpreter, rather than in the objective reality. As I was interested in exploring the perceptions and meanings given to the teachers' NVBs by the learners in a class, I knew from the beginning that I was going to adopt an exploratory and interpretive framework for the data collection and analysis.

Although I soon became aware of the existent concerns regarding the generalizability of a qualitative study, I knew that human behaviour is never repeatable and generalisable. The only way of exploring it is by accepting its dependency on the context of occurrence and on the meanings given to it by its viewers. In this sense, Guba and Lincoln write:

It is virtually impossible to imagine any human behaviour that is not heavily mediated by the context in which it occurs. One can easily conclude that generalisations that are intended to be context free will have little that is useful to say about human behaviour. (1981:62)

In the context of language classroom, which I chose as the setting of my research enquiry, the perceptions that learners held on teachers' NVB seemed of much more interest than the quantities of behaviours produced. Teachers' behaviours are context-bound and conditioned by factors such as personality, topic taught etc. and in this sense it seems less relevant to count frequencies and types of actions produced than to explore their meanings for the participants.

1.4. The stages of the study

This study developed in two distinct phases of data collection and analysis, the pilot and the main study. I will now outline each of the two research phases together with the research foci that accompanied each phase.

The pilot study

My main objective in the first phase of the study was to pilot a method of inquiry that had never been applied before in studying the language learners' perceptions of teachers' NVBs. The research questions I had in mind at this stage were formulated in the following way:

- *Are students able to describe and interpret aspects of teachers' NVB?*
- *What type of data will I get if I interview students on teachers' NVB?*
- *Is it possible to explore, by using video recorded data, individuals' interpretations of teachers' NVB?*

A group of 18 trainee teachers were interviewed in semi-structured interviews. They were asked to report on teachers' and learners' NVBs as perceived in five video extracts of fairly typical classroom interactions. The analysis of the participants' accounts facilitated the development of a tri-dimensional framework of data analysis.

The findings from the pilot study provided a methodological and conceptual framework for the main study and helped me in narrowing down the research focus. Following the pilot, I made several changes in the research design. These changes were reflected in:

- *The choice of research focus:* I decided to explore learners' perception of teachers' NVB and to exclude the learners' own, produced NVBs;
- *The choice of informants:* Learners involved in real classes seemed more suitable to provide contextualised data than subjects who reported on an unfamiliar class seen on a video recording;
- *The interview procedure:* Some experimental conditions involved in the pilot study were modified or even abandoned in the main study. Also the duration of the interviews was reduced in the main study.

The development and stages of the pilot study are discussed in detail in Chapter 4 of this thesis. At the end of the pilot study, I decided that, as the methodology was appropriate if certain adjustments were made, in the main study I was going to explore in-depth the learners' perceptions of teachers' NVBs in classroom interaction.

The main study

The findings from the pilot indicated that the main study needed to explore the classroom behaviours in their immediate context and with their direct participants. As I knew that people are not self-aware of their own NVBs in the interaction, I excluded the possibility of interviewing teachers on their behaviours. I decided that the language learners would be the most suitable informants for three main reasons. First, because they were present in the class and could provide contextualised accounts. Second, they were the main addressees of teachers' NVBs and therefore in the best position to identify their own reactions to these actions. Third, they were observers rather than performers and thus more aware of the others' NVBs. A second cohort of participants was represented by a group of trainee teachers who were asked to observe classes and report on teachers' NVBs.

In Chapters 5 and 6, I outline in detail the methods used in collecting and analysing each set of data. Despite the complexity of the data and the variety of informants, there were striking similarities between the perceptions of all learners and trainee teachers. The categories of behaviour identified and interpreted by the

participants are presented in a narrative account of their observations in the main body of the thesis, in Chapters 7 to 9.

1.5. The organisation of the study

This study is divided into three main parts: the introduction (Chapters 1 to 3), the presentation of the methodology and of the findings from the data (Chapters 4 to 9) and the conclusions (Chapters 10 and 11).

The First Part provides an introduction and theoretical background to the study. The content of the three chapters is as follows:

- Chapter 1 gives an overview of the study and explains its developmental nature.
- Chapter 2 provides an extensive overview of the theoretical approaches to non-verbal behaviour. It introduces the terminology and the relevant issues in the field of NVB studies and presents the main classification systems of the NVB sub-codes and the existent models of NVB. It also discusses the cross-cultural aspects of NVB.
- Chapter 3 reviews the findings from the field of social cognition, with direct applications to human perception and the factors affecting our interpretations of the others' NVBs. It also reviews the current trends in the field of SLA research, locating the current study at the confluence of the two fields, social cognition and applied linguistics.

The Second Part comprises three chapters which discuss the development of the research method and its piloting. There are three chapters in this part:

- Chapter 4 summarises the piloting of the study, by describing the methods used in collecting and analysing the data and the final research questions that emerged from the pilot study findings.
- Chapter 5 introduces the participants of the study and discusses the research methods involved in collecting each set of data.
- Chapter 6 describes the methods applied in analysing the data collected, the decisions made regarding the presentations of the findings and the writing style and the ethical issues considered during the research process.

Part Three comprises three chapters of data presentation and analysis. The emphasis in these empirical chapters is on the qualitative presentation of the data. The content of the chapters in this section is as follows:

- Chapter 7 presents the learners' and trainees' descriptions of gestures and other non-verbal behaviours that they perceived as having a cognitive function in the classroom. It opens by describing the participants' general attitudes regarding the role of teachers' NVB in the class. It then shows the participants' understanding of the functions that the teachers' NVB have in learning and other related mental processes.
- Chapter 8 identifies the emotional functions of teachers' NVB as interpreted by the participants and the contexts in which these were identified as affecting the interaction.
- Chapter 9 groups a set of NVBs considered as affecting the class organisation and management.

All these three chapters are written in a way to offer as much as possible of the participants' own views. They all include photographic extracts from the video sequences used as prompts during the interviews with the learners, to illustrate what aspects of teachers' NVBs the participants identified and discussed as relevant.

The final part of this work, Part Four, consists of two chapters that give a brief evaluation of the study and discusses the implications of the research findings for classroom-based research and pedagogy. The two chapters are:

- Chapter 10, where I summarise and discuss the research findings in direct relation with the research questions initially identified.
- Chapter 11, which presents a summary of the nature and objective of the study, outlines its significance and limitations and concludes by making suggestions for further research.

1.6. Summary

The purpose of this first chapter was to provide a general introduction to the study. I began by describing how I identified the focus of the investigation by looking at an aspect of human interaction that is common to all language classrooms. I then proceeded to explain how a research framework suitable for investigating the topic at hand was identified. Next, I provided an outline of the two stages of the research

inquiry and discussed the research focus for each of them. Finally, I gave an overview of the organisation of the thesis.

The purpose of Chapter 2 will be to provide:

- (i) the terminological distinctions of the terms in the field of NVB;
- (ii) a critical overview of the NVB studies and
- (iii) an examination of the methodologies used by current research in the field of NVB.

CHAPTER 2

NON-VERBAL BEHAVIOUR

THEORY AND RESEARCH

2.1. Overview

This chapter provides a theoretical and conceptual background to the study. The first part clarifies the terminology used in the existent literature and evaluates the taxonomies of NVB adopted by current research. The second part focuses on gestures, their communicative properties and their symbiotic relationship with speech. Some models of produced NVB are next discussed. Research findings overviewed reflect on gesture and other NVBs as social, inter and intra-psychological, anthropological and cross-cultural phenomena, serving certain functions in the process of human communication.

2.2. Terminological distinctions

This section clarifies some of the terminological distinctions and the selection of terms used in this study. It also explains some of the current terminological controversies. As the study was meant to reflect the learners' interpretations of teachers' visible actions in the class, I sought to find a balance in the terminology between the common understanding of the concepts used and the current practice in the research field.

2.2.1. The terms 'verbal' and 'non-verbal'

Traditionally, studies of communication have explored almost exclusively the verbal interaction between individuals. The everyday non-verbal interaction has been generally played down in social science research. The most notable exception is the symbolic interactionist school, which explained the origin of social self in direct relation to the notion of 'conversation of gestures' (Mead, 1934). Conversation analysts have long conceptualised talk as social interaction in which the occurrence and development of any meaningful event is situated and negotiated between participants (Schegloff and Sacks, 1973; Schegloff, 1984). Despite this

reconceptualisation of talk as social interaction, even nowadays, research on communication tends to exclude from the analysis the visual aspects of the interaction. As an exception, the collections of articles edited by Markova and Foppa (1990, 1991) recognise the importance of analysing in tandem the individuals' speech and non-verbal behaviour in order to get a complete picture of the interaction.

As verbal and non-verbal communications are dimensions of the same system of communication, as suggested for more than a century by Darwin (1872), the distinction between them should be simply methodological, not conceptual (Beattie 1981a; Kendon, 1980; McNeill, 1992). 'Non-verbal' is currently defined by its not being something else, i.e. verbal. The fact that research in this area is still distinguishing between the two through a positive (verbal) and a negative notion (non-verbal) indicates the misconception that they are opposite or exclusive. Sufficient evidence now exists to indicate that social actions are constructed and conceptualised as conjoint products of speech and action. Moerman (1990:9) suggests that the terms 'visible' and 'audible' would be more suitable to identify the sensory distinction between the two systems, without implying their opposition or difference in functions.

For the purposes of this study, I shall use the term 'non-verbal' to encompass the visible aspects of individuals' interaction, still preserving the negative term with the intention of co-ordinating the language of the present study with the terminology used in current research and in everyday life situations.

2.2.2. The terms 'communication' and 'behaviour'

Samovar and Porter (1993) define non-verbal communication as follows:

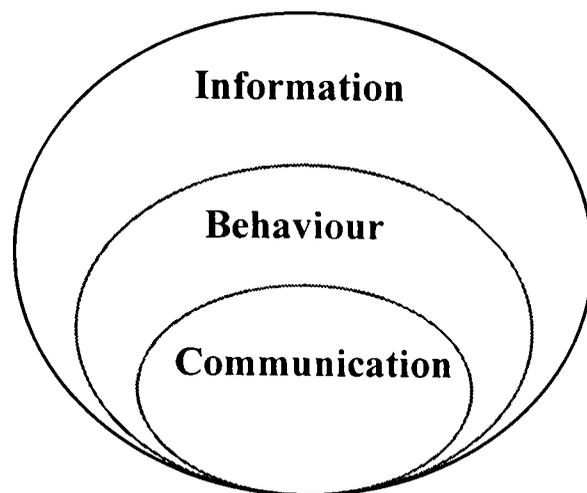
Non-verbal communication involves all those stimuli within a communication setting, both humanly generated and environmentally generated, with the exception of verbal stimuli that have a potential value message for the sender or receiver. (1993:156)

Although based on the traditional stimulus-response paradigm of communication, this definition features the main issues in the study of NVC: the relationship with language, the agency of the non-verbal message, the potential for a communicative value, and the role of the social setting.

Current research uses interchangeably the terms '(NV) communication' and '(NV) behaviour' to explore the visual aspects of the social interaction, although a distinction could be made between the two. Burgoon and Saine (1978: 6) argued that

information, behaviour and communication are related, however not identical, as seen in Figure 2.1. below.

Figure 2.1. The relationship between information-behaviour-communication



Source: Burgoon, J.K. and Saine, T. (1978:6)

The social environment is full of information, still only part of this information is behaviour. All individuals use information from the physical and mental environment, consciously and/or unconsciously, to guide their own behaviours and reactions. However, only the behaviour produced, even subconsciously, in the presence of a *perceiver* and which becomes symbolically linked to another individual can be seen as communication. Given this terminological distinction, I intend to use the term 'non-verbal behaviour' as referring to the aspects of teachers' actions which have the potential to become communications, but which are still dependent on the interpretive activity of their perceivers in the class. Although behaviours have the potential to communicate, they become communicative only through the perceivers' interpretive activity.

2.3. The non-verbal subcodes

The ordinary person would consider as 'gestures' or 'behaviours' any manual movements and other bodily actions such as head movements, bodily posture, facial expression etc. One of the first classifications of the areas of NVB belongs to Ruesch & Kess (1970) who created a three parts code: *sign language*, *object language* and *action language* and who also used the concept of 'non-verbal communication' for the first time. Several coding systems followed (Knapp, 1978; Burgoon & Saine, 1978; Argyle, 1994). However, the subcodes generally used in current NVB studies and the aspects they refer to are:

- Kinesics, i.e. body movements, hand and leg gestures;
- Facial expressions, i.e. expressions of emotions on the face;
- Eye contact and gaze, i.e. distance, length, context of eye contact;
- Appearance, i.e. the general body look and clothing;
- Posture, i.e. body positions;
- Proxemics, i.e. the use of personal space and territory;
- Haptics, i.e. touch and physical contact between individuals;
- Environment, i.e. the use of objects and artefacts;
- Paralanguage, i.e. the use of voice qualities (tone, pitch, intonation patterns) and silence:
 - Chronemics, i.e. individual and cultural perception and use of time;
 - Olfaction, i.e. body odours and its effects on human behaviour.

In this study, I will focus the research investigation on gestures, specifically on speech-related gestures. The rationale for focusing the study on the perception of gestures is discussed later on in this chapter (see section 2.4., page 19f). However, the other NV subcodes will not be ignored, as individuals perceive and interpret behaviours holistically. The significance of other four NV subcodes - facial expressions, eye contact, proxemics and posture - will now be discussed more fully, as participants in this study understood these codes as part of teachers' NVB in the class and constantly referred to them in their accounts.

2.3.1. Facial expressions

The face is seen by researchers and lay people alike as an important communication area, mainly for its capacity to function as an output source for internal emotions and attitudes. Ekman *et al.* (1972) found six main facial expressions, which seem to have an innate, physiological basis as they are found in young children and in all cultures. These expressions are corresponding to the following emotions:

- Happiness;
- Surprise;
- Fear;
- Sadness;

- Anger;
- Disgust or contempt.

Several studies were carried out to investigate both the production and the recognition of these emotions cross-culturally (Ekman and Friesen, 1971; Izard, 1971). In these studies, subjects from different cultures were asked to identify the emotions expressed facially by different individuals from other unfamiliar cultures. Results indicated that all the six emotions above listed were universally identified. Ekman and Friesen (1969; 1971) nevertheless suggested that, although these emotions are cross-culturally recognisable, there exist differences between cultures in expressing emotions. They coined the term '*display rules*' to describe the norms that people learn since childhood to control and change their facial expressions, according to various social circumstances. Ekman and Friesen (1969) called this theory *the neurocultural theory of emotional expression* and explained that despite the biological innate abilities to produce and recognise facial emotions, people use this innate ability differently.

In order to see if the production of facial expressions is also universal, as their recognition and judgement proved to be, the same authors conducted another study to investigate individuals' facial reactions when emotions were aroused in an experimental setting. American and Japanese students were asked to watch an unpleasant film (an amputation scene, childbirth etc.) and their facial expressions were recorded with a hidden camera. Results showed that both American and Japanese subjects displayed similar negative facial expressions in the absence of an interlocutor. However, during a subsequent interview discussing the film, the Japanese showed happy faces while the Americans did not. The explanation for the difference resides in the Japanese cultural rule of masking the real emotions in distressful situations when another person is present. Other studies replicated these findings, documenting the universality of the six expressions and the function of the cultural display rules in modifying them (Ekman *et al.*, 1987; Matsumoto & Ekman, 1989; also review by Ekman and Keltner, 1997). Contempt was also shown to be a universal facial expression of emotion (Ekman and Friesen, 1986; Matsumoto, 1992).

Facial expressions can have other functions in the interaction, apart from conveying emotions or attitudes (Ekman and Friesen, 1969). They can regulate the interaction by indicating the readiness to speak or to give a turn, accent the content of speech by marking important words (e.g. raise the eye brows) or carry their own

messages (e.g. winking as a message). However, these functions were not explored in-depth or in the direct context of a language class by existent research. We still do not know if individuals in a language learning situation bring with them the social rules from their own culture or negotiate them in the class, by developing new rules of expressing and interpreting facial expressions.

2.3.2. Eye contact and gaze

Individuals can send limitless numbers of messages through the eyes and these messages have a direct impact on the progress of interpersonal relationships. As one chooses to establish or avoid eye contact, look downcast or shift the eyes, stare straight ahead or even close the eyes, an interlocutor will invariably construct meanings from this behaviour. Gaze becomes thus an important source of information for the person doing the looking as well as for the person looked at.

The amount of gaze ('looking at the other') and eye contact ('looking at each other') during the interaction were measured (Argyle and Ingham, 1972). It was found that when two people are talking, they look at the other nearly twice as much while listening as while talking. This might be due to the focus of the speaker on the speech planning processes, therefore extra information would be distracting, while for the listener the gaze may function as a source of additional information. While individual glances can be up to 7 seconds (average was 2.95 seconds), mutual glances are rather shorter (average 1.18 seconds). In a classroom-based situation, this would imply increased gaze from the students' part as they listen to the teacher. However, no studies that measure the amount of gaze exist in group or class-based situations.

Studies in the field of eye contact and gaze have generally two foci: the role of eye gaze for the speaker and the role of eye gaze for the interlocutor. Speakers were found to use eye gaze in social interactions for various purposes such as signalling liking or disliking, regulating the interaction and showing interest or attentiveness. Friends and lovers were found to gaze more at each other (Rubin, 1973) and people generally gazed more at interlocutors they liked (Exline and Winters, 1965). Conversations were found to start with a mutual eye contact to signal readiness for interaction (Goffman, 1981) and, while during conversations speakers gaze less, at the end of the utterances they involve the prolonged gaze as a turn yielding cue to their listeners (Kendon, 1967; Duncan, 1972). When gazing, speakers check for interlocutors' gaze and positive facial expressions as cues for interest and adequate

reactions to their words. At the same time, speakers' own gaze at an interlocutor while speaking was found distracting and subjects talking about difficult tasks were seen to use less gaze when attempting to recall materials involving competing rather than noncompeting associations (Stanley and Martin, 1968). Similarly, Glenberg *et al.* (1998) found that when people were asked difficult questions, they often averted their gaze while searching for an answer. They showed that gaze avoidance is related to the difficulty of cognitive processing and that performance is improved when averting gaze. It seems that cognitive processing is enhanced by the disengagement from any other visual stimulation, in the case of conceptually driven tasks. While no similar studies to the ones above mentioned exist in relation to the context of EFL class, it may be the case that learners avoid eye contact during difficult tasks or when trying to recall words or phrases of difficulty to facilitate their mental processes.

In another study, decreasing visibility corroborated with speakers' decreased satisfaction with the interaction when they were the ones who could not see the interlocutor. At the same time, listeners were happy to be less visible, which might mean that they use the visual channel to mainly receive information, unlike speakers who use it for sending information or control the interaction (Argyle *et al.*, 1968). However, other authors suggest that such visual signals play little if no part in the flow of interaction, as their role depends upon context task goals and personal factors such as status and motives (Beattie, 1981b; Kleinke, 1986).

The ways in which viewers use speakers' eye contact as a source of information or social cue was also investigated. In an interviewing situation, interviewees judged their interviewers as more attentive and pleasant and gave longer responses when their gaze was longer (Kleinke *et al.*, 1975). Also interlocutors indicated to use the gaze between them as a cue to each other's interest to pursue the conversation (Kendon and Ferber, 1973). Conversation and interaction seem thus to be encouraged by gaze. Furthermore, recent evidence shows that the presence or absence of visual signals affects communication. Pairs of adults involved significantly more words and turns to accomplish a problem-solving communication task when they could only hear each other compared with face-to-face interaction, although the same level of task performance was maintained in both conditions (Boyle *et al.*, 1994). In a similar study, it was found that young children of 4 to 6 years-old perform significantly better on a problem-solving task in the face-to-face interaction over unseen interaction (Doherty-Sneddon and Kent, 1996), while for a shape description

task, visual social cues were found to be disruptive (Doherty-Sneddon *et al.*, 2000). These contradictory findings suggest that some visual signals may interfere with certain cognitive activities, while in other situations visual signals may be beneficial.

The role which gaze plays in turn taking is still unclear (Beattie, 1981b), especially that turn taking is signaled by a combination of cues; as well as looking, there are syntactic and paralinguistic cues (intonation, pitch etc.) or hand pointing gestures. The main role that gaze plays for the interlocutors seems to be that of providing information. As strangers were found to look more than friends in a task-based interaction, it may be the case that gaze serves more to collect information than to express affect (Rutter and Stephenson, 1979).

Several authors support the role of visual signals in providing information in the communication process (Clark & Brennan, 1991; Goldin-Meadow *et al.*, 1992; McNeill, 1985). There is convincing evidence that certain visual signals are multifunctional in the interaction and impact in several ways on the participants. However, studies reviewed above were conducted mainly with subjects from the same cultural backgrounds (British or American), while certain cultural display and interpreting rules of eye contact and gaze vary from country to country.

2.3.3. The use of physical space and posture

The study of proxemics was launched and labelled by Hall (1959, 1966) and defined as ‘the interrelated observations and theories of man’s [sic] use of space as a specialised elaboration of culture’ (1966:1). Hall identified that the space between interactants could be classified in four main zones (see Figure 2.2. below), depending on the nature of the relationships between them and the purposes of the interaction.

Figure 2.2. The four zones of personal space (Hall, 1966)

Zone	Description
Intimate zone	People in intimate relationships, e.g. lovers or couples, interact with each other at distances of 45 cm or less.
Personal zone	People in personal relationships, e.g. friends or relatives, interact with each other at distances between 45 cm – 120 cm.
Social zone	People in professional relationships, e.g. work colleagues, interact at distances between 1,2 metre – 3,6 metres.
Public zone	People in public interactions, e.g. speaker and audience, will stand at a distance of more than 3,6 metres from each other.

The factors that seem to determine the proximity between two individuals include physical factors (e.g. sight, sound etc.) and cultural factors. The latter regulate the appropriate distance between individuals in different types of relationships. A key variable seems to be that of intrusion into one's personal space, as its invasion generates anxiety and discomfort. Several field experiments demonstrated the effects of violating one's personal space (Felipe and Sommer, 1966; Mehrabian, 1968). These experiments were done in public places, such as libraries and parks, and indicated peoples' embarrassment and discomfort when approached too closely by a stranger. In situations like these, subjects were found to restore the equilibrium of their personal space by moving further from the stranger, a finding explained through a *theory of approach-avoidance* of proximity (Argyle and Dean, 1965). This theory claims that it is possible to regulate the level of required intimacy between two individuals by taking into account in an ensemble the distance between them, the level of gaze and smiling and the intimacy of the speech content. If the level of intimacy becomes inappropriate or uncomfortable for any of the participants, compensation is likely to occur along any of the behavioural dimensions mentioned. In other words, if two people like each other they will accept close proximity, while people who do not like each other will increase the distance between them. Physical distance seems thus to reflect the psychological distance between two interactants.

Other key factors which seem to impact on the distance between individuals are culture (see also section 2.6. below for cultural aspects of proximity), the social setting in which interaction takes place and the power relationship between interactants. Zahn (1991) found that people of unequal status keep a greater distance between each other than people of equal status. In a classroom setting, the social zone is usually the norm, although teachers may enter students' personal space at times. Also the disposal of furniture in the class does not allow for individual negotiations of personal distance. Studies which examined the impact of different classroom settings identified open plan classes as more stimulating for class interaction and close approach between teacher and students as giving interactions a higher intensity (Neill, 1991, provides a review of these studies). Finally, cultural differences of interaction between teachers and students and class arrangement are very likely to impact on individuals when entering a class in a foreign culture. However, no recent studies exist which investigate the immediate or long-time effects of different cross-cultural proximity rules on students (or teachers).

Posture is another sub-code of NVB through which individuals can communicate attitudes to others. Posture refers to an individual's position (seating or standing) and the ways in which body parts such as the hands, the trunk and the legs are kept. Positive attitudes are usually expressed by leaning forward towards the other person, together with other co-occurring signals of interest, such as smile, maintained eye contact etc. In contrast, negative attitudes or disinterest appear to be indicated by a leaning backwards posture and other signals, such as disinterested face expression, lack of eye contact, crossed arms or legs etc. (Mehrabian, 1972; Argyle, 1996). Status seems to be a key determinant in the posture adopted by an individual and so are the person's self-image and emotional state (Hargie *et al.*, 1994). For example, an individual in a higher status will adopt a more relaxed posture, while a low status person is likely to have a more rigid posture. However, these 'body language' rules are so far only common sense observations rather than scientifically documented.

An interesting phenomenon is the postural mirroring or postural congruence, which occurs generally when people adopt a similar posture to the one shown by an interlocutor (Bull, 1987). The phenomenon is explained as an indicator of interactants' positive attitudes to each other and seems to help establishing the rapport between them. A study in which waiters were asked to mirror the clients' posture intentionally found a significant increase in the clients' satisfaction when their posture was mirrored (Lynn and Mynier, 1993).

No systematic recent studies were found which to explore the effects of teachers' posture on learners' attitudes or learning. However, manuals of teacher training routinely indicate the NVBs that are likely to convey teachers' positive attitudes to the learners or signal to the teachers their learners' interest or disinterest. They also emphasise that teachers should raise their own and their students' awareness of non-verbal behaviour (for example, Pennycook, 1985; Kellerman, 1992).

2.4. Gestures

As individuals move their hands and body continuously while speaking, gestures are an omnipresent and important part of any human interaction. Now that it is generally acknowledged that gesture and speech communicate meanings jointly, gestures become of more interest to classroom and social research.

2.4.1. Defining gestures

Current dictionaries conceptualise gestures rather through the intentions of the speaker than through the ways in which these moves are interpreted by a viewer:

Gesture - an action, especially of the hands, expressive of sentiment or passion or intended to show inclination or disposition; the use of such movements; an action dictated by courtesy or diplomacy or by a desire to impress or create an impression; a posture or movement of the body; behaviour. (Chambers Dictionary, 1998)

Gesture - a movement that you make with your hands, your hand or your face to show a particular meaning; something that you do or say to show a particular feeling or intention; (vb) to move your hands, head or face etc. as a way of expressing what you mean or want. (Oxford Dictionary, 2000)

These broad definitions suggest only limited properties and functions of gesture. However, both definitions indicate certain important aspects of gesture, such as the body parts which may produce gestures (hand, head, face), the potential to convey meanings and other key functions which gestures play in interaction (to convey feelings, an impression, or to influence actions).

Kendon (1981, 1997) identifies the characteristics which distinguish gestures from other types of human activity and which could serve as criteria in moving to a working definition. These features include:

- The existence of a pattern of action, with clear beginnings and endings and a distinct communicative function;
- Gestures are excursions between two phases of rest positions and take place against a background of more lasting activity;
- They have a clear peak structure (the *stroke* of the gestural phase), are well bounded between clear onsets and offsets and have symmetry of organisation (the stages between and after the gestural stroke are very symmetrical).

The physical properties of gestures (see section 2.4.2. below) as well as the body parts involved in producing them are important distinctive features. Kendon identifies the communicative function as a main feature of gestures, where the context in which gestures occur bears a crucial role in their communicative content and role in the interaction. Gestures become communicative and achieve meaning within interaction. A definition must also include the participants' perception of a communicative intent in the gesture (Streeck, 1994). While viewers can fail to detect the actual communicative value of a gesture, this does not diminish the communicative potential

of the gestural action. Based on these descriptive criteria and on the purposes of this research, the following definition of gesture will be adopted:

Gestures are spontaneous, mostly unconscious, speech-related movements of the hands, arms or head, which acquire a communicative value only through the conjoint interpretive effort of a speaker and an interlocutor and which function in direct relation to the particular linguistic or social context in which they occur.

I consider that this definition allows me to:

- Identify gestures as spontaneous, noncoded signs, as opposed to standardised codes of communication, like language, which imply the existence of a systematic structure maintained by a community of users; speech-related gestures are idiosyncratic movements accompanying speech, without a meaning in themselves;
- Acknowledge the fact that gestures occur mostly unconsciously for the individuals generating them and that people who see them may or may not consider them as communicative and always interpret them in the context in which they occur;
- Clarify the relationship between speech and gesture, by recognising an inter-relationship between them, while still exploring the communicative body movements as systems in themselves;
- Identify the bodily parts which are associated with gestures and distinguish them from other NVB subcodes like tactile behaviour, facial expressions or proximity;
- Identify the communicative potential of speech-related movements that function as meaning carriers in a specific linguistic and social context.

Gestures defined as above will be regarded as distinct actions directly connected with speech, although they may also occur in the immediate absence of speech.

2.4.2. Physical properties of gestures

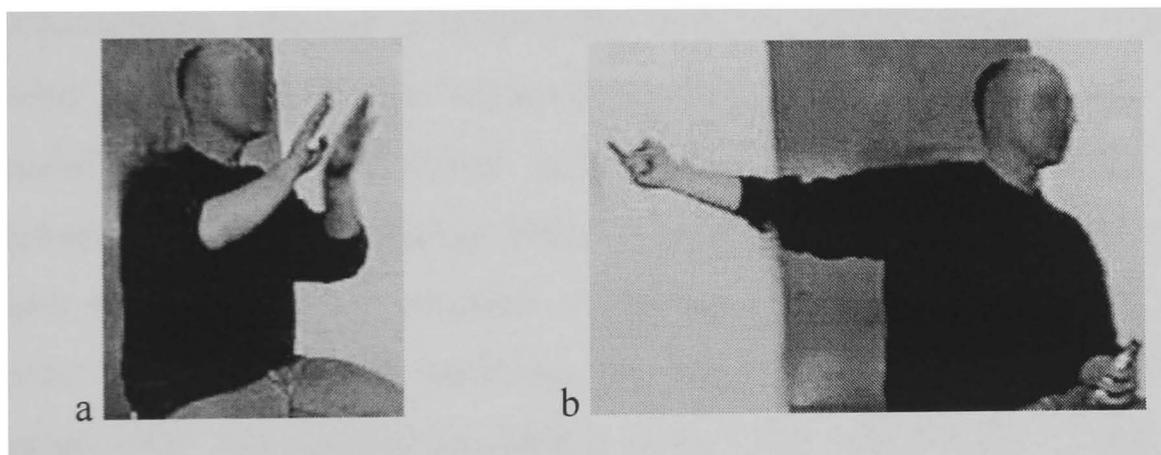
The structural methods of linguistics inspired the first phonological and morphological analyses of gesture, although the interest of the first studies was concentrated on sign languages (Stokoe, 1972, 1980; Liddell & Johnson, 1989).

Stokoe identified three parameters that could serve as a basis for the analysis of gestures: the hand configuration (*the designator*), the articulatory place (*the tabula*) and the movement (*the signation*). Through this model, he analysed gestures by breaking them down in smaller units in similar ways to the linguistic analysis of phonemes and morphemes. This eased considerably the subsequent development of the methodology of data analysis in the whole field of kinesics, but imposed a structural model of analysis that became a norm, rather than one alternative.

The physical performance of gestures is normally confined to a limited space situated immediately in the front of the individual, as illustrated in Figure 2.3.a. below. This 'gestural space' (McNeill, 1992) can be divided into the *central space*, i.e. the space in front of the speaker's body, where most of gestures are performed with least effort, and the *peripheral space* that requires more effort for gestures to be performed.

Figure 2.3. An illustration of gestural spaces

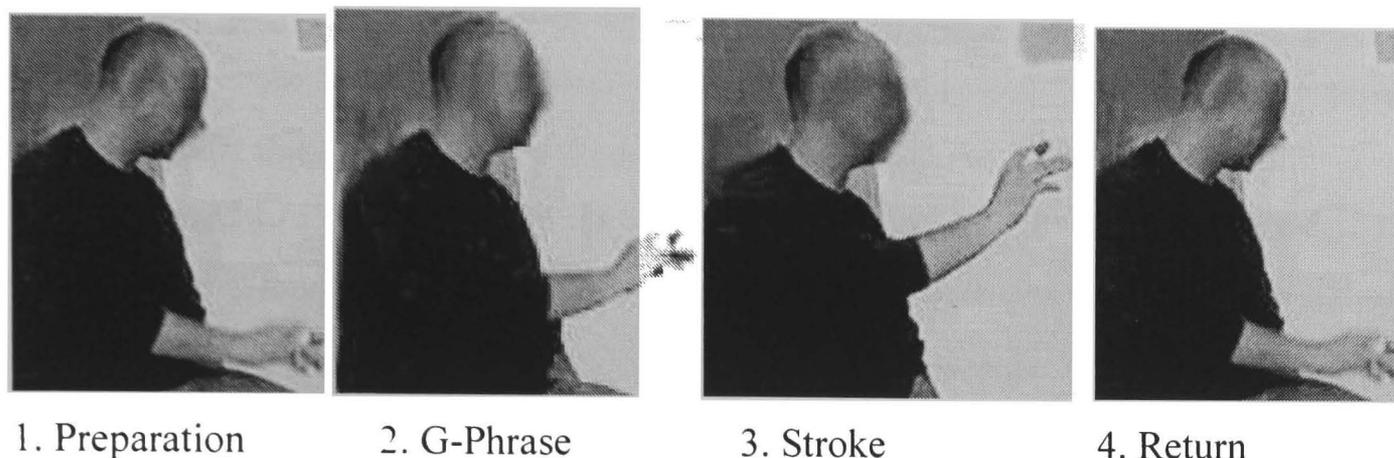
People usually perform gestures within the central gestural space (as seen in photo a), while the peripheral space (seen in photo b) is less often used for gesturing.



Kendon (1972, 1980) identified the structure of a gesticular unit (G-unit), by differentiating between the *rest position* when the hand is motionless, the *preparation stage* when the hand starts the movement, the *phrase(s) of gesticulation* when the hand makes one or more moves which culminate in a *gestural stroke*, and finally, the *recovery or return phase* when the hand returns to the initial resting position. These stages are illustrated in Figure 2.4. below. A gesticular unit can thus contain more gesticular phrases (G-phrase), which have distinct stages of development. He appreciated that the naïve observers would identify as 'gesture' only the stroke of the whole move.

Figure 2.4. The stages of a gesticular unit

This gestural unit appeared with the words ‘nowhere else in the world’. It started and finished with the hand in the rest position on the teacher’s knee, after the gestural stroke marked the main linguistic segment that was emphasised in speech (‘in the world’).



2.4.3. Gesture and speech – two systems of communication

Language and gesture have traditionally been considered as separate systems of communication, although a relationship between them was always acknowledged. Kendon (2000) regards the inconsistency in defining ‘language’ and ‘gesture’ as responsible for the perceived lack of unity between the two systems of communication. The Saussurean tradition imposed a view of language as exclusively spoken and therefore the omission of gesture from the research focus of linguistic theories. Post-Chomskyan redefining of linguistics as a kind of “mental science” (Kendon 2000: 49) restored the interest in the study of gesture as a cognitive activity with a direct role in communication.

Freedman (1972) acknowledged the existence of two types of hand movements that indicate a variable congruence with the verbal content. He distinguished between *speech-primacy moves*, which constitute an intimate parallel with the formal and rhythmic properties of speech, and *motor-primacy moves*, which are idiosyncratic and therefore have a more superficial relationship with speech. The speech-primacy moves function as supplementers of words and have a rather self-monitoring and clarifying function. The motor-primacy movements however are highly representational and used to illustrate a thought that is rather difficult to express in words. In this sense, when people have to describe ambiguous or abstract meanings, the number of motor-primacy moves increases considerably.

Freedman considers speech and gesture therefore as a system with two alternatives for the communication of individuals' mental representations. When speech is available, speech-primacy moves are expected to dominate, while more complicated contents will automatically generate compensatory motor-primacy moves. Speech-primacy movements monitor speech, while motor-primacy movements activate images and their link with words. The author attributes to gestures the role of supplementing meaning when words are not accessible or are insufficient to express meanings clearly.

Kendon (1980, 1983, 1984, 1986, 1994, 2000), when discussing the relationship between language and gesture, takes into account the social and interactional circumstances affecting communication and sees gestures as an integrative part of a subject's communicative effort. He conceptualises gestures less as instruments of rebalancing the dominance of speech, but as alternative expressive substitutes. Kendon cites the work of Condon and Ogston (1966, 1967) who undertook the first attempts to study the co-ordination between gesture and speech through a close examination and time-motion analysis of all speech and movement patterns. Their findings indicated clear temporal synchronisation between the speech sounds and the body moves, the whole organism behaving in unison.

Kendon himself conducted a series of studies to investigate the co-ordination between speech and gesture. In his early research (1972; 1980; 1983; 1987; 1988), he analysed speech and gesture from various examples of interaction by comparing the *Tone Units* of speech with *Gesticular Units*. Kendon aimed further analysis at comparing the relationship between the phrase structure of a gesticular flow and the organisation of the speech flow and findings show that each distinct Gesticular Unit corresponds to an associated unit of meaning. This led Kendon (1980: 218) to suggest that the process of utterance might use two channels of output into behaviour, the speech and the bodily movement.

Therefore, Kendon (1984, 1994) suggests that gestures are not a by-product of communication, they do not overflow the verbal component of the utterance, but function as a compensation to it. The inherent limitations of the verbal channel as a conveyor of meaning need an alternative to express representational meanings. Kendon concludes that the speaker uses both expressive modalities to convey meaning, either to achieve an economy of expression or to have a particular

expressive effect on the addressee. Usually, gestures convey meanings that are not present in the verbal utterance.

McNeill (1987, 1992) also suggests that these two types of symbolisation, imagistic and syntactic, occur spontaneously in the case of ordinary thinking and utterances are thus bi-symbolical at all times. Words are given shape by the images they reflect and images are activated through the linguistic constructs. Therefore, spoken language and gesture support each other and refer actively to the complex configurational structures stored in memory. The transformation of the meanings stored mentally takes place both linguistically and gesturally, and the speaker uses tactically one of the two systems. However, McNeill does not indicate the factors that might influence these tactical decisions and thus the conditions under which gestures occur are difficult to identify.

2.4.4. Gesture and speech – how do they convey meanings?

McNeill considers speech and its accompanying gestures as “elements of a single integrated process of utterance formation in which there is a synthesis of opposite modes of thought” (1992: 35). He also identifies the properties which distinguish speech-related gestures from language and allow the two systems to convey meanings differently. These properties are:

Global-synthetic

The global property of gestures resides in the meaning being conveyed through the whole representational unit, where the meaning of the whole gives meaning to the parts. This contrasts with the structure of language, where the parts (words) have meanings independently and combine to create a whole (a sentence). More meanings can be conveyed through the same gesture (hence the synthetic property of gestures), as opposed to language. An individual saying ‘and I was climbing this hill’ may accompany their words with an ascending move made with one of the hands. This gesture is global, as the component parts (the hand fingers, the palm) get meaning in the context of the whole hand representing a character performing the action of climbing. The gesture is a symbol, which embeds meaning in a different way from the symbols of speech. The hand represents a character, the hand in motion becomes a character performing an action, the move is a representation of the action of climbing,

and the trajectory suggests a narrative space. The whole gesture presents in a synthetic manner the analytic construction 'I + climbing + hill'.

Noncombinatoric

Gestures are also noncombinatoric. They convey meanings independently and a combination of individual gestures does not generate a superior unit, like in the case of words. Usually an independent gesture corresponds to a single clause, but occasional co-occurrence of two gestural units per clause does not incur a superior gestural unit. Successive gestures present successive, independent units of meaning, while words combine into superior units (phrases, sentences etc.)

No standards of form

Gestures are free of any rules of standard well-formedness. There are no patterns of form imposed for speakers of a certain community, although cultural differences are a key feature of emblematic gestures (see section 2.4.6. for a definition of emblematic gestures). Speech related gestures are not standardised, and this explains why people can use different gestures in expressing the same meanings. Variations between individuals in expressing the same content are an indication of gestural flexibility.

No duality of patterning

While words enter into the dual pattern of sound, syntax and meaning, gestures pattern only on meaning, which explains why gestures can express meanings that are difficult to put in words.

All the above differences between the two systems explain why gestures can convey meanings that are more difficult to express verbally. Gestures are also anticipatory in time, in the sense that the stroke of a gesture is completed either before or exactly on the onset of the verbal associated unit of meaning (Kendon, 1980:218). In this sense, gestures can anticipate the meanings expressed verbally, a property that might be due to the fact that the gesture combines in an instant picture the aspects that are strung into several words on a linear dimension.

These dimensions of difference between the two systems constitute the strength of their combination. Several linkages between the two systems of

communication indicate their co-participation in the process of communication. According to McNeill (1992: 23), these linkages are:

1. Gestures occur only during speech.
2. Gestures and speech are semantically and pragmatically co-expressive.
3. Gestures and speech are synchronous.
4. Gestures and speech develop together in children.
5. Gesture and speech break down together in aphasia.

The first statement refers to the occurrence of gestures mainly in the act of speaking. McNeill mentions the occurrence of only one gesture of a listener in 100 hours of videotaping. Furuyama (2000) however identified gestures made by learners of origami as collaborative gestures with the instructor's gestures, which is not surprising perhaps.

The pragmatical co-functioning of gestures and speech, i.e. fulfilling the same functions in the interaction, and their joint presentation of meaning is another reason for considering them as parts of the same unified process. Gestures perform certain functions in the discourse in close connection with speech. They can illustrate the words, complement the information conveyed verbally, give a visual representation to an abstract idea etc. Furthermore, their co-semantic and co-pragmatic action is also synchronous. The speaker combines at the same moment the meanings conveyed verbally and gesturally.

Finally, the development and the alteration of gestural activity and speech seem to be simultaneously processed. In children, gestures develop in parallel to the progression of speech. The first gestures to be used by children are the pointing gestures, then the illustrative gestures, and finally the speech-related gestures (McNeill, 1992:295-296) (See section 2.4.8. for a taxonomy of speech-related gestures). In aphasia, the neurological damage that impacts on speech, the impairing of the ability to combine words into superior grammatical units is accompanied by a diminished use of gestures and a simplified gestural style, with almost no production of gestures of the abstract or speech-related gestures.

The features above mentioned regarding the two systems of communication and the combinations between them indicate that gesture and speech are both used by individuals in constructing and presenting meanings. What the factors are that lead to the predominance of one over the other and in which contexts the speaker chooses a

more gestural-dominant or words-dominant style of communication are issues still to be investigated by further research.

2.4.5. Communicative properties of gesture

Several authors have challenged the widely accepted view that gestures play a significant role in communication when used in conjunction with speech. Critics argue that individuals usually fail to recollect the gestures used by the speakers during a previous conversation (Rimé and Schiatura, 1991) and they are unable to guess the speech content to which gestures relate (Feyereisen *et al.*, 1988). Finally, interactions between individuals who cannot see each other (e.g. on the telephone, with a blank screen between etc.) do not differ from face-to-face situations in terms of message reception or understanding (Rimé, 1982; Williams, 1977).

Rimé & Schiatura (1991) consider gestures as arising due to a general cognitive-motor activation for the purpose of speech, which also generates gestures as a by-product of the process. They found that speakers whose gestures were restricted, produced an increased frequency of eyebrow and finger movements. The only role the authors see for gestures during speech is to facilitate for the speaker the verbal encoding process, with only incidental communicative functions of gestures. Three main arguments may be put forward in reply to these criticisms, to support the communicative property of gestures:

1) Gestures are intended and adapted for the addressees.

Rimé's study (1982) shows no increase in the frequency of body moves in subjects who interacted in a face-to-face situation in comparison with subjects who interacted only verbally, with an opaque screen between them. These results are however unconvincing for denying the communicative properties of gesture. Even if gestures exist in the physical absence of an interlocutor, for example in the case of telephone conversations, this does not mean that gestures lack the potential to communicate.

Conversational gestures are always intended and adapted for the addressee in the manner the words are. Observation and experimental studies which show how speakers and listeners alike attempt to ensure gestural accessibility and visibility support this claim. Streeck (1994) described the procedures that speakers employ to make sure that their gestures are attended to by the viewers. Speakers were found to orient their body posture and their gaze to the gestures they use so that the viewers'

attention is drawn to the performance and the meaning to be conveyed is made accessible to them. In Streek's cases, speakers aimed their gaze directly at their hands as these were beginning to gesticulate and then gazed at the interlocutor when uttering the associated lexical affiliate, if this existed. Speakers also involved a verbal strategy of assuring the interactants' attention, by including deictic particles in the spoken language. These particles, such as 'like this' construction in English, were used by speakers of various cultural backgrounds as deictic references.

In another study, Heath (1986: 87) describes how the speaker makes sure that the recipient sees the gesture in a situation when the meaning is conveyed mainly gesturally. A patient in a videotaped medical consultation explains to the doctor her difficulty in going up some steps. She says: 'I was coming up the steps like this'. As the meaning of the sentence is given mainly by the referent of 'this', the speaker wants to make sure that the doctor sees her, so she swings her body around to make her gesture visible to the doctor, who does not watch her at the moment of speaking. By shifting her position, the patient manoeuvres to attract the doctor's attention and employs the gesture only after she makes sure that the gesture will be seen. In this situation, the speaker wants to make sure that the gesture is visible. The recipient needs also to attend to the gesture as the whole meaning of the sentence depends on the gestural reference for 'this' in the verbal construction. In the example given above, as he looks at the patient, the doctor sees the gesture and nods as a confirmation of attending to it.

In all these cases speaker and recipient collaborate in constructing the interaction, one by assuring that both gesture and speech are accessible, and the other by paying attention and signalling understanding. It seems clear from the examples provided that speech is not always enough to convey meaning and that, in several situations, recipients need to perceive and interpret the meanings conveyed through gestures to fully understand an instance of communication.

One cannot deduce from the above descriptive studies that gestures are communicative devices, unless the listeners are shown to attend to and use the information conveyed gesturally in conjunction with speech.

2) *Interactants perceive and interpret gestures for their meanings and functions.*

There are very few studies that investigate the perception and interpretation of gestures by addressees or other viewers. Sceptics about the communicative view (Rimé & Schiatura, 1991; Feyereisen *et al.*, 1988) suggest that gestural meanings are irrelevant in the absence of speech. Krauss *et al.* (1991) indicate that subjects attach meanings to gestures from separate semantic categories through exclusion of the improbable meanings, i.e. based on the opposition of likely and unlikely categories. In another study, Feyereisen *et al.* (1988) found that when asked to select the meanings of particular gestures from a list provided, subjects chose correct answers as frequently as implausible ones. During the same experiment, plausible responses were selected more often than the correct ones. Gullberg (1998) criticises these studies as presenting gestures in a context-free situation and providing the subjects with an artificial list of deliberately close meanings:

These experiments can be said to have tested not how gestures aid comprehension, but rather how language can make comprehension of gestures more difficult. (1998:67)

Rimé and Schiatura (1991) consider that gestures have the potential of becoming communicative devices in exceptional situations, when speech is not fully accessible or is disturbed:

When unfamiliar, excessive, bizarre, or discordant with regard to the situation or context, non-verbal material may be said to rise in intensity in the observer's or partner's eyes, as in such circumstances it becomes noticeable. (1991:273)

Based on the common principle that what is unusual becomes more noticeable, it may be supposed that during an interaction between a native and a non-native speaker of a language, gestures become more noticeable due to the participants' differences in using and interpreting gestures, as well as in their level of language proficiency. As the cultural display rules vary from country to country (Ekman and Friesen, 1969; Hofstede, 1983), non-natives will probably pay more attention to gestures (and other NVBs) in the foreign language context.

Several studies indicate that individuals of various ages do perceive and integrate gestures in their understanding of the meaningful act, even in common conversations. Children and adults alike seem to synthesise the auditory and the visible in order to figure out the meaning of a given situation (Thompson & Massaro,

1986, 1994). McNeill *et al.* (1994) did a mismatch experiment in which it was found that individuals included the mismatched speech-gesture combinations present in a narrative into their re-telling of a story. Subjects were exposed to a videotaped performance in which the narrator deliberately included several instances of mismatched gestures in his narrative. These gestures were in conflict with or additional to the co-occurring verbal message. For example, the narrator might say 'He goes up the pipe' while his hands rise upward, moving hand over hand. While the verb 'goes up' conveys the ascent and motion, it does not convey the manner of ascension, which is shown in the gesture as if climbing on a ladder. When viewers retold the story, they adjusted the narrative so as to include the information provided by the mismatched gestures. McNeill *et al.* interpret this as an indication that subjects form a new idea unit to solve the apparent conflict between the two systems and to provide a coherent narrative:

This is the sense in which two nonredundant channels can be said to cover the same idea unit, the two combining into a single idea unit about the scene that is richer than the picture conveyed by either channel alone. (1994: 235)

Streeck (1994) indicates how, by examining what recipients are doing at any moment in the interaction when the speaker is producing a gesture, one can derive evidence as to whether the recipient is attending or not to the gesture. The recipient may shift gaze along with the gesture, translate the speaker's gesture in another gesture to show understanding, or indicate that the gesture was perceived through head gestures. Similarly, speakers were found to adjust their gestural as well as spoken performance, according to how recipients are paying attention.

3) Interactants attend to each other's gestures as well as words.

Close analyses of videotaped interactions investigated the use of gestures by the addressees in various conversational contexts (Goodwin, M.H., 1980; Goodwin, C., 1986; Goodwin and Goodwin, 1986, 1992; Heath, 1986, 1992; Streeck and Hartege, 1992; Streeck, 1993). These studies indicated that meaning and functions attached by participants in a particular context depend as much on gesture as on speech.

Heath (1992) and Goodwin (1986) give examples in which speakers manage to regain the viewer's attention by using gestures. These are either conversational gestures or self-touchings (non-gestures) and serve to regulate the visual attention of the others. Adult listeners were shown to attend to gestural information conveyed by a

conversational partner when describing pictures (Berger & Popelka, 1971), drawing abstract shapes (Graham and Argyle, 1975), learning an origami technique (Furuyama, 2000) or for assessing children's knowledge and understanding (Church & Goldin-Meadow, 1986; Goldin-Meadow *et al.*, 1992). McNeill *et al.* (1994) show how listeners of a narrative integrate both types of available information, verbal and gestural, in their re-telling of a story. This wealth of studies indicates that viewers attend to speakers' gestures as well as words. However, the ways in which viewers perceive gestures and interpret them are not yet clear and need further research.

2.4.6. From gesture to sign languages

Kendon made the distinction between *gesticulation* that is complementary to speech, *autonomous gestures*, which can "function independently of speech" (1983: 33) and *sign languages* that occur in the total absence of speech. He takes the meaning and the co-occurrence (or not) of speech and gesture as the criteria for distinguishing between the systems of gestural communication. McNeill (1992: 37) proposed a so-called 'Kendon's continuum' (shown in Figure 2.5. below) to differentiate between the spontaneous gestures and the socially regulated, more systematic codes of gestures.

Figure 2.5. Kendon's continuum

Gesticulation → Language-like Gestures → Pantomimes → Emblems → Sign Languages
(1992:37)

The relationship between gestures and speech on this continuum varies considerably. Speech-related gestures (*gesticulation*) and sign languages develop in a different relationship with the social environment. While *gesticulation* is spontaneous and lacks any strict standards of form, sign languages are highly regulated and with precise standards of well-formedness. McNeill argues that in moving from left to right on the continuum between the two extremes:

(1) the obligatory presence of speech declines; (2) the presence of language properties increases; (3) idiosyncratic gestures are replaced by socially regulated signs. (1992: 37)

Gesticulation refers to all gestures that occur spontaneously (only) during speech. Kendon (1983: 17) includes in this category movements of the hand and arms, but also of the head and face (not facial expressions, but head actions). These gestures are

co-temporal, co-expressive and have convergent functions with speech, as shown above (see sections 2.4.4. and 2.4.5.).

Language-like gestures are defined by McNeill (1992) as different from the speech-related gestures not through their form, but through the ways in which they are grammatically integrated into the utterance. Kendon (1988) labels this class 'speech-alternating gestures', and sees them as movements which take the role of a potentially extended phrase to convey a complex image. He gives the example of a 'mixed-syntax' sentence (Slama-Cazacu, 1976), when the speaker - a young girl talking about other young people she knew - finishes a construct with a gesture: 'Their parents are professors, but the kids are /gesture/' (Kendon, 1988: 135). In the final stage of the utterance, the girl moves both hands forward, with fingers splayed out, and her face shows an expression of disgust. Kendon (1988) interprets these types of gesture as a holistic gestural representation that functions as a *replacing unit* for a whole descriptive phrase.

Pantomime is defined by McNeill (1992: 37) as a hand depiction of objects and actions that excludes the presence of speech, although there might be inarticulate onomatopoeic sound effects. McNeill notes that their combinatory potential, when two or more successive pantomimic performances can construct a sequence-like demonstration, differentiates pantomime from gesticulation, when successive gestures do not combine.

Emblems or symbolic gestures are gestures that bear no morphological relation with the lexical referent, have a direct translation in words and their meaning is shared by a group, class, culture or sub-culture. They are used deliberately to send a particular message, particularly when attempts are made to control other people's behaviours (Kendon, 1981). First labelled by Efron (1941/1972), emblems represent signs which differ from other gestures through their relationship with the verbal context, awareness and intentionality. Kendon (1983) labelled them *autonomous gestures*, to mark their independent occurrence in rapport with speech. Ekman and Friesen (1969) consider them as non-verbal acts which "have a direct verbal translation", usually consisting of a word or a phrase, and which represent the speaker's "intentional, deliberate effort to communicate" (1969: 63). For example, the sign for OK can be translated as "everything is all right". They generally express an insult or praise and have certain rules of well formedness, unlike spontaneous, speech-

related gestures. In certain ways, emblems are almost lexicalised, as they function like words independent of any morphological relation with a visual or logical referent.

Sign languages develop when speech is impossible or taboo. Kendon (1983) identifies three types of circumstances that generate the use of conventionalised signs as the main means of communication. The alternate sign languages occur when speech is available, but social or religious reasons forbid its use. Some examples include the monks of certain monastic orders, the Australian Aborigines, or married women in Armenia (Kendon, 1990; Klima and Bellugi, 1979; Stokoe, 1972, 1987). These communities developed a limited sign language based on pantomime and arbitrary signs. An alternate signing system is also in use by professional groups like auctioneers, broadcasting staff, crane operators etc. This is not the case with the signing *lingua franca* used among certain indigenous communities, where sign languages were developed as the only available system of communication between them. Such communities include the Indian tribes in North America (Kendon, 1983) and the Walpiri community in North Central Australia (Kendon, 1988).

Finally, Kendon identifies *primary sign languages* as the third category of existent sign languages. These refer to the systems of signs used as the only means of communication by the deaf communities. They have been extensively studied recently, as they present very different structures from the spoken language and function as independent linguistic systems. By functioning in the visible medium, the primary sign languages can be organised in spatial as well as temporal sequence, thus conveying meaning differently from the spoken language. Authors discuss the distinctions between speech and sign languages as different linguistic systems at the level of segmentation, compositionality, morphological and syntactic complexity, arbitrariness, standards of form and community of users (Kendon, 1988; Klima and Bellugi, 1979; McNeill, 1992). The best known sign languages are the ASL (American Sign Language) and the BSL (British Sign Language), which have been extensively researched for their linguistic properties (Stokoe, 1972; Klima and Bellugi, 1979; Liddell, 1980). Goldin-Meadow (1982) identified a unique sign language developed spontaneously by deaf children of hearing parents who did not know ASL and had no access to an oral language due to their impairedness.

The progressive replacement of speech on Kendon's continuum with more gestures impacts on the form and the communicative function of gestures. While spontaneous gestures produced only during speech are simpler in form and in general

complement the meanings conveyed verbally, the gestures further along the continuum become more abstract in meaning and standardised in form. Kendon (1988) talks about a lexicalisation of gestures, which occurs in the case of sign languages:

Gestures become fully lexicalised when, for one reason or another, speech cannot be used for prolonged periods, but when, nevertheless, all of the functions of spoken interchange are required. In these circumstances (...) gestural units must be established that can serve, as words do, to refer to units of meaning that can be recombined to create specific signs with specific meanings. (1988: 136)

2.4.7. The focus on gestures in the present study

The focus of this study will be on gesticulation or speech-related gestures, as these are the gestures that occur with most frequency in usual conversation and appear to play several communicative functions in social interaction. Also, as data will show, these gestures are the predominant ones in teachers' production of NVBs and in learners' noticing of relevant NVBs in teachers' behaviour. Emblems, as symbolic gestures with cross-cultural variations and specific meanings and functions in the language class (Hauge, 2000) will also be investigated. All the other gestures as identified in Kendon's continuum (language-like gestures, pantomime) are less frequent in usual interaction or characterise a particular group of users (e.g. communities of sign language users, religious groups etc.) and they will not be explored in this study.

2.4.8. Taxonomies of speech-related gestures

Kendon (1983:15) identifies two approaches adopted by authors in developing classifications of gesture: *semiotic*, which take meaning as a main criterion and reflect the modalities in which gestures embed it, and *functional*, which reflect mainly the relationship between gesture and its simultaneous discourse. As reflected in the classifications discussed below, these principles are not easily distinguishable at all times.

The classifications traditionally used in the study of gestures adopt the criterion of representationality of gestures in order to group them. This dimension refers to the ways in which bodily movements that accompany speech are alleged to depict the referential content of an utterance. Gestures identified in these taxonomies range thus from those without any semantic relationship with speech to those which depict speech content. Several taxonomies were elaborated mainly in the last three

decades, following a model developed by Wundt (1921/1973), who was the first to identify a close relationship between speech and gesture. Most influential categorisations that followed his model took into account the semantic relationship between gestures and co-occurring speech (Efron, 1941; Ekman & Friesen, 1969, 1972; Freedman, 1972; Cosnier, 1982; McNeill, 1987; 1992).

As much current research in the field of gesture uses McNeill's semantic-semiotic classificatory system, I will discuss here its categories and the underlying principles. McNeill's classification (1992) includes the following categories of gestures:

- *ICONICS* as gestures which "bear a close formal relationship to the semantic content of speech" (1992: 12).
- *DEICTICS*, as gestures of pointing to a locus in space, to describe a location or a motion. They are used in indicating objects and events in the concrete world, but abstract pointing is the most dominant type of pointing in narratives. In these cases, individuals point to an abstract space which is taken as a location of an introduced reference.
- *BEATS* as gestures that are simple rhythmic flicks of the hand or head, which simply punctuate speech. They are invariable in form regardless of the content of speech and reflect the speaker's conception of the narrative discourse as a whole.
- *METAPHORICS* as gestures that resemble iconics in their pictorial content, but reflect "an abstract idea rather than a concrete object or event" (1992:14). Their role is to give concreteness to an abstract concept, by visualising the idea in the shape of an imaginary object supported in the hands and presented to the listener.

McNeill's taxonomy has two main advantages as an investigatory tool. First of all, it recognises the interdependence between gesture and speech. The two systems are conceptualised as reflecting an underlying representation simultaneously, although through different channels and strategies. Secondly, the categories are complex enough to include the multi-functional gestures occurring in interaction, still limited enough to allow a deep understanding and convenient manipulation during the coding. This might also explain its extended use in almost all current studies on gesture. For these reasons, I will use in the present study McNeill's coding system of gestures.

Bavelas *et al.* (1992) suggest a mainly-functional classification of speech-related gestures. The authors see gestures as highly contextualised and their meaning depending on the linguistic and social context in which they occur. Individuals' interpretations of the meaningful value of a speaker's gesture depend not only on the physical properties that a gesture displays, but mainly on its function in the context. In this sense, based on the distinction between gestural referents, the authors distinguished between two groups of conversational or speech-related gestures: *topic gestures* and *interactive gestures*. While topic gestures have reference within the content of speech, interactive gestures are meant to simply include the addressee in the conversation. By taking reference into account, Bavelas *et al.* generate a classification that adopts a mixed criterion, gestural meaning and function, remaining predominantly functional.

According to these authors, *topic gestures* represent the vast majority of gestures occurring in conversation. Their function is to visualise an aspect of reality talked about simultaneously, such as the physical properties of an object described or (metaphorically) of a problem. Four types of *interactive gestures* were identified, with their subsumed functions in interaction:

- *Delivery gestures* - "refer to the delivery of the information by speaker to the addressee" (1994: 213).
- *Citing gestures* - "refer to a previous contribution of the addressee" (1994:213).
- *Seeking gestures*- attempt "to elicit specific information from the addressee" (1994: 213).
- *Turn gestures* - refer to "issues around the speaking turn" (1994: 213).

This classification complements McNeill's semantic-semiotic classification of gesture in several ways:

- a) by making a distinction between the gestures which are produced in conjunction with the content of speech and gestures which are meant to preserve the interaction;
- b) by combining gestural meaning with gestural functions as a more integrative way of studying gestures;

- c) by recognising that gestures can have different functions (even simultaneously), depending on the content in which they occur and on the interpretive action of the interlocutor.

The functional principles stipulated in relation to gestures by Bavelas *et al.*'s classification will be taken into account in this study, although the categories of gestures developed by the authors will not be applied to the data. The purpose of the study will be to identify the functional categories of gestures and other NVBs identified by the participants *themselves* rather than to impose existent taxonomies on the data.

2.5. Models of non-verbal behaviour

Several models of NVB have attempted to explain the ways in which individuals interact non-verbally and also how they adjust to each other's NVB during the interaction. Burgoon *et al.* (1995) provide a comprehensive review of existent models of produced NVB. While traditional models of NVB defined NV exchanges in terms of participants' reactions to each other's actions, recent functional models perceive interactions as cumulated results of pre-determinant factors.

2.5.1. Traditional models of non-verbal behaviour

Traditional *reactive models of NVB* explained one person's NVB as a result or reaction to the partner's preceding behaviour. *Equilibrium or affiliative conflict theory* (Hall, 1959, 1966; Sommer, 1959, 1962; Argyle and Dean; 1965) claimed that interactants tend to achieve a comfortable or appropriate level of behavioural involvement. This involvement was expressed in terms of distance, gaze, smiling and other related cues which appeared to indicate intimacy between participants. Authors claimed that when this equilibrium was disturbed, behavioural adjustments would take place to compensate for the inappropriate involvement. Experiments carried out to prove the validity of the theory generally involved a stranger approaching an individual too closely, gazing excessively or touching unsuspected subjects (reviews by Cappella, 1981; Patterson, 1973). Results indicated changes in the unsuspecting subject's behaviour, who was usually trying to restore the balance to the appropriate and acceptable levels of interaction. However, these findings were not confirmed in studies involving people in close relationships, such as friends or family members. In these situations, equilibrium is achieved not through compensation, but rather through

reciprocation of similar behaviour, e.g. children's touch of parents requires similar behaviour from adult.

Alternative subsequent *affect-based models* of NVB attempted to identify an emotional link between physiological arousal and close approaches (McBride *et al.*, 1965) or increased gaze (Kleinke, 1986). They generated an 'arousal model' in which the individuals' labelling of a partner's arousal was seen to mediate subsequent NVBs. This model could account for both compensatory and reciprocal behaviours as a reaction to previous interaction. According to the *arousal-labelling model*, if an individual liked and labelled positively an interactant's actions, reciprocation was predicted. On the contrary, if an individual labelled negatively one's behaviour, compensation would take place. Affect had thus a mediating role in determining one's subsequent NVB. However, Capella and Greene (1982) claimed that people's adjustments to each other's NVBs were too fast to allow for labelling in the course of interaction and that arousal is the mediating process of NVB adjustment. They advocated that differences between expected and actual NVB of a partner increases arousal and affective involvement proportionally. While high levels of arousal produce negative emotions and lead to compensation, moderate levels of arousal produce positive emotions and lead to reciprocation.

All traditional models seem to conceptualise NVB exchange as reactive in nature and attempted to identify the mediating factors that might account for individuals' adjustments to each others' behaviours. They were all affect driven and adjustments were seen to take place as an immediate emotional reaction to previous actions of their interaction partners. The underlying theme of all these models is that individuals are driven by internal states that impact their emotional states and determine behavioural adjustments to other's behaviours. These models did not account for individuals' actions in situations inconsistent with their underlying affects and they do not address the initiation of interaction sequences (Patterson, 1999). They also do not account for the influence on interaction of the environmental factors or partner characteristics.

2.5.2. Communication and cognitive models of non-verbal behaviour

More recent models of produced NVB shift from a focus on individuals, their biological links and the affect- arousal link to larger group processes, such as the

social and cultural norms, ingroup-outgroup relations, and also with an emphasis on functions, goals and meanings, perceptions and attributions.

The most representative theory in this paradigm is the *communication accommodation theory* (reviewed by Giles *et al.*, 1991), which developed initially as a theory of speech and expanded later on to include other non-verbal phenomena, such as language formality, speech rate, pauses, gaze and smiling. One of the principles proposed is that people use convergence as a strategy in which they adapt their linguistic and non-verbal styles to mirror their conversational partners and thus maintain positive social relations. This process is seen to occur mainly between strangers in initial interactions and does not account for interactions among acquaintances. The model seems limited to highly intentional forms of adaptation and only to few communication functions. It also places the emphasis on speech adaptations (Burgoon *et al.*, 1995: 77).

Functional and meaning-centred perspectives have become popular contemporary approaches to the study of non-verbal communication. They acknowledge that interactions are multifunctional, as interactants bring their own goals and needs to be accomplished in the interaction. They also place an emphasis on the meanings that the interaction behaviours convey and on the active roles that all participants play in the interaction at all times, not only when speaking. Functional approaches recognise a more active cognitive involvement of the conversational partners during the interaction, as individuals are conceptualised as striving to encode comprehensible messages and also attend and interpret the partner's message during the conversation. Several other functional categories (Burgoon *et al.*, 1995) frame the development of the interaction such as:

- the identity function, i.e. individuals develop their identity during the interaction;
- the impression function, i.e. individuals manage the image they want their conversational partners to perceive of them;
- the relational function, i.e. individuals care for the type of relationship they have with the conversational partner;
- the structuring function, i.e. individuals define the situation in which the interaction takes place;

- the conversational managing function, i.e. interactants negotiate the access to conversational floor;
- the influence function, i.e. partners influence each other's attitudes and beliefs during interaction;
- the personal resources function, i.e. individuals have to secure their own safety, pleasure etc. during conversation.

Patterson (1991), trying to re-establish the active cognitive role of the non-speaking interactant, argued that:

an individual's naïve perception of the purpose or function of a given interaction is a more important determinant of interactive behaviour than is arousal. (1991: 461)

This statement can be interpreted as a criticism of traditional reactive explanations of interactive behaviour discussed above (section 2.5.1.), which did not take into account the context of particular NVB exchanges, but only the reactive adjustments to a prior pattern of behaviour. The fact that prior theories did not account for multiple functions of certain NVBs and also did not include both non-verbal and verbal expressions of involvement made Patterson develop a model to account for these aspects and also to attend more carefully to the effects of antecedent factors of interaction.

Patterson's functional model (1982, 1983, 1991) identifies a set of preliminary factors, from more remote ones (e.g. culture, gender, personality) to factors immediately linked to the interaction stage (e.g. cognitive-affective expectancies, perceptions of the function of interaction, preferred levels of involvement etc.). During the interaction, these factors are activated and influence an individual's NVB in different ways. While Patterson still accepted the arousal-assessment-adaptation cycle as the pattern of attempting interaction stability, he did not consider affect as the main determinant of a person's behaviour. In his model, NVB is determined by the individual's deliberate behaviour, rather than being an affect-driven behaviour. While spontaneous patterns of NVB may be driven by emotions, managed patterns of NVB would follow a more deliberate route. In other words, rather than simply reacting on an affective base to a previous behaviour from a partner, the individual is acting as a *pattern initiator*. The author also makes the distinction between adaptive actions directed towards a partner and internally triggered and non-adaptive reactions. As behaviours are in general norm-and-script governed, some confusion may arise in

situations when behavioural patterns may be perceived as adaptive, while they are not intended to be reciprocal.

Patterson (1991) identifies seven functions which interactive NVB can serve: (1) providing information; (2) regulating interaction; (3) expressing intimacy; (4) managing affect; (5) exercising social control; (6) presenting identities or images; (7) facilitating service or task goals. The main innovation this model brought was the conceptualisation of the individual as an *initiator* of specific patterns of NVB, rather than a simple recipient who reacts to previous sequences of NVB. It also recognised the role of the pre-interactive factors (such as culture, gender, and personality) in influencing one's NVB and acknowledged the role of individuals' definition of a situation in determining the development of the interaction. Multiple factors are seen to influence interaction patterns at all times: individual styles and preferences, expectations based on social norms and past experience, and situationally immediate behaviours that occur during the interaction. Patterson also accounts for a combination of affective and cognitive factors that may account for both strategic and non-strategic interactions. However, the model lacks an explanation of which elements take precedence in which conditions and also looks at the interaction from the NVB producer's perspective rather than from a perceiver's perspective. The present study will offer an alternative to Patterson's model, by identifying the factors which learners in a class context perceive as affecting their judgements of teachers' NVBs and by exploring mainly the perceivers' perspective to the NVBs produced in the interaction.

2.5.3. Observer versus participant perspective

Studies of NVB usually explore the observers' perspective on interactions, asking them to judge or rate an interaction or whether adaptation of two or more interactants occurred. Observers may provide advantages in investigating NVBs as they can get the perspective that the direct participants lack when interacting. However, certain aspects of an interaction cannot be accessed by observers, such as the relational history or the subtle immediacy cues that are available only to direct participants (Burgoon and Newton, 1991; Surra and Ridley, 1991). Bavelas *et al.* (1992) also suggest that gestures are tailored for the addressees, who become thus the best judges of the role of gestures in interaction (see also section 3.6. for a discussion of 'actor-observer differences' in situational attribution making).

Observers also cannot account for responses that are due to the participants' own perceptions of an event or of a context in which an aspect of NVB is produced. At the same time, participants' self-reports proved to be biased and inaccurate in a study that investigated retrospective interactions (Bernard *et al.*, 1984). These reports indicated the participants' tendency to give stereotypical and socially acceptable responses. However, data were elicited a long time after the interaction took place, making their recollection very difficult for the participants. When a cued recall method was used, the participants were found to give more reliable accounts (Roloff and Campion, 1985). The present study will explore the participants' perspective on selected classroom-based events and will do so by using a cued recall method soon after the interaction is concluded. It is hoped that by eliciting the data immediately after the actual event, the participants will have a clearer picture of the interaction and will provide an insightful perspective on the events lived and their meanings.

2.6. Non-verbal behaviour and culture

Culture is usually defined as a set of shared beliefs, values, attitudes and behaviours that are transmitted from generation to generation (Barnouw, 1985) and operationalised as either race (cross-ethnicity studies) or place of birth (cross-country studies). Cross-cultural studies of NVB talk about cultural similarities and equally about differences in the use of NV subcodes. While some facial expressions of emotions or gestures are known to be pancultural, authors and lay people alike talk about the cultural differences of how cultures express emotions or use gestures and other NVB codes. Ekman and Friesen (1969) explain the co-existence of these similarities and differences of NVB through the action of certain *display rules*, which are learnt since childhood and which regulate the amount and types of NVBs used in different social circumstances. The number and extent of these rules seems to depend upon the culture where these rules are produced. Matsumoto (1996) shows that cultures may have rules to *amplify or deamplify* emotions (show more or less emotion than actually felt), *neutralise or mask* emotions (show nothing or conceal an emotion) or *blend expressions* (mix the expressions of two or more emotions simultaneously). These rules of emotional display may be extended to the use of other non-verbal codes, such as eye contact, touch, space, gestures etc.

Argyle (1996) appreciates that these rules are evident across cultures as well as gender. In this sense, in Mediterranean countries both men and women are

encouraged to express their emotions in public, while this is discouraged for men in North European and Asian cultures. In another study, Japanese and Americans showed quite different *facial expressions* after watching a stressful film. In the interviews after the film, the Americans continued to display negative emotions, while the Japanese smiled as a mask to their real feelings (Friesen, 1972). Similarly, when judging others' expressed emotions, people from countries which encourage the use of NVB score higher than people from countries where the use of NVB is restricted. In this sense, English and Italians could judge their own and each other's emotions quite well, but not those of the Japanese; the latter could judge the Europeans better, but were not very good at judging people from their own culture (Shimoda *et al.*, 1978).

Several studies however showed the existence of certain facial expressions that are pancultural, in the sense that they are produced by people in any culture in direct relation to specific emotions and equally recognised cross-culturally (Ekman and Friesen, 1971). Similarly, the recognition of facial expressions of emotions was shown to be universal (Matsumoto, 1989; Matsumoto and Ekman, 1989; Kupperbusch *et al.*, 1999). However, Japanese subjects had lower recognition accuracy rates for the negative emotions. This appears to suggest that, although the ability to recognise emotions is universal, the Japanese culture shapes the perception of some emotions (Barnlund, 1989; Matsumoto, 1996). It might be the case that similar to the constrained ability to recognise and interpret emotions, cultures with more restrictive rules of NVB would notice less and make less sense of other NVBs.

At first sight, *gestures* appear to vary considerably between cultures. Differences between the amount and the manner of gesturing in various cultures have long been investigated (Birdwhistell, 1970; Ekman and Friesen, 1969; Kendon, 1984; Graham and Argyle, 1975). However, there are no more recent systematic cross-cultural comparisons of gestural use or interpretation. Efron (1941/1972) found, in his widely quoted study which compared the gesture styles of Southern Italians and East European Yiddish-speaking Jews, certain cultural differences in the amount of gesturing as well as in the information that the interactants derived from gestures. While both cultures gestured quite extensively, Jewish subjects appeared to use gestures that had a much more abstract relationship with the speech content. At the same time, Italians used mainly gestures that were highly pictorial, with an immediate reference to the objects and actions they talked about. He considered the character of

Jewish gesturing as 'ideographic' by depicting the logical structure of the talk rather than giving a visual representation of its content. This seemed to suggest that the two cultures use gestures for different purposes in social interaction; the Italians conveying more contextual information through gestures, the Jews relying on gestures to mark the progression of talk (Kendon, 1981).

Interesting findings comparing distinct cultural groups were revealed in the case of *emblems*, which are gestures with a meaning on their own separate from the content speech and with a high degree of conventionalisation. Typical emblems include gestures such as head-nodding, thumb up, the OK sign, halt sign etc. Descriptive accounts and dictionaries of emblems exist for different cultural communities from all over the world. These studies vary considerably in the techniques used for the data collection and in most cases they reflect results from limited samples of population and contexts of occurrence. Kendon (1981) compared six of these national accounts and concluded that the gestures focused upon have limited functions, reflecting mainly purposes of interpersonal regulation such as communicating an impression of actions or individuals, or personal states.

Morris *et al.* (1979) conducted the largest comparative study on cultural variation, distribution and attributions of meanings to 20 emblems. They investigated forty locations across Europe and found a variety of uses and meanings attributed to the 20 emblems selected. These were mostly of local use, with only two gestures commonly shared across countries out of the 20 emblems investigated. The study also confirmed that gestures are more widely used in Southern than in Northern Europe. This supports the recognition of regional and cultural variety in the use of emblems and indicates that the decoding of gestures can be as problematic cross-culturally as the decoding of facial expressions.

However, Kendon (1996) suggests that the widely claimed idiosyncrasy of gestures is, at this stage, just a supposition. Although there are differences between gestural styles from one culture to another, individuals belonging to similar social groups or similar cultures display a close range of gestural patterns. Individuals seem to be aware of certain social norms of appropriateness with regards to the use, range and space used by gestures in various social contexts. In this sense, authors claim the existence of culture-specific gestural styles. Italians, for example, are known for using a high amount of speech-related gestures (Kendon, 1995), while Japanese are typically less expressive (Matsumoto, 1996). In a cross-cultural study involving

Italian and English subjects, it was found that the accuracy in decoding descriptions of geometrical figures by listeners was higher when gestures were seen in conjunction with speech for both cultures, but this increase was more significant in the case of the Italian subjects. This might suggest that for Italians, the information content of gestures is much greater than for British participants (Graham and Argyle, 1975).

With regards to the use of *spatial behaviour* and *touch*, anthropologists have long distinguished between 'contact' and 'non-contact' cultures (Hall, 1959; Watson, 1970; Argyle, 1996). While contact cultures, such as Arabs, Latin Americans and Southern Europeans, stand closer, face more directly, touch and look more and speak louder, the non-contact cultures, such as Asians, Indians and Northern Europeans, interact with greater distances, do not face directly, avoid touch and eye contact and speak in a quieter voice. Table 2.1. below illustrates the cultural differences in contact and non-contact cultures in terms of the use of certain NVB codes.

Table 2.1. Differences between contact and non-contact cultures

	Gaze	Proximity	Axis	Touch	Voice
Contact cultures					
Arabs	1.25	3.53	2.57	6.59	3.96
Latin Americans	1.41	4.96	2.47	6.74	4.14
Southern Europeans	1.49	4.42	2.19	6.88	5.57
Non-contact cultures					
Asians	2.06	5.20	3.25	6.97	4.79
Indians-Pakistanis	2.05	3.94	3.59	6.99	4.39
Northern Europeans	2.17	5.92	3.51	7.00	4.32

Source: Watson (1970), cited in Argyle (1996)

Notes on scoring systems:

Gaze (1) Sharp, focussing directly on the other person's eye
 (2) Clear, focussing about the other person's head or face
 (3) Peripheral, having the other person within the field of vision, but not focussing on their head or face

Proximity (3) Within touching distance with forearm extended
 (4) Just outside this distance
 (5) Within touching distance with arm extended
 (6) Just outside this distance

Touch (6) Accidental touching
 (7) No contact

<i>Axis</i>	/	/	\
	(2)	(3)	(4)

Voice (3) Normal plus
 (4) Normal
 (5) Soft

The table above indicates that there are certain cross-cultural differences in the ways in which people use space, position their bodies in relation to an interlocutor, touch or look at each others and use the tone of their voice. These differences may generate difficulties in inter-cultural situations, as a European interacting with a Latin American for example may feel uncomfortable with the invasion of their accustomed private space. However, these distinctions are not always clear-cut, as a more recent study found that Irish and Scottish dyads stood closer than did the French, English, Italians and Greeks when interacting (Remland *et al.*, 1995). These findings might suggest that other factors, such as the context of the interaction, the relationship between the interactants or their personality might influence more their use of space than cultural norms. It may also suggest that cultural norms simply changed in the 30 years which had passed between the two studies.

2.7. Summary

This chapter has reviewed the main theories and approaches to the study of NVB. I began by clarifying the terminology in the field and I made the relevant distinctions between non-verbal subcodes. I then proceeded to evaluate some of the studies and taxonomies in the field of NVB, mainly of gesture. Finally, I discussed some models of NVB and the cultural aspects of non-verbal interaction.

The following chapter will examine relevant studies from social psychology and foreign language classroom research, locating the current study in these two fields and explaining why an investigation of learners' perceptions of teachers' gestures and other NVBs would bring a new dimension to FL classroom research.

CHAPTER 3

NON-VERBAL BEHAVIOUR, SOCIAL NORMS AND THE LANGUAGE CLASSROOM

3.1. Overview

This chapter has two main sections. In the first section, I discuss the relevance of the social norms in the production of NVB and the ways in which these norms influence the perception and interpretation of others' NVB. In the second section, I locate the present study in the context of classroom-based research, showing how, despite the fact that the focus and the methodology of my study are relatively innovative, both are in line with current directions in applied linguistics research on language classrooms. In the end, I provide an outline of the key features of the present study.

3.2. The effects of social norms on individuals' production of non-verbal behaviour

People's social life is determined by being simultaneously members of many different social groups. e.g. family, groups of friends, work-groups, cultural groups etc. A definition of a small group is given by Paulus (1989):

A group consists of two or more interacting persons who share common goals, have a stable relationship, are somehow interdependent and perceive that they are in fact part of a group.

This definition identifies four important aspects of groups and their functioning, which may be used in characterising classes as groups. First, it requires that the group members regularly interact with each other. Second, group members have similar purposes for their actions and joint interests, e.g. teaching or learning a content. Third, that the relationships between the members are amicable and all roles and group norms are established and respected. Fourth, that individuals are counting on each other's support and each one's actions has repercussions on all the members. In the field of SLA research, several authors have conceptualised language classes as groups that develop shared values, meanings and practices (Gibb and Gibb, 1976; Breen, 1985; Doyle, 1986; Slavin, 1989).

When groups come together, they develop norms, defined as a set of shared rules regarding, for example, the members' behaviour, ways of dressing, attitudes in certain situations, shared ways of doing and thinking about the main group activity (Argyle, 1994). They also start to negotiate roles and types of interaction, and tend to reach a common ground of beliefs and practices. When people forming a group have different backgrounds, they will try to find commonalities between individual values.

Different sources can generate the social norms that impact on a group's dynamics. In this sense, in the case of NVB, the most important sources appear to be culture, gender, power and status (Philippot *et al.*, 1999). These norms operate at the group level and at the individual level via the so-called display rules, i.e. the rules which regulate the type and amount of NVB which should be shown in different contexts of social interaction. At the group level, the norms regulate the types of interactions between individuals and help to resolve social conflicts (Wilke and Meertens, 1994). At the individual level, the norms regulate the types and frequencies of one's NVBs. As shown before (see section 2.6.), in the non-contact cultures (e.g. Asian, North European), individuals are expected to avoid direct eye contact, use less gestures and do not express emotions in public. In contrast, contact cultures (e.g. Mediterranean, Arabic) promote emotional and gestural expressivity, direct eye contact and close proximity. As these norms vary from culture to culture, entering a new cultural environment requires the individual to learn not only the language, but also the new set of display rules that grants one group membership.

Kirouac and Hess (1999) discuss the areas in which group membership may influence the expressive displays of a person's emotions. First, membership can determine the types of events that are likely to elicit a certain emotion. Second, it can influence the degree to which an emotion is appropriate to a specific context or more acceptable. Individuals seem to develop, through learning, the rules of displaying certain emotions or using certain gestures, as well as learning to select the appropriate responses and interpreting appropriately the non-verbal displays of an interaction partner (see also section 3.4. for a discussion of social attributions).

There seem to exist cross-cultural differences in non-verbal display rules (as discussed in section 2.6.). However, there is evidence to suggest that the events that appear to generate a certain type of behaviour and the emotions that people feel in certain situations are comparable across cultures (Wallbott and Scherer, 1986). What seem to differ are the rules for showing these emotions in public and the rules of

enacting a certain type of behaviour only in specific social contexts. People all over the world have the same ability to recognise emotions in others or to interpret the others' behaviour. However, as the display rules in some countries suppress the expression of certain emotions or the use of certain gestures, people belonging to these cultures seem to lose their capacity to be alert to and interpret others' emotions or gestures (Matsumoto, 1996: 104 f). Therefore, when entering a culture that has different rules for showing emotions or for using NVB in interaction with the others, learners will be likely to have difficulties in interpreting appropriately others' actions and also in adapting their own style of behaviour. It seems reasonable to assume that, while some learners might progressively adapt to and adopt the new set of display rules as a way of gaining group membership, others might lack this adaptability and face miscommunication and social frustration when interacting with members of a new culture.

Social norms are also generated by the gender differences which are perpetuated in any society and learnt from ages as young as 3 to 5 years old (Birnbaum, 1983). Several gender differences reside in cultural stereotypes and individuals tend to be aware of the social expectations regarding the differences in emotional expressivity between genders, such as crying when angry or sad as being more permissible for women (Fischer, 1993). However, while some consistent gender differences were observed, men's and women's reactions and behaviours seem to depend more on individual and contextual factors, such as personality, the type of stimulus, the interpersonal situation etc. than on gender predispositions (Wagner *et al.*, 1993).

Some of the differences in individuals' use of NVB are usually linked with norms related to the power differences in the group. Henley (1995) showed that men and people of higher-status are more likely to initiate touch or eye contact and also smile more. Gender differences were however inversely correlated with status in another study, where men of high-status were found to smile less than women of high-status when interacting with a subordinate (Deutsch, 1990). Although no reports of classroom interaction exist regarding the differences between female and male teachers or learners, it could be assumed that females, both teachers and learners, might smile more and show more emotion than males.

The findings presented above suggest that, in social interaction, factors such as cultural background, gender and status are determinants of a set of conventions

regarding the ways in which individuals belonging to different groups are expected to behave. Groups representing specific cultures are shown to have a common memory of norms, rules, friends and enemies etc. and individuals are required to obey the rules if they are to be validated as members (Moreland *et al.*, 1996). All these findings generate several implications for the multi-cultural class. One of them is that learners coming from a variety of cultural backgrounds will be 'programmed' to operate on the basis of a set of rules that are the custom in their country. These rules might differ from the ones of the culture in which they come to learn the language. In this sense, miscommunication and social misunderstandings in the class are more likely. However, one also needs to consider the degree to which individuals adapt to the new set of rules of behaviour and the ways in which they may transfer their background knowledge in judging the others' NVB in the new cultural context.

3.3. The effects of social norms on individuals' perceptions and interpretations of others' non-verbal behaviour

Social norms have an impact not only on individuals' behaviour in certain situations, but also on the ways in which individuals perceive each other's behaviour in the interaction. This issue is of particular relevance to the present study. Earlier studies investigated the ways in which individuals judge others' NVB under the influence of their own cultural norms. Before I discuss this body of research, I will make some comments on the general attributes of human perception in interaction.

An important feature of human perception is our ability to empathise with others. Empathy is generally defined as our ability to take the perspective of the other person, either cognitively or emotionally (Markova, 1987: 54). There are several variables that affect one's ability to empathise with the others. First, although children increase their empathic abilities with age, they nevertheless become more aware of the cultural display rules in their society. As these rules regulate mainly the expression of emotions and gestures, children's perception of others is simultaneously affected through the internalisation of the rules. Second, individual experience may impact on a child's own level of empathy, e.g. a child with a sick mother may become more able to empathise with illness. Third, people are shown to empathise more with those who are similar to them in a particular way, e.g. gender, culture, age etc. In this sense, English people and Italians were more able to empathise with the emotions

displayed by each other than with the emotions of Japanese subjects (Shimoda *et al.*, 1978).

A second feature of human perception is its selectivity, which refers to the perceptual property of selecting from the environment only the objects or actions that help individuals make sense of their immediate reality. Although the criteria through which this selection takes place are not yet very clear, it seems that we tend to notice aspects of others' behaviours which are particularly salient or do not fit in the existing conventions of social behaviour (Pennington *et al.*, 1999). Salience or prominence of an act of behaviour can determine it being noticed. In an experimental situation, observers of a conversation rated as more influential the person whom they were facing during the observation, i.e. the person they had their attention on by the nature of their seating arrangement (Taylor and Fiske, 1975). In other words, focusing the attention on a person increases the noticing and the recall of that person's actions. Also, the behaviours which appear different from the patterns we are used to or we expect in a certain situation are bound to become noticeable. These discrepancies would attract one's attention and encourage the individual to look for an explanation for the deviation (See also section 3.5. below for 'models of attribution').

One of the main sources of potential discrepancies between expected behaviours and actually occurring behaviour resides in different cultural display rules (Ekman and Friesen, 1969). As people are used to see and involve certain types of gestures or emotions in their own culture, their sensitivity to these aspects of NVB seems to be affected. In this sense, Japanese subjects were reported to attribute a lower intensity of emotional expressions to both Japanese and Caucasian subjects (Matsumoto & Ekman, 1989). Regarding the accuracy of decoding, Japanese subjects were less accurate in identifying anger (Matsumoto, 1992), fear and happiness (Russell *et al.*, 1993) than American, Canadians or Greek subjects. In a medical context, Brunel (1989) and Hall (1997) found that psychologists and therapists had difficulties in empathising with members of another cultural group or misinterpreted their NVB due to the lack of cultural background knowledge. Cultural display rules governing NVB impact thus on the individuals' ability to perceive the others' emotions and to interpret them accurately. In a classroom context, this means that teachers and learners might have difficulties in interpreting each other's NV messages when they do not share the cultural background or do not have the knowledge about different cultural norms governing NVB.

Apart from the cultural display rules, gender and status were also influential of individuals' perceptions of the others' emotions or gestures. Women were found to be better interpreters, with a higher rate of accuracy in perceiving emotions (Briton and Hall, 1995). Also, people of lower status seem to be better perceivers than people of higher status. In a study involving people assigned the roles of teachers and students, status influenced the perceivers' accuracy, in the sense that students were more accurate in decoding teachers' emotions than vice versa (Snodgrass, 1992).

Existent studies in the field of NVB perception indicate that individuals differ in their abilities of perceiving and interpreting others' NVB. A major shortcoming of these studies is the fact that most of them adopted an experimental design, by using mainly still photos as stimuli or by eliciting subjects' judgements of others' NVB in laboratory-based simulated interactions. It might be the case that, in real life situations, individuals use a combination of cues rather than isolated acts of NVB to base their judgements of the others' emotions and intentions. What these studies show is that, in experimental settings, individuals differ in their accuracy in identifying and interpreting NVBs, a difference which may be generated by specific cultural norms. It is not clear yet is the way in which individuals adapt in real life situations to a new cultural context in order to make sense of new types of perceived NVBs.

For the purposes of this study, the following conclusions seem important. Since individuals vary in the types and amounts of NVB considered appropriate in their own cultures, a multi-cultural class entails exposure of each individual to a medium of behaviours that may be new and different. It is however difficult to predict if the difference is more noticeable due to its novelty or more difficult to interpret, as the person lacks the experience of perceiving it. However, due to their individual experiences and abilities of perceiving others' NVBs, learners in a language class may be expected to: a) rely on NVB when unclear of some aspect of the verbal message; b) differ in the amount of NVBs noticed; c) notice aspects of NVB different from their own cultural norms; d) occasionally differ between each other in the interpretations given to some of the NVBs noticed.

3.4. The attribution approach

Heider (1958) argued that people, in their daily life, wish to make sense of the world in order to be able to predict and control it. To do so, people tend to attribute intentionality, as we constantly look for causes in the events around us. If we are able

to explain others' behaviour, we can decide on our own behaviour towards them and also attempt to predict their next actions. The ways in which we perceive others' behaviours and the process through which we attribute causes and interpretations to them are framed by *attribution theory*. In an early article, Heider (1944) identified three principles that are at the basis of attribution theory:

- Individuals perceive behaviours as having a cause;
- Perceptions are important;
- The causes of behaviour may be perceived as residing with the person and/or the situation.

The first principle stipulates that in any situation people are bound to try and explain a situation by identifying its causes. That means that all human behaviour is explained by its producers and perceivers alike as being attributed to one or a number of specific causes. There are differences between the 'objective' causes of an action (which might not be accessible in some cases) and the ways in which individuals attribute causes to an action (Pennington *et al.*, 1999). However, the fact that in any given situation individuals attempt to find an explanation for an event or behaviour is very important when exploring the perception of NVB. This means that learners will attribute causes and meanings to acts of behaviour perceived according to several influences.

The second principle identified by Heider is that 'perceptions are important' in the sense that one needs to look at what individuals *perceive* as causing an act of behaviour rather than what the actual causes are. In this sense, when investigating NVBs in the language class, it seems reasonable to assume that learners' perceptions are crucially important for understanding the impact of teachers' NVB on them. Finally, the third principle identifies the ways in which attributions of cause work, i.e. the individual may consider the person or aspects of the situation as the main cause of a perceived action. The ways in which individuals choose between internal causes (i.e. causes of behaviour located within the individual whose behaviour is perceived) and external causes (i.e. causes located outside the person and in the situation in which behaviour occurred) are still unknown. People were found to use both external and internal attributions of cause in the same situation, which makes it difficult to understand how individuals may choose between these (Ross, 1977; Fincham, 1985).

Although people seem to attribute causes to all behaviours, this process is not conscious at all times as it works almost spontaneously. However, people are more likely to produce attributions in new or unexpected situations, when failing to achieve a desired outcome (Weiner, 1985) or when experiencing a negative emotion (Bohner *et al.*, 1988). This means that in a FL class situation, learners are more likely to try and attribute causes to teachers' NVBs when these appear different from what they are used to or when they experience emotions in situations when, for example, they do not understand or disagree with something.

The circumstances when we are more likely to make spontaneous, almost instant attributions refer to the situations in which a behaviour or a person are immediately categorised and identified based on the immediately available information. These spontaneous attributions are more likely to be dispositional (about the person) rather than situational (Jones, 1990). As an example, a learner is likely to judge a teacher (person identification) when smiling to the class (behaviour identification) after someone answered her question (situation identification) by making a spontaneous judgement. The learner may consider that the teacher is a pleasant person (internal attribution) or that she is pleased with the answer (external attribution). In any case, the decision will be almost spontaneous. However, when the behaviour is confusing or unexpected, there is likely to be a deliberation stage before attributing a cause. In this stage, individuals rely on their previous knowledge about the person, previous knowledge about how other people behave in a similar situation and also the effects of the behaviour on the outcome of the situation (Lord, 1997). This deliberation stage, which requires further thought and reflection based on previous information and life experience determines an adjustment of the attribution towards a more situational, external attribution.

Key questions arise for researchers interested in the perception of teachers' NVB by the learners in the class: how do individual learners attribute causes (and meanings) to teachers' NVB and in what contexts are these attributions spontaneous or deliberated? As perception is a selective process and also conditioned by a series of individual factors, discrepancies in perceptions between different individuals when judging the same behaviour are likely. Heider (1958) identified three aspects which condition the perception of behaviour as well as that of objects:

- The characteristics of the perceiver;

- The features of the behaviour perceived;
- The social context in which the behaviour is perceived.

In relating these principles to the language learner, the first aspect refers to the learner's own life experience, culture, personality, perceptive qualities etc. The second aspect identifies the qualities of the behaviour perceived, such as how visible was the teacher's action, what was the complex of behaviours in which it occurred, how familiar is the learner with the teacher's NV style etc. Finally, the social context conditions the production as well as the perception of an act of behaviour (as discussed above in sections 3.2. and 3.3.).

Several authors referred to differences between the inter-group attributions, as conditioned by the cultural differences of attribution (and behaviour). In this sense, Hofstede (1983, 1986) developed a four dimensional model of cultural differences which accounts for discriminations between cultural groups with respect to their beliefs, values, attitudes and behaviours. The dimensions he defined and the cultural dichotomies thus generated are shown in Table 3.1. below.

Table 3.1. Hofstede's dimensions of culture (1980, 1983)

Dimensions of culture	Types of societies
<p><i>Power Distance (PD)</i> =the degree to which differences in power are maintained</p>	<p>Small power distance societies (i.e. more equality) vs.</p>
<p><i>Uncertainty Avoidance (UA)</i> =the development of institutions and rituals to deal with uncertainty</p>	<p>Greater power distance societies (i.e. more social inequalities). Strict control, more aggressive and intolerant societies vs.</p>
<p><i>Individualism (IN)</i> =the degree to which a culture encourages the sacrificing of individual goals for the group goals</p>	<p>Relaxed, less aggressive and more tolerant societies. Individualist societies, encouraging the development of personal needs vs.</p>
<p><i>Masculinity (MA)</i> = the degree of emphasis on gender differences</p>	<p>Collectivist societies, encouraging the pursuit of the group's needs and values. Masculine societies (gender roles clearly marked, assertiveness) vs.</p>
	<p>Feminine societies (flexibility across genders, concern for interpersonal relationships and quality of life).</p>

Hofstede (1986) discussed the ways in which these general matrices of cultural discrepancies might affect the relationships in multicultural companies or in a multicultural language class. Other studies also examined the ways in which one or more of the cultural differences identified by Hofstede affect the interactions between people from different cultures (Triandis, 1994; Berger, 1992; Fletcher and Ward, 1988). These studies explain individual differences in attributing causes to behaviours as conditioned by the social rules from one's own culture. In this sense, Western cultures are more likely to make internal, dispositional attributions than non-western cultures (Morris and Peng, 1994). Honk Kong students were found to focus more on the collective, external responsibilities than American students (Bond and Hwang, 1986) and Hindu teenagers made more external attributions than Americans (Fletcher and Ward, 1988).

Although the processes of causal attribution are not completely explained by current theories, the following features of adult language learners' ways of interpreting teachers' NVBs can be hypothesised from the examined literature:

- Learners will be selective in their perceptions of teachers' NVB;
- Learners may oscillate between a spontaneous or deliberate attribution in the case of a teacher's NVB;
- When attributing an explanation to a perceived teacher NVB, learners will choose an internal or external reason in a generally unpredictable manner;
- Different learners will be conditioned by different personal, i.e. perceptive skills, and pre-interactional factors, i.e. external to the classroom situation, in attributing meaning or cause to the same act of NVB.

The present study will examine the conditions in which learners make similar and different selections and attributions of teachers' NVBs and the factors which *they* perceive as conditioning these attributions.

3.5. Models of attribution

When having to interpret others' behaviour, people use a set of mental structures or frameworks which allow an efficient interpretation of the large amount of information available at any given moment (Fiske and Taylor, 1991). Usually, individuals develop these mental schemas or prototypes from early childhood and once developed they tend to be stable and very influential. Mental schemas are defined as frameworks that

contain information relevant to self, other people, specific situations and events (Pennington *et al.*, 1999: 109). They are established on the basis of existing cultural and social norms, or the previous experience of a group or individual. Fiske and Taylor (1991) identified four types of schemas which individuals use in interpreting new situations and regulating their own behaviour. These four groups are:

- *Self schemas*, i.e. generalisations about the self based on past experiences;
- *Person schemas*, i.e. knowledge about the traits, motivation, personality, goals etc. of a particular person or type of person;
- *Role schemas*, i.e. knowledge about expected behaviours of people in certain roles;
- *Event schemas*, i.e. frameworks which relate to expectancy of a certain behaviour in specific situations.

In order to operate with the given schemas, people need to observe a behaviour and then, in a process which is almost unconscious and automatic, the attribution of meaning takes place. However, when the information received is inconsistent with one's existent schemas, people seem to perform a more in-depth and conscious analysis (Devine and Ostrom, 1988).

There are three main models aimed at explaining the ways in which attributions take place, depending on the amount of information available for the perceiver. The *causal schema model* (Kelly, 1972) argues that individuals make judgements on a regular basis about the others based on a single observation of that person. People try to find the kinds of causes that could generate a certain act of behaviour and, based on experience or stereotypes, they make a causal attribution for the behaviour perceived. Two principles are identified in relation to the causal attribution: the *discounting principle* and the *augmentation principle*. According to the first one, people will exclude any potential causes once they decide about a present cause. The second principle implies that once the cause is decided, people will try and add evidence from the context in which the behaviour occurred to support this cause. As an example, a smiling face will be considered as a sign of willingness to communicate. Any other possible causes (happiness, irony etc.) will then be excluded. Other 'contextual cues' (Gumperz, 1982) used to confirm the cause might be the person's intention to shake hands, direct eye contact and nodding etc.

A second model of attribution was generated in direct relation with the situations in which the perceiver has much more information about the person perceived. In *the covariation model*, the perceiver is thought to operate with three types of information from previous experience (Kelly, 1967). The three types of information are connected with the three questions that we ask in attributing a cause to an act of behaviour:

- Consistency (Question: Do other people behave in a similar way to the person perceived?)
- Distinctiveness (Question: Does the person perceived behave the same in other circumstances or with other people?)
- Consensus (Question: Do other people behave the same in the given circumstances with the person perceived?)

The attribution of a person or situation seems to work thus as a combination of the three types of information sources. From the result of this analysis, the perceiver is making a causal attribution to the person's behaviour. The perceiver is seen to be looking for factors that co-vary with the behaviour; when the factors change, so does the behaviour, and the attribution is different. In the case of a gesture made by the teacher, for example, a learner would try and discover if the gesture is repeated in different circumstances (consistency), towards the other people in the class (distinctiveness) or/and by other people in the class or community (consensus).

However, Kelly admitted that the perceivers are not always able to go through the analysis process that is implied by the covariation model:

The framework should be regarded as simply the context within which some limited and small sample of observations is interpreted. Beyond that, it is obvious that the individual is often lacking the time and the motivation necessary to make multiple observations. (1973:13)

Both models above described are causal, assuming that individuals will explain a certain act of behaviour through a rational cause. However, people do not always perceive behaviours in terms of cause and effect, as the following model will show. Kelly's models also exclude other types of information that perceivers might process apart from the three types of information above mentioned. For example, people may judge more the other person's individual attributes rather than their previous behaviour.

Finally, *the correspondent inference* model of Jones and Davis (1965) claims that the attribution of a cause of behaviour is an inference, which in certain circumstances becomes a correspondent inference between an act of behaviour and the perceiver's dispositions (personality, intention, attitude, temperament etc.) As with Kelly's models, this model refers to the attribution of cause to an act that is perceived as intentional. As any behaviour is likely to have more than one effect, the perceiver has to decide which of the effects is intended and then make an attribution or interpretation.

Two important factors are suggested as affecting the ways in which a perceiver interprets an act through inference: the *commonality* and the *social desirability* of the effects. The commonality refers to the habitual effects that an act of behaviour generates. For example, a teacher pointing with the arm in a student's direction after asking a question is a habitual action that usually generates a response from the student. If the teacher points to the student in the middle of a sentence, the attribution is made more difficult for the students in the class. They might consider that the student pointed at was disruptive, that his/her turn is anticipated or that s/he is given as an example. In any of these choices, the attribution is made more difficult by the unusual context of the gesture. The fewer non-common effects there are, the easier is to infer a meaning intended. In the case of social desirability, we unconsciously assume that people are generally aiming at a desirable effect. When this is not the case, i.e. when an act of behaviour generates more non-common negative effects, we are likely to make an inference.

Jones and Davis (1965) acknowledge in their model the importance of past information in helping our decisions. The expectations we have of people about their behaviour from past experiences or due to their role determine the types of inference we make, as usually we expect people to perform a socially desirable act. Their model is however aimed at explaining more the unexpected acts, with few effects that are likely to be seen as intended by the actor and 'in character'. In other words, it does not provide an explanation for the situations that are routines or already experienced in the past. It suggests that when faced with a new or unexpected behaviour, we tend to use our previous knowledge to build expectations about it in order to make an interpretation.

All models reviewed here offer an account of the mental analysis which perceivers are believed to follow to attribute causality to an act of behaviour. While

Kelly's models suggest a more direct use of prior knowledge in the process, the correspondent inference theory argues that the particular experience is used to develop expectations about a person's behaviour. The difference between them resides in the amount of knowledge we possess in a given situation. When this situation is familiar, the interpretation is based on judgements made in previous similar situations. In all other cases, the perceiver makes inferences based on the expected and desirable behaviour in the given situation. Therefore, the three theories seem to be suitable for different types of situations. What these models do not explain are the cases when the perceivers attribute other reasons than causal to an act of behaviour and also do this in a seemingly irrational way.

3.6. Attributional inaccuracy

Individuals' perceptions are not always accurate. There are several processes involved in social perception, such as self-interest, a person's beliefs, focus of attention etc. that may affect the ways in which individuals make attributions to a situation or behaviour. Pennington *et al.* (1999:158) identify four types of errors that people commonly make in the process of attribution. These are:

- Correspondence bias;
- Actor-observer differences;
- Self-serving biases;
- Group-serving biases.

The *correspondence bias* refers to the individuals' tendency to make attributions based on dispositions (Gilbert, 1989, 1995; Jones, 1990). This means that people tend to interpret a person's actions or words as directly dependent on their own beliefs, intentions, traits etc. As an example, a person who asks the questions will be considered as more knowledgeable than the person who answers them, although the judges would know that the questioner had time to prepare the questions (Ross *et al.*, 1977). There are four main explanations for the prevalence of the correspondence bias in human perception (Gilbert and Malone, 1995). First, people tend to attribute causes to the individual rather than to the situation. Second, they assume that the behaviour is consistent with the person's intentions or attitudes. Third, spontaneous attributions determine a closer link between person and behaviour. Fourth, these spontaneous attributions are taken at face value rather than being evaluated and adjusted.

These explanations indicate that generally people tend to be rather superficial and spontaneous in their attributions rather than elaborate and deeply analytical. However, this might be the case only with expected behaviours, as in other cases people seem to take the situation into account to explain the unexpected (Kulik, 1983). To claim that people make errors in attribution may be possible only by knowing exactly the cause of a certain act of behaviour. In all other cases, individual variations in attribution are natural and justified by the different experiences, perspectives and interests of the perceiver (Locke and Pennington, 1982).

The actor-observer difference (Jones and Nisbett, 1972) argues that when individuals justify their own behaviour, they tend to emphasise the role of situational factors. However, when attributing causes to the others' behaviours, individuals tend to attribute internal or dispositional causes. There are several possible explanations for this tendency of favouring one or the other type of factors. As the observer is more focused on the actor's behaviour than on the situation, it means that the actor's behaviour becomes more salient and noticeable. By contrast, when judging one's own behaviour, the environment is more salient than one's own personality or reasons for action. Secondly, the availability of a diverse range of reasons when explaining our own behaviour is not the same when attempting to explain the others' behaviour. We are usually more aware of the situations influencing our own behaviour. In an experiment, Storms (1973) showed how, by asking individuals to watch themselves on videotape and thus changing the actor-observer perspective, the attributions people made on others' or on own behaviours changed.

The existence of the actor-observer difference is very important for the present study. First, it suggests that the role in an interaction, actor or observer, definitely influences the types of attributions people tend to make. As learners in a class are always in the observer's perspective, it means that the attributions they would routinely make on teachers' NVBs would tend to be internal, i.e. related to teacher's perceived traits, personality, communicative intentions etc. This aspect will be discussed in the current study in direct relation to the attributions made by the learners to teachers' NVBs.

The *self-serving bias* determines such situations when individuals tend to explain their own behaviour retrospectively in ways to enhance their abilities or/and self-esteem (Miller and Ross, 1975). In competitive circumstances, we tend to attribute success to internal factors and failures to external factors. For example,

passing an exam will be explained through hard work and intelligence, while failing it would be considered the result of bad luck or difficulty of questions. The ego-enhancing self-serving bias is however seen as having an important role in preserving the individuals' motivation to persist in the task. A similar phenomenon to the self-serving bias exists at the group level. *The group-serving bias* involves ethnocentric attributions through which a group promotes the in-group values and denigrate an out-group, e.g. Muslims' group-bias over Hindus (Islam and Hewstone, 1993). However, not all cultural groups display in-group bias.

It is tempting to see the existence of the attributional biases discussed above as an indication of people's generally limited skills of perceiving and interpreting the others' behaviours. However, the 'failure' which research might attribute to individuals by comparing their perceptions against some normative models does not mean that the problem resides with the individual, but that the models are unable to explain the variations in individual perceptions. The models discussed earlier in this chapter (in section 3.5. above) fail to take into account the social context and the culture in which the behaviour takes place in explaining individual perceptions. The existence of certain rules that enable the individuals to be accustomed to routines and practices means that individuals do not always have to go through a process of causal attribution, as suggested by most models. Only when behaviours perceived are new or confusing, individuals might try to explain them through a more intense analysis. It makes sense thus to say that individuals' perceptions are influenced at any time by a variety of factors, external and internal, and that the so-called biases are rather characteristics and circumstances of human perception that need a closer justification in future models of perception of behaviour.

3.7. Social stereotypes

Another characteristic of human attribution is the use of stereotyping in forming impressions and judging people. Social stereotypes are usually defined as mental representations of a social group and its members (Stangor and Lange, 1994) in a mix of abstract knowledge about a group (e.g. teachers are strict and knowledgeable) along with exemplars of the group members (e.g. my previous or actual teacher). Stereotypes work as a set of categories that include shared beliefs about personal attributes, personality traits, roles, physical characteristics and behaviours of a specific group of people (Kunda, 1999). These group stereotypes mean that we have

certain expectations about group members and these expectations are activated automatically once the stereotypes are formed. Stereotypes are formed in connection with several types of construct:

- Roles, e.g. accountants are very hard working, but boring and shy;
- Physical characteristics, e.g. small people are mean and less attractive;
- Personality traits, e.g. Northerners are hard working, and cool, Southerners are easy-going and emotional;
- Gender, e.g. women are more emotional and expressive etc.

Stereotypes seem to be activated automatically and determine the ways in which we anticipate and then judge someone's behaviour. Several studies have examined the ways in which derogatory stereotypes work when judging people from a different cultural group (Devine, 1989; Chen and Bargh, 1997) or region (North versus South) in the same country (Linssen and Hagendoorn, 1994; Von Ehrenfels, 1961). These studies show that we tend to judge people coming from a particular group according to a set of stereotypes we developed through experience and/or education. The activation of these stereotypes is automatic, sometimes against our own rationality. This can influence our own behaviour towards the person stereotyped and, thereby, their reactions to us (Chen and Bargh, 1997). At the beginning, soon after meeting a person from a stereotyped group, we shape our impressions about the person based on our knowledge of the group stereotype. However, when we become familiar with a person and we gain clear individual information about the person, we seem to judge the person's actions based on the individualised information, not on the stereotype (Kunda, 1999:355).

In the process of interpreting the others' NVB, the existence of cultural stereotypes plays a major role. There exist some well-known stereotypes based on the display rules of NVB, which, for example, make Europeans believe that Asians are less expressive, less emotional and more difficult to interact with. In this study, as learners interpret teachers' NVB, I expected them to invoke their existing stereotypes about the British NVB. This hypothesis will be discussed later on in the presentation and evaluation of the research findings (see Chapter 10).

3.8. Summary - Human perception and attribution

From the studies reviewed from the field of social cognition, I developed a broad understanding of the processes of human perception. The specific aspects that I considered relevant for the adult classes of language learners were the following:

- (i) the idea that individuals' perceptions of an act of human behaviour may differ in terms of both noticing it and interpreting it;
- (ii) the notion that individual attributions are conditioned by a set of internal (e.g. attention, perception skills etc.) and external factors (e.g. own culture, previous experience of similar behaviours etc.)
- (iii) an act of behaviour becomes meaningful only if the perceiver interprets it accordingly during the interaction.

I did not use social-psychological frameworks to guide my data collection and analysis in any formal way (for example, by trying to identify the exact stages in the learners' perceptions of a teacher's action or behaviour). However, the background of the studies on human perception provided me with a deeper understanding of the phenomena that I intended to explore. Therefore, I knew that individuals' perceptions and attributions of the same behaviour differ and that schematic information processing is a characteristic of such perception. This characteristic may lead learners to make erroneous, biased or oversimplistic judgements, but these attributes appear nevertheless to represent the only way of coping with the multitude of behaviours occurring at any moment in any interaction.

As the next section will show, findings from the field of social cognition are used as research tools and areas of investigation in the field of applied linguistics on language classrooms. However, no studies currently exist which explore language learners' perceptions and interpretations of teachers' gestures and other NVBs. In this context, the following section will locate the current study in the field of applied linguistics research and will show how, by investigating the learners' perspective on teachers' NVB, research can reveal aspects of significant processes of social interaction in the language class.

3.9. Current issues in the field of foreign language classroom research

In this section, I will describe the current foci in the field of FL classroom research. I will then offer a review of the existent studies investigating the role of gestures and other NVBs in the language class. Finally, I will indicate where my own study is located in terms of current foci and methodologies in the field on EFL/SLA research.

3.9.1. Research trends and the relevance of the social context in the language class

The traditional concern with the cognitive and psychological models of foreign and second language learning was based on the assumption that language development is a private and largely mental achievement. Initial research in the field of second language acquisition (SLA) was mainly descriptive, trying to document the language produced by learners and to identify some regularities and rules of development that are common to all learners. Thus attention has been paid largely to the role of L1 in the acquisition of SL or FL, developmental sequences of interlanguage, negotiated input and, more recently, the pragmatic features of the ways in which learners use the FL for various communicative purposes (Ellis, 1994; Mitchell and Myles, 1998). This has meant that language learning was conceptualised mainly as a psychological process and sidelined as a cultural and social practice.

Recent studies of language learning conceptualise it in context, understood as an ensemble of educational, social and political factors. It is now increasingly accepted that language classes are complex environments, in which the social forces within the context shape the learning interaction and its outcomes. Current mainstream SLA research recognises interaction as central, but mainly as a source of comprehensible input and verbal negotiation of meaning (Kasper, 1996, 1997; Long, 1981, 1996; Pica, 1994; Swain, 1985, 1995). Breen (1985) invited researchers to consider language classes as special social situations rather than experimental laboratories that reflected an essentially asocial view of language acquisition. He identifies eight features that exemplify classroom as a culture, all reflecting the specific contributions of classroom's social reality to the processes of language development. Since these characteristics are closely linked with the ways in which teachers and learners perceive each other in the interaction, I will list them here. The classroom culture is:

1. Interactive, i.e. class participants are involved in verbal or non-verbal interactions from ritualised to unpredictable ones, which will have different degrees of salience and will be diversely interpreted by all participants;
2. Differentiated, i.e. although it appears as one social unit, it is always a composition of various subjective views of language, learning beliefs and purposes, preferences for learning etc.

3. Collective, i.e. it is constituted in the constant interplay between individual values and group norms and values;
4. Highly normative, i.e. it develops overt and covert group rules of evaluating participants' learning and behaviour;
5. Asymmetrical, i.e. asymmetric roles and identities determine different behaviours of the participants;
6. Inherently conservative, i.e. it develops patterns of interaction, rituals and styles which are quite resistant to change;
7. Jointly constructed, i.e. all learning outcomes are socially processed and are a dynamic synthesis of individual and collective experience;
8. Immediately significant, i.e. the learning experience is located in the immediate context and the significance that a participant gives to a moment of interaction is of great importance for understanding the classroom teaching and learning processes.

Given these complex conditions, it means that, at any given moment in the interaction, one needs to consider the ways in which these features influence learners' behaviour and interpretation of others' actions. Although it seems difficult if not impossible to pinpoint the relationship between particular social and cognitive variables that may influence language learning at any given moment, a reconstruction of the existent research paradigms is needed to account more explicitly for the impact of both. This may involve a shift of research perspective from the observable to the uncovering of the more subjective experiences from the participants' point of view and also a more anthropological approach of evaluation. This evaluation should be based on the criteria 'derived directly from individual expectations and the group's emerging norms and values' (Breen, 1985: 151).

In the same vein, Van Lier (1988) promotes an ethnographic approach to foreign language classrooms and suggests that the detailed descriptive investigation of class interaction is absolutely vital in understanding the existence of any relationships between classroom variables:

Without the social context it is difficult to see how classroom interaction can be understood and what cause-effect relationships, if they can ever be established, really mean. (1988: xiv)

The ethnographic tradition of research generated studies exploring the language classrooms as socially constructed (reviewed, for example, in Johnson, 1992). It also

acquired recently innovative uses, as a method of language learning and acculturation. Roberts *et al.* (2001) conducted a project in which learners of a foreign language become ethnographers in a foreign culture as a means of developing an understanding of the new cultural group and its meanings simultaneously with learning the foreign language.

This view on classes as socially constructed has generated a reconceptualisation of the learners themselves. The above metaphor of language learners as 'ethnographers' adds to the list of other metaphors recently used to conceptualise learners in cultural and social terms, such as 'negotiators of meaning', 'cultural mediators' or 'border-crossers' (reviewed in Breen, 1996; Ellis, 2001a). They are now characterised as 'socially constituted', as 'responsible agents with dispositions to think and act in certain ways rooted in their discursive histories' (Lantolf and Pavlenko, 1995: 116). This marks a new significant trend in SLA research, towards a conceptualisation of the learners as active agents within the language class (Ehrman, 1996; Magnan, 1990; Nunan, 1988; Tudor, 1996 *inter alia*). There are new studies that suggest that how learners perceive and construct the whole interaction has a direct influence on their learning (Beebe and Butland, 1994; Ehrman and Dörnyei, 1998; Oxford *et al.*, 1998). Their findings support the need to understand learners' own constructions of their engagement during the class.

Similarly, recent Vygotskian approaches to SLA research also conceptualise learners as 'social agents, whose actions are situated in particular contexts and are influenced by their dynamic ethnic, national, gender, class and social identities' (Lantolf, 2001: 115). At the same time, Firth and Wagner (1997) call for a similar widening of the research agenda to include approaches that view the learner more holistically and from an emic perspective and that are more critical of traditional concepts such as 'native speakers' and 'interlanguage' (Selinker, 1972). These authors claim that the typical view of the language learners as non-native speakers 'handicapped' by their reduced level of competence encouraged researchers to focus on the psycholinguistic aspects of learning and ignore the contextual and interactional aspects of language use. Recently, several researchers have used the framework of sociocultural theory to explore the ways in which the individual's own social dimensions and interpretations of the interaction affect language use and, ultimately, the process of language acquisition (McKay and Wong, 1996; Miller, 1999; Norton Peirce, 1995; Norton, 1997; Siegal, 1996). All these studies conceptualise learning

both as an *individual* and as a *social* process and are able to shed some light on processes traditionally overlooked by classroom-based research in language learning.

As one reaction to early research focusing on the formal linguistic properties of learners' language, recent SLA research has focused on the pragmatic aspects of language learning. According to pragmatic theories of SLA, learners' ability to use the appropriate utterances in the right contexts is as important as their linguistic competence. In this sense, research has examined the ways in which learners dealt with certain interpersonal actions such as making or receiving compliments, requests, apologies or complaints either in natural or in simulated situations. Learners were asked to complete missing sentences (Beebe *et al.*, 1990; Blum-Kulka *et al.*, 1989) to act in a role-play (Kasper, 1981) or to interact with native speakers (Wolfson, 1989) in contexts aimed to elicit their pragmatic uses of the language. The major findings emerging were that learners transfer their rules of interaction from L1 only after a certain level of linguistic development and that their inferior status when interacting with a native speaker may limit the range of speech acts they perform.

Another interesting finding from the pragmatic investigation of SLA relates to the ways in which learners manage to use verbal and non-verbal resources to achieve certain communicative effects and produce a desired social impression. Goffman (1959: 14) made the distinction between information that individuals 'give' to each other, that is 'symbols and their substitutes' which they all share and know, and the information they 'give off'. The latter refers to actions that 'the others can treat as symptomatic of the actor' and has no value of responsibility for the actor. Individuals are generally held responsible for what they say or do, and not for what they 'seem to say' or 'seem to do'. Kendon argues that the issue is not the information being given or given off, but rather the interpretation the other participants attach to it, 'how the co-participants in the gathering take it' (1985: 216). In this sense, Gumperz (1982) identified *contextualisation cues* as the means that individuals use to differentiate an instance of interaction in relation to others and to generate their situated interpretations accordingly. These cues allow the individual to activate and selectively use past knowledge and experiences of similarly situated interactions to interpret and adapt to a novel situation. They are thus related not only 'to traditional linguistic and pragmatic knowledge but to social relations, rights and obligations, linguistic ideologies and so on' (Roberts, 2001: 117). Although Gumperz sees these cues as making more salient specific linguistic features, they can also contribute to the

cohesion of the whole interaction. Individuals can gain, through the use of contextualisation cues, a general feeling about the progression of the whole interaction, verbal and non-verbal.

Roberts (2001: 118) discusses the difficulties that language learners might encounter in dealing with unfamiliar contextualisation cues, which are highly socially and culturally embedded. Also the 'sub-cultural differentiation' of cues makes them difficult to identify and to interpret for the language learners (Levinson, 1997: 29). Individuals could interpret a cue differently in their reading of the situation due to the pre-suppositions they have about the speaker's perspective. This mis-interpretation can have the effect of disqualifying the individual at the pragmatic and social level, but can also generate a failure of meaning making and ultimately, end the interaction.

The only solution to the learner's dilemma seems to rely on the prolonged exposure to a certain community of FL users that can assure the learning of their communicative practices.

It is long-term exposure to (...) communicative experience in institutionalised networks of relationship and not language and community membership as such that lies at the root of shared culture and shared inferential practices.

(Gumperz, 1982: 15)

'Good' language learners will thus be the ones who will quickly re-adapt to a set of contextualisation cues which might differ from the ones they are already familiar with in their own culture. This seems to support the idea of learning within interaction and the active involvement of the learner in the acquisition of the pragmatic rules of interaction. The simple 'belonging' to a community of speakers alone does not develop the learner's perceptive and interpretative skills regarding the understanding of contextualisation cues.

Although these recent orientations mark a concern with the contextualised nature of language classroom processes, critics claim that they do not address the issues regarding the more general and universal language phenomena, such as the rates and routes of learning (Mitchell and Myles, 1998: 162). Mitchell (1985) suggested that, although interesting in themselves, descriptive studies fail to further our understanding of how, when, and why students learn effectively (or fail to learn) in FL classrooms. She also makes the point that the understanding of classroom processes is hampered by a lack of appropriate theoretical models and frameworks with which to account for all the variables, linguistic, mental and social, involved in

foreign and second language classrooms - a point supported by other authors (Chaudron, 1988; Allwright, 1988).

Ellis (1994; 2001b) discusses the implications of developing an SLA theory in direct relation with language pedagogy. He claims that there is a current gap between the manner in which research in the field of SLA is conducted and language pedagogy. While researchers pursue the theoretical development of the field and contributions to other disciplines such as linguistics or cognitive psychology, language pedagogy is concerned with practical knowledge and activities that work in the classroom. Simultaneously with the focus on the contextualised aspects in the interaction, the field of SLA research currently faces a new shift of perspective to a more interactional view, where internal and external factors need to be considered jointly when constructing new theories of language learning.

3.9.2. Studies on gestures and foreign language learning

Issues of cultural differences and the use of gestures as compensatory devices by language learners are already acknowledged, but existing studies on gesture use in the language class are seldom related to a coherent SLA learning theory. Some classroom-based research has focused on *teachers' use of gestures*. Non-verbal behaviour of language learners and teachers has been investigated in several empirical studies that concentrated mostly on the amount and types of gestures used in the EFL class (Grant and Hennings, 1977; Gallaway, 1979; Kellerman, 1992; Seaver, 1992; Al-Shabbi, 1993; Allen, 1995; Antes, 1996). Canale and Swain (1980) developed a framework for communicative competence that included both verbal and non-verbal symbols. Similarly, Moskowitz (1976), in an interaction-analysis study, included the non-verbal behaviour as a characteristic of outstanding language teachers. Other authors also suggested the compensatory role of gestures in teaching a foreign language, by providing 'extralinguistic cues' to elaborate the information (Krashen, 1981; Long, 1989; Wong-Fillmore, 1985). However, the majority of these authors considered gestures as simple instruments of clarifying the input rather than actions with a communicative potential in themselves.

Hauge (2000) investigated the use of emblems as highly regulated signs in the FL classes and tried to identify the existence of ELT class specific emblems. After examining videotaped data from seven EFL teachers, she concluded that the occurrence of emblems outnumbers the other types of gestures and teacher's gesturing

is adapted to the specific context of the classroom, in the same manner that teacher talk is. She also claims the existence of the so-called 'prime emblems' which were mainly used by the participating British teachers, with head nodding, head shaking and eyebrows raising as the 'key prime emblems' and having the highest occurrence in teachers' behaviour. Although the generalisation of seven teachers' practices during one hour teaching sessions as valid for the whole British community of teachers of EFL seems overstated, the finding that emblems outweigh the occurrence of other types of gestures might suggest the teachers' unconscious attempt to try and use highly lexicalised gestures as a compensatory strategy for learners' linguistic difficulties.

Most of the studies investigating FL *learners' use of gestures* have examined the relationship between foreign language proficiency and the number of gestures used. Empirical studies suggest that the speaker's moments of difficulty in expressing themselves in a FL are accompanied by a correspondent increase in the amount and frequency of gestures. Marcos (1979) identified a negative correlation between the level of proficiency in the FL and the beats gestures occurring during silent pauses in speech. but the beats occurring with speech did not follow the same rule. This means that the less proficient speakers are in a foreign language, the more beats with silent pauses they are likely to produce. Furthermore, on the whole, the Spanish-English and English-Spanish bilinguals investigated in this study used more gestures of all types when speaking in the foreign language. Similar results were concluded in the case of French learners of English (Sainsbury and Wood, 1977), Japanese learners of English and English learners of Japanese (Kita, 1993; Nobe, 1993).

Gullberg (1998) recently investigated the use of gestural communication strategies as opposed to oral communication strategies by FL speakers of English and Swedish. In this study, learners of EFL were asked to narrate the story from a cartoon in L1 and then in the FL. Overall, the author concluded that complementary strategic gestures were used more frequently than substitutive strategic gestures in FL. Also, FL speakers appeared to favour a combination of the two types of strategies - oral and gestural - more than the L1 speakers did. Gullberg confirms the increase in the use of gestures by FL speakers on the whole and as communication strategies, acknowledging differences between the individuals in the amount and types of gestures used. Similarly, Strömquist (1987) presented six case studies of FL learners

who used illustrative or pointing gestures as aides when they were searching for verbal referents.

The general opinion that we use gestures as a compensatory device for relatively poor fluency in a language overlooks some individual differences, as McCafferty (1998) showed. He studied the appropriation of gestures by Japanese learners of English as a FL, who displayed individualised variations in the use of beats while speaking in the FL. Within a short time of exposure to the EFL environment, the Japanese and Venezuelan subjects produced an increased number of beats, which represented about half of the total gestures involved by the learners in conjunction with speech. Even if the subjects were assigned the same task, the individual production of beats varied considerably, with certain individuals producing no beats at all. This suggests that although a tendency to an increased use of gestures in FL is confirmed, there might be certain social and individual factors that affect the production of gestures and these need to be taken into account when studying the individual use of gestures in FL.

In the same study, McCafferty (1998) identified the appropriation by the Japanese learners of American English of a gestural emblem that is not a Japanese gesture. The subjects used the uncertainty gesture of reversing the palms and spreading the arms outward ('I don't know' gesture) after a certain number of weeks from seeing the gesture used by the tutor. This finding, although limited to a particular emblem and to limited case studies, might indicate a gestural 'acculturation' in the context of language classroom. A similar study done with bilingual children in Canada found that children used different gestures when telling the same story to children from the same cultural and linguistic background and when talking with children in a FL (von Raffler-Engel, 1976). However, these findings did not seem to be confirmed in the case of adult bilinguals.

In another study, McCafferty and Ahmed (2000) investigated the appropriation of FL gestures of the abstract by Japanese learners of English who were exposed to the language in naturalistic or instruction-only contexts. They were asked to interact in monolingual or bilingual pairs and to discuss issues related to marriage for ten minutes. The analysis of the videotaped dyads indicated that the naturalistic learners displayed American forms of gesture similar to the ones displayed by monolingual American pairs. This suggested a high rate of appropriation of certain types of gestures of the abstract by the learners of a FL learning in naturalistic contexts. In

contrast to the naturalistic learners, the instruction-only learners displayed gestures more similar to the Japanese monolinguals than to American natives, in spite of their advanced level of proficiency.

In another study, Allen (1995) reports on the effects of emblematic gestures on the development of mental representations of French expressions. In this study, learners of French were presented with French expressions in a context with and without emblematic gestures. It was found that learners recalled more expressions and remembered them for a longer period of time if they were exposed to gesture + verbal expression combination than when hearing the verbal expressions in isolation.

Learners of an origami technique used gestures that did not occur with speech when encountering increased task difficulties and collaborative gestures with the instructor (Furuyama, 2000). Similarly, learners of a FL used compensatory gestures when the encoding problems increase (Marcos, 1979). Adult FL learners also used more gestures than the native speakers (Kita, 1993; Nobe, 1993; Sainsbury and Wood, 1997; Gullberg, 1998). No differences between Chinese FL learners' use of gestures at different levels of proficiency were found (Chen, 1990), but the subjects were all adults. In another study (Taranger and Coupier, 1984), adult learners of French produced more mixed-syntax types of utterances at the lower levels of proficiency and fewer representational gestures and more rhythmic and emphatic gestures when proficiency increased. Stam (1999) considers proficiency as a determinant factor, suggesting that at advanced levels of proficiency the cognitive load on linguistic representations becomes relatively lighter and this decreases the amount of gestures produced by a speaker. These seem to be the only studies taking into account the learners' level of proficiency. Teachers of a FL were found to adapt their gestural activity to the learners' level of proficiency, similarly to gestural 'motherese' reported in interactions between mothers and young children (Bekken, 1989).

The major shortcoming of research investigating the use of gestures in FL learning is the lack of studies which explore participants' perception of gestures and their interpretation alongside their occurrence in interaction. Another unexplored path is the relationship between learners' learning as related to teachers' gestural activity during the class. Although the present study will not attempt to measure learning in any way, the relationship between teachers' gestures and learners' learning will be addressed from learners' own perspective (see Chapters 7 and 10). A possible explanation for the lack of studies trying to connect the two variables (teachers'

gestures - learners' learning) is the difficulty of conducting measurements which to determine a clear positive relationship between the two. In other words, there are several variables that influence the teachers' gestural activity and equally the learners' learning at any given moment and their isolation for inferring causality seems difficult to achieve. However, a study which explores learners' own perception and understanding of teachers' gestures and other NVBs during the class has the potential of furthering the understanding of the ways in which gestures may enhance or hinder learning and its related emotional and social aspects.

3.10. The key features of this study

The investigation of current directions of research in the field of SLA indicates that:

- Traditional SLA research focused on the examination of learners' production data and, within a limited range of variables, the input - output aspects of class interaction;
- Recently, language classes are being seen more holistically and research seems to turn its interest to the investigation of the social aspects in complementary relation to the pedagogic aspects of the class culture;
- Learners are now constructed as direct and active participants in the processes of language learning and their participation in the class depends on a complex of social and cultural factors which affect them prior to, during and subsequently to classroom interaction;
- There is a need for alternative ways of exploring learners' participation in the language classroom, particularly through methods that investigate learners' own perspectives of classroom events.

These conclusions indicate that the current study is in line with new directions in classroom-based applied linguistics research. As this study focuses on an omnipresent aspect of the language class that has not been explored from the learners' perspective yet, it has the potential of making a contribution to our understanding of the social processes in multicultural classes of adult language learners. The present study has the following distinguishing features:

- It will focus on an omnipresent aspect of language classroom, which is obvious to all classroom participants, but which has hitherto seldom been systematically investigated. Although not directly referring to the specific

methodological aspects of teaching the foreign language, teachers' NVB seems to be generally acknowledged as an important feature of classroom interaction by teachers, trainee teachers and learners alike.

- Learners' and trainee teachers' interpretations of the NVBs occurring in the classroom will be used as the main source of data, which will be corroborated with the direct analysis of classroom video extracts and trainee teachers' observations of classroom work. It is hypothesised in this sense that differences in perceptions of teachers' NVB may be related to different roles of participants in the interaction.
- It will focus on the perception and interpretation of teachers' NVB in the wider social context of the language classroom and will seek to understand the participants' interpretations in the context of a range of interrelating individual, classroom and extra-classroom variables.
- The theoretical framework used is the one developed in the tradition of qualitative research, as the study investigates the meanings and functions attributed to teachers' NVBs through individuals' subjective interpretations.

3.11. Summary

This chapter has presented the theoretical background and the rationale for the study. In the first section, I discussed the aspects from the field of social psychology. This allowed me to: (i) assess the degree to which individual perceptions of gestures and other NVBs are influenced by various internal and external factors and (ii) identify theoretical frameworks from the field of social psychology which I could use to guide my observations and my analysis of the data collected.

In the second section, I located my study in relation to existent research on gesture in language learning. In describing the current trends in the field of EFL classroom research, I explained how the investigation of NVB in the language class is an unexplored, yet important aspect of classroom interaction. In the final section, I summarised the key characteristics of the present study.

In the chapter that follows, I will describe how I developed and piloted the research instruments for the data collection and analysis.

PART TWO:
RESEARCH METHODOLOGY

CHAPTER 4

THE PILOT STUDY

4.1. Overview

The purpose of this chapter is to describe the stages I followed in piloting the data collection and analysis. It details the procedures involved in collecting the first set of data, the ways in which I experimented with different methods of interviewing, and how I used these data to develop a model of coding and analysis. The final section discusses the outcomes of the pilot study and their impact on refining both the research questions and methodology pursued in the main study.

4.2. Justifying the pilot study

In the initial stage, I wanted to understand how individuals perceive and interpret teachers' NVBs produced during the language class. My main goal was thus to discover the best method for collecting the data. At this stage, although I had a general idea about the topic and the issues of possible interest, I was not sure about the precise focus of the research and I had not developed precise research questions. However, I started the pilot study with a set of preliminary questions that I needed to verify. I formulated these methodological questions as follows:

- *Are students able to describe and interpret aspects of teachers' NVB?*
- *What type of data will I get if I interview students on teachers' NVB?*
- *Is it possible to explore, by using video recorded data, individuals' interpretations of teachers' NVB?*

As the survey of the literature helped me identify an unexplored area of investigation - that of students' perceptions of teachers' NVB - I needed a first contact with the field and with the informants to help me refine and define precisely what were the problems I wanted to investigate. Jorgensen (1989) underlines the importance of viewing this initial idea about the research problem with a great degree of flexibility and open-mindedness:

When going into the field with an idea about what is problematic, it is important to remain open to the widest possible range of findings, including the possibility that your initial idea is inappropriate or completely mistaken.

(1989: 30)

The purpose of the pilot study was not only to help me refine the research questions and the research methodology. I also hoped that, in the light of the findings from the pilot study, I would be able to identify the operational concepts for exploring the individuals' perceptions of NVB and the general themes I was going to use in the future analysis of a larger data base. However, I was aware that questions and frameworks developed in a pilot study are susceptible to change, reformulation and reorganisation during the main data collection stage.

4.3. Selecting the setting

I considered the language classes as an entity, something of an almost material structure - an imaginary land, with actors and rituals which had many features in common, although they were placed in different specific rooms, at different times, with different participants. They all seemed to be bounded by a regularity of routines, activities, interactions, questions and answers, learning attitudes, and not lastly, non-verbal behaviours. Despite inter-individual and between-group differences, there was the unifying and stable pattern of learning a foreign language abroad. This gave me a pivotal reference, although I was going to present different perspectives and an interpretive analysis of some teachers' NVBs. The stability and the harmony of the language class as a routinised and cohesive group were nonetheless far from being hermetic. Hammersley and Atkinson warn that:

settings are not naturally occurring phenomena, they are constituted and maintained through cultural definition and social strategies. Their boundaries are not fixed but shift across occasions, to one degree or another, through processes of redefinition and negotiation. (1995: 41)

This made me think that there are several external influences which affect any setting at all times, constituting intrinsic, invisible parts of the participants' actions and reactions. Rather than determining individuals' behaviours, the immediate setting provides a context for explaining it. It is in this context that the ethnographers have to locate their detailed description:

As interworked systems of construable signs (...) culture is not a power, something to which social events, behaviours, institutions, or processes can be causally attributed; it is a context, something within which they can be intelligibly - that is thickly - described. (Geertz, 1993: 14)

Geertz's concept of 'thick description' (i.e. describing the meaning behind a person's behaviour) as opposed to that of 'thin description' (i.e. describing a person's actions) encourages the exploration of the rationale behind one's actions. I considered this exploratory, interpretive perspective as a guideline for my whole study.

When I decided to choose the language classrooms in the Centre for ELT at Stirling as the setting of the research, a main advantage was easy access, but also the typicality of the setting for a common language class situation. Schofield (2002) argues that the typicality of a setting increases the chances for a generalisation of the findings to other similar settings. Although idiosyncrasies are characteristic of any particular situation studied, there is more potential in increasing the knowledge about an aspect of human life by choosing to examine cases typical of their kind rather than exceptions. Holliday (2002: 38) identifies several criteria that need to be considered by the researcher, mentioning among others that the setting needs to be bounded as a locus, a time frame and as a culture. The boundedness should provide a richness of 'relevant, interconnected data'. The setting should also sufficiently be small and accessible, to be managed logistically without difficulty.

As an insider to the chosen setting, I was familiar with the teachers I needed to work with and the students I was going to investigate were in my close environment for extensive periods of time. I was meeting them on a daily basis and the idea that when going to their classes they will see a familiar person, although not as their teacher, appeared to be to my advantage. Once this decision taken, my next step was to familiarise myself more fully with the chosen setting and its participants.

4.4. Getting familiar with the field

At first, I participated in the language classes as an observer. Although I was familiar with the language classroom from my previous experience as an EFL learner and teacher, I knew that I was entering a new cultural setting, i.e. the EFL classroom in a British university.

At the beginning, I focused less on teachers and students' NVB, as I was captivated by the whole new atmosphere and impressions I was getting. I noticed the room setting, the number of the students in a class (one third of the numbers I was used to), the colourful books, the desks arranged always differently, the audio-visual facilities. Coming from a more traditional background of teaching and learning, I looked at the new environment as a learner first, as a teacher afterwards, and only

later on as a researcher. I could not help comparing my EFL learning background with the new setting. I had to become accustomed to new methods, new teaching styles, new types of classroom interaction.

Once I became more familiar with the setting, I focused my observation on teachers' and students' behaviour. I watched and noted down what teachers did, not only in terms of NVBs, but also in terms of teaching strategies, as I was not sure at that stage what I was going to focus upon in my research. For the same reason, I observed the students' behaviour at the same time. I noted down their actions, their reactions to teachers' questions or requests, their interactions with each other, etc. At that stage. I needed to develop a system of taking notes on behaviour, so I explored different techniques, from long descriptions, to abbreviations and drawings.

I observed several classes for a semester before I decided to move on and use the video-recorder. This first research exercise gave me the sense of the skills I needed to develop to conduct research. I needed to discuss with the teachers the possibility of observing their classes. I needed to decide where to sit in the class to be as unobtrusive as possible. I needed to select what to observe, what to write down and how to do it. When conducting the observations, I thought about the ways in which I was going to use the video camera, where I was going to place it, what effects this might have on the participants etc.

The classroom observations were a necessary and fruitful step in the whole process. As the teachers and the students were used to having their classes observed by trainee teachers on a regular basis, they did not seem to be seriously affected by my presence. There were several instances when teachers and students attempted to include me in the activity, either by giving me a copy of the materials they were using or by asking me direct questions. I interpreted this as a sign that my presence was acknowledged but considered unthreatening, as they felt at ease to include me in the group. In general, the more familiar I became with the students and teachers, the less preoccupied with my presence they seemed. Looking back, I would say that classroom observation put me in the mind frame for studying NVB in the given setting. It helped me focus the research and familiarised me with the research skills I needed in the field.

4.5. Selecting the sample

I had a choice of accessible informants, from adult language learners to post-graduate trainee teachers and teachers. I decided to choose the post-graduate trainee teachers as my pilot population for a variety of reasons. Firstly, I had easy access to these informants. I used to attend some of their classes and managed to develop a good relationship with most of them by the time of the second semester when I started my pilot study. This friendly relationship and the close age gap made me think that they would be honest and co-operative informants due to the shared student status and familiarity. Secondly, the informants came from a variety of cultural backgrounds, they had some teaching experience and methodological knowledge, so they would be able to inform the research from a variety of insights. Thirdly, there was the language issue and the typicality of the subjects as language learners. The sample had two advantages here: the subjects were themselves advanced learners of English, so they were familiar with the social aspect to be explored and their ability to express this reality verbally was high, as they were all studying at a postgraduate level in the foreign language.

As indicated in Table 4.1, the subjects came from a variety of countries and were speakers of at least two languages each. The majority were between 20 and 30 years of age and ten of them had some teaching experience in EFL.

Table 4.1. Trainee teachers' background

Age range	20-25	8
	25-30	7
	30+	3
Number of subjects (N=18)	Female	12
	Male	6
Country of origin	Germany	3
	Greece	4
	Cyprus	2
	Norway	1
	Taiwan	3
	Japan	2
	England	3
	Years of teaching EFL	none
1-2 years		3
3-4 years		5
5+ years		2

4.6. Finding a suitable method of data collection

As I wanted to explore the individuals' own perceptions of teachers' NVBs and the ways in which they attributed meanings to these NVBs in the interaction, I needed to find the most suitable method for eliciting this type of data. In this sense, I next surveyed the existing introspective methods used by current SLA research and then adopted the most suitable principles of introspective data collection.

4.6.1. Overview of the methods used for investigating learners' perspectives in current SLA research

Traditional SLA research tended to examine classes and learners in terms of the observable, external dimensions of the interaction and limit the investigation of learners' participation in the class to their language production during the class, in writing or in speech. More recently, several authors have suggested that learners' and teachers' experience of the language class are not accessible through the analysis of a the verbal text of lessons and that only a more inter-subjective, ethnographic approach can give a more holistic understanding of the learning experience (Breen, 1985, 2001; Allwright and Bailey, 1991; Allwright, 1996).

Studies of interaction analysis explored several years ago the extent to which learners' behaviour is determined by the teacher-led interaction. These observational studies developed schedules of categories for coding observable classroom behaviours (Moskowitz, 1967; Allwright, 1980; Long, 1980; Mitchell *et al.*, 1981; Allen *et al.*, 1984). Ellis (1994: 567) argues that these types of schedules make comparisons across studies extremely difficult due to their subjective nature and have the risk of generating disconnected tallies of behaviours that obscure the general picture. Also, as teacher and learner are often observed separately, the information about the 'sequential flow of classroom activities' is lost (McLaughlin, 1985: 149). However, despite these criticisms, the interaction analysis studies brought attention to other aspects of the class rather than the dialogical ones and suggested the idea that interaction can impact on language acquisition (Long, 1989, 1996).

On the assumption that it is important to understand what people think and feel when learning a FL, recent innovations in the research methodology of SLA conceptualise learners as active participants and consider them and the teachers as important sources of research data (Allwright, 1996). In this sense, introspective methods are nowadays more and more popular in investigating the 'unseen' or less

visible side of the language learning process. Such methods of investigation assume that learners are able to observe what takes place in their mind or what emotions they experience in a similar way as one can observe the objective reality. In this sense, some of the methods recently adopted by research to get an insight into the participants' meanings attributed to the class events include: self-reports involving note-taking and learning diaries, 'think-aloud' procedures (where learners verbally record their tasks or procedures as they perform different tasks), elicitation of retrospective accounts soon after the class or prompted forms of recall using photos or playing back videos of the class. These methods of eliciting data have been adopted in reaction to the previous methodologies of inferring learners' behaviours and strategies mainly from observing their production.

Several studies have used learners' self-reporting to explore learners' strategies and processes during or soon after the completion of a task or process of learning. Through self-reporting, learners were asked to identify their own approaches to a task or process and to write them down in note form or in diaries. This method was used to investigate learners' acquisition strategies (Cohen, 1987, 1996; Lennon, 1989), writing skills (Gosden, 1996) or individual beliefs and attitudes regarding the language learning (Fry, 1988; Bailey, 1991). In all these studies, learners were asked to keep diaries of their language learning for some time, focussing on certain aspects such as their writing, speech, interaction patterns etc. Their writings were then subjected to analysis to identify patterns or significant variables and their possible impact on learning.

Several studies which used the think-aloud method of eliciting data unveiled interesting findings regarding the learners' ways of dealing with processes of learning or skills such as reading (Hosenfeld; 1977; Block, 1986; Kern, 1994; Alanen, 1995), writing (Jones & Tetroe, 1987; Cumming, 1989), learning of vocabulary (Haastrup, 1987; Zimmermann & Schneider, 1987) and of pragmatic rules (Robinson, 1991). Although these studies pose some difficulties in terms of the contextual factors that will affect the data collection at any given moment, they nevertheless allow access to learners' individual meanings and interpretations, which are now generally considered an invaluable source of research data. However, Someren *et al.* pointed out that although the introspective methods provide interesting findings, they should be used as 'a means to validate or construct theories of cognitive processes, in particular of problem-solving' (1994: 9).

Audio and video technologies provide nowadays a considerable aid in the process of stimulating learners' recollection of previously performed tasks or class events. These visual aids are usually involved as prompts during interviews with the learners facilitating thus their recollection. Stimulated recall interviews have been used mainly in direct relation with learners' processes of speaking and communication strategies (Poulisse, 1990; Cohen and Olshtain, 1993; Dörnyei and Kormos, 1998; Mackey *et al.*, 2001). In these studies, learners were asked to discuss their thoughts at a particular moment in the interaction based on the audio or video recording of the actual class event.

The techniques such as those outlined above identify the learner as an active participant in the research process. However, critics of introspective methods claim that these methods pose several disadvantages (Nisbett and Wilson, 1977; Seliger, 1983; Ericsson and Simon, 1996). They suggest that learners are not reliable informants on their cognitive processes, due to the complexity and unconscious character of such processes. In other words, learners are not able to understand or even remember their mental processes, and also in the special context of SLA they will have difficulties to report in a language that they do not master very well. However, these concerns are reduced by studies which used introspective data and which indicate that, if using certain safeguards in the procedure itself, the results are reliable. Some of these measures include the use of the visual stimuli to access the recall of the event, the performing of the procedure soon after the class or the triangulation of data with other, more controlled procedures (Gass and Mackey, 2000). The use of introspective data, although still under consideration by the field in terms of best methodology, proves an important tool of exploring and understanding classroom events from the participants' perspective.

For the purposes of this study, I decided to use stimulated recall interviews as a means of understanding learners' perception of teachers' NVB as I believed in the potential of the method as a useful introspective tool. As I did not plan to develop a universal system of classifying teachers' NVB, I used learner perceptions as a way of uncovering what NVBs *they* noticed, the ways in which they interpreted teachers' NVB as relevant in certain contexts and their reasons underlying their selections and interpretations. However, in the piloting stage, I used semi-structured interviews based on video stimuli that subjects were unfamiliar with.

4.6.2. Designing the interviews

I decided to use video extracts of language classroom for the purpose of generating the trainees' comments and I had, for this purpose, a collection of four tapes entitled 'Looking at language classrooms' (Cambridge University Press, 1999) designed as EFL teaching material. The videos showed ordinary EFL classes with teachers and students from various cultures. I selected five extracts of circa two-three minutes each on which I decided to ask the informants to talk about the aspects of teachers' and learners' NVB as noticed in the video extracts.

I used the following criteria in selecting the video extracts:

- *Each extract to be a unitary sequence in itself, with a clear opening and ending of the interactional sequence.* The explanation for this criterion was to offer as a stimulus a coherent and comprehensible extract, without creating any confusions about the content of speech or the wholeness of the sequence of interaction.
- *Three extracts should focus on the teacher and two extracts should focus on the learners in the class in moments of actively engaged interaction.* This criterion was meant to reflect the NVB of all participants in a class, teachers and learners, with the aim of investigating if learners and teachers' NVB were perceived similarly or if they generated different types of comments.
- *The types of interaction between teacher and learners should be identifiable as typical patterns of interaction in EFL classes (frontal teaching, exchange of turns between teacher and students, group/pair work etc.) with typical activities (e.g. explaining vocabulary items, giving instructions, exchanging opinions etc.).* This criterion is in line with the focus of the whole study, focussed on the language classroom, and was meant to insure the representativeness and the relative typicality of the video extracts for the research environment chosen.
- *The camera should be focused on the teacher or students, with all body parts visible and a clear accompanying sound.* This criterion was meant to insure the clarity of the stimulus and diminish the risk of undermining the data collection due to technical reasons.

I also decided to vary the procedure, so I used three combinations of audio and video during the interviews, aimed at exploring if in any of them the informants' accounts

on the aspects researched would be facilitated by trying to separate the visual aspects of individuals' NVB from their speech. The three conditions chosen were as follows:

- a) watching the videos without sound and then with sound;
- b) listening-only to the videos and then watching them;
- c) watching the videos with and then without sound.

The participants were distributed randomly in equal groups between the three conditions, and all interviews took place on an individual basis. Six trainees were asked to watch the video without sound first, to make comments on teacher's and learners' NVB, and then the same procedure was repeated but with the sound on, to see if their interpretations would differ in quantity or quality. I thought initially that switching the sound off might facilitate the interpretants' concentration on the aspects of NVB that are not so obvious in a 'normal' sound-and-movement interaction. I was aware that the situation was experimental and un-naturalistic, but I considered it an advantage in order to enable the students' concentration on the aspects of NVB.

In a similar experimental design, another six trainees were asked to listen to the recording first without watching the videotape, by positioning themselves with their back to the screen, and to try and 'guess' teachers and learners' NVBs at the time. Then they would watch the videos with the sound on and make any other comments regarding aspects of NVB seen. In this case, I was interested to explore the associations subjects might make between a given recognisable setting, i.e. the language class, and the NVBs they expected or anticipated in relation to it.

To compare the results of the first two conditions with a more naturalistic situation, I asked the remaining six subjects to watch the videos with the sound on first and then to repeat the procedure with the sound switched off.

4.6.3. Conducting the interviews

The interviews took place mostly in the afternoons, when the classes in the Centre were finished and students could participate. Interviews were conducted in CELT to keep the setting familiar. The first interviews were more difficult, as I was not sure about the focus of my research and my interviewing skills were in formation. The use of technology was also challenging, as I had to audio-tape the interviews, take notes in case my taping failed, and manipulate the video-recorder at the same time. In some instances, these actions made the interviewees conscious at times of the audiotaping

and questions like ‘Are you sure you are recording?’ or ‘Would you like me to stop the tape to help you?’ were frequent in the first interviews.

In all situations, subjects were familiarised with the setting first and with the purpose of the research. They were told that the research focused on teachers’ and learners’ actions rather than words. I used an opening question: ‘What is your understanding of non-verbal behaviour?’ and then discussed the concept with the participants, clarifying the aspects which they were supposed to focus upon. I also informed them that I was going to record the interview and take notes to help my data analysis later on. All participants were guaranteed confidentiality and told that pseudonyms will be used throughout any written outcome of the research. They were provided with an informed consent form that they and I signed and they were given a copy of it (Appendix B).

When watching the videos, interviewees were asked to manipulate the remote control and to stop the video whenever they wanted to make a comment on a particular aspect of NVB noticed. Participants were thus in the position of identifying themselves the aspects of NVB they considered as relevant or particularly meaningful rather than being provided with a examples of NVB already selected for them - as in most previous studies of NVB.

Usually the atmosphere of the interviews got more relaxed as the discussion progressed. I decided to mainly listen and use prompts during the interviews and refrain from suggesting interpretations or giving cues about what I may have considered as relevant aspects of NVB. In several instances, I noticed the interviewees’ attempts to try and guess if I wanted them to stop the tape and comment on anything in particular. They used to check my reactions indirectly by watching me out of the corner of their eye or asking directly questions like ‘Should I stop here?’ or ‘Do you want this (move) as well?’. In these instances, I encouraged the subjects with answers like ‘It’s your choice’ or ‘I want you to make the decision’.

4.6.4. After the interviews

Based on the principle that short-time memory fades rapidly, I decided to do a self-debriefing soon after each of the sessions. I used to listen again to the audio recording of each interview and work on my notes made during each session. I was thus recording all the impressionistic data that the tape could not catch and started to order the material through free associations. These notes usually referred to the ‘feeling’

and the flow of the whole interview, if the interviewee was talkative or not, their physical and emotional condition, their behaviour and gestures made during the interview. I also noted down if there were any unusual instances or aspects which I could not explain, my general impressions about the data I got, considerations about the procedure I used etc.

After the first four or five interviews, I started to identify themes and sub-themes that recurred in the interviews, but I did not attempt an analysis until I proceeded to the transcription of the tapes. However, I recorded in the notes my immediate explanations and interpretations, as I trusted my spontaneous impressions and the stimulating value of the interviewing process.

4.7. Analysing the data

At the end of my pilot study, I had a rich account of data that covered most aspects of NVB interpreted by the participants in terms of their perceived relevance in the context of classroom language learning situation. I transcribed the interviews soon after I collected them, for several reasons:

- I was curious to see where each interview was taking me, if it gave me perspectives, new interpretations etc.;
- I knew that the immediate spontaneous flow of ideas is easier to produce soon after the interview when the memory of the interaction was still fresh in my mind;
- Each interview helped me develop the interviewing technique.

From the very beginning, I decided to do full transcripts of whole interviews, as I was not sure how I would use the data in my writing later on. In the initial stages, I was also operating without any established categories in mind, so I could not select 'relevant aspects' to be transcribed, as I did not know yet what was going to have relevance in my final analysis. I developed then a set of categories of analysis and the analytical framework that I was going to use in the next stage of the study. I shall now discuss the stages I followed in the analysis.

4.7.1. Generating coding categories and labelling them

I began a preliminary analysis of the interview material as soon as I started to transcribe the audio recordings. As several authors suggest (Emerson *et al.*, 1995;

Hammersley & Atkinson, 1995; Silverman, 2001), at this initial stage in the research, one should look for predominant issues as indicated by their frequency of occurrence and the importance they were given by the respondents, and for any emergent patterns, as well as for areas of inconsistency and contradiction within the data. Boyatzis (1998:3) talks about the search for the ‘codable moment’, when one identifies the occurrence of a pattern or a theme in seemingly random information.

In order to identify the best ways of structuring my data, I decided to conduct a ‘microscopic’ or ‘line-by-line’ examination of the interview data. Strauss and Corbin consider this type of analysis as especially relevant at the beginning of a study ‘to generate initial categories (with their proprieties and dimensions) and to discover the relationships among concepts’ (1998: 57). The first readings of the transcripts made clear the fact that participants described the NVB primarily in functional terms, i.e. they were attributing functions to the NVBs identified rather than simply describing them. At that time, I did not interpret this as a particular finding, but rather as a framework for developing a coding scheme.

When I transcribed the interviews, I used to separate the lines into *units of coding*. The unit of coding is the most basic segment of the raw data or information that can be assessed in a meaningful way regarding the phenomenon investigated (Boyatzis, 1998: 63). Each unit of coding included a descriptor, i.e. the aspect of NVB identified, and an interpretation or function as given by the interviewee to the aspect of NVB noticed. This helped the further coding of the data. In analysing, I identified initially all the instances when subjects chose to stop the videotape and the NVBs they mentioned in each of these instances. I marked each of the NVBs identified and the corresponding interpretation with the code in a separate column on the transcript, constructing thus the units of coding. Fairly early in the analysis, after the first five or six transcripts, it became apparent that some of the functions informants identified for certain NV actions coincided with the ones identified in the literature. To illustrate this process, I will consider an extract from an interview transcript, with the corresponding codes developed during the analysis (see section 4.7.3. for a description of the coding categories).

Table 4.2. Transcript segment and sample coding

Stop tape	Units of meaning/Coding (Informant's descriptions)	NVBs identified	Functional categories	Notes
#0.3.	He is trying to make them say more about the car in the photo. So he is pointing to the back of the car. It gives them focus on what to talk about.	Concrete deictic	Eliciting or giving clues	
#0.7.	He looks a bit confused, looking back and forth in the class, or maybe that's just to involve everybody.	Eye contact	Making an impression OR Encouraging participation	
	When you are far from the class, you don't have to move your head that much. But when you are down there, among the students, you need to move to include all of them.	Eye contact	Encouraging participation	Conditions for the use of head moves
#0.14.	He is pointing at them, although he probably knows their names. Sometimes you do this combination of pointing and names, so that they understand who has to answer.	Concrete deictic	Giving the speech turn	Verbal-gestural combination
#0.18.	A girl asked about the meaning of 'clean' and he explains it not only by saying what it is, but by pointing to a clean window.	Concrete deictic	Giving clues for meanings	
#0.20.	He pointed to his face to show how to wash, when you wash your face, it's clean, he said. He is showing her an action as an example, then she can figure out the meaning of 'clean' by herself. Prompt: <i>Why was he doing that, what do you think?</i> Well, he doesn't want to say it, so he explains it indirectly. When you want to just give a hint, you use a combination of words and body language, and the students will try to get the meaning.	Concrete deictic Iconic	Illustrating meanings Giving clues for meanings	Verbal-gestural combination Explanation for 'giving hints'

This outline made the analysis and the comparison between individual accounts easier, as it provided a clear summary of the NVBs identified and the functions attributed to them by each participant. It also indicated in the first column the moments when the participant chose to stop the tape and discuss an aspect of NVB identified.

In labelling the categories of perceived NVBs, I used different techniques. While some of the categories seemed to label themselves through the words used by the interviewees, others were strikingly similar to categories existing in the literature. Still others were difficult to label, so I would use common words to label them. When

the student gave two possible explanations for the same action, I coded it twice, as shown in Table 4.2., unit 2. After coding the first five or six interviews, I started to look for synonym labels and try to identify any emerging categories of perceived NVB. The initially identified categories were very exploratory, as I used to re-label and restructure them many times during the coding of the subsequent transcripts. I developed the final categories on the basis of their significance, mutual exclusivity and potential to stand for themselves (Yin, 1994). This was not only a matter of re-labelling, it was also an issue of reconceptualising each category until a dense and robust explanation could be built for it.

Although at this stage I thought about using a computer software programme, I did not find the experience of using analytic software particularly useful, especially for the relatively small amount of data gathered. The currently available softwares (Ethnograph, NUDIST, Atlas.ti) do not provide any automatic coding process, but generally emulate manual coding and searching. The coding seems tedious and difficult to change and the analysis is not particularly helped as the coding is restricted by a 'powerful conceptual grid' (Atkinson, 1992: 459). In the end, I chose the manual coding, as I felt more comfortable with the actual manipulation and continuous regrouping of the interviewees' statements written down on paper.

The next stage of analysis involved classifying the remaining data into the categories of perceived NVBs developed. I decided to cut up the photocopied transcripts after coding and file the pieces of paper according to the categories they classified for. Some extracts were placed under multiple categories, either because they were ambiguous or they seemed to bring new dimensions to more categories. I kept another copy of each transcript intact to read it whenever necessary. Wiseman (1979:278) discusses the implications of segmenting the data for the purposes of coding as this destroys the narrative entity constructed by the interviewee and suggests working back and forth between the coded units and the whole transcripts of the data.

4.7.2. Identifying emerging themes and categories

At the time of coding the data, I could already begin to identify the emergent themes and categories of perceived NVBs. I used in this sense the outline I developed for the interviews, which offered a summary of the NVBs identified by each individual and the functions they attributed to these behaviours. When labels were similar, I tried to

unify them and to place them in clusters or categories based on their related characteristics or underlying constructs. As an example of clustering division, the categories ‘agreeing’, ‘acknowledging contribution’, ‘asking for clarifications’, ‘disagreeing’ and ‘correcting’ formed together the super-ordinate category of ‘reacting to learners’ output’. All sub-categories seemed independent and standing for themselves, in the sense that there were several instances when learners identified NVBs that served each of these functions and they also seemed to be distinct from each other. Sub-categories are seen to ‘specify a category further by denoting information such as when, where, why and how a phenomenon is likely to occur’ (Strauss & Corbin, 1998).

Interviewees seemed to place their interpretations on a kind of tri-dimensional map. I therefore deduced the following themes:

- **Theme 1: NVBs perceived as having a cognitive function, i.e. interpretations regarding NVBs perceived as having an effect on or a contribution to language learning and its mental processes.**
- **Theme 2: NVBs perceived as expressing emotions, i.e. interpretations of NVBs perceived as indicating teachers’ affects and attitudes.**
- **Theme 3: NVBs perceived as managing the group organisation, i.e. interpretations of teachers’ NVBs related to the class dynamics and organisation.**

For each of these broad themes of perceived NVB emerging from the pilot study I allocated the corresponding categories of perceived functions of NVBs, as shown in Tables 4.3., 4.4. and 4.5. below.

Table 4.3. Perceived cognitive functions of teachers’ NVBs

<i>Main functions</i>	<i>Subordinate functions</i>
<i>Enhancing comprehension through gestures</i>	Identifying through pointing Illustrating meanings Emphasising for relevance Making comparisons and marking contrasts Eliciting or giving clues for meanings
<i>Creating conditions for learning</i>	Orienting attention Facilitating retention and recollection
<i>Reacting to learners’ output</i>	Agreeing and acknowledging contribution Asking for clarifications Disagreeing and correcting learners’ output

Table 4.4. Perceived emotional functions of teachers' NVBs

<i>Main functions</i>	<i>Subordinate functions</i>
<i>Making an impression</i>	Looking relaxed and supportive Showing nervousness or lack of motivation
<i>Interacting with individuals</i>	Encouraging individual participants Avoiding the public humiliation of learners Reacting to learners' non-verbal messages
<i>Creating a positive group atmosphere</i>	Energising classes Accommodating cultural differences

Table 4.5. Perceived organisational functions of teachers' NVBs

<i>Main functions</i>	<i>Subordinate functions</i>
<i>Fulfilling the leader's role</i>	Distributing roles in the interaction Checking individual participation Manipulating classroom space and objects
<i>Controlling speech turns</i>	Giving the speech turn Maintaining and denying the learners' speech turn Listening to the learners
<i>Classroom non-verbal rituals</i>	

4.7.3. Classifying behaviours into functional categories

For the purposes of this study, all NVBs identified and interpreted by the participants were coded on the basis of two sets of criteria. Each aspect of NVB identified by the subjects was categorised first for the type or sub-code of NVB it represented. The main sub-codes of NVB used (as identified and discussed in Chapter 2) were:

- Gestures;
- Facial expressions;
- Eye contact;
- Proximity or use of space;
- Posture.

Secondly, each aspect of NVB identified by the subjects was coded for its perceived function or role in the interaction. The summarised categories of perceived functions of NVB were outlined above in Tables 4.3., 4.4. and 4.5. In developing them, I considered the following five elements of a good thematic code (Boyatzis, 1998:31):

- A label, i.e. a name;
- A definition of what the category concerns, i.e. the characteristic or issue constituting the code;

- A description of how to know when the category occurs, i.e. indicators on how to 'flag' the code;
- A description of any qualifications or exclusions to the identification of the code;
- Examples, both positive and negative, to eliminate possible confusions when looking for the code.

In this sense, I developed the following descriptions for the categories of perceived functions of NVB:

Theme 1: Categories of perceived cognitive functions of teachers' NVB

Enhancing comprehension through gestures: These are gestures that are attributed with a function in supporting learners' understanding of speech or of the material taught and ultimately assist learning. They often occur in contexts of perceived difficulty of understanding on learners' behalf and are meant to salience the cognitive load. This category of NVB is enacted when a teacher:

- a) Identifies through pointing with the finger or hand towards the direction of a person or object in order to avoid misunderstandings;
- b) Involves illustrating, amplifying gestures or moves which clarify the content of speech, either by supplementing it or by providing a visual clarification of meaning;
- c) Marks with a hand or head gesture an important idea or word;
- d) Marks through hand gestures the difference between two concepts or ideas by placing the hands in counter-balanced locations in the gestural space;
- e) Produces eliciting non-verbal clues, often in the absence of speech, and these clues help the learners identify the meanings intended.

Creating conditions for learning: These NVBs, mainly gestures, are perceived by subjects as aiding learning, by facilitating mental processes, such as attention, memorisation or recollection. The category is indicated when a teacher:

- a) Attracts and orients the learners' attention to a word, idea or object, through deictic or pointing gestures or through strategies such as signalling important words or ideas;

- b) Provides visual clues in gestural form that help retention or recollection, through a mental connection made between the gesture and the associated meaning.

Reacting to learners' output: These are NVBs attributed by the viewers with the function of providing an immediate feedback to learners' output. They usually occur immediately after a learner's direct participation in the interaction, and can be produced in the presence or absence of speech. The indicators in this category are identifiable when a teacher:

- a) Shows agreement or acknowledges a learner's contribution through head and hand gestures, eye contact or positive facial expressions such as smiling;
- b) Asks for clarifications, either by showing a questioning facial expression, or by using specific hand gestures;
- c) Disagrees and corrects learners' output, by indicating through facial expressions, emblematic gestures or posture a different opinion or disagreement.

Theme 2: Categories of perceived emotional functions of teachers' NVB

Making an impression: These are NV indicators of teacher's emotional states at a given moment during the class. Although they might not coincide with the teacher's emotional state, they reflect the attributions made by the viewer. It is noticed as such when the teacher:

- a) Looks relaxed and supportive, displaying positive facial expressions, an open and relaxed body posture;
- b) Shows nervousness or lack of motivation, through negative facial expressions, avoidance of eye contact or gestural barrier, i.e. crossed arms, increased social distance etc.

Interacting with individuals: These are NV actions perceived by the viewers as directed towards a particular individual in the class and expressing the teacher's personalised approach to that learner. Although it is not often clear for the viewer what the effect of an individualised NVB might have on the receiver, the viewer can nevertheless empathise with the person to whom the behaviour is addressed and make an attribution. This category is indicated when the teacher:

- a) Encourages individual participants, through gestures which involve NV indications that direct involvement is expected and supported;
- b) Avoids the public humiliation of learners, when teachers save the learner's public image by redirecting the interaction or providing clues;
- c) Reacts to learners' non-verbal messages, either through positive facial expressions or gestures or approval, or through adapting the teaching to the learners' immediate needs suggested non-verbally.

Creating a positive group atmosphere: These are NV actions performed by the teacher and perceived as influencing the whole group's affective state and cohesion. The intent appears to be to engage the learners in active participation and to make them feel good in the class. It is indicated when a teacher makes NVBs to:

- a) Energise classes, through actions meant to combat boredom and make the learners motivated to engage in activities;
- b) Accommodate cultural differences, either through specific teaching of the British NVB rules or by providing a protective environment for acculturation.

Theme 3: Categories of perceived organisational functions of teachers' NVB

Fulfilling the leader's role: These are NV actions perceived as determined by the teacher's leading role in the interaction and contributing to the dynamics of group management by deciding and controlling individual participations, types of activity or organisation of settings. It is indicated when a teacher:

- a) Distributes roles in the interaction, usually by pointing or smiling to the learners and indicating the desired grouping;
- b) Checking individual participation, through eye contact and special use of space, predominantly by verifying learners' involvement in a task or group work;
- c) Manipulating classroom space and objects, when the teacher makes decisions and changes in the using of the class space, furniture and other objects.

Manipulating turns: They include NVBs attributed with a function in deciding and distributing speech turns. The category is indicated when a teacher is perceived to:

- a) Give the speech turn, through gestures and other NVBs which indicate to the learners that they are allowed to speak;

- b) Maintain and deny the learners' speech turn, through NVBs which deny the learners' intention to speak in the class or to do an action;
- c) Listen to the learners and indicate this through NVBs that show interest and active listening to their words.

Performing classroom rituals: These are NV actions perceived as occurring with a certain regularity or routine. The intent is to recognise a NVB pattern in the organisation or delivery of the lesson or in the teacher's NVB style. It is indicated when viewers in a class perceive NVBs which, for them, occur with certain regularity or in specific contexts.

These were the coding categories developed at the end of the pilot study and organised in three super-ordinate themes. They were thus defined and clarified by a list of specific descriptors that were to be used in coding the data in the main study. The identification of the descriptors for each functional category was thought to allow for a comprehensive and systematic analysis. To further develop the specifications of each category and the relationships between them, I wrote analytic notes on the categories, inspired by the process of coding.

4.7.4. Writing analytic notes on categories

The importance of writing analytical notes at all stages of data collection and analysis is stressed by all qualitative or interpretive research methodologists (Glaser and Strauss, 1967; Cresswell, 1994; Hammersley and Atkinson, 1995; Silverman, 2000; Wengraf, 2001). During the analysis, I tried to reflect on the meanings expressed in each of the category, to identify causalities and connections, interdependencies and potential contradictions, which I was going to explore more in the main study.

I will exemplify with one of the notes I wrote at the beginning of the analysis process. In coding, I identified the functional category 'showing/ illustrating meaning', on which I wrote the following analytic note:

Analytic note on 'illustrating meaning'. The first intriguing thing is a student's use of the construction 'this gesture shows the meaning'. The construction indicates an understanding of the meaning as something concrete, which can be given a visual, touchable shape. A student talked about teacher's gestures that 'give words a picture'. This raises a question about the interviewees' perception of the meaning of words. Do they see words as something abstract that can be visualised through gestures? There is also an issue of agentship. The teacher is perceived as an actor,

the one who 'shows' on the central stage and reveals the meaning to the audience. Another student talks about learners' understanding, so I might assume a perceived fluency between the stage of teacher's 'showing' of the meaning and the stage of learners' 'understanding' of it. This opens up a broader interpretation of the category 'showing/illustrating meaning', as the connotation is more than a presentation or objectivisation of the meaning. It involves also the issue of teacher's responsibility to provide clearer meanings, the purposeful and directed use of certain moves to clarify the meaning, plus the context in which teachers choose to make supplementary clarification gestures. I need other similar instances to develop the category.

I did not write such full of notes for all categories. I wrote analytic notes whenever I was not sure about the understanding or development of a given concept or when I intended to develop a category, but did not have enough data to expand it. I also enabled a way of thinking about structuring and organising the data through the writing of such analytical notes.

4.8. Findings of the pilot study

As I stated before, the main aim of the pilot study was to validate the methodology and to develop a framework for conducting the analysis of the main data to be gathered. After examining the data collected in the pilot study, I was finally in the position to confirm the methodological questions I started with and also drew some conclusions on the most adequate methodology for the purposes of the main study. Initially, I was able to answer my questions as follows:

- *Are students able to describe and interpret aspects of teachers' NVB?*

The answer to this question was clearly 'yes', as the interviews proved very successful in generating a larger than expected amount of data regarding the participants' descriptions and interpretations of teachers' NVB. Subjects seemed to select different aspects of perceived NVBs as relevant. They also provided a wide range of comments on the impact that teachers' NVBs may have on learners in a language class situation.

- *What type of data will I get if I interview students on teachers' NVB?*

The data collected during the interviews ranged from descriptions of the NVB selected to broader personal beliefs or experiences of previous language learning situations. While some accounts were mainly descriptive, others were rich in interpretations, still others seemed to express mainly considerations on the

individuals' own learning or teaching style. It also seemed that informants reflected mostly on the functions that teachers' NVBs play in the language classroom, either from a learners' or from a teachers' perspective.

- *Is it possible to explore, by using video recorded data, individuals' interpretations of teachers' NVB?*

The answer to this final question was again 'yes'. The using of the video materials as prompts for the interviews proved to be a very inspired idea. By watching the videos, subjects could pause and comment on teachers' and learners' NVB, a process that would be impossible in a real life setting, due to the ephemeral character of gestures and other NVBs. Participants also had an insight into a real classroom situation and also could concentrate on explaining their impressions on a certain aspect of teacher's NVB rather than having to recollect instances they themselves experienced in the past. Finally, the material offered the potential of comparing individual accounts, as participants were shown the same video extracts in varying experimental conditions.

The pilot study produced interesting findings regarding the three conditions used in presenting the classroom data to the informants. The following conclusions emerged:

- *Watching the videos without sound and then with sound*

This condition seemed very artificial and generated mainly data on participants' own suppositions on what was going on in terms of verbal and NVBs in the class. Informants focused mainly on 'guessing' the context in which a gesture was made or the type of interaction in the class, rather than on reflecting on the role that a particular instance of NVB played in the interaction as a group process. Nevertheless, the attempts to guess the verbal context in which an action occurred and their significance in the situation were sometimes successful. However, the interviews seemed more like a 'right-or-wrong' test, which did not seem productive in terms of the purposes of the study.

- *Listening to the videos without vision and then watching them*

In this case, participants tried to suppose or guess the NV actions that teachers might have produced in combination with the words heard. Participants in this condition identified quantitatively fewer aspects of NVB than the participants in the first condition, an expected finding. When watching the video extracts later on in the interviews, informants were able to check the visual aspect of teachers' NVB and

tried to make connections between the previous suppositions (made in the ‘without vision’ condition) and the real occurring behaviours. This was again an interesting perspective for comparison, but did not suit the focus of the study, as it elicited the participants’ guesses rather than contextualised interpretations.

- *Watching the videos with and then without sound*

This proved to be the most profitable condition for stimulating the participants’ comments as it did not create any artificial situations, such as asking participants to avoid watching the screen or to watch an interaction without hearing the conversation. Participants generated a wide range of reasons that reflected the perceived roles that gestures and other NVBs played in the interaction. I considered this the most suitable methodology to inform the study and to use further in the main study.

4.9. Outcomes of the pilot study

The most important achievement though the initial stage of data collection was in terms of methodology rather than research findings. The categories of perceived functions of teachers’ NVBs were also followed up in the main study. After reflecting on the results of my pilot study, I made a series of decisions that helped me shape the main data gathering process. These decisions were as follows:

1. I was going to abandon the ‘without-sound/with sound’ and the ‘listening only/watching with sound’ procedures. They were both artificial and made the informants guess the meaning of the NVB aspects rather than interpret them in context. Although there were interesting comparative aspects worthwhile exploring, such as the individual differences in the amount of NVBs identified, my interest was on individuals’ contextualised attributions. I was also going to abandon the ‘without sound’ condition after the informants saw the video extracts with the sound on, as this variation did not seem productive. Most participants took the second viewing as a checking time of the initial account rather than a new condition.

2. I needed to use actual participants in the class as informants. The non-participants seemed to give detached, ‘objective’ interpretations or rather expressed beliefs about the potential rather than actual meanings of the various NVBs observed. These findings confirmed previous research reports (reviewed in section 2.5.3.) that observers cannot access certain aspects of an interaction available only to direct

participants. A stimulated recall methodology was more desirable instead of an experimental design, with unfamiliar video prompts.

3. Non-participating trainee teachers interpreted teachers' NVBs either from the teachers' or the students' perspective, due to their mixed status of language learners and trainee teachers. For the main study, I decided to use learners and trainees as informants with clearer roles in the interaction, i.e. participants and observers, in order to eliminate the confusion generated by an ambivalent status and also to combine the advantages of exploring both perspectives.

4. I was going to reduce the interviewing time, as sometimes the interviews would last for more than an hour and the final parts of the interview proved to be less productive.

5. I had to abandon any interpretation of learners' NVB in class and focus only on the interpretations of teachers' NVB, as the physical time devoted to individual interviews would have been far too demanding if exploring both sets of behaviours.

With these decisions made, I started the next stage of my data collection, which explored learners' and trainee teachers' direct interpretations of teachers' NVB while participating in a class as direct learners and respectively, direct observers.

4.10. Identifying the research questions of the main study

I started the pilot study with a general question in mind, trying to understand in what ways is teachers' NVB meaningful to people seeing it. The purpose of the pilot study was to develop this research focus further and to build a method for investigating it. After conducting the pilot study, I developed the initial framework for the coding of the data (presented in sections 4.7.2. and 4.7.3. above) and I settled upon the following research questions:

Question 1: How is teachers' NVB perceived and interpreted by language learners' in a language learning context?

I considered the investigation of the perceived NVB in the language class as the main focus of this study, as previous studies focused mostly on the production of individuals' NVB rather than on the perceptions and interpretations of it. At the same

time, most authors appreciated the communicative impact that NVB may have on the viewers (as discussed in Chapter 2). Therefore, the focus of the present study was on locating these perceptions and interpretations in the language classroom context as direct participants reported them.

Question 2: Do learners value teachers' NVBs and perceive themselves as reacting to teachers' NVBs?

This question relates to the first one and focuses on the sense made by learners of their teachers' NVBs. It addresses the learners' valuing teachers' NVBs and their reported reactions to teachers' NVBs.

Question 3: What functions do learners attribute to teachers' NVBs and which are the factors that influence their attributions?

As the pilot study revealed that informants attribute particular functions to teachers' NVBs, this question addresses the variety of functions that learners perceive in teachers' NVB in the class. A model of perceived NVB might be developed to account for the ways in which learners typically induce interpretations of teachers' NVB and the range of factors that learners identify as influencing the production of these NVBs.

Question 4: What are the perceived effects of teachers' NVBs and in which contexts are these perceived as relevant?

There were three superordinate categories of perceived functions of NVBs which emerged from the pilot study: cognitive, affective-attitudinal and relating to group organisation. These need further exploration from the learners' perspective as direct addressees of the NV messages. NVBs also need to be considered in the immediate context in which they occur and identified as relevant by the learners themselves.

Question 5: Do learners' individual accounts differ in how they select aspects of teachers' NVBs and in how they interpret the same aspects of teachers' NVBs, when selected?

The pilot study identified some differences between individual accounts in terms of NVBs selected as well as in terms of the meanings attached to the same aspects of behaviour. This question aims at exploring these differences further.

Question 6: Do learners and trainee teachers differ in how they select aspects of teachers' NVBs and in how they interpret the same aspects of teachers' NVBs, when selected?

Finally, trainee teachers in addition to the participating learners will be asked to reflect on aspects of NVB noticed in the class and considered significant by them. It might be the case that their interpretations vary from the ones expressed by the learners. These differences will be further explored as differences between direct participants and observers may have implications for further research.

These were the questions I set up for the next stage of the research. I considered them sufficiently open-ended and exploratory to allow a flexible approach during the main study. All questions reflected my set agenda for investigating the unexplored non-verbal dimension of language classroom interaction from learners and trainees' perspective as an intrinsic, yet previously overlooked phenomenon.

4.11. Summary

This chapter has presented the stages I went through in piloting the methodology for the data collection and analysis. At the beginning, I discussed the procedures I followed in designing and conducting the pilot study. Then I discussed the steps taken in order to develop a set of analytical categories and themes of analysis of interpretations of NVB as emerging from the data. The final part of the chapter reviewed the outcomes of the pilot study and its impact on the general research design and the emerging research questions.

In the chapter that follows, I will describe the developed research methods used in collecting the data for the main study and I will introduce the informants called upon in the data collection.

CHAPTER 5

METHOD OF DATA GATHERING

5.1 Overview

This chapter describes the stages I followed in the data collection for the main study. I begin by identifying the research approach and the methods selected for answering the research questions. In the second section, I present the profiles of the participants in the study. I also describe and evaluate critically the various methods used in collecting the data required for answering the research questions. The final section of the chapter offers a summary of the range of data gathered.

5.2. Designing of the study

The objective of the main study was to uncover answers to the research questions identified at the end of the pilot study (see section 4.10.). As seen from the literature review, theoretical development in the field of communicative potential of NVB in general, and particularly in the context of the EFL class, remains at its beginnings. There have been calls for further empirical studies to support the theoretisation in the field generally (Kendon, 1994; Philippot, Feldman & Coats, 1994). Perhaps the most neglected aspect of research on gestural communication, and one could generalise to the whole NVB research, is the consideration of the addressee in the meaning construction of an interaction (Bavelas, 1994). The understanding of the subjective processes associated with the interpretations individuals attach to the others' NV actions during interaction has hitherto not been a priority for earlier research in NVB. In Argyle's words:

The main weakness of sequence studies appears to be a self-imposed one: no one asks the subjects what they are thinking, or feeling, or trying to do. This is partly because the research methods have been taken from animal research, partly through a mistrust of subjective data. (1996:16)

Having established the significance of exploring the subjective dimension of learners' understanding and interpretation of teachers' NVBs, I decided that the adoption of an interpretive approach would allow the best exploration of this focus. The central aim of the research would be an in-depth and open-ended examination of the processes by which learners in particular, and other participant observers, give meanings to

teachers' NVBs. It was clear that another aim was a better understanding of teachers' actual use of NVB in the language class as a prerequisite stage of locating the participants' interpretations.

The adoption of a qualitative framework in a field that developed traditionally as an exclusively experimental, quantitative science needs a clear justification. The participants' subjective, even idiosyncratic interpretations of gestures and other NVBs seemed to me accessible only in their immediate context and through individual introspection. Denzin and Lincoln (2000) argue that such interpretivist research is subjective and participative in its essence:

It is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. They turn the world into a series of representations. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret phenomena in terms of the meanings people bring to their lives.
(2000:3)

It is the core belief of qualitative research to pursue the understanding of social reality according to the subjective frame of reference of the participants in the social environment considered. The same authors argue that it is more relevant and of greater benefit to find the methodological approach which might best serve the objectives of a particular research. Qualitative research requires researcher's fidelity to the field and the subjects, involving an accurate reflection of the occurring events and trusting the participants' interpretations. In other words:

The primary aim should be to describe what happens in the setting, how the people involved see their own actions and those of others, and the contexts in which the action takes place. (...) In the view of interactionists, people interpret stimuli, and these interpretations, continuously under revision as events unfold, shape their actions. (Hammersley and Atkinson, 1995: 6-7)

Supporters of experimental approaches usually criticize the absence of formally standardising and measuring the results when discussing qualitative research. Authors in the field of qualitative studies reply either by denying the importance of a structured and scientific paradigm for a qualitative study (Guba & Lincoln, 1981) or by suggesting alternative validation techniques, different from the ones of quantitative inquiry (Kirk & Miller, 1986; Maxwell, 1996). Wolcott (1990: 146) argues that understanding is the fundamental concept in qualitative research rather than validity. In this sense, the framework of my study reflects a different purpose and implicitly different techniques from the traditional studies of NVB.

As I believe that continuous interpretations of each other's actions take place in any instance of human interaction, I explore here the constructs that some learners as direct participants and some trainee teachers as direct observers developed during immediate contexts of classroom interaction. The research methodology used and the ways of presenting and analysing their experiences aim at a better understanding and reflection of the aspects of NVB as they were experienced and referred to by the participants.

5.2.1. Characteristics of qualitative research

Bryman (1988: 61-69) identifies six general characteristics of qualitative research:

1. 'Seeing through the eyes of...' or taking the subject's perspective.
2. Describing the mundane detail of everyday setting.
3. Understanding actions and meanings in their social context.
4. Emphasising time and process.
5. Favouring open and relatively unstructured research designs.
6. Avoiding concepts and theories at an early stage.

The subjective perspective suggested by the first criterion derives from an 'emic' analysis (using the subjects' conceptual framework and descriptors) as opposed to an 'etic' analysis (using generally applicable or existent terms of reference), both terms developed by Pike (1967). An exclusively subjective perspective limits the researcher's contribution to the analysis (Silverman, 2001). In this sense, the next three criteria identify the focus and the locus of the research, with an emphasis on the actions researchers should take when in the setting. They should 'describe', 'understand' and then 'emphasise' the mundane actions, their located meanings and respectively the processes. Therefore, the researcher's main aims are to make sense of the subjects' social actions and meanings reflected through the participants' own eyes, experiences and understanding. At the same time, researchers bring to the process their own values and assumptions. This unavoidably distorted reflection ('no research is untouched by human hands' - Hammersley and Atkinson, 1995) could be compensated for by applying a 'semi-structured' rather than unstructured research design to allow for interpretation and flexibility in providing a stable framework.

The emphasis on meaning in the given social context appears to be at the core of all descriptions of qualitative research. Discussing ethnography, Hammersley and Atkinson (1995:6-9) emphasise the preference for 'natural' settings as the main

source of data, collected by the use of an inductivist methodology. The researcher is seen as an anthropologist newly arrived in the researched community, a migrating 'stranger' to the new group (Schutz, 1976), who develops a certain 'objectivity' while having to learn to live and participate in the new community. The 'cultural description' is the main mission of such a research enquiry and requires fidelity and 'respect' to the setting and marginality, through the turning of the 'familiar' into 'strange' and reflecting accurately and honestly the events and meanings as they occurred. Interpretations and explanations are most of the times discouraged. Talking about the use of ethnography in educational research, van Lier (1990:41) underlines its 'emic' viewpoint and holistic character in reflecting cultural facts as its main advantages.

Adapting some of the criteria of qualitative research discussed, I applied the following features in my own research design:

- Data are collected in their occurring settings with no external intervention.
- The range of types of data collection includes videotaped classrooms, semi-structured interviews and participant narratives which are analysed using the same coding framework in order to achieve a degree of triangulation.
- It focuses on individuals, their actions and meanings (as constructed by the participants) being generated in their immediate setting.
- Behaviour is not an object of investigation *per se*, but rather reflected upon through the interpretations and functions of social action attributed to it by the participants.
- Clear distinctions are made between the interpretations given by the subjects and the interpretations imposed through analysis.
- It is informed by theory, but it also takes an 'emic' viewpoint through the application of the descriptors and categories used by those researched.

With these guidelines in mind, I developed the design of the main study.

5.2.2. Developing the research design

Following the outcome of the pilot study (described in Chapter 4), I planned to collect individuals' interpretations of contextualised teachers' NVBs and to present their experiences rather than an account of the NVB produced. I therefore considered my study a descriptive research, aimed at exploring through a range of qualitative techniques naturally occurring phenomena. As Selinger and Shohamy (1989) put it:

In a descriptive study, the researchers begin with general questions in mind about the phenomenon they are studying or with more specific questions and with specific focus. Because the questions are decided in advance, the research only focuses on certain aspects of the possible data available in the language learning context being described. (1989:117)

Janesick (2000) argues that the process of the research design commences with the identification of the research question and only then the selection of an appropriate method of data capture takes place. The research questions I developed after the pilot study reflected upon the 'how' and 'why' are teachers seen to behave in a certain way (see section 4.10. for the research questions). It was clear that the best techniques for collecting the adequate data to answer the research questions identified were videotapes of actual classrooms and classroom participants' reports on these video accounts. The 'story' of teachers' NVB could be thus told through the eyes of the learners and the observers and through my own views, a triangulated perspective that seemed to enhance the reliability of any eventual conclusions. I assumed that the triangulation made possible by multiple data collection methods and perspectives of the same phenomenon would create a richer account of the aspect investigated and provide a stronger substantiation of constructs and hypotheses.

I did not adopt the position of grounded theorists (Glaser and Strauss, 1967; Strauss and Corbin, 1998) with a 'no theory, no hypothesis' start to the research. I considered that a loose theoretical framework was at all times needed, as it provided a necessary focus for the process of data collection and analysis. Within the context of this study, the literature on NVB and its functions provided a broad framework of reference. Given the current lack of a theoretical framework relevant to the individuals' *perceptions and interpretations* of NVB, the literature did not impose any a priori assumptions about the meanings learners and observers developed. Instead, the literature on NVB and its social aspects (reviewed in Chapters 2 and 3) and the findings of the pilot study (see section 4.8.) provided an informed direction for the second phase of the research.

Eisenhardt (1994) argue that, in any research, induction and deduction are parallel processes, where the prior theory supports the research design and the analysis of data, but it does not impede on the development of new and useful theory. Parke (1993) identifies also a 'continuous interplay' between the two processes, with both 'pure deduction' and 'pure induction' being damaging to the research process. While the first one may inhibit new theory development, the second limits the benefits

from existing theory. A balance between existing theories and the collected data seemed thus appropriate.

Initially, I contemplated the idea of including a quantitative dimension to my study by measuring the learners' progress and trying to correlate it with teachers' behaviours. Soon I realised that I would not be able to attribute their progress to specific instances of teachers' NVB, as many additional factors come into play and only in highly controlled experimental designs an isolation of factors would be possible. As I was more interested in the inter-subjective and contextualised nature of the enquiry, I decided not to interfere at all in the natural dynamics of the class. I also did not quantify the teachers' use of particular actions during extended samples of classroom activity for two reasons: a) I did not find the quantification of NVBs relevant for explaining their significance, as this is highly dependent on factors like social context, content of speech, individual style and interaction dynamics; b) I was more interested in the individual perceptions and interpretations of these NV behaviours rather than the frequency of their occurrence.

Therefore, I intended to collect my main set of data through the following techniques:

- Videotaping five language classes of 90 minutes each and taking notes on the range of teachers' NVBs as they occurred during the classes observed based on existing taxonomies of gestures and other NVBs;
- Interviewing soon after the class at least three language learners from each class on their teacher's NVBs during the lesson;
- Interviewing two cohorts of trainee teachers on their beliefs and interpretations of the roles of teachers' NVB in the language class;
- Getting the trainee teachers to act as classroom observers and then each write a narrative report on the teachers' NVB in the classes observed.

5.3. Gathering the data

Before starting to collect the data, I discussed the purposes of the study individually with the teachers, asking their co-operation in being observed or videotaped. I explained that I would be focusing on aspects of communication between them and the learners rather than on pedagogical aspects of their class. I considered that it was necessary to generalise the topic of the research, as mentioning a specific focus on

NVB would have raised teachers' awareness of their own NVBs during classes. However, after the data was collected I explained in more detail the focus of the research and gave the teachers the option to have their videotaped classes destroyed if they wanted to. All teachers co-operated fully and did not object to the use of the tapes in the interviews with the learners.

Each teacher was videotaped for the whole duration of a single lesson, which usually lasted for 90 minutes. Teachers were also invited to co-operate by encouraging the learners to participate in the interviews after the class and also by accepting the trainee teachers as observers in their classes. This last activity was already a practice that the teachers were used to due to the routine activity in the institution. Trainee teachers observed separate classes from the ones videotaped, as it was not possible to arrange simultaneous observations and videotapings. Learners were asked to volunteer to be interviewed after the class and usually between three and five learners co-operated in each class.

5.3.1. Videotaping classes

Qualitative studies (Goffman, 1963; Garfinkel, 1967; Schegloff and Sacks, 1973) have claimed the importance of using videotaped data, emphasising the role that bodily conduct and the physical environment play in the production and intelligibility of any social action. Recent methodologies of qualitative analysis also emphasise the enriching perspective that visual data can bring to a research design and the most adequate methods of collecting and analysing this type of data (Kress and Van Leeuwen, 1996; Deacon *et al.*, 1999; Bauer and Gaskell, 2000; Emmison and Smith, 2000; Van Leeuwen and Jewitt, 2001). There are two features of human interaction which impact strongly on the social researcher's need of using video recorded data. One is the complexity of human action, with the observer being bound to grasp just a limited sense of what happens in an instance of interaction. The other factor refers to the participants themselves as actors who do not have the physical time to reflect upon all the intricacies of a routine sequence of interaction and also cannot recollect for long periods of time all the aspects of that sequence.

When I decided to videotape the language classes, I was aware of the advantages such records provide for a research with the focus on individuals' NVB. Unlike more conventional ethnographic data, video recordings provide a database with certain facilities, unobtainable through other methods of data collection. They

facilitate access to everyday classroom settings and allow a recording of talk and bodily action in their finer details. The context of an action is usually clear and the addressees of an instance of talk or action become easily identifiable. Video recordings present the facility of repeated viewing and minute analysis through the watching with the slow motion facility, especially important in the case of NVB analysis. In this study, videos were also instruments of further data collection, as I used video prompts during the interviews with the learners to refresh their recall of the particular moments of classroom interaction.

Heath and Hindmarch (2002: 107) suggest the importance of corroborating the video recordings of natural occurring activities with more conventional fieldwork in order to become familiar with the setting. Researchers need to undertake small amounts of fieldwork previous to recording in order to understand the activities in which people engage in a particular setting and to plan the best ways of capturing video images. Previous to starting my recordings, I observed some classes and I discussed with the teachers the possibility of videotaping their classes. During these observations, I decided that with the fairly standard frontal position of the teacher, the best and least obtrusive position for the camera would be at the back of the class, in order to capture as much as possible of the teacher's actions and to whom they were addressed.

Although I had my concerns that the presence of a video camera in the class would make the teachers and students aware of their bodily behaviour, several studies indicated the fact that most NVB is in general out of conscious awareness and automatic, without a persistent modification of normal behaviour (Goffman, 1981; McNeill, 1994). While videotaping classes, I realised that both teachers and learners seemed less and less aware of the presence of a video camera as the lesson progressed, as they would get engaged in the activity and focus on the interaction. Nevertheless, like other field researchers I was aware of my influence on the whole scene, due to the so-called 'observer effect' (Bogdan & Biklen, 1992: 47). There were instances when participants would glance at me or the camera, smile, try to get me in their activity groups or even ask questions like 'Are you videotaping now?', 'Are you managing ok?' or 'Are you getting a good picture?' , 'Do you need help?' These instances made me accept the idea that the presence of a camcorder in the room may influence the interaction to a certain extent.

When I started the videotaping, I prepared every session in advance, by informing both teachers and learners about the intention to videotape the class and by studying the layout of the room. The teachers were at all times in control, by choosing a class they felt comfortable with and by deciding how to inform the learners. Sometimes I was asked to go to the class a week in advance and explain to the learners why I was going to videotape the class and ask for their permission. Other times, the teachers would do the 'negotiation' themselves, by informing the learners that I was going to videotape the class. In these cases, I would still explain briefly to the students at the beginning of the class the purpose of my presence and asked if they had any objections to being filmed. None of the learners objected and they all signed the consent forms provided (see Appendix B).

I tried to track the teacher as much as possible during the classes, but I also focussed on the learners when they were speaking for a lengthy amount of time or when there was a successive exchange of turns between the teacher and a particular learner to get a fuller picture of the interaction.

After the recording, each tape was labelled with the name of the teacher and the date. I would also write a field note after each of the sessions, including information such as the learners' seating position and names, the topic and the general development of the lesson, the students' length of stay in Scotland and their proficiency level, the names of the learners who volunteered to be interviewed and any other details considered relevant at that time. Extracts from the five videotaped sessions were used during the interviews with the learners. I will now discuss the classes in which learners were interviewed and the corresponding teacher profiles. In order to protect the anonymity of the teachers and to distinguish them from the learners who are protected by pseudonyms, I have referred to each teacher by the number I arbitrarily allocated to each.

Table 5.1. below provides a summary of the participants in each of five classes selected, teachers and learners. The teachers were all native speakers of English and their gender is the only attribute which objectively distinguished them. There were three female teachers and two male teachers. The other factors which might have influenced their NVB, e.g. personality, beliefs about learners' level etc. were not assessed in any ways.

The table also includes the nationality of the learners present in each class at the moment of the videotaping, although they did not all participate in the post-class

interviews. While *Class 4* was the only monocultural class, being constituted exclusively by students from Japan, the other classes had a multi-cultural participation. Students in *Class 4* also knew each other before their arrival in Britain as they were attending the same university back home, while students in the other classes were generally strangers to each other prior to their arrival in Stirling. Finally, I included in Table 5.1. details about the type of the class, the level of proficiency and the topic in focus on the day when the videotaping of the class took place. While *Class 3* was labelled as an 'Academic English' class, all the other classes were of 'General English', which means that teachers would choose topics of general interest and adapt the content to learners' level of proficiency rather than to their educational purposes.

The learners' level of proficiency varied from one group to the other, but in general there were no serious discrepancies inside the groups. *Classes 1* and *4* were labelled as Lower Intermediate, *Classes 2* and *5* were Upper Intermediate, and *Class 3* had learners considered of Advanced proficiency. However, learners' individual proficiency was not assessed for the purposes of this study.

Table 5.1. The profile of the classes videotaped

Class Code	Teacher's gender	Students' genders	Nationalities of students in the class	Type of class and level of proficiency	Topic of lesson recorded
<i>Class 1</i>	Female	5 Males 4 Females	Spanish (4), Italian (2), Japanese (2), Russian (1)	General English Lower Intermediate	'Money and finance'
<i>Class 2</i>	Female	4 Males 6 Females	Italy (3), Japanese (3), Spanish(2), Chinese (2)	General English Upper Intermediate	'The good language learner'
<i>Class 3</i>	Male	5 Males 3 Females	Japanese (3), Chinese (2), Spanish (1), Austrian (1), Iraqi (1)	Academic English Advanced	'Expressing cause and effect'
<i>Class 4</i>	Female	1 Male 8 Females	Japanese (9)	General English Lower Intermediate	'My favourite movie'
<i>Class 5</i>	Male	2 Males 3 Females	Spanish (3), Italian (1), German (1)	General English Upper Intermediate	'The Scottish legal system'

5.3.2. The profiles of the interviewed learners

The main target informants were the language learners who participated in the videotaped classes. As direct addressees of teachers' NVBs, they were in a favourable position to interpret their behaviours. Speakers tailor their words 'with and for the addressees' and their NVB is likely to be tailored in a similar way (Bavelas, 1994: 207). In the pilot study (presented in Chapter 4), I interviewed informants who did not participate directly in the classes they reported upon, but who were nevertheless able to give an interpretation of teachers' NVB as seen in the video extracts they were exposed to. These meanings were more likely to be inferred from past experiences and not derived from a participant insight into the actual, lived situation.

Twenty-two learners volunteered to participate in the interviews from the five classes recorded. Table 5.2. below offers a general profile of the interviewed learners. The majority of them were registered for short, three or five-week courses, in the summer school held in the Centre for ELT, at the University of Stirling. They were planning to stay in Britain for less than a couple of months during the summer holiday with the expressed purpose of improving their English language skills. Only the students in *Class 3* were on a longer course, in preparation for studying for a degree in British universities. At the time of the interview, students in *Class 3* had lived in Britain for up to one year. The age of the students interviewed ranged from eighteen to mid-thirties. The majority of them were in their early twenties, with three students over thirty years of age. The average age was 23.8 years old for the whole population interviewed.

All students had graduated from high school, most of them being in the process of completing university degrees in various subjects, while some of them were already working in their home countries in areas such as commerce or engineering. Accordingly, they seemed to have different language learning goals. In general, students with similar learning were grouped in the same class and the teaching materials and methods were adapted to their needs. While in *Class 3* the atmosphere was more focused and teacher-centred, the content being academic skills and essay writing techniques, the other classes were more relaxed and dynamic as they were General English classes, with a focus on conversation in relation to a flexible choice of topics.

Table 5.2. The profile of the interviewed learners

Class code	Learners' pseudonyms	Learners' gender	Learners' age	Learners' country of origin
	(n 22)	(10F/ 12M)	(Av.age=23.8)	
<i>Class 1</i>	Marianne	F	22	Spain
	Jose	M	26	Spain
	Vladimir	M	19	Russia
	Laura	F	31	Spain
	Daniel	M	30	Italy
<i>Class 2</i>	Marcus	M	26	Italy
	Armand	M	36	Italy
	Eunice	F	34	Spain
	Ronaldo	M	22	Spain
<i>Class 3</i>	Kali	F	20	Japan
	Nahiko	F	19	Japan
	Liang	M	20	China
	Reyno	M	26	Japan
	Theodor	M	26	Austria
<i>Class 4</i>	Kandar	M	20	Japan
	Mayumi	F	20	Japan
	Ayurda	F	19	Japan
	Narun	F	19	Japan
	Keiko	F	20	Japan
<i>Class 5</i>	Romeo	M	26	Italy
	Johan	M	19	Germany
	Sylvia	F	24	Spain

5.3.3. Using the stimulated recall methodology

Stimulated recall (SR) as an introspective research method has been used widely in field of SLA research (for a comprehensive review of these studies, see Gass and Mackey, 2000). The method relies on the assumption that a reminder of an event will stimulate the individuals' recall of their mental processes active at the moment of the event. By using stimulated recall:

a subject may be enabled to relive an original situation with great vividness and accuracy if he [sic] is presented with a large number of the cues or stimuli which occurred during the original situation. (Bloom, 1954: 25)

SR and other methods of introspection (thinking aloud, retrospective reflection, self-observation, self-revelation) have been used to explore a various range of research topics (as discussed in section 4.6.1.). Foreign language studies using introspection investigated amongst other areas processes such as learners and teachers' decision

making, learning strategies, FL writing choices and processes and oral interaction in FL. An interesting study that applied the use of SR in a qualitative investigation of the sources of miscommunication in interaction is reported by Tyler (1995). She investigated the interaction during an academic tutorial between a non-native speaker of English and his native speaker student. The tutorial was first videotaped. The participants were then interviewed independently and asked to stop the video at any time and make comments on what made them feel uncomfortable or confused during the tutorial. Before the interview, the researcher asked two independent native speakers of English to compile a list of signs of the interlocutor's discomfort. During the interviews with the participants, the researcher stopped the videos at times and asked the participants to give their comments on particular moments of interaction. The data were analysed through an in-depth qualitative framework and reflected the different interpretations of the participants on the moments of miscommunication and interactional discomfort.

In the current study, I have used a similar method with the one above described in Tyler's research (1995) for eliciting learners' interpretations of teachers' NVBs. However, the learners themselves were asked to make the selection of the relevant aspects of teachers' NVB rather than being asked to comment on moments of interaction already selected for them. It was thought that learners' own selections reveal the aspects of teachers' NVBs that are meaningful for the learners themselves rather than for the researcher.

Færch and Kasper (1987) offer a useful classification scheme for the collection of introspective data. They consider that the object of introspection can be either linguistic/cognitive or affective or social, that the introspection is related to a concrete event and the temporal relation to the action needs to be immediate. With regards to the elicitation procedure, the authors suggest that this should be relatively structured, always based on the prior event and on a recall support, such as visuals, audio retellings of the event etc. During the direct interaction between the participant and researcher, both can initiate verbalisations.

Some general recommendations (Gass and Mackey, 2000:54) in the use of SR methodology advise the practitioner as follows:

- The data collection should take place close to the event in focus as the subjects' recollection decreases in time and they might give created interpretations;

- The stimuli used should be clear and strong, the video recording being a desirable choice;
- The participants should receive minimal training in the procedure, mainly focusing on the technical aspects of carrying out the procedure, and should not be cued during the interview;
- If participants are allowed to select the stimulus episodes themselves and initiate the recalls, there will be less likelihood of researcher's interference in the data.

These were the guidelines I followed at all times when interviewing participants in this study. I will now describe in detail the procedure followed during the interviews.

5.3.4. Interviewing the language learners

I planned to conduct all interviews on the same day or the next day after the class. I would watch the videotape soon after the class to select one or two sequences from the lesson to be used as prompts during the interview. The average length of an extract was between 4 and 5 minutes. In selecting the video samples, I followed the criteria developed in the pilot study (see section 4.6.2.). The reason why I chose only one or two interaction sequences from each class was the length of attention time I could reasonably ask for. In the pilot study, I used five extracts of 2-3 minutes each and I could see that in the second half of the interviews the subjects would become tired or superficial, giving brief responses and making fewer comments. While the interviews in the pilot stage would last for at least an hour, I tried to keep the interviews with the learners in the main study between 25 and 45 minutes. Another change from the pilot study was the focus exclusively on the teacher's NVB. It seemed too big a task to investigate both teacher and students' interpretations of each other's NVB, however interesting the idea appeared at the beginning.

I always started the interviews by trying to make the interviewees comfortable, displaying an interest in them, their educational focus back home and their reasons for studying English at Stirling. In general, I got the impression that I managed to establish a warm and relaxed atmosphere before starting. I would then tell the interviewees that the research explores from the language learners' view the relevance of teachers' body behaviours during the class. This focus was explained in an informal manner, using phrases such as 'I want to know more about teacher's

behaviour during the class from your perspective' or 'What teachers do with their body and hands during the class and why is this relevant for learners' and 'We look at anything which is not words and which you considered important in the class'. I would then move on to familiarising them with the interviewing technique.

Subjects were then asked to watch the video sequences I selected from the class in which they participated and to stop the video whenever *they* wanted to make a comment on any aspect of teacher's NVB. I would ask them to comment on their views on what was going on at that particular moment of interaction and how they perceived the teacher's actions in the instance selected. During the interviews, I used prompts like 'What do you think of this move/action/gesture?' and 'How do you interpret it?' or 'Why did you stop the video here?' or 'Why did you mention this move/action/gesture?'. In this way, I managed to probe more deeply into the learners' perceptions of their teachers' NVBs and to understand what learners meant by their statements. The sessions were all audiotaped (or videotaped when the subjects would agree to it) and fully transcribed afterwards.

Interviews varied to a certain degree and provided evidence that exploring individuals' perceptions of behaviour and interaction is never going to be a generalisable experience. Some learners would talk more, others would give straight answers or wait for prompts, some were critical, others very enthusiastic, some seemed as concentrated as they would be when taking a test, others were relaxed and easygoing. In addition to commenting on particular instances of teacher NVB, different students had different points to focus on during the same class; some would talk about cultural perspectives, others about the general classroom climate, yet others about the friendships and enmities existent in the group and their impact on classroom dynamics.

Although I started the interviews with certain preconceived ideas, such as the Asian students being less willing to talk about behaviour due to their traditionally restrictive rules of NVB, I soon learnt not to anticipate the kinds of comments the students might make. The Asian students proved to be, in most cases, very forthcoming and talkative, with insightful and pertinent remarks on their teachers' NVB.

Another aspect that affected the data collection was the relatively limited language proficiency of some of the learners I had access to. When participants had difficulties in expressing their ideas in English, they were encouraged to speak in their

mother tongue and the passages were translated afterwards during the transcription of the interviews. The fact that some learners also had difficulties in explaining their interpretations is a limitation of the study and might have affected the learners' selection of relevant NVBs from the video sequences. However, this does not seriously diminish the value of the findings obtained. It was clear that having access to the video of their lessons was helpful to the subjects in their reflections. This meant that subjects did not have to describe in words the teachers' NVBs, but just identify them on the video and provide their interpretations of these actions. Very frequently learners would choose to reproduce through an action a teacher's NVB and simultaneously provide an interpretation for the particular NVB selected.

In general, interviewing the language learners provided me with an insightful and comprehensive set of data. Their comments based on the videotaped sequences from their classes form the primary data of the study, which I will discuss in the following chapters.

5.3.5. Obtaining data from the trainee teachers

The trainee teachers who contributed to the study were all attending an undergraduate course in Teaching English as a Foreign Language. I decided to involve them as a second set of informants for several advantages that this particular group presented:

- Their ability and experience in observing classes and analysing classroom interactions;
- Their own experience of language learning and empathy with learners in classes observed;
- Their generally high level of English language skills.

These features made the trainees a group of valuable informants. However, they differed widely in terms of their educational and cultural backgrounds, their life experiences, their teaching and learning experiences. At the time of the study, they were all in the third year of teacher training, having already a background in education and language teaching through the courses taken. The profile of the participating trainees is summarised in Table 5.3. below, including their gender and country of origin. The table also records the type of class each of them observed and the teacher who taught that class. All classes observed by the trainees had multicultural groups of students, i.e. with students coming from at least three different

countries, apart from two classes that had only Japanese students. Trainees however observed different classes from the ones I recorded for the interviews with the learners. Nevertheless, if the teacher observed by a trainee was one of the five teachers in the classes I videotaped, the number of the teacher was kept the same. Extra number codes were added for the other teachers, who were not involved in any of the videotaped classes.

Table 5.3. The profile of the participating trainee teachers

Trainees' pseudonyms (n 20)	Gender (15F/5M)	Trainees' country of origin	Level of proficiency and type of class observed	Teacher observed	Nationality of learners in classes observed
Craus	M	Germany	Beginners Grammar	T2	Mixed
Ariadne	F	Cyprus	Upper intermediate Reading & vocabulary	T3	Mixed
Iris	F	Greece	Intermediate Reading & vocabulary	T2	Mixed
Monica	F	Greece	Intermediate Pronunciation	T6	Mixed
Arito	F	Japan	Intermediate Reading & vocabulary	T1	Mixed
Tina	F	China	Intermediate Grammar	T6	Mixed
Sorito	F	Japan	Intermediate Reading	T6	Mixed
Carmen	F	Greece	Intermediate Reading & vocabulary	T1	Mixed
Manuela	F	Greece	Intermediate Reading & vocabulary	T3	Mixed
Inghin	M	Turkey	N/A Grammar	T2	Mixed
Alexander	M	Brunei	Low intermediate Conversation	T3	Mixed
Michaela	F	Greece	Intermediate Reading & vocabulary	T7	Mixed

Elvira	F	Greece	Upper intermediate Writing	T7	Japanese
Claudius	M	Cyprus	Intermediate Writing	T3	Mixed
Irida	F	Poland	Lower intermediate Reading & vocabulary	T4	Mixed
Cardik	M	Iran	Intermediate Conversation	T1	Mixed
Sato	F	Maldiva	Low Intermediate Grammar	T7	Mixed
Mi Lu	F	Hong Kong	Upper intermediate Grammar	T2	Mixed
Ming	F	Hong Kong	Upper intermediate Conversation	T6	Mixed
Ling	F	Hong Kong	Low intermediate Grammar	T4	Japanese

I decided to involve the trainee teachers in two ways in the research:

- (i) as participants in group interviews which were going to be organised as routine classes of teacher training and,
- (ii) as classroom observers, by asking them to observe language classes and write a report on their observations.

There were two groups of trainee teachers involved in the study in two consecutive years. Similar research procedures and perspectives were adopted with both groups, with the idea of unifying the two sets of data. The sessions were planned after at least two weeks of classroom observation, so that the students would have the time to become familiar with the course and with the general procedures of classroom observation. This meant that, at the moment of asking them to observe teachers' NVB, trainees were already used to observing a class based on an observation sheet designed by the tutor on a topic of language teaching methodology. During the observation class, they would take notes and follow an 'Observation sheet' designed by myself (see Appendix G). Finally, they would write a report based on their observation notes and then discuss their views with their colleagues in the following

class. This seemed a useful practice and I agreed with their tutor to preserve the working pattern for the session on NVB.

Together with the tutor, we planned the structure of each session in detail. With both groups, the pre-observation and post-observation sessions lasted about an hour each. All trainees contributed with a written report. The data from the group interviews and the reports were analysed and compared with the data obtained from the learners' interviews.

5.3.6. Conducting group interviews with the trainee teachers

Group interviews can be seen as conversational meetings with a research focus in which the participants are led by a leader. The literature on group interviewing details the rationale and the techniques one needs to employ in successfully including this method in any research design (Hedges, 1985; Watts and Ebbutt, 1987; Breakwell, 1990; Lewis, 1992; Krueger, 1998). Lewis identifies four sets of research-based rationales for using group interview techniques:

To test a specific research question about consensus beliefs, to obtain greater breadth and depth in responses than occurs in individual interviews, to verify research plans or findings and more speculatively, to enhance the reliability of interviewee responses. (1992: 414)

The group interviews I conducted with the trainees were intended to meet these four objectives. As I was investigating a behaviour that occurs in any social group, I was interested in the consensus beliefs that the particular groups of trainees were sharing before and after the direct observation of teachers' NVB. Participants in group interviews are extending each other's opinions and one response may trigger off ideas from the others (Powney and Watts, 1987; Breakwell, 1990). Because I did not know the participants previous to the interview, I was counting on the supportive environment that the trainees would offer to each other to open up and speak about their beliefs and observations on teachers' NVB. I was also hoping to use the group-collected data as a way of complementing the data I had collected already from the learners who participated directly in the class. The group interviews had the potential of enlarging the range of interpretations of teachers' NVB and also complementing my observations and theoretical ideas. Ebbutt (1987) used individual and group interviews in a similar way, to verify the data across two sources.

The focus of the pre-observational session was mainly on developing a metalinguistic awareness of what trainees, as everyday interactants, already knew. The difficulty of describing the visual aspects of human behaviour is helped by everyone's experience of interpreting these social signals during routine daily social interactions. I intended the pre-observational session as a way of formalising what participants already knew through a semi-structured group interview.

As I anticipated, the fact that there was a cohesive group in place already at the time of the interview, the familiarity with each other and their relative interest in the topic made the first session easy to run. Watts and Ebbutt (1987: 26) suggest that during the group interview the interaction between participants is as important as the interaction between interviewer and interviewees. Trainees felt at ease to talk about various aspects of NVB and the roles they believed that NVB could play in classroom interaction and in language learning. I found the group interviews more fluent than the individual interviews, as partial responses of a participant generated prompts from other colleagues. Somebody's turn meant reflection time for the others and, in general, responses were, understandably, more detailed than the learners' responses in the stimulated recall interviews.

At the end of the first group interview, participants were ready to conduct their classroom observation on teachers' NVB. The instruments trainees had at hand at the beginning of their observation sessions comprised:

- (i) A framework of beliefs about the roles of NVB in classroom interaction as they were expressed by all participants during the group interview and which trainees needed to confirm or deny through observation;
- (ii) An 'Observation sheet' (see Appendix G) which identified the main five NVB codes used in current research on NVB, provided a grid and suggestions for recording the observations and some guiding questions for the report writing.

The second group interview took place a week after the first session and, in the time elapsed, the trainees observed individually each a language class. The focus of the second meeting was to explore the trainees' interpretations of teachers' NVB based this time on what they observed during the lesson attended. The group dynamics was now more fluent, as I was familiar with the participants and the focus was clearer, as they were asked to reflect back on their classroom observations rather than on their beliefs.

The session started with trainees' general comments on teachers' NVB and then individual examples of classroom NVB as observed in their classes were described by individual trainees and discussed by the group. Trainees identified a variety of NVBs teachers used and discussed their roles in classroom communication. In general, all trainees contributed with a range of examples, comments and opinions and the exchange was very dynamic and controversial at times. Contributors made several references to the cross-cultural significance of particular gestures or moves and methodological considerations of using NVB in language teaching. Both sessions - before and after the classroom observation - lasted about an hour each and post-observational sessions were video recorded.

5.3.7. Researching with narratives

Each trainee contributed an observational report. No restrictions in length or format were applied. This generated a free range of observation-based reports, from the ones summarising in half-a-page the aspects of NVB seen as significant to lengthy reports of ten pages which detailed extensively the teacher's NV moves, the context in which they occurred, the writer's belief about their relevance for the learners etc. Some reports had drawings, others had graphs. Some included systematic tables summarising chronologically the teacher's moves as they occurred, others did this by using bullet points, and others wrote the 'story' of the noticed moves and gave their interpretations. Participants were told that their reports would not be part of their assessable work, but they would receive feedback. They were encouraged to be as open and as spontaneous as possible in their interpretations and critical remarks. They were also told that the questions set up at the end of their 'Observation sheet' (Appendix G) should only orient their writing and not be followed religiously.

The trainees' reports as a research source had the following advantages:

- They were field-focused, i.e. their observations came from the classroom rather than from memorised social encounters or artificial settings;
- They were interpretative and detailed, as the observers were used to write critical reports on various aspects of language classroom and to attend to details;
- The trainees were direct and undisturbed observers as they did not have to react to the situation as learners had;

- The observers were semi-trained in observing NVB as they had participated in a session familiarising them with the NV codes and some observation techniques;
- The reports had insight, as trainees were observing from their experience of roles of observers and observed, teacher trainees and language learners, members of a culture and learners of a new culture, evaluators and evaluated.

5.3.8. Considerations on triangulating the data

The principle of triangulation is described as ‘the use of two or more methods of data collection in the study of some aspect of human behaviour’ (Cohen and Manion, 1994: 233). Multiple perspectives on the data are required to minimise the exclusive reliance on one method, which cannot reflect the complexity of human behaviour and could bias the investigation. While the traditional understanding of the concept of triangulation is that of ‘multi-method’, Denzin (1970) identified six types of triangulation used in social research:

- time triangulation - by using cross-sectional and longitudinal designs;
- space triangulation - by spreading the research area and using cross-cultural techniques;
- combined levels of triangulation - using the three level of analysis of interest for social science - individual level, interactive level and the level of collectivities;
- theoretical triangulation - drawing on alternative theories;
- investigator triangulation – involving more than one observer;
- methodological triangulation - using the same method in different occasions (‘within method’ triangulation) or different methods on the same object of study (‘between methods’ triangulation).

The combination of methods or perspectives does not automatically imply data validity. Triangulating aims to relate different sets of data and validate the inferences made from them than rather than the data in itself (Hammersley and Atkinson, 1995). In this study, although teachers, lessons and interactions varied from day to day, there was the overriding constant of learners, teachers and trainees gathered together to work on a foreign language. The phenomenon to be investigated was complex and the need for multiple perspectives and crossed methodologies became a *sine-qua-non* for exploring it.

I had to decide from the very beginning which were the core data. I chose in this sense learners' interviews and trainee teachers' reports. I was going to use as peripheral data the trainee teachers' group interviews, the videotaped classes, my class observations, and the interviews from the pilot study. Interpretations of teachers' NVB were the focus of the analysis at all times. I also combined the learners' perspectives with the trainees' and my own view on the phenomenon to increase the strength of the inferences made on the same aspect of reality. I considered that the combination of views coming from a variety of observers, direct or indirect participants, learners or non-learners, experienced or inexperienced, would generate a fuller and appropriately diverse view of teacher NVB in the language classroom. By combining the learners' and observers' perspectives I thought of exploring the main advantages provided by each set of subjects: the learners' direct involvement in the context in which the actions took place and their position as main addressees; the trainees' experience as observers and as previous language learners; and the knowledge and training I developed as a researcher of NVB.

As I was interested in the participants' experience of the process of NVB rather than the teachers' NVB in itself and had no intentions of generalising the findings to wider populations, the research methods were selected accordingly. Interviews and personal accounts seemed to me the appropriate way of getting the type of data I needed. I used recorded stimuli to incite individual responses of learners, while the trainees wrote their reports on lessons they observed directly. A variety of methods were therefore in place by combining the stimulated recall interviews with classroom observation and analysis.

5.3.9. Overview of gathered data

By the end of the data-gathering period I collected the following items of raw data:

- videotapes of 5 separate classroom sessions, with a duration of 90 minutes each, and accompanying memos and notes;
- 18 audiotaped interviews with non-participant trainee teachers based on videotaped extracts of classroom interaction and the attached notes which constituted the pilot study;

- 22 recorded interviews with classroom participating language learners, of approximately 30-45 minutes each, with the comments I made on separate memos;
- 20 trainee teachers' reports based on their direct classroom observation;
- 2 videotaped group interviews with the trainee teachers.

5.4. On ethical issues

The ethical issues concerning the conduct of any social research refer primarily to the rights that participants in the study have as individuals. I will discuss here the ethical aspects that had particular relevance in this research.

5.4.1. When are participants volunteering?

All data gathering depended on participants' benevolence to being videotaped and to volunteer for interviews. At times, I found myself trying hard to persuade the volunteers to participate, as they could sometimes see no benefit in return. I realised in time that students would agree to participate if they saw a utility in it, so I soon 'advertised' the interview as a way of practising their English, as a way of supporting research or an experience they might otherwise never encounter. Some participants were people I never met before the class. The discussion was limited to the immediate moments before or after the class. Sometimes the teacher would suggest participation in the interview and it was clear that teachers' authority and their built-in trust with the class was of great impact. Students would then volunteer in greater numbers.

5.4.2. Informed consent forms

Before starting the data collection, I informed all participants about the nature of the research and the methods involved. I used informed consent forms in the following ways:

- Teachers were asked permission to be videotaped and signed a consent form for each of the videotaped sessions, also giving their consent for the use of still photographic extracts for the purposes of illustrating this thesis (see Appendix A).
- All learners present in the classes selected were informed that their class was being videotaped and gave their consent to this (see Appendix B).

- Participants interviewed were briefed at the beginning of the interview about the purposes of the research and the intended use of the data and asked to sign an ‘Informed Consent form’ (see Appendix B).
- Trainee teachers were advised about the use of their narratives for research purposes and guaranteed confidentiality.

5.4.3. Confidentiality

In reporting the research findings, I used numbers for all teachers, to protect their identity. Four teachers however agreed to have extracts from their classes put in this thesis in photo format. Teachers were assured that only themselves or the learners in the class during the research interviews could see the videotaped recordings of their classes. In any other cases, like showing video extracts in conferences or other audiences, a special consent would be asked from each teacher involved.

With regards to the other participants, they were all guaranteed confidentiality and given pseudonyms throughout the study. The request for protection, mentioned at the beginning of each interview, was reconfirmed whenever participants required it. It happened several times that learners made remarks on teacher’s practice or behaviours and by considering this information extra-sensitive, they would ask for confirmation of confidentiality. ‘Don’t tell the teacher what I have just said’ was always followed by my reassurance that the interview was used exclusively for research purposes and in complete protection of the informants.

5.5. Summary

This chapter has presented the steps followed and the issues considered when designing the study. I discussed the range of informants participating in the process of data gathering and each group’s contribution to the research. As the exploratory nature of the study required several decisions regarding the nature of the data collected and the methods used, I have tried to justify the reasons behind my decisions. Finally, I reviewed the ethical issues considered in collecting the data.

The chapter that follows explores the methods used in analysing the data and the format chosen for their presentation.

CHAPTER 6

DATA ANALYSIS

6.1. Overview

In this chapter, I first describe the stages followed in analysing the data collected in the main study. As the methodology of data analysis was developed successfully in the pilot study, it was adopted with some minor modifications in the main study. In the second part of the chapter, I discuss the choice of the writing style adopted in presenting the data.

6.2. Processes of data analysis

As data analysis is not a clear-cut stage of a qualitative inquiry, I started to analyse data as soon as I collected the first videotaped classes and interviews. As I aimed to develop the framework of data analysis from the data itself, ‘grounding’ thus the research in the data (Glaser and Strauss, 1967; Strauss and Corbin, 1990), the continuous interaction between data collection and data analysis was important. The pilot study (presented in Chapter 4) provided a useful framework of data analysis. This framework allowed for the coding of the data along three functional dimensions of perceived NVB: cognitive, emotional and organisational. Each dimension was represented by functional categories of perceived NVB, which represented communicative functions attributed to teachers’ NVBs by the participants in the pilot study. These categories of perceived functions of teachers’ NVBs were adopted in the main study, with some minor modifications that referred to:

- (i) The development of each functional category of teachers’ NVB, by clarifying the types of NVB codes identified by the participants as representing each category;
- (ii) The understanding of each functional category of teachers’ NVB, by comparing the attributions made by individuals with different roles in the interaction, i.e. learners and trainee observers.

6.2.1. Transcribing the visual data of teachers' NVB

Part of the data I collected was in the form of videos of language classes. As already mentioned, I had used the classroom-videotaped data to stimulate learners' interpretations on teachers' NVB during the class. It was therefore important to transcribe in detail the video sequences which learners were exposed to during the interviews to relate their interpretations to the precise instances in the interaction.

I decided to use a set of descriptors for each of the NVB codes investigated. The descriptors used in the transcripts are identified in Table 6.1. below. Their use allowed for a systematic transcription of the NVBs produced by the teachers. I used descriptors already existent in the literature for two main reasons. Firstly, this coding system was already validated by previous studies (as reviewed in Chapter 2). Secondly, a close analysis of the data from the pilot study revealed the informants' tendency to identify NVBs in terms of their functions (see Chapter 4). This was confirmed in the data from the main study. The descriptors of the NVB codes were broad enough to allow the superimposition of another coding dimension, the functional one.

Table 6.1. Descriptors for the NVB codes

NVB Codes	Descriptors
1. GESTURES	1.1. beats 1.2. metaphoric 1.3. deictics - concrete - abstract 1.4. iconics 1.5. emblems
2. FACIAL EXPRESSIONS	2.1. happy, smiling, laughing 2.2. upset, sad 2.3. surprised 2.4. disgusted 2.5. scared, afraid 2.6. discontent, angry 2.7. curious, enquiring
3. EYE CONTACT	3.1. individual, glance 3.2. individual, maintained 3.3. collective, glance 3.4. collective, maintained
4. PROXIMITY OR USE OF SPACE	4.1. close to individual learner 4.2. close to group 4.3. in front of class or at distance of group
5. POSTURE	5.1. sitting 5.2. standing 5.3. leaning

Recent methodological studies (Kress and van Leeuwen, 1996; van Leeuwen and Jewitt, 2001) offer suggestions on developing the coding categories and their dimensional values when operating with visual data. In defining the variables of the 'gestural' code, I adapted the classification developed by McNeill (1992), as this was already used extensively in previous research and was developed in relation to the interdependence between speech and gesture, which was of interest to me. The descriptors for the 'facial expressions' of emotion include some of the main universal emotions that were thought to cover the expressions showed by teachers in a class context. Apart from the six universal emotions, another facial expression – curious, enquiring – was included, as this was considered as likely to occur in a class context. The descriptors for the 'eye contact' code define two variables, type of addressee and length of glance, as these were seen to be important in the given research context. Finally, for 'proximity' and 'posture' three descriptors were identified in each case, as the most usual ones occurring in the data. The set of descriptors was designed mainly for analytical purposes, to allow a relative uniformity in transcribing the video sequences and it was not intended to be exhaustive in terms of its potential to describe any of the non-verbal codes explored.

I also had to choose a system of arranging the transcription on the page. In order to facilitate the analysis, I needed simultaneous access to the transcription of speech and of visual data. Currently, there is no agreed system for the transcription of visual data, but authors have suggested various solutions for locating and characterising action. Methodological considerations on how to analyse action in human interaction had been made for the study of gaze (Goodwin, 1981; Heath, 1986; Robinson, 1998) and gesture (Kendon, 1990,1994,1997; Haveland, 1993, McNeill, 1992), including references to other aspects of bodily action. Goodwin (2000: 160) makes the following observations in relation to the use of visual data in studies of conversation analysis:

- The analysis of the visual data is not focused on the isolated visual events, but on the participants' practices in the interaction, meant to develop the collaborative action with each other;
- The analyst seeks to explore the participants' orientation to particular visual events and how they 'use them as a constitutive feature of the activities they are engaged in';

- The spatial and temporal dimension of the visual events are interdependent, as the events seen influence the development of emerging action;
- Video data are the best resource for an analyst aiming to reflect the whole setting of interaction;
- Transcribing visual data involves a process of selection and decision in terms of aspects to be transcribed and a use of multiple methods for rendering relevant distinctions.

With these guidelines in mind, I decided to develop transcripts of the video sequences selected for the interviews with the learners. I transcribed and numbered every line of talk horizontally, and then placed the NVB details in relation with the speech events (see Figure 6.1. below) After transcribing the speech, through repeated viewings of the tape, I identified the corresponding act of NVB and its duration in relationship with the speech unit. The description of the NVB was included under the co-occurring speech strand and underlying of the corresponding segment of speech was used to indicate when the move started and ended. For example, in line #5.49. below, *Teacher 5* produces almost simultaneously two gestures. While saying ‘I am’, he points to himself with both hands (BH) in a container gesture, i.e. palms facing each other, to identify himself as part of the example given and to represent visually the concept of ‘house’ as a bounded, concrete object. When such a complex occurred in the data, gestures were described in tandem, as their production was (almost) simultaneous.

Figure 6.1. Extract from a transcript of video recording

- #5.49. I am selling my house
***Concrete deictic + Meta:* BH close to his body, point to himself, while hands kept in a container gesture suggest the concept of ‘house’.**
- #5.50. Manuelle comes
***Concrete deictic:* BH point to the student named.**
- #5.51. and decides she wants to buy my house
***Meta:* BH shift from right to left, still container shape.**

The moves were described by using the descriptors above identified in Table 6.1. and the description was placed immediately under the strand of speech, as in Concrete Deictic and Meta(phoric) in line #5.49. This alignment facilitates the analysis by having both speech and action in one, easy to follow transcript. However, whenever

more durative action took place, for example when the teacher changed sitting position, the action was marked only in its beginning as its duration would extend over several turns of speech. Appendix C contains all the transcripts of the video extracts that were used in the study during the interviews with the learners.

The transcribing was thus a rigorous process, as each unit of analysis required a transcription of speech, a coding of behaviour into a NVB code and a description of the action. I did not use any symbols for coding the moves. I categorised them according to the five non-verbal codes (gestures, facial expressions, eye contact, proximity or use of space, posture) and then I provided a detailed description of the action. I used these detailed transcripts for the purpose of preserving a record of what had happened in the class in order to relate this with the learners' interpretations made during the interviews.

I did not intend to conduct any quantitative analyses on the data, as NVBs are highly dependent on the content of speech and individual factors, such as personality or NV style. Therefore, quantitative evaluations are very unlikely to enhance the understanding of this type of data without a systematic control and measurement of the individual variables. However, I summarised the absolute figures of teachers' NVBs as they occurred in the video extracts selected. These figures are provided in the Appendix E for an overview on these five teachers' general use of NVBs. They also indicate the range and potentially meaningful NVBs situations that the learners interviewed in each class were shown in the video extracts.

6.2.2. Analysing the interviews with the learners

In the main study, I transcribed and analysed two sets of interviews:

- Interviews with learners;
- Focus group interviews with the trainee teachers.

I used a system of transcription of units of analysis as developed from the pilot study (see section 4.7.1. and Table 4.2.), where each unit of analysis included the aspect of NVB identified by the learner and its interpretation. In this way, the coding was facilitated by the clear setting on the page. I transcribed all the interviews in full and a sample of an interview transcript is included in Appendix D. (Space does not permit the inclusion of all 22 interview transcripts, each of which ran up to 10 pages).

Participants interviewed in the pilot study spontaneously used two points of focus: one describing the move made by the teacher and another one interpreting it in terms of its function in the interaction. I decided to keep this double focus when analysing the data from the learners and to write on the transcript the *NVB code* and its *function*, as identified by them. The new set of data from the learners made me change or develop few of the categories identified in the pilot study. However, some new dimensions were added to the categories, mainly by identifying the specific NVBs codes that were found by the participants to represent each functional category.

All interview data were selectively double-coded by myself at an interval of four months. Intra-coder reliability as a test-retest method was shown as reliable (Hatch and Lazon, 1991, cited in Gullberg, 1998) and used before in research on gesture (Gullberg, 1998). However, an independent coder was trained to code the functions attributed by the learners to the NVBs perceived. A selective inter-coding of five interviews indicated an agreement of an 85% average, with ranges between 75% and 95%.

The absolute summaries of the NVBs identified and discussed by all learners are provided in Appendix F, based on the functional categories of coding. As learners participated in different classes and therefore saw different video extracts during the interviews, quantitative comparisons between individuals were not intended, as a variety of variables were active at all times. Learners differed in their level of language skills, cultural background, attention skills, memory, age, gender etc. and these variables could have influenced their selection of relevant teacher NVBs during the interviews. As none of these variables were controlled, it appeared that a quantitative analysis of the results was unsuitable. However, Appendix F provides a general overview of the functions that were predominant in learners' attributions (i.g. cognitive interpretations were far more numerous than emotional or organisational) and also gives an indication on the total numbers of instances analysed in the study.

When coding, I looked first for the NVB identified by the learner, allocate to it a NVB descriptor (gesture, eye contact etc.) and then identify its function, as attributed by the learner. Then I looked out for the relationships between the aspect of NVB identified and the function attributed to it by the learner. For example, in the case of the following interview extract with one of the learners:

Sylvia: *She said 'I' and put her hands in her direction to remark the word 'I'.*

I would identify 'gesture – concrete deictic (pointing)' as a descriptor and 'emphasising/ marking relevance' as a functional category. I would usually write down my ideas at this stage in a note form to facilitate the analysis at a later stage. I also corroborated the learners' interpretations with the transcripts of the video extracts, to identify the immediate context in which learners made their attributions and judgements.

Only after having determined the construction of a functional category from the learners' perspective, did I relate the learners' attributions with the trainee teachers' and start to look for differences or similarities of views between the two sets of informants. For this process, I put together quotations from the learners, written on small-size cards organised on functional categories of NVB with quotations from the trainee teachers' reports and compared their views. I usually wrote down ideas on the order of presenting the different views expressed by the learners on the same category, as well as any differences of opinion between the two sets of informants. These notes proved very useful in the later stage of analysis.

6.2.3. Analysing the focus group interviews with the trainee teachers

I coded the data collected in the focus group interviews in a similar manner to the data from the learners' interviews. I looked for codes of NVB as the trainees and their corresponding functional categories identified them. In the focus group interviews, there were also strands of data that would not reflect a particular NVB, but rather considerations on the relationship between teachers' NVB and pedagogy. I grouped these observations separately, but I do not report on them here as they do not form an extensive account.

6.2.4. Analysing the written reports of the trainee teachers

Before attempting the analysis of the trainee teachers' observation reports, I read them through several times to get a general feeling of the type of data I was dealing with. I was surprised by the richness of the examples comprised by some of them and also by the variety of styles chosen by the writers in presenting the data (see Appendix H for a sample report). Hammersley and Atkinson (1995) list several questions that can be asked about written documents:

The presence and significance of documentary products provides the ethnographer with a rich vein of analytic topics, as well as a valuable source

of information. Such topics include: How are documents written? How are they read? Who writes them? Who reads them? For what purposes? On what occasions? With what outcomes? What is recorded? What is omitted? What is taken for granted? What does the writer seem to take for granted about the reader(s)? What do the readers need to know in order to make sense of them?

I briefly tried to address these questions in the light of the documents I was faced with to get the general framework that was going to characterise the interpretation of the reports data. I was analysing accounts written by university students who usually had their writing evaluated by the course tutor, so these writers were probably motivated to write a 'good' report.

I knew from experience that observing gestures and other teacher NVBs is not an easy task. The difficulty of observing human actions resides not only in their rapid and ephemeral succession, but also in the multitude of tasks an observer has to do: watch, memorise the scene, analyse mentally the action in the given context, relate it to previous experiences, find the words to express it and write it down. I was aware that the trainees were all non-native speakers of English, and although experienced students, they must have had some difficulties in expressing their thoughts about teachers' NVBs. This was a difficulty I had to overcome myself at the times when doing classroom observations. I was also aware that their reports presented a very individualised selection of classroom actions interpreted on the basis of personal criteria of analysis.

The data from the reports could be organised through the codes and functional categories of NVB developed earlier in the interviews with the trainees and the learners. I was going to use the same combination of NVB code and function, as developed in the pilot study and also used in coding the learners' interviews.

The following steps were followed in analysing the reports:

- (1) Select the paragraphs that discussed an aspect of teachers' NVB;
- (2) Separate the extracts that reflected immediate observations on the classroom interaction and the ones that reflected the writer's beliefs or general comments;
- (3) Identify the NVB descriptor and its attributed function in each extract;
- (4) Identify any isolated extracts, which do not belong to any of the existent functional categories and develop new categories if needed, i.e. methodological considerations, teacher training implications etc.

When I had identified for each extract a NVB code and a corresponding perceived function, I could distribute the extracts in their corresponding functional category and start the comparison with the learners' accounts. Some categories were enhanced by the trainees' perspective. For example, learners had little to say on teachers' 'classroom non-verbal rituals', probably due to the limited perspective they were given on the class through the video extracts selected for them. However, trainee teachers provided rich accounts of what they perceived as 'rituals', activities or routines that were recurrent during a class. In this sense, the comparison of the two sets of data confirmed most categories and extended some of them.

6.3. Writing the analysis

In this section, I discuss the choices I made in presenting the results of the study and developing a suitable presentation style. I decided not to present an 'objective' account or description of all the NVBs occurring in the classrooms I observed or recorded. The choices I made were motivated by the need to reflect the participants' opinions on teachers' NVB as well as providing the opportunity to examine critically what they had to say about their classes. The style chosen had to reflect the fact that what each participant was saying, while not necessarily 'right' or 'true', was nevertheless their own version of significant NVBs that occurred in the class. I considered that, by taking this particular approach, I would be able to give an account of learners' own perceptions rather than an imposed explanation of the data. I would also be able to indicate where the learners' versions of reality were supported by the trainee teachers' and my own observations of the same phenomena, and where they were not.

6.3.1. Developing the narrative

I perceived the writing experience as a continuous process of analysis rather than just reporting an already 'finished' research. Writing up the study was maybe the most reflexive stage of the research process. It involved not only a process of finding the best text to describe the whole process of data collection and analysis, but also a construction of a comprehensive and unitary argument which to involve my voice and the voices of the participants in the research. Richardson (1994) presents the writing as:

a method of inquiry, a way of finding out about yourself and your topic. Although we usually think about writing as a mode of 'telling' about the social world, writing is not just a mopping-up activity at the end of a research project. Writing is also a way of 'knowing' - a method of discovery and analysis. By writing in different ways, we discover new aspects of our topic and our relationship to it. (1994: 516)

The conventions of academic writing, although rigorous and learnable, do not prescribe the 'best' way of writing qualitative research. Furthermore, for me, writing and thinking in a foreign language is an experience of self reconstruction, with many frustrations of not being able to manipulate the language and adopt the position of a perpetual wanderer in the realm of foreign words. One may struggle in deciding which is the best discourse for a particular type of research, how to combine one's own authorial voice with traditional reporting, how to explore with rhetoric devices and so on. The decisions are not always clear cut.

I aimed for a narrative style that I found best for reflecting how people in my study acted and reacted to situations and NVBs in the classroom setting. In doing so, I wanted to reconstruct not only the teachers and their observers as social participants, but I also intended to reflect the patterns of action and interaction, the routines and misunderstandings that occurred at times. I tried at all times to present the narrative as representative of its creators and as critical as necessary to transform them into an object of reflective enquiry.

In structuring the narrative of the data and what it revealed, I hesitated between creating distinct accounts for each group of participants - teachers, learners and observers- and contrasting the views of various participants to the classroom interaction. The whole conceptualisation of the study was to reflect the process of classroom interaction with the corresponding reflections learners and trainees made on teachers' NVBs. I decided to parallel their interpretations with a presentation of teachers' NVBs as they were recorded on the videotape. I adopted as a framework the three themes or super-ordinate functional categories identified in the pilot study. I elaborated each theme in turn in relation to the corresponding categories of NVB. I chose to present the teachers' corresponding NVBs in a descriptive manner, together with the interpretations given by the learners and the trainee teachers. When writing up each theme, I will make constant references to learners and trainees' perspectives on similar NVBs. However, to avoid treating the actors' point of view as an

explanation (Silverman, 2001), I will relate the participants' accounts to my own reflections provided in a discussion of the findings (see Chapter 10).

6.3.2. Giving voice to 'voices'

One of the main challenges of writing up this study was the combination of my 'authority' as researcher and the informants' interpretations. The temptation to take up the role of the omniscient writer was strong, and so was the thought of arguing with the positions offered by the participants on certain instances. Although the writing in itself is a very subjective experience, I tried to refrain as much as possible from imposing my own interpretations. I considered the narrative structure as also the best way of representing the learners and the trainees' views, as well as the behaviour of the teachers they talked about. As Richardson explains:

If we wish to understand the deepest and most universal of human experiences, if we wish our work to be faithful to the lived experiences of the people, if we wish for a union between poetics and science, or if we wish to use our privileges and skills to empower the people we study, then we should value the narrative. (1994: 133-4)

When writing the following chapters on the data and what it revealed, I have tried at all times to interweave the analytical frame and the illustrative data by balancing the two perspectives, mine and the participants'. I have used the first person to identify personal reasons and arguments and my own experiences and interpretations. When others are introduced with opinions and interpretations, this is made clear by using a third person narrative. I have used the learners and trainees' accounts in the current study with their original, sometimes idiosyncratic grammar and spelling. I made amendments only in cases where there could be some confusion for the reader.

6.4. Summary

In this chapter, I discussed the stages followed in the process of data analysis for the different types of data collected. I also discussed the format developed for presenting the study. I tried to justify the reasons underlying each of the selections I made in terms of method of data analysis and writing format. This was the last chapter in Part Two of the study, in which I have discussed the methodology and I set the scene for the presentation of the findings. In Part Three, which now follows, I will present the main research findings.

PART THREE :
THE FINDINGS FROM THE DATA

CHAPTER 7

COGNITIVE FUNCTIONS OF TEACHERS' NON-VERBAL BEHAVIOURS

7.1. Introductory note

This is the first of three chapters in which I present the data within the framework of functions that participants in the main study attributed to teachers' NVBs. These chapters are based mainly on learners' views and direct classroom experiences as they were reported by them in the interviews and on the trainee teachers' direct observations as presented in their written reports or during the group interviews. Whenever possible, the NVBs identified as significant by the learners are illustrated with photographs taken from the classes videotaped.

The following three chapters focus each on one of the themes or superordinate functions which have emerged from the pilot study and were confirmed in the main study. This chapter reflects the NVBs attributed with cognitive functions, attributions made in direct relation with the processes of learning. Chapter 8 explores the emotional and attitudinal functions attributed to certain teachers' NVB, while Chapter 9 focuses mainly on the organisational functions that certain NVBs were perceived to fulfil in the class.

7.2. Overview

This chapter explores the teachers' gestures and other NVBs considered by the participants as being used by the teachers to make the language input more salient and efficient. I will show that most of the learners considered teachers' gestures an important aid in the process of language learning, mainly due to their supporting role in conveying the verbal message. Learners also emphasised certain NVB perceived as strategic actions for facilitating the development of learning processes. At times, I will complement the learners' views with the observations provided by the trainee teachers on the same cognitive dimensions.

I will illustrate which gestures were considered by the participants as potential meaning enhancers and in what contexts were these perceived as affecting, positively

or negatively, the learners' processes of meaning making. I will then explore the strategies used by the teachers in facilitating language learning processes by enhancing the comprehension of meanings. In the final section of the chapter, I will focus on the output aspects of the learning process, by exploring the teachers' reactions to learners' output and the impact of these reactions on the individuals.

The learners' and trainee teachers' interpretations will be prevalent in what follows. My commentaries will only guide the reading of the participants' accounts and the description of the NVBs that occurred in the interaction and mark out the significant relationships or contradictions between the informants' explanations. I begin the chapter with participants' general views on teachers' NVB.

7.3. Participants' general attitudes to teachers' non-verbal behaviour

The majority of the participants, learners and trainees alike, clearly expressed the view that teachers' gestures and other NVBs are of particular significance at various levels of classroom interaction. Several learners expressed the belief that gestures have a significant role in enhancing the meanings expressed verbally. They generally considered some gestures as clues to the verbal meaning, to the teachers' emotions and attitudes and to the whole process of group dynamics. One of the students, a Spanish woman, Marianne, explained that:

When you make a gesture or you use your body people can understand better and get more things than when you are still. This is because the gesture used makes clearer what you mean.

Marianne's remarks were supported by the comments of the other learners interviewed, several of them making clear the view that gestures and bodily actions in general are part of any act of 'normal' or 'natural' human interaction. Marianne's explanation considers the relevance of gestures for both the speaker and the audience. She clearly suggested that the main purpose of any speaker is the continuous attempt to get the meaning across to the audience as clear as possible. With this objective in mind, the role of gestures is essential, as they seem to have the potential, in certain situations, of adding clarity and precision to the meaning intended.

While Marianne expressed the view that gestures and bodily signals in general enhance the communicative potential of a message in any given act of social interaction, Daniel believed that gestures had a particular communicative role in the language classroom, due to their compensatory function. This communicative

property of gestures was seen as a characteristic of the language learning setting and teachers were believed to adapt their NVB to the students' perceived level of FL comprehension. Daniel said:

When teaching foreign students, they [the teachers] need to use more body expressions. Italian teachers teaching Italian students are using fewer gestures than English teachers when teaching Italians. They just know that foreigners understand better if they see as well as if they hear.

The same learner explained his own attitude to gestures in the different settings of language learning and extra-classroom activities:

If I speak with people from my country, I don't need to watch their gestures. We are Italians, we use gestures like we eat, so for me it is not usual to watch somebody's gestures. When you learn a foreign language, it is different. The gestures help me understand in English.

Gestures were seen to transform from an ordinary ingredient of every interaction in someone's culture into a vital, survival element within the foreign group. This changing relevance of gestures depending on one's communication needs was similarly perceived by learners coming from the cultures considered traditionally as less expressive. Kali, a female student from Japan, explained her changing attitude to gestures since studying English abroad:

It is hard to study a language if you don't see any actions. In Japan, you learn to control your moves, there are few actions when you speak. The Japanese view is that silence is a good thing. Too much speaking is even impolite and too many gestures might show your lack of education. But here [in Britain] the teachers move a lot. And this is not impolite, you can watch somebody and it is not rude, it is acceptable and even polite. Because you study a language and you know that more actions make an easier understanding and show enthusiasm from the teacher. Here I watch the teacher all the time and he watches me all the time so I am never lost.

Kali showed an explicit understanding of the social display rules which sometimes require an individual entering a new culture to adopt opposite norms to the ones valued in the mother culture. She makes explicit the ways in which she needs to re-define her representations of what is socially acceptable and adapt through her new experience to a new set of social rules of behaviour, a re-conceptualisation which also impacts on her approach to language learning.

The different sets of display rules imply sometimes a shift of identity when performing in distinct cultural contexts. Vladimir, a Russian, fluent in three foreign

languages, identifies this change of identity in his own performance when speaking different languages:

Russian is an expressive language, as Italian or Spanish are. We [Russians] use a lot of gestures when we talk with our people to express ourselves and to communicate emotions. Chinese is more quiet and relaxed. They [the Chinese] don't use gestures while speaking, or maybe they use gestures for numbers. If you talk about a price, you are supposed to show it with your fingers at the same time. But in normal conversation you don't use gestures. So when I speak in Chinese, I don't use too many gestures, but when I speak in Russian or English, I do. As my father would say, if you want the Chinese to like you, think and behave like them.

The father's final intervention, suggesting that social acceptability is possible through a change of behaviour and thinking patterns, expresses Vladimir's belief in the power of social imitation as a valid pass to a new community membership. He also implies a belief in the controllable nature of NVB and the individuals' ability of consciously choosing their actions during the interaction. Later on in his interview, he made this explicit when discussing the teachers' NVB in general terms:

I think that teachers know how to control their moves. It comes with their training and experience. It is similar to the diplomats. They learn how to control their emotions and moves during the conversation.

This view of the teachers as a group of professionals who consciously develop a certain code of behavioural practice contradicts the opinion of the majority of the learners. Most learners interviewed saw teachers as 'ordinary people' who behave according to their own personal style, but without consciously controlling their bodily actions. As Ronaldo and Armand respectively put it:

Teachers are normal people. They do general actions, like normal moves you do while speaking.

This is a part of the teaching activity, a personal way of expression. It doesn't belong to a special field like teaching, it is something personal, that you cannot change when you are teaching and change again when you are outside the class.

Armand, unlike the other learners interviewed, declared gestures as irrelevant and unimportant for the language learners:

I don't think that students give too much importance to teachers' gestures. I normally don't look at the teacher while in the class. So I don't think their moves are important.

This view might seem surprising coming from an Italian learner, who displays an awareness of his own cultural display rules ('I know that Italians use gestures a lot') and has a very expressive communicative style. It also contradicts the majority, as all the other participants appeared to believe in the communicative potential of gestures, especially in contexts of foreign language interaction.

Sharing a similar view with the learners', the trainees considered teachers' gestures as particularly relevant in the context of language classroom, discussing mainly their compensatory role of NVB in providing meanings and facilitating understanding. Michaela expressed the following generally shared opinion:

Generally, a teacher's NVB is extremely important in the language classroom because depending on how much of this behaviour a teacher shows, the students will pay attention, get interested or understand what they hear. I think that students need NVB because it gives them the courage to make questions and generally makes them more approachable. Teachers' NVB define the whole relationship between them and the students in the class.

The evidence in the study of individual students identifying, describing and apparently valuing the teachers' gestures and other NVBs (to a lesser extent) seemed to organise around the key moments of the language learning process. Participants, learners and trainees, interpreted most of teachers' gestures in functional terms, in direct connection with the relevant mental processes that these NVBs were seen to enhance or facilitate. The functional categories of NVB I deduced from the participants' accounts reflect mainly the learners' perspective, bringing to attention the trainees' perspective only when this differs from the learners' or refine the learners' views in giving them an added dimension.

The cognitive functional categories, some of which were initially discovered and their categories subsequently developed at the end of the pilot study and confirmed in the main study, with their subordinate functional categories of teachers' NVBs, were as follows:

a) Enhancing comprehension through gestures

- Identifying through pointing;
- Illustrating meanings;
- Emphasising for relevance;
- Making comparisons and marking contrasts;
- Eliciting or giving clues for meanings.

b) Creating conditions for learning

- Orienting attention;
- Facilitating retention and recollection.

c) Reacting to learners' output

- Agreeing and acknowledging contribution;
- Asking for clarifications;
- Disagreeing and correcting learners' output.

The remainder of the chapter will present the learners' and trainees' interpretations of each of these main and subordinate functional categories and the types of NVBs codes that were identified by the participants in relation with each of these categories.

7.4. Enhancing comprehension through gestures

Most of the twenty-two students interviewed appeared to believe that teachers' *gestures* have the potential of clarifying meanings that are expressed verbally. The other NVB codes were not mentioned in connection with the processes of comprehension, probably due to the limited potential of these other codes such as facial expressions, eye contact or spatial use to communicate more complex meanings in relationship with speech.

The dominant metaphor was that of the teacher as a facilitator of the verbal message, who is aware of learners' lack of complete understanding of the foreign language. Several learners considered themselves deficient addressees who participated in an asymmetrical interaction:

Romeo: *While in the class, she¹ moves her body and her hands a lot. She tries to make us understand as much as we can from what she says.*

Sylvia: *You cannot understand everything when you talk in a foreign language, no matter how good you are or how many years you study it. And then gestures become important, because if you don't understand the person by listening, you might get it by watching their moves.*

Marcus: *The teacher doesn't speak all the languages in the world, so she cannot translate a word for all of us. So she is using moves to suggest what she means and to compensate for the fact that we are foreigners. In a foreign language, it is easier for you if a person is using gestures. It makes it clearer.*

¹ 'He' or 'she' in participants' quotes refers always to the teacher, unless otherwise stated.

Keiko: *With students like us, English is not our mother tongue so the teacher knows that we don't understand her perfectly. So some of the teachers' actions help us understand them better. We manage to guess better what they [the teachers] think.*

Reaching understanding seemed to be the main perceived aim of the interaction between learners and teacher. The predominant image presented was that of the teacher striving to make as clear as possible the message sent verbally, while the learners' role is seen as collaborating through the effort of interpreting the teacher's intended meaning correctly. Learners appear to perceive class interaction as asymmetrical, due to the teacher's status and native-speaking skills. They are aware of their limited competence and hold the view that teachers are aware as well of this fact (Keiko says: 'The teacher knows that we don't understand her perfectly'). Sylvia believes that a non-native speaker will never have full access to the complete meaning, as 'you cannot understand everything when you talk in a foreign language' and Romeo implies the same limited ability of understanding with students only comprehending 'as much as they can'.

However, the learners did not see their role as entirely passive and uninvolved. They have to try and make sense of teacher's input. The strategies used in making sense of a given situation vary from trying to 'guess' the meaning, 'supposing' and 'imagining what it might all be about', to waiting for a delayed explanation or contextual cue or trying to understand by watching the interlocutor's actions. Liang explains why his teacher's effort of trying to make clear the message makes him likeable and appreciated:

This makes him a good teacher. He watches me all the time and he can always know what I need. He knows all the time what I think, he catches my mind. If I want him to explain something, I don't need to tell him. He just knows what I need or what I want. And he tries hard. He moves his arms, he speaks slowly, and he is very active. I am never lost with him.

In a similar tone, Marianne considers her teacher 'good' because 'she does dynamic classes and her moves help you understand' and Eunice says that 'if you are a good teacher, you have to move your hands and body'. Ronaldo says that 'a static teacher makes you tired and bored, as it is hard to get their meaning' and Marcus values a teacher who 'speaks slowly, like an English, and moves her body a lot, like an Italian'. The view of all the learners interviewed echoed that of Marianne, who

considered a good teacher the one who is dynamic, uses gestures and other non-verbal actions and, thereby, shows involvement in teaching.

However, some learners seemed to consider gestures as communicative only when talking about concrete realities, which can be represented in some visual form. The view here was that concrete gestures are the only meaning bearing aspect of one's gestural activity:

Romeo: A gest [gesture] is relevant when you talk about concrete things, in the case of more abstract things, a gesture is not very relevant.

Marcus: I think that moves are useful mainly to learn the vocabulary, in situations when students don't know the word or don't remember it. So it is important for the beginners to see the teacher's moves. But if we speak about a technical issue or a specific language like medicine or philosophy, I don't see how gestures can help you understand. How could a teacher show you in gestures concepts like cancer or capitalism?

Laura: When you explain something, you need to move your hands to help your speech, this makes your words come more easily to you and also makes your speech more fluent.

This generalised view that gestures of the abstract are less possible and have a less significant impact on the learning process as they cannot 'translate' meanings may be due to the saliency for the learners of particular types of gestures. Gestures like deictics or emblems have a more concrete and independent meaning in relation with the content of speech, while other gestures like metaphors and beats may be more difficult for learners to notice and explain due to their more abstract meanings (see section 2.4.8. for definitions of gestural categories).

Another aspect of importance in the interpretations above is that of differences in perceived gestural relevance. Marcus and Laura indicate gestures as having a meaning potential and a symbolic value only in the concrete context of a narrative or explanation. Marcus talks about the gestures made for the audience, while Laura talks about gestures made for the speaker's own benefit. Marcus identifies the potential of gestures to illustrate a word or to act as triggers of latent information for the learners seeing them. Laura discusses the speakers' need to enhance their fluency and expressiveness, without valuing particularly the impact of the gestures on the interlocutor. Several other learners mentioned the compensatory role of gestures when reflecting on their own gestural behaviour. It seems that gestures are considered in general as compensatory devices for the speaker, but nonetheless, fulfilling various

functions in the interaction for the viewers' benefit. These latter functions of gestures depend on the attributions given to gestures by their receivers or addressees.

Trainee teachers also emphasised the compensatory role of gestures in clarifying meanings expressed verbally and used expressions like 'facilitate meanings', 'help understanding' or 'make learners understand' in explaining this perceived function. The only difference between the trainees' accounts and the learners' view is the fact that the trainees did not see gestures as having a particular role for speakers' own benefit. They generally considered that teachers used certain gestures with their learners in mind, without perceiving any compensatory role of gestures to help the teachers in their message construction. This difference may be justified by learners' increased awareness of the role that gestures play in their own speech when having difficulties to express an idea or opinion. As trainees are advanced speakers of English, they may be aware of using the compensatory role of gestures to a lesser extent.

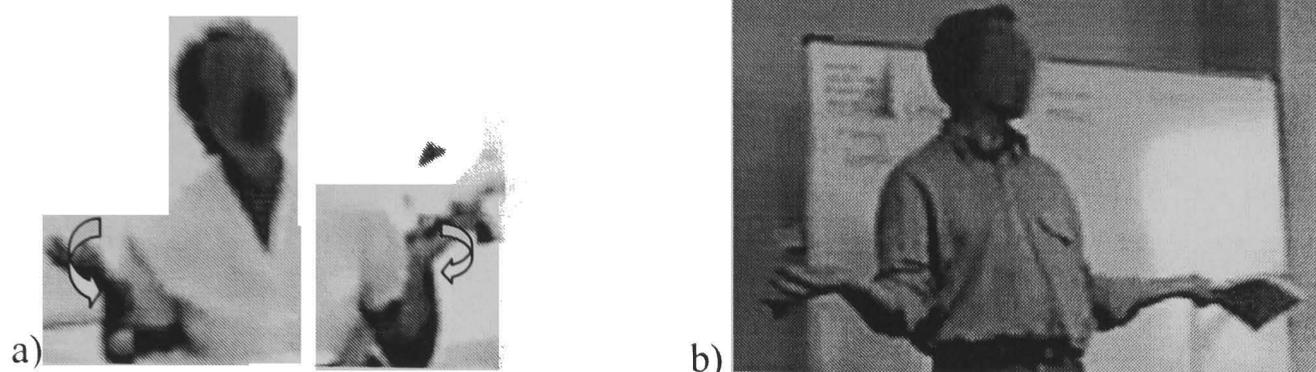
The following five sections will explore the interpretations that learners and trainees in the main study attributed to NVBs that appeared to them to serve cognitive functions and to influence their learning. The last section will discuss certain cases in which gestures failed to enhance comprehension, although the participants perceived them as intended to support understanding.

7.4.1. Identifying through pointing

Of great significance for all learners and trainee teachers appeared to be the pointing gestures teachers used either for locating concrete objects or persons in the physical space (concrete deictics) or abstract concepts in the concrete gestural space (abstract deictics). Certain students interpreted these gestures as a clarifying move, supplementing or complementing the information conveyed verbally.

The concrete deictics that learners noticed included pointing to own body parts, to objects in the immediate surroundings or to the person(s) talked about. In *Class 5*, the teacher identifies the persons discussed in an example by pointing with both hands in their direction, as shown in Figure 7.1. Concrete pointing to himself is combined with a container gesture, in which both hands are 'holding' in an imaginary manner the concept discussed. The direction of the pointing indicates the location of the individuals given as an example, while the shape of the gesture suggests the concept ('house') presented as a bounded container supported by both hands.

Figure 7.2. Deictics used in direct relation with the addressees or with a specific location



#2.63. *But everyone understands*

Teacher points to the whole group.

3.25. *(it's much warmer at the Equator) than it is here*

Teacher identifies a narrative location.

Marcus considers the gesture in Figure 7.2.a. as a clarification aid for the learners who had doubts about the meaning of the word 'everyone':

Everyone [reproduces gesture]. She is talking about the whole class so she opened her hands [reproduces gesture]. It includes everyone, it shows what she means if you have doubts about the word 'everyone' or it emphasises the fact that we all understand her, if you know the meaning of the word.

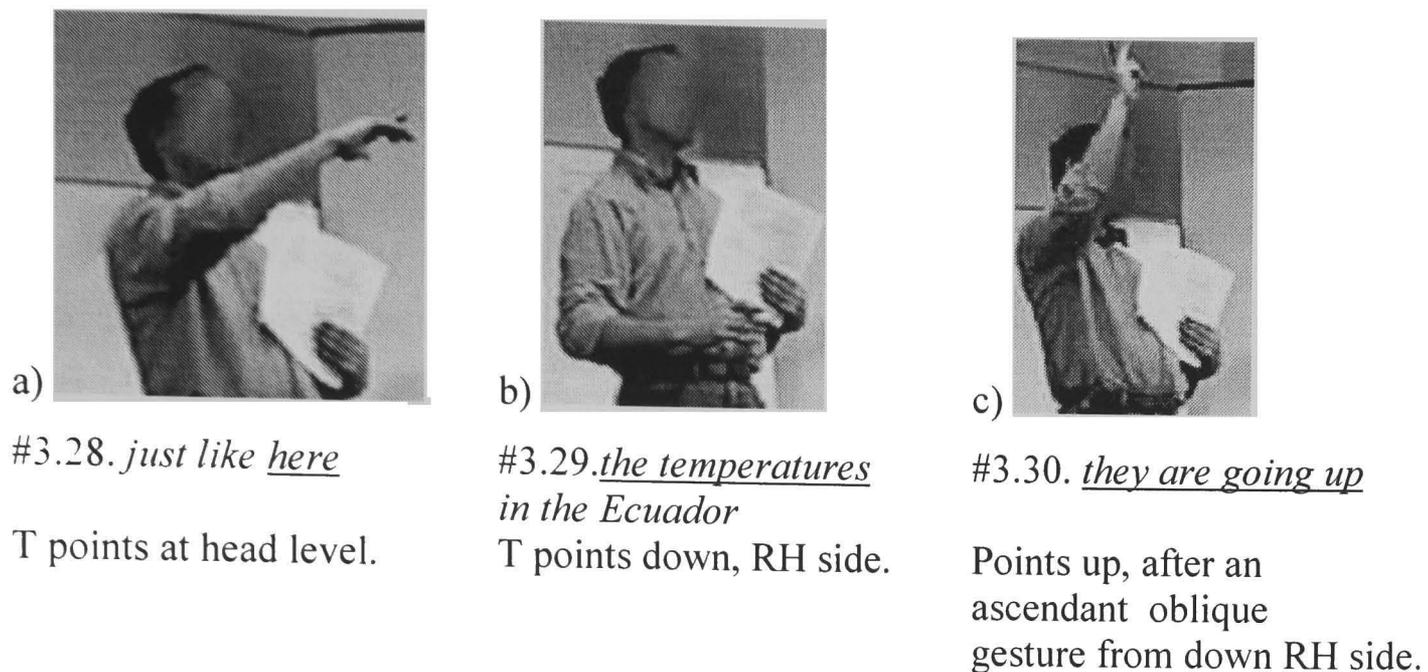
Marcus expresses the belief that learners use gestures according to their personal comprehension needs. If someone has the meaning of the word 'everyone' clear in mind, the gesture functions as an emphasiser. However, if someone is unfamiliar with the lexical item, then the gesture becomes of prime importance by clarifying its meaning in the given context. Eunice also holds this belief, as she considers gestures as useful aids in teaching words of concrete reference, but less efficient in clarifying abstract terminologies:

When the noun, the object, the thing is very common, for example the sky, a table, you can point at them and these gestures help the students. But if you are talking about abstract or technical things, you have nothing to point at.

Teacher 3 discusses the differences in temperature in different parts of the world and makes a comparison between the local temperatures and the ones at the Equator. In making the geographical distinction, the teacher differentiates two loci in the gestural space for each of the two geographical spaces, Britain and the Equator, as shown in Figure 7.3.

Figure 7.3. Abstract deictics and teachers' use of gestural space

The spaces pointed at are not concrete locations, but abstract spaces identified as locations for the introduced references.



Liang comments on teacher's combination of gestures in the instance above and explains why the teacher needs to change his gestures:

Liang: *He said here*
Abstract deictic: left index, points up, above head level.

and also the temperature is going up
Abstract deictic: hand is raising up above the head.

and then he did something else in the other way
Abstract deictic: Points with right hand on the left side, down.

Interviewer: *So why is he changing it?*

Liang: *First he is doing this*
Abstract deictic: RH index goes up.

to explain here
Abstract deictic: RH index points at head level.

Then he cannot do it again for another place/

He needs to change the move when he talks about a different place.

There are several aspects of Liang's comments which are of particular importance. First, is the way in which he presents the gestures. There are no verbal descriptors for the three gestures which he discusses, only his repeated reproduction of the gestures while identifying and discussing their lexical affiliates. Second, many of his sentences

would be ambiguous or unintelligible without considering his gestures. He is using gestures which either supplement his speech ('here' + gesture construction in the first line) or even substitute for it. In line 3 for example, he does not explain what is the 'something else' that teacher did, but rather shows it in the immediate gesture. Without understanding his gesture in line 3, his final explanation about the teacher's need of changing the gestures to represent different meanings cannot be understood. By different meanings he implies different locations in the gestural space and the idea that the places indicated become symbolically representative. The gestural space is seen as a symbolic map which provides a visual representation of the different locations. The clarification emerges thus through the gesture, by identifying the two loci in different places in the gestural space and implying thus the idea of difference between them.

Liang also implies that different meanings require different gestures suggesting the communicative property of gestures and his perceived synchrony between speech and gestures. In the first sentence, Liang explains that the point above the teacher's head is 'here', presumably this country. Therefore, for identifying the Equator, the teacher needs another spatial location and thus he is shown to point to the lower left side when talking about the temperatures at the Equator. The perceived synchrony between gesture and speech emerges in Liang's simultaneous reproduction of them and in his comments referring to the gestures and their co-occurring speech segments.

Learners noticed frequently teachers pointing to a concrete space when talking about a location. Teachers used to say 'here' and simultaneously point to the floor or to the gestural space in front of them to identify the class, the university or the country they were talking about. Learners interpreted these gestures as clarifying location, as in the following example showing *Teacher 1*'s gesture and one of her student's comment on the gesture:

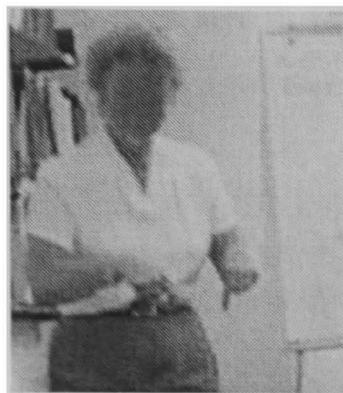
#1.39. T *and the standard of living here?*
 Abstract deictic: LH points to the floor, palm down, fingers spread.

Jose: She [the teacher] points down and says 'here'. She means Scotland, to make it precise, as opposed to what we are used to at home, in our country.

In another instance, the teacher is seen to use an abstract pointing gesture in a ‘mixed syntax’ type of structure, i.e. a verbal sentence is ended with a gesture, as shown in Figure 7.4. below.

Figure 7.4. Mixed syntax gesturing

The teacher ends a sentence with a gesture produced in the absence of speech. The gesture becomes a lexical equivalent, which indicates location.



=2.106. *(but we are not learning American English here) we are learning (...)*
Abstract deictic: Both index fingers point to the floor.

Students perceive the gesture as a clear substitute for the phrase ‘British English’:

Ronaldo: *This is clear, it means we are in Britain, not in America, so we learn British English. She points to mean the local language.*

Eunice: *She is suggesting that here [reproduces T’s gesture], in this country, we learn this English.*

Another way of substituting the verbal through the use of pointing was described in the following example. when a teacher pointed at the students coming from different countries when discussing the ‘standard of living’ around the world. The gesture was discussed as follows by two of the students in the class:

Daniel: *She is talking about the cost of life in Italy and she pointed at me because I am from there. Although she did not say my name, it makes it clearer that she talks about my country. Then she talks about Japan, and she points at the Japanese girl in the class.*

Vladimir: *She is comparing the cost of living in Italy, Spain and Japan and she is indicating with her hand people from different countries. So when she showed Daniel with her hand, she said ‘Italy’ to suggest his country.*

Trainees identified similar gestures in teachers’ behaviour, interpreting them not only for their function but, interestingly, for their role as teaching techniques:

Ling: *When explaining that some ‘ing’ words can be adjectives, she rotated her finger in air when she said ‘and this -ing ending...’. Her finger points to the ending of a word written in air. She also put her hand to the back when*

talking about the spine, to locate it. These pointing gestures helped learners locate what she was talking about.

Sato: She pointed to some sentences on the board with the index finger while reading them out and giving them instructions. It was thus clearer for the students which sentence she was talking about and also kept them focused. She also pointed to words on the board when students looked confused or had blank faces.

Arito and Craus give also examples of teacher's pointing gestures when explaining tenses and consider that learners have become familiar with these gestures:

Arito: She pointed to the ground in front of her with the index finger when explaining the present tense and pointed behind, over her shoulder with both thumbs when indicating the past. Learners were familiar with these gestures as they seemed to understand immediately what she explained.

Craus: She was always doing gestures when talking about time and tenses to reiterate them. She pointed away ahead of her when she said 'in the future', then pointed to herself to refer to present tense and behind her head when saying 'past'. She also clapped with one hand the fingers on the other hand to demonstrate the words 'punish'.

The use of similar gestures by different teachers when discussing the same content might suggest the existence of certain 'teacher gestures' (Hauge, 2000) which develop with particular meanings in the specific context of language classroom. The idea that learners and teachers develop a code of particular gestures that give salience to things to be learnt reflects a process of standardisation of interaction which develops as a co-constructed understanding between learners and the teacher.

7.4.2. Illustrating meanings

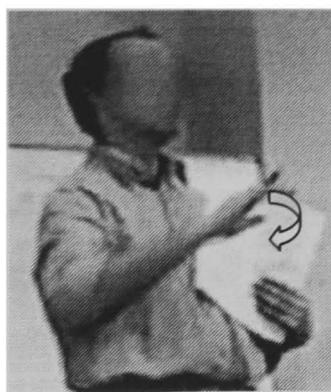
Teachers were perceived by informants to represent visually the lexical items which teachers seemed to anticipate as difficult for the learners' level of proficiency or as essential for the understanding of the whole discursive sequence. Learners' expressions like 'she knows this is a difficult word', 'he sees I am confused' or 'this is an important word, so she needs to make sure we got it' express their belief that teachers seize the situations in which a supplementary way of expressing the meaning may ensure comprehension. This belief that the teachers' adapted their verbal and non-verbal discursive practices to the students' perceived level of understanding appears to contradict earlier research findings which argue that iconic gestures, by

- #3.20. if you said the rising temperatures/
Beats: Repeated beats with RH in air in an ascendant direction, then RH goes down.
- #3.21. whereas/ (clears throat) the temperatures
Meta: RH up in air, in front of him, above the head level, palm in cup, holding a pen.
- #3.22. <in different parts of the world >/
Abstract deictics: RH descends by quickly pointing in a zig-zag more different locations on an imaginary map.
- #3.23. they are <rising> all the time /
Iconic + Abstract deictic: RH goes up in a straight move, pointing with the index above the head level.
- #3.24. but they are always <different> /
Abstract deictic: RH descends in a straight move, pointing with index finger three times in the air at different levels.
- #3.25. it's much warmer at the Equator
Meta: RH describes an arch to the learners' direction and opens in a semi-container (palm up), then retreats.
- #3.26. than it is / here / for instance / (...)
1 Abstract deictic + Emblem: BH opens laterally in a large move and head nod.
2 Emblem + EC: Head nod and EC with S who asked the question.

Two phenomena are worth underlining here in terms of teacher's use of gestures to visualise concrete and abstract concepts. One is the anticipatory character of the second gesture in #3.18. (see also Figure 7.5.).

Figure 7.5. An illustrating gesture which anticipates the lexical equivalent

Teacher's RH describes a horizontal line from left to right hand side of the gestural space to illustrate the meaning of average. The gesture however occurs before the lexical equivalent.



#3.18. *would suggest that the temperature // (that would be an average)*

their nature, represent relevant dimensions mainly in the *speaker's* thought (McNeill, 1992).

A majority of students considered as 'normal' or as a 'routine' practice teachers accompanying their verbal input with an intense gestural activity when giving explanations or telling a narrative. As Johan says:

It is normal to emphasise with your hands the important words in your speech or in a text when you read it out. He speaks and makes a film, he gives words a picture and that makes him easy to understand.

While, for Johan, gesturing becomes a condition of making the speech comprehensible, other learners considered teachers' gesturing as a desirable quality of their speech expressiveness and teaching style:

Laura: She is very expressive, her style is like that. She makes lots of gesticulations and body moves to make people understand what is she saying. She repeats many times a word and at the same time she moves her hands to make it clearer. That makes her a good teacher.

When watching the teacher's actions played back on the video during the interview, the majority of the learners were particularly keen to point out gestures that they considered as clarifying the meaning of various lexical items or phrases. Iconics, as gestures that illustrate concrete meanings expressed verbally, were predominantly selected by the learners in relation to this functional category. In *Class 3*, the teacher discussed the temperature differences between regions of the world and used various representational gestures when explaining the key lexical items encountered in the text. Talking about the variation in temperatures, he uses the gestures for 'average' and 'rising' in a slight asynchrony with the lexical equivalents, as part of his explanation for using the noun plural form in 'rising temperatures':

#3.17. because / to say <rising temperatures>
EC: EC shifted from Ss on the LH side to Ss on the RH side.

#3.18. would suggest that the temperature (...)
Space: T steps back, at distance from group.
1 Meta: RH goes up in a container gesture.
2 Iconic: RH makes a horizontal line from left to right.

#3.19. that would be an average /
1 Transition: RH suspended in air, palm down.
2 Emblem: Head nod when saying 'average'.

In the above extract, the hand describes the horizontal move corresponding to the idea of 'average', anticipating thus the lexical equivalent which appears only in the next utterance. This gesture appears before the word is used, and was generally *not* noticed by the learners interviewed. This may suggest that, unless the gesture appears simultaneously with its linguistic equivalent, learners are not able to guess their meaning or use them as anticipators of meanings, especially when they are not familiar with the meaning to be expressed.

A second phenomenon relates to the use of the gesture for the verb 'rising'. The gesture is not produced at the first use of the word, as it may be anticipated. The teacher does not use the word to introduce the lexical equivalent, but rather later on, in line #3.23. Then the gesture is repeated in line #3.30. in a slightly altered manner, with the hand going up in an oblique rather than vertical move. Learners' reactions to these two illustrative gestures are intriguing. In general, they agreed that the 'rising' gesture clarified the meaning and supported understanding. When the teacher rose his left hand in the air in an oblique ascending line, Nahiko stopped the video and reproduces herself the gesture while saying:

Yeah...very clear...rising...if he raises his hand, it shows the rising temperature. It helps us understand what we are talking about.

Iconic: Right hand goes up in an oblique move.

Similar comments were made by Theodor, Kali and Liang. Theodor implied that the perceived level of learners' proficiency is again determining the teacher's behaviour:

Because he is working with students of a foreign language, he does things like rising. It makes it clearer and easier to understand.

Iconic: Left hand raises above head in ascending oblique move.

The same learners do not comment on the teacher's gesture of drawing a horizontal line in the air while saying that the temperatures are 'average'. When prompted to explain it, Nahiko says that it 'makes it clearer', Theodor considers that is 'the normal way to show it'. This example generates the question of what the criteria are and the conditions in which students consider some gestures as significant while ignoring others. If two gestures of the same category are evaluated to different degrees of relevance, the factors that determine learners' noticing and specific interpretation of gestures are of great significance. In this case, all learners selected the 'rising' gesture as relevant and clarifying and all did not comment upon the 'average' gesture.

When asked why they did not identify or comment on a particular gesture that was identified by other learners in the class, most of the learners provided the argument of non-relevance as the main reason. ‘I did not consider it important’ was the answer, while other students simply could not give an explanation for the reasons why they excluded certain gestures from their selection from the video. It appeared that it was easier for the learners to explain why certain gestures were selected and considered important than to identify the criteria for the exclusion of others. Perhaps due to the inability of providing a coherent explanation, learners might have chosen to overlook certain behaviours that occurred in the class. A counterargument would be the fact that students could also choose to reproduce the action or just point it out, without providing an explanation. Perhaps the salience of certain gestures related to their use by teachers or to the visual or physical salience of the gestures themselves.

I will now discuss some other instances when students found gestures as helpful in enhancing comprehension by clarifying meanings. In *Class 2*, the teacher uses the words ‘reflex’ and ‘copy’ (verb, with the meaning of imitating an action) when discussing the process of learning a language. Simultaneously with using each of these lexical items she uses the same gesture of moving her arms backwards and forwards in counterbalance, with palms facing her body:

- #2.18 T forever / we / we learn it
1 Concrete deictic: BH open slightly towards the learners’ direction.
2 Beat: BH beat laterally, arms at 45°.
- #2.19. and then we // we never forget
1 Abstract deictic: BH close together on chest, palms one of top of the other.
2 Meta + Emblem: BH open widely towards the students at 90° and head nod.
- #2.20. like a reflex
Iconic + Emblem: BH counter-balance back and forth three times and head nod.

In this last instance, the teacher uses a very dynamic gesture of counter-balancing the hands to suggest something that is automatic, which works almost like a machine, very rhythmic, as shown in Figure 7.6. She also nods her head simultaneously to confirm that this is the right idea or maybe as a comprehension check.

Figure 7.6. An illustrating gesture for the word ‘reflex’



#2.20. *like a reflex*

Teacher balances her hands back and forth three times to suggest the word ‘reflex’.

Learners saw this hand gesture as serving to clarify the meaning expressed verbally:

Marcus: *We spoke about the necessity to practice and when practising you develop a reflex. And she moved her hand while she said the word reflex.*

Iconic: BH reproduce the counter-balance gesture made by the teacher.

An interesting phenomenon that illustrates the independent pattern of gestures occurs later on in the same class. The teacher uses the same gesture in direct connection with another lexical equivalent, which shows the flexibility and the lack of standardised pattern of gestures as opposed to the standard form of words in a sentence (see section 2.4.4.). *Teacher 2* explains that language learners listen to the speakers' pronunciation and try to imitate it (see Figure 7.7.):

Figure 7.7. An illustrating gesture for the word ‘copy’



#2.123. *and you try and copy*

Iconic: BH kept very close to each other, palms reversed up, hands balance backwards and forwards in counter balance.

However, the students did not seem to see any contradictions or problems in considering the gesture for its relevance in clarifying the meaning of the second situation as well. When discussing the same gesture in conjunction with the word ‘copy’, Marcus reproduces the gesture while saying:

Try and copy: change the word with the good, change the wrong way with the good way/ copy. It is like a confirmation for us that copy means to exchange something, to change what you know for what others show you.

Iconic: BH counter-balance back and forth.

Although he considers the two identical gestures as having the potential of clarifying or confirming the meaning expressed in speech, Marcus identifies a supplementary condition for both gestures to become comprehension enhancers:

I know the meaning of the word 'reflex' so for me this is not an important movement, it is a surplus, it confirms what I already know. But if I don't know the word, this move could make me understand what she says. So it is a matter of being a surplus or being useful, but this depends on every student. It is relative and depending on what you know already. I know the word 'reflex', but another student might not know it. So what is for me a surplus, for him is very relevant because he doesn't know the word and her moves help him understand.

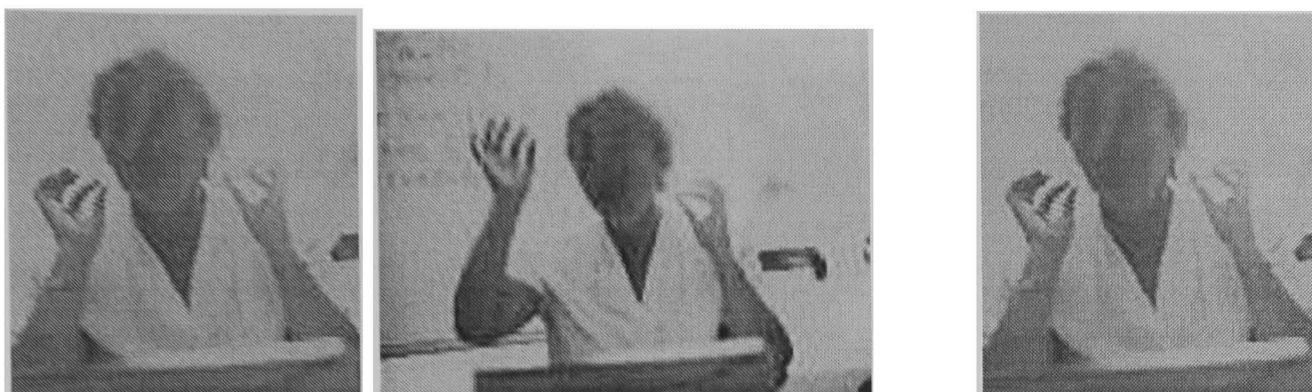
The property of a gesture of supporting speech or being just a redundant move becomes thus determined by the *learners' individual need* of using a supplementary cue before deciding the meaning of a certain situation. Gestures are thus seen as having the property of supporting comprehension, but the significance of their role as essential or marginal resides with the addressee. This is a key issue which has importance for classroom practices. Here are some other students' interpretations of the same two gestures:

Ronaldo: *When she says that you try and copy what natives say, she does this movement [reproduces gesture] to suggest like an exchange. You are sharing something with the other people; in this case, you are sharing the language or the knowledge.*

Armand: *She talks about the reflex you develop in learning a language so she is moving her hands like this [reproduces gesture] to suggest the automatic character of something learnt. It makes it clearer.*

Another function teachers' gestures were seen to play with benefit for understanding was to represent the meaning of an abstract idea through a concrete gesture. When talking metaphorically about the action of 'picking up' a new word or sound when listening to a native speaker, *Teacher 2* reproduces the action of catching an object in the air with her right hand, as shown in Figure 7.8. below.

Figure 7.8. The use of a concrete gesture for illustrating an abstract idea



#2.119. *and your ear picks up the sound*

Iconic: BH in air, hands in a container shape, then RH suggests the catching of something in the air and then hand withdraws close to teacher's body.

Marcus deciphered the metaphor in the teacher's gesture and explained why the gesture is a clarification in this case:

This is pick up [reproduces gesture], or catch the sound. It is like a physical movement, but it suggests a mental activity in the brain; to catch an idea or a concept. She did this movement to make the verb less ambiguous. Pick up [his arms crossed] is ambiguous. But pick up [reproduces gesture of picking up] is not ambiguous anymore. It makes it clearer.

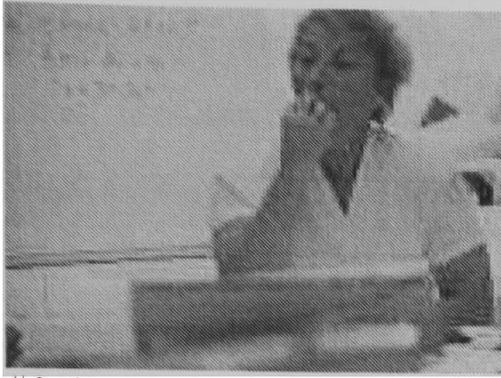
In a similar way, Ronaldo gives his version of the same gesture:

She is talking about catching the words metaphorically. It is like catching something, a fly or a butterfly. When you understand the meaning of a word it is like catching something. That is why she does this [reproduces gesture].

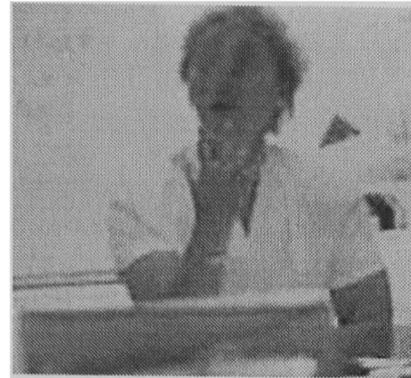
The partial synonyms 'pick up' and 'catch' are familiar to these two learners in different degrees. They both use the word 'catch' to explain the action. This also indicates the transfer of knowledge both students seemed to make; the verb 'pick up' is placed as a synonym in relation to the word 'catch' due to the interpretation of the meaning conveyed gesturally. At no time did the teacher use the word 'catch'; but she implied the meaning through the gesture.

In the same class, the teacher uses an iconic to give an image to the word 'pronounce', by moving her hand from the mouth to the centre of her gestural space, and simultaneously opening up her palm, as shown in Figure 7.9. below.

Figure 7.9. An illustrating gesture, used to elicit a word and then to confirm it.



#2.65. *your good ear enables you to (...)*



#2.67. *yes to pronounce
to produce the sound of the language*

In #2.65., the T tries to elicit the word by producing an illustrating gesture in the absence of speech. In turn #2.66., the students identify the word ‘pronounce’, which is confirmed by the teacher’s words and illustrating gesture in turn #2.67. The hand moves from the mouth to the centre and the palms open to the class.

One of the students interprets the gesture through the metaphor of an imaginary explosion of sounds:

Ronaldo: *Here is like sound floating. She is talking about pronunciation, which is generated by the moves of your tongue. And she is doing like a mouth explosion, as if the speech... the sounds are floating from your mouth.*

Marcus identifies the synchrony between the teacher’s gesture and the lexical equivalent, without attributing it with a particular relevance in itself:

She said the word ‘pronounce’ when doing this [repeats gesture]. So the sound of her voice moves in the same rhythm with her hand. For me, the move is just a confirmation, I know the word already.

Iconics were found as particularly relevant by learners when illustrating action verbs. In these situations, teacher’s gestures were considered as giving words a concrete, visual image that seemed to make the meaning salient for them:

Johan: *He explains how to do a contract and he says something about signing it. And at the same time, he shows the action of signing, with his hand in the air, and the other hand like holding a pen and writing on the hand. It makes it clear, you know for sure what signing means.*

Laura: *She is explaining the meaning of the word ‘increase’ so she puts her hand up in the air, like a plane that is taking off. So you know that to increase means ‘to go up’.*

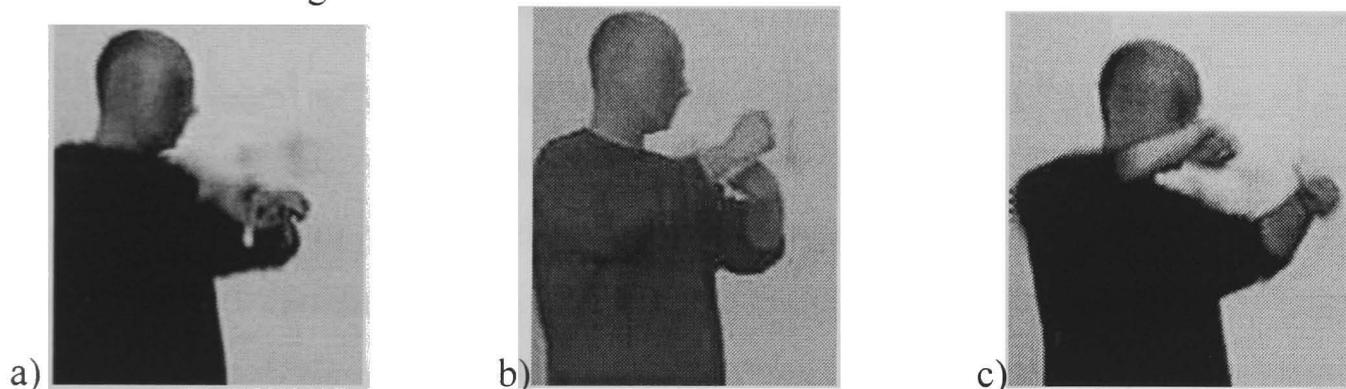
Daniel: *When she says that something is ‘connected to you’ she is touching her body, her hip, and then you imagine an action in the recent past which is touching you and it makes the whole notion of present perfect clearer.*

All the above examples and others in the data confirm that the interdependent relationship between the content of speech and the gesture is perceived accordingly by the learners. They perceive the two systems of communication as supporting each other. Gestures were considered to provide, in the examples above, an illustration of the lexical referent. This illustration takes place through the visual dimension created by the speaker for one of the features the referent displays, i.e. its shape, its move, its instrumentality etc.

Teachers were seen to use iconic gestures in providing an immediate clarification of the lexical equivalent. Learners reckoned that teachers would instantly know when they had difficulties in understanding a word or phrase and decide to provide an instant clarification through a relevant illustrating gesture. Figures 7.10. – 7.12. below illustrate some of the gestures used by the teachers in clarifying words, as identified by the learners in their classes.

Figure 7.10. Iconic gesture illustrating the meaning of the word ‘to tie’

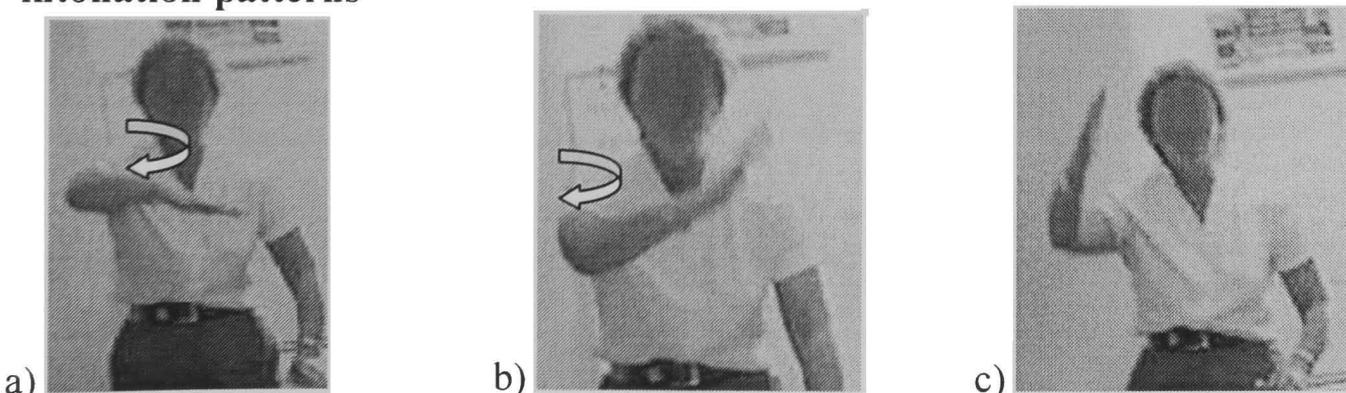
The teacher rotates the hands around each other and then mimes the action of pulling the ends of a string.



a) =5.29. *to tie like a knot*

Iconic: BH rotate around the other in air, to suggest the action of twisting two pieces of rope and then pulling the extremities.

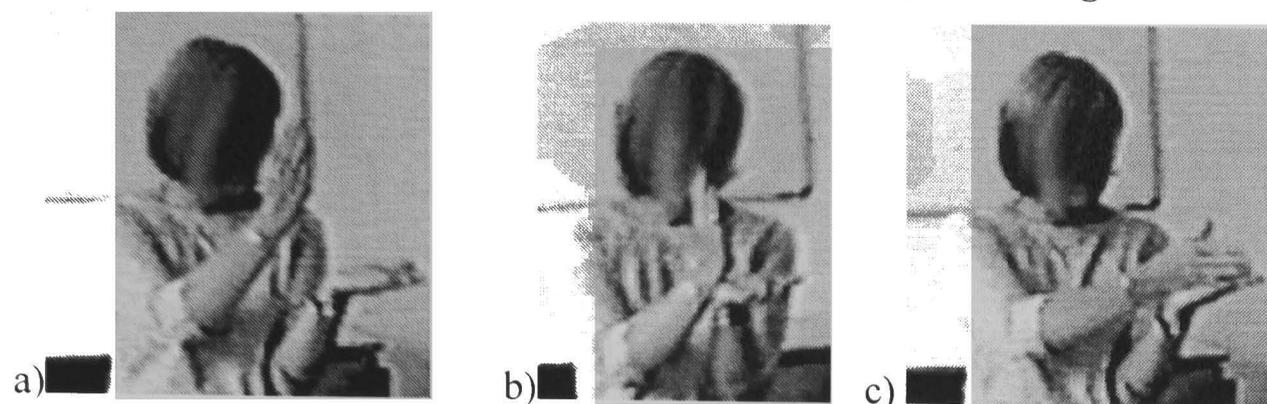
Figure 7.11. Iconic gesture illustrating the meaning of the construction ‘intonation patterns’



a) #2.121. *(your ear picks up) the melody of the language* *the intonation patterns*

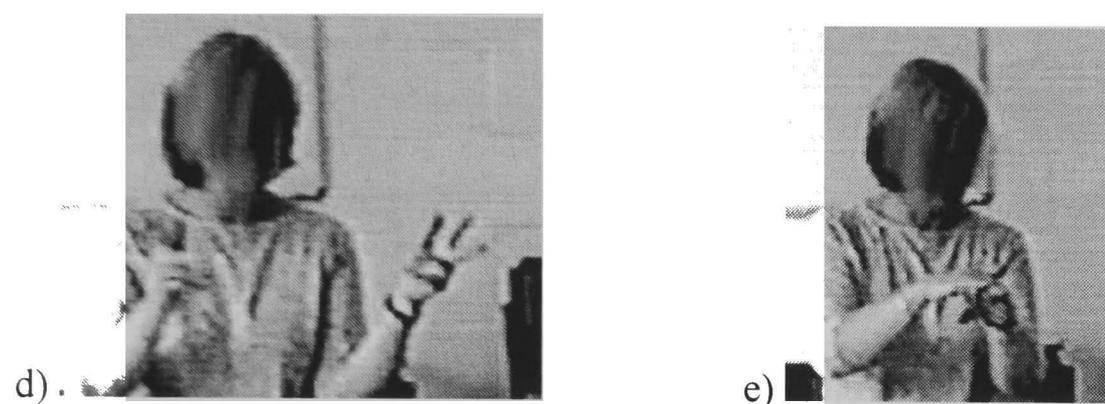
Iconic: RH draws two big wave shapes in the air from right to left.

Figure 7.12. Iconic gesture illustrating the meaning of ‘cutting a film’



a) #4.81. *there's <cu::t/ cu::t>* #4.82. *they stop the film*

Iconic: RH palm goes up and down in LH palm.



d). #4.83. *when they are <making> the film* # 4.84. *they cut bits out and stick it together*

Iconics: BH reproduce the action of cutting something and then putting the pieces together, by placing one palm on top of the other.

Not only iconic gestures were found to clarify meanings. Teachers also used metaphors and abstract deictics, trying to give a visual image or a physical representation to an abstract idea or concept. When encountered, these gestures were considered as clarification markers by the learners. I will detail here two instances which illustrate the perspective learners seemed to have on metaphorical gestures. In *Class 5*, the teacher illustrates the word ‘paragraph’ as if it was an object to be held with his hands, as seen in Figure 7.13.

Figure 7.13. Metaphoric gesture to suggest the word ‘paragraph’



#3.55. *the whole structure // of the / of the writing*

Meta: BH palms reversed mirroring each other, suggest a rectangle in air.

This is what two of the learners had to say about the gesture above:

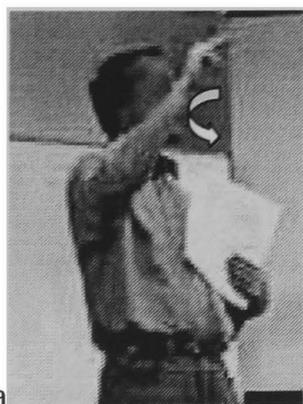
Reyno: *This is the equivalent for structure, it just makes it clearer.*

Theodor: *This [reproduces gesture] illustrates the paragraph, how it looks like. He says the word as well, but the gesture made it clearer, that it looks as a block and has a unity. But the gesture is something natural.*

In another instance, the same teacher suggests the difference in temperature by using a the index finger and marking three different levels in the air, in a descendent move (see Figure 7.14.) In this case, the complementary character of the gesture in providing meaning works by showing a different picture from the one expressed verbally. The teacher says that the temperatures are ‘different’ while the gesture shows the progressive decrease of temperatures that is suggested only gesturally.

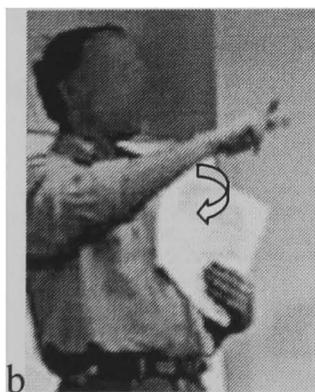
Figure 7.14. A combination of abstract deictics and illustrating gesture to suggest different temperatures around the world

The gestural space identifies an imaginary map of the world, while the hand gestures suggest decreasing temperatures.



a #3.21. *the temperatures*

Specification of gestural symbol, the finger will represent ‘temperatures’.



b #3.22. *<in different parts of the world>*

Zigzag move to identify decreasing temperatures.



c #3.24. *they are always <different>*

End of gestural explanation.

One of the students shows how she considers both systems, verbal and gestural, when constructing the meaning:

Nahiko: *Different [repeats zigzag gesture]. This is to suggest the different temperatures in different parts of the world. Because the temperatures are changing from thirty, twenty, ten [repeats gesture]. So they are always different [repeats gesture].*

The teacher's gesture triggers the learner's mental representation that is more complex than the identical reproduction of the lexical item. She actually explains that each move marks a different level of temperature, and her abstract gesture locates either different lines on an imaginary thermometer, or different imaginary locations around the world from the North Pole to the Ecuador. Nahiko expands verbally the meaning perceived in teacher's gesture and she repeats the gesture three times. This repetition translates a sense of unity given to the whole explanation, although each of the three identical gestures has a different function. The first one indicates that the student noticed the relationship between gesture and its lexical correspondent 'different', which the gesture is supposed to complement or explain. The second reproduction of the gesture illustrates the learner's own perception of the meaning in the teacher's gesture, by verbally specifying in numbers the decrease in temperature illustrated only gesturally by the teacher. Finally, the third reproduction of the gesture by the learner concludes the explanation and emphasises the gesture-word correspondence one more time.

Teachers also used emblems (gestures with a well-known verbal equivalent) simultaneously with the lexical correspondent, and these gestures were perceived also as helping understanding. When using the phrase 'a little bit', one of the teachers made the familiar gesture of bringing the index and the thumb in close distance of each other, but without putting them in contact (see Figure 7.15.).

Figure 7.15. Emblem gesture to suggest the expression 'a little bit'



#2.42. *so there is a little bit of physical (inclusion there)*

One of the students who noticed the gesture made the following comment:

Eunice: She does this for 'a little' [reproduces gesture] and you can associate the word with the idea. Everybody does this to show 'little'. The gesture and the idea are about the same thing. This is a universal gesture, we all do it and we all understand it.

Two other students make similar comments on the same gesture to underline the perceived universality of the meaning in the case of this particular emblem (Ronaldo: 'This is a gesture everybody knows or does') and the implicit knowledge that this gesture has a precise verbal equivalent (Marcus: 'She is repeating the word with her hands'). However, the three students attributed different functions to the gesture. Eunice says that the gesture stimulates her mental association of the word with the idea of 'little' or 'some, but not much'. Ronaldo thinks that the gesture clarifies his understanding of the idea, while Marcus considers the gesture as irrelevant, as he is familiar with the lexical equivalent and does not need a clarification. In other words, while the specific meaning of the gesture is perceived identically by all the three students ('a little'), the function that the gesture has for each of them is independently attributed.

In interpreting another emblem used by the teacher, when she puts the index finger to the lips to express 'silence', Marianne explains how a gesture becomes clarifying and can function as a mnemonic for the lexical equivalent:

If the teacher says 'silence' and you don't understand the word 'silence', then ok, it means nothing maybe. But if she makes the gesture, the teacher says 'silence' [puts index finger to her lips] you understand and you remember the word.

Trainee teachers identified the roles that teachers' gestures had in illustrating meanings expressed verbally, usually by discussing them in relation to the verbal or social contexts in which they occurred. At times, their accounts included comments on the efficiency that gestures had in clarifying meanings, on their relationship with speech and also on the value of gestures they perceived from the learners' perspective. These examples illustrate such views:

Mi Lu: When she explained the words 'spiral', she whirled her finger to show a rotating movement, accompanying thus the simple words 'moving around' with a relevant move that explains the meaning. The students got the meaning very quickly.

Carmen: When she said 'a very big and luxurious ship', she used her hands laterally to emphasise the size. The same happened when she said 'it's a big liner...' moving her hands on the opposite directions to specify approximately the width and length of the liner. When she said 'there are many countries...' she moved her hands in a circling way to pinpoint the various countries and when later on she said 'I hope this ship doesn't sink', she moved her hand from up high going down to try and get the meaning of 'sink' across.

Ming: Her non-verbal behaviour helped her explanations and made her speech clearer. When she used the verb 'to plan' she used her finger to point to her head. As a result, the students would get the idea that she was talking about something related to her mind.

What stands out when comparing the learners' and trainees' accounts are the roles that gestures were seen to play by the two sets of informants. Trainees generalised on the relevance of gestures by showing how they represent visually the meaning conveyed verbally, but did not state the precise role that gestures play in the development of learners' mental processes. Learners, due to their role of direct receivers of the gestures, could identify more precisely the scaffolding role that particular gestures played in their understanding of a given sentence or idea.

7.4.3. Emphasising for relevance

Several learners in the study pointed out the fact that certain gestures were used by the teachers with the purpose of emphasising a key word or idea expressed verbally. The students seemed to believe that, in certain conditions, gestures can highlight the communicative value of teachers' speech by marking through hand or body moves a certain segment of the verbal input:

Liang: Usually the good and funny teachers use body actions when they are teaching. But you cannot gesture for every word, so you normally make gestures when you use a new word or you say something important, which you want the students to notice.

Reyno: If he does a gesture, it means he says something important. He would not make gestures for ordinary words, unless it helps his speaking.

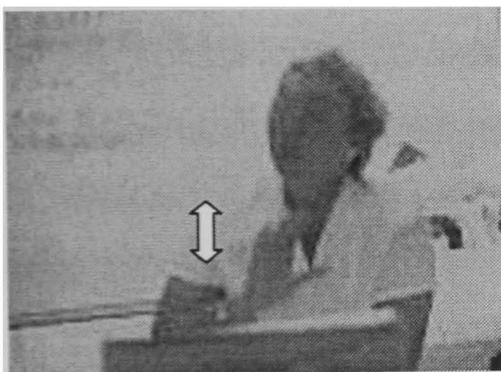
These are important beliefs expressed by these two learners, who were not singular cases. One of them is that teachers would mark gesturally some words, in an almost conscious manner, in order to increase their saliency when they were seen to express concepts or ideas of increased relevance for the learners. Something that is

'important' might be a new word, an explanation of a concept, an important idea, an answer to a question etc.

Learners also indicated that gestures are seen as useful not only by the viewer, they are also serving the speaker's necessities and presumably help the fluency of speech especially when speaking in a foreign language. Gestures performed when 'searching for a word' or helping to 'find an idea' were mentioned by several learners. Finally, the learners' view that one uses gestures for key ideas implies the belief that language and gesture are in a close synchrony, i.e. that certain gestures correspond to the main linguistic segments. Speakers are seen as conveying a meaning simultaneously in both channels in order to insure its receiving by the interlocutors.

The main types of gestures people use to mark the important parts of the discourse are beats, defined as simple flicks of the hand used to reveal the speaker's conception of the important parts in a sentence. Beats have always the same form, a simple flick of the hand, produced in two moment phases (usually up/down, as shown in Figure 7.16.)

Figure 7.16. Using beats to mark the important parts of a sentence



=2.13. we think of these activities (as just being physical)
Beats: RH emphasises the words with hand beats.

Learners were not very alert to teachers' produced beats and only few instances were identified in all accounts, when learners discussed beats as 'normal' gestures that all people produce spontaneously when speaking. As beats are very quick gestures, it may be the case that learners do not have the time to notice them. Also, beats are gestures that translate the speaker's conception of the discourse, so it may be the case that they function mainly as gestures for the speaker rather than for the audience.

A technique used frequently by the teachers in order to emphasise meanings for their relevance was the abstract pointing in the air with the hand in a cup shape when pronouncing a key word or a new word. Usually the hand would rise in the air and point in front of the teacher when pronouncing the stressed word.

- #3.32. T3 What is the connective here?
EC + Abstract deictic: EC shifted between Ss in class, collective glance, and LH, points in air, hand in cup shape, palm down.

This gesture was commented by the students in the class as emphasising the important word in the sentence:

Kali: He pointed at something in the air, like saying 'focus on this, this is what you need to tell me, this is the important thing in this sentence'. He wanted us to concentrate and find the connective in the sentence.

Liang: He is talking about the cause and the effect of something, so he needs to stress the important word which links them. Here we need a connective, so he marks it clearly with the hand in the air and then you know what should be the focus of your answer.

Both learners imply the idea that the message given by the teacher in this case is conveyed through the concrete character of the concept represented symbolically by the teacher's hand. Although the verbal message is very clear, also marked by intonation, the gesture comes to complement the structure, by adding a visual dimension and emphasis on what is seen as the essential unit of the communication.

Trainees identified other NVB codes apart from gestures that teachers used in emphasising the important aspects of the verbal input. They made remarks on the emphasising use of teachers' voice or eye contact, which were used in complexes of behaviours rather than in isolation:

Michaela: When she wanted to explain a word or emphasise something, she raised her voice for the important words or ideas and looked straight at the learners. For example, when she emphasised 'four years' she raised her voice at the word 'four' and showed four finger with her hand, checking with her eyes if they understood.

Mi Lu: Sometimes the teacher would slow down the speed of her speech and at the same time stick out the forefinger to emphasise the main words in a sentence.

These examples might imply that speakers, in this case teachers, are seen to emphasise the key parts of their verbal input through several channels to ensure that the receivers perceive the emphasis and pay closer attention to the words.

7.4.4. Making comparisons and marking contrasts

There were several instances identified by the learners when teachers used gestures to compare two concepts or mark the contrast between them by metaphorically separating them in the gestural space. When discussing a relationship of lexical antinomy or partial synonymy, teachers used to involve both hands in representing the concepts involved and the relationship between them.

In *Class 1*, a learner uses the wrong tense form for a past action. When explaining the difference between past and present, the teacher uses two successive metaphorical gestures. Initially, she draws an imaginary line in front of her, then she locates on this line the two tenses, the present placed in front of her body (#1.48.) and the past placed laterally (#1.50.). Her hands are in a container shape, as if ‘holding’ the concept for present and then she moves them along the imaginary line for ‘past’:

#1.47. T *Think about the time when you tell the story*
Iconic: LH draws a long horizontal line in air.

#1.48. *You are here, now*
Meta: BH facing each other, fingers curled, mark the space in front of her body.

#1.49. *and you are telling someone*

#1.50. *what happened with your watch in the past*
Meta: BH facing each other, fingers curled, move laterally to the left on the horizontal line suggested in #1.47.

This gestural combination is interpreted as a single meaningful unit by the learners in the class, who comment on the supplementary value of the information conveyed non-verbally:

Vladimir: *I did not use the correct tense, so she tried to make me imagine the difference by having this line of tenses. The present is close to you, the past is far away and you need to think of this difference when deciding which one to use.*

Laura: *We know the difference between past and present, but she makes it clear once more. You realise that you cannot use the same tense in both situations as these actions are not happening at the same time. When something is gone, you need to use past tense.*

Although Vladimir’s comments might seem complex for a relatively simple instance of negative feedback, it appears that he perceives the gestures involved as having a

clarification role. He also associates the last gesture of something that happened some time ago with the necessity of using the past tense. He does not repeat the teacher's gesture, but he rather uses a verbal equivalent ('gone' instead of 'forgotten').

As students in *Class 1* seemed to need a supplementary explanation for the use of past tense, the teacher continues the instance above with another gestural combination to classify the use of the tense:

#1.58. *You could imagine the past tense*

#1.59. *as a collection of little boxes /*
Iconic: BH index fingers draw a square in front of the T.

#1.60. *little stories that are finished*
Iconic: BH index fingers draw in air two other squares laterally to the left.

#1.61. *and are put on a shelf.*

Marianne analyses the instance in the following words:

She does like this [draws two parallel squares in the air with her index fingers one next to the other] to suggest different times. The one far from her body is for the past and the one close to her body suggests the present. This is like different boxes. Each story in the past has a box of its own. So if a story is put in a box and finished, then it's past. Because of her gestures here, it is very easy to understand the past. Past means an action that is closed in a box and put on a shelf, in an imaginary way, of course.

Marianne's last comments make clear the inner analysis she has developed. She is now relating an event in the past with a place in an imaginary box somewhere on an imaginary mental shelf. Two of her classmates comment in a less metaphorical way on the significance of the same gestural instance:

Daniel: *She is explaining that there is a difference when you speak about something in the past or something in present or present perfect. So you use past when a story is completely finished, when it does not affect you anymore.*

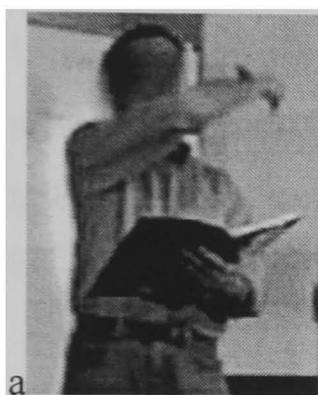
Vladimir: *The action is confirming her expressed ideas. The graphic representation of the time through boxes is used to help our understanding of how to separate past from present.*

In the two extracts above, which refer to the explanation of using the tense, *Teacher 1* uses two different gestural combinations to suggest the difference between 'past' and 'present'. In the first instance, past and present are located on the time line through simple pointing in air. In the second instance, the teacher uses her index fingers to

concretise the two concepts as imaginary boxes. These examples indicate the nonstandardized quality of gestures, as speakers can choose the gestures through which to represent a particular idea or content of speech. Different speakers might thus choose the same gesture to represent ‘past’ because the content of gesture is similar, however variations are allowed and depend on the speaker.

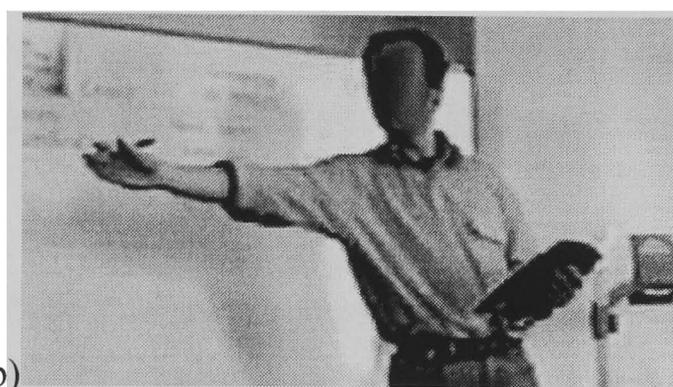
There were however certain gestures which appeared as standard in teacher’s representations of past, as they developed as emblems in the class context. For example, teachers appear to use gestures such as the waving of the hand(s) behind shoulder, the lateral waving of one or both hands or the pointing with the index finger behind shoulder to suggest a past action or the use of past tense. When a comparison between tenses is being made, teachers would use the gestural space to clarify the two tenses by marking them in different locations (see Figure 7.17.).

Figure 7.17. Abstract deictic gestures used to identify the use of past tense after the connective ‘as a result of this’ as opposed to the use of future tense



a)

#3.81. *(and this) it always refers to something beforehand*
Abstract deictic: RH describes an arch in the air, going behind the teacher’s left shoulder.



b)

#3.82. *'cause you can't say / this / this to come*
Abstract deictic: RH arm straight, points laterally on the right side.

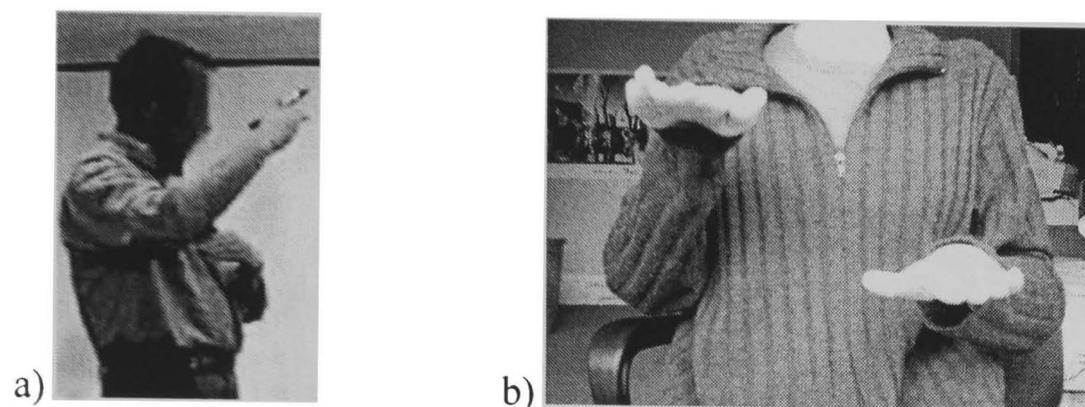
The ways in which teachers decide between the different gestures appear to depend on their individualised ways of processing the same reality. What is important is their impact on the learners, as learners in *Class 1* interpret both of their teacher’s gestures as clarifying the concept of ‘past’, even when this is represented in a variety of gestural forms. Laura, a learner in *Class 1*, explains that connecting two concepts in the gestural space is natural, an intrinsic condition for a clear message:

She is talking about the connection between past and present. When you are connecting two things or two concepts you do a movement in two ways between them to suggest their relationship. If you don't connect them through gesture, it is not clear how they relate or even what do they mean.

The use of two opposite places in the gestural space to distinguish between different concepts or ideas occurred in all the teachers' behaviour (Figure 7.18.).

Figure 7.18. Metaphoric gestures suggesting a comparison between two different concepts or ideas

Each hand represents a concept and the gesture suggests the difference between them, by placing them at different levels in the gestural space.



Teacher 1 discusses the difference between 'cost of living' and 'standard of living'. While giving examples to illustrate the meanings of the two words, she marks the relationship between them by counter-balancing her arms in the centre of her gestural space (Figure 7.18. b.):

- #1.2. the cost of living
Meta: LH fingers are held in a cup shape on the left side of body.
- #1.3. is how much people pay for things
Beat: LH as above in #1.2. beats once in air.
- #1.4. and the standard of living
Meta: RH, fingers in a cup, palm down, at a higher level than the LH above in #1.2, which is still maintained.
- #1.5. is how much money people <have or earn>
Beats: RH beats twice in air to stress the two words.

She does not actually explain in words the opposition between the concepts, as her gesture implies it. Her hands balance in opposite directions, each hand representing metaphorically one of the concepts.

In his explanation of the gestures, Jose refers to an implicit understanding that the two hands function as symbols for the two lexical items discussed. He talks about the two words as being 'different' and then he discusses the opposite directionality of the two hands in the gestural space and relates it to the opposition in lexical meanings:

She is talking about two different things which are easy to confuse. So she is moving her hands like this [repeats counter-balancing gesture]. She is trying to explain that the two things are relatively similar, but not synonyms, that there is a relationship between them and she tries to suggest this with her hands. Each hand means one thing. One hand shows the standard of living and the other one shows the cost of living, so if there are any confusions, we will now understand they are different.

Two other learners explained the same complex of gestures as follows:

Daniel: She explained the difference between the cost of living and the standard. She divides the things and describes the difference between them.

Vladimir: She is using her hands to compare the two things, the cost and the standard of living, like in a graphic. She is trying to make it easy to see that one thing is different from the other, as one hand is placed higher than the other.

Although expressing a similar view when reporting on the symbolic value of the hands performing the gesture - i.e. the hands placed at different levels in the gestural space representing different concepts - the functions learners attribute to the same non-verbal action are slightly different. Jose considers that the main role of the move is to clarify any potential confusion, Daniel sees the same move as an intrinsic part of the explanation and Vladimir interprets it as a visual auxiliary to an otherwise sufficient explanation. Although, in most of the cases, learners' interpretations of a gesture were similar in meanings and the same function was attributed to the same gesture by different individuals, there were several instances with slight differences in individuals' actual understandings. Each learner highlights the function of the gesture that was of specific importance for him or her at a given moment, but all retain the core meaning of the comparison between the two concepts. This individualisation of the gestural meanings may reflect not only differences in learners' definitions of a given situation, but also different learning needs.

The trainee teachers identified similar examples in which teachers used gestures to mark contrasts between two different ideas or concepts:

Michaela: The teacher gave an example at the beginning in order to explain the exercise. She asked a question and suggested two possible answers 'Yes, I have' and 'No, I have not'. While saying the answers, she moved her hands right for the first answer and left for the second one.

Ming: She explained the construction 'either...or' and then she gave several examples like 'either sleep, or study'. For the first part of the phrase, she

moved her both hands to the left side of the table and then for the second part of the phrase she moved her hands in the opposite direction of the table.

The examples discussed above indicate that teachers are seen to regularly use the gestural space to mark the difference between two concepts or ideas. Either by locating the two concepts in the two sides of the gestural space or by using the hands to represent the concepts and the unequal relationship between them, teachers appear to make dichotomies clearer by visualising in a concrete manner a relationship which could be more difficult to understand if explained verbally only.

7.4.5. Eliciting or giving clues for meanings

During the routine activity of giving explanations for some vocabulary items or clarifying ideas, teachers would often be seen to try and elicit words or ideas by using representative gestures, with or without speech. This action would normally occur when a key word was discussed, a word which was particularly important for understanding the whole context in which it occurred. It appears that teachers recognise situations when learners are puzzled, confused or not participating and the gestural clues become part of the more general procedure of encouraging learners' direct contribution to the class.

In *Class 2*, the teacher elicits, with the use of extensive gestural hints, the phrase 'physical activity' as opposed to a 'mental activity'. After discussing some concrete examples of physical activities, the interaction follows like this:

- #2.13. because we think of these activities
1,2,3 Beats: RH stresses the words with a flick of hand, palm flat.
Posture + EC: T sits down while talking, collective glance.
- #2.14. as just bei::ng (...)
1 Beat + Emblem: BH waves twice in air, hands flexed at 45°, palms reversed to T's body ('Come on, say it').
2 Emblem: BH showing muscles flexed.
- #2.15. S automatic
- #2.16. T <yes>
Emblems: BH counter-balance back and forth ('more or less' gesture), also quick head nod.
- #2.17. S forever

- #2.18 T forever / we / we learn it
1 Concrete deictic: BH open slightly towards the learners' direction.
2 Beat: BH beat laterally, arms at 45°.
- #2.19. and then we // we never forget/
1 Concrete deictic: BH close together on chest, palms one of top of the other.
2 Meta + Emblem: BH open widely towards the students at 90° and head nod.
- #2.20. like a reflex /
Iconic + Emblem: BH counter-balance back and forth three times and head nod.
- #2.21. like a reflex we say
- #2.22. and they also involve just the:: (...)
1 Beat: BH slightly open in air at 45°, beat in air.
2 Emblem: Arms flexed, like in #2.14., gesture 2.
- #2.23. S physical
- T (...)
Posture: T stands up.
- #2.24. T yes (...)
1 Concrete deictic: LH stretched, points with index finger to the student who answered.
2 Concrete deictic: LH palm up turns up and waits for student's answer.
- #2.25. S physical aspect
- #2.26. T <that's it>
Emblem + Posture: Head nod, then T sits down at end of turn.
- #2.27. They just involve a sort of physical / a physical learning process/
Emblem + EC: Head nod and direct EC with different students, individual glance.

This instance of co-operation between the class and the teacher in the attempt of finding the generalising term 'physical' has several moments in which the teacher supports the learners' attempts of finding the right word with relevant non-verbal cues. In line #2.13., the teacher recruits the participation of the other learners by using the 'we' pronoun and pausing, with simultaneous beats of the hand to suggest the importance of the idea. The request for participation is not explicit, but embedded in the waved hand gesture and the long pause that passes on the turn to the learners. At

the same time, the teacher flexes her muscles in a very clear clue that makes the learners understand that help is available (see Figure 7.19. below).

Figure 7.19. Eliciting the word ‘physical’ through an emblematic gesture produced in the absence of speech



#2.14. *(we think of these activities) as just be::ing (...)*
Emblem: BH tensed, arms up, fists closed.

However, the gesture is not working in the desired way, as a learner uses the word ‘automatic’ and another learner says the word ‘forever’. This makes the teacher change the clue to another gesture, an illustrator for the word ‘reflex’ in line #2.20. (see Figure 7.6. above). This intermezzo is meant to clarify the context before returning to the process of elicitation. In line #2.22., the teacher returns to the initial gesture of flexing the muscles during a suggestive pause, a gesture which functions now as a clue to the word searched as well as a cohesive tie which re-establishes the focus of the elicitation moment. The same technique of waiting and giving the turn is employed in lines #2.22. and #2.24., when the teacher waits for the learners to offer the answer and then, once the answer is given, she points for reinforcement in the direction of the student who answered and nods for confirming the answer (line #2.26.). The moment ends with the teacher abandoning the eye contact with the class and changing her posture as a sign of moving on to another sequence in the lesson.

The selection of non-verbal cues in the above extract illustrates the flexibility with which speakers can involve gestural cues. The gestures in the above instance were considered probably salient by the teacher, as the flexed muscles are a universal emblem suggesting physical force, while the iconic used to represent the ‘reflex’ suggest the automatic and repetitive character of it. The teacher chose to show an emblem as an initial cue and when this did not seem to achieve the desired effect, she employed an iconic gesture in direct relationship with speech.

The ways in which teachers give clues can include thus iconic gestures to suggest the shape, the size or the content of an object or the performance of an action. The features to be represented in the gesture would be made on teacher's personal or idiosyncratic choice with the intent of making the meanings connected with them as salient or as explicit as possible.

There are also facial expressions which teachers were seen to use as clues for an attitude or emotion. A teacher in one of the classes observed elicits the word 'disgusting' by showing the appropriate expression in the face:

- #1 **T** If you put something in your mouth
Iconic: RH in pouch brought close to the mouth, index finger touches the tongue.
- #2 and you don't like the taste
Emblem: head shake right-left.
- #3 you go (...)
FE + Posture: grimace to suggest disgust, arms semi-open, palms facing the body, head and shoulders drawn back
- #4 you say it's (...)
FE+ Deictic: the same facial grimace as above, also teacher points to the word 'disgusting' written on the board.
- #5 **Ss** disgusting

Like in the previous example, the teacher tries to make clear through a long pause and a facial and postural clue that learners are expected to co-operate and identify the lexical item searched for. The pauses in the third and fourth line are filled with a repetition of the clue to direct the learners to the answer. However, as the facial grimace alone does not elicit the answer, the teacher abandoned the indirect elicitation after the third line. By pointing to the word on the board, the teacher attempts to ease the learners' task by directing them clearly to the answer. Gestures of pointing, mainly of concrete pointing like in the example just discussed, were another device seen to be used by teachers in eliciting words.

It is difficult to say what triggers the teachers in producing a NV elicitation cue. It probably is the case that teachers produce NV clues when they anticipate that learners might have difficulties in understanding and usually involve representative gestures which are ample and clear enough for the learners to recognise them. When

the technique is not successful in triggering the right answer, as some of the above example showed, teachers seem to try alternative, more salient cues or just abandon the elicitation and offer the answer. Ronaldo explains how he thinks that the teacher perceives the students' difficulties and how a relevant complex of NV clues triggers the relevant word:

It seems like the word is on your tongue and you don't remember it. And she knows you know the word but you can't remember it. So she does a jest [=gesture]. Here she does this [shows his muscles] to make us say the word 'physical' or 'exercise'. And you know what this move means and then you know what word you are searching for.

Here she gave us a hint. At the beginning I did not think that there is something physical when talking in a foreign language. But then she stressed her pronunciation with her mouth position when she said the 'th' sound and then I thought about the movement of the tongue, of the lips and I understood what she meant.

Another aspect of interest is the combination of gesture and speech in eliciting through NV cues. Sometimes, the non-verbal clue is given with a lexical equivalent, while other times the teacher would pause and produce a gesture during a silent interruption, as seen in some of the examples above. In *Class 2*, the teacher frequently fills the silent pauses in speech with eliciting gestures, as shown in Figure 7.9. above.

- #2.65. your good ear enables you to (...)
1 Concrete deictic: RH index finger points to mouth and rotates around mouth four times to suggest the mouth shape.
2 Concrete deictic+ Iconic: RH fingers point to mouth in a pouch shape, then fingers open to the students' direction, then the same gesture is repeated with BH.
- #2.66. S pronunciation?
- #2.67. T yes / <to pronounce> / to produce the sound of the language
1 Concrete deictic + Emblem + FE: RH points with palm up to the student who answered and head nod and smile.
2 Concrete deictic+ Iconic: Gesture 2 from # 2.65. reproduced only with RH.
3 Meta: RH fingers kept together in a pouch shape.

The teacher's gesture of suggesting an imaginary explosion of sounds coming from the mouth triggers the learners' attempt of trying to guess the word. Normally, when eliciting, this teacher reproduces the gesture more than once to give the students time to figure out the lexical equivalent and also to mark the lexical equivalent searched for its relevance. Eunice explains:

Sometimes you search hard to find the word that you need and the teacher knows that. She gives you time and she makes again and again the same move to help you get it. Normally it is quite easy to guess it as you see the move and you get an idea about what is it all about. You also know the topic, because you talk about it all the class and all the words you use are somehow connected, from the same family.

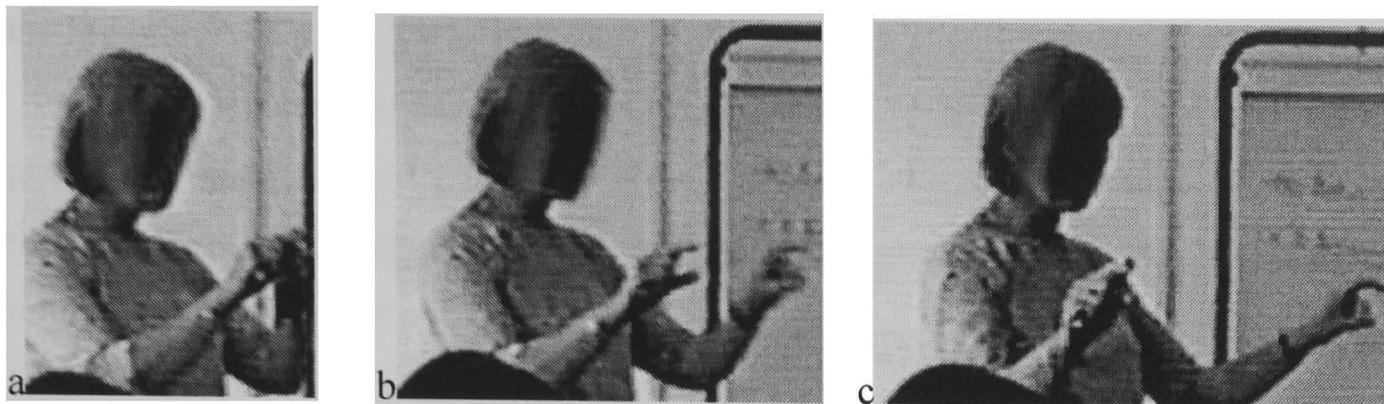
Trainee teachers' accounts contain similar examples of instances in which representative gestures and other NVBs were seen as eliciting answers or giving learners relevant information about the words searched for. Trainees discussed the conditions in which gestures can become relevant clues for eliciting meanings, mentioning clarity and their relevance in the given context mainly. Iris says in this sense:

These gestures [providing clues] need to be clear and relevant. If students cannot see them because the teacher is sitting down or is behind the desk, they cannot figure out the meaning. If gestures do not give a clear picture of the meaning, again they are not efficient. For example, a teacher who elicits the word 'writing' by opening the notebook will be less successful than another one who imitates the action of writing with a pen. Teachers need to make clear gestures and good gestures, otherwise the learners will end up being more confused than helped.

7.4.6. When gestures fail to clarify meanings

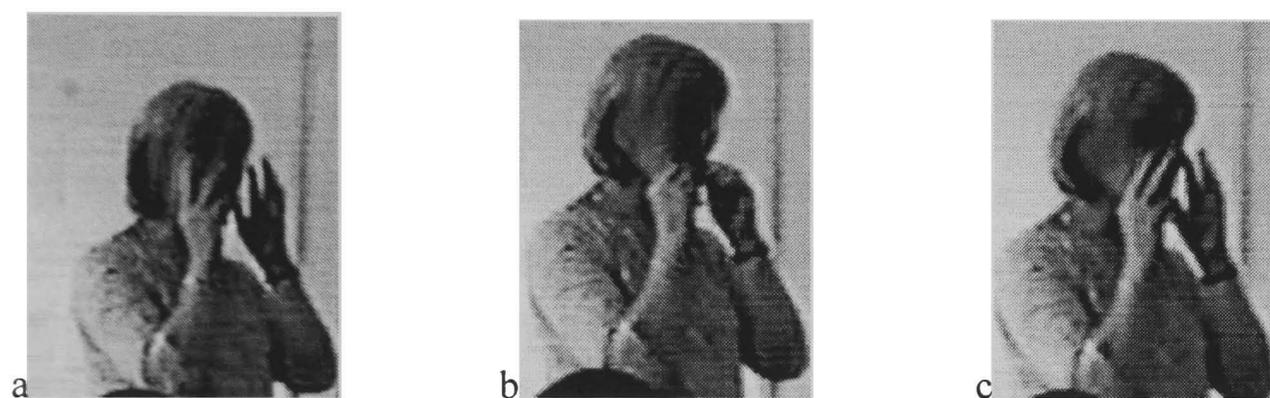
Learners' accounts indicate that they generally rely on teachers' gestures to aid understanding. However, gestures used by the teachers in direct relationship with the semantic content of speech were not always interpreted as useful in clarifying meanings. Teachers appear to count on learners' ability to recognise and interpret their gestures accordingly. But this expectation is not always met by the learners, who might lack the common background with the teacher that allows for a shared gestural interpretation. In such cases, gestures which might be perceived as helpful by the teacher have the effect of confusing or even misleading the students. In *Class 4*, the teacher explains the words 'subtitle' and 'dubbed' with ample gestures, probably considered by the teacher as illustrative for the meaning of the two words. Figures 7.20. and 7.21. below show the gestures used to elicit and/or explain these two words.

Figure 7.20. Gestural illustration for the word ‘subtitle’



#4.41. you can have the translation at the bottom #4.44. that's called (...) (subtitles)
The teacher illustrates the shape of the subtitle and its placement at the bottom of the screen and suspends the speech and gesture in 7.20.c. to give the learners time to say the word elicited.

Figure 7.21. Gestural illustration for the word ‘dubbed’



#4.47. and if the people are speaking your language
(the film is dubbed)

T flutters her fingers to suggest the sound production in a film.

Most students in *Class 4*, when interviewed, were not able to explain the lexical equivalent of the gestures used by the teacher in the two situations above described and considered them as misleading or confusing. The gesture for the word ‘subtitle’ was seen by the learners as suggesting ‘something long’ or ‘the time of a movie’. Here are some of the learners’ opinions on the teacher’s gesture for ‘dubbed’:

Mayumi: *I don't know the word, so I did not understand what she means here.*

Narun: *I don't remember the word she tried to suggest.*

Keiko: *This means speaking probably, I am not very sure.*

Kandar: *This gesture means ‘stupid’ in Japan. You do it when you talk about a person who talks too much without saying anything. Or somebody who is not very educated. It wasn't clear what she meant with this gesture. But I saw the word written and I tried to guess the meaning in the context.*

Only one of the students interviewed, Ayurda, explained the gesture as a clarification act for the word ‘dubbed’. The others’ comments reflect the strategies they used to

cope with the situation by taking the larger context into account and trying to guess the meaning.

The situation reflected in the examples above casts some uncertainty on the potential of gestures to clarify meanings in all situations and for all learners. It reflects the fact that the interlocutors' potential of understanding the gestural meaning, by recognising it and by sharing the interpretative framework with the teacher, varies from one individual to the other under the influence of various factors. In this case, Kandar identified the incompatibility as cultural, while Mayumi talks about the linguistic incompatibility that affects her meaning attribution for the gestures. Kandar thinks that the gesture has a particular meaning developed in the two cultures, his own and the teacher's, and this explains the different meanings they might attach to the same gesture. Mayumi implicitly suggests the partial compensatory role of gestures in clarifying the lexical meaning, without their full potential of explaining it entirely. In her case, if she does not know the lexical equivalent, the gesture is of no help. The extracts also show the individuals' different strategies in using a combination of clues in determining meaning. While Mayumi seems to rely entirely on her verbal understanding, Kandar considers that he uses the context and tries to make sense of the situation.

Trainee teachers did not identify many instances when the gestures that teachers used generated misunderstandings or confusion, a fact probably due to their position of observers rather than learners. Sato however noticed that:

Although most of the gestures were helpful for the students, one gesture could be doubted as to its effectiveness. When the teacher drew an imaginary horizontal time line in front of her, the word order was shown from her position. Therefore, what she showed as past could have been taken as future by some students or vice versa.

Trainees also discussed the conditions in which gestures can lose their constructive role in the communication and become sources of confusion and misunderstandings. They mentioned factors like learners' cultural display rules, gestural clarity and visibility as conditioning their function in clarifying meanings and facilitating learning:

Tina: Students from different cultural backgrounds may give distinct interpretations to the same movement. This may lead to misunderstandings. The teacher's own culture may affect her NVB. If her culture is more conservative, there may be less facial expressions and gestures.

Ariadne: All learners were able to see the teacher's actions and this increased the efficiency of gestures. If learners sit in rows they cannot always see the teacher's actions, especially if she is sitting down, and this limits their possibility of getting the meanings from the gestures. Also if gestures are not clear enough, they might confuse the learners, especially when pointing at a person to speak or identifying groups.

The fact that some gestures obviously intended by the teacher as explicit clues for meaning do not succeed in taking these meanings across to the learners does not diminish the value given by learners to gestures. It seems reasonable to argue that gestures have the potential to communicate meanings and trigger understanding, but their communicative function is fulfilled only through the successful interpretive action of the viewer, in this case, by the learners in the class.

7.5. Creating the conditions for learning

In certain situations, teachers' gestures were seen as orienting learners' attention to relevant aspects of the task or interaction or to work as helpful aids in the memorisation of vocabulary items, grammar rules or ideas. These contexts were seen by the learners as creating the conditions for the learning process and appeared to be valued by them. The following two sections describe the types of gestures perceived as creating favourable conditions for learning and the contexts in which these occurred.

7.5.1. Orienting attention

A set of actions teachers performed during the classes was perceived as facilitating concentration on a person or task during the interaction as a pre-condition for learning. Teachers used certain gestures, mainly concrete deictics or pointing gestures, to draw the learners' attention either to a person or to an object or task. In *Class 2*, the teacher talks about the example given by one of the students, Eunice, and at the same time she is pointing with her arm to the student:

Figure 7.22. Orienting attention of group through pointing



#2.64. (everyone understands) *what Eunice says*

Concrete iconic + EC+ Emblem: RH points with the palm open to Eunice's direction, also keeps EC with different students in the class and head nods twice.

Three of the learners in the class considered the gesture helpful in orienting their attention to the student given as an example, while another student, Marcus, considered the gesture an unnecessary supplement:

Ronaldo: *Here she is inviting the people to pay attention to what Eunice says.*

Armand: *She indicates that she is talking about Eunice's answer. So she points at her to take our attention to what Eunice was saying.*

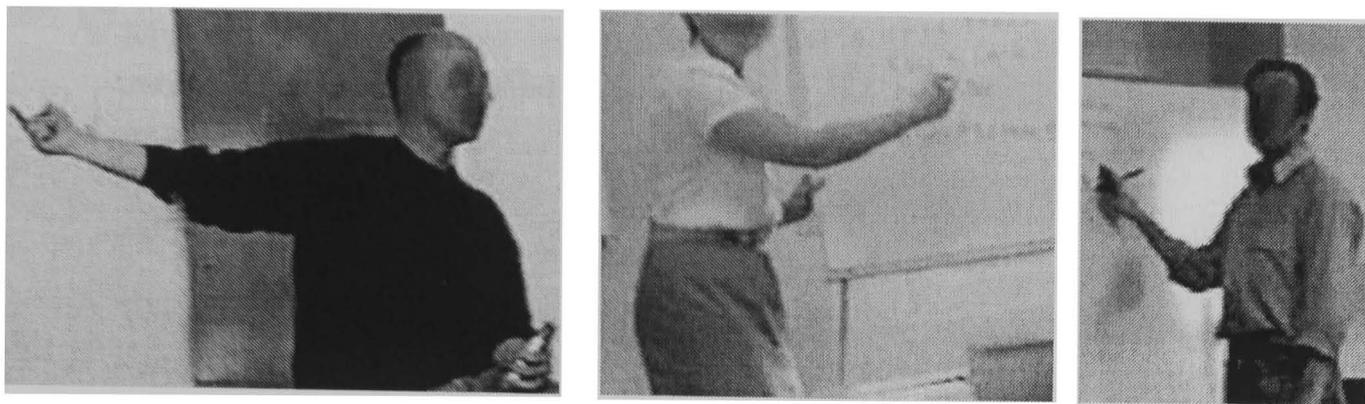
Eunice: *She is driving the attention of the whole group to me, in this case. She indicates me with her hand and all the group knows that she is talking about me. And they can pay attention to myself. Not to me as a person, but to the context, to my example. I made a mistake (...) and she corrected me and oriented all the students to my example.*

Marcus: *She said her name, Eunice, and at the same time she pointed at her with her hand to confirm that she talks about her. To me, the movement is not necessary here. We all know Eunice so she does not need to show her with her hand.*

These interpretations given by the learners to the same gesture illustrate again the variable character of individuals' perceptions. While, for three of the participants, the gesture is attention orienting or emphasises a given example, for Marcus the move is superfluous. What Marcus perceived as a repetitive move, others perceived as emphasising and as a useful marker.

In other situations, teachers were seen as trying to orient the students' attention by pointing to certain objects or to the board (see Figure 7.23.)

Figure 7.23. Gestures perceived as orienting learners' attention to an object or to selective words written on the board



When the teacher points to a particular word on the board, Kali explains:

There are two or three things written on the board, so he pointed at one of them and we can see what he wanted to focus upon or to talk about.

Other students gave similar explanations for the same gesture:

Reyno: *He wanted us to watch carefully.*

Nahiko: *It makes us understand where are we or what are we doing next.*

Liang: *He indicates what we should focus upon. It is like saying 'think about this, this is what we are talking about'.*

The translation Liang gives to the implicit message of teacher's gesture - 'think about this'- suggests that the perceived role of the teacher is to determine the immediate action and its acceptance by the group.

In another situation, the teacher is perceived as orienting the students' attention to an example in a book by holding his palm open up in the air, as if holding an open book. Nahiko interprets the gesture as referring the students to the example given in the textbook and as a focus trigger. She says:

If he does like this [reproduces gesture] / hold book/ it shows that he is talking about something which is in the book. For me this is very helpful because sometimes you don't know if the teacher gives a personal example or he discusses an example in the textbook. It is very helpful as I can look up the example in the book.

When students looked confused or lost, teachers were perceived to use the same strategy of pointing to the right example or task to provide help:

Reyno: *I think that Abdul didn't understand the question here. So the teacher is pointing to the white board [repeats gesture] to help him get back in line.*

In a less explicit situation, Marcus takes the teacher's gesture of pointing to her temple as an attention orienting action:

Marcus: *She said that many English words are similar, but have different stresses, ad'vertisement or adver'tisement. So we should put our attention at work to understand it.*

Researcher: *Did she say you have to pay attention?*

Marcus: *Well, she didn't say it, but she puts her hands to her head to suggest 'think' and it's the same.*

This example illustrates how certain gestures are seen as substitutes for the verbal messages and also achieve certain functional properties in the learning context. What, for Marcus, becomes an encouragement for reflection on the difference between the two ways of stressing the same word might be an insignificant gesture in another context or for another participant or it could be given a different meaning. The interdependence between the gestural function and the context in which the gesture occurs is very clear here.

Trainee teachers considered the orienting of learners' attention as a definite stage of the process of teaching and identified gestures and other actions that teachers use in achieving this aim:

Monica: *They were talking in groups, so she stopped them and pointed at the question on the board and they all looked at it.*

Irida: *She was at the board, and then she suddenly turned around to the class to explain some words. She was keeping eye contact with all students while she was explaining the new vocabulary; thus she kept students' attention and focus on her words.*

Although the distinction between the NVBs intended at orienting learners' attention and the ones meant to emphasise parts of the verbal discourse or to check the group's involvement were not very clear, trainees explained the difference between the two functions through independent interpretations of gestural meanings:

Cardik: *She put her hand to the heart, while saying 'my name is...', a gesture which is supplementary to the verbal behaviour. For me, she was orienting their attention to the use of the possessive pronoun, for some learners it might emphasise that she was talking about herself or for others it might be just a superfluous movement. Everybody gives his or her own meanings.*

Cardik summarises the flexible character of speech-related gestural meanings, as having no predetermined standards. The fact that similar gestures are sometimes used by different individuals appears not to be due to the existence of any gestural standards, but to the similarity in the content of their speech. Gestures become thus free to present what is relevant and salient for the speaker and open to viewers' interpretations, often dependent on their immediate needs or concerns.

7.5.2. Facilitating retention and recollection

Most of the students believed that they did not fully recollect the actual gestures used in the class by a teacher. However, learners and trainees shared the belief that teachers' gestures may facilitate the memorisation and the recollection of particular words or phrases. Learners identified a few NVBs that they considered as facilitating memorisation, but expressed the belief that they can function in this capacity:

Marianne: If the teacher says 'silence' and you don't understand the word because you don't know it in English, silence, ok? But if she makes the gesture, the teacher says 'silence' [puts index finger to her lips] you understand and you remember then the word.

Theodor: It makes it easier to understand if the teacher uses hand moves or so. It also helps you remember things, you remember an action he did in the class and then you can locate better what he said and you remember it.

Laura describes how she takes the teacher's action as both a clue to understanding meanings and as a mnemonic aid. The teacher makes the difference between 'present perfect' and 'past tense' and Laura explains how she interprets these actions:

She is representing like a rope around her body and the far end is the past. The present perfect is very near to you, she said, and then she showed like a rope around her waist and the end of the rope which is far away suggests the action in the past. When I saw this gesture, I imagined the rope around her waist and this helps me remember the difference between the two tenses. She also showed little boxes with her fingers to suggest that what happens in the past goes in a box up on the shelf. So you can actually remember these boxes when you think of something which happens in the past and then you know to use past tense.

Marcus expresses the belief that, especially at the initial stages of learning a foreign language, teachers' gestures may work as mnemonics:

One way of learning new words is to memorise the word said by the teacher together with the gestures made when she said the word. And you do this especially when you are a beginner, and you don't have other ways to

remember that word like a dictionary definition or so. For example here [in the class] she is speaking about the mind and she put her finger to the brain to remark the mind, the brain. So if you don't know the word mind, maybe this [repeats gesture to temple] is an indication and you remember the word because you have seen this move.

Other students identified additional conditions in which gestures may function as aids for the memory by specifying the concreteness of the lexical equivalents and the clear connection between them and the gestures used by the speaker. Another important condition was that the students should be unfamiliar with the lexical equivalent in order to exploit the gesture as a mnemonic. Armand said:

If I know the word, I would not try to remember the gesture, why should I?

Trainee teachers also shared the opinion that certain gestures may function as visual memory aids and their production in a subsequent situation may trigger their verbal equivalent:

Elvira: I believe that some gestures are very helpful, especially for the visual type of students who remember a word. It is better if they see it written or they see an action performed simultaneously.

Ariadne: Students can understand easier if they see the movements. They associate gestures with the words and this enables them to remember.

However, despite learners' and trainees' expressed beliefs that teachers' actions may act as useful memory aids, there were few instances when participants identified actual NVBs. The fact that these examples were isolated might be due again to the individual nature of gestural interpretation. The mnemonic function of gestures depends ultimately on the viewers. To claim that a gesture functions as a memory aid requires an elapsed time to show that recollection does take place. As the participants reported on their experiences or classroom observations soon after the class, they did not seem ready to speculate on the potential of precise gestures of acting as memory aids. What they expressed were rather beliefs that this might be one of their functions.

7.6. Reacting to learners' output

A typical characteristic of classroom interaction is the teacher's monitoring of the students' direct participation in the class activity and in providing them with an immediate feedback. There is an implicit agreement between teacher and students that the teacher has the authority to provide the learners with the ultimate validation of

#2.26. T <that's it>
Emblem + Posture: Head nod, then T sits down at end of turn.

Because the answer was hesitant, the teacher identifies the learner who attempted to answer to reinforce his contribution and also gives him the turn to speak. The silent pause in #2.24. is accompanied by the sudden turn of teacher's palm, still pointing at the same student, but in a more gentle manner. The right answer is again confirmed in #2.26. by a strong head nod and then the abandonment of the direct eye contact marks the re-taking of the turn by the teacher. In this case, learners commented as follows the teacher's gesture:

Ronaldo: *Here she is inviting people to pay attention to what I was saying and also she shows that I said the right thing by nodding her head.*

Eunice: *She points at him and gives him time to think and also looks at us to help him or maybe to say that if you give a good answer, she will appreciate it.*

Learners in general attributed teachers' gestures in situations like this with a positive impact on their involvement in the class. The learner involved in the above example, Ronaldo, appreciates the teacher's gesture with the hand open, considering it more gentle and warmer than pointing with the finger. Other learners also commented on the affective impact on teachers' NV actions when they acknowledged learners' answers. Liang summarises some shared opinions:

If you are right, he will look at you and do this [nods] but if you are wrong, he will never do this [shakes head negatively]. In my opinion, if the teacher would do this [shakes head again] you feel bad, you feel that you are not a good student. When you are right and he does this [head nod], you'll have a good feeling, like telling you are good.

The pointing to the student's direction, the head nod and the smile were seen as confirmative actions on the teacher's part that the answer was right or the contribution was appreciated:

Kali: *This student gave a correct answer so he [the teacher] pointed at him [the student] to say like 'you are right'.*

Nahiko: *Here he nods to say that it is a correct answer.*

Mayumi: *She smiles and this means that my answer is good and it makes me feel confident and happy.*

Trainee teachers made similar comments, considering the positive impact of teachers' NV feedback on the learners in most of the cases. While, in some cases, the gesture sufficed in communicating the positive feedback, at other times teachers showed agreement by using both verbal and non-verbal actions:

Irida: She was nodding her head whenever agreeing with a student. She was also putting up her finger thumb (the ok gesture) to praise a good answer and the student felt rewarded.

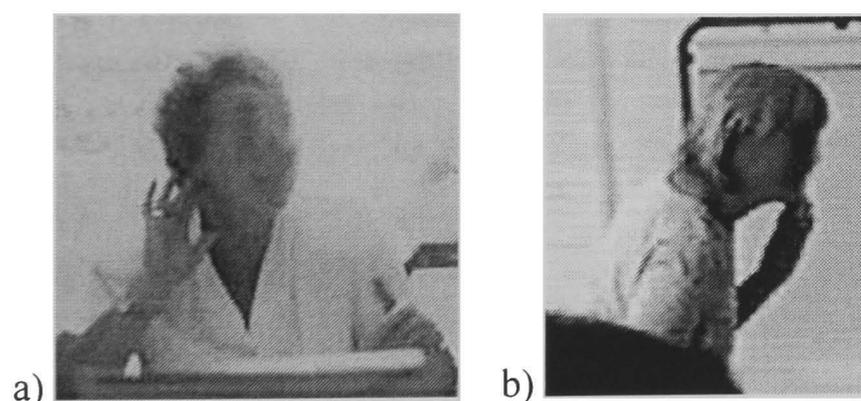
Cardik: She clapped her hand like saying 'well done' and showed that it was the time to move on to another task. This was a good positive feedback for the students.

Sorito: A common use of synchronised verbal and non-verbal behaviour was when saying 'right' or 'yes' while smiling or nodding. When the student got the right answer or a good point, the teacher responded by using this synchronisation. This could reinforce students' confidence and encourage them to answer in the class.

7.6.2. Asking for clarifications

Teachers would often ask students to clarify or to refine their answers whenever they would say something close to teacher's expectation or when their words would be unclear or inaudible. In the latter case, teachers were seen to usually point to the ear with one or both hands, lean forward or make a puzzled facial expression (see figure 7.24. below)

Figure 7.24. Emblems used to ask for clarifications



When the answer would need refinement, teachers would either ask the student explicitly to clarify their answer ('more exactly?', 'can you clarify?') or they would suggest gesturally that the answer can be improved upon. Marianne explains the teacher's gesture of waving her hand or the palm in the air to suggest a partial answer:

This move means 'more or less' so the answer is not that good. If she asks for example what's the meaning of 'book' and you say 'a kind of paper' she will

do this move [repeats gesture] to show you that the answer is not perfect. So you need to make some changes and say it again.

The same gesture is interpreted in a similar manner by other students in the class:

Jose: This guy is not answering correctly. She is then showing with her hand that the answer is medium, not very good, but not very bad. And she does this [waves RH in air] to tell him that there are other ways to say this. He needs to make a correction.

Daniel: She did this move like saying 'more or less' [waves hand] or to show that the countries are not so different, Italy and Spain.

In other instances, the teacher's face was taken as a clear indication that the answer given is not the one expected:

Jose: Her face looks like she is not very sure about an answer given by the student, she wants him to find another solution.

A similar example is given by Claudius, a trainee teacher:

The teacher was changing her face expression in such a way that the students knew that she was not understanding what they said and the response was that they were rephrasing what they had said before.

Alexander, another trainee, explains how the teacher also used the learners' facial expressions as signs that they were having difficulties in understanding a word or a task:

Through eye contact, he checked if they looked confused or if they had any doubts or questions. This happened mainly after giving a command or changing the topic. When he would notice their confusion, perhaps when he spoke too fast, he would then repeat what he said previously, but in a simpler way.

The belief that learners and teachers alike use gestural and facial signals to indicate lack of understanding reflects the shared routine which develops between the participants in the class of co-operating in maintaining the coherence of the interaction through supporting each other's participation.

7.6.3. Disagreeing and correcting learners' output

There were not many instances in the lessons observed when teachers would disagree with the students' output and explicitly correct them. Most of the situations in which negative feedback would be given involved re-casting or repeating the students'

answer. In some instances, when misunderstandings would occur, teachers would make clear that a correction was needed and that the students were wrong. In *Class 2*, Eunice misunderstands the expression ‘having a bad ear’ for meaning somebody who has poor hearing. The teacher provides the explicit correction (#2.55. to #2.83., see Appendix C) and then she elicits the correct meaning from the students. The correction is interpreted as follows by Eunice:

Eunice: Actually, I made a mistake. I thought that having a bad ear means that you don't understand something very well, so I said that I have a bad ear. So the teacher showed me that I made a mistake and then we explained the expression.

Researcher: When did you realise she was correcting you?

Eunice: She showed the shape of her mouth to make us understand that the expression refers to the way you pronounce a word, not to hearing being good or bad. So when I saw her pointing to the mouth I said ‘pronunciation’ and she agreed with my answer. So I thought, aha, so this is not about hearing, but about speaking. I realised that I was totally wrong.

Eunice expresses the view that, in the given context, the teacher made a clarifying gesture that remedied her confusion. She does not clearly specify the teacher’s head shake as the moment when she realised her error, but she describes the process of correction and the stages she goes through in clarifying her understanding of the expression used. She mentions the deictic gesture when the teacher indicated her mouth as making her think of the word ‘pronunciation’, and the teacher immediately confirms it as a correct guess.

On other occasions, teachers would stop the learners directly when talking, in order to clarify a significant ambiguity or misunderstanding. In *Class 1*, a student was confused between the ‘standard of living’ and the ‘cost of living’ in a particular country. Before providing a clarification, the teacher raises her palm to the learner in a ‘stopping’ gesture, which is interpreted accordingly by the student (he stops speaking) and also by the other classmates:

Laura: First she makes this gesture to refuse what Chris said. Because he thought that the two things are the same. So she put her hand like this [hand up, palm facing the audience] to suggest that his answer was incorrect. And later she is trying to give the right explanation and she uses her hands to make things more graphic.

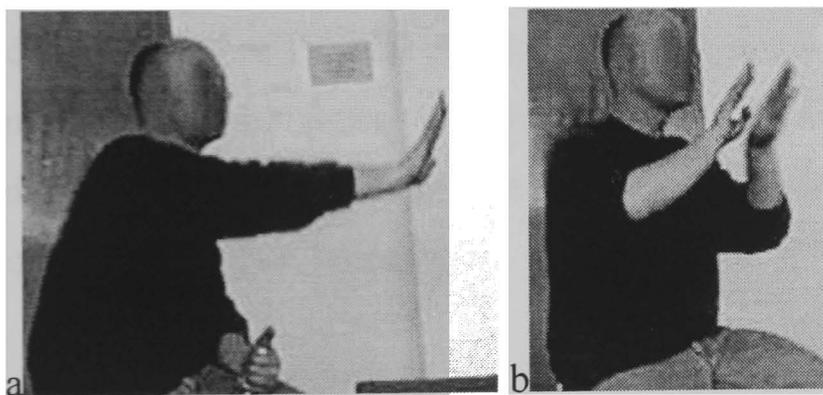
There were other similar situations in which teachers would suggest disagreement without actually expressing it in words. In these cases, learners would immediately

reflect on their answers and attempt a correction. As Laura explains, a headshake works as a clear message in a question-answer situation:

With her head here she says 'no'. She does not say it in words, but you know that she doesn't agree with your answer when you see this. You need to say something else.

Teachers would also wag the index finger or the hand, raise their eyebrows, show a puzzled face, cross their arms or avoid eye contact when they would disagree with some of the students' opinions. In *Class 5*, Romeo is a student who expresses very strong views on supporting the Mafia and considering Italy as the only country in the world with adequate standards of living. At certain points during the class, the teacher seems to disagree with his point of view, sometimes verbally ('I don't think that you can generalise like that') and at other times through his behaviour. When listening to his remarks, the teacher often keeps his arms crossed, nods rapidly or tries to put one or two palms in the student's direction (see Figure 7.25.a.)

Figure 7.25. Emblem gestures indicating disagreement or intention to stop a student speaking



The students interviewed from the class notice the tension and explain it accordingly:

Johan: Romeo is a bit annoying for everybody in the class, including the teacher. Here he leans forward and speaks very loud and after a time the teacher wants him to stop, but he wants to continue. The teacher's face shows anger and stress and then when he can't stop him, he puts his both palms in the air and turns around to the other students, like ignoring Romeo.

Sylvia: It's clear that the teacher wanted to move forward to the next topic and Romeo wanted to talk more. So he just stopped him with his hands, like pushing his words with both his hands.

The trainee teachers also selected instances of explicit feedback that involved particular gestural activities and discussed also the perceived impact these might have on the learners. Their comments reflect the belief that teachers use the verbal and non-

verbal forms of negative feedback on the assumption of the impact that these NVBs may have on their learners:

Elvira: The teacher was smiling every time when she was correcting an answer. I believe that she wanted to make the students feel comfortable with her and the language and not afraid to answer in the future.

Manuela: She put her hand to the ear and said in a normal voice 'I hear lots of people using until with the present perfect'. She nodded negatively the head, raised her voice and said 'this is not correct' and then gave the explanation with a smile on her face. This is a gentle type of correction that includes everyone, not only the students who made the mistake.

Craus: She asked what they did the night before and a student answered 'I read French novel'. She then repeated half of the sentence 'you read' with a raised intonation and paused to wait for his correction. Because he did not answer, she repeated the sentence again showing two fingers for the first two words and then suspending the action and waiting for his correction. He immediately said 'a French book' and she nodded and smiled.

These examples, although limited to certain types of gestures and NVBs that teachers use in providing feedback in the class, illustrate the role that participants' interpretations play in completing the gestural meaning. The instances of disagreement or explicit correction in the classes observed were fairly rare, with the majority of the cases involving corrections of key words or ideas rather than differences of opinion. In general, teachers were seen to try and support learners' output rather than inhibit it.

7.7. Summary

In this chapter, I have indicated how learners and trainees believed that certain teacher NVBs may affect cognitive processes of language learning. I then described the variety of NVBs, mainly gestures, that participants claimed to influence their learning.

The conditions in which teachers' gestures become facilitators of the language learning process appear to vary from individual to individual. In general, learners appreciated gestures that were clear and easy to recognise, especially in situations when they were linked with information that is seen as essential. Not all gestures performed by the teachers were perceived as having the same communicative value. Learners display the ability of selecting the gestures that they used in their own process of learning, according to individual learning needs. They also seemed to

perceive and interpret gestures within both the verbal and non-verbal context in which they occur rather than in isolation.

Table 7.1. on the following page summarises the main cognitive functions identified by the learners and the trainee teachers and the NVBs they associated with each of these functions. Although combinations of different NVBs were sometimes perceived as fulfilling a certain cognitive function, the NVB codes are presented independently in relation to each function, in order to give a more systematic view of the NVBs that were seen to represent each function.

In the next chapter, I will explore the informants' beliefs that teachers' NVBs have also an emotional dimension. I will suggest that learners especially and also observing trainees attribute certain emotional values to teachers' NVBs and this attribution may contribute to the affective bond developed between the teacher and learners in the language class.

Table 7.1. Cognitive functions of teachers' NVBs identified by participants and the NVBs associated with them

MAIN PERCEIVED COGNITIVE FUNCTIONS OF TEACHERS' NVBs	SUBORDINATE COGNITIVE FUNCTIONS	NVBs ASSOCIATED WITH EACH SUBORDINATE FUNCTION
<i>Enhancing comprehension through gestures</i>	Identifying through pointing	Concrete deictics Abstract deictics
	Illustrating meanings	Iconics Abstract deictics Emblems
	Emphasising for relevance	Abstract deictics Eye contact Beats
	Making comparisons and marking contrasts	Metaphorics Iconics
	Eliciting or giving clues for meanings	Emblems Iconics Facial expressions
<i>Creating conditions for learning</i>	Orienting attention	Concrete deictics
	Facilitating retention and recollection	Emblems Iconics Metaphorics
<i>Reacting to learners' output</i>	Agreeing and acknowledging contribution	Emblems Facial expressions Eye contact Concrete deictics
	Asking for clarifications	Emblems Facial expressions Posture
	Disagreeing and correcting learners' output	Emblems Facial expressions Posture

CHAPTER 8

EMOTIONAL FUNCTIONS OF TEACHERS' NON-VERBAL BEHAVIOURS

8.1. Overview

This chapter focuses upon how the learners and trainee teachers participating in the study described their perceptions of the roles that teachers' NVBs played in engaging learners emotionally in the process of language learning. The emotional functional categories developed at the end of the pilot study and confirmed in the main study, with their subordinate functional categories of teachers' NVBs, were as follows:

a) Making an impression

- Looking relaxed and supportive;
- Showing nervousness or lack of motivation.

b) Interacting with individuals

- Encouraging individual participants;
- Avoiding the public humiliation of learners;
- Reacting to learners' non-verbal messages.

c) Creating a positive group atmosphere

- Energising classes;
- Accommodating cultural differences.

This chapter will present the learners' and trainees' interpretations of the above categories and the types of NVBs codes that were identified by the participants in relation to each of them. The first section presents how teachers' general NVB made an impression on the learners in terms of the teachers' own interest and motivation during the class. In the second section, I illustrate the emotional value of the one-to-one interaction between teacher and learners, suggesting that individuals' perceptions and feelings are influenced as much by what teachers *do* as by what they say. The third section of the chapter focuses on the actions which teachers used in developing a sense of togetherness in the class, by stimulating a team spirit and accommodating the learners as members of a multi-cultural class.

8.2. Making an impression

In their classes, the teachers were, to use Goffman's words (1959), 'making an impression' on the students who acted at all time as observers, as well as learners and interactants. At the time of the interviews, all classes were in an already established pattern of interaction, with defined roles and a sense of group cohesion. The impressions participants attributed to their teachers in the class were very similar, teachers being seen as 'doing their duty', as professionals, and also having a humane and warm approach to the students. At times, learners indicated that they were aware of the teachers' interaction as part of the wider process of education to which they were committed. Nevertheless, students talked enthusiastically about teachers' personalities as affecting their NVB directly and about their favourite hobbies or personal details revealed during the class, portraying them as individuals with whom they felt connected emotionally as well as socially. Some learners talked about their teachers as being 'human after all' and having different habits and tics, as well as disapproving of their attitude or reaction in a particular moment of classroom interaction. These instances of disapproval were few and, in general, learners appeared to praise the teachers with a genuine feeling of attachment and appreciation.

8.2.1. Factors that learners considered to determine teachers' NVB style

Some learners talked about individual teachers behaving or talking in one way or another due to their own personality or interactive style. Teachers' gestural style was explained in some cases according to their personality or 'nature':

Kali: He always does an action when he explains something, that's his personal nature, he can't change it.

Armand: In my opinion, this [teacher's NVB] is not a part of the teaching activity, it is a part of a personal expression. It doesn't belong to a special field like teaching it is something personal, which you cannot change if you are teaching or if you are outside the class.

Marcus: I don't think she plans her behaviour. She needs to be understood, so she makes more gestures. This is her habit in real life.

Laura: I guess that some gestures don't show anything concrete. It is simply your way of expressing yourself. Almost like a reflex.

In contrast, other learners considered that teachers alter their behaviour to adapt to the type of interaction and to their role of being in control of the classroom activity.

Vladimir made the comparison between teachers and politicians, who are both 'trained' to control their behaviour to respond to the demands of their professional interaction:

I think that teachers know how to control their moves. It comes with their training and experience. It is similar to the diplomats or politicians. They know how to control their emotions and moves in serious conversations. Sometimes, they cannot use their hands as they want while talking, as this might affect negatively their message or the whole meeting.

This belief contrasts with other learners' views that personality and culture are the main factors determining a teacher's style of NVB. Just as some learners believed that individual teachers behave according to their individual style independently of being in a classroom or outside the school, so others believed that teachers behave as they are 'supposed to', given their status and classroom context. Certain learners thought that factors like learners' proficiency level, the lesson stage, or the immediate context of the interaction directly affected the teachers' NV actions:

Vladimir: She is talking with people who are learning a foreign language, so they might not understand everything. So she tries to find easy words and clear moves to express herself.

Sylvia: When he explains a word or how to do a task, he needs to use gestures to make it specific and clear.

Theodor: You always try and locate your communication partner to see if he or she understands you and likes or not what you are saying. The teacher can see if you are nodding or smiling, or if you look confused, so then he knows he needs to explain more or to use gestures which are expressive, like suggesting the shape of an object or so.

Regardless of reasons given for teachers' NVB, the teacher was mostly perceived as an individual rather than a role performer, as a person with a unique style of behaviour and interaction with others. The kinds of teacher NVBs that learners appeared to approve most strongly were those that indicated a positive approach towards them. In discussing this aspect, learners identified the following complexes of NVBs:

- Showing enthusiasm in teaching;
- Treating students as equals in conversation;
- Seeming interested in learners' opinions;
- Including all students in class activities;

- Being supportive and patient with the learners;
- Showing friendliness and making jokes.

8.2.2. Looking relaxed and supportive

Most of the teachers in the study were considered as enthusiastic in their class activity, the enthusiasm being interpreted through their body posture, abundance of gestures and positive facial expressions. Learners seemed to appreciate teachers who tried and find the right words combined with the right moves when explaining something or when interacting with the students in general:

Marianne: She does nice, dynamic classes. And she also seems happy to be in the class with us.

Eunice: She loves her job. She always moves her hands to activate us. She moves a lot, she does interactive activities at all times. It is also good that she uses materials, like the board or the video, then she moves around to see if students are working or need help. And she is always smiling, patient and in a good mood.

Kali: He moves his body and smiles, but his actions are useful. They help our understanding and show his enthusiasm.

Liang: His body language is very natural, he doesn't have a formal pose. He is just himself at all times and he makes the class relaxing and informal. This is his normal behaviour, he will do the same in the class or if we go to a pub for a drink together.

Liang considers that enthusiasm is conveyed differently by male and female teachers, with the female teachers trying to create a warmer atmosphere but wanting to keep the control. and the male teachers being more informal, but imposing more authority with less effort:

Male teachers and female teachers have different body languages. The female teachers make you feel warm and the atmosphere is soft. They use a soft voice and look at you more often, smiling and so. They want you to relax and learn, but not to be stressed. And they bring you back in line if you are lost or if you don't pay attention. The male teachers are more informal, more friendly and funny. They smile less and move less, but they let you free, there is less control, although you know all the times who is the boss.

No other student mentioned this gender-based differentiation in teachers' NV style, although it seemed that, in general, learners in female-led classes made more remarks

about the warmth of the class atmosphere and the ‘feel good’ factor, while learners in the male-led classes spoke about the teacher’s implicit authority:

Mayumi: She is very nice to us, she makes us feel less shy when we speak in English. She smiles and moves her head like this [nods] when we give a good answer, also looks happy and makes us happy and interested.

Liang: He stands up in the class, he rarely sits and this gives him power. And he also walks around a lot, checking on us. This makes you think about the class, not about other things, it makes you focus. You cannot dream in the class, you need to be here with him.

Enthusiasm was interestingly related to the amount of bodily actions used by the teacher. Although considering *Teacher 1* inexpressive in comparison with her previous Spanish teacher, Laura considers *Teacher 1* as being enthusiastic, because she compensates for her lack of facial expressivity with gestures and body moves:

It seems curious to me the fact that this teacher has an inexpressive face. To compensate, she uses a lot of gestures and actions and that’s why she still looks that she likes teaching us.

Teachers were believed by the learners to compensate for their students’ perceived level of reduced proficiency by speaking more clearly, with simplified words and by using more gestures and bodily actions in anticipated moments of comprehension difficulty. All these actions were often related to the general climate of enthusiasm for teaching and for the activity, which learners praised in their interviews:

Nahiko: His voice tone and face don’t change too much. But in compensation he uses his body actions when he has to emphasise ideas or so. He also speaks clearly, with simple words, words which he knows that we know already.

Apart from the teachers’ enthusiasm, learners also commented on the teachers’ relaxed attitudes during the class as affecting their own attitude to learning. Several students interpreted the teacher’s level of relaxation or stress as conveyed in their posture, gestures and eye contact. In general, teachers who were seen to be listening leaned their body slightly forward, with the arms open and glancing between different students in the class. They were regarded as relaxed and interested in what learners had to say. Other students also mentioned the teachers’ informal style of sitting on a table while speaking or their informal dressing style which makes them look ‘friendlier’ or ‘closer to our age’.

In contrast to the learners' reflections, which were dense in observations on behaviours seen to have an emotional impact on them, the trainee teachers did not highlight the emotional dimension of the classroom interaction. This dimension did not seem to have priority in the trainees' view, although some comments were made on the potential emotional effects of certain gestures. Neither were the teachers' personality or teaching style mentioned extensively. Trainees mostly discussed the impact gestures had on learning processes and classroom dynamics. There are three possible explanations to account for this fact. First, as trainees were generally unfamiliar with the routines of the classes they attended, they were probably denied access to the emotional bond existent within the group. Second, they were observers, therefore did not engage themselves emotionally with the teacher's NVBs, unlike the learners who were direct addressees of their actions. Finally, the trainees were also unfamiliar with the teacher and this unfamiliarity probably made the interpretation and attribution of any emotional states difficult.

8.2.3. Showing nervousness or lack of motivation

There were several occasions in which teachers' self-comforting actions were identified by the learners as 'human', without being given a specific meaning in the interaction. Actions like arranging one's hair, fidgeting with a pen or a ring or grooming their clothes were in some occasions labelled by the learners as 'normal' and without a direct impact on the class.

In other occasions though, learners perceived the teachers' fidgeting and grooming actions as conveying an emotional state of boredom or nervousness. Johan, in *Class 5*, considered that the teacher was annoyed by the long turn taken by an Italian student, so he interpreted the teacher's action of pulling up his sleeves followed by his arm crossing as an expression of frustration. Other learners made similar deductions about the teachers' nervousness or boredom:

Jose: She is playing with a pen, she might be just nervous.

Sylvia: He has this pen in his hands and when he gives us the instructions he starts to play with it, out of boredom probably.

Learners interpreted these fidgeting or grooming actions by comparing them to their own behaviour and considered them as indicators of the mental transition from one topic to another or of intense concentration:

Kandar: *The teacher plays with the pen, but that's just normal, I do that when I need to concentrate on something.*

Theodor: *At this point, he is scratching his head, but it means he is thinking hard about something. It shows me that he tries hard to give me an explanation, but the gesture is natural.*

Narun, on the contrary, interprets differently the teacher's grooming action of touching her hair and her classmate's behaviour of fidgeting with her hair while giving an answer. She comments the teacher's action as 'normal' and considers her classmate's similar action as a sign of nervousness:

She [the classmate] is a bit nervous to speak up in the class, so she plays with her hair because she is shy and also it helps her thinking.

This apparently contradictory interpretation might support the idea that learners interpret NVBs within a broader context, in this case the different roles of the people in the class. A teacher is not seen as nervous in a moment of giving an explanation or waiting for an answer. At the same time, a learner having to speak in a class in a language s/he does not manage very well becomes prone to nervousness and her fidgeting is seen as a meaningful act. In a similar way, students' abstract gesturing while speaking is interpreted as indicating a lack of confidence or linguistic ability. In *Class 4*, all students interpret a colleague's gesturing while speaking as itself meaningless and as a sign of linguistic inability and mental struggle:

Ayurda: *Her gesturing suggests poor vocabulary, she has the ideas, but she cannot say it, she tries to find the right words, so she moves her hands rapidly, while searching for the word. She is nervous to talk in the class and she also smiles, but is not a happy smile; she is more embarrassed and shy.*

Mayumi: *She speaks in a foreign language which is difficult and she is not very confident about her English. So she moves her hands like that to find the words, it helps her thinking.*

At the same time, the teacher's similar abstract gesturing while talking is interpreted as a sign of enthusiasm and effort to make things clearer:

Ayurda: *She is moving her hands a lot, this is very unusual in Japan. But she just wants to make things clearer.*

Mayumi: *Her gestures here don't mean anything in particular. It is just to make us speak in the class and activate us.*

This contrasting explanation given to similar gestures of teacher and of classmates might also reflect a cultural reluctance to criticise the teacher's behaviour. However, it seems to be the case that learners judge one's NVBs in the context in which they occur and in direct relation with the person who produces these actions.

The trainee teachers also made comments on teachers' fidgeting or 'meaningless' gestures, ranging from the lack of any purpose in these mannerisms to the consideration that they might actually distract the learner from their activities:

Alexander: At times, once after the instructions for a particular task were completed, he used to play with the marker pens, making noises with his tongue, drumming fingers on the table. These were, perhaps, distractions for the students in the class. I asked the students in the class if he does this a lot and they said that yes, he does it quite often.

Cardik: In my class, the teacher stretched her upper body. I am not sure how the students interpreted that. In another occasion, he drummed his fingers on the table and I interpreted it as him trying to figure out what to do next. I am not sure that it was though a meaningful action for the learners.

Claudius: Sometimes you need to scratch your face or to arrange your hair, these are normal things and they don't mean anything. But the facial expression, the way you look at me or the way you nod, that is a sort of communication and learners react to it.

Claudius interprets the class behaviour according to the rules of most social interactions. This transfer of rules of interpretation from the wider social context might be justified by the fact that the trainees had not become familiar with the teacher's gestural style and could not infer any specific emotional message from the teacher's actions. While learners commented on teachers' NVBs from their immediate perspective as addressees and co-participants in the development of a classroom shared code of meaningful behaviours, the trainees coped in the new context by applying the general social rules governing the interpretation of others' NVBs.

8.3. Interacting with individual learners

There were learners and trainee teachers in the study who considered that certain teachers took steps to particularly support individual students as well as dealing with the class as a whole group.

All teachers in the study were perceived by their students as developing an individualised relationship with the learners, as well as treating them as a group.

Marianne expresses her views about the teacher needing to cater for the individuals, as learners have personalised needs:

She cannot be the same with all of us, she treats us a bit different, which is normal. Some shy people need more encouragement, and she can give a smile or a word whispered to you, others are more excited, so they need calming down, and she can frown her eyes and it's enough, you get the idea. But in the rest she needs to be fair to all, and she does.

The trainee teachers did not make detailed observations on the individual treatment of learners, possibly due to their indirect and relatively brief access to the classrooms they observed. This indicates the contextualised nature of the teacher - learners relationship, which may not be accessible to a passing observer. It also has implications for research on NVB in classrooms, especially when based on observational methods of data collection.

8.3.1. Encouraging individual participants

Most learners believed that they needed encouragement from their teachers, if not explicit, at least in the form of a non-verbal positive feedback. Some learners also talked about a special kind of friendship that developed between them and the teacher. Although only the learners in the male-led classes talked about doing extra-class activities together with the teacher, like going together for a drink or to see a football game, all students saw the teacher as a 'special friend'. When discussing this relationship, learners mentioned characteristics such as 'understanding', 'gives me support when needed', 'shows/imposes respect' and 'spending good time together':

Romeo: He helps me understand things, he shows interest in what I'm saying and he is always there if I need him. If I do an activity and I am not sure about something, I can just look at him and he comes straight away to help me.

Reyno: I like this class. I like to go there every day. I have a good teacher who makes a good atmosphere and never lets me get bored. I always watch him to see if he is making a joke or a funny face.

The NVBs which learners found particularly encouraging were the teacher's smile and head nod during or subsequent to giving an answer or when struggling to find the right answer, as well as the teacher leaning forward and keeping direct eye contact when listening to the student speaking. *Teacher 2* used to point to a student with the palm open and smile when hearing a good answer. Eunice recalls such an instance:

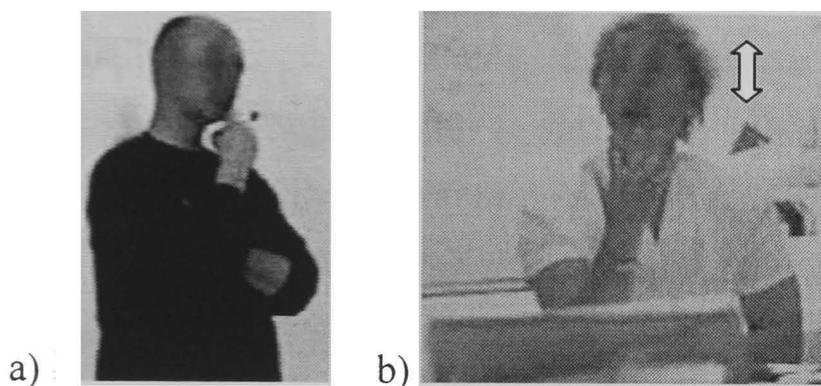
She indicates Ronaldo with her hand and smiles at him to show to the rest of the group that he gave a good answer. So everybody has now the feeling that if you give a good answer, you will be appreciated. And that makes you self-confident, because you trust the teacher.

In a similar way, Liang interprets teacher's nodding after a good answer as an encouraging factor and not necessarily as a validation of the answer:

When you are right and he does this [head nod] you'll have a good feeling, like telling you are good.

Teachers were also considered as supportive when they showed interest in learners' input and opinions by displaying a positive facial expression or involved posture, such as the ones shown in Figure 8.1., with the body leaning forward. Usually, a simultaneous engaged facial expression and active encouragements (e.g. smile, head nodding, waving of hand) would be involved also to signal to the learner that the teacher is listening.

Figure 8.1. Teachers' NVBs encouraging learners to speak



Romeo interprets the teacher's position (as shown in Figure 8.1. a.) as follows:

His face shows interest in my point of view, he looks concentrated and even puts his hand to the head, like the thinker's statue. He is leaning towards me which again shows he wants me to talk more; if not, he would lean back, relaxed or would not look at me with that expression.

Sometimes learners had difficulty in finding the right word and teachers were seen to give support through gestures produced in the absence of speech. They were thus in the position of the listeners producing highly interactive gestures, as these gestures communicated to the learner striving to produce a word that the teacher is supportive and patient. Such instances occurred very frequently in *Class 4*, where the students were asked to talk about their favourite movie. Kandar, the only male student in the class, tells the narrative of a cartoon and while searching for the word 'cut' he avoids

the direct eye contact with the teacher and simultaneously uses his right hand to mark that his search is in progress. This gesture, which is meant to ask for time from the listener rather than lexical help, is accompanied by the teacher's encouragement to persevere in finding the right word and finish his construction:

I was trying hard to find this word and then I was not sure of my pronunciation. So I was looking at the teacher like saying 'just give me time' and meantime she smiled and gave me encouragement.

In a similar situation, Narun explains why she is using so many metaphors while narrating her movie story, and how the teacher's reaction is affecting her:

I was very nervous because I wanted to speak more fluently but I could not find the words. So I use many gestures to help myself and the teacher was doing this [nodding] and waited in silence for me to find the words. So my moves probably had no meaning for the other students, but they helped me and let the teacher know that I am trying hard.

The fact that the teachers produce communicative gestures when listening to students' input is relatively different from other types of social interactions when listeners normally produce few or no gestures. Teachers were found to use this listening time to either encourage students to speak or to spontaneously validate their answers and it seems clear that these gestures affect the students' emotional state in the class.

Due to the perceived unequal relationship between the teachers' and the learners' status and linguistic proficiency, learners identified as important the teachers' efforts in trying to balance the roles and giving them importance in the interaction. Learners valued NVBs through which teachers seemed to allow learners to take control over the interaction, even if it was for shorter periods of time, or when they valued the learners' contribution to the class. For individuals coming from a more traditional background, this openness and attempt to raise a learner's status during the class, may seem a stressful experience at the beginning, as Kali describes:

This class was for me a surprise. The style is very different from Japan. In Japan nobody asks for your opinion in the class. We also sit in lines, so we can't see each other's faces and we can't talk to each other. Here everyone sits in a circle and we feel like taking part in the class. This type of teaching is very good for the students, you practice more the language and it shows that you are valued, that you have something to say. But at the beginning, it was hard, it made me a bit stressed, to speak up in front of the others.

In these situations of perceived distress, teachers were appreciated for their perceived assistance and encouragement conveyed mainly through positive facial expressions or

gestures like head nodding and pointing to the learners' direction to confirm that they could maintain the turn as long as needed.

8.3.2. Avoiding the public humiliation of learners

There were not many instances in which teachers drew attention to learners' mistakes or inappropriate behaviour. However, students seemed to be aware that, due to the asymmetrical relationship between them, the teacher had the power to expose individuals to public scrutiny and also to raise their prestige in the group. In this sense, teachers were praised in some of the situations for their actions in trying to avoid the exposure of individuals to embarrassment in front of the group. When one of the Japanese girls fails to give an answer when being directly nominated, the teacher saves the situation by inviting the whole class to answer. Eunice describes the moment as follows:

I like what she did here [in this situation]. Mayko has not answered the question and the teacher didn't want her to feel embarrassed. She needed to resolve this individual crisis so she pointed with her arms at all of us, inviting us to answer in Mayko's place. It's like we are all invited to save her rather than to blame her and it probably helped her feel better.

In *Class 4*, the change from the traditional classroom seating generates stress for Narun and she feels relieved when saved by the teacher:

She asked me to go to the board and write something and then she asked me to tell the story in front of the class. I felt very nervous. This was not my seat and I could not think in that place, as it was the teacher's place. So she saw this and asked me if I was feeling better to go back to my seat and talk. And yes, I felt better, I could see all my classmates eye to eye, at the same level, when seated, instead of looking at them with superiority.

A similar story was told by the trainee teachers, who held the view that teachers try and support learners and avoid their public exposure and embarrassment during the class. However, Tina and Manuela identify, respectively, two moments in which the teacher chooses to expose a student to public scrutiny:

One of the students forgot his homework; so she looked at him strictly and started to tap her fingers on the table, while telling him he must always do his homework. And when she looked at him with that serious face and tapped her fingers it was clear not just to that particular student, but to the whole class that she meant it.

They were supposed to work in group and one of them was obviously doing something else. So the teacher asked him if he finished his task, also making a

joke on people who are never 'on this planet'. The others looked at the student in case and smiled; he was obviously embarrassed and returned to the group task.

It seems that teachers did exploit the option of exposing individuals to public opprobrium at times, although in general they tended to encourage and support the learners' status and confidence in the group. Their actions appeared to impact emotionally on the particular students and also sent a message to the other learners in the class.

8.3.3. Reacting to learners' non-verbal messages

Learners also produce non-verbal messages in the language class. These messages address the teacher and the other classmates, they are communicative and influence the classroom dynamics. Teachers were perceived to relate to students' non-verbal messages in certain instances and to adapt their teaching according to the meanings they interpreted from them. In *Class 2*, the teacher concludes a long explanation and an elicitation stage by doing the OK sign with both her finger thumbs up (Figure 8.2.).

One of the learners, Ronaldo, interprets this gesture as follows:

This means 'good' [reproduces gesture]. After she gave a long explanation, she needed to know if we understand and because everybody was happy and smiling, she did this [repeats OK gesture]. It was good that we understand, she did a good job explaining. If we didn't understand, everybody would be in silence. So she did OK with her hands to show that she knew we understood her.

Figure 8.2. The OK emblem to praise an answer or learning outcome



#2.124. (result?) good

Emblem + FE: BH thumbs up and smiles.

Other learners expressed the impression of the teacher reacting to their needs without being asked, by providing an explanation or by giving spontaneous support when seeing them struggling to express an idea:

Liang: *He can catch my mind and he knows at all times what I think. If I want him to explain something, he just knows what I want. I don't need to tell him.*

Mayumi: *When I don't know a word, I look at the teacher and then she knows by my face and my vague hand moves that I am searching for a word. And then she normally helps me.*

Similarly, trainee teachers identified instances when teachers reacted to learners' unspoken messages, either by trying to encourage them when hesitant, by starting a negotiation when the learner was lost for a word, or by providing supplementary information when learners looked confused. These contexts were seen as crucial for the teacher to react to learners' non-verbal messages as they were all situations in which learners would hesitate to admit their feelings of frustration or embarrassment in front of the class:

Iris: *Students felt comfortable to reply to her answers, her gestures put them at ease, especially her smiling and nodding.*

Irida: *The teacher was nodding when listening to a student; the student was glad that his guess was correct and also that he did not struggle for nothing, there was a reward after his effort.*

The trainees also seemed to believe that teachers need to anticipate the reaction a behaviour or a word might produce in the learners and also to use their own non-verbal reactions as a quick feedback which to direct the learners' immediate action.

As Monica summarises it:

Learners don't always tell the teacher when they don't understand something or when they don't know something. So it's up to you as a teacher to look at them and see how they behave. If they look happy or worried, if they are relaxed or desperate and then you act.

Finally, the trainees also thought that learners were able to influence the teacher's whole attitude during the class and that learners' relative enthusiasm has a direct impact on teacher's mood and behaviour. Carmen writes:

When students were enthusiastic and happy to do an activity, the teacher was also very active, gave many explanations, smiled more. When students were apathetic and sleepy, the teacher shared their mood and adopted a more boring style, with less gestures and eye contact. I saw them depending on each other when it came to their mood, it takes two to tango, as they say.

Interestingly, only the trainees observing classes reported this idea of a shared emotional state. Learners did not seem to think that they were influencing the

teacher's attitude to the class. They admitted to being greatly influenced emotionally by the teachers' actions, without seeing themselves, in turn, as influencing their teachers' mood or feelings. This may be partly explained by the fact that the trainees were more alert to the interactive nature of the lessons wherein learners' behaviour is given significance.

8.4. Creating a positive group atmosphere

Apart from interacting with individual learners and generating individual feelings of well being in the class, teachers seemed to use a variety of non-verbal strategies for developing the emotional atmosphere of the group as a whole. They were seen to try and be funny after moments of intense concentration in order to balance the energies in the class and to stimulate a further effort. At other times, teachers would revitalise the whole group, when students seemed bored or lethargic. Also the use of classroom space was perceived as a strategic tool in trying to get the students to work together and to become more co-operative and happy with each other.

8.4.1. Non-verbal strategies for energising classes

In all the classes in the study there were learners who mentioned the importance of having a 'good feeling' in the presence of the other classmates and the crucial role played by the teacher in developing this climate of co-operation. Learners seemed to believe that it was important for their language learning processes to feel comfortable in their classmates' company and to be able to make mistakes or ask for help without being ridiculed or dismissed by the others. Liang explains the role of the teacher's NVB in this:

I am a happy learner in this class and this helps me learn more. I know that I can make mistakes and that nobody will laugh at me. The teacher has this natural body language and he also doesn't have a formal pose. He makes the class relaxing and informal, so we are at ease to talk to each other or to make mistakes, as you know he will not shout at you or anything. He sometimes makes fun of you if you make a mistake, but that's OK.

It appears that learners were not only concerned with their interaction with the teacher, but also with the interaction with their classmates and the out-of-class community. Although the majority of the interaction in the classes observed was teacher-led, learners expressed the view that their readiness to enter in direct interaction depended on the climate developed by the teacher.

In *Class 5*, although there were only five students, there seems to exist a kind of animosity. ‘Nobody likes the Italian guy’, says Johan, and the teacher seems to notice the adverse reaction that Romeo gets from the others, probably due to his expansive nature and rhetorical speech style. Although the teacher repeatedly resists Romeo’s insistence for getting a turn to speak, he seems to make a good impression on Romeo himself, who considers the teacher his ‘best friend’ in Scotland. Romeo seems to feel his classmates’ dislike and finds the teacher his only ally:

I am moving my hands quite a lot, especially when I get passionate about something, and people find it strange or difficult to accept. But I am Italian and my hands move without control. I am also very loud, I know it, but the teacher knows that Italians are like that and he understands me. The people in the class think that I am arrogant, but he likes me and supports me. Don’t tell him, just between me and you this one, but he is my best friend here.

The teacher confirmed that Romeo was making the interaction difficult at times through his expansive, dominating behaviour. He admitted that the student’s personality as well as his Italian gestural style were difficult to accept, even by the other Mediterranean learners, coming from Spain. Although the teacher himself was very familiar with Italian culture, he needed different management techniques for distributing the roles in the class and to ensure that the other students would get time to speak and would not feel intimidated by Romeo’s dominating behaviour. Apart from *Class 5*, all the other groups seemed to co-operate well and learners interact smoothly. Participants believed though that this feeling of group comfort depended heavily on the teacher’s skills of harmonising different cultures and personalities.

Certain learners talked about the importance of teachers’ NVBs in combating general boredom and in revigorating the whole classroom atmosphere. Although they did not refer to specific gestures which teachers might do when they sense a feeling of general boredom, learners said that teachers with dynamic bodily movements make the class more active and can use their hands or certain facial expressions in creating a diversion from routine. Comments like ‘she is moving a lot, so we never get bored’ or ‘if he uses his hands you cannot sleep in the class, it makes it more dynamic’ indicate the learners’ perception of the role of gestures in communicating more than the information directly related to speech.

There seems to be a shared belief that gestures performed when speaking can either be informative by supplementing or complementing the information conveyed verbally or helping the teacher’s ‘performance’ and thereby influencing the audience

affectively. The learners identify teachers' NVBs that appear to keep the class dynamic as a general intense gestural behaviour, with clear hand moves, positive facial expressions and dynamic use of classroom space. Marianne commented on her teacher's NV style as follows:

She does dynamic classes; her moves help you understand and keep you concentrated. You don't lose interest because she always does something with her hands, she does not only use words. Her body talks, if I could use a metaphor.

In a similar way to the learners, the trainee teachers considered that NVB can be used as a strategy for energising the classroom atmosphere. Irida expresses her view as inspired by observing a class taught by *Teacher 4*:

I believe that particularly in the case of language teaching, it is very important for the teacher to use as many aspects of NVB as possible. In the class I observed, teacher's NVB not only made the speech clearer, but also sustained a productive relationship with the students and also introduced a relaxed and friendly atmosphere. She always changed her body posture, smiled or nodded, or made expressive faces. Students enjoyed her teaching at all times and they did not seem bored at all.

Other trainees also seemed to hold the view that teachers' moves are not only supportive of the language learning, but also significant for the group atmosphere.

Finally, it is worthwhile mentioning the fact that some of the trainees did not discuss the shared responsibility of teacher and students in developing a good classroom atmosphere. Most of them emphasised the teacher's key role in conducting the learning and establishing a positive learning climate, with the learners' role being that of reacting to teacher's actions rather than initiating or complementing them.

Elvira and Michaela express the following conclusions in their reports:

The teachers have the key to knowing a language and it is their responsibility to facilitate the learning process. The teacher is the 'bridge' between the students and the language. Students should not be 'inhibited' by the teacher's behaviour, but encouraged and motivated. While teachers should make them feel comfortable through their actions, students should also show them through their actions that they care and they want to learn.

Generally, a teacher's NVB is extremely important in the language classroom. Depending on how much of efficient behaviour a teacher involves, the students will pay attention, get interested and show that they understand. I also believe that the students need the teacher's NVB because it gives them the courage to make questions and generally it makes the teacher more approachable to them. Actions define the whole relationship between the teacher and the students more than words do.

In summary, it appears that the trainee teachers seem to believe in the power of teacher's NVBs to emotionally engage the students as a group. The evidence seems to suggest that, on a number of occasions, teachers' actions were seen as giving an emotional dimension to the verbal message and therefore creating a positive climate for learning. Although it was not clear if learners and trainees saw the emotional well-being as a condition for learning, they all suggested that positive feelings should be the norm.

8.4.2. Accommodating cultural differences

With learners coming from diverse cultural backgrounds, it was expected that they might notice differences between their teachers' practice in Scotland and the practices seen in language classes back home. These differences in interaction were perceived as having emotional significance and were, most of the times, non-verbal rather than verbal. Learners appeared to value cultural differences in terms of teachers' NVBs much of the time and even attempted to adapt their own NVB to ways resembling the teachers'. However, in some situations, cultural differences seemed too unfamiliar for the learners and impossible to adopt.

Several learners considered the pattern of language teaching and learning as very different from that in their own country. Learners generally valued the fact that they were encouraged to speak in the class and to express own views or opinions, although they had to overcome the stressful initial stage of adapting to the new type of interaction. Especially for learners coming from Asian cultures, this initiation into a new type of classroom culture is very emotional. Kali, a Japanese student, and Liang, from China, who were in Scotland for over four months, describe their process of adaptation to a new set of class rules and the overcoming of the social pressure:

Kali: In a class in Japan they would always call my family name, while here they all use my first name. This makes me feel more like a person, like their friend. And there are few actions in Japan. For us silence and lack of emotion or hand moves are good, it shows that you are educated. Too much speaking or moving is impolite. Here I have to speak and talk about myself. In Japan, they would never ask me to give my opinion, you just have to listen to the teacher. So I was a bit upset at the beginning because the teacher asks me directly and all the students are watching you, like in a public show. And it is very embarrassing if you don't know the answer.

Liang: In China, teachers use less body language, because they are supposed to be more serious. I guess this will change soon as there are more foreign

teachers coming to China. And foreign teachers don't make formal classes, they like students to speak in the class, they consider speech important. Traditional Chinese teachers consider grammar important, so you don't speak about issues and problems in the class. You ask silly things like 'what's your name?' although you know their names already. But when you come here, you need to change, you need to adapt. I am a happy learner since I came here, although I did not change much. I speak more, I am more confident, but I still behave like a Chinese.

The formal and collectivist approach of Japanese or Chinese schools contrasts with the personalised and interactive relationship that the students met in the new culture and it seemed to prompt the individuals to redefine their set of desirable rules for interaction. While some rules are preserved, like the one of having to perform well in a 'public show', otherwise embarrassment occurs, other rules are abandoned, i.e. 'silence is good'.

The students in *Class 4* experienced two different classroom populations, the multicultural and the unicultural. In the first two weeks of their course, all the learners in *Class 4* were dispersed with other students in different classes. As time went by, teachers and learners seemed frustrated with the difficulties of interacting with the Japanese students. The teachers decided therefore to isolate the Japanese students in a separate class to increase their chances of interacting. This change of climate seemed to generate a positive feeling for most of the students in the class, as Mayumi explains:

When we were in classes with people from other countries, we did not speak that much. We need more time to think and also we don't show it when we have difficulties, I mean, you cannot see on our face that we are upset or so. So when they [the teachers] saw that we were not participating in the class and we were not happy, they put us all together in a new class. Now we are better, we can ask the teacher questions, because the other students in the class know how to wait. We also learn cultural things to help us interact with the local people, like to smile or to look at the people when speaking. Probably we failed to integrate with the other students, but we need first to learn how to do it and then go back to meet the other foreigners.

This re-construction of the cultural community seems to generate a feeling of comfort for the learners and teacher alike. Rather than having the disappointment of failing to interact with the other 'foreigners', Mayumi expresses a feeling of relief and comfort in having to interact with people from her own culture, who know 'how to wait'. The differences in learners' perceptions of time and the style of interacting with the teachers through non-verbal messages (i.e. showing or not showing frustration on the

face) seem to account for the rift between this Japanese group and the other learners in the language school.

Probably seizing the cross-cultural differences as a problem for these learners, *Teacher 4* mentions explicitly the behaviour which is culturally appropriate when listening to a presenter or lecturer. When she asks the students to give a small presentation in front of the class on their favourite movie, she says:

Can I just tell you one thing? In Britain, when somebody is talking or giving a talk, it is good manners to look at them and slightly exchange with them. So you might nod your head, smile and look at them. It's not making a good impression to put your head down and not show interest when somebody is talking to you. Try and do this when your colleagues are talking in the class.

To this instance of explicit teaching of acceptable NVB, learners in the class reacted very differently. While most of them rejected the possibility of adopting the behaviour as it contradicted their own cultural display rules, two of the students appreciated the teacher's input and were ready to behave like the 'natives'. Keiko's comment exemplifies the view of the students who rejected the teacher's input:

Japanese in general avoid eye contact and face expressions, but the teacher doesn't know it. I could never do what she said, as I would feel inappropriate and impolite towards my classmates. We all know these rules and we will not change this only because we learn English.

However, not all students in the class seemed to follow Keiko's principle. Kandar in particular, the only boy in the class, seemed to be very keen on adopting the local behaviour and looked to identify more with the British culture, as he himself confessed. Although he was in Scotland for a month only, he adopted the British style of clothing and coloured his hair as well as starting to behave more expressively and dynamically. His behaviour was however noticed by his classmates, who were not necessarily pleased with his transformation:

Mayumi: Kandar behaves strangely since we came here. He tries to adopt the European type of behaviour, he looks like a foreigner and he starts to move his hands a lot when talking. He doesn't do that when he talks in Japanese, this is not our custom.

Ayurda: His moves are not normal, he tries to copy the teacher all the time. He does like this [leans on colleague's chair] or like this [shrugs his shoulders] and he would never be allowed to do this in Japan.

The resistance to change of the Japanese group is acknowledged not only by the teachers who generally considered them ‘more difficult to teach’, but also by other students in the class. Liang, a Chinese, mentions that:

The Japanese group is very difficult to join, as they are always suspicious, always thinking what's your reason, why are you trying so hard to go with them. That's maybe because I'm Chinese and our countries don't like each other. But I would like to have a Japanese girlfriend, although it is hard to convince them that I am a good boy.

All learners are likely to undergo a process of acculturation in parallel with their language learning. However, attitudes to experiencing other types of cultures are very different. Some of the learners expressed a genuine curiosity and readiness to live the novelty of meeting people from other cultures and sharing experiences:

Nahiko: Every person I've met here is different. German students are more fluent and move more than us, and so are the French people. But everybody has a different culture and I like to have different cultures in the class. The problem is not that we are from different cultures, the problem is that English is not our mother tongue and sometimes it is difficult to express your feelings or your opinions.

Theodor: Here I've met more Asian people than Scottish, I live in the same halls with them, we go to the same classes, sometimes we cook together. So it is more a meeting of cultures than meeting the local culture and I like to know more about them, I tell them about my country. And we always speak in English. But there are differences in their behaviour, for example the Asian girls seem very childish, they laugh a lot and even when they are sad, you can't really tell.

In contrast to Nahiko and Theodor, Narun expresses the view of resistance to any foreign influence and the rejection of the local culture or of any other foreign culture:

We are here to learn the language, not to forget our country and start to behave like foreigners do. I will always be Japanese and I don't want to spend too much time with the foreigners, because they have different behaviours. We have our rules and just because you want to speak better English does not mean that you need to change your education. Although the Scottish people are very nice and friendly.

Living and studying with students coming from very different cultural backgrounds proves to be thus a difficult experience which requires constant self-scrutiny and attention to any detail of behaviour, as well as a permanent quest of one's own identity:

Liang: *You will always be a foreigner in this country. There are always miscommunications and you always have the wall between you and the others. You never know when to make a joke, sometimes is impolite. In China, you can make jokes on people, but you can't do that with people from other countries, as you don't know their reactions. Also we don't have that many body moves, while other countries do, so you don't know what to do. To behave like them and they will like you or to be yourself? The people from this country are warmer, they smile and talk to you, but I don't really trust it, it might be just politeness. I think that Spanish and Italians are really friendly and honest.*

The feeling that one will always be a 'foreigner' is also expressed by other students in *Class 3*, who are all intending to study in the United Kingdom for a longer degree. The metaphoric 'wall' that Liang sees as separating the two cultures seems to affect the attitude one develops to the whole environment and to the local culture. The inability to anticipate the others' reactions when not sharing a cultural background becomes thus a factor of restraining one's own spontaneous way of interacting and the constant monitoring of own behaviour is implicit. This may become a factor of anxiety in some cases, but it also increases one's cultural awareness and adaptability. However, in spite of cultural differences, learners seem to rely on commonalities to develop a shared and positive ground when interacting with the teachers and their classmates. Although differences cannot be ignored, they seem to be overcome by both teachers and learners in a general will of creating a positive and supportive working environment.

Trainee teachers also wrote in their reports about the role that cultural differences of NVB may play in the language class due to potential cross-cultural misinterpretations. They also emphasised the attention that teachers and learners alike should pay to avoid potential cultural divergences. The opinions were split between the teacher having to adapt to the students' cultural background and the students having to develop their own awareness of the behavioural rules in the new language community:

Ming: *Students coming from a country different from the teacher's country should pay more attention to teacher's NVBs to avoid misunderstandings. They should learn explicitly how to behave or what to accept as appropriate behaviour in the new culture even before arriving in the new country.*

Mi Lu: *Teachers should pay special attention to students' different cultural backgrounds to avoid the occurrence of confusions and misunderstandings. They should know what is acceptable in each student's country, I mean the general rules, like bowing or not showing facial emotions, and respect these rules, without trying to convert the students to a new set of rules.*

Mi Lu therefore suggests that teachers should respond to their students' cultural NVB rules by acknowledging the differences and even trying to adopt them in their own behaviour. The trainees, as well as learners, were frequently confronted with their own cultural assumptions and seemed to reflect on the processes of acculturation from their own perspective and experience, as well as through their empathy with the learners. Their written reports, as well as the focus discussions, reflected the trainees' struggle with their own assumptions, preconceptions and cultural judgements. Thus Sato, when discussing how Japanese students in the class she observed were behaving, described their behaviour as something negative:

They were at times very loud for a group of Japanese students and their behaviour was exaggerated. When speaking, they would use many gestures and their face would show interesting expressions. It was probably a way of copying the teacher's behaviour and thus trying to please her.

Sato's interpretation reflects her deep convictions of ways of preserving the self when confronted with a new cultural challenge. Reflections like this give an indication on the role that classroom observation might play in observers' own cross-cultural assumptions about the significance of aspects of NVB.

8.5. Summary

In this chapter, I have argued that learners considered that a key role of teachers' NVBs was to boost the emotional involvement of the individuals and the whole class atmosphere. I have suggested that learners, more than the trainees, identified certain NVBs that function as emotional enhancers and interpersonally connect them with the teachers. As trainees were not familiar with the teachers they observed and were not direct participants in the class activity, they did not seem to have access in the manner the learners did to the emotional value of certain gestures and NVBs.

I have also illustrated the NVBs that learners and, on certain occasions, trainees saw as having a positive impact on individuals in the group, as well as instances when teachers' NV actions were felt as generating negative emotions or personal discomfort. Finally, some NVBs were perceived as directed at the whole group, in order to energise the class or to accommodate cultural differences. Table 8.1. below summarises the main emotional functions identified by the participants and the NVBs associated with each of these functions.

This chapter has focused on teacher NVBs that were perceived as having an emotional impact on individual learners or on the class group. In the chapter that follows, I will describe the teachers' NVBs that participants perceived as influencing the organisation of the class dynamics.

Table 8.1. Emotional functions of teachers' NVBs identified by participants and the NVBs associated with them

MAIN PERCEIVED EMOTIONAL FUNCTIONS OF TEACHERS' NVBs	SUBORDINATE EMOTIONAL FUNCTIONS	NVBs ASSOCIATED WITH EACH SUBORDINATE FUNCTION
<i>Making an impression</i>	Looking relaxed and supportive	Posture Gestures Facial expressions Eye contact
	Showing nervousness or lack of motivation	Self-comforting gestures Facial expressions
<i>Interacting with individuals</i>	Encouraging individual participants	Facial expressions Emblems Eye contact Posture
	Avoiding the public humiliation of learners	Facial expressions Eye contact
	Reacting to learners' non-verbal messages	Facial expressions Emblems
<i>Creating a positive group atmosphere</i>	Energising classes	Gestures Facial expressions Use of space
	Accommodating cultural differences	All NVBs codes

CHAPTER 9

ORGANISATIONAL FUNCTIONS OF TEACHERS' NON-VERBAL BEHAVIOURS

9.1. Overview

This chapter describes the teachers' NVBs perceived by the participants as directed at organising the class activity. The organisational functional categories of teachers' NVBs, some of which were initially discovered and their subordinate categories subsequently developed from the pilot study, were as follows:

a) Fulfilling the leader's role

- Distributing roles in the interaction;
- Checking individual participation;
- Manipulating classroom space and objects.

b) Controlling speech turns

- Giving the speech turn;
- Maintaining and denying the speech turn;
- Listening to the learners.

c) Classroom non-verbal rituals

The first section of the chapter describes the teachers' NVBs perceived by the participants as functioning in direct relation to the teacher's leading role in the class. The second section discusses the role that teachers' selected NVBs appeared to have in controlling the conversation turns, either by indicating speakers, by denying their speech turn, or by signalling active listening. The third section of the chapter focuses on the shared understandings that seemed to develop in classes in relation to activities performed by the teacher and the class in a seemingly ritualistic manner.

9.2. Fulfilling the leader's role

Some participants identified instances when teachers' non-verbal actions were directed at leading the class activities with the result that learners would react and follow the teachers' unspoken instructions. One of the trainees, Craus, explains how important is for a teacher to impose their leadership from the very beginning, not only through words, but also through an adequate image:

When you first come in a class, I do this in my teaching, you just need to wait until they all stand up and it's dead quiet. Then you probably say 'good morning' and you invite them to sit, so they realise already that you are the boss. It is important to have a good start and it's very important how you look when you first come in. Because if you look a bit scared, they will get you. If you have a good body language, they will respect you a bit more.

The same idea was expressed by another trainee teacher, Claudius, who considers the teacher's leading role as expressing a certain type of personality and attitude:

If you look a bit humble or shy and you don't look them in the eye and you look like you are afraid of the class or insecure on your teaching, they sense it very quickly and then you are lost, they'll take control. You can't be a shy teacher, you need to be strong and in control. After all, you are their leader by definition, without their own choice, and you have to do this, it comes with your job. They can't choose their own captain.

Learners also generally expressed the view that the teacher is ultimately in control of the roles in interaction, of the type of activity the group is doing, the topic of the group conversation etc. Not only did learners accept the teacher's authority in the interaction, they were also convinced that the group needed leadership and granted the teacher the legitimate power over the interaction.

The individual perceptions of the type of power the teacher had in the interaction differed. While some of the learners attributed the teacher's leading role to their knowledge and native speaker's status, others talked about the teacher's power over the group by enhancing the group cohesion. Yet others prioritised the teacher's legitimate power of rewarding, punishing or even deciding an individual's acceptance by the group:

Jose: You give an answer and you need to check it with the teacher. She will tell if your answer is right or wrong, as it's her language and she knows it best. She can also tell you why you are wrong, she knows how to explain things, that's her job.

Ronaldo: She has control over the class because she knows us all, she knows what to do to make us work together and also enjoy being here in the class.

Nahiko: If he points at you, you have to answer. Sometimes, if you don't know the answer it's ok, he might forgive you; but you can't do this too often, otherwise you are out of the class for good.

The main types of NVBs that learners and trainee teachers identified as marking the teacher's leading role in the interaction, thereby contributing to whole group management, were as follows:

- Distributing roles in interaction;
- Checking individual participation;
- Manipulating classroom space and objects.

I will now consider each of these in turn, as identified and expressed by the informants.

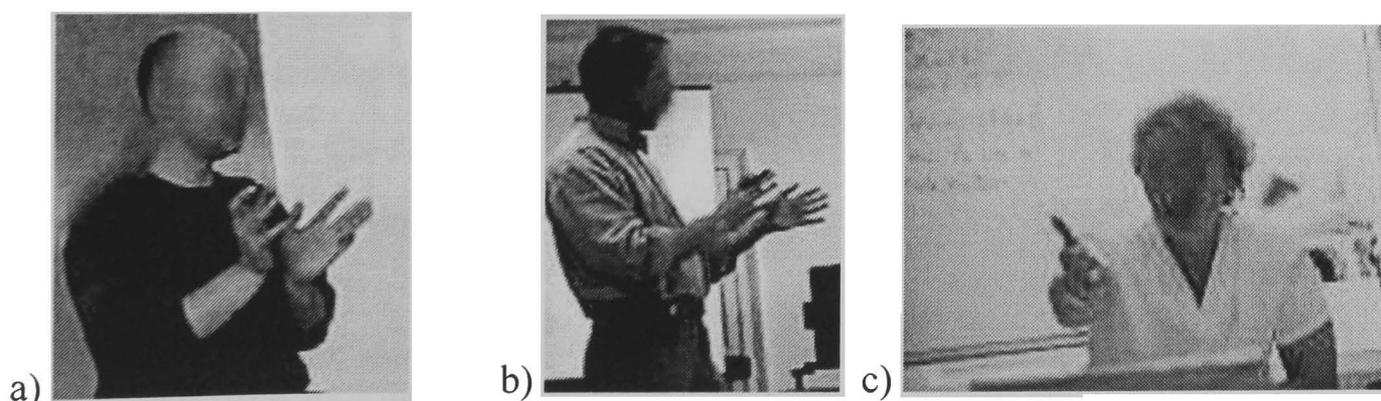
9.2.1. Distributing roles in interaction

Teachers were perceived by the informants as being responsible for organising the roles that learners were supposed to play in the interaction. Although the main allocated role for all learners was that of receivers of information, when the interaction type would change, learners were given different roles by the teacher. Usually, the teacher would identify a speaker and also decide the form of the interaction (frontal, pair or group) or the roles that each individual had to play in it. Teachers were thus perceived to:

- Select pairs or groups of learners who would work together;
- Identify each of the learners' roles in a group or pair;
- Identify a student who subsequently takes charge of the interaction organisation;
- Allocate different tasks to different learners etc.

Most of the times these organisational activities were done verbally, i.e. by nominating the students and clarifying their roles. However, the non-verbal aspects noticed were pointing with the hands or palms open and direct eye contact with the students nominated, behaviours which, in these contexts, were seen mainly as reinforcing the verbal command (see Figure 9.1.).

Figure 9.1. Deictic gestures for distributing roles in the interaction



When focusing the interaction on the learners, some teachers would discuss initially the task and then identify the groups or the pairs that learners were supposed to be part of. Trainee teachers had mixed feelings about the degree of freedom learners should have in these transitory moments, which marked the progress from one activity or stage of the lesson to another. Manuela and Carmen respectively explain:

He read the task and then he said 'work in pairs' and he pointed with both arms at two students at a time, to show who was working with who. They looked at him to see his gesture, otherwise they could not know who was their pair. In this case, to see the move was essential for the learners. They all accepted their partner and started working immediately.

She told them to work in groups, but did not mention clearly the members of each group, so the students ended up arguing two minutes who to put in their group. It was a mess and they needed some time before starting the task.

In other classes, once the pattern was established, there was less confusion. Once the learners knew who their pair was, either from their previous class by keeping the same seats or from a previous task in the same lesson, they would immediately turn to the same individual and discuss the task. In *Class 2*, the teacher used group work at different times, when she identified learners by pointing and smiling at them, and simultaneously saying their names. At a second switch of activity from frontal to group, the learners automatically changed their sitting position to the partners previously identified and started discussing the task.

Other teachers used similar techniques of pointing with the hand open or smiling to a student for distributing different tasks, e.g. in a group role play, or in identifying the roles that members of the group were expected to perform. By saying their name and also pointing or establishing direct eye contact with the student named, the teacher would decide who will report back to the class after the group activity, who is supposed to write down the group ideas, who is reading out the questions to the other members of the group etc.

An interesting case of transfer of responsibility for distributing the roles in the class occurred in the class observed by Inghin, when a teacher initially identified a speaker through direct eye contact. The strategy is then perpetuated by the other students in the class:

In my class, during a question and answer session, the teacher addressed the question and then by using eye contact and nodding he would determine who would have to answer it. He was just looking at one of them and then the student knew that he or she had to answer. The interesting thing is that

students afterwards would do the same. The boy who answered the teacher's question took the lead and then he determined who was going to answer by just looking at another student or nodding his head. I have never seen this before, but they were probably familiar with the technique, as they were very comfortable in doing this.

In another case, a trainee observes the organisation of the activity in a group in which the learners are left to get organised in dealing with the task. Iris describes this incident in her notes:

The teacher told them to work in the group and come up with ideas on how to convince people to give up drugs. I observed three students, a girl and two guys. They planned the task then they all nodded at each other and got ready for action, leaning forward to show their interest and motivation to get this done well. One of them pointed to each of the questions on paper in turns and then pointed at individual students who were supposed to solve each question. He seemed to be now the leader, as the teacher was before.

Instances like the one Iris described were not many in the data sets, as participants were asked to report on the teachers' NVBs rather than on the learners'. The example however illustrates that, although the teacher normally takes the lead in organising the activity and distributing the roles to the participants, learners will use organisational NVBs when interacting with each other if given the opportunity.

9.2.2. Checking individual participation

As part of their routine monitoring of the group, teachers would check from time to time individuals' involvement in frontal or group activities. This monitoring was mostly done non-verbally, without specific questioning of the learners, but in circumstances that made them aware that they were being supervised. Learners identified instances when teachers would gaze through the class to see if they were working. Similarly, the teacher's shift of position or moving around the groups was considered as fulfilling the same purpose. Liang and Mayumi explain how they feel about the teacher monitoring their work almost continuously:

Liang: He was looking straight at me. I don't know why, but in this class the teacher is always looking at me, like checking what I'm doing.

Interviewer: How do you feel about it?

Liang: I feel good, it shows me that he cares, that he wants me to learn. I think he is a good teacher, I can learn from him and feel good at the same time.

Mayumi: The teacher looks at you normally to check if you are doing your work or to help you when you speak, like an encouragement.

Trainee teachers, more than the learners, reflected on the strategies that teachers used in monitoring the learners' activity. The teacher's posture was seen to vary with different types of interaction, monitoring being done during frontal as well as during group interactions. Sato describes how a teacher checked upon the learners from her seat:

The teacher and the students were sitting around a big table, altogether. Once when they were working on something, she was moving her upper body while sitting, undulating her body almost like the sea waves towards different students, like trying to connect with each of them in turns. While she was approaching them, she was also keeping eye contact or sometimes looking at their notes. This was a good way of showing them that she was paying attention on their work as a group and wanted them to take it seriously.

In a similar situation, Alexander describes the behaviour of another teacher who used eye contact as a form of control and also varied his position in the classroom space depending on the type of interaction going on in the class at the time:

Sitting at the same level with the learners, he would move his eyes from learner to learners, as a key to control and discipline in the class. In this way, he was showing them that they are watched and make them concentrate on the task. The teacher quite often walked around the classroom and occasionally would sit next to the learners and always made an immediate amendment if they made mistake. Again, it was a gentle way of controlling them and also giving them opportunities to ask individual questions.

Opinions differed when trainees discussed the emotional effects that the teacher's proximity might have on the learners. Some considered it an opportunity for the learner to express individual concerns without being exposed in front of the whole class. Others perceived the situation as threatening for the learner, due to the inhibitory effect of the teacher's close presence and the learners' constant awareness of being scrutinised. Elvira summarises well this shared opinion:

In my class, she was going around the tables when students were working on a task. This action was useful I guess, from the teacher's perspective, as she could clearly see their progress on the task. On the students' side, it might have had different effects. If you are a brave and confident student, it might motivate you to work more in the group so that the teacher notices you. If you are the shy type, it might put extra pressure and inhibit you.

Cardik brings into the discussion a cultural factor, as there are different levels of proximity socially acceptable in different cultures. He explains that while for him, the teacher's proximity would be uncomfortable due to his cultural restrictions, for others teacher's proximity impacts positively:

In my country [Brunei], the teachers are always sitting at the front and it is prohibited for a teacher to touch students of the opposite gender. To compensate for this, teachers develop other forms of control. I remember I had a teacher who kept a very strong eye contact with us in the class and we felt intimidated. Her facial expression and eye contact were too much, she was like a lion. Then she was walking like a soldier in the class, keeping us all under strict surveillance. When I came to Britain, I noticed that the non-touch rule is in place as well. So in my class, I know for sure that teachers coming close inhibit me. But I have classmates who like to show off in the group when the teacher is nearby.

Sato also makes a remark on the impact that changes in the curriculum bring into the classroom in terms of teacher - learner behaviour:

In my school years, teachers used to sit at their desk most of the times, while now with the promotion of the communicative and interactive teaching they are supposed to move around. The teaching is now more learner centred in Maldives and the changes in theory require changes in teachers' behaviour. I am not used to have the teacher close to me, but as a teacher I will be expected to go close to the students. I suppose it's ok if you get used to it from the very beginning, when you are in your school years.

Nevertheless, the trainees agreed that teachers need to monitor learners' activity to ensure that they are actively involved, which is routinely done by teachers by observing the learners' behaviour rather than asking for verbal confirmation of their participation. Ming explains:

You need to make sure that they are working and you cannot ask them all the time 'John, are you working? Mary, are you working?'. So teachers normally look at the students and read their actions, see what they do and then judge if they are doing the right thing or they need to be brought back in line.

9.2.3. Manipulating classroom space and objects

The ways in which teachers were seen to use the classroom space and various objects familiar in any classroom (i.e. books, pens, the board etc.) were, in certain contexts, seen to communicate. All classes observed had the furniture arranged in such ways that learners were able at all times to see the teacher as well as the other classmates. Learners were seated around a horseshoe distribution of desks in *Classes 4 and 5*, while in all the other classes, the small square tables were put together to form a rectangular shape which had all the learners around it. Usually, the teacher would occupy the whole line of the rectangular, sitting at the centre of the table, while students would group along the other three lines of the table. Although not questioned directly on the relevance of the sitting arrangement, learners nevertheless mentioned it spontaneously in their interviews:

Theodor: *We are sitting very close to each other and to the teacher, so it's like a more friendly way to ask him something or to share an opinion with the others.*

Keiko: *I like to sit together at the same table with my classmates, it is more like a family than a class. So we can all talk, but normally we don't, because Japanese people are shy and don't speak in class.*

Several learners identified a relationship between the teaching approach and the organisation of the physical space in the classroom, making interesting cross-cultural comparisons, as Kali's comments show:

Kali: *This class is very different from Japan (...) we don't sit like here, in a circle. The desks are like [both hands draw small squares in the air, one after the other, to suggest a row, then another row] so we all see at the front, we only see the teacher, we don't see each other's faces.*

Interviewer: *Why is that, you think?*

Kali: *Well, there is a different purpose to teaching, I guess. In Japan, they want us to listen only, here they want us to speak to each other.*

Interviewer: *Is that making you feel different?*

Kali: *If you see all students' faces, we can exchange opinions. If you don't see their faces, you don't feel like talking to them, but that's what they want in Japan, to keep you quiet. It would seem just strange to talk to someone's back, isn't it?*

Another Japanese, Reyno, expresses a similar idea:

Japanese teachers are boring, they just read and talk [puts both hands at his back]. Here, teachers are more dynamic [both hands at front, gesturing in air]. We all talk in class, probably because they ask us to seat in a group around the table. You cannot be quiet, because everybody looks at you and expects you to say something. If you sit together at the same table with the teacher is like you are equal, so you need to contribute in the discussion. If you sit in a row like in Japan, with the teacher at the front, you don't need to talk, the teacher is up at the front, exposed, so he needs to do the talking.

The Japanese learners in *Class 4* identify the front of the class with the teacher's attributed space and admit the feeling of embarrassment and shyness when asked to address their colleagues from the front:

Narun: *I was embarrassed when she asked me to speak in front of the class, I did not want to speak in front of everybody. I cannot think there, I can think only when sitting at my desk. Also I have eye-to-eye contact with all the other people when seated, it's like being equals, not me being like a boss or a teacher.*

Mayumi: *Narun is shy to speak in front of the class, we don't speak in class in Japan or not from the teacher's place, at least. When back at her seat, she is fine, while in front is the teacher's place.*

Trainee teachers' shared, to a certain extent, the learners' perception of conventional seating arrangements in class, noticing instances when this order was changed either by the teacher or by learners:

Michaela: *Generally, she listened to the students from far away, sitting at her desk and when she heard something wrong, she stood up and came closer to them to correct them. You have to be among students if you want to help them one by one. You cannot help them sitting at your desk.*

While Michaela sees the teacher's proximity as a sign of willingness to provide assistance, Elvira and Claudius respectively perceive the same situation as a sign of teacher's control and as a potential source of discomfort for the learners:

She moved around the class when she was doing the task. She did this because she wanted to check if they were on the correct track for answering the task.

She was in the middle of them, to supervise their work. It showed that she was not afraid of them or their questions, otherwise she would stand at her desk, the place that gives her authority. But it is a bit strange to get the teacher so close, I remember it from my school years.

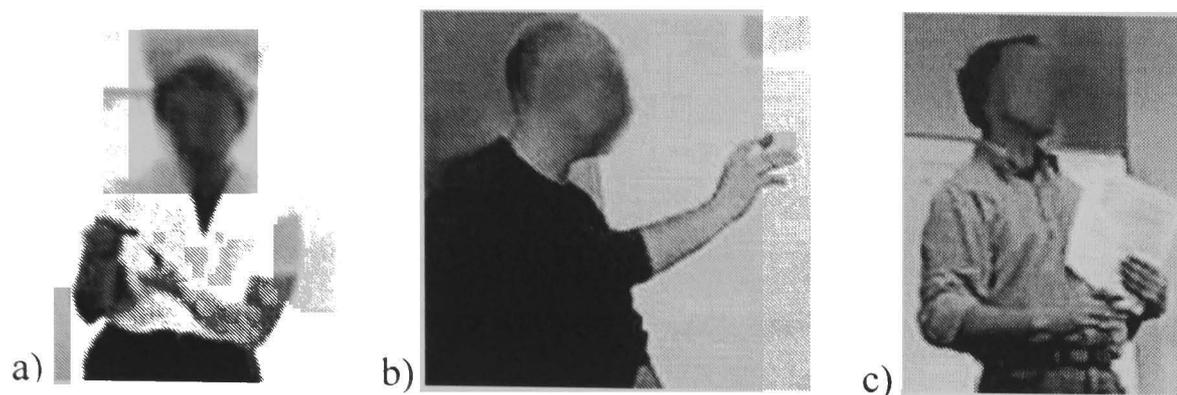
The instances when the teacher would leave the front seat and come close the students were rare. Nevertheless, trainees considered that the teacher's place was at the front, to see the whole class and be seen by the learners, perhaps providing thus a point of stable focus in interaction for the learners. As Tina summarises it:

It is good to see the teacher standing in one place so that the students don't loose focus or don't become dizzy or distracted by having to look for the teacher around the class. The teacher has to be in one place where students can see him or her at all times as they need to know that the teacher is there for help if they need it and also is watching them.

Both learners and trainees also referred to the teacher's manipulatory actions, when objects like the book, a pen, a piece of paper etc. were hold by the teachers. Teachers were found to use these objects for certain purposes, such as:

- Pointing with the pen or holding the book as a guide (Figures 9.2. b. and c.);
- Using a pen to give a turn to one of the students in the class;
- Showing a picture to illustrate something;
- Using objects to play with (pens, paper, paper clip etc.) for releasing stress or out of boredom.

Figure 9.2. Manipulatory actions involving objects



In *Class 2*, the teacher raises up the pen for eliciting the word ‘pen’ (Figure 9.2. a.), used here as a visual substitute for the words or ideas which one writes down. Romeo explains how this action functions as an eliciting technique:

She talks about the transfer of information from your mind to your pen. Before she said the word ‘pen’ she held up the pen so when she said the word, you have it in your mind already. She is showing you the pen before she says the word, so you find the word by yourself before she uses it. In case you don’t know the word, when she says ‘pen’, you understand that ‘pen’ means the object which she holds in her hand and points with. This is a typical case when she doesn’t know our potential very well, she cannot know what we all have in our vocabulary luggage. So for those students who know the word ‘pen’ this is just a confirmation, for the others is learning a new word.

Other situations in which the manipulation of objects by the teachers was seen as meaningful and serving different functions were as described by some of the trainees:

Arito: She looked in her book and it meant that she wanted them to focus on their own book or task. Sometimes, the teacher looks in the book to check information, other times to focus the class on the work.

Ling: He always had a pen in his hand to use it for writing on the board if necessary, for showing which student to answer a question or just for playing with it when the students were working on a task.

The instances when teachers used physical objects in the class were quite common in the classes observed, as most teachers would constantly hold a pen or pencil or refer to the book or paper in front of them with certain regularity. This may affect the quality of the gestures produced as holding an object would normally impede on one’s freedom to gesticulate. However, at times teachers appear to involve the objects in meaningful ways in their gesticulation, e.g. pointing to the book, using the pen as a pointer etc.

9.3. Controlling speech turns

So far I have illustrated the teachers' leading role in distributing roles in the class interaction, in controlling the individuals' involvement and in deciding on the classroom space organisation. Teachers were also seen to have control and organise the local sequences of interaction by deciding who speaks in the class.

In most cases, the teacher was seen as the one determining who was going to speak in the class and for how long. Although the turn order was mostly unfixed, situations existed when teachers would determine an order for taking the turn, like asking the learners to each give an answer from right to left around the table. When the order of turn taking was not pre-established, the teacher would normally nominate a learner to answer a question, give an opinion etc. The teacher was also seen as the one mainly responsible for denying a learner's turn to speak or for taking back the turn and re-directing the conversation by involving other participants. However, the role of turn allocation was sometimes fulfilled by other students. Learners' turn-manipulation techniques were mainly for turn requesting when willing to participate in the conversation, turn maintaining especially in group working situations, and turn-denying when avoiding participation.

The non-verbal strategies used by the teachers in manipulating the speech turns in the class ranged from smiling facial expressions and eye contact with the nominees to uses of pointing and other independent gestures, mainly emblems. Examples of these instances and the impressions they left on the learners will be discussed below. The following three sections illustrate the NVBs which teachers were seen to involve in manipulating the speech turns and the perceived effects that these actions had on the learners.

9.3.1. Giving the speech turn

When deciding to involve learners in the interaction, the teachers would normally apply the rule of 'one speaker at a time' and learners seemed to co-operate in respecting it. Usually the teacher would determine the next speaker by identifying them from the group, either verbally or non-verbally, or often through a combination of both. The contexts in which teachers would give the learners the turn would usually be a question-and-answer sequence, when learners would have to respond briefly and return the turn to the teacher:

Laura: *She is showing now to whom she is addressing the question, she is pointing to who will answer it. So she is inviting the student pointed at to answer the question and he [the student] knows he has to answer it.*

Mayumi: *If she wants us to speak up, she looks at us and smiles and makes a pause.*

Eunice: *She asks a question with the intonation going up, but she doesn't answer it. She looks at the class and raises her eyebrows and waits for somebody to answer it quickly. So when Ronaldo speaks in this case she briefly points at him to show to the rest of the group that he gave a good answer and then she continues her speech.*

Learners talked about signals that anticipated the teacher's intention of asking someone to speak. by adopting such actions as a more relaxed posture, with less gesturing and a general gaze at the whole class. Interestingly, these non-verbal actions were seen by the learners in direct connection with the changes at the speech level, learners noticing a decreased loudness in the teacher's voice, longer pauses and shorten sentences:

Johan: *When he explains something or tells a story, he talks quicker, in long sentences and uses his hands a lot. But then, by the end of the explanation, he looks more at the class, his speech is slower and his hands move less, or sometimes he keeps his hands in the air and looks at us, like saying 'Come on, say something, I've talked enough'.*

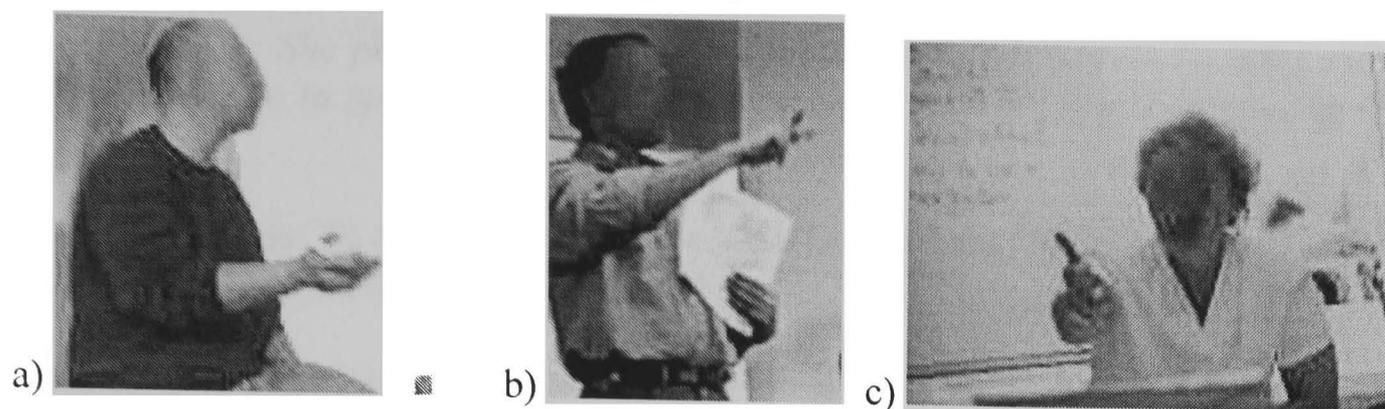
Ronaldo: *She explained a lot and now she is opening her arms to let us now that soon we can speak, like giving you time to get ready. She is inviting us to answer a question or just give an opinion. And then she puts down her arms to relax, no more hand moves, while I answer the question.*

Learners not only identify such non-verbal actions as regulating the interaction, but they also mention the conditions in which these gestures are effective. Marianne explains how the non-verbal actions of giving the turn need to be clear and directly oriented to the nominated student in order to avoid confusions and interruptions:

There are sometimes teachers who you don't know for sure if they are talking to you or to the other student or if they are looking at you or at someone else. But if she shows you with the finger or the hand, then you know it's you to answer.

The gesture of pointing with the hand or the finger to a student therefore becomes an emblem of turn-giving used sometimes in combination with other signs, like direct eye contact, raised eyebrows or raised intonation and then silent pause.

Figure 9.3. Deictic gestures of turn giving



The same gesture of pointing to one's direction, acting as a simple regulator for Marianne, also has an emotional significance:

Narun: When she is pointing at you it means that she is giving you the permission to speak. The pointing with the finger is threatening, but with the palm open is warmer, it gives you a good feeling. She always tries to make us feel comfortable in the class.

Kandar: Pointing at a student is ok when they know the answer; otherwise it becomes stressful and embarrassing as everybody is looking at you and waiting for your answer.

While Kandar talks about the instances in which learners have no choice but to take the turn when allocated by the teacher, other instances give the learners the impression of a certain degree of freedom in speaking up in the class. As gaps and interruptions are uncomfortable in any conversations, some learners feel compelled to re-establish the fluency of the interaction and take the turn spontaneously:

Ronaldo: She explained a lot the difference between the two concepts and now she is opening the arms to let us know that now we can speak, if we want. Sooner or later somebody speaks, otherwise it gets too embarrassing.

Liang: I am the only Chinese in the class and I feel a bit uncomfortable because sometimes the class gets too quiet. Then I feel that I have to say something to save the others in the class. I say to myself, Liang, you have to say something. Other times I also think the opposite, that I shouldn't also try and save the moment when it's dead silent. Let the teacher know there is something wrong with the class. If you speak, the teacher will think that everything is ok in the class. But I cannot control myself always. When the class is dead quiet I need to speak; it's just polite to do so sometimes.

In a similar way to the learners, the trainee teachers identified the teachers' actions seen to regulate the interaction and determine a learner's turn. The non-verbal actions which trainee teachers identified as regulatory and turn-giving were as follows:

a) Pointing with the hand, the finger or the head

Cardik: *She pointed at the student with the palm open, a nicer way to invite someone to speak rather than showing them with the finger or calling their name.*

Michaela: *To indicate a student who to answer, she [the teacher] showed him or her with a slight tilt of the head.*

b) Establishing direct eye contact with the learner

Elvira: *The teacher kept eye contact with individual students when nominating them to answer a question. In that way, she made it clear that she expects them to speak and also gave them the confidence to do it.*

Irida: *The teacher was blinking her eyes repeatedly when prompting/ waiting for a student to provide an answer.*

c) Smiling and head nodding

Claudius: *The teacher was always smiling when asking a question and always nodding her head when they were answering.*

Inghin: *After students have finished their work in pairs, the teachers would nominate individuals by smiling and nodding at them. They could decode what she meant by this and they would always answer promptly.*

d) Raising the eyebrows

Craus: *She said 'have you ever been pick-pocketing?' and rises the tone of her voice. Then she pauses, smiles and raises her eyebrows, while waiting for someone to answer.*

e) Raising intonation and pausing

Irida: *The teacher raised her voice as well as her eyebrows whenever asking them a question.*

Inghin: *As she is writing half of a sentence on the board, she says it loud and then she pauses and waits for the students to complete the sentence. They seemed familiar with the teacher's style and answered as soon as she paused.*

Interestingly, the trainee teachers' accounts express in a more holistic manner than the learners' accounts the complexes of NVBs which occur when teachers nominate a speaker in the class. They usually identified combinations of simultaneous actions rather than isolated acts. This may reflect their concern with the broader classroom context in which an act of behaviour has the potential of influencing the learners. In

this sense, when discussing the meaning of silence, Ariadne explains the role which the context plays in interpreting it:

The meaning of teacher's silence depends very much on the context in which it is used, what other behaviours accompany it. Silence can be good, it can give learners time to think. If a teacher is silent when looking at the classroom and his facial expression is indicating that he is waiting for an answer or that he is irritated about something, like someone's behaviour for example, then silence has a different meaning for the students. It also depends on the students' culture, some cultures praise silence, while in the European culture, silence in conversations is awkward. Still, in the class, a teacher who doesn't have enough pauses and moments of silence might inhibit the students' participation.

Other trainees also reflected on the ways in which learners interpret a teacher's action as turn giving, having developed a shared understanding of certain signs made by the teacher. Sato, for example, says:

After asking an open question, the teacher would wait for a while, giving them time to think or check from their worksheet the answers and process their answers before speaking. Sometimes, she would fill this pause by holding her hand with the palm upwards in air and with an encouraging smile on the face. By now, students would know her well enough to understand that she was expecting an answer from any of them.

9.3.2. Maintaining or denying the learners' speech turn

In several situations, teachers were seen not only to maintain their own speech turn for long periods of time, but they were also perceived to employ direct non-verbal strategies of denying the learners' turn to speak or cutting short their contribution to the conversation.

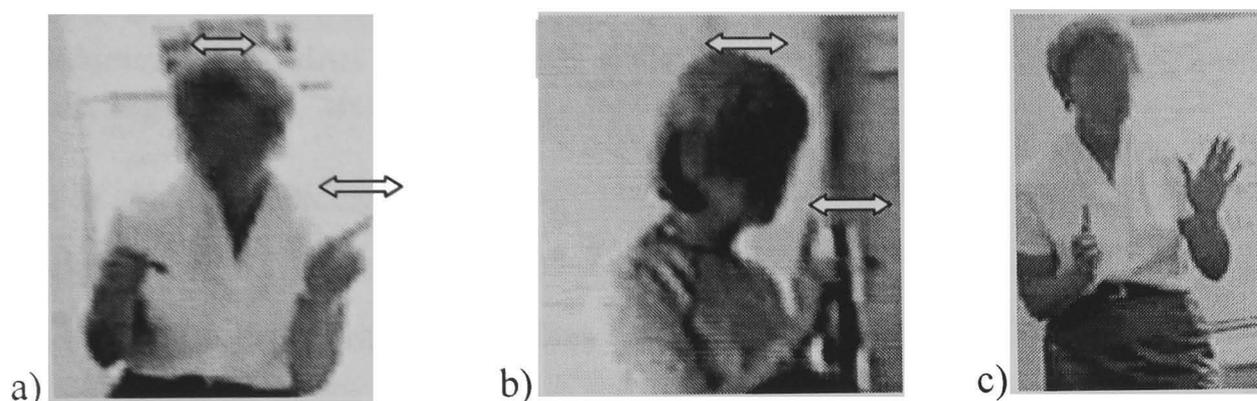
As one of the learners mentioned already, teachers were seen to use an intense gestural and verbal activity when giving explanations and when they did not have an intention of involving the learners in a direct verbal interaction. These aspects and the lack of eye contact with the students as well as the increased loudness and rapid tempo signalled to the learners the teacher's intention of continuing to talk:

Sylvia: If he speaks loudly and has very dynamic moves of his hands, it means that he wants us to listen and to follow what he says. When he comes to the end of his explanation, he will pause more and look up at us for our opinion or questions.

Kali: When he thinks, he doesn't move at all, but he always uses actions when he explains something and looks at people to make sure we understand. I would never think of interrupting a teacher while talking, as other students do. I only speak when he asks me to or when we work in groups.

There were some instances identified by the learners when teachers would deny the learners' turn either by ignoring their signals of turn request or by deliberately stopping the student after a long turn, using emblems such as wagging of the index finger and shaking the head (Figures 9.4. a. and b.) or showing the palm to the learner's direction (Figure 9.4. c.)

Figure 9.4. Emblems used to deny the speaker's turn



In *Class 5*, Romeo insists on continuing his explanation regarding the organisation of the legal system in Italy. The teacher ends the exchange by refusing the learner's turn (see also Figure 9.5.):

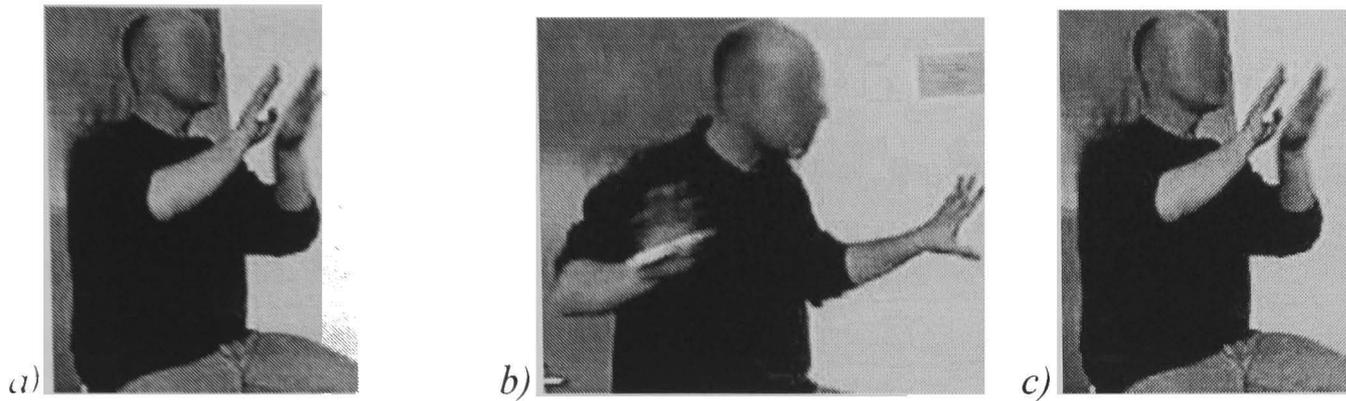
#5.75. **S** OK / so if

#5.76. **T** But I don't want to get
Emblem + Posture + EC: BH palms downwards describe a horizontal line laterally, then come back together. Also T stands up and avoids EC.

5.77. too stuck in this question / a /
1 Iconic: BH suggest a vertical cylinder from up to down, palms facing each other.
2 Beat: BH palms facing each other, both beat once in air.
3 Iconic: BH rotate one around other twice, like saying 'move on'.

#5.78. that's what gazumping means
Meta + EC: BH and arms open in a large gesture, palms open to the students' direction, EC re-established with whole class, collective gaze.

Figure 9.5. Complex of NVBs involved to deny the speaker's turn

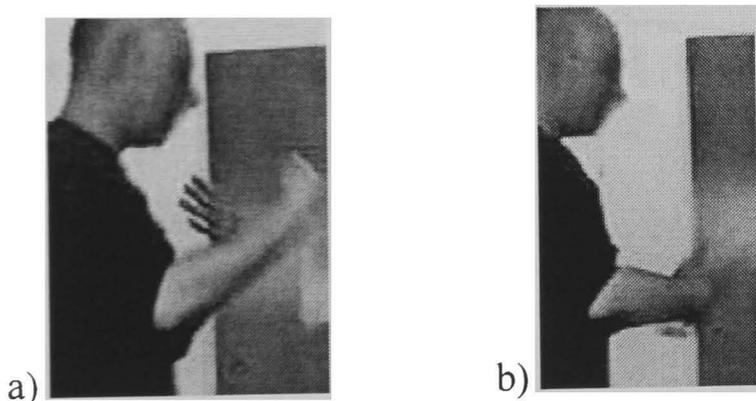


a) **#5.76. But I don't want to get** (too stuck in this question)
Emblem: BH palms downwards describe a horizontal line laterally, then come back together (T also stands up, avoids EC).

As in other instances, the message is sent to the learner through both channels, verbal and non-verbal. The teacher does not specifically say that he is not allowing Romeo to continue speaking, but he implies it in his utterance and clearly in his behaviour. He changes his position (stands up), avoids to look at the potential speaker, also rotates his hands around each other in a gesture which in itself might be enough to signify 'let us move on' (Figure 9.6.)

Figure 9.6. Iconic gesture suggesting the transition to a new topic

This gesture was produced in the absence of a lexical affiliate.



The effect on the student is the desired one, as he does not insist on continuing his explanation, although he confesses a feeling of frustration:

Romeo: He did not want to listen anymore and I sensed this some time before he actually stopped me. He started to look away and he was nodding quickly, like he wanted me to finish. But I really wanted to explain a difference between Scotland and Italy, so I was leaning forward and I looking to see if the others were listening to me. So when I realised that he doesn't want me to talk I leaned back, relaxed. I was a bit nervous because I couldn't say what I wanted to.

The perception of the same moment is shared by Johan, another student in the class:

His face [the teacher's] was showing anger or at least stress when Romeo was speaking, he wanted him to stop. So because he [Romeo] continues talking, the teacher decided to tell him to stop, so when he didn't look at him and moved on by asking another question, Romeo was probably feeling frustrated.

Trainee teachers also observed instances when teacher would repeatedly refuse to nominate some of the learners in the class and supposed a feeling of frustration for the subjects observed:

Sato: She could stay quiet or ignore students by not looking at them or even by turning her back to the students.

Sorito: One thing that puzzled me was that the teacher was not responding to the students putting their hands up. A boy was there with his hand up all the time, but the teacher did not react. He did not have any reaction of rejection, like an adverse facial expression or so, and he kept on trying. It seemed that this happened before, they were used to persevere.

Elvira: Their only way of asking to speak is by putting up the hand or by catching the teacher's eye. You cannot just start talking in the class. But there are many who want to speak and the teacher is the only one who decides the speaker, so there will always be situations when they want to speak in the class and cannot put a word in, so they might get a bit frustrated at times. Group work might be a way of reducing this frustration.

While the learners seemed more apprehensive than the trainee teachers regarding the teacher's limit on the speaking time allocated to the learners in the class, trainee teachers seemed much concerned with the frustration and inhibiting effects that these actions might have on learners. They identified alternative ways of organising the class so that learners have increased time to talk. Claudius says:

You have ultimately to teach all the stuff and you don't have too much time left for the learners to speak. And you also have to be fair and give the same time to the ones who want to speak and to the shy students. This is bound to upset the others whenever you make a selection, so maybe it's better to use group work and let them speak more and also decide by themselves who speaks and who listens.

9.3.3. Listening to the learners

When speaking, learners seemed sensitive to the teacher's reaction to their output judging it as an immediate feedback on their words as well as a confirmation or denial of permission to continue speaking. Several learners pointed out the role that teacher's actions had in determining their selection of words and also in deciding the length of

their turn. It seems that the learners significantly valued the immediate reaction expressed by the teacher while listening, as some of them said in the interviews:

Nahiko: If he is nodding when you speak it means 'I am listening'; it also shows that he wants you to continue speaking or to say that you gave the correct answer. These are all encouraging things.

Keiko: She smiles to encourage us to speak and also waits until you find the right words. When waiting, sometimes she just keeps her arms crossed or down and doesn't need to do anything, maybe just smile to encourage us.

Other learners considered these teacher's NVBs when listening as signs of relaxation from the teacher, who is most of the times energetically involved in the interaction. Therefore, when learners were speaking, the teacher was seen to adopt a more relaxed posture and limit their bodily actions to simply nodding or smiling to suggest to the learner that the channel of communication is still open:

Ronaldo: She is opening her arms to relax. She explained a lot and now she puts down her arms to relax while I am speaking.

Johan: If someone speaks, he seems relaxed, there are no big movements; still, his face will look serious, like he is interested or concentrated on the answer.

Romeo: He is sitting, quite informal; his hand to the head shows that he is thinking and his face shows interest in my point of view.

Craus, a trainee, describes a similar posture of physical relaxation of the teacher in moments when the action shifts to the learners. He describes the teacher's position when listening or waiting for the learners to accomplish a task:

Her two hands were grasped together while she was waiting for their answer or listening to them [the learners]. She was meantime looking at the speaker, to mark her interest in his or her answer. When they were discussing or working on a group task, she also crossed her arms on the chest, a neutral gesture in my interpretation.

Similarly, trainee teachers considered that the message sent by the teachers when listening to learners' output is of importance for the learners' affective state as well as for the good progress of the interaction:

Cardik: I think that giving praise verbally or non-verbally when students are speaking is essential. They know if their response was adequate and also that their contribution is interesting and appreciated. The teacher on behalf of the group has the authority to validate someone's contribution.

Irida: The teacher was smiling and nodding while listening to the student; the student was encouraged thus to make the effort.

In a few cases, the trainees identified some listening gestures which they interpreted as having a negative effect on the learners in the class, like the teacher drumming her fingers on the table or stretching his upper body, both actions being considered by the observers as showing, respectively, nervousness and lack of interest in the class.

Finally, trainees, again alert to learners' NVBs, observed a difference between the teacher's active listening behaviour and the learners' listening behaviour. While teachers were seen to display positive facial expressions, nodded and smiled when listening to the learners, learners were seen to seldom use these behaviours. This might of course be due to the length of teachers' speech turns and to the accepted asymmetric status between teacher and learners in the class.

9.4. Classroom non-verbal rituals

A number of comments were made by the learners and especially by the trainees on aspects of teachers' NVBs which were seen as 'regular' or 'ritualistic'. These NVBs occurred in identical contexts and acquired symbolic value for classroom participants. The repetitiveness of the same gesture or complex of NVBs, sometimes done in very similar steps, was perceived by both learners and trainees as a positive enhancer of the class group identity and familiarity with the teachers and their routines. Trainees, unlike learners, were prompted through the observation sheet to look for any existent patterns or repetitive uses of certain types of NVBs in the class and to identify the contexts in which these occurred. Learners themselves spontaneously identified instances that took place 'always' in similar ways in the class or NVBs that their teachers 'normally' did.

Although the activities that were perceived as ritualistic involved usually both the teacher and the learners in a joint effort, the teacher was seen by all informants as the main initiator of such rituals:

Jose: Whenever we clarify the words, she stands up in front of the class so that we can see her explanation. And she always uses gestures then to help her words, like drawing with her arms in the air. We normally watch her and if something is unclear, she will see your confused face or you can ask directly a question, to clarify the situation.

What Jose perceived as ritualistic in this teacher's activity seems to be a classroom practice widely recognised by the learners. When the teacher stands up after focussing on unknown words in a text or in a vocabulary list, the explanation that follows is

likely to be highlighted and accompanied by gestures. This behaviour from the teacher, standing up and then looking around the class for confirmation that she has the learners' attention, prepares the learners for taking up their role of being an active audience. They have to show they attend and confirm understanding through nodding or adopting a positive face expression or signal confusion and the need for clarification. All these actions function as signals for the teacher who reacts by detailing the explanation or by repeating it. Here is another example, as described by Theodor, who focuses more on the learner's role in this particular ritual:

Theodor: If he explains something, he looks us straight in the eye. So you have to concentrate on his explanation, because he can see if your mind is not there. You also have to locate your communication partner to see if he or she understands you. Teachers especially have to do it, and you need to help them, to show that you don't understand something.

Interviewer: And how do you normally do that?

Theodor: Well, your face is the best source first of all. You can show surprise or a puzzled face, as well as a wondering face, with your eyebrows raised. You can also do this with your head [head shake] or just lean forward with a curious face on. Also if you understand what he says, then you nod, smile and look happy.

Another type of activity that determined the adoption of routinised patterns of NVB was the question-and-answer interaction. In *Class 4*, the teacher initiates a discussion about the learners' favourite movie. The learners' answers are short and always addressed to the teacher, after which the teacher has to redirect the turn to another student or ask another question. Mayumi explains the practice:

When we talk about something, it is usually the teacher who starts to talk and tells us what to talk about. Then we all sit around the table and she asks something, then shows with her hand or smile who to answer, then the person called answers. You normally have to answer in short sentences because other people need to talk as well.

In another class, a trainee teacher observes an alteration to the routine of the teacher always deciding who speaks and on what topic. Inghin identifies a practice that became a customary activity in the class he observed, involving both teacher and learners. At the time of the observation, the learners became involved in the activity without any preliminary formal instructions from the teacher:

The teacher would usually start the topic. But once a student answered it, then the student would ask another question and nominate someone else in the class, either by looking at them, saying their name or just smiling. This seemed

to have been done before, as there was no explicit instruction from the teacher to do so.

Finally, when discussing the regular patterns observed in teachers' NVB style, trainees generally referred to the types of activity that triggered intense moments of teacher's gestural activity. Cardik offers a good summary of the rituals identified in his class:

There were several stages in the lesson, the general pattern being that the teacher taught something and then the students took turn to answer questions. During the different stages, the teacher adopted different NVBs. When she was speaking, she used more eye contact, gestures and adequate intonation. When she was waiting, she walked around the classroom to check that everyone was making progress and helped them. She also changed her sitting posture to show that time was up. When she was listening to their answer, she kept eye contact with the students and used some gestures and facial expressions to show that she was listening and acknowledge their answer.

The patterns discussed by Cardik were identified, with slight modifications, by most trainees. Teachers were seen to display moments of more intense gestural activity when speaking or giving explanations and an active listening behaviour when interacting with the students. Ming identified the predominance of verbal-only input when discussing abstract contents like grammar rules and an increase of verbal-and-gestural combination in more concrete contexts, like explaining vocabulary items or giving instructions:

When the teacher was talking about a grammar rule, she seldom used non-verbal behaviours, but verbal ones. But when she came across vocabulary items she adopted NVBs. For instance, when she tried to explain the word 'punch', she hold her hand up and gave herself a punch, jokingly.

Ming's observation is supported by learners' own beliefs that teachers' gestures are communicative in instances of concrete verbal input and less helpful in discussing abstract contents like concepts or grammar rules.

In all classes in the study, certain learning activities occurred on a regular basis. These activities appeared customary, as both learners and teachers seemed familiar with them and they also needed less explanation or introduction by the teacher. These routine activities were often signalled by NVBs seen as 'normal' and necessary by both learners and trainees and as beneficial for creating a degree of familiarity. This familiarity appeared to give the interaction a certain stability,

allowing teachers and learners alike to focus on the activity itself rather than on its organisation.

9.5. Summary

In this chapter I have presented teachers' NVBs that learners and trainee teachers perceived as having a contribution to the group management and the organisation of classroom interaction. Table 9.1. on the following page summarises the main organisational functions identified by the learners and the trainee teachers and the NVBs associated with each of these functions.

From the participants' accounts, the co-operation between teachers and learners in cultivating an environment without unnecessary disturbances became clear. The teachers' NVBs referred to in this chapter were seen by informants to mark their leading role in class. They seem to control the individual participation in the interaction, the use of the physical space for the purposes of organisation. Learners' accounts reflect their decoding of these regulatory messages, by responding to them accordingly. This shared understanding between learners and teachers, in addition to rituals regularly performed by the teachers in the class, create a environment of familiarity and order for all participants and may implicitly facilitate the social climate in which learning can take place.

This chapter concludes the presentation of the data as reported by learners and trainee teachers in response to videotaped and, respectively, observed lessons. The following chapter will provide an overview and a discussion of the findings emerging from the study. It will also offer a critical analysis of the points and observations made by the participants when reflecting on teachers' NVBs.

Table 9.1. Organisational functions of teachers' NVBs identified by participants and the NVBs associated with them

MAIN PERCEIVED ORGANISATIONAL FUNCTIONS OF TEACHERS' NVBs	SUBORDINATE ORGANISATIONAL FUNCTIONS	NVBs ASSOCIATED WITH EACH SUBORDINATE FUNCTION
<i>Fulfilling the leader's role</i>	Distributing roles in the interaction	Concrete deictics Eye contact Facial expressions
	Checking individual participation	Eye contact Position Use of physical space
	Manipulating classroom space and objects	Use of physical space
<i>Controlling speech turns</i>	Giving the speech turn	Concrete deictics Emblems Eye contact Facial expressions Posture
	Maintaining and denying the learners' speech turn	Emblems Eye contact Facial expressions Posture
	Listening to the learners	Emblems Eye contact Facial expressions Posture
<i>Classroom non-verbal rituals</i>		All codes of NVBs

**PART FOUR:
CONCLUSIONS**

CHAPTER 10

OVERALL RESEARCH FINDINGS AND DISCUSSION

10.1. Overview

In this chapter, I present and discuss the research findings as they emerged from the data analysis. The discussion considers to what extent the findings from the data answer the research questions that emerged from the pilot study. The nine findings are initially listed with their corresponding sub-findings, then each of them is commented on in direct relationship with the data and to other related studies in the field.

10.2. The research focus of the present study

The aim of my research exploration was to investigate the perceptions and interpretations that learners in the language class construct in relation to teachers' NVB. This study progressed in an exploratory manner, with the major findings from the pilot study providing a conceptual and methodological framework for the main study. The three research questions from the pilot study were as follows:

1. *Are students able to describe and interpret aspects of teachers' NVB?*

Students in the pilot study were able to describe and interpret teachers' NVB as seen on the video extracts from unfamiliar language classes. However, as these subjects did not participate directly in the classes they were asked to discuss, they mostly provided generalised rather than contextualised explanations of teachers' NVBs. It seemed therefore appropriate to consider learners, as direct participants in the class interaction and main addressees of teachers' NVB, as the most adequate informants for the research purposes of the main study. This preliminary finding guided the data collection methodology and identified the appropriate informants.

2. *What types of data will I obtain if I interview students on teachers' NVB?*

Data collected during the pilot study showed that there are similarities and differences in the ways in which individuals perceive and conceptualise aspects of teachers' NVB and that they interpret the NVBs identified mainly in functional terms. This preliminary finding led me to formulate the following hypothesis:

Students perceive and interpret teachers' NVB in terms of their functionality in the process of classroom interaction.

Therefore, the aim of the main study was to describe learners' perceptions and interpretations of teachers' NVBs as occurring within selected language classes and analyse them by using the conceptual framework emerging from the pilot study.

3. Is it possible to explore, by using video recorded data, individuals' interpretations of teachers' NVB?

This last research question explored in the pilot study supported the use of the video data as a way of stimulating the participants' comments on the NVBs occurring during the class. Due to the ephemeral and 'real time' character of gestures and other NVBs in any human interaction, informants needed a visual prompt of the events as they occurred in the interaction and the video extracts provided it. The pilot study determined thus the use of the visual prompts in the main study in conjunction with the stimulated recall methodology.

The aim of the main study was to document in much more detail the perceptions and interpretations that learners develop in relation to teachers' NVB in selected language classes. The first and main research question was formulated in the following way:

How is teachers' NVB perceived and interpreted by language learners in a language learning context?

The other five research questions (section 4.10. detailed the Research Questions of the main study) were related to this main question and aimed at investigating:

- Learners' attitudes to teachers' NVB and their perceived reactions to teachers' NVB (Question two);
- The types of functions that learners attribute to teachers' NVBs and the range of factors that influence their attributions (Question three);
- The teachers' NVB that learners perceive as affecting, in certain circumstances, their learning, emotions and social interaction (Question four);
- The similarities and differences between the individual selections of relevant NVBs and the interpretations given to the same aspects of teachers' NVB by different learners (Question five);
- The similarities and differences between learners' and trainee teachers' accounts (Question six).

10.3. Research findings

From the data, it was possible to deduce nine major findings, each constituted of a number of related findings. The main research findings are summarised here in direct relation to the research questions. A detailed discussion of the main findings and corresponding related findings follows later in the chapter.

Question 1: How is teachers' NVB perceived and interpreted by language learners in a language learning context?

Finding 1: All learners and trainee teachers participating in the study recognised certain teachers' gestures and other NVBs as conveying meanings in certain contexts and as contributing to the process of interaction in the classroom. They also interpreted these gestures and NVBs primarily in functional terms.

Question 2: Do learners value teachers' NVB and perceive themselves as reacting to teachers' NVB?

Finding 2: Language learners perceived themselves as attending to both teachers' speech and their NVBs and judged them as mostly interrelated in nature within the same communicative event.

Question 3: What functions do learners attribute to teachers' NVB and which are the factors that influence their attributions?

Finding 3: The three superordinate categories of perceived functions of NVB were: cognitive, emotional and relating to group organisation. Learners attribute these functions under the influence of prior knowledge and social experience and appear to be clear on the value and the function of an occurring aspect of NVB.

Question 4: What are the perceived effects of teachers' NVB and in which contexts are these perceived as relevant?

Finding 4: Learners considered certain NVBs, especially gestures, as important aids in the cognitive processes of language learning.

Finding 5: Learners considered certain NVBs as important clues in judging the teachers' emotions and attitudes in certain circumstances and in influencing their own emotions and attitudes during the class.

Finding 6: Learners considered certain NVBs as intrinsic components of a teacher's management and organisation of the classroom group.

Question 5: Do learners' individual accounts differ in how they select aspects of teachers' NVB and in how they interpret the same aspects of teachers' NVB, when selected?

Finding 7: Although individual learners and trainee teachers did focus differently on aspects of teachers' NVB, common interpretations of the meaning and functional role of certain aspects of NVB were frequent and seemed to be socially regulated.

Finding 8: Differences arise between the numbers of NVBs learners selected as relevant and sometimes between the interpretations given to the same aspect of teachers' NVB by different individuals.

Question 6: Do learners and trainee teachers differ in how they select aspects of teachers' NVB and in how they interpret the same aspects of teachers' NVB, when selected?

Finding 9: Trainee teachers who observed language classes shared, to a certain extent, the interpretations of teachers' NVBs with the participating learners. The emotional function of teacher NVBs was emphasised more by the learners than the trainees, while trainees showed greater awareness than the learners of the interaction between teachers' NVBs and learners' actions or responses to them.

10.4. Discussion of findings

This section provides a discussion of the main findings and the corresponding related findings in the order in which they were formulated above. Finding 1 suggests several hypotheses that may explain why all participants in the study considered teachers' NVBs, mainly gestures, as communicative and valued their role in the language class. Finding 2 suggests that learners see speech in conjunction with NVB as a cohesive system of meaning conveyance in the class. Findings 3 to 6 discuss, in an extended framework of the pilot study, the types of functions that learners and trainees attribute to teachers' NVB. I will then discuss the types of NVBs that learners interpreted in a similar manner and the ones that they disagreed upon (Findings 7 and 8). Finally, I review the trainee teachers' attitudes to teachers' NVB by comparing them with the learners' views (Finding 9). I conclude on a speculative note, proposing that teachers' NVB is an aspect of classroom interaction that might need more attention from teachers and researchers alike, for its hidden messages and complex impact on learners in a language class.

Finding 1: All learners and trainee teachers participating in the study recognised certain teachers' gestures and other NVBs as conveying meanings in certain contexts and as contributing to the process of interaction in the classroom. They also interpreted these gestures and NVBs primarily in functional terms.

Several reasons might account for the fact that all learners considered selected gestures and other NVBs as communicative and valuable aspects of teachers' classroom practice. Firstly, NVBs that they considered informative appeared to help learners to understand the content expressed verbally. They were perceived to either clarify or emphasise relevant information expressed in speech (see sub-chapter 7.4.), draw the learners' attention to an idea or phrase of importance (sub-chapter 7.5.1.) or give them hints for recollection (sub-chapter 7.5.2.). In other cases, teachers' NV actions conveyed their attitudes towards learners' output and prompted self-repairs (sub-chapters 7.6.2. and 7.6.3.). Learners and trainees alike identified different types of NVBs that, in various contexts, fulfil these different roles and generally considered them as communicating meanings. Most of the learners, who study English in a Western environment, welcome this type of expressiveness in teachers, perceiving it as an affirmation of the teacher's professional skills as well as of personal charisma.

There may be also affective reasons why learners preferred to consider teachers' gestures and other selected NVBs valuable for their language learning. At a practical level, teachers who convey an emotional value attached to the verbal message may be seen as easier to follow by the learners and also may give learners a sense of warmth and familiarity. Learners confessed to being pleased when able to infer a teacher's emotional state or attitude in a particular moment of interaction, especially after an instance of learner output. Most individuals know how difficult it is to communicate with people who do not indicate their reaction and feelings towards the message received. Surprisingly, even the subjects coming from cultural backgrounds with restrictive display rules considered teachers' NVB as a useful source of information and praised the teachers' expressivity in the class.

Learners evidently identified particular gestures and instances of eye contact, facial expressions and spatial behaviour that they considered as helpful in their own right or in direct relationship with the verbal context in which they occurred. When the NVBs expressed emotions, attitudes and role distributions, for example, they were seen as meaningful in themselves (as seen in Chapter 8). When NVBs occurred in direct relationship with the verbal discourse, they were considered meaningful through their properties of visualising or concretising words or ideas that were too complex or inaccessible verbally due to the learners' limited level of proficiency (As shown in Chapter 7, section 7.4.). Iconics and metaphoric gestures especially were seen in these situations as relevant. Emblems and deictics tend to have a very clear meaning and are also more standardised in form (i.e. their form is regulated socially, there are certain rules of producing them correctly) and more specific in meaning. This may explain why teachers used more emblems and deictics than iconics in the extracts selected (see Appendix E for absolute figures of gestures used). Moreover, emblematic gestures appear to have an already established meaning within the group or to develop as EFL classroom-specific emblems (Hauge, 2000).

Another possible explanation for the learners' positive judgement of teachers' NVB in this study is the existence of certain gestural commonalities across cultures and their potentially compensatory role in moments of linguistic impairment. As gestures and other NVBs are visible and generally considered as reliable components of any interaction, it seems reasonable to rely on them when one needs to break down inter-cultural as well as inter-lingual barriers. Although learners expressed strong awareness of cultural differences which regulate the amount, the types, and the

meanings of certain NVBs in the interaction, they seemed confident in considering the cross-cultural commonalities rather than being too concerned with the cultural discrepancies. Individuals process non-verbal aspects more easily than the verbal ones (Feyereisen & deLannoy, 1991) and this might become, for the learners, a way of salienting their interaction with others and thereby helping their understanding.

There were particular contexts that learners considered as determining the communicative properties of teachers' NVBs, as seen in the learners' own comments (Chapters 7,8 and 9). These contexts were either verbal, e.g. a sentence, or situational contexts, e.g. question - and - answer interactions, in which learners used either the speech which embedded the NVBs or features of the particular situation in which they occurred as the main factor in determining the behavioural meaning (see, for example, sub-chapters '7.6. Reacting to learners' output', '8.4. Creating a positive group atmosphere' and '9.3. Controlling speech turns'). In other words, learners' definitions of a situation in terms of a frame or recurrent pattern that is familiar or recognisable determine the meanings they give to a certain aspect of a teacher's NVB. However, once learners are familiar with the situation, the meaning of the teacher's actions depends more heavily on the immediate verbal context (sentence or phrase). They are used instead to understand words and sentences rather than patterns of interaction, as gestures usually bear a close relationship to the semantic and pragmatic content of speech (see sub-chapter '7.4. Enhancing comprehension through gestures'). At this micro-level, learners seem to perceive gestures and other NVBs as a kind of 'contextualisation cues' which allow them to make sense of the situation and, more precisely, of individual sentences. Referring to linguistic contextualisation cues, Gumperz (1982) highlights the role that these play in interaction, with the participants' active involvement in interpreting them correctly:

a contextualisation cue is any feature of linguistic form that contributes to the signalling of contextual presuppositions (...) Unlike words that can be discussed out of context, the meanings of contextualisation cues are rather implicit. They are not usually talked about out of context. Their signalling value depends on the participants' tacit awareness of their meaningfulness (...). However, when a listener does not react to a cue or is unaware of its function, interpretations may differ and misunderstanding may occur.

(1982:131-132)

Most of the gestures become meaningful for the informants only in the context of interaction and only with the listeners' direct interpretive involvement in attributing a

meaning to gestures. Otherwise, a gesture remains an unimportant and ephemeral action, despite its communicative potential. Therefore, it becomes central to see in what contexts learners start to pay attention to teachers' gestures and other NVBs and in what contexts they may ignore them. A good deal of learners' interpretations also included their descriptions of the wider context of the particular use of a specific NVB. Their definition of the context appears to affect the meanings they give to the gestures perceived and instant-by-instant reactions they are going to have in relation to these gestures. In this sense, it seemed that learners considered teachers' NVBs as relevant and meaningful when they occurred in direct or indirect relationship with a significant aspect of the learning – cognitive, emotional or regulatory. When learners considered that they understood the teacher's message, the aspects of teachers' NVB that seemed to affect the content or the conditions of the learning were selected as meaningful.

In a previous study, Gullberg (1998) found that listeners of a narrative, who did not see gestures, generally believed that seeing the gestures would have improved their comprehension, especially when the narrators were non-native speakers of low proficiency. At the same time, listeners who saw the gestures were generally vague regarding their improvement value. The fact that all subjects were asked to evaluate the efficiency of the gestures after the actual interaction took place, without any immediate recall prompts, might explain why their explanations were vague, in contrast to the findings from the present study. Participants in this study had available the immediate context of the interaction through videos or direct observation as a basis for their analysis, which might explain why they were able to make judgements on a concrete, rather than imaginary basis.

There may be another explanation for learners' positive judgement of teachers' NVB in this study. As other authors indicate (Neu, 1990; Gullberg, 1998), assessments of gestural efficiency depend to a great extent on the speaker's general communicative style, defined as an interacting manner which involves a general level of activity, not only gestural, but also oral and interactive. In other words, listeners assess more positively the speaker who is making an effort during the whole interaction and whom they perceive as superior or whom they respect in terms of linguistic or social status. It may be the case that, as with oral communication, learners judge the efficiency of the NVBs perceived on the basis of who performs them, rather than on the basis of some inherent properties of the NVBs perceived.

This would explain why the same type of gestural activity occurring in some of the classes was judged differently when performed by a teacher and when performed by a student. A student's intense gestural activity was typically seen as a sign of linguistic struggle, while a teacher's intense gesturing was seen as an indication of involvement and commitment to make the content clear and accessible.

Finding 2: Language learners perceived themselves as attending to both teachers' speech and their NVBs and judged them as mostly interrelated in nature within the same communicative event.

Although only few learners specifically articulated the belief that there is a direct relationship between language and speech, they all readily assumed that NVBs that they saw as meaningful supported or complemented the co-occurring verbal message. Their comments referred almost constantly to meanings conveyed non-verbally in direct relationship with the content of speech. This indicates that learners perceived an existent semantic and pragmatic relationship between the content of speech and the content of NVB, especially of gestures.

All participants considered teachers as using speech and gestures and other NVBs with the same purpose of getting their meanings across to the learners, while also preserving a positive group atmosphere and cohesion. The evidence from learners' accounts and from my own observations on the video data suggests that teachers systematically use communicative gestures and other NVBs to enhance the meanings expressed verbally and sometimes even to substitute them. While some gestures simply emphasise the relevant aspects of the verbal discourse, others complete the speech by illustrating a different aspect of an object or phenomenon described, yet others communicate independently of speech, i.e. emblems. Teachers, as with the majority of individuals, may not be aware of the types of NVBs they actually use in class. However, the impact of their actions on the learners seems to be at least as strong as the impact of their speech (as seen in Chapters 7 to 9) and especially when feelings and attitudes are involved (as shown in Chapter 8).

The fact that learners perceived themselves as attending to both systems of communication in the process of interaction suggests that learners had intuitive knowledge of how gesture and speech co-exist and function, and of the roles that gestures and other meaningful NVBs play in the process of human communication. Learners not only identified and elaborated on the communicative properties of

gestures and other NVBs, they also perceived themselves as reacting constantly to teachers' NVB actions in a manner that furthered their learning and also preserved a positive classroom participation.

During the interviews, learners expressed a range of beliefs about the nature of teaching and language learning. They all seemed to share some expectations and beliefs about the ideal language class and the ideal language teacher. First, several learners considered that they were more likely to learn if the teachers were dynamic and expressive, creating opportunities for interaction and a relaxed atmosphere. It became evident that they valued the British learning environment for its interactive style and affective engagement and considered it a motivational factor for learning. Second, a number of learners considered communicative gestures and other NVBs as the sole way of accessing certain meanings expressed by the teachers, especially when they were learners of lower levels of proficiency or when the content of speech was felt not to be clear enough. This compensatory role of (mainly) gestures was perceived as another incentive for the learners to watch and interpret teachers' NVB. Learners considered themselves as more confident in interpreting teachers' NVBs, especially when it came to emotions and attitudes, than relying solely on speech. They also appeared to consider the emotional and social interaction with the teacher as important as their own learning processes. A third common belief was that they shared with the teachers the aim of the interaction, that is to develop their learning and to do so in a positive environment. In this sense, learners considered that both teachers and themselves were tacitly committed to preserve the smooth development of the interaction by trying to communicate by all means available and by striving to understand correctly and react adequately to each other's messages.

These commonly shared beliefs suggest that a further motivational force may have underpinned the learners' desire for actively interpreting NVBs. Perhaps the learners considered communicative NVBs as a more direct and reliable way of interpreting teachers' intentions and messages, due to their own limited language proficiency. It seems that learners felt that, by watching teachers' NVBs in the class, they have an alternative or complementary way to construct their interpretations of verbal meanings. In the case of emotions and attitudes, teachers' NVB becomes the main channel of communication, as these are routinely conveyed non-verbally rather than verbalised and learners appeared to be highly sensitive to them.

While, in most cases, learners seem to understand the messages conveyed non-verbally by the teachers, there are certain instances where confusions occurred due to misinterpretations of teachers' NVBs (see section 7.4.6.). As misunderstandings can occur in the case of NVBs as well as in speech, learners seem to constantly rely on both systems of communication to figure out the meanings conveyed by the teachers and, indeed, to communicate their own meanings. Although it was not the purpose of the study to investigate learners' use of NVB in their own discourse, during the interviews, it was obvious that learners themselves use communicative gestures in immediate conjunction with speech in order to ensure the correct encoding of their meanings and to prevent misunderstandings. In this sense, very often they chose to reproduce teachers' gestures that they were describing.

It seems clear from previous research that speakers use language and gesture in partnership in order to communicate and can shift the prevalence and roles of any of the two during the conversation in dependence with their communicative purposes (McNeill, 1992; 2000; Kendon, 1980; 1994). The two systems employ different media and therefore offer different possibilities of use to the speakers. The different structural and functional affordances are not a weakness, but a strength of the two systems in combination, as these differences allow for their complementary use by both speaker and receiver. However, research so far has not explored the ways in which the recipients attend simultaneously to the two systems of communication in real time. The present study shows that learners seem to consider both systems communicative, be aware of their interface in communicating meanings and perceive themselves as attending to both teachers' speech and gestures.

Finding 3: The three superordinate categories of perceived functions of NVB were: cognitive, emotional and relating to group organisation. Learners attribute these functions under the influence of prior knowledge and social experience and appear to be clear on the value and the function of an occurring aspect of NVB.

One of the clearest findings that emerged from the study was the degree to which learners made immediate, seemingly ad hoc selections of 'relevant' NVBs and offered decisions on the roles that these NVBs fulfilled in the interaction. Goodwin (1981) was able to show how participants in a conversation both attend and fail to attend to each other's actions, by drawing a distinction between actions that are relevant or irrelevant. He also identified the issue of finding out how gestures become

consequential (or not) for the recipients as one of the main challenges for future research on gesture, as:

very often recipients to a gesture do not make a subsequent move to it that deals with the gesture as a distinct event in its own right. It is thus difficult to establish what consequences the gesture has for the organisation of their action. (1981: 29)

In another study, Kendon (1976) also found that observers readily and consistently distinguish between actions that they classify as communicational and other behaviours that they ignore or discount as irrelevant for the communication. Similarly, the findings from the current study seem to indicate that learners constantly distinguished, either through their selections of teachers' NVBs or explicitly through their comments, between actions that they perceived as relevant and actions that they ignored or discounted as irrelevant or of little significance for them.

The mechanisms through which learners decide to consider a gesture as important or disregard it completely are not clear yet. The fact that individuals are able to make a selection and attribute meanings and functions to only certain actions in the interaction indicates that the role of the audience is crucial for the destiny of a NV action. Speakers employ several strategies in securing the communicative significance of their gestures, such as orienting their eye-gaze at the hands as they begin to gesticulate, orient their body towards the audience to make their actions visible or include deictic particles (e.g. 'like this') in their spoken utterances to 'point' the recipient to the gestures (Streeck, 1994). However, the fate of a gesture is ultimately decided by the recipient, who has to make an effort of attaching it with function and meaning through a process of interpretation in the immediate context.

How do learners decide if a gesture is or is not relevant in a class? The findings from this study seem to indicate that learners tend to prioritise the function of a gesture or act of NVB and attend to it when it affects, directly or indirectly, their own learning. A possible explanation for the fact that learners attributed functional values to gestures and other NVBs is the learners' own definition of the social context in which the events occurred and were investigated. Learners knew that their presence in the class is justified mainly by their need to learn (Ellis, 2001a). Therefore, they may have constructed their judgements of any action occurring in the classroom context in direct conjunction with their cognitive processing needs, their affective states and their participation in an activity of group organisation. Patterson's

functional model of NVB (1982,1983,1991) assumed that an individual's naive perception of the purpose or function of a given interaction is a more important determinant of interactive behaviour than a spontaneous reaction or arousal, as suggested by earlier theories of NV exchange (reviewed in Chapter 2). The findings from the present study support Patterson's view, in the sense that learners constantly justified their interpretations of teachers' NVB with reference to the functions that they attributed to them. Rather than reacting to teachers' NVB in an 'instinctive' way, individuals seem to perform an interpretive activity in relation to the act of NVB perceived. Learners seem to interpret according to a pre-existent set of knowledge and beliefs about teaching and learning in a classroom setting which allow them to attach particular meanings to teachers' NVB and self-regulate accordingly their own participation in the interaction.

Three themes of interpretation emerged which typified learners' attributions of functional value to teachers' NVBs. The first and most predominant in learners' accounts was the cognitive dimension; NVBs which learners perceive as influencing their mental processes of learning (see Appendix F for absolute figures of NVBs identified by learners for each of the functional categories). Learners include here gestures and NVBs that affected processes like comprehension, memorisation, language production etc. A second area of interpretation includes NVBs that learners perceive as affecting their emotions and attitudes towards learning and towards the teacher. Finally, the last group of NVBs was perceived as affecting the group organisation and classroom management. The research findings regarding learners' interpretations in each of these three areas are further discussed below.

It appears that while, most of the time in the class, learners do not need to reflect on the meanings attached to teachers' NVBs, they nevertheless seem to possess prior background knowledge on some of the factors that may influence them and this knowledge is accessed consciously whenever the interaction becomes unstable or confusing. In the case of language learners, the chances for instability of the interaction are increased. They have thus to constantly evaluate the teachers' NVB. This pre-existent knowledge that learners use in interpreting teachers' NVB calls on a set of previous beliefs and experiences about the types and meanings of the interactional patterns and the factors which may determine them. This knowledge may be acquired unconsciously, be the outcome of social observation and imitation, or may be acquired consciously. Like all individuals, learners therefore appear to possess

a set of beliefs developed through previous social interaction or instruction, which they are able to talk about and use in making sense of any act of NVB.

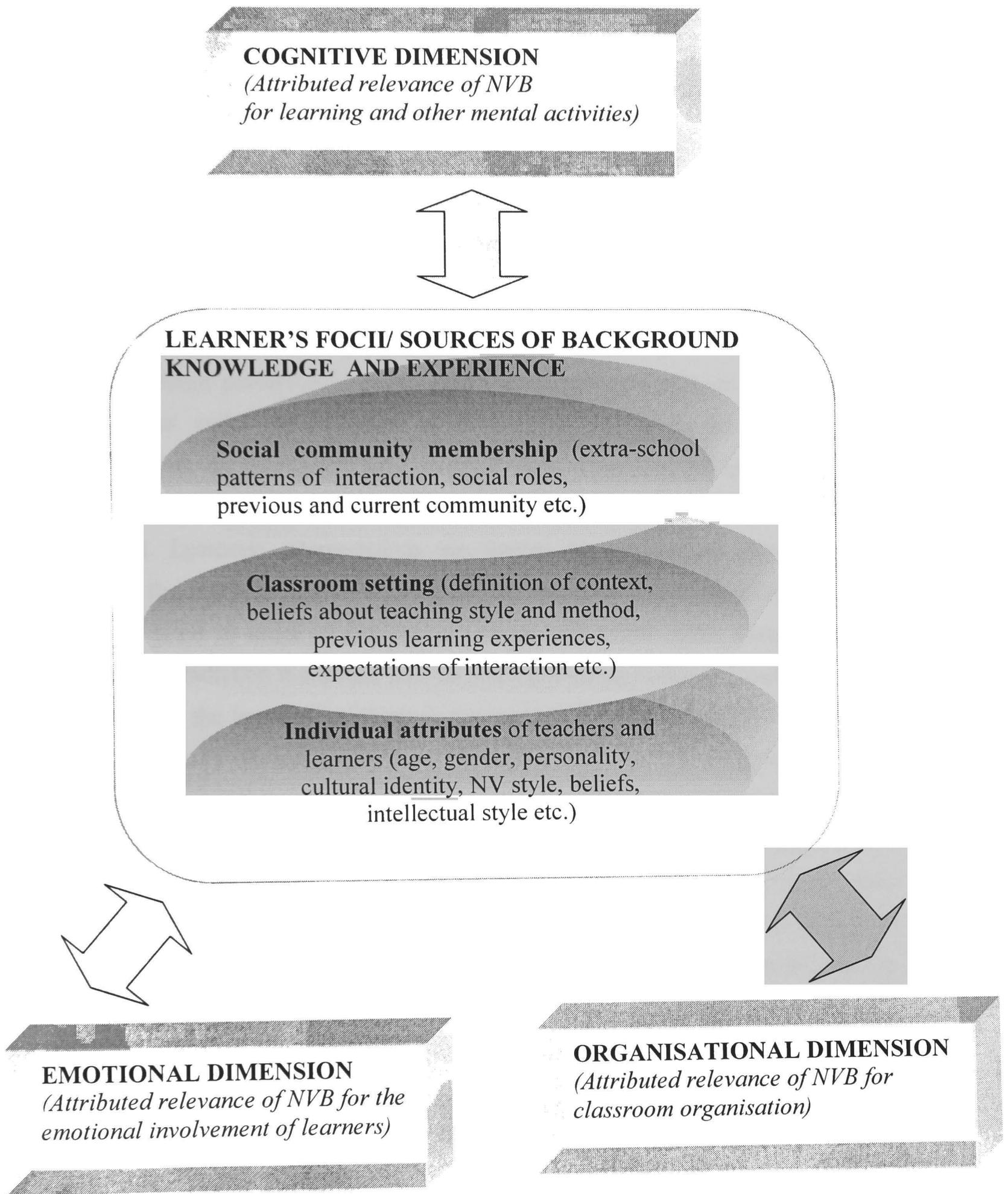
Three categories of prior knowledge emerged from the learners' accounts, which focused respectively on the individual, the setting, and extra-class social interaction:

- *Individual knowledge* refers to knowledge learners acquired about how cognitive and affective factors, such as teachers' gender, personality, culture, motivation etc. may influence their NVBs.
- *Setting knowledge* refers, first of all, to the understanding of the pedagogical purposes of their interaction and their expectations of it. It also includes knowledge about different teaching styles, teaching methodologies, methods of class interaction etc.
- *Social knowledge* refers to the general knowledge learners develop about the social rules and conventions of interaction and meaning making in intercultural interaction and about the 'when' and 'how' to apply them.

These three types of knowledge appeared to guide the learners' choices of interpretation when reflecting on teachers' NVB. The ways in which learners make use of this knowledge in the interaction seems to vary and follow mysterious ways and these individualised interpretations may ultimately influence the learners' self-regulation of their NVBs in the class.

This study was based on individuals' perceptions of teachers' NVB rather than on the analysis of teachers' actual 'performed' NVB. It reflected thus the attributions made by the participants themselves to teachers' NVBs rather than analysing the NVBs produced by the teachers. The perceivers' perspective was prevalent at all times. A model of 'perceived' NVB emerged from the data as it seemed necessary to distinguish between the NVB that teachers *produce* and the NVB that learners *perceive* as relevant. In order to conceptualise this relationship between interpretations (of others' NVBs) as emerging from the data available in this study and what may determine them, the interrelationship between the three types of functions of perceived NVB and the types of knowledge can be illustrated diagrammatically as in Figure 10.1. on the following page.

Figure 10.1. An illustration of the functional model of perceived NVB



This model of 'perceived' NVB suggests the following definition:

Perceived NVB describes the individuals' attribution of relevance to an act of NVB as occurring during interaction and the interpretation of it as affecting the individuals' mental processes, their affective engagement in the interaction, and/or the management of relationships within the immediate social group. These interpretations are determined firstly by the individuals' definition of the immediate context of the interaction and then by more social remote factors. Interpretations of others' NVBs give stability to the interaction and sustain the individual as part of it.

The three major perceived functions of NVB (cognitive, emotional, organisational) emerge thus under the influence of three levels of factors which may affect simultaneously the interpretations individuals make. However, the specific functions and meanings attributed to an act of NVB reside to a certain extent with the individual. Learners' interpretations are limited by pre-existent patterns, which prescribe the potential types of interpretations that individuals can attribute to any aspect of NVB in order to maintain a smooth and collaborative interaction. This apparent contradiction is clarified later on when discussing Findings 7 and 8.

While the learners' attributions are unpredictable to a certain extent, due to each individual's distinct background knowledge and life experiences, shared and constant interpretations are made possible by pre-existent rules of social interaction and meaning making which are inherent properties of a context such as a classroom. Moerman (1990:40) argues that the unit of any interaction is the 'social move', seen as a physical action, audible or visible, which contributes to the social interaction on the basis of a set of patterned interactive structures and events. Although the ways in which an individual will react in a situation or interpret it are generally unpredictable, the existence of a set of features which participants seem to regularly take into account and emphasise when acting and reacting to an act of social interaction gives it stability and continuity. The data from the learners and the trainee teachers suggested a shared awareness of such features.

Finding 4: Learners consider certain NVBs, especially gestures, as important aids in the cognitive processes of language learning.

In selecting the aspects of teachers' NVBs that they considered relevant, learners gave a considerable predominance to gestures perceived to have a cognitive function. More than half of the total attributions made to teachers' NVBs were cognitive and most of these NVBs were gestures (See Appendix F). There appear to be a number of reasons for this. First, the social context in which the interaction and the research took place was a pedagogic one. In observing gestures and other NVBs, the habitat in which they occur is the immediate clue for their viewers. Secondly, due to the fact that most gestures are synchronous with speech and present the same or closely related meanings with it, they might become more salient for interpreting meanings. Third, the frequency of gestures increases when restrictions are imposed on speech (Rauscher *et al.*, 1996) or with increasing encoding problems (Feyereisen and de Lannoy, 1991). Similarly, it may be the case that teachers' gestural frequency increases when they expect the learners to encounter difficulties in understanding. Teachers might anticipate, through previous experience and intuition, learners' decoding verbal difficulties and try and provide them with explicit and relevant gestural cues with which to increase their chances of decoding the intended referent. Gestures are also the only NVBs that can encode complex meanings. They become thus the predominant NVB in learners' explanations or narratives.

In general, gestures that give a visual representation to concrete or abstract concepts (see sub-chapter 7.4.2.) or gestures that emphasise the main words in a sentence (see sub-chapter 7.4.3.) were seen as particularly helpful by the learners. Almost half of the cognitive attributions made by all learners referred to gestures that were seen to enhance the learners' understanding, by illustrating the meanings expressed verbally (see Appendix F). Gestures appeared to be considered helpful mainly when they had a clear correspondent at the level of speech and when their production was salient. These were concrete gestures, i.e. iconics with a referential content, that were noticeable and salient due to their clarity or amplitude. The probable explanation for this is that attention needs clear and visible actions for processing in real time. Speakers and viewers seem to intuitively know this rule, as speakers were shown to use different techniques of making their gestures clearly visible to their audience (Streeck, 1994), while viewers make efforts to see the speakers whenever possible during interaction. If this is the case, then teachers may be trained to ensure that they provide the learners with visible and clear gestures and ensure their saliency for interpretation.

Although learners found it difficult to assess how precisely these gestures helped them when reflecting on their cognitive processes at the moment of perceiving the actions, they nevertheless considered certain gestures as facilitating mental processes implied in their learning. It seems that learners focus on the aspects of the gesture which express those properties of the referent which are ambiguous in speech or of which they are not certain, due to their linguistic level or capabilities. As most speech-related gestures are pragmatically and semantically co-expressive with the content of speech, it is reasonable to find that learners perceive this relationship and try to rely on one or both systems in understanding. Learners identified several instances of complementarity between the two systems, speech and gesture, when elements of content were deduced by the learners synchronously from the two channels (see, for example, evidence presented in sub-chapters 7.4.2., 7.4.4. and 7.4.5.). In situations when gestures completed the verbal message by adding new information to the content, learners seemed able to perform this mental act of combining both media in order to achieve meaning. When a teacher says that the temperatures are 'different' meantime indicating with his hand decreasing levels in the gestural space, learners interpreted that what the teacher meant were constantly lowered temperatures.

Some gestures that represented visually the content of speech were also considered as assisting learning by functioning as mnemonics and helping retention (see sub-chapter 7.5.2.). Some learners talked about 'mental images' that helped the retention of the verbal equivalent and/or its meaning. While sometimes learners would not be able to remember the exact word, they could recollect the meaning expressed or the ideas discussed. In other cases, gestures were believed to help the memorising of the lexical equivalent or of an association of terms.

In several instances, learners perceived the compensatory character of gestures when they could not comprehend the verbal message or when the teacher was trying to elicit a word or idea (section 7.4.5.). In these situations, learners perceived the gestural clues as the only available resource for continuing the interaction. This was connected by them with the learners' own performative strategy of using more gestures when they did not know a word in a foreign language. Similarly, when unable to understand an interlocutor, learners seemed to become more alert to their non-verbal clues when providing supplementary explanations. When teachers explain a word or concept, learners seemed to classify the situation as potentially 'difficult' or

'important' and became thus more alert to teachers' gestures. Learners themselves explain that, when understanding is easy, gestures become 'superfluous' or 'unimportant'. When comprehension is problematic, learners seem to try to rely on alternatives to the verbal channel and in this way gestures become more salient to them.

Teachers were also perceived to use techniques of eliciting learners' responses through gestures. Mainly iconics and emblems were identified in conjunction with this function (see sub-chapter 7.4.5.). As this is a frequent type of class activity, learners seemed to look out for teachers' NV clues in situations of word search. It might be the case that learners apply similar strategies in comprehending a verbal message as they do in overcoming their difficulties in speaking. As another study has shown, when speaking in a foreign language, people produce more gestures to solve lexically related problems and gestures that exploit the conceptual features of the referents, such as iconics and referential metaphors (Gullberg, 1998). It may be the case, as this study shows, that learners rely on the same types of gestures in class when being direct addressees and when encountering difficulties in understanding the teachers' message.

Another group of functions that learners attributed to teachers' gestures were the ones that they related to the facilitative conditions of learning (see sub-chapter 7.5.). There were gestures, especially concrete deictics or emblems, which learners perceived as directing their attention to an aspect of importance, place or person and thus facilitate their concentration. These gestures of pointing to objects or people were perceived as focussing the attention and as making a sentence or situation less ambiguous. Similarly, gestures that emphasised the relevant parts of a sentence, usually abstract deictics used to mark the key word or phrase, were also often noticed by the learners. However, learners did not mention beats almost at all. These gestures, produced as flicks of the hand used by speakers as management gestures to index the significant elements of the discourse, were not discussed in learners' accounts, although teachers appeared to use them quite often in the video extracts selected (see Appendix E). The probable explanation for this fact might be the quick and brief character of such gestures. When learners identified beats in teachers' NVBs, they usually considered them as 'normal' or typical speaker's gestures meant to help the speaker, rather than to communicate to the viewer.

Finally, another function that learners often perceived in teachers' NV activity during the class was that of acknowledging their output and responding to it, either by agreeing or disagreeing, or by asking for clarifications (as presented in sub-chapter 7.6.). Learners perceived this type of interaction as a set of patterns which occur with regularity in the class and which are intrinsic components of teacher-learner interaction. As these reactions were brief and recognisable, mainly expressed through emblematic gestures and facial expressions, they might have appeared as unimportant or too quick to be noticed by the learners. On the contrary, learners seemed to be very alert to teachers' reactions to someone's answer and to their own and considered these NV reactions as significant, desirable and important for their own learning. Although the affective dimension was stressed by some learners, they nevertheless implied that teachers' attitudes to their answers also had a cognitive impact in the sense that learners learn what teachers approve as correct or important.

Another aspect that deserves consideration is that of the potential of ambiguous gestures and of culturally-specific emblems to hinder learning (discussed in sub-chapter 7.4.6.). Although situations like these might occur, as shown in one of the classes in this study, they do not seem of great concern as they are rare in comparison with the situations in which gestures are seen by informants to help comprehension. Learners seem to cope with these ambiguous situations by seeking confirmations or clarifications in the content of speech and/ or by giving the speaker the benefit of being well-intentioned. The misinterpretations, rightly or wrongly, are usually related by the learners to their own level of proficiency or assumed unawareness of teachers' cultural rules.

Finding 5: Learners considered certain NVBs as important clues in judging the teachers' emotions and attitudes in certain circumstances and in influencing their own emotions and attitudes during the class.

There appear to be several instances in the language class when learners interpreted certain NVBs produced by the teachers as indicators of their emotions or attitudes to an individual (see sub-chapter 8.3.) or to the group (sub-chapter 8.4.). Learners seem to sensitively monitor teachers' emotional reactions to their answers and behaviours in the class, or to their own teaching. Through this monitoring, learners felt able to make adjustments in their verbal and non-verbal contribution to the class.

It seemed surprising to find that learners highly value teachers' NVBs for their potential of communicating emotions and attitudes, while trainee teachers observing the classes did not emphasise this dimension (see Chapter 8). There are two possible explanations for this fact. First, learners and their teachers had time to develop a degree of familiarity with each other, a fact that increases the level of NVB produced (Aiello & Cooper, 1972; Heslin & Boss, 1980; Rubin, 1970) and perceived (Buck and Lerman, 1979; Buck, 1989). In other words, learners' sensitivity to teachers' NVB is increased through their ongoing relationship. Second, trainees participated as observers and not as direct addressees of teachers' NVBs. The differences between the two groups' perceptions suggest that the learners as addressees in a class may be more discriminatory in the range of interpretations given to teachers' NVB. This also indicates that investigating NVBs only with observers or with teachers new to the students may have limitations.

A further finding was that learners seemed to value teachers who were expressive and came across as enthusiastic speakers, saying that their dynamism made the class motivating and enjoyable (see sub-chapters 8.2.2. and 8.4.1.). This finding is striking in the case of the learners coming from Asian countries that tend to cultivate more restrictive rules of NVB display. It seemed that for these learners the different patterns of class intimacy from the ones they were traditionally used to were a desirable characteristic of their class. Although frustration was present when they had to reproduce this type of NVB and modify their own NVBs, learners accepted cultural differences as a positive experience and as part of their learning. Surprisingly, the Asian students were able to identify particular meanings in NVBs that traditionally are constrained in their own cultures, such as eye contact or increased gesturing. This shows that, although some NVBs are restricted in some cultures, individuals can develop a cross-cultural awareness of their use, especially when interacting directly within the foreign culture.

In connection with the observation above comes another finding that suggests that learners interpret teachers' NVB in culture-specific ways. For example, Asian learners almost invariably construed teachers' smiles and animated behaviour positively (sub-chapters 8.2.2. and 8.4.2.), whereas the same NVB displayed by a student was interpreted as an evidence of embarrassment and linguistic difficulty (see last quotes on page 220, for example). It is possible that learners from these countries may reject teachers' lively NVB style in their own cultural context as inappropriate or

disrespectful. However, individual learners had different attitudes towards the adoption of different cultural display rules in their own NVB. While some were keen to change and become more expressive in an effort towards their acceptance in the new community, others strongly rejected the idea and declared their intention to follow their cultural display rules religiously when returning home (see section 8.4.2.).

Some of teachers' NVBs were perceived in direct relation with their status and role in the class. While some of these were interpreted as part of a professional duty, others were perceived as individual attributes of teacher's personality (sub-chapter 8.2.1.). Most of these NVBs were positive expressions on the face, a relaxed posture, intense gesturing, head nods etc. Teachers were also perceived to have tics or to show negative emotions, like boredom or annoyance, but these were always considered as human and acceptable, if occurring only incidentally. The fact that learners take into account teacher's status when judging their NVB is an indicator of the ways in which the general interpretation of NVB takes place. Individuals judge not only the immediate context in which an act of NVB occurred, but they also take into account the role expectations of the social situation.

Learners placed a great importance on NVBs that indicated a teacher's attitudes to their individual performance in the class. They valued a teacher's smile and nodding after a 'good' answer, the direct eye contact for checking that everything was in order, a close proximity for supplementary explanations etc. When these actions were addressed to the whole group, learners considered them equally positively, but they also expected to be treated as individuals and receive their moments of direct and exclusive interaction with the teacher.

In all cases, learners seldom seemed to want to initiate a NV exchange with the teacher to express their own attitudes or emotions. While these situations are not impossible, it seems to be the case that teachers are granted the role of initiating NVBs expressing emotions which learners value and react to. Although differences between individuals exist in attributing these emotional meanings to teachers' NVB, learners appear to share the belief that these meanings of NVB are equally important to their learning experience as the ones directly assisting their learning processes. Individuals seem to give classrooms an emotional value as well as a rational one. They come in the class to learn, but also to feel good. This 'feeling good' factor appears to be highly dependent on the teacher's initiative.

Finding 6: Learners considered certain NVBs as intrinsic components of a teacher's management and organisation of the classroom group.

As in the case of NVBs expressing affects, learners considered that it is the teachers' responsibility to take the leading role and organise the interaction. Several of teachers' NVBs were interpreted by the learners as having an organisational role through the regulation of learners' participation in the class (see Chapter 9). These NVBs were mostly brief, standardised moves, i.e. emblems, concrete deictics and eye contact, which teachers seemed to use with some degree of awareness in order to directly influence the learners' behaviour in the class.

In their interpretations, learners suggested the existence of certain standardised NVBs which teachers use regularly in managing the group, some being well-known social practices, others developing as specific classroom practices. For example, the decision of allowing or denying a learner's turn to speak is made mainly by the teacher and the ways in which the decision is communicated to the learner is mainly non-verbal (see sub-chapter 9.3.1.). Teachers ordinarily use such gestures, and due to their regularity of recurrence, they become substitutes for speech in the specific context of the language class. Pointing to a learner after a question or establishing direct eye contact are clear moves of turn-giving, and so are the avoidance of eye contact or the palm-up gesture for turn-denying. Again learners' familiarity with the teacher and the development of a shared code of interaction make these NVBs more efficient, in the sense that teachers do not need to explain them verbally and learners, once familiar with them, need less time to react. In another study, Hauge (2000) identified the range of emblems that teachers seem to employ on a regular basis in the EFL class, the prime emblems being 'the eye brows raised', the 'head nod' and the 'head shake'. The current study indicates that learners are aware of certain emblems which teachers use on a regular basis and in direct relation to the language learning context.

Some other codes of NVB were perceived by learners as relevant to organising class interaction. Teacher's use of space in the class and grouping of learners were perceived by them as regular activities that frequently occur in interaction without much verbal explanation (see sub-chapter 9.2.). Teachers' posture, sitting or standing, their distance from the learner or a group were, in certain circumstances, associated with intentions of taking control over the interaction or passing the responsibility to the learners for a short time or with marking the importance of the activity.

Learners considered that, when having their turn to speak, the teacher's NVB is crucial for monitoring their own performance and also for limiting their intervention (see sub-chapter 9.3.2.). If the teacher shows interest or otherwise in their words through actions like maintained eye contact, head nodding, smiling for encouragement etc., learners consider that their contribution is relevant and also that the group's judgemental evaluations are influenced in a positive way by the teacher's NV response. This might not always be the case, as one of the classes in this study revealed. One of the learners considered himself as valued by the teacher due to his contributions to the class, while all the other learners disregarded him as too dominating and arrogant.

From the data, it is clear that learners and teachers develop a shared understanding of the NVBs that function to regulate the class interaction and learners are alert to them. Although individual interpretations and responses to a teacher's NVB are possible, a pre-established type of reaction is expected in most instances of the interaction. Learners seem to know these rules and tacitly respect them. When a teacher points to a learner after a question, it is very unlikely that the learner will not answer. The repetitiveness of the same NVB in conjunction with the same classroom activity and the co-participation of teachers and learners in preserving its role and meanings confer stability and predictability to the interaction.

Finding 7: Although individual learners and trainee teachers did focus differently on aspects of teachers' NVB, common interpretations of the meaning and functional role of certain aspects of NVB were frequent and seemed to be socially regulated.

While learners' own selections of aspects of teachers' NVBs relevant to themselves may be different, their interpretations of the same aspects of NVB were most of the times similar. In other words, when the same aspect of NVB was selected by different individuals, their interpretations matched in terms of its function and its meaning in the interaction. The kinds of functions that learners attributed to teachers' NVB accord for the most part with the findings from the existent studies in the field regarding the roles that NVBs, especially gestures, play in interaction (Bavelas, 1994; Bavelas *et al.*, 1992).

Agreements between learners when discussing the functions and meanings of emblems and deictics were mostly noticed. The explanation may lie in the fact that

emblems and deictics are gestures that are learnt with their socially regulated conventions of physical form and established meanings, even outside the classroom. As emblems and deictics imply a shared meaning between the community of users (society, teachers and learners etc.), individual interpretations tend to be confined to narrow ranges of meaning. On the other hand, certain gestures seem to develop also as classroom specific emblems (thumb up for agreement after an answer, head shake for disagreement etc.) or deictics (pointing to a learner for turn-giving, pointing to the board for attention, pointing behind the head for expressing 'past tense' etc.). The explanation of a shared practice of meaning-making possibly resides in the existence of the learners' wish to understand what a teacher wants to achieve in any instance of interaction. Although extensive, the range of the potential interpretations of a given NVB may thus become limited due to previously shared classroom experiences.

It seems that although learners differ in their language learning beliefs and strategies (Bialystok, 1981; Oxford, 1990), they nevertheless share some strategies of NVB meaning-making as a sine-qua-non condition of interaction stability. These shared learner strategies and interpretations are more surprising when it comes to gestures and NVBs used in direct relationship with the language learning processes, being thus special attributes of classroom interaction. Some of the strategies that learners might use in interpreting teachers' gestures are: making the analogy with the meaning of the gesture outside the class, relating the meaning of the gesture with meanings expressed verbally, using prior situations in which the gesture occurred as a reference for interpretation, analysing the immediate verbal context, or locating the gesture in relation with other simultaneous NVBs. It may be the case that learners not only learn in the class how to understand and interpret the foreign language taught by the teacher, but they also learn the unspoken 'language' of their teachers' actions. A class develops thus as a group that shares principles of interpreting each other's words and actions. Teachers' NVBs become subjected to a constant process of evaluation and meaning-making according to some group co-constructed rules and conventions.

Language classrooms are complex and multi-layered realities (Mitchell, 1985). Classroom practices are situated in particular cultural environments and within these environments the interpretations of each other's behaviours are socially constructed (Breen, 1985; Kramsch, 1993; Holliday, 1994; Byram, 1991, 1997). Breen (1985) suggests that the analysis of the classroom linguistic performance does not reveal the learners' experience:

Such experience is two-dimensional: individual-subjective experience and collective-intersubjective experience. The subjective experience of teacher and learners in a classroom is woven with personal purposes, attitudes, and preferred ways of doing things. The intersubjective experience derives from and maintains teacher and learner shared definitions, conventions, and procedures which enable a working together in a crowd.

(1985: 140)

Similarly, Allwright (1996) argues that the on-going balancing of pedagogic and social factors influences, in complex ways, the interaction in the class and the learning processes and results.

It is very unlikely that learners discuss between them the ways of interpreting teachers' NVB in a certain context, given the possibly novel character of the gestures that teachers may use in any moment. The existence therefore of a shared meaning in the case of any gesture or other NVBs indicates the active role of a pre-existent set of knowledge and earlier experience that makes possible congruent interpretations. The interpretations given by the learners in the particular context become a reflection of their knowing and following the classroom 'mystery play' that has a certain script, but is still flexible and unpredictable to a certain degree. Learners and teachers have to continuously work together to preserve their interaction and to make it favourable for learning. It can be supposed that teachers involve the same effort in interpreting the learners' NVB. Language learning in a classroom is thus not an individual and exclusively mental process, it is socially orchestrated and conditioned in its unfolding by the continuous interpretation of teacher's words and non-verbal meanings.

Finding 8: Differences arise between the numbers of NVBs learners selected as relevant and sometimes between the interpretations given to the same aspect of teachers' NVB by different individuals.

There were marked differences between the individual learners' selections of NVBs considered as relevant in each class (see Appendix F). Learners were participants in five different classes and the numbers of total NVBs used by the five teachers differed (see Appendix E for absolute figures of NVBs used by the teachers). Yet the numbers of NVBs selected as relevant by learners in different classes did not seem to differ considerably between the groups (see Appendix F for absolute figures of functional attributions made by each learner), with the only exception of the learners in *Class 4*. Learners in this class identified the fewest relevant teacher NVBs from all the groups interviewed. This implies a difference between the two cultural groups in the study,

European and Asian, with the European learners generally noticing more than the Asian learners in *Class 4*. An explanation in this case is the existence of the different ‘cultural display rules’ that regulate the numbers and types of NVBs admissible in each culture. As learners from the Asian background learn to limit their own NVBs, they might constrain their ability of noticing and interpreting them when occurring in others. However, the limited number of subjects in this study does not allow for a confident generalisation of this finding. Another explanation might be related to some of the learners’ level of proficiency in the language in which the interviews took place. It might have been the case that learners could not fully explain in the foreign language their ideas and therefore decided to limit their selection of relevant NVBs.

Individuals in the same class were sometimes very different in the numbers of teachers’ NVBs selected as relevant (see Appendix F). Two potential explanations may be given here. First, individuals differ in their perceptive skills and in their attention at any given moment of the interaction. Second, individuals have different beliefs about the role of NVBs in the interaction and therefore value their role in interaction to different degrees. In *Class 2*, Armand, who openly declared his disbelief in the importance of gestures for learning, identified the fewest instances of relevant NVBs in his group. The implication is that learners are affected in different degrees by teachers’ NVBs. Although teachers may apply efficient and meaningful NVBs, learners might not notice them and therefore lose out in comprehension and interaction.

Despite the fact that, in most situations learners’ interpretations of particular NVBs were similar, there were certain instances when mismatches of interpretations occurred between learners’ accounts. This finding, although it might seem to contradict the previous one, rather complements it. While shared meanings of speech and gesture confer the class interaction with stability and predictability, a certain degree of flexibility and variation is an inherent property of learner attention and understanding. As class interaction is never predictable in full, neither are learners’ processes of perceptive selection of gestural meaning making.

There were two areas of dissonance between learners regarding: the individually perceived relevance of a certain aspect of teachers’ NVB and the different functions that selected aspects of teachers’ NVB were attributed with by different learners. One possible explanation for these differences may lie in the fact that learners have different learning needs and different previous experiences that

influence their independent perceptions at any given moment. A gesture that clarifies the meaning of a word for a student who is not familiar with it acquires a different function for a student who does not need to learn the word, as s/he knows it already. The two students will attribute a different relevance to the same aspect of NVB. NVBs used in relationship to the content of teaching have a higher degree of variation in the meanings that can be attributed to them by different individuals. Mismatches occur less in the case of NVBs expressing emotions or commands of group management due to the relatively universal character of facial emotions (Ekman *et al.*, 1987; Matsumoto, 1992; Ekman and Keltner, 1997) and of actions used for showing directions or commands.

There were few instances when cross-cultural meanings of emblems came into discussion in the present study. However, when these instances occurred, learners seemed to rely on their knowledge about cultural differences in using certain gestures and further rely more on their knowledge about the target culture than on their own cultural background. It seems that as part of their process of language learning in a western environment, learners also develop a set of beliefs about native speakers' use of gestures. Learners confessed to constantly observing native speakers' and teachers' NVB in order to increase their awareness of it or even to adopt it. When this type of knowledge was not available, learners assumed that teachers are well-intended and would not deliberately offend learners by using inappropriate gestures (see, for example, the quotes from Kandar, page 184, and Keiko, page 220).

Learners seem to try and adjust their interpretations of teachers' NVBs in ways that preserve the class interaction and co-operative climate and, rather than emphasising cultural differences, they actively look for cross-cultural commonalities in interpretations. In particular, learners often adjusted their perceptions of the meanings and functions that they thought their teachers' NVBs expressed in the light of their previous experiences in that class and of their expectations of the particular teacher. An explanation for the fact that learners were ready to look for bridges of communication rather than trying to analyse their NVB in negative or critical ways is their shared understanding that they should preserve group cohesion and a trust in the teacher's authority. Learners seem to know that teachers try to adjust their behaviour in order to accommodate different cultures and individualities and they seem to want to support the teachers in this enterprise by giving them the benefit of cross-cultural unawareness or of a temporary uncertainty on their own part. This process of

adjusting interpretations reminds us of the process of co-regulation (Fogel, 1993) that sees interaction as based on the ongoing stream of information resulting from actions of partners. In this way, when situations of potential cross-cultural misunderstanding occur (see pages 184, 220), as in one of the classes when the teacher's gesture could have been interpreted an insult by all the Japanese students in the room, learners overcome the situation by trying to find alternative meanings of the NVB perceived.

Being able to seek alternative interpretations at any given moment is a survival mechanism for all learners in a foreign language classroom. This seems to be the case especially with the learners at lower levels of proficiency. It also seems possible that learners base their assessments of teachers' NVBs on their previous interactions in a foreign language, as they know that interactions can occur at different levels of stability or be unpredictable, but also that partners in a conversation try and reach mutual understanding.

Finding 9: Trainee teachers who observed language classes shared, to a certain extent, the interpretations of teachers' NVBs with the participating learners. The emotional function of teacher NVBs was emphasised more by the learners than the trainees, while trainees showed greater awareness than the learners of the interaction between teachers' NVBs and learners' actions or responses to them.

After the analysis of the observational reports, it became clear that trainees perceive teachers' NVBs according to the same functional dimensions as learners do, being similarly selective in the aspects of NVB considered relevant and being individual in their interpretations. This finding showed that there was some congruence between the reflections offered by individuals of different statuses and different roles in the interaction. There were mostly similarities in the functions attributed to teachers' NVB and total agreement of all the trainees on the communicative properties of certain NVBs. What varied again, as also in the case of learners, were individual attributions of functions to the same gesture or some differences of opinion between learners' and trainees' valuing of the same NVBs. While learners, for example, valued teacher's gestures of expressing attitudes to an answer or emotions, trainees considered these less important (as discussed in Chapter 8).

All trainees considered teachers' NVBs, especially gestures, as communicative and useful in teaching a foreign language. They referred mainly to the compensatory role of gestures, through which learners can compensate for their lack of

understanding by receiving the same information non-verbally (See especially sub-chapter 7.4.). Trainees seemed to assume, like the learners, that understanding teachers' NVBs is actually less complicated for learners, as this is a code that individuals master even before starting to learn the foreign language from their previous educational and social experiences.

The three-dimensional model of functional properties of teachers' NVB accounts for the trainees' perceptions also. These similarities indicate that the trainees, through their presence in the language class, are very aware of the intricate exchanges of non-verbal messages between a teacher and learners and will tend to attribute these NVBs with similar significance to the participating learners. However, there are exceptions. Trainees seemed less sensitive to the emotional dimension of the class interaction they observed. This indicates that, although present in the class, trainees did not have access to the emotional bond that had developed previously between the teacher in the class and the learners.

In some cases, trainees admitted their exclusion from the gestural meanings that seemed to have developed over time, through a shared practice of the group. A gesture performed by the teacher to elicit a form of past tense could not be understood by the trainee observing the class, while all the learners appeared to react to it appropriately. This example suggests that a shared understanding of certain NVBs develops within a class with the exclusive agreement of all members of that class. Certain NVBs acquire meanings in the language class which might differ from the interpretation given to them outside the class or by another community of users.

While learners were asked to reflect analytically on a particular and selected sequence of class interaction, trainees were asked to consider teachers' NVBs holistically and express an overall impression of a whole lesson. This fact might explain why trainees said more in their reports about patterns of NVB which occur in specific classroom contexts. Learners made some comments on isolated gestures that 'always' occur in conjunction with a type of activity, e.g. pointing to individuals to identify partners for a task. Trainees were in a more favourable position to observe recurrent patterns in teachers' NVBs and to analyse them in relation to typical classroom activities or instances of class interaction.

Trainees claimed that teachers have a set of NVBs that are performed as rituals. Patterned activities like question-and-answer sessions, clarifications of vocabulary items, change of topic, giving instructions etc. were seen to co-occur with

certain typical NVBs. These NVBs were considered to confer stability to the interaction through their repetitive character and also to reduce the time taken for developing an activity. Although there is not enough data in the present study for identifying definite patterns of interaction that typically characterise language classes, it seems clear from the trainees' accounts and from my own observations that they exist.

A final distinction between the learners' and the trainees' accounts can be made between the perspectives that the two groups took in their reports on teachers' NVB. While learners referred to the effects that teachers' NVBs have on their learning and class activity, trainees took into account both the learner's and the teacher's perspective (see, for example, trainees' comments on pages 217 -last two quotes and 243 – comment by Cardik). While learners explained why a gesture was important for their understanding or learning, trainees empathised more with the teacher and judged their gestures from the perspective of enabling learning and classroom management. In other words, the position that learners and observer trainees had in the class influenced the decisions they made on the value and function of the acts of NVB occurring. This is an important finding that indicates that any further research on individuals' judgements of each other's behaviours should take into account the roles that individuals play in the interaction.

Regarding the effects of classroom observation on the trainee teachers' formation, it seems that there is a sense in which they are uniquely placed to observe the kinds of NVBs teachers employ. Without having specific guidance, trainees spontaneously shifted between the two perspectives of teacher and student and tried to understand both the rationale between teachers' NVBs and the potential effects that these actions could have on the learners in the class. As future practitioners, if trainees are given the opportunity to reflect on teachers' NVBs, this may increase their awareness of the communication taking place in the class at all times. The trainees in this study valued watching teachers' NVBs as a means of getting a wider perspective on communicative events in a class. Although it is not a guarantee that, by becoming aware of other teachers' NVBs, trainees will be self-aware and try to change their NVB style in their own teaching practice, it might be the case that trainees become more expressive through a conscious effort, knowing that learners are affected by their actions as well as by their words.

10.5. Conclusion

This has been a descriptive and interpretive study conducted with the purpose of describing the perceptions of a group of learners and trainee teachers studying in a particular University in an English-speaking country. Its aim was not to identify universals or to suggest that the findings would be generalisable to other contexts. Nevertheless, there seems to be a sense in which particular functions attributed to teachers' NVB in classroom interaction is something to which the 22 learners and 38 trainee teachers in this study subscribe. When discussing NVB informally with teachers and students outside the class, regardless of their country of origin or levels of proficiency, they all had something to say about the communicative properties of gestures and other NVBs in relation to their own learning experiences. It appears therefore that the notion of meaningful NVB is something which holds value for learners and trainee teachers in a range of different pedagogic contexts, even though they may occasionally conceptualise it differently and attribute to it different roles in the interaction.

Although the evidence suggests that the active noticing and interpretation of teachers' NVB is a current practice for the learners, it is possible that the amount of NVBs perceived as relevant and the attributed interpretations may differ to certain extent. While similarities of interpretations are probably more often in the case of a community of users who have developed a shared understanding of a teacher's NVB, actual interpretations are ultimately an individual decision. Individuals learn since early childhood the amounts and types of NVB which are desirable and acceptable in their community (family, group of friends, school, country etc.). The entering in a new community of users implies a reliance on previously acquired knowledge and skills and a process of adjustment in one's own NVB interpretations and performance.

It is possible to consider the perception and interpretation of teachers' NVB as a process that requires a constant individual adjustment and the learning of new patterns of NVB to enable the individual's acceptance in the classroom group. If this is the case, perhaps new studies may look not only at how individuals cope verbally in the language class, but also how they adapt their NVB and their perceptions and interpretations of it when interacting within a new community.

10.6. Summary

In this chapter, I have discussed the range of findings emerging from the study and the possible reasons that may explain the ways in which the learners and the trainee teachers in the study valued teachers' gestures and other NVBs. I have also discussed the range of functions that they attributed to teachers' NVBs as well as the potential factors that may have influenced their interpretations. In doing so, I developed a *model of perceived NVB* that may explain why individual interpretations of teachers' NVBs may vary even when reflecting upon the same action. I have then explained that, while generally learners share interpretations of teachers' NVBs, individual variations of meaning making are yet possible. I finally discussed the trainee teachers' perception of NVB and considered the implications of this type of observation activity for their training and future career. The following chapter ends the study by providing a brief summary of it, an evaluation of the research, and final implications for further research.

CHAPTER 11

OVERVIEW OF THE STUDY AND IMPLICATIONS FOR FURTHER RESEARCH

11.1. Overview

In this chapter, I first summarise the main characteristics of this study, its contribution to the field as well as its limitations. I then evaluate the research approach and the research tools used, and close with some recommendations for further research on the role of NVB in the language classroom.

11.2. The main characteristics of the study

This study has been a descriptive investigation of the perceptions and interpretations expressed by a group of language learners and trainee teachers on teachers' gestures and other NVBs in the language class. The pilot study focused on a sample of 18 trainee teachers and led to the development of a theoretical and methodological framework. This framework was then used to conduct the second phase of the study, with a sample of 22 language learners and 20 trainee teachers. On a larger scale, the main study investigated the attributions made to teachers' NVBs by the language learners and trainee teachers. The methods used in gathering the data in the main study involved videotaping classes, extended interviews with the learners on the basis of a stimulated recall approach and written reports collected from the trainees. Data were analysed and presented using a combination of interpretive research procedures.

The main objective of the pilot study was to understand how language learners perceived and attributed meanings to teachers' NVBs and on what basis they selected them as representative. I was also interested in finding out the types of NVBs that occurred in the language class. At the end of this first stage, I was able to establish the fact that most learners based their judgements on the idea that language and gesture are interrelated and support each other in the process of communication. In learners' judgements, teachers' gestures were meaningful and intentionally communicative. Because the learners seemed to consistently identify certain communicative functions for teachers' NVBs, mainly for their gestures, I decided to develop the functional

categories of perceived NVB as a framework for the second, more detailed, stage of the study.

The second, main phase of the study explored the functions that mainly gestures, and other NVBs, play in classroom interaction as attributed by the learners and trainee teachers. In particular, I wanted to investigate how learners attribute interpretations to teachers' gestures in direct relation to their own learning, their affective involvement in the class and their own behaviour. I also wanted to establish how trainee teachers, as observers, perceived teachers' NVBs and to see if their role as observers, a different one from learners', affected their interpretations.

With the intention of obtaining a broad spectrum of learners' views I selected as varied a sample as possible, choosing to interview learners from different cultural backgrounds and language proficiency, who learnt English with different teachers. I used stimulated recall techniques, in the form of learners talking about their past lessons immediately after the class while seeing videotaped extracts from that class. In a similar way, I considered trainee teachers in a position of having direct access to the classes and directly observing the teachers' actions. With them, I adopted the report writing based on their classroom observation as my method of data collection.

The study generated interesting findings in the sense that, despite the learners' different cultural backgrounds, the kinds of opinions that learners expressed were strikingly similar. Of particular significance were: (i) the high number of instances during the interviews when learners spontaneously referred to gestures and language as being interdependent and co-communicative and (ii) the range of functions that learners attributed to different gestures and other NVBs for the purposes of communicating and learning. These findings suggest that gestures and other communicative NVBs occurring during the classroom interaction were considered by all participants as undeniably helpful and as necessary aspects of classroom interaction.

I have presented and discussed the findings in the previous four chapters. Despite occasional individual differences in identifying and interpreting teachers' particular NVBs, participant learners and trainee teachers generally concurred in their attributions of functions to teachers' NVBs. These clustered within the following general categories: (i) NVBs which affect learning; (ii) NVBs which affect learners' emotions and attitudes; (iii) NVBs which affect the group organisation and management. These common areas of attributed functionality suggest the existence of

a shared understanding in attributing meanings to NVBs in the interaction and the basis on which learners do so are worthwhile of further investigation. It is likely that, as learners and trainees approach classrooms from the perspective of their experience, they already hold strong expectations regarding the likely meanings and purposes of language teachers' NVBs.

11.3. The importance of the present study

In addition to having a rare focus within language classroom research, the novelty of this study resides in an interpretive and thematic approach to a field of human interaction traditionally explored through quantitative methodologies. The aim of the study was to explore not the range and type of teachers' NVBs produced *per se*, but the meanings these actions have for their addressees. In this sense, the study was directed at describing rather than categorising and quantifying, at raising new hypotheses and questions about learners' attributions to teachers' NVBs rather than at testing and quantifying in old parameters. The main idea was to explore the learners' view on an aspect of classroom interaction which they intuitively knew about, but which they rarely reflected upon or discussed. Therefore, as gestures are elaborated for the specific addressees in context and in the manner that words are (Bavelas, 1994), it made sense to explore the addressees' views on their meanings and functions in the interaction. The trainee teachers were in the position of observers, without having to react to the gestures or participate in the interaction. As direct observers, they were part of the immediate classroom context and empathised with both the learners through their recent experience of learning English as well as with the teachers through their ongoing teaching training. In this sense, they appeared to be a useful set of informants to complement through their observations the data collected through the learners' attributions.

It seems surprising that, in the area of English language teaching, so little is known about the types of teachers' unspoken actions during interaction and about the effects that these actions have on learners at different levels of proficiency and from different cultural backgrounds. We need to know more about what exactly is going on in addition to verbal interaction in the classroom and how these NV actions impact on the participants. In a similar way, we need to know how learners' unspoken messages affect the teachers' own activity and classroom dynamics.

The experiences presented here are contextualised and familiar to the students who lived them. It might be the case that other learners of English recognise some of the situations and would give similar types of interpretations to identical or similar behaviours occurring in other language classrooms.

11.4. The limitations of the study

Although informal discussions were conducted with the teachers soon after the classes, the insights they provided were less informative, due to the well-known low level of awareness of one's own gestures and bodily actions while speaking. The study reflects thus a rather one-sided, unidirectional view of the events as I did not explore teachers' intentions behind their NVBs.

The study was conducted in only one Centre of ELT and called upon a relatively small group of teachers and students. All teachers were native speakers of English, who were working together for at least three years, and therefore shared a broadly speaking similar teaching approach and training. At the same time, the learners and the trainee teachers, although coming from different backgrounds, had relatively similar learning purposes and expectations. Although they shared a great range of ideas about the functions of teachers' NVBs in the language class, it might be the case that the findings are specific to the context in what circumstances they occurred and would therefore seem unfamiliar to learners and teachers practising in a different cultural and social context. Data were also constrained by the subjective nature of informants' selective attention. In some cases, informants' proficiency in English will have influenced their capacity to articulate their identification and interpretations of teachers' NVBs. However, the majority of the informants were very detailed and forthcoming in their accounts.

The study did not aim to investigate the broader reality that would be generally characteristic of any language class. It was rather an investigation of one normal and recurrent phenomenon of classroom interaction, its unspoken reality. It is clear that much work needs to be done to compare the views expressed by learners and the ones held by the teachers, to clarify if they share similar views on the role and utility of gestures and other NVBs in the class. It might then be possible to explore how these shared experiences are conditioned by different factors affecting both teachers and learners and, particularly, how a shared understanding of classroom

NVB develops over time. Also, it would be valuable to explore how teachers make sense and represent learners' NVBs.

Through its design and methodology, this study did not seek to measure the impact of teachers' NVBs on the students' language learning. There was no intention of correlating the processes explored with the learning outcomes in order to inform the practitioners and to recommend improvements to current teaching practices. However, the study suggests that there might be potential for a more systematic research design to establish direct connections between teachers' NVBs and aspects of language learning.

As all the learners and trainee teachers who participated in the study valued the role of teachers' gestures and other selected NVBs in the language learning, further research needs to confirm if teachers' NVB is as formative in classroom interaction as the participants in this study considered it to be.

11.5. Recommendations for further research

One of the features of this study is that it poses other questions and may encourage researchers to consider using alternative methodologies in order to understand more fully learners' attributions and use of teachers' NVB during classroom interaction. Although some gestures are obviously considered helpful for comprehension and learning, it would be premature to identify a set of gestures that should be adopted by teachers in order to more directly facilitate learning or class interaction. However, learners perceive that they attend to teachers' NVBs as well as to their speech, and it seems feasible to try and explore in more depth and with larger samples the ways in which they selectively perceive and attribute particular meanings to teachers' NVBs.

11.5.1. The research approach

Traditionally, research in this area has been conducted mainly through a series of experimental enterprises in which individuals were asked to act in non-naturalistic, laboratory situations in which their NVB was monitored. Researchers who feel challenged by the prospect of analysing the individuals' perceptions of NVB as well as their production of it, might find the collecting of data through asking learners for introspective analysis of their perceptions a daunting challenge. Individuals' accounts can provide interesting and sometimes surprising insights into the perceptive dimension of NVB, although these can be hard to collect and interpret at times.

The main problem in conducting a study that focuses on the perception of others' NVB in interaction is the diverse individual attribution of meanings to any act of human behaviour. Nevertheless, although subjective and various, individuals' meanings when perceiving an interlocutor's NVB clarify our understanding of a perceived act of NVB and its impact upon communication. It constitutes also a phenomenon that cannot be studied directly without the introspection of the subjects themselves. Any study that correlates individuals' overt reactions in the interaction with the antecedent NVB as perceived by the researcher is assuming the addressees' inner processes. Rather than imposing explanations and inferring learners' individual perceptions of a given act of NVB, research should aim at coming as close as possible to the actual interpretations, as constructed by the individuals themselves. In this sense, an interpretive approach opens up a perspective otherwise unachievable through conventionally simulated or observed interactions alone.

11.5.2. The research tools

The following research tools need consideration when conducting a similar study to the one presented here:

Collecting the video data

I came to consider that collecting video data in this type of study was the only way of getting a close look at teachers' NVBs and of having the support material for subsequent interviews with the learners. Although the quality of the video data gathered was not excellent at all times, it nevertheless provided a rich account of the class interaction, which allowed for repeated viewings and minute analysis later on. The use of a single camera placed at the back of the class was meant to keep it as unobtrusive as possible, although this sometimes affected the sound quality and the gathering of images on learners' contribution to the class. As learners' NVB was not the purpose of the study, this fact did not impact seriously on the type of data collected. However, in similar studies, researchers might want to consider the placement of a camera at both ends of the room, in order to access both perspectives, as well as the use of individual microphones or table microphones, when learners' verbal input is of interest.

Describing aspects of NVBs

When transcribing the video extracts, initially I used to write down the spoken words and then, through repeated viewings, relate the duration of the NVB to the corresponding speech fragment by underlining it. Under the corresponding speech strand, I wrote the type of NVB performed (type of gesture, eye contact etc.) and described in detail the action. The use of the existent gestural taxonomies and transcript codes (McNeill, 1992, for example) enables validity and can allow for comparisons with existent research in the field and although time consuming, this way of presenting the speech and non-verbal data permits a quick and clear visualisation for the reader without necessarily having to access the video data.

With regards to the taxonomy of gestures, I decided upon McNeill's (1992) taxonomy as this is a well-known classification in the field of gesture and allows for a descriptive categorisation of all gestures occurring with speech. While coding was done by myself on the video extracts used with selective inter-coder reliability checks, a systematic inter-coder reliability may be helpful in more quantitative studies. When coding the other forms of NVB – eye contact, facial expressions, use of space, posture – the lack of existent comprehensive taxonomies in the field may impede analysis. In analysing these types of NVB, I have described them as clearly as possible in words, and this was sufficient as their occurrence was limited in the data extracts selected. Another difficult aspect of the analysis regarding other NVBs is the fact that their duration can extend over several lines of speech. For example, a teacher can come close to a student and have an exchange of ideas that lasts over ten lines of transcript.

Developing functional categories of NVBs

The functional categories developed from learners' own interpretations of teachers' NVBs and their labelling and organising was a continuous process throughout the study. In some cases, I labelled the categories by directly using learners' own words, in other cases I used categories from the literature and still in others I created labels with which to synthesize the representation of that category as constructed by different learners. If researchers seek to develop a functional taxonomy of the teachers' NVB in the language class, the prevalence or relative frequency of occurrence of the same function needs to be assessed when developing a category. Individual researchers will probably use different codes for the same emerging category of perceived NVB, but labels need to reflect the function conveyed by the

learners who expressed it. Although no claim is made here that the functional taxonomy developed is complete, it probably represents a fair account of the functions that learners attribute to teachers' NVB in a language classroom situation.

Using the Stimulated Recall Methodology

The Stimulated Recall (SR) methodology proved a successful way of investigating learners' perceptions and interpretations. Without the video data used as prompts to stimulate learners' comments, it would have been extremely difficult, perhaps even impossible to access this type of data. As it is very difficult to remember the particular words one uses in an interaction, it is even more difficult to remember a gesture performed or several actions that occur in rapid sequence in any interaction. When using SR, however, it is the case that individuals tend to see as 'normal' acts of NVB that occurred in the interaction and thus tend not to identify them in the interviews. This is one of the challenges the method poses to the researcher, who needs to make very clear for the interviewee the precise aspects of the video extracts one needs to focus upon. As I asked my subjects to mention 'any' aspect of NVB which they saw and then discuss its relevance, I considered them prepared for the interview. However, at times learners admitted that they did not mention some aspects of NVB as they were 'too normal' or routine to be commented on. Another limitation of SR is the fact that individuals might have not perceived a certain aspect of NVB within the interaction, but notice it during the re-play of the situation on the video tape. Both these situations are inherent in the nature of the SR and one needs to accept them as limitations or ideally try and counter-pose them by using other methods of investigation in parallel.

11.5.3. Potential areas of further investigation

The qualitative investigation of learners' perceptions seem to be the only way of getting access to the meanings individuals attribute to aspects of NVB in interaction. Other methods of investigating individuals' perceptions and use of each others' gestures and NVB might include learning diaries, journals, essays, semi-structured or open-ended questionnaires. However, all these methods would require access to an immediate recording of the aspect of NVB perceived, due to its ephemeral character and difficulty in remembering it over a period of time. This might prove difficult to achieve in the conditions in which learners have to participate in the interaction and

also simultaneously record their perceptions of the others' NVB. In this sense, using the SR methodology seems an advantageous choice, as individuals are reminded of the actual situation and have a more direct access to their experiences in the precise context in which these occurred, soon after the actual interaction.

On the basis of the findings from the present study, the following issues at least are worthy of investigation by future research:

- Learners' definitions of 'good' NVB styles of their teachers and out-of-class interlocutors;
- Learners' expectations of teachers' and other native speakers' NVBs in interaction;
- Learners' perceptions of their own learning outcomes in the foreign language as directly related to teachers' NVBs;
- Learners' perceptions of the cross-cultural differences in their teachers' NVBs in the class;
- Learners' perceptions of the impact of teachers' NVBs on their learning;
- Learners' perceptions of the factors which condition the perceived NVBs;
- Teachers' awareness of their own NVB styles and beliefs about the influence of their NVB on the class progress and individual learning;
- The relationship between teaching styles and teachers' NVBs.

An avenue for research relating to the phenomenon of NVB in the language class might lie in correlational studies which investigate the possible relationships between the occurrence of different types of useful gestures in teachers' NVB, as perceived by the learners, and learners' progress in their language learning. A number of precautions would need to be taken to reduce the likelihood that variables other than teachers' gestures had an equally strong influence on learners' progress (not forgetting factors outside the classroom itself). However, even if a positive relationship was found to exist between particular teachers' gestures and other NVBs and learners' progress, it would be unwise to infer causality. It is just as likely that a class makes progress because teachers' NVBs are helpful as it is that teachers' NVB are seen as helpful because the learners are making good progress regardless. The following variables might also be assessed in a study of NVB in the context of language learning classrooms:

Individual teachers' NVB

- Types of gestures and other NVBs used predominantly by teachers in language classes;
- Comparisons between teachers' NVB repertoires in similar of different cultures or when teaching learners of different levels of proficiency;
- Comparisons between teachers' NVB when teaching different subjects or between teachers' NVB repertoire inside and outside the class;
- Relationships between teachers' teaching style, personality, age and gender and their NVB repertoire.

Individual learners' NVB

- The influence of learners' level of proficiency, cultural background and/or subject learnt and the number of perceived teacher NVBs;
- Learners' own use of gestures and other NVB when interacting with native /non-native speakers, with individuals of different status (teacher, colleague etc.)
- The effects of consciously training learners to use the meanings conveyed non-verbally by the teachers in the class.

Inter-change of NVB in class

- Correlations between gestures used by teachers in the class and the appropriation of these gestures by learners in the class;
- Teachers' perception and interpretation of learners' gestures and other NVBs;
- Learners' adaptation to each others' NVB styles, when these are different due to factors such as personality, cultural background, level of proficiency etc.

A further area of investigation might lie in the relationship between the clarity of teachers' NVB or the types of gestures they use regularly and learners' progress. I suspect that a key factor in learners' perception of teachers' NVB may be the degree of salience that gestures have for an individual learner and the importance that learners give to the particular sequence of interaction, both verbal and non-verbal. Learners' definitions of a situation may be the most powerful influence when they decide to give attention or not to a gesture and when judging, there and then, how helpful any NVBs are to understanding and future interaction.

11.6. Endnote

It seems paradoxical that even though all learners and trainee teachers in the study asserted their belief in the communicative potential of gestures and other NVBs and their key role in language classrooms, current classroom-based research appears to operate with a verbal input-output model which overlooks much of what is actually happening in the interaction. Second language acquisition researchers have tended to investigate language classrooms as a dialogic and exclusively verbal exchange between teachers and learners, where the primary things that matter is the talk used by teachers and its subsequent 'internalisation' by learners. However, the evidence from the participants in the present study suggests that it may be more appropriate to view language classrooms as open-stage plays rather than radio plays, with a non-verbal dimension that develops in the learners' eyes in a direct relation with speech. Teachers and learners interact with one another through gestures and other NVBs and interpret them in meaningful ways. This view of classroom interaction acknowledges an added dimension of classroom discourse with a range of variables that do influence learners and, therefore, implies that they be taken into account when conducting research. Future research in applied linguistics needs to consider more fully the complex interface between the verbal and the non-verbal in the discourse of language classrooms.

REFERENCES

- Agar, M.H. (1986) *Speaking of ethnography*, Qualitative Methods Research Series 2, Beverly Hills, CA: Sage.
- Aiello, J.R. and Cooper, R.E. (1972) Use of personal space as a function of social affect, *Proceedings of the APA Convention*, 207-208.
- Alanen, R. (1995) Input enhancement and rule presentation in second language acquisition. In Schmidt, R. (ed.) *Attention and awareness in second language learning*, Honolulu:University of Hawai'i Press, 259-302.
- Allen, J.; Frölich, K. and Spada, N. (1984) The communicative orientation of language teaching: an observation scheme, In Handscombe, J.; Orem, R. and Taylor, R. (eds.) *On TESOL '83: The question of control*, Washington, DC: TESOL.
- Allen, L.Q. (1995) The effect of emblematic gestures on the development and access of mental representations of French expressions, *Modern Language Journal*, 79, 521-529.
- Al-Shabbi, A.E. (1993) Gestures in the communicative language teaching classroom, *TESOL Journal*, 2(3), 16-19.
- Allwright, D. (1996) Social and pedagogic pressures in the language classroom: The role of socialisation, In Coleman, H. (ed.) *Society and the language classroom*, Cambridge: Cambridge University Press.
- Allwright, R.L. (1980) Turns, topics and tasks: patterns of participation in language teaching and learning, In Larsen-Freeman, D. (ed.) *Discourse analysis in second language research*, Rowley, Mass.: Newbury House.
- Allwright, R.L. (1988) *Observation in the language classroom*, UK: Longman.
- Allwright, R.L. and Bailey, K.M. (1991) *Focus on the language classroom*, Cambridge: Cambridge University Press.
- Antes, T.A. (1996) Kinesics: The value of gesture in language and in the language classroom, *Foreign Language Annals*, 29 (3), 440-448.
- Argyle, M. (1994) *The psychology of interpersonal behaviour* (3rd edition), Harmondsworth: Penguin.
- Argyle, M. (1996) *Bodily communication*, Second Edition, England: Biddles Ltd.
- Argyle, M. and Dean, J. (1965) Eye-contact, distance and affiliation, *Sociometry*, 28, 289-304.

- Argyle, M. and Ingham, R. (1972) Gaze, mutual gaze and distance, *Semiotica*, 6, 32-49.
- Argyle, M.; Lalljee, M. and Cook, M. (1968) The effects of visibility on interaction in a dyad, *Human Relations*, 21, 3-17.
- Atkinson, P. (1992) The ethnography of a medical setting: reading, writing and rhetoric, *Qualitative Health Research*, 2 (4), 451- 474.
- Bailey, K. (1991) Diary studies of classroom language learning: the doubting game and the believing game, In Sadtano, E. (ed.) *Language acquisition and the second foreign language classroom*, Singapore: SEAMEO Regional Language Centre.
- Barnlund, D.C. (1989) *Communicative styles of Japanese and Americans: Images and realities*, California: Wadsworth.
- Barnouw, V. (1985) *Culture and personality*, Homewood: Dorsey Press.
- Bauer, M.W. and Gaskell, G. (eds.) (2000) *Qualitative researching with text, image and sound: A practical handbook*, London: Sage.
- Bavelas, J.B. (1994) Gestures as part of speech: Methodological implications, *Research on Language and Social Interaction*, 27(3), 201-21.
- Bavelas, J.B.; Chovil, N.; Lawrie, D. A. and Wade, A. (1992) Interactive gestures, *Discourse Processes*, 15, 469- 489.
- Beattie, G.W. (1981a) Language and non-verbal communication- the essential synthesis?. *Linguistics*, 19, 1165-1183.
- Beattie, G.W. (1981b) The regulations of speaker turn in face-to-face conversation: Some implications for conversation in sound-only communication channels, *Semiotica*, 34 (1/2), 55-70.
- Beebe, S. and Butland, M. (1994) *Emotional response and learning: Explaining affinity seeking behaviours in classroom*, Paper presented at the Annual Meeting of the International Communication Association, Sydney, Australia.
- Beebe, S.; Takahashi, and Uliz-Weltz, R. (1990) Pragmatic transfers in ESL refusals, In Scarcella, R.; Andersen, E. and Krashen, S. (eds.) *Developing communicative competence*, New York: Newbury House.
- Bekken, K. (1989) Is there 'motherese' in gesture?, Unpublished Ph.D. dissertation, Chicago: University of Chicago.
- Berger, K.W. (1992) Communicating under uncertainty, In Gudykunst, W.B. and Kim, Y.Y. (eds.) *Readings on communicating with strangers*, New York: McGraw-Hill.

- Berger, K.W. and Popelka, G.R. (1971) Extra-facial gestures in relation to speech reading, *Journal of Communication Disorders*, 3(4), 302-308.
- Bernard, H.R.; Killworth, P.; Kronenfeld, D. and Sailer, L. (1984) The problem of informant accuracy: The validity of retrospective data, *Annual Review of Anthropology*, 13, 495-517.
- Bialystok, E. (1981) The role of conscious strategies in second language proficiency, *Modern Language Journal*, 65, 24-35.
- Birdwhistell, R.L. (1970) *Kinesics and context. Essays on body motion communication*, Philadelphia: University of Pennsylvania Press.
- Birnbaum, D.W. (1983) Preschoolers' stereotypes about sex differences in emotionality: A Reaffirmation, *Journal of Genetic Psychology*, 143, 139-140.
- Block, E. (1986) The comprehension strategies of second language readers, *TESOL Quarterly*, 20, 463-494.
- Bloom (1954) The thought processes of students in discussion, In French, S. J. (ed.) *Accent on teaching: Experiments in general education*, New York: Harper, 23-46.
- Blum-Kulka, S.; House, J. and Kasper, G. (eds.) (1989) *Cross-cultural pragmatics: Requests and apologies*, Norwood, NJ: Ablex.
- Bogdan, R. and Biklen, S.K. (1992) (2nd edition) *Qualitative research for education: An introduction for theory and methods*, Boston :Allyn and Bacon.
- Bohner, G.; Bless, H.; Schwartz, N. and Strack, F. (1988) What triggers causal attribution? The impact of subjective probability, *European Journal of Social Psychology*, 18, 335-346.
- Bond, M.H. and Hwang, K.K. (1986) The social psychology of Chinese people, In Bond, M.H. (ed.) *The psychology of Chinese people*, Oxford: Oxford University Press.
- Boyatzis, R. (1998) Transforming qualitative information: Thematic analysis and code development, Thousand Oaks, CA, London: Sage.
- Boyle, E.A., Anderson, A.H. and Newlands, A. (1994) The effects of visibility on dialogue and performance in cooperative problem solving task, *Language and Speech*, 37, 1-20.
- Breakwell, G. (1990) *Interviewing*, London: Routledge.
- Breen, M.P. (1985) The social context for language learning- a neglected situation?, *Studies in Second Language Acquisition*, 7, 135-158.
- Breen, M.P. (1996) Constructions of the learner in SLA research, In Alatis, J. E.; Straehle, C. A.; Ronkin, M. and Gellenberger, B. (eds.) *Georgetown University Round*

- table on Languages and Linguistics 1996*, Washington, DC: Georgetown university Press.
- Breen, M.P. (ed.) (2001) *Learner contributions to language learning: New directions in research*, London: Longman.
- Breen, M.P. (2001) Overt participation and covert acquisition in the language classroom, In Breen, M.P. (ed.) (2001) *Learner contributions to language learning: New directions in research*, London: Longman, 112-141.
- Briton, N.J. and Hall, J.A. (1995) Gender-based expectancies and observer judgements of smiling, *Journal of Non-verbal Behaviour*, 19, 49-65.
- Brunel, M. L. (1989) L'empathie en counseling interculturel, *Santé Mentale au Québec*, 18, 81-84.
- Bryman, A. (1988) *Quality and quantity in social research*, London: Unwin Hyman.
- Buck, R. (1989) Emotional communication in personal relationships: A developmental-interactionist view, In Hendrick, C.D. (ed.) *Close Relationships. Review of Personality and Social Psychology*, vol. 10, Newbury Park, CA: Sage Publications, 144-163.
- Buck, R. and Lerman, J. (1979) General versus specific nonverbal sensitivity and clinical training, *Human Communication Summer*, 267-274.
- Bull, P. (1987) *Posture and gesture*, Oxford: Pergamon.
- Burgoon, J. and Newton, D.A. (1991) Applying a social meaning model to relational message interpretations of conversational involvement: comparing observer and participant perspectives, *Southern Communication Journal*, 56, 96-113.
- Burgoon, J. and Saine, T. (1978) *The unspoken dialogue*, Boston: Houghton Mifflin.
- Burgoon, J.; Stern, L.E. and Dillman, L. (1995) *Interpersonal adaptation: Dyadic interaction patterns*, Cambridge University Press.
- Byram, M. (1991) Teaching culture and language: Towards an integrated model, *Multilingual Matters*, 60, 17-32.
- Byram, M. (1997) *Teaching and assessing communicative intercultural competence*, Philadelphia, Multilingual Matters Ltd.
- Cambridge University Press (1999) *Looking at language classrooms*, Cambridge Teacher Training and Development Series, Cambridge: Cambridge University Press.
- Canale, M. and Swain, M. (1980) Theoretical bases of communicative approaches to second language teaching and testing, *Applied Linguistics*, 1, 1-47.

- Candlin, C.N. and Mercer, N. (eds.) (2001) *English language teaching in its social context: A reader*, London: Routledge.
- Cappella, J.N. (1981) Mutual influence in expressive behaviour: Adult-adult and infant-adult dyadic interaction, *Psychological Bulletin*, 89, 101-132.
- Cappella, J.N. and Greene, J.O. (1982) A discrepancy-arousal explanation of mutual influence in expressive behaviour for adult and infant-adult interaction, *Communication Monographs*, 49, 89-114.
- Chaudron, C. (1988) *Second language classrooms: Research on teaching and learning*, Cambridge: Cambridge University Press.
- Chen, S.Q. (1990) A study of communication strategies in interlanguage production by Chinese EFL learners, *Language Learning*, 40(2), 155-187.
- Chen, M. and Bargh, J. (1997) Nonconscious behavioural confirmation processes: The self-fulfilling consequences of automatic stereotype activation, *Journal of Experimental Social Psychology*, 33, 541-560.
- Church, R. B. and Goldin-Meadow, S. (1986) The mismatch between gesture and speech as an index of transitional knowledge, *Cognition*, 23 (1), 43-71.
- Clark, H.H. and Brennan, S.E. (1991) Grounding in communication, In Resnick, L.B., Levine, J. and Teasley, S.D. (eds.) *Perspectives on socially shared cognition*, Washington, DC: American Psychological Association, 127-149.
- Cohen, A. (1987) Using verbal reports in research on language learning, In Færch, C. and Kasper, G. (eds.) *Introspection in second language research*, Clevedon: Multilingual Matters, 82-95.
- Cohen, A. (1996) Verbal reports as a source of insights into second language learner strategies, *Applied Language Learning*, 7, 5-24.
- Cohen, A. (1998) *Strategies in learning and using a second language*, London: Logman.
- Cohen, A. and Olshtain, E. (1993) The production of speech acts by EFL learners, *TESOL Quarterly*, 27, 33-56.
- Cohen, L. and Manion, L. (1994) *Research methods in education* (4th ed.), London: Routledge.
- Cosnier, J. (1982) Communication et langues gestuelles, In Cosnier, J.; Berrendonner, J.; Coulon, J. and Orecchioni, C. (eds.) *Les voies du langage: Communications verbales, gestuelles et animales*, Paris: Dunod, 255-304.
- Creswell, J.W. (1994) *Research design: Qualitative and quantitative approaches*, Thousand Oaks, CA: Sage.

- Cumming, A. (1989) Writing expertise and second-language proficiency, *Language learning*, 39, 81-141.
- Darwin, C. (1872) *The expression of the emotions in man and animal*, London: John Murray.
- Deacon, D.; Pickering, M.; Golding, P. and Murdock, G. (1999) *Researching communications: A practical guide to methods in media and cultural analysis*, London: Arnold.
- Denzin, N. (1970) *The research act in sociology: A theoretical introduction to sociological methods*, London: The Butterworth Group.
- Denzin, N. and Lincoln, Y. (eds.) (2000) (2nd edition) *Handbook of qualitative research*, Thousand Oaks, CA: Sage.
- Deutsch, F. M. (1990) Status, sex and smiling: The effect of role on smiling in men and women, *Personality and Social Psychology Bulletin*, 16, 531-540.
- Devine, P. G. (1989) Stereotypes and prejudice: Their automatic and controlled components, *Journal of Personality and Social Psychology*, 56, 5-18.
- Devine, P. G. and Ostrom, T. (1988) Dimensional versus information processing apparatus to social knowledge: The case of inconsistency management, In Bar-Tel, D. and Kruglanski, A.W. (eds.) *The social psychology of knowledge*, Cambridge: Cambridge University Press, 231-261.
- Doherty-Sneddon, G. (1995) *The development of conversational and communicational skills*, Unpublished Ph.D. Thesis, University of Glasgow.
- Doherty-Sneddon, G. and Kent, G. (1996) Visual signals in children's communication, *Journal of Child Psychology and Psychiatry*, 37, 949-959.
- Doherty-Sneddon, G., Mcauley, S., Bruce, V., Langton, S., Blokland, A. and Anderson, A.H. (2000) Visual signals and children's communication: Negative effects on task outcome, *British Journal of Developmental Psychology*, 18, 595-608.
- Dörnyei, Z. and Kormos, J. (1998) Problem-solving mechanisms in L2 communication: A psycholinguistic perspective, *Studies in Second Language Acquisition*, 20, 349-386.
- Doyle, W. (1986) Classroom organisation and management, In Wittrock, M.C. (ed.) *Handbook of research on teaching* (3rd edition), New York: MacMillan, 392-431.
- Duncan, S. (1972) Some signals and rules for taking speaking turns in conversations, *Journal of Personality and Social Psychology*, 23, 283-292.
- Ebbutt, D. (1987) Interviewing groups of students, In Powney, J. and Watts, M. (eds.) *Interviewing in educational research*, London: Routledge.

- Efron, D. (1941/1972) *Gestures, race and culture* (First edition in 1941 as *Gestures and environment*, New York: King's Crown Press), The Hague: Mouton.
- Ehrman, M. (1996) *Understanding second language learning difficulties*, Thousand Oaks, CA: Sage.
- Ehrman, M. and Dörnyei, Z. (1998) *Interpersonal dynamics in second language education: The visible and invisible classroom*, Thousand Oaks, CA: Sage.
- Eisenhardt, K.M. (2002) Building theories from case study research, In Huberman, A. M. and Miles, M. B. (2002) *The qualitative researcher's companion*, London: Sage, 5-37.
- Ekman, P. and Friesen, W.V. (1969) The repertoire of non-verbal behaviour- Categories, origins, usage, and coding, *Semiotica*, 1, 49-98.
- Ekman, P. and Friesen, W.V. (1971) Constants across cultures in the face and emotion, *Journal of Personality and Social Psychology*, 17, 124-129.
- Ekman, P. and Friesen, W.V. (1972) Hand movements, *Journal of Communication*, 22, 353-374.
- Ekman, P. and Friesen, W.V. (1975) *Unmasking the face*, Englewood Cliffs, NJ: Prentice-Hall.
- Ekman, P. & Friesen, W.V. (1986) A new pan-cultural expression of emotion, *Motivation and Emotion*, 10, 159-168.
- Ekman, P. & Keltner, D. (1997) Universal facial expressions of emotion: An old controversy and new findings, In Segerstrale, U. & Molnar, P. (eds.) *Non-verbal communication: When nature meets culture*, New Jersey: Lawrence Erlbaum.
- Ekman, P., Friesen, W.V. and Ellsworth, P. (1972) *Emotion in the human face*, New York: Pergamon
- Ekman, P.; Friesen, W.V., O'Sullivan, M., Chan, A., Diacoyanni-Tarlatzis, I., Heider, K., Krause, R., LeCompte, W.A., Pitcairn, T., Ricci-Bitti, P.E., Scherer, K., Tomita, M. and Tzavaras, A. (1987) Universal and cultural differences in the judgements of facial expressions of emotion, *Journal of Personality and Social Psychology*, 53, 712-717.
- Ellis, R. (1994) *The study of second language acquisition*, Oxford: Oxford University Press.
- Ellis, R. (2001a) The metaphorical constructions of second language learners, In Breen, M. P. (ed.) *Learner contributions to language learning: New directions in research*, London: Longman, 65-86.
- Ellis, R. (2001b) Second language acquisition: Research and language pedagogy, In

- Candlin, C.N. and Mercer, N. (eds.) *English language teaching in its social context: A reader*, London: Routledge, 44-75.
- Emerson, R.M.; Fretz, R.I. and Shaw, L.L. (1995) *Writing ethnographic field notes*, Chicago: University of Chicago Press.
- Emmison, M. and Smith, P. (2000) *Researching the visual*, London: Sage.
- Ericsson, K. and Simon, H. (1996) *Protocol analysis: Verbal reports as data* (3rd ed.), Cambridge MA: MIT Press.
- Exline, R.V. and Winters, L.C. (1965) Affective relations and mutual gazes in dyads, In Tomkins, S. and Izard, C. (eds.) *Affect, cognition and personality*, New York: Springer.
- Færch, C. and Kasper, G. (eds.) (1987) *Introspection in second language research*, Clevedon: Multilingual Matters, 197-212.
- Feldman, M. S. (1995) *Strategies for interpreting qualitative data*, Thousand Oaks, CA: Sage.
- Feldman, R. S. and Rimé, B. (eds.) (1991) *Fundamentals of non-verbal behaviour*, Cambridge: Cambridge University Press.
- Feldman, R.S.; Philippot, P. and Custrini, R.J. (1991) Social competence and non-verbal behaviour, In Feldman, R. S. and Rimé, B. (eds.) (1991) *Fundamentals of non-verbal behaviour*, Cambridge: Cambridge University Press, 329-350.
- Felipe, N.J. and Sommer, R. (1966) Invasion of personal space, *Social Problems*, 14, 206-214.
- Festinger, L. and Katz, D. (1965) *Research methods in behavioural sciences*, New York: Holt, Rinehart and Winston.
- Feyereisen, P. and de Lannoy, J.D. (1991) *Gesture and speech: Psychological investigations*, Cambridge: Cambridge university Press.
- Feyereisen, P.; Van de Wiele, M. and Dubois, F. (1988) The meaning of gestures: What can be understood without speech?, *European Bulletin of Cognitive Psychology*, 8 (1), 3-25.
- Fincham, F.D. (1985) Attributions in close relationships, In Harvey, J. H. and Weary, G. (eds.) *Attribution: Basic issues and applications*, Orlando, FL: Academic Press.
- Firth, A. and Wagner, J. (1997) *On discourse, communication and (some) fundamental concepts in SLA research*, *The Modern Language Journal*, 81(3), 285-300.
- Fischer, A. (1993) Sex differences in emotionality: Fact or stereotype? *Feminism and Psychology*, 3, 303-318.

- Fiske, J. (1990) *Introduction to communication studies* (2nd ed.), London: Routledge.
- Fiske, S.T. and Taylor, S. (1991) *Social cognition* (2nd ed.), New York: Random House.
- Fletcher, G.J.O. and Ward, C. (1988) Attribution theory and processes: a cross-cultural perspective, In Bond, M.H. (ed.) *The cross-cultural challenge to social psychology*, Newbury Park, CA: Sage.
- Fogel, A. (1993) *Developing through relationships: Origins of communication, self and culture*, Chicago: Chicago University Press.
- Freedman, N. (1972) The analysis of human behaviour during the clinical interview, In Siegman, A.W. and Pope, B. (eds.) *Studies in dyadic communication*, New York: Pergamon, 153-175.
- Friesen, W.V. (1972) *Cultural differences in facial expressions in a social interaction: An experimental test of the concept of display rules*, Ph.D. Thesis, San Francisco: University of California.
- Fry, J. (1988) *Diary studies in classroom SLA: problems and prospects*, JALT Journal, 9, 158-67.
- Furuyama, N. (2000) Gestural interaction between the instructor and the learner in *origami* instruction, In McNeill, D. (ed.) *Language and gesture*, Cambridge: Cambridge University Press, 99-118.
- Gallaway, C. (1979) *Teaching and non-verbal behaviour*, Academic Press.
- Garfinkel, H. (1967) *Studies in ethnomethodology*, Englewood Cliffs, NJ: Prentice Hall.
- Gass, S. and Mackey, A. (2000) *Stimulated recall methodology in second language research*, Mahwah, NJ: Lawrence Erlbaum Associates.
- Geertz, C. (1993) *The interpretation of culture: Selected essays*, London: Fontana.
- Gibb, J.L. and Gibb, L.M. (1978) The group as a growing organism, In Bradford, L. (ed.) *Group development* (2nd ed.), San Diego, CA: University Associates.
- Gilbert, D.T. (1989) Thinking lightly about the others: automatic components of the social inference process, In Uleman, J.S. and Bargh, J.A. (eds.) *Unintended thought*, New York: Guilford Press.
- Gilbert, D.T. (1995) Attribution and interpersonal perception, In Tesser, A. (ed.) *Advanced Social Psychology*, New York: McGraw-Hill.
- Gilbert, D.T. and Malone, P.S. (1995) The correspondence bias, *Psychological Bulletin*, 117, 21-38.

- Giles, H.; Coupland, N. and Coupland, J. (1991) Accommodation theory: Communication, context and consequence, In Giles, H.; Coupland, N. and Coupland, J. (eds.) *Contexts of accommodation: Developments in applied sociolinguistics*, Cambridge: Cambridge University Press, 1-69.
- Glaser, B. and Strauss, A. (1967) *Discovery of grounded theory*, Chicago: Aldine.
- Glenberg, A.M., Schroeder, J.L. and Robertson, D.A. (1998) Averting the gaze disengages the environment and facilitates remembering, *Memory and Cognition*, 26, 651-658.
- Goffman, E. (1959) *The presentation of self in everyday life*, Edinburgh: Edinburgh University Press.
- Goffman, E. (1963) *Behaviour in public places: Notes on the social organisation of gatherings*, New York: Free Press
- Goffman, E. (1971) *Relations in public*, Allen Lane.
- Goffman, E. (1981) *Forms of talk*, Oxford: Blackwell.
- Goldin-Meadow, S. (1982). The resilience of recursion: A study of a communication system developed without a conventional language model, In Wanner, E. & Gleitman, L.R. (eds.). *Language acquisition: The state of the art*, New York: Cambridge University Press, 51-77.
- Goldin-Meadow, S., Wein, D. and Chang, C. (1992) Assessing knowledge through gesture: Using children's hands to read their minds, *Cognition and Instruction*, 9, 201-219.
- Goodwin, C. (1981) *Conversational Organisation: Interaction between speakers and hearers*. Academic Press.
- Goodwin, C. (1986) Gesture as a resource for the organisation of mutual orientation, *Semiotica*, 62 (1-2), 29-49.
- Goodwin, C. (2000) Practices of seeing: Visual analysis- An ethnomethodological approach, In Van Leeuwen, T. and Jewitt, C. (eds) *Handbook of visual analysis*, London: Sage, 157-182.
- Goodwin, C. and Goodwin, M.H. (1992) Context, activity and participation, In Auer, P. and di Luzio, A. (eds) *The contextualisation of language*, Amsterdam: Benjamins, 77-99.
- Goodwin, M.H. (1980) Processes of mutual monitoring implicated in the production of description sequences, *Sociological Inquiry*, 50 (3-4), 303-317.
- Goodwin, M.H. and Goodwin, C. (1986) Gesture and co-participation in the activity of searching for a word, *Semiotica*, 62 (1-2), 51-75.

- Gosden, H. (1996) Verbal reports of Japanese novices' research writing practices in English, *Journal of Second Language Writing*, 5, 109-128.
- Graham, J.A. and Argyle, M. (1975) A cross-cultural study of the communication of extra-verbal meaning by gestures, *International Journal of Psychology*, 10 (1), 56-67.
- Grant, B.M. and Hennings, D.G. (1977) *The teacher moves: An analysis of non-verbal activity*, New York: Teachers' College Press.
- Guba, E.G. and Lincoln, Y.S. (1981) *Effective evaluation*, San Francisco: Jossey-Bass.
- Gullberg, M. (1998) *Gesture as a communication strategy in second language discourse*, Sweden: Lund University Press.
- Gumperz, J. (1982) *Discourse strategies*, Cambridge: Cambridge University Press.
- Haastrup, K. (1987) Using thinking aloud and retrospection to uncover learners' lexical inferencing procedures, In Færch, C. and Kasper, G. (eds.) *Introspection in second language research*, Clevedon: Multilingual Matters, 197-212.
- Hall, C.C.I. (1997) Cultural malpractice: The growing obsolescence of psychology with the growing of U.S. population, *American Psychologist*, 52, 642-651.
- Hall, E.T. (1959) *The silent language*, New York: Doubleday.
- Hall, E.T. (1966) *The hidden dimension*, New York: Doubleday.
- Hargie, O.; Saunders, C. and Dickson, D. (1994) *Social skills in interpersonal communication* (3rd edition), London: Routledge.
- Hammersley, M. and Atkinson, P. (1995) *Ethnography: Principles in practice* (2nd edition), London: Routledge.
- Hauge, E. (2000) *The role of gesture in British ELT in a university setting*, Unpublished Ph.D. Thesis, England: University of Southampton.
- Heath, C. (1986) *Body movement and speech in medical interaction*, Cambridge: Cambridge University Press.
- Heath, C. (1992) Gesture's discrete tasks: Multiple relevancies in visual conduct in the contextualisation of language, In Auer, P. and di Luzio, A. (eds.) *The contextualisation of language*, Amsterdam: Benjamins, 102-127.
- Heath, C. and Hindmarch, J. (2002) Analysing interaction: Video, ethnography and situated conduct, In May, T. (ed.) *Qualitative research in action*, London: Sage, 99-121.
- Hedges, A. (1985) Group interviewing, In Walker, R. (ed.) *Applied Qualitative Research*, Gower: Aldershot.

- Heider, F. (1944) Social perception and phenomenal causality, *Psychological Review*, 40, 358-374.
- Heider, F. (1958) *The psychology of interpersonal relations*, Hillsdale, NJ: Lawrence Erlbaum Associates.
- Henley, N. M. (1995) Body politics revisited: What do we know today?, In Kalbfleisch, P.J. and Cody, M. J. (eds.) *Gender, power and communications in human relationships*, Hillsdale, NJ: Lawrence Erlbaum, 27-61.
- Heslin, R. and Boss, D. (1980) Nonverbal intimacy in airport arrival and departure, *Personality and Social Psychology Bulletin*, 6, 248-252.
- Hinton, P.R. (1993) *The psychology of interpersonal perception*, London: Routledge.
- Hirsbrunner, H.P.; Frey, S. and Crawford, R. (1987) Movement in human interaction: Description, parameter formation, and analysis, In Siegman, A.W. (ed.) *Non-verbal behaviour and communication*, London: Lawrence Erlbaum.
- Hofstede, G. (1980) *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1983) National cultures in four dimensions: A research-based theory of cultural differences among nations, *International Studies of Management and Organisation*, 8, 46-74.
- Hofstede, G. (1986) Cultural differences in teaching and learning, *International Journal of Intercultural Education*, 10, 301-320.
- Holliday, A.R. (1994) *Appropriate methodology and social context*, Cambridge: Cambridge University Press.
- Holliday, A.R. (2002) *Doing and writing qualitative research*, London: Sage Publications.
- Hosenfeld, C.(1977) A preliminary investigation of the reading strategies of successful and unsuccessful second language learners, *System*, 5, 110-123.
- Huberman, A.M. and Miles, M. B. (2002) *The qualitative researcher's companion*, London: Sage.
- Islam, M. and Hewstone, M. (1993) Intergroup attributions and affective consequences of majority and minority groups, *Journal of Personality and Social Psychology*, 65, 936-950.
- Izard, C.E. (1971) *The face of emotion*, New York: Appleton Centre Crofts.
- Janesick, V.J. (2000) The choreography of qualitative research design, In Denzin, N. K. and Lincoln, Y. S. (eds.) *Handbook of Qualitative Research*, (2nd edition), Thousand Oaks, Sage Publications, 379 - 399.

- Johnson, D. (1992) *Approaches to research in second language learning*, New York: Longman.
- Jones, E.E. (1990) *Interpersonal perception*, New York: W. H. Freeman.
- Jones, E.E. and Davis, K.E. (1965) From actions to dispositions: the attribution process in person perception, In Berkowitz, L. (ed.) *Advances in experimental social psychology*, vol. 2, New York: Academic Press.
- Jones, E.E. and Nisbett, R.E. (1972) The actor and the observer: divergent perceptions of the causes of behaviour, In Jones, E.E. et al. (eds.) *Attribution: perceiving the causes of behaviour*, Morristown, NJ: General Learning Press.
- Jones, S. and Tetroe, J. (1987) Composing in a second language, In Matsushashi, A. (ed.) *Writing in real time- Modeling production processes*, Norwood NJ: Ablex, 96-118.
- Jorgensen, D. L. (1989) *Participant observation: A methodology for human studies*, Newbury Park, CA: Sage.
- Kasper, G. (1981) *Pragmatische Aspekte in der Interimsprache*, Tübingen: Gunter Narr.
- Kasper, G. (1996) The development of pragmatic competence, *Studies in Second Language Acquisition*, Special issue, 18 (2), 145-148.
- Kasper, G. (1997) 'A' stands for acquisition. A response to Firth and Wagner, *The Modern Language Journal*, 81(3), 307-312.
- Kellerman, E. (1992) 'I see what you mean' : The role of kinesic behaviour in listening and implications for foreign and second language learning, *Applied Linguistics*, 13, 239-258.
- Kelly, H.H. (1967) *Attribution theory in social psychology*, Nebraska Symposium on motivation, 14, 431-439.
- Kelly, H.H. (1972) Causal schemata and the attribution process, In Jones, E.E. (ed.) *Attribution: Perceiving causes of behaviour*, Morristown, NJ: General Learning Press.
- Kelly, H.H. (1973) The processes of causal attribution, *American Psychologist*, 28, 107-128.
- Kendon, A. (1967) Some functions of gaze direction in social interaction, *Acta Psychologica*, 28 (1), 1-47.
- Kendon, A. (1972) Some relationships between body motion and speech, In Siegman, A. and Pope, B. (eds.) *Studies in dyadic communication*, New York: Pergamon Press, 177-210.

- Kendon, A. (1976) Differential perception and attention frame in face-to-face interaction: Two problems for investigation, *Semiotica*, 24 (3/4), 305- 315.
- Kendon, A. (1980) Gesticulation and speech: Two aspects of the process of utterance, In Key, M.R. (ed.) *The relationship of verbal and non-verbal communication*, The Hague: Mouton, 207-227.
- Kendon, A. (1981) Geography of gesture, *Semiotica*, 37, 129-163.
- Kendon, A. (1983) Gesture and speech: How they interact, In Wiemann, J.M. and Harrison, R.P. (eds.) *Non-verbal interaction*, Beverly Hills: Sage Publications, 13-45.
- Kendon, A. (1984) Did gestures have the happiness to escape the confusion at Babel? In Aaron, W. (ed.) *Non-verbal behaviour: Perspectives, applications, intercultural insights*, New York: Hogrefe, 75-114.
- Kendon, A. (1985) Some uses of gesture, In Tannen, D. and Saville-Troike, M. (eds.) *Perspectives on silence*, New Jersey: Ablex Publishing, 215-234.
- Kendon, A. (1986) Some reasons for studying gesture, *Semiotica*, 62 (1/2), 3-28.
- Kendon, A. (1987) On gesture: Its complementary relationship with speech, In Siegman, A.W. and Feldstein, S. (eds.) *Non-verbal behaviour and communication*, Hillsdale, NJ: Erlbaum, 65-97.
- Kendon, A. (1988) How gestures can become like words, In Poyatos, P. (ed.) *Crosscultural perspectives in non-verbal communication*, Toronto: Hogrefe, 131-141.
- Kendon, A. (1990) Signs in the cloister and elsewhere, *Semiotica*, 79 (3-4), 307-329.
- Kendon, A. (1994) Do gestures communicate? A review, *Research on Language and Social Interaction*, 27 (3), 175-200.
- Kendon, A. (1995) Gesture as illocutionary and discourse structure markers in Southern Italian conversation, *Journal of Pragmatics*, 23 (3), 247-279.
- Kendon, A. (1996) Reflections on the study of gestures, *Visual anthropology*, 8 (2-4), 121-131.
- Kendon, A. (1997) Gesture, *Annual Review of Anthropology*, 26, 109-128.
- Kendon, A. (2000) Language and gesture: unity or duality?, In McNeill, D. (ed.) *Language and gesture*, Cambridge: Cambridge University Press, 47-64.
- Kendon, A. and Ferber, A. (1973) A description of some human greetings, In Michael, R.P. and Crook, J.H. (eds.) *Comparative ecology and behaviour in primates*, Academic Press.
- Kern, R. (1994) The role of mental translation in second language reading, *Studies in second language acquisition*, 16, 441-461.

- Key, M.R. (ed.) (1980) *The relationship of verbal and non-verbal communication*, The Hague: Mouton.
- Kirch, M.S. (1979) Non-verbal communication across cultures, *Modern Language Journal*, 63, 416-423.
- Kirk, J. and Miller, M. (1986) *Reliability and validity in qualitative research*, Qualitative Research Methods Series 1, London: Sage.
- Kirouac, G. and Hess, U. (1999) Group membership and the decoding of non-verbal behaviour. In Philippot, P; Feldman, R.S. and Coats, E.J. (eds.) (1999) *The social context of non-verbal behaviour*, Cambridge: Cambridge University Press, 182-210.
- Kita, S. (1993) *Language and thought interface: a study of spontaneous gestures and Japanese mimetics*, Unpublished Ph.D. dissertation, Chicago: University of Chicago.
- Kleinke, C.L.; Staneski, R.A. and Berger, D.E. (1975) Evaluation of an interviewer as a function of interviewer gaze, reinforcement of subject gaze and interviewer attractiveness, *Journal of Personality and Social Psychology*, 6, 7-12.
- Klima, E. and Bellugi, U. (1979) *The signs of language*, Cambridge, MA: Harvard University Press.
- Kleinke, C.L. (1986) Gaze and eye contact: A research Review, *Psychological Bulletin*, 100 (1), 78-100.
- Knapp, M.L. (1978) *Non-verbal communication in human interaction*, United States of America: Holt, Rinehart and Winston.
- Kramsch, C. (1993) *Context and culture in language teaching*, Oxford: Oxford University Press.
- Krashen, S.D. (1981) *Second language acquisition and second language learning*, Oxford: Pergamon.
- Krauss, R.M., Morrel-Samuels, P. and Colasante, C. (1991) Do conversational hand gestures communicate?, *Journal of Personality and Social Psychology*, 61 (5), 743-754.
- Kress, G. and van Leeuwen, T. (1996) *Reading images: The grammar of visual design*, London: Routledge.
- Krueger, R.A. (1998) *Analysing and reporting focus group results*, London: Sage.
- Kulik, J.A. (1983) Confirmatory attribution and the perpetuation of social beliefs, *Journal of Personality and Social Psychology*, 44, 1171-1181.
- Kunda, Z. (1999) *Social cognition: Making sense of people*, United States of America: MIT Press.

- Kupperbusch, C.; Matsumoto, D.; Kooken, K.; Loewinger, S.; Uchida, H.; Wilson-Cohn, C. and Yrizarry, N. (1999) Cultural influences on non-verbal expressions of emotion, In Philippot, P; Feldman, R.S. and Coats, E.J. (eds.) *The social context of non-verbal behaviour*, Cambridge: Cambridge University Press, 17-44.
- Lantolf, J.P. (ed.) (1994) Sociocultural theory and second language learning: Special Issue, *Modern Language Journal*, 4.
- Lantolf, J. P. (2001) Sociocultural theory and SLA. In R. B. Kaplan (ed.) *Handbook of applied linguistics*, Oxford: Oxford University Press, 109-119.
- Lantolf, J.P. and Appel, G. (1994) *Vygotskian approaches to second language research*, Norwood, NJ: Ablex.
- Lantolf, J.P. and Pavlenko, A. (1995) Sociocultural theory and second language acquisition, *Annual Review of Applied Linguistics*, 15, 108-124.
- Lennon, P. (1989) Introspection and intentionality in advanced second-language acquisition, *Language Learning*, 39, 375-386.
- Levinson, S. (1997) Contextualising “contextualisation cues”, In Eermans, S.; Prevignano, C. and Thibault, P. (eds.) *Discussing communication analysis 1 : John J. Gumperz*. Lausanne: Beta Press, 6-23.
- Lewis, A. (1992) Group child interviews as a research tool, *British Educational Research Journal*. 18(4), 413- 421.
- Liddell, S.K. (1980) *American Sign Language syntax*, The Hague: Mouton.
- Liddell, S.K. & Johnson, R.E. (1989) American Sign Language: The phonological base, *Sign Language Studies*, 64, 195-277.
- Light, P. and Butterworth, G. (eds.) (1992) *Context and cognition : Ways of learning and knowing*, New York: Harvester Wheatsheaf.
- Linssen, H. and Hagendoorn, L. (1994) Social and geographical factors in the explanation of the content of European national stereotypes, *British Journal of Social Psychology*, 33, 165-182.
- Locke, D. and Pennington, D. (1982) Reasons and other causes: their roles in attribution processes, *Journal of Personality and Social Psychology*, 42, 212-223.
- Long, D.R. (1989) Second language listening comprehension: A schema-theoretic perspective, *Modern Language Journal*, 73, 32-40.
- Long, M.H. (1980) Inside the “black box”: methodological issues in classroom research on language learning, *Language Learning*, 30, 1-42.

Long, M.H. (1981) Input, interaction and second language acquisition, In Winitz, H. (ed.) *Native language and foreign language acquisition*, New York: Annals of the New York Academy of Sciences, 379.

Long, M.H. (1989) Task, group, and task-group interactions, University of Hawai'i, *Working papers in ESL*, 8, 251-286.

Long, M.H. (1996) The role of the linguistic environment in second language acquisition, In Hyltenstam, K. and Viberg, A. (eds.) *Progression and regression in language: Sociocultural, neuropsychological and linguistic perspectives*, New York: Cambridge University Press.

Lord, C. G. (1997) *Social Psychology*, Fort Worth: Harcourt Brace College Publishers.

Lynn, M. and Mynier, K. (1993) Effect of server-posture on restaurant tipping, *Journal of Applied Social Psychology*, 23, 678-685.

Mackey, A.; Gass, S. and McDonough, K. (2002) How do learners perceive implicit negative feedback?, *Studies in Second Language Acquisition*, 22

Magnan, S. (ed.) (1990) *Shifting the instructional focus to the language learner*, Middlebury, VT: Northeast conference on the teaching of Foreign Languages.

Marcos, L. R. (1979) Non-verbal behaviour and thought processing, *Archives of General Psychiatry*, 36(9), 940-943.

Markova, I. (1987) *Human awareness: Its social development*, London: Hutchinson.

Markova, I. and Foppa, K. (1990) *The dynamics of dialogue*, New York: Harvester Wheatsheaf.

Markova, I. and Foppa, K. (1991) *Asymmetries in dialogue*, New York: Harvester Wheatsheaf.

Matsumoto, D. (1989) Cultural influences on the perception of emotion, *Journal of Cross-Cultural Psychology*, 20, 92-105.

Matsumoto, D. (1992) More evidence for the universality of a contempt expression, *Motivation and Emotion*, 16, 363-368.

Matsumoto, D. (1996) *Unmasking Japan: Myths and realities about the emotions of the Japanese*, California: Stanford University Press.

Matsumoto, D. and Ekman, P. (1989) American-Japanese cultural differences in intensity ratings of facial expressions of emotion, *Motivation and Emotion*, 13, 143-157.

Maxwell, J.A. (1996) *Qualitative research design: An interactive approach*, Thousand Oaks: Sage.

- May, T. (ed.) (2002) *Qualitative research in action*, London: Sage.
- McBride, G.; King, M.C. and James, J.W. (1965) Social proximity effects of galvanic skin responses in adult humans, *Journal of Psychology*, 61, 153-157.
- McCafferty, S. (1998) Non-verbal expression and L2 private speech, *Applied Linguistics*, 19, 73-96.
- McCafferty, S. and Ahmed, C. (2000) The appropriation of gestures of the abstract by L2 learners. in Lantolf, J. P. (ed.) *Sociocultural theory and second language learning*, Oxford: Oxford University Press, 199-218.
- McKay, S. and Wong, S. (1996) Multiple discourse, multiple identities: Investment and agency in second language learning among Chinese adolescent immigrant students, *Harvard Educational Review*, 66, 577-608.
- McLaughlin, B. (1985) *Second language acquisition in childhood*, Hillsdale, NJ: Lawrence Erlbaum.
- McNeill, D. (1985) So you think gestures are non-verbal?, *Psychological Review*, 92, 350-371.
- McNeill, D. (1987) So you *do* think gestures are non-verbal! Reply to Feyereisen (1987). *Psychological Review*, 94(4), 499-504.
- McNeill, D. (1992) *Hand and Mind: What gestures reveal about thought*, Chicago: University of Chicago Press.
- McNeill, D. (ed.) (2000) *Language and thought*, Cambridge University Press.
- McNeill, D.; Cassell, J. and McCullough, K.E. (1994) Communicative effects of speech-mismatched gestures, *Research on Language and Social Action*, 27, 223-237.
- Mead, G.H. (1934) *Mind, self and society*, Chicago: University of Chicago Press.
- Mehrabian, A. (1968) Inference of attitudes from the posture, orientation and distance of a communicator, *Journal of Consulting and Clinical Psychology*, 32, 296-308.
- Mehrabian, A. (1972) *Non-verbal communication*, Chicago and New York: Aldine-Atherton.
- Miller, J. (1999) Becoming audible: social identity and second language use, *Journal of Intercultural Studies*, 20, 149-165.
- Miller, D.T. and Ross, M. (1975) Self-serving biases in the attribution of causality: fact or fiction?, *Psychological Bulletin*, 82, 213-215.
- Mitchell, R. (1985) Process research in second-language classrooms, *Language Teaching*, 18, 333-352.

- Mitchell, R. and Myles, F. (1998) *Second language learning theories*, London: Arnold.
- Mitchell, R.; Parkinson, B. and Johnstone, R. (1981) The foreign language classroom: An observational study, *Stirling Educational Monographs no. 9*, Stirling: University of Stirling.
- Moerman, M. (1990) Studying gestures in social context, *Senri Ethnological Studies*, Japan: Nakanishi Printing, 27, 5-52.
- Moreland, R. L.; Argote, L. and Krishnan, R. (1996) Socially shared cognition at work: Transactive memory and group performance, In Nye, J. L. and Bower, A.M. (eds.) *What's social about social cognition?*, Thousand Oak, CA: Sage.
- Morris, D.; Collett, P.; Marsh, O. and O'Shaughnessy, M. (1979) *Gestures, their origins and distribution*, London: Cape.
- Morris, M. and Peng, K. P. (1994) Culture and cause: American and Chinese attributions for social physical events, *Journal of Personality and Social Psychology*, 67, 949-971.
- Moskowitz, G. (1967) The Flint system: An observational tool for the foreign language classroom. In Simon, A. and Boyer, E. (eds.) *Mirrors for behaviour: An anthology of classroom observation instruments*, Philadelphia: Centre for the Study of teaching at Temple University.
- Moskowitz, G. (1976) The classroom interaction of the outstanding foreign language teachers, *Foreign Language Annals*, 9, 135-157.
- Neill, S. (1991) *Classroom non-verbal communication*, London: Routledge.
- Nisbett, R. and Wilson, T. (1977) Telling more than we can know: Verbal reports on mental processes, *Psychological Review*, 84, 231-259.
- Nobe, S. (1993) *Cognitive processes of speaking and gesturing: A comparison between first language speakers and foreign language speakers*, Unpublished Masters' Thesis, University of Chicago.
- Norton, B. (1997) Language, identity and the ownership of English, *TESOL Quarterly*, 31 (1), 409-429.
- Norton Peirce, B. (1995) Social identity, investment and language learning, *TESOL Quarterly*, 29 (1), 9-31.
- Nunan, D. (1988) *The learner-centred curriculum*, Oxford: Oxford University Press.
- Oxford, R. (1990) *Language learning strategies: What every teacher should know*, Rowley, Mass.: Newbury House.

- Oxford, R.L.; Tomlinson, S.C.; Barcelos, A.; Harrington, C.; Lavine, R.; Saleh, A. and Longhini, A. (1998) Clashing metaphors about classroom teachers: towards a systematic typology for the language teaching field, *System*, 26 (1), 3-51.
- Patterson, M.L. (1973) Stability of non-verbal immediacy behaviours, *Journal of Experimental Social Psychology*, 9, 97-109.
- Patterson, M.L. (1982) A sequential functional model of non-verbal exchange, *Psychological Review*, 89, 231-249.
- Patterson, M.L. (1983) *Non-verbal behaviour: A functional perspective*, New York: Springer-Verlag.
- Patterson, M.L. (1991) A functional approach to non-verbal exchange, In Feldman, R. S. and Rimé, B. (eds) *Fundamentals of non-verbal behaviour*, Cambridge University Press. 458-495.
- Patterson, M.L. (1999) The evolution of a parallel process model of non-verbal communication, In Philippot, P; Feldman, R.S. and Coats, E.J. (eds.) (1999) *The social context of non-verbal behaviour*, Cambridge: Cambridge University Press, 317-347.
- Paulus, P.B. (ed.) (1989) *Psychology of group influence*, Hillsdale, NJ: Erlbaum.
- Pennington, D.C.; Gillen, K. and Hill, P. (1999) *Social Psychology*, United Kingdom: Arnold.
- Pennycook, A. (1985) Action speaks louder than words: Paralanguage, communication and education, *TESOL Quarterly*, 19, 259-282.
- Philippot, P; Feldman, R.S. and Coats, E.J. (eds.) (1999) *The social context of non-verbal behaviour*, Cambridge: Cambridge University Press.
- Pica, T. (1994) Research on negotiation: What does it reveal about second-language learning, conditions, processes and outcomes?, *Language Learning*, 44(3), 493-527.
- Pike, K.L. (1967) *Language in relation to a unified theory of the structure of human behavior* (2nd edition), The Hague: Mouton.
- Poullisse, N. (1990) *The use of compensatory strategies by Dutch learners of English*, Dordrecht: Foris.
- Powney, J. And Watts, M. (eds.) (1987) *Interviewing in educational research*, London: Routledge.
- Poyatos, P. (ed) (1988) *Cross-cultural perspectives in non-verbal communication*, Toronto: Hogrefe, 131-141.

- Raffler-Engel, W.V. (1976) Linguistic and kinesic correlates in code switching, In McCormack, W.C. and Wurm, S. A. (eds.) *Language and man: Anthropological issues*, The Hague: Mouton, 229-238.
- Rauscher, F. H., Krauss, R. M., & Chen, Y. (1996) Gesture, speech, and lexical access: The role of lexical movements in the processing of speech. *Psychological Science*, 7, 226-231.
- Remland, M. S.; Jones, T. S. and Brinkman, H. (1995) Interpersonal distance, body orientation and touch: effects of culture, gender and age, *Journal of Social Psychology*, 135, 3, 281-297.
- Richardson, L. (1994) Writing: a method of enquiry, In Denzin, N.K. and Lincoln, Y.S. (eds.) *A Handbook of Qualitative Research*, Thousand Oaks, CA: Sage, 445-462.
- Rimé, B. (1982) The elimination of visible behaviour from social interaction: Effects on verbal, non-verbal and interpersonal variables, *European Journal of Social Psychology*, 12 (2), 113-129.
- Rimé, B. and Schiatura, L. (1991) Gesture and speech, In Feldman, R. S. and Rimé, B. (eds.) *Fundamentals of non-verbal behaviour*, Cambridge: Cambridge University Press, 239-281.
- Roberts, C. (2001) Language acquisition or language socialisation in and through discourse? Towards a redefinition of the domain of SLA, In Candlin, C.N. and Mercer, N. (eds.) *English Language Teaching in its social context: A reader*, London: Routledge, 108-121.
- Roberts, C.; Byram, M.; Barro, A.; Jordan, S. and Street, B. (2001) *Language learners as ethnographers*, Clevedon, UK: Multilingual Matters.
- Robinson, M. (1991) Introspective methodology in interlanguage pragmatics research, *Pragmatics of Japanese as native and target language*, Technical Report No. 9, Honolulu: University of Hawai'i.
- Roloff, M.E. and Campion, D.E. (1985) Conversational profit-seeking: Interaction as social exchange, In Street, R.L. and Capella, N. (eds.) *Sequence and pattern in communicative behaviour*, London: Edward Arnold, 161-189.
- Ross, L. (1977) The intuitive psychologist and its shortcomings, In Berkowitz, L. (ed.) *Advances in experimental social psychology*, vol.10, New York: Academic Press.
- Ross, L. D.; Greene, D. and House, P. (1977) The false consensus effect: an egocentric bias in social perception and attribution processes, *Journal of Experimental Psychology*, 13, 279-301.
- Rubin, Z. (1970) Measurement of romantic love, *Journal of Personality and Social Psychology*, 16, 265-273.

- Rubin, Z. (1973) *Liking and loving*, New York: Holt, Rinehart and Winston.
- Ruesch, J. & Kess, W. (1970) *Non-verbal Communication: Notes on the visual perception of human relations*, Berkley, CA: California Press.
- Russell, J.A.; Suzuki, N. and Ishida, N. (1993) Canadian, Greek and Japanese freely produced emotion labels for facial expressions, *Motivation and Emotion*, 17, 337-351.
- Rutter, D.R. and Stephenson, G.M. (1979) The role of visual communication in synchronising conversation, *European Journal of Social Psychology*, 7, 29-37.
- Sainsbury, P. and Wood, E. (1977) Measuring gesture: Its cultural and clinical correlates, *Psychological Medicine*, 7(1), 63-72.
- Samovar, L.A. and Porter, R.E. (1993) *Intercultural communication: A reader*, Belmont, CA: Wadsworth Publishing.
- Schegloff, E. (1984) On some gestures' relation to talk, In Atkinson, M.J. and Heritage, J. (eds.) *Structures of social action: Studies in conversation analysis*, Cambridge: Cambridge University Press, 266-296.
- Schegloff, E. and Sacks, H. (1973) Opening up closings, *Semiotica*, 8 (4), 289-327.
- Schirato, T. and Yell, S. (2000) *Communication and culture*, London: Sage.
- Schofield, J.W.(2002) Increasing the generalizability of qualitative research, In Huberman, A.M. and Miles, M. B. (2002) *The qualitative researcher's companion*, London: Sage. 171-203.
- Schutz, A. (1976) The stranger: An essay in social psychology, In Brodersen, A. (ed.) *Alfred Schutz. Collected Papers 2*, The Hague : Martinus Nijhoff, 91-105.
- Seaver, P.W. (1992) Pantomime as a L2 strategy, *Foreign Language Annals*, 25 (1), 21-31.
- Seegerstrale, U. & Molnar, P. (1997) (eds.) *Non-verbal Communication: When nature meets culture*, New Jersey: Lawrence Erlbaum.
- Selinker, L. (1972) Interlanguage, *International Review of Applied Linguistics*, 10, 209-231.
- Seliger, H. (1983) The language learner as linguist: Of metaphors and realities, *Applied Linguistics*, 4, 179-191.
- Selinger, H. and Shohamy, E. (1989) *Second language research methods*, Oxford: Oxford University Press.
- Shimoda, K.; Argyle, M. and Ricci Bitti, P. (1978) The intercultural recognition of emotional expression by their national groups, *European Journal of Social Psychology*, 8, 169-179.

- Siegal, M. (1996) The role of learner subjectivity in second language sociolinguistic competency: Western women learning Japanese, *Applied Linguistics*, 17, 356-382.
- Silverman, D. (2000) *Doing qualitative research: A Practical Handbook*, London: Sage.
- Silverman, D. (2001) *Interpreting qualitative data: Methods for analysing talk, text and interaction* (2nd edition), London: Sage.
- Slama-Cazacu, T. (1976) Non-verbal components in message sequence: "Mixed syntax". In McCormack, W.C. and Wurm, S.A. (eds.) *Language and man: Anthropological issues*, The Hague: Mouton, 217-227.
- Slavin, R. (ed.) (1989) *School and classroom organisation*, Hillside, NJ: Erlbaum Associates.
- Someren, M.; Barnard, Y. and Sandberg, J. (1994) *The think aloud method: A practical guide to modelling cognitive processes*, London: Academic Press.
- Sommer, R. (1959) Studies in personal space, *Sociometry*, 22, 247-260.
- Sommer, R. (1962) The distance for comfortable conversation: A further study, *Sociometry*, 23, 111-116.
- Snodgrass, S.E. (1992) Further effects of role versus gender on interpersonal sensitivity, *Journal of Personality and Social Psychology*, 62, 154-158.
- Stam, G. (1999) *Speech and gesture: What changes first in L2 acquisition*, Paper presented at Second Language Research Forum, 19, University of Minneapolis.
- Stangor, C. and Lange, J. E. (1994) Mental representations of social groups: advances in understanding stereotypes and stereotyping, *Advances in Experimental Social Psychology*, 26, 357-416.
- Stanley, G. and Martin, D.S. (1968) Eye contact and the recall of the material involving competitive and noncompetitive associations, *Psychometric Science*, 13, 337-338.
- Stokoe, W.C. (1972) *Semiotics and human sign languages*, The Hague: Mouton.
- Stokoe, W.C. (1980) Sign language structure, *Annual Review of Anthropology*, 9, 365-390.
- Stokoe, W.C. (1987) Sign languages and the monastic use of lexical gestures, In Umiker-Sebeok, J. and Sebeok, T. A. (eds.) *Monastic sign languages*, Berlin: Mouton, 325-338.
- Storms, M.D. (1973) Videotape and the attribution process: Reversing actors' and observers' point of view, *Journal of Personality and Social Psychology*, 27, 165-175.

Strauss, A. and Corbin, J. (1998) *Basics of qualitative research: Techniques and procedures for developing grounded theory*, London: Sage.

Strömqvist, S. (1987) Gaze-aversion, code-switching and search activities in routine descriptions by six adult language learners, In Wande, E.; Anward, B.; Nordberg, L.; Steensland, L. and Thelander, M. (eds.) *Aspects of multilingualism. Proceedings from the Fourth Nordic Symposium on Biligualism 1994*, Uppsala: University of Uppsala, 351-372.

Streeck, J. (1993) Gesture as Communication I: Its coordination with gaze and speech, *Communication Monographs*, 60 (4), 275-299.

Streeck, J. (1994) Gesture as Communication II: The audience as co-author, *Research on Language and Social Interaction*, 27(3), 239-267.

Streeck, J. and Hartege, U. (1992) Previews: Gestures at the transition place, In Auer, P. and di Luzio, A. (eds.) *The contextualisation of language*, Amsterdam: Benjamins, 135-157.

Surra, C.A. and Ridley, C.A. (1991) Multiple perspectives on interaction: Participants, peers and observers, In Montgomery, B.M. and Duck, S. (eds.) *Studying interpersonal interaction*, New York: Guilford, 35-55.

Swain, M. (1985) Communicative competence: Some roles of comprehensible input and comprehensible output and its development, In Gass, S. and Madden, C. (eds.) *Input in second language acquisition*, Rowley, MA: Newbury House.

Swain, M. (1995) Three functions of output in second language learning, In Cook, G. and Seidlhofer, B. (eds.) *For H.G. Widdowson: Principles and practice in the study of language*, Oxford: Oxford University Press.

Taranger, M. C. and Coupier, C. (1984) Recherche sur l'acquisition des langues secondes. Approche du gestuel, In Giacomi, A. and Veronique, D. (eds.) *Acquisition d'une langue étrangère. Perspectives et recherches*, Aix-en-Provence: Université de Provence, 169-183.

Tarone, E; Gass, S. And Cohen, A. (eds.) (1994) *Research methodology in second-language acquisition*, Mahwah, NJ: Lawrence Erlbaum Associates.

Taylor, S.E. and Fiske, S.T. (1975) Point of view and perceptions of causality, *Journal of Personality and Social Psychology*, 32, 439-445.

Thomson, L.A. and Massaro, D.W. (1986) Evaluation and integration of speech and pointing gestures during referential understanding, *Journal of Experimental Child Psychology*, 42(1), 144-168.

Thomson, L.A. and Massaro, D.W. (1994) Children's integration of speech and pointing gestures in comprehension, *Journal of Experimental Child Psychology*, 57, 327-354.

- Triandis, H. C. (1994) *Culture and social behaviour*, New York: McGraw-Hill.
- Tudor, I.(1996) *Learner-centeredness as language education*, Cambridge: Cambridge University Press.
- Tyler, S.(1995) The coconstruction of miscommunication, *Studies in Second Language Acquisition*, 17, 129-152.
- Van Leeuwen, T. and Jewitt, C. (2001) (eds.) *Handbook of visual analysis*, London: Sage.
- Van Lier, L. (1988) *The classroom and the language learner*, Harlow, UK: Longman.
- Van Lier, L. (1990) Ethnography: Bandid, bandwagon or contraband?, In Brumfit, C.J. and Mitchell, R.F. (eds.) *Research in the language classroom*, ELT Documents, 133. London: Modern English Publications, British Council, 33-53.
- Van Maanen, J. (1988) *Tales of the field: On writing ethnography*, Chicago: University of Chicago Press.
- Von Ehrenfels, V.R. (1961) A trend in the development of national units, *Tamil Culture*, 9, 1-12.
- Wagner, H.L.; Buck, R. and Winterbotham, M. (1993) Communication of specific emotions: Gender differences in sending accuracy and communication measures, *Journal of Non-verbal Behaviour*, 17(1), 29-53.
- Wallbott, H.G. and Scherer, K. R. (1986) Cues and channels in emotion recognition, *Journal of Personality and Social Psychology*, 51, 690-699.
- Watson, O.M. (1970) *Proxemic behaviour: A cross-cultural study*, The Hague: Mouton.
- Watts, M. and Ebbutt, D. (1987) More than the sum of the parts: Research methods in group interviewing, *British Educational Research Journal*, 13 (1), 25-34.
- Weiner, B. (1985) Spontaneous causal thinking, *Psychological Bulletin*, 97, 74-84.
- Wenraf, T. (2001) *Qualitative research interviewing*, London: Sage.
- Wilke, H.A.M. and Meertens, R.W. (1994) *Group performance*, London: Routledge.
- Williams, E. (1977) An experimental comparison of face-to-face and mediated communication, *Psychological Bulletin*, 84, 963-976.
- Wiseman, J.P. (1979) *Stations of the lost: The treatment of skid row alcoholics*, Englewood Cliffs, NJ.:Prentice-Hall.

Wolcott, H. (1990) *Writing up qualitative research*, Qualitative Research Methods Series, No. 20, Newbury Park: sage.

Wolfson, N. (1989) *Perspectives: Sociolinguistics and TESOL*, Rowley, MA: Newbury House.

Wong-Fillmore, L. (1985) When does teacher talk work as input? In Gass, S. M. and Madden, C. (eds.) *Input in second language acquisition*, Rowley, MA: Newbury, 17-50.

Wundt, W. (1973) *The language of gestures* (First edition *Wölkerpsychologie: eine Untersuchung der Entwicklungsgesetze von sprache, Mythos und Sitte*, Stuttgart: Alfred Kroner Verlag, 1921, Volume 1, first part, Chapter 2), The Hague: Mouton.

Zahn, G.L. (1991) Face-to-face communication in an office setting: the effects of position, proximity and exposure, *Communication research*, 18, 737-754.

Zimmerman, R. and Schneider, K. (1987) The collective learner tested: Retrospective evidence for a model of lexical search, In Færch, C. and Kasper, G. (eds.) *Introspection in second language research*, Clevedon: Multilingual Matters, 177-196.

Yin, R.K. (1994) *Case study research: design and methods* (2nd ed.), Newbury Park, CA: Sage.

APPENDIX A

LETTER AND INFORMED CONSENT FORM- TEACHERS

Dear(name),

Thank you for allowing me access to your class for the purposes of data collection and research. The purpose of this letter is to:

- (a) provide you with a brief description of my research and my reasons for wishing to observe/record your lesson;
- (b) indicate the dates of lesson I would hope to observe and/or videotape;
- (c) secure your permission to share the recordings with other members of staff within CELT and/or a wider seminar or conference audience.

I will now deal with these points one by one.

- (a) As you already know, I am a research student within CELT and the purpose of my study is to reach a fuller understanding of patterns of verbal and non-verbal communication in the language classroom. At present, I wish to investigate how learners perceive or interpret teachers' verbal and non-verbal input during the classroom interaction. I hope to examine this by video-recording classes. I will then show episodes of the lessons to the learners and ask them to comment on their thoughts at the time. It is perhaps important to point out that the learners are asked to comment **only** on the interaction during the lesson and not to make personal observations on the teacher or fellow students. In any written document or paper used for research or presentation purposes, all participants including yourself will remain anonymous.

- (b) I would hope to record your following class:

Date: _____ Time _____

Should the recording not be able to take place for any reason, I will inform you as soon as possible.

- (c) As part of the research process, it is necessary for me to share the recordings with my supervisors and colleagues within CELT for research purposes. It may be desirable at some time to share parts of recordings with a wider audience at seminars or conferences outside the university. Should you have reservations about either of these circumstances, I would be happy to discuss them further with you. If, however, you object unreservedly, please indicate in the appropriate section overleaf.

I hope the contents of this letter are sufficiently clear in terms of what I am asking of you. If so, I would be grateful if you would complete and sign the section overleaf.

Thank you once again for your co-operation, which is of key importance for this study. Should you have any further questions, please direct them to me at any time.

Yours sincerely,

Daniela Sime
Ph.D. Student, CELT

INFORMED CONSENT FORM

Please delete as appropriate:

I agree to allow Daniela Sime to video-record my lesson on the date agreed above.

Yes/No

I agree that any recordings made of my lesson(s) may be shared with:

(a) Her academic supervisors (Prof.Mike Breen, Dr.Richard Badger) Yes/No

(b) Other members of the CELT research group Yes/No

(c) A wider seminar/conference audience at Stirling Yes/No

(d) A wider seminar/conference audience elsewhere Yes/No

I agree that still photographs made during the lesson may be used by Daniela Sime for illustration purposes in her Ph.D. Thesis

Yes/No

Signed..... (Teacher)

Signed.....(Research Student)

Date.....

APPENDIX B

INFORMED CONSENT FORM - LEARNERS

I, (name), agree/ do not agree (delete one) to be video-taped in my class activities in CELT Department, at University of Stirling. I understand that the video material obtained during these classes will be used for research purposes in the department, and that it might also be shown in public presentations.

I..... (name) am willing/not willing (delete one) to be interviewed by Daniela Sime, as part of her research project. I understand that the interview will focus on the language classes in which I am a participant in CELT Department at University of Stirling and it might be recorded for research purposes. I agree for the information I provide to be used as part of any research outcomes and to be shown in public displaces (presentations, conferences, seminars). I understand that the interview does not influence my study results, it is entirely optional and I have the right to discontinue my participation at any time.

Signature:

Date:

Some details about you:

Name:

Country of origin:

Age:

Years of studying English:

Languages spoken:

How long have you been in Britain for:

Which course are you taking?

For how long?

Why are you taking this course?

Thanks for participating and for supporting my research.

APPENDIX C

TRANSCRIPTS OF THE VIDEOTAPED CLASS EXTRACTS USED IN THE INTERVIEWS WITH THE LEARNERS

Key used in transcripts and accompanying descriptions

T	Teacher
S	Student
Ss	Students
#2.21.	line number in transcript
/	pause (not measured)
//	longer pause (not measured)
<stressed>	word is stressed verbally
<u>underline</u>	stretch of speech during which gesture or other NVB occurs
(.....)	gesture made in the absence of speech
the:::	prolonged sound
(<i>T smiles</i>)	added information
<i>Iconics</i>	Gestures pictorial in content, with close semantic relationship to the content of speech.
<i>Meta</i>	Metaphoric gestures, pictorial in content, but reflecting an abstract idea or concept.
<i>Deictic</i>	Pointing gestures, with a concrete or abstract reference.
<i>Beat</i>	Flicks of the head or hand, which punctuate strands of speech.
<i>Emblem</i>	Gestures with a standard form and meaning within a community.
<i>RH/LH/BH</i>	Right hand/ Left hand/ Both hands

- EC* Eye contact, followed by the description of the type of eye contact established, individual or collective, and its duration, glance or maintained eye contact.
- FE* Facial expression, usually followed by the description of the expression showed.
- Space* Use of classroom space, followed by the details of teacher's position in relation to the learners.
- Posture* Posture, describes the teacher's standing, sitting or leaning posture, in relation to the stretch of speech when the change in posture occurs for the first time.
- EC + Emblem* A complex of gestures that occur (almost) simultaneously.
- 1 Emblem* Gesture (or other NVB) that occurs in relation to the stretch of speech underlined first in the transcript line. The behaviour is described immediately under the corresponding line in the transcript.
- 2 EC* Eye contact (or other NVB) that occurs in relation to the stretch of speech underlined second in the transcript line. The behaviour is described immediately under the corresponding line in the transcript.

TRANSCRIPT - CLASS 1

Teacher 1:	Female
Students:	4 females (2 Japan, 2 Spain) 5 males (2 Italy, 3 Spain)
Class type:	General English
Class arrangement:	Small room, students seated around one big table, teacher stands most of the times.
Level:	Lower Intermediate
Topic:	Money and Business
Length of extract:	4 mins 25 seconds

FIRST EXTRACT – CLASS 1

Stage in lesson: Clarifying meaning of two different phrases.

T's initial posture: Standing in front of the class, by the table.

- #1.1. **T** OK/ You've got two things
Emblem + Beat: LH index and thumb up, waved in air twice.
- #1.2. the cost of living
Meta: LH fingers are held in a cup shape, palm down, on the left side of body.
- #1.3. is how much people pay for things
Beat: LH as above in #1.2. beats once in air.
- #1.4. and the standard of living
Meta: RH, fingers in a cup, palm down, at a higher level than the LH above in #1.2, which is still maintained.
- #1.5. is how much money people <have or earn> /
Beats: RH beats twice in air to stress the two words.
- #1.6. I mean these are two expressions
- #1.7. <the cost of living and the standard of living>
Meta: BH with fingers in a cup, at different levels in air, BH counter-balance twice in air.
- #1.8. which people sometimes confuse
Meta: As above in #1.7., gesture maintained.
- #1.9. 'cause they are not the same
Emblem: LH index is up, the other fingers are closed in a fist, index wags in air to suggest negation.
- #1.10. <all right?>
EC: Direct EC with different Ss in the class, collective glance.

- #1.11. OK/ What about the standard of living in Italy?
EC + Concrete deictic: Individual, maintained EC and LH points straight to one of the Ss who is Italian.
- #1.12. S I think it's the same like here/
- #1.13. you have a good type of life
- #1.14. T a good standard of living
Emblem + Beat: Nodding, also RH index beats in air horizontally.
- #1.15. And the cost of living?
EC: T looks directly at the same S, maintained EC.
- #1.16. Is it expensive or/
- #1.17. S no
- #1.18. T not really
Emblem: Head nod.
- #1.19. S not really
- #1.20. T So you don't pay much for things/
- #1.21. The cost of living is
Meta + Beat: BH wave in air in container shapes, palms up.
- #1.22. how much you <pay> for things/
Beat: LH beats in air once in an oblique direction, palm is flat.
- #1.23. Tahako, what about Japan?
Concrete deictic + EC: RH points towards the S from Japan, direct EC with her, maintained.
- #1.24. S It's getting worse/
- #1.25. T What's getting worse?
FE: Shows enquiring, curious face, also head tilting to left.
- #1.26. S the prices
- #1.27. T You mean they are <increasing>?
Emblem: LH oscillates slightly in air, palm almost flat (gesture for 'more or less').
- #1.28. <rising>?
Iconic: LH palm flat ascends in a oblique move from LH side, down to RH side in the up corner of gestural space.

- #1.29. S yes
- #1.30. T Usually if the prices are increasing /
Iconic: LH repeats gesture as above in #1.28.
- #1.31. we are not happy /
Emblem: LH, fingers straight, wave shortly in air to suggest negation.
- #1.32. we want them to come down /
Iconic: LH, palm flat, short move downwards to the RH side.
- #1.33 <all right?>
Emblem: Head nod.
- #1.34. What about the standard of living?
- #1.35. S very good
- #1.36. T It's very good/ OK/
1 Emblem: Head nod.
2 Emblem: RH palm to the class.
- #1.37. What about your short experience here?
Concrete deictic: Points with RH erected at different Ss.
- #1.38. Ss very expensive (*indecipherable*)
- #1.39. T And the standard of living here?
Abstract deictic: LH points to the floor, palm down, fingers spread.
- #1.40. S good/ it's good

SECOND EXTRACT - CLASS 1

Stage in lesson: Explaining the difference between Past Tense and Present Perfect.

T's initial posture: Stands up, a S reads an example sentence from an exercise.

- #1.41. T Is this a story in the present or in the past?
Meta: BH in a container shape, in front of the T, with the fingers curled and the palms facing each other, moving laterally once when saying 'in the past'.
- #1.42. S present perfect
- #1.43. T <No, no> When did it happen?
Emblem: Head shake.

- #1.44. S in the past
- #1.45. T OK/ If the story is in the past / which tense do you use?
Emblem + EC: LH up in the air, palm open ('attention' gesture), also direct EC with the S who answers, EC maintained.
- #1.46. S past tense
- #1.47. T Think about the time when you tell the story
Iconic: LH draws a long horizontal line in air in front of her body.
- #1.48. You are <here / now>
Meta: BH facing each other, fingers curled, mark the space in front of T's body.
- #1.49. and you are telling someone
- #1.50. what happened with your watch in the past
Meta: BH facing each other, fingers curled, move laterally to the left on the horizontal line suggested in #1.47.
- #1.51. So really this is a story
- #1.52. that happened in the past when you lost your watch
Abstract deictic: BH wave behind the shoulders briefly.
- #1.53. with no impact on the present/
- #1.54. And it's quite useful to think about events in the past
1 Emblem: Head nod.
2 Abstract deictic: LH waves behind the left shoulder briefly.
- #1.55. even if they happened half an hour ago/
- #1.56. if they are not <connected to you>
Iconic: LH palm in vertical position, moves further and then closer to the body, at waist level.
- #1.57. then they are past /
Space: She moves a step forward from the board, closer to the group.
- #1.58. You could imagine the past tense
- #1.59. as a collection of little boxes /
Iconic: BH index fingers draw a square in front of the T.
- #1.60. little stories that are finished
Iconic: BH index fingers draw in air two other squares laterally to the left.

- #1.61. and are put on a shelf/
- #1.62. Do you <understand?>
Emblem+ EC: Head nod and direct EC, collective maintained.
- #1.63. I don't think you ever thought about it like that /
- #1.64. Sometimes it's quite helpful to think
Meta+ Beat: BH wave in air, fingers in cup.
- #1.65. that present perfect has to touch you
Iconic: LH taps gently twice the T's waist level, palm flat.
- #1.66. to have an effect on you/
- #1.67. If something is past tense
Space: T moves away a step forward from the board, closer to the group.
- #1.68. then it's finished/
Iconic: LH palm flat, oblique move in air from right up to left down side.
- #1.69. you are not there
- #1.70. and it doesn't affect you anymore/
- #1.71. If something is not connected to you/
- #1.72. then it's past tense/
Abstract deictic: BH palms wave over the shoulders briefly.

TRANSCRIPT – CLASS 2

Teacher 2:	Female
Students:	6 females (2 Japan, 2 China, Italy, Spain) 4 males (2 Italy, Spain, Japan)
Class type:	General English
Class arrangement:	Small room, students seated around one big table, teacher stands or sits at the front, beside the board.
Level:	Upper Intermediate
Topic:	What makes a good language learner?
Length of extracts:	4 mins 05 seconds

FIRST EXTRACT – CLASS 2

Stage in lesson: Eliciting words expressing physical activities.

Teacher's initial posture: Standing in front of the class.

- #2.1. T What's completely <different>
Meta + Beat: RH in cup, palm down, marks in air the word.
- #2.2. to learning a foreign language? (...)
EC + Concrete deictic: Collective glance, then BH point with palms up to one of the students.
- #2.3. S learning to swim
- #2.4. T <swimming> / learning to swim
1 Concrete deictic: BH stretched, RH moves around the class to point to different students, palms up.
2 Emblem: Head nod.
- #2.5. what else?
Concrete deictic: BH stretched, LH points to another student.
- #2.6. S learning to walk
- #2.7. T <learning to walk> (...)
1 Beat: LH beats in air, then BH retreat close to the body.
2 Concrete deictic: BH points to a student, arms flexed, palms up.
- #2.8. S learning to write
- #2.9. T <learning to write>
Beat: RH beats to emphasise the answer, then BH retreat close to body.
- #2.10. maybe learning to write

- #2.11. but learning to swim and learning to walk
Emblem: RH points with pen to the LH last finger, then to the ring finger.
- #2.12. did <everyone> identified these?
Concrete deictic + EC: LH rotates index finger three times around the class, collective glance.
- #2.13. because we think of these activities
1,2,3 Beats: RH stresses the words with a flick of hand, palm flat.
Posture + EC: T sits down while talking, collective glance.
- #2.14. as just bei::ng (...)
1 Beat + Emblem: BH waves twice in air, hands flexed at 45°, palms reversed to T's body ('Come on, say it').
2 Emblem: BH showing muscles flexed.
- #2.15. S automatic
- #2.16. T <yes>
Emblems: BH counter-balance back and forth ('more or less' gesture), also quick head nod.
- #2.17. S forever
- #2.18 T forever / we / we learn it
1 Concrete deictic: BH open slightly towards the learners' direction.
2 Beat: BH beat laterally, arms at 45°.
- #2.19. and then we // we never forget/
1 Concrete deictic: BH close together on chest, palms one of top of the other.
2 Meta + Emblem: BH open widely towards the students at 90° and head nod.
- #2.20. like a reflex /
Iconic + Emblem: BH counter-balance back and forth three times and head nod.
- #2.21. like a reflex we say
- #2.22. and they also involve just the:: (...)
1 Beat: BH slightly open in air at 45°, beat in air.
2 Emblem: Arms flexed, like in #2.14., gesture 2.
- #2.23. S physical
T (...)
Posture: T stands up.

- #2.24. T yes (...)
1 Concrete deictic: LH stretched, points with index finger to the student who answered.
2 Concrete deictic: LH palm up turns up and waits for student's answer.
- #2.25. S physical aspect
- #2.26. T <that's it>
Emblem + Posture: Head nod, then T sits down at end of turn.
- #2.27. They just involve a sort of physical / a physical learning process/
Emblem + EC: Head nod and direct EC with different students, individual glance.
- #2.28. so they are very very <different>/
Emblem: Head nod to one side of the table.
- #2.29. <whereas> / compared to learning a foreign language/
1 Meta + Abstract deictic: BH palms facing teacher's body point in front of teacher on the table.
2 Meta + Abstract deictic: BH as above, the hands move laterally on teacher's right hand side and point to the lateral side on table.
- #2.30. is it <physical>?
Beat: BH close to the teacher's body beat in air.
- #2.31. S no
- #2.32. T except for <tha:::t, the:::m, tho:::se>
1 Emblem: BH index fingers raised up ('pay attention' gesture).
2 FE: Facial grimace. (BH are crossed one of top of the other on table).
- #2.33. S (laugh)
- T is it not physical at all? /
Meta + Beat + Emblem: BH open in a large container gesture, 45° and beat at 'physical' also head beat at 'physical' and raised eyebrows and intonation.
- #2.34. S you use the physical ability because of the pronunciation and all that
- T (...)
Emblem + Concrete deictic + Emblem: Smiles and then points with RH palm to the student speaking, then head nod.
- #2.35. T Yes / Think of all the things
1 Emblem: head nod.
2 Beat: RH beats in the air, elbow on table.

- #2.36. involved in pronunciation
Beats: RH beats in air.
- #2.37. your teeth // your tongue // your lips /
1 Meta: RH pouch shape, held up in air, elbow on table.
2 Meta: RH fingers open slightly in a container gesture, palm reversed to the students' direction.
3 Concrete deictic: RH palm semi-open points to the mouth.
- #2.38. they have to be in the right position
Meta + Beat + Emblem: BH on table, palms semi-open towards the T's body, then BH wave slightly and head nod.
- #2.40. don't they / to produce this sound
Iconic: BH open forward to the class, arms opening largely 45° towards the students' direction.
- #2.41. that you want to pronounce
Emblem: Head nod.
- #2.42. so there is a little bit of physical //
Emblem + Beat: RH index and thumb close to each other (gesture for 'a little'), then RH beats slightly three times in air.
- #2.43. (*laughs*) inclusion there
- #2.44. but / most of is::: //
Abstract deictic + Emblem: BH opens largely to the class, in a big arch movement and eyebrows raised.
- #2.45. most of it happens in you:::r //
Abstract deictic: BH widely open, arms stretched, then gesture suspended waiting for students to answer during the verbal pause.
- #2.46. S (chorus) mind
- #2.47. T in your mind
Transition + Emblem: BH retract close to teacher's body and head nod.
- #2.48. and of course is transferred from your mind
Concrete deictic + Iconic: LH points to left temple and then RH stretched laterally at 90° on the right side.
- #2.49. to you:::r (...)
1 Beat: RH flexed at 45° holding the pen, then marks two beats in air.
2 Concrete deictic: LH index touches pen in the RH.
- #2.50. Ss (*chorus*) pen

- #2.51. T to your pen
Iconic: RH imitates the action of writing on the paper, using the pen.
- #2.52. when you come to write/
Emblem: Head nod.
- #2.53. OK / good // now then/
Emblem: Head nod, then looks at paper in front of her on the table.
Posture: T sitting, moves her chair slightly forward towards the table.
- #2.54. we are moving on to our next part/
EC: EC re-established, collective glance.

SECOND EXTRACT- CLASS 2

Stage in lesson: Clarifying meaning of an expression and eliciting vocabulary.

Teacher's initial posture: T sitting at table, reading from a paper, arms kept together on table, fingers intertwined.

- #2.55. T A good language learner
Posture: T sitting at table, arms kept together, fingers intertwined.
- #2.56. has a good ear / has a <good ear>
1 Emblem: Head raised up, head nod.
2 EC + FE: EC with different Ss, individual glance, also smiles.
- #2.57. what does it mean to have a good ear?
EC + FE: EC shifted between students, individual glance and smiles.
- #2.59. S understanding is easy / for you
1 Meta: BH up in air, container gesture.
2 Concrete deictic: BH point to teacher's direction.
- #2.60. in my case / my problem is /
Concrete deictic: BH point to herself.
- #2.61. I have a very bad ear
Meta: BH open to the teacher's direction.
- #2.62. T right/
Emblem+ FE: Head nod and smile.

- #2.63. but everyone understands
1 Concrete deictic: RH points to the whole group, with all fingers extended.
2 Abstract deictic: RH index finger points up in the air.
- #2.64. what Eunice says / don't we?
1 Concrete deictic + EC: RH arm stretched, palm open, points to Eunice, EC with the other students, collective glance.
2 Emblem: Head nod twice.
- #2.65. your good ear enables you to (...)
1 Concrete deictic: RH index finger points to mouth and rotates around mouth four times to suggest the mouth shape.
2 Concrete deictic+ Iconic: RH fingers point to mouth, hand in a pouch shape, then fingers open to the Ss' direction, then the same gesture is repeated with BH.
- #2.66. S pronunciation?
- #2.67. T yes / <to pronounce>/ to produce the sound of the language
1 Concrete deictic + Emblem + FE: RH points with palm up to the S who answered and head nod and smile.
2 Concrete deictic + Iconic: Gesture 2 from # 2.65. reproduced only with RH.
3 Meta: RH fingers kept together in a pouch shape.
- #2.68. S I thought that ear is /
- #2.69. ear is not
- #2.70. T Ah no/ you're thinking of /
Concrete deictic + Emblem: RH points with index finger to the T's right ear and head nod.
- #2.71. when you got a problem with your ears
Concrete deictic + Emblem: RH index and thumb holds the teacher's ear and head nod.
- #2.72. which/ which means that
Concrete deictic + Emblem: Gestures as in #2.71., maintained.
- #2.73. you can't <hear> people very well
Concrete deictic + Emblem: Gestures as in #2.71., maintained.
- #2.74. no // I don't mean that
Emblems: RH descending from ear to table waving negatively twice and head shake.
- #2.75. I don't mean that
Concrete deictic: LH points to her chest.

- #2.76. you've got to have good hearing /
Concrete deictic: BH hold the ears, gesture as above in #2.71., but with BH.
- #2.77. S is not understand this?
- #2.78. T no / no
Emblem + FE: Head shake and smile.
- #2.79. S is not the same with understand something?
- #2.80. T (...) no / it's not
1, 2 Emblems: Head shake.
- #2.81. what <I mean> by a good ear
Meta + Emblem: BH prayer-like gesture, palms facing each other at table level and simultaneous head nod.
- #2.82. is that you are able to
Iconic (preparation): BH go up at shoulder level, index and thumb together, the other fingers slightly curved.
- #2.83. <pick up> the sound/
Iconic: RH raises up in the air, palm opening to the ceiling.
- #2.84. you know / you //
Meta: RH comes back to the same position as in #2.82., then BH descend to the table BH on the table, palms one on top of the other, finger intertwined.
- #2.85. for example / instead of saying
Meta: BH palms open up to the class, at table level.
- #2.86. adver'tisement / adver'tisement/
Beats: Head nod for the stressed syllable.
- #2.87. (...) you hear your teacher/
1 Concrete deictic: LH points to left temple.
2 Concrete deictic: BH palms reversed, point to herself, palms pointing at chest level, fingers spread.
- #2.88. you hear the native speakers/
Abstract deictic: BH palms open laterally to the teacher's sides, under the table level.
- #2.89 sayi::ng //
Concrete deictic: BH on table, palms up, fingers kept open pointing to the Ss' direction.

- #2.90. sayiiing ad::
1 Abstract deictic + Meta: LH points with palm open to the table, palm down.
2 Emblems: RH goes to R ear, hand in a cup, 'I can't hear you' gesture, while LH rotates once in the air 'come on'.
- #2.91. Ss (silent)
- #2.92. How do we say it?
Transition + EC + FE: BH held on table, elbows on table, relaxed fists + T looks at Ss, collective glance and smiles.
- #2.93. ad::
Abstract deictic + Meta: RH describes a big arch in air backward-forward, then hand in a cup touches the table surface.
- #2.94. Ss adver'tisement
- #2.95. T one more time / ad::
1 Transition: RH retreats backwards, behind teacher's chair, lower level.
2 Abstract deictic + Meta: RH as above in #2.93.
- #2.96. S adver'tisement
- #2.97. T (...) **FE + Emblem:** T smiles and shakes head negatively.
- #2.98. (...) keep going like <this>
Emblem: BH index fingers raised in air, like saying 'pay attention', elbows on table.
Abstract deictic + Meta: Repeats gesture from #2.93., with less amplitude, touching the table when saying 'this'.
- #2.99. let's write it on the board //
Posture: T stands up and turns to write on the board.
- #2.100. you've got a good ear / you see the word /
Posture: T writes on board 'advertisement', turns back to the class while talking.
- #2.101. and the teacher asks you to pronounce the word
- #2.102. you are doing / you're doing a beau::tiful
- #2.103. American English for me
Concrete deictic: RH rotates four times around the centre of the word 'advertisement' written now on board.

- #2.104. adver'tisement / adver'tisement
1,2 Meta: RH arm straight, palm slightly open in air in a container gesture.
- #2.105. but we are not learning American English here //
Space: T moves a step forward from board, closer to the group, facing now the class, BH in a 90° angle in front of her.
1 Beat: BH mark the word with a slight beat in air, palms down.
2 Beat: Shoulder shrug.
- #2.106. we're learning (...)
Abstract deictic+ FE: BH index fingers point to the floor and smile.
Posture: T goes back closer to the board.
- #2.107. so we don't say adver'tisement
Concrete deictic: RH points with pen to the word written on board by circling the whole word.
- #2.108. your hear the native speakers
Posture: Teacher standing, body is half-turned to the board, half to the class.
1 Emblem: RH hand cup to ear.
- #2.109. in <this country> saying ad::
1 Beat: RH marks the stressed words, arm stretched.
2 Concrete deictic: RH points with the pen to the syllable 'ad' in the word written on board, then points to next syllable.
- #2.110. it's coming / say it again
Concrete deictic + FE: RH points to the Ss, arm stretched, palm up, fingers fluttered in air and smile.
- #2.111. S ad'vertisement
- #2.112. T that's it / you've got it /
1 Emblem: Strong head nod.
2 Posture: Standing, turns her face towards the board.
- #2.113. you've got it /
Emblem + FE: Head nod and smile.
Posture: T turns again to the class.
- #2.114. You arrive / you arrive in Britain
Abstract deictic: BH arms open laterally, palms open point in space.
Transition: No EC, puts back on table the pen.
- #2.115. and you hear

- #2.116. oh / they are not <saying> adver'tisement here/
Posture: T stands close to the table, BH rest on table.
FE + EC: Wondering/surprised face, EC shifts between learners, collective glance.
- #2.117. they are saying ad'vertisement/
EC: Shifted between different learners, collective glance.
- #2.118. you've got <a good ear>/
Concrete deictic: RH points to right ear, holding the ear lobe.
- #2.119. and your ear picks up the sound
Iconic: RH suggests the catching of something in the air and then hand withdraws close to teacher's body.
- #2.120. picks up the / you know/
Iconic: RH draws two big wave shapes in the air from right to left.
- #2.121. the melody of the language
Iconic: Gesture as above in #2.120., wave shape continued.
- #2.122. the intonation patterns //
Iconic: BH come together from the lateral side in a slightly undulatory move.
- #2.123. and you try and copy /
Iconic: BH kept very close to each other, palms reversed, hands move backwards and forwards in counter balance.
- #2.124. result? good
1 Emblem: LH palm up in the air, facing the class.
2 Emblem + FE: BH thumb up (gesture for 'OK') and smile.
- #2.125. What about question nine?
Posture + EC: T sits down and looks at the paper on table.

TRANSCRIPT - CLASS 3

Teacher 3:	Male
Students:	2 females (Japan) 5 males (Irak, 2x China, Japan, Austria)
Class type:	Academic English
Class arrangement:	Small room, students seated around one big table, teacher stands at the front, beside the board.
Level:	Advanced
Length of extract:	4 mins 50 seconds
Topic:	'Expressing cause and effect'
Stage in lesson:	On the board, the teacher drew a table to classify the answers for an exercise, where Ss had to identify causes and effects of natural phenomena.
Teacher's initial posture:	Standing up in front of the class.

- #3.1. T Let's get these sentences corrected then/
- #3.2. <Now::>
Space + Posture: T moves from the table to the board, standing
with his back to the class.
- #3.3. Number one / given as an example/
Posture: T picks up the pen, turns his back to the class, reading the
book, no EC with the class.
- #3.4. we won't repeat it /
- #3.5. right / number two //
- #3.6. number two / <Che Cin>
EC: EC with the student named, individual EC maintained.
- #3.7. S yes / ah
- #3.8. T give me the cause
(T looks back at book)
- #3.9. S the cause is raising temperatures
- #3.10. T (...) rising temperatures / good //
Emblem+ EC: Head nod and EC with student who answered,
individual maintained. (T writes answer in board)
- #3.11. S Why is the plural at temperatures?
- #3.12. T Well/ is it not temperatures around the world? //
Posture: Looks in the book, but no EC with the class.
(T adds an 's' after the word 'temperature' on the board.)

- #3.13. I've just changed that /
Beat+ EC: Head tilts slightly to the left side, EC with the student asking the question, individual glance.
- #3.14. I've got it in singular /
Posture: T goes from board to the table and leans on the chair.
- #3.15. and now I made it in plural
(General laugh in class)
- #3.16. I would use it in the plural / yes /
Emblem: Head nod.
Posture: T is now standing by the table, supporting his RH on a chair.
- #3.17. because / to say <rising temperatures>
EC: EC shifted from Ss on the LH side to Ss on the RH side.
- #3.18. would suggest that the temperature (...)
Space: T steps back, at distance from group.
1 Meta: RH goes up in a container gesture.
2 Iconic: RH makes a horizontal line from left to right.
- #3.19. that would be an average /
1 Transition: RH suspended in air, palm down.
2 Emblem: Head nod when saying 'average'.
- #3.20. if you said the rising temperatures/
Beats: Repeated beats with RH in air in an ascendant direction, then RH goes down.
- #3.21. whereas/ (clears throat) the temperatures
Meta: RH up in air, in front of him, above the head level, palm in cup, holding a pen.
- #3.22. <in different parts of the world >/
Abstract deictics: RH descends by quickly pointing in a zig-zag more different locations on an imaginary map.
- #3.23. they are <rising> all the time /
Iconic + Abstract deictic: RH goes up in a straight move, pointing with the index above the head level.
- #3.24. but they are always <different> /
Abstract deictic: RH descends in a straight move, pointing with index finger three times in the air at different levels.
- #3.25. it's much warmer at the Equator
Meta: RH describes an arch to the learners' direction and opens in a semi-container (palm up), then retreats.

- #3.26. than it is / here / for instance / (...)
1 Abstract deictic + Emblem: BH opens laterally in a large move and head nod.
2 Emblem + EC: Head nod and EC with S who asked the question.
- #3.27. S ok
- #3.28. T but just like <here>/
Abstract deictic: RH index finger points up at head level.
- #3.29. the temperatures in the Equator/
Abstract deictic: RH points down, lateral left, with index finger.
- #3.30. they are going up (...) //
1 Iconic: RH goes up in an oblique move, from down right to up centre.
2 Emblem+ EC: Head nod and EC with S who asked the question.
- #3.31. Now the connective //
(Transition: T looks in the book, no EC with the class)
- #3.32. What is the connective here?
EC + Abstract deictic: EC shifted between Ss in class, collective glance, and LH, points in air, hand in cup shape, palm down.
- #3.33. and I'll a::sk/ Nahiko
EC: EC shifts between learners, collective glance.
- #3.34. S have been causing
- #3.35. T right / easy peasy
Emblem: Head nod. *(T turns to board and writes the answer.)*
- #3.36. <have been causing> / give me the effect / Ahmed
1 Concrete deictic + Emblem: LH holding the book points to the space left empty on the board and EC with the Ss, collective glance.
Posture: T turns to the class. *(EC from students to the book.)*
- #3.37. T (...)
EC: T looks at student named, direct individual EC maintained.
- #3.38. T we have <the cause> / <the connector>
Posture: T turns to the board again.
1 Concrete deictic: RH points with pen to the word 'cause' written on board.
2 Concrete deictic + EC: RH points to the word 'connector' written on board, then EC with student named, individual Ec maintained.
- #3.39. S the snow line to retreat on mountains
T (...)
EC+ Posture: T looks at individual S, then turns to the board.

- #3.40. T yes /
Emblem: Head nod. (*T writes answer on board.*)
- #3.41. and he gives an example /
Posture: T turns to the class, looking in the book.
- #3.42. what is that example? //
- #3.43. he or she
Beats + FE: Head beat and rising eyebrows.
EC: EC with the class, gazing at different learners.
- #3.44. S in Peru
- #3.45. T in Peru:./ it has risen
EC+ Posture: EC with the students answering, collective glance, then T turns to the board. (*T writes the answer repeating each word as he writes them.*)
- #3.46. it has risen?
Posture + EC: T turns to the class, EC with different students, individual glance.
- #3.47. S as much as two thousand seven hundred feet in sixty years
- #3.48. T really? / two thousand seven hundred feet/
(*T writing the answer on board*)
- #3.49. S yes / in sixty years
- #3.50. T right (*T writing on board*)
- #3.51. S I have a question
- T (...)
EC+ Space: T looks at S directly, individual maintained EC, then rapidly moves backwards from the right side of the board to the left side.
- #3.52. S for a connective or marker
- T (...)
Emblem: Head nodding twice.
- #3.53. S Is 'secondly' a marker and also a connector?
- #3.54 T Yes / Secondly is fo::r / (...)
1 Emblem + Space: Head nod, then T steps forward to the table.
2 Adaptor: T scratches his head.

- #3.55. the whole structure // of the / of the writing
1 Emblem: EC directly with the Ss asking the question, collective glance. (T puts the book on the table.)
2 Meta: BH one up and one down, palms reversed mirroring each other suggest a rectangle in air.
- #3.56. but as far as cause and effect (...)
1 Meta: BH come together in the front in a container gesture, then the container is moved on the left side when saying 'cause' and on the right side when saying 'effect'.
Space: T moves closer to the board.
- #3.57. it is / have been causing /
1 Concrete deictic: LH points to the expression on board, no EC.
2 Concrete deictic + EC: LH points to the board and keeps EC with the student who asked the question, individual maintained.
- #3.58. because if you look at the rubric
Space: T comes back to the table.
- #3.59. the rubric in your instructions (T takes up the book.)
- #3.60. it says // the appropriate connector or marker / (T reads from the book.)
- #3.61. of the cause effect relationship / yes? /
EC+ Emblem: Individual maintained EC with the S who asked the question and head nod.
- #3.62. S yes / because without mentioning the cause/
(T moves back to the board and leans on it with his LH up to the board.)
- #3.63. the rising temperature/
- #3.64. 'secondly' is really important/
- #3.65. T yes/
Emblem + EC+ Concrete deictic: Head nod, direct EC, individual maintained, and LH index points to the example on the board.
- #3.66. S to show that is the same/
- #3.67. T the rising temperature/
Emblem: T nods head rapidly.
- #3.68. S yes / but this is mentioned/
- #3.69. T exactly / yes /
Emblem: Quick head nod.

- #3.70. Right / next one / number three /
Space: T moves back to the table and looks in the book.
- #3.71. (...) What is the cause?
Emblem: EC shifted between different Ss, collective glance.
(T looks in the book)
- #3.72. S the same
- #3.73. T it's the same / so we'll leave it blank /
1 Emblem + Posture: Head nod, then T turns to the board.
2 Concrete deictic: LH points to the empty space in the table on the board.
- #3.74. What is the connective?
Concrete deictic: T points to the second space on the table with his LH, fingers spread. (T still looking in the book, no EC with class).
- #3.75. S as a result of this
- #3.76. T <as a result of this>/
(T starts writing in on the board)
- #3.77. Now / notice how the connective
Posture+ EC: T turns towards the class, collective glance.
Concrete deictic: LH points to the words just written on board 'as a result'.
- #3.78. comes at the start
- #3.79. and <this>/
Meta + Abstract deictic: RH in a cup, arm straight in air, on the right side of him, points in air.
- #3.80. when you see this/
1,2,3 Beats: RH beats in air, hands in cup.
- #3.81. it always refers to something beforehand/
1 Beat: RH beats twice.
2 Abstract deictic: RH describes an arch in the air, going behind the teacher's left shoulder.
- #3.82. 'cause you can't say / this / this to come
Abstract deictic: RH arm straight, points laterally on the right side.
- #3.83. it's what has already come//
Abstract deictic: RH repeats deictic gesture in #3.81., but quicker.

- #3.84. and <this> is referring back to something
1 Meta + Abstract deictic: RH cup shape points in air, on the right side, arm straight.
2 Abstract deictic: Repeats gesture in #3.81. , but quicker.
- #3.85. and this is the rising temperature (...)
1 Concrete deictic: RH points to board in the 'connector' rubric.
2 Concrete deictic: RH points to board to 'cause' rubric.
(T finishes writing on the board)
- #3.86. now / the effect (...)
1 Emblem: EC with different students, collective glance.
Posture: T faces again the class, reading the book, no direct EC.
- #3.87. S vegetation has been changing
- #3.88. T I'll just shorten that // changing vegetation /
Space: T goes back to the board, writes the answer on board, looking from time to time in the book.
- #3.89. because I don't // neither do you / we don't have much space//
- #3.90. now / is there an example?
- #3.91. S yes the agricultural crop line / shifted / shifted to hundred miles
(T continues writing)
- #3.92. T really?
(T whistles and continues writing)
- S *(laugh)*
- #3.93. T That is a lot/
Posture+ Space: T turns facing the class and walks to the table.
- #3.94. Ok / <next one> / number four/
EC: EC with the class, collective glance, then looking back to the book.

TRANSCRIPT - CLASS 4

Teacher 4:	Female
Students:	8 females (Japan) 1 males (Japan)
Class type:	General English
Class arrangement:	Medium size room, students seated around a big horse-shoe table, teacher sits at the front, beside the board.
Level:	Lower Intermediate
Topic:	'My favourite movie'
Length of extract:	4 mins 35 seconds
Stage in lesson:	Before an exercise, the teacher clarifies the vocabulary items, which are movie-related words.
Teacher's initial position:	Sitting at the table, reading from the book.

- #4.1. T Let's just have a look
- #4.2. at the film vocabulary given first of all / film vocabulary/
Beat: Head beat laterally right.
- #4.3. we've got <banned> / got <dubbed> /
(*T reads from book.*)
- #4.4. stars / cut / director / special effects/
- #4.5. right? / let's have a look at these words/
- #4.6. the first word / ...
Adaptor: T shakes head, arranging her hair.
- #4.7. S What is 'banned' mean?
- #4.8. T What's the meaning?
EC: EC with left side of class, collective glance.
Posture: T stands up and turns towards the board.
- #4.9. to ba::n something/
Posture: T semi-turned to the class.
- #4.10. <anybody>/
- #4.11. S (*indecipherable*)
- #4.12. T (...) **Emblem: LH in a cup behind ear.**
- #4.13. S prohibit

- #4.14. T <prohibit> / well done / all right?/
- #4.15. To ban means to prohibit/
(*T writes on board 'to ban' and 'to prohibit'.*)
- #4.16. And what does prohibit mean? (...)
EC: EC shifted between learners, collective glance.
- #4.17. What's the meaning? / <prohibit> (...)
- #4.18. <in ordinary words> / it means (...)
Emblem: RH index waged in air three times left to right.
- #4.19. S (*indecipherable*)
- T What? (...)/
Concrete pointing + Emblem: RH palm open up points to a S and head nod at the same time.
- #4.20. S forbidden
- T (...)
EC+ Posture: T shifts EC to the learner speaking now, individual EC maintained, and orients also her body towards that S's direction.
- #4.21. T <forbidden> / well done/
- #4.22. It means you can't do it / you're not allowed /
Emblems: RH index up in air, wagging 'no' at mouth level and head shake.
- #4.23. it's banned / all right?/
Emblem: Gesture as above in #4.22., wagging finger.
- #4.24. and banned is the past participle /
Concrete deictic: LH points to the word 'banned' on the board.
- #4.25. and is usually used // is banned
(*T writes on the board 'is banned'.*)
- #4.26. and banned is the past participle/
- #4.27. means not allowed/
Emblem: RH palm down, fingers spread, wags in air twice at waist level.
- #4.28. right? / <not allowed>/ ok?
Space: T comes closer to the table, looking in the book.

- #4.29. What about the next one?
(*T looking in the book.*)
- #4.30. <dubbed> / What's dubbed? (...)
EC: T looking at the different learners, collective glance.
- #4.31. Don't you know that word?
- #4.32. It's a film word / a film word //
Space+ EC: T goes closer to board, looking around the class, collective glance.
- #4.33. <no> / don't look in the dictionary//
Emblem: Head shake.
- #4.34. <all right> / if you go to see
- #4.35. an American film in a cinema /
EC+ Posture: T looks at different learners while speaking, collective glance, standing by the board.
- #4.36. there are two possible ways
Emblem: LH index and middle finger up in air, palm towards her body.
- #4.37. you can see it in Japan//
Emblem: Gesture as above in #4.36., maintained.
- #4.38. you can either have/
Emblem: Gesture as above in #4.36., maintained.
- #4.39. the Japani- / the American actors
Iconic: BH at mouth level, fingers fluttering quickly suggesting a mouth shape, fingers in a cup. (The gesture is interrupted for the correction in speech, then continued afterwards.)
- #4.40. speaking in Japanese /
Iconic: Gesture as above in #4.39.
- #4.41. or you can have /
Iconic: BH at waist level, drawing with the index fingers an imaginary rectangle in air from inside to outside.
- #4.42. the translation at the bottom//
Iconics: Gesture as above in #4.41., BH repeat twice the shape of rectangle.
- #4.43. If you have the translation at the bottom/
Iconic: Gesture as above # 4.41., repeated.

- #4.44. that's called (...) //
Iconic: BH described a rectangle as in #4.41. Now gesture is suspended, hands being kept laterally in air, fingers flat, thumb mirroring the other fingers, as if holding an imaginary rectangle from its extremities.
- #4.45. S text
- #4.46. T No / That's called <subtitles>/
Emblem: Head shake.
Iconic: Gesture as in #4.41. repeated.
- #4.47. and if the people are speaking your language /
Iconic: BH brought at mouth level, fingers pointing to the mouth and flutter. (A version of gesture in # 4.39., but fingers are not in a cup anymore).
- #4.48. that means the film is //
Transition: BH at waist level, closed, RH holding the pen.
- #4.49. dubbed // all right?
Emblem: Head nod.
- #4.50. So the film // is / dubbed /
Posture: T turns to the board. (T starts writing on board, repeating the words written.)
- #4.51. so that means that the actors are speaking /
Posture: T turns towards the class.
Iconic: RH to the mouth in a cup, then it opens up to the class direction.
- #4.52. in translation//
- #4.53. or you can have subtitles // <right>/
(T writes on board 'subtitles')
- #4.54. which is the writing translated/
Iconic: BH repeats gesture in line #4.41.
- #4.55. in a minute we'll discuss
Beat: RH up in air, cup shape, beats once.
- #4.56. which one you prefer //
(T picks up the book from table)
- #4.57. Now we've got <stars> / stars (T reads from book)
EC: EC with the class, collective glance.

- #4.58. stars can be / a verb or a <noun>/
Concrete deictic: RH index points to LH small finger for the word 'verb' and then ring finger for 'noun'.
- #4.59. all right?
(T goes to board and starts writing)
- #4.60. you can have <a star> / and <to star>/
(T back to class, writes on board)
- #4.61. Star means^ / (...)
EC: T looks at students for an answer.
- #4.62. S someone famous
- #4.63. T a famous or popular actor / yeah/
- #4.64. T and <to star>? //
Concrete deictic: LH points to the board at the verb 'to star'.
- #4.65. S a popular film?
- #4.66. T No / it doesn't mean that/
Emblem: Head shake. *(Also T looks away from the student answering.)*
- #4.67. it just means that
- #4.68. an actor is acting in the film//
Concrete deictic + Beats: LH underlines repeatedly the verb 'to star' on the board and slight head nods.
- #4.69. so you say the film stars / Leonardo di Caprio/
Meta + Beat: LH up in air, cup shape, points for the three words stressed, at different points in the gestural space in front of T's body.
- #4.70. it means he / is / acting in the film/
Meta + Beat: BH in a cup, facing the floor, moving from left to right to stress the words.
- #4.71. that's all it means / right?
Emblem: head shake.
- #4.72. so it's used as a noun and as a verb/
Concrete deictic: LH index points to the board.
- #4.73. OK?
Posture: T moves back to table, sits down and looks in the book.

- #4.74. <to cut> / another film word/
EC: direct EC with the class, collective glance.
- #4.75. to cut the film / What's the meaning? (...)
EC: T looks around the class, collective glance.
- #4.76. to cut //
EC: EC with different students.
- #4.77. S to stop the filming
 T (...)
EC: T establishes direct EC with student speaking, maintained.
- #4.78. T yes / all right / exactly that/
FE+ Emblem: Smiles and nods head.
- #4.79. and when you watch the film making/
Iconic: LH elbow on table, palm up open, RH palm flat, perpendicularly in LH palm.
- #4.80. they have a clapper board / don't they?
Iconic: Hands as above in #4.79., then RH palm goes up and down in LH palm.
- #4.81. there's <cu:t / cu:t>/
Iconic: Gesture as in # 4.80. repeated.
- #4.82. they stop the film/
Iconic: Gesture as in #4.80. repeated.
- #4.83. and when they are <making> the film/
Iconic: BH lateral, elbows on tables, fingers in a scissors gesture, reproduce the action of cutting something.
- #4.84. they cut bits out and stick it together
1 Iconic: Gesture as above in #4.83.
2 Iconic: BH come together in the centre, one palm on top of the other.
- #4.85. so that's terrible/ cut cut cut
1 Iconic: BH one palm on top of the other, like #4.84, gesture 2.
2 Iconic: RH only reproduces gesture of 'cutting' as in #4.83.
- #4.86. cut just means stop / all right? (...)
Iconic: RH describes a brief oblique move from up to down. (T looks in the book.)

- #4.87. <director> / you all understand?
Emblem +EC: Head nod and EC with different Ss, collective glance.
- #4.88. and special effects? (...)
EC: EC with different students in class, collective glance.
- #4.89. you all understand special effects?
EC: Shifts EC between students, collective glance.
- #4.90. Yes? // Who could explain that? Nakako?
Concrete deictic+Beat: LH points with a slight beat towards named S's direction.
- #4.91. Special effects / can you explain?
Posture+ EC: T orients body and establishes EC with S named.
- #4.92. think of a film with special effects/
- #4.93. S those films // using //
- #4.94. T Using / special effects/
1 FE: T smiles at class.
2 Meta + Beat: BH cup shape up in air and brief head shake.
- #4.95. Yes? / Using what?
Posture: T orients her body back to the student answering.
- #4.96. Can you think of a film
- #4.97. with special effects? Think of a film //
- #4.98. S computer programme
- T (...)
Posture: T orients her head to student answering.
- #4.99. T <right>/ OK / but can you think
Emblem: Head nod.
- #4.100. of a title of a film that has special effects?
- #4.101. S Matrix
- #4.102. T <Matrix> / The Matrix / That sort of thing/
1 Emblem: Head nod.
2 Beat: Head beat twice laterally.
- #4.103. So you understand?

- #4.104. It's a very clever / computer aided film/
1 Beat + Meta: BH balance up in the air, palms semi-open.
2 Transition: BH arms crossed.
- #4.105. <All right> / What you have to do here/ (*T looks in the book.*)
Concrete deictic + EC: RH index points in the book and EC with class, collective glance.
- #4.106. is to read these sentences and put in a word that's going to fit/

TRANSCRIPT - CLASS 5

Teacher 1:	Male
Students:	3 females (all Spain) 2 males (1 Italy, 1 Germany)
Class type:	General English

Class arrangement: A big room, table in horse-shoe shape.

Level:	Upper Intermediate
Topic:	'The Scottish legal system'
Length of extract:	4 mins 40 seconds
T's initial posture:	T sits on a table, posture is relaxed, LH holds a pen. He has the book on the table on his left side.
Stage of lesson:	Clarifying vocabulary items in a given text.

- #5.1. T gazumped
(T looks at the book, changes pen from LH to RH.)
- #5.2. I think / no, you are not given that
(T looks at the book, LH on book, RH in his lap, holding a pen.)
- #5.3. but you are given the meaning
(T turns the page, no EC with the class.)
- #5.4. if you read / the rest of the paragraph
- #5.5. you can be <gazumped>/
EC: EC shifts from book to the class, collective glance.
- #5.6. nowhere / else <in the world>/
Meta: RH moves up in air, fingers kept together and holding a pen.
- #5.7. could you <agree to buy a flat>/
Beat: RH still in air, holding the pen, beats once in air.
- #5.8. <put your money down>/
Beat: RH repeats move from above in #5.7, hand moves backwards to body, then forward.
- #5.9. i.e. pay a deposit/
Meta: RH fingers open and then show a horizontal line in air to the right side, then RH comes down on the left leg.
- #5.10. and then have somebody/
Meta+ Abstract deictic: RH rises up in air from left to right, in an ascendant move, then RH opens, pointing in space.

- #5.11. sell it / to somebody else /
1 Meta + Beat: RH waves once in air for 'sell it'.
2 Meta + Beat: RH waves again at the extreme right of the gestural space, then hand returns on the leg.
- #5.12. this can happen in England //
1,2 Emblem +Beat: Head nodding.
- #5.13. remember I said that
Meta: BH up in air, palms facing each other, container gesture (palm face each other suggesting a round shape).
- #5.14. we have a different legal system
Meta: BH move in the container gesture from above on the left side.
- #5.15. in England / and in Scotland//
1 Meta + Abstract deictic: BH mark the container gesture on the left side.
2 Meta + Abstract deictic: Container gesture as in gesture 1 above moves on the right hand side.
- #5.16. one of the things that
Meta: BH move at the centre of the central gestural space.
- #5.17. in Scotland happens/
1,2 Beat: BH as above, beat in air several times.
- #5.18. if you sign a contract/
Iconic: LH imitates the action of writing with the pen on the surface of the RH.
- #5.19. buy a flat/
Iconic: Gesture as above in #5.18, gestures repeated.
- #5.20. that contract is then / <legally binding>//
Meta: BH palms raised up in the air, facing the class.
- #5.21. there are two lawyers here in the class/
Posture: T stands up and goes to the board and writes 'legally binding'.
- #5.22. explain the phrase legally binding//
- #5.23. S Binding? What is binding?
- #5.24. T The whole phrase, Clare?
Iconic: BH thumb and index fingers are raised and suggest a circle in the air, by closing the index finger on the opposite thumb twice.

- #5.25. Clare? You are a lawyer/
Concrete deictic: RH index finger pointing to the board.
- #5.26. what does legally binding mean?
- #5.27. S I don't know
- #5.28. T To bind means to tie/
Iconic: BH fingers are intertwined in the centre of the gestural space at chest level.
- #5.29. to tie like a knot/
Iconic: BH rotate one around the other in air, to suggest the action of twisting two pieces of rope and then pulling the extremities.
- #5.30. S Ah! When you sign the contract the house is yours/
- #5.31. T (...)/ legally binding means / that this contract/
1 **Emblem:** Head nod.
2 **Concrete deictic:** RH pointing to the phrase on the board.
3 **EC:** EC with the learners in the class, collective glance.
- #5.32. will then be honoured in a court of law//
Concrete deictic +Beat: RH points to the board and marks the emphasised words on board.
- #5.33. If I sign a contract with you/ Romeo/
1 **Iconic:** Reproduces the act of signing with the RH held pen on LH palm.
2 **Concrete deictic:** RH points to the S named, with the pen.
- #5.34. and then at the last minute
Meta: BH up in the air, at the shoulder level, with the palms facing the class.
- #5.35. I decide // a //
Emblem: BH palms move once in air laterally, palms facing the class.
- #5.36. no I don't want to do this anymore/
Emblem: BH palms move repeatedly in air, then BH relaxed at waist level.
- #5.37. it's too late//
Abstract deictic: RH waves behind the right shoulder, then back hand on hand at waist level.
- #5.38. S Yes, it's perfect
T (...)

- #5.39. T **Emblem:** Head nod.
I've signed a legally binding contract/
Concrete deictic: RH points to the phrase on the board, underlying it with the pen held in RH.
- #5.40. Romeo can take me to the court/
1 Concrete deictic: RH points to the learner named.
2 Iconic: RH suggests a quick action of 'picking up' something in air and moving it a step forward.
- #5.41. and say na-na/
Iconic: Repeats action of signing the contract, with RH pen on LH palm.
- #5.42. you can't say no//
Emblem: BH palms up in the air, reversed, palms facing the class.
- #5.43. because you have already signed/
Iconic: RH reproduces the action of signing, this time in the air in front of his chest.
- #5.44. In England//
Beat: RH pen flicked in air as word is stressed.
- #5.45. particularly with the buying and selling of houses/
Abstract deictic: RH pen points on left side for 'buying' and then on right side for 'selling'.
- #5.46. there exists this / a /
Abstract deictic + Beat: RH (without pen) points in air with index and thumb together.
Posture: T moves from standing in centre of class to sitting on a table.
- #5.47. this notion / this idea of gazumping/
Beat+ EC: head beat for 'gazumping' and direct EC with class.
- #5.48. where a // say/
Beat: RH slightly up in air at low level.
- #5.49. I am selling my house/
Concrete deictic + Meta: BH close to his body, point to himself, then hands kept in a container gesture to suggest the house.
- #5.50. Manuelle comes
Concrete deictic: BH point to the S named.
- #5.51. and decides she wants to buy my house//
Meta: BH shift from right to left, still in a container gesture.
Beat: BH mark the stressed word, then BH put down on knees.

- #5.52. we sign a preliminary contract/
Iconic: RH holding pen reproduces gesture of writing.
- #5.53. Manuelle leaves some money with me/
1 Beat: BH move slightly close to the table surface.
2 Manipulative: T raises the piece of paper with BH in air.
3 Concrete deictic: RH points to himself, fingers spread, holding the pen.
- #5.54. with <my bank / with my state agent>/ or with my lawyer //
1,2,3 Abstract deictics: RH moves laterally in a large gesture on the right hand side, fingers open three times repeatedly.
- #5.55. and then somebody else/
Iconic: RH describes an approaching move, from the centre of gestural space in front of the teacher towards himself.
- #5.56. Olga comes/
1 Concrete deictic: RH points to the S named, fingers open.
2 Iconic: Gesture as above in #5.55. repeated.
- #5.57. and Olga makes a better offer //
Concrete deictic: RH points to the student named, as above.
- #5.58. it doesn't matter that I signed a contract with Manuelle/
1 Emblem: Head shake.
2 Concrete deictic: RH points to the S named, arm stretched.
- #5.59. I can sell to / to Olga
Emblem: RH points to the S named, arm stretched.
- #5.60. S What about the money I paid?
- #5.61. T Oh I'll give you back the money/
1 Emblem: RH waves twice in air negatively.
2 Iconic: RH reproduce the action of handing in something, moving forward to the S's direction.
- S OK
- #5.62. T But in the meantime you don't have a house/
1 Meta: RH palm down, describes a horizontal line in the air from left to right, in front of T's body.
2 Beat: RH slightly move again left to right in a horizontal move.
- #5.63. or nowhere to live or anything like that/
1 Beat: As beat above in # 5.62.
2 Emblem + Posture: Head nod twice, then teacher stands up in the centre of the class.

- #5.64. S But there is a difference between a preliminary and a definitive contract
- T (...)
Posture + EC: T listening, standing, LH crossed over the body, RH on the chin, EC kept with the student talking.
- #5.65. T Yeah / But in Scotland/
1 Emblem: Head nods rapidly.
2,3,4 Beats: Short beats, RH beats up in air, no EC.
- #5.66. even if you have exchanged a <preliminary contract>/
1,2,3 Beats: RH stresses each word, by a rapid beat in air.
Posture: T goes back to sit on table.
- #5.67. and this has been backed by money/
1 Concrete deictic: RH points to Manuelle's direction.
2,3 Beat: Two beats with RH to mark the stressed words, also simultaneous head nod.
EC: Shifts from Manuelle to Romeo between the two sets gestures above.
- #5.68. remember I said that a deposit / has been paid/
1,2 Beats + Concrete deictic: RH in air, still pointing to Manuelle's direction, marks with beats the stressed words, fingers kept together at tips.
- #5.69. this//
Iconic: the RH first descends from chest to leg level, suggesting an action of grounding something.
- #5.70. S in Italy is double
- #5.71. T Yeah/ This becomes legally binding/
1 Emblem: Head nods rapidly, turns body to board direction.
2 Concrete deictic: RH points to board, middle finger pointing.
(T looking at board)
- #5.72. even if Olga comes afterwards/
1 Concrete deictic: RH index finger points to Olga.
2 Iconic: RH index finger balances from S's direction to T's body.
- #5.73. I can't sell to Olga//
Emblem: RH palm showed to the class.
- #5.74. in England I can
Abstract deictic: RH palm downwards points up in the air twice.

- #5.75. S OK / so if ...
- #5.76. T But I don't want to get
Emblem + Posture: BH palms downwards describe a horizontal line laterally, then come back together. Also T stands up and avoids EC.
- # 5.77. too stuck in this question / a /
1 Iconic: BH suggest a vertical cylinder from up to down, palms facing each other.
2 Beat: BH palms facing each other, both beat once in air.
3 Iconic: BH rotate one around the other twice, like saying 'let's move on'.
- #5.78. that's what gazumping means/
Meta+ EC: BH and arms open in a large gesture, palms open to the Ss' direction, EC re-established with the whole group, collective gaze.
- #5.79. Are there any other vocabulary difficulties?
1 Beat: RH fingers together at tips, beat once in air.
2 Posture+ EC: T sits back on table and pulls up his sleeves, EC with Ss in class, collective glance.

APPENDIX D

TRANSCRIPT OF AN INTERVIEW

WITH A LEARNER

Learner's background

Marcus is a student from Italy, 26 years old, he studied English for 3 years at the university back home. He works as an engineer in Italy and is taking the 5 weeks General English class to improve his English with the view of better job prospects.

Interview briefing (I= Interviewer, M=Marcus)

I: You will watch two video extracts from your English class from today. I want you to look at the teacher and discuss her behaviour, everything she does. We are looking at what the teacher does, what actions, with her hands, with her body in general. I want you to stop the video, by pressing this 'pause' button, whenever you see something that you want to discuss in teacher's behaviour. Then I want you to tell me what you've seen and if that action is relevant or not for you or for the other people in the class.

M: OK. All the actions, right?

I: Yes, all. Even the ones that you consider less important, but let me know that you have noticed them.

M: Ok. Can I start?

I: Let's see an example, to understand better what I mean.

(a short video clip is discussed and subject's questions are answered)

I: Ok, now we can start.

Stop Tape	Units of meaning/Coding (Informant's descriptions)	NVBs identified	Functional Categories	Notes
#2.1.	Here she is asking a question and she wants a precise answer and she wanted to know a specific thing. And to remark this specific thing, she put her hand [reproduces gesture, palm down marks a beat in the air] made this movement to identify this specific thing [reproduces gesture].	Metaphor + Beat	Emphasising for relevance	
#2.4.	Now she is putting her hands at the class [reproduces gesture] waiting for an answer.	Concrete deictic	Giving the speech turn	
#2.12.	Everyone [reproduces gesture] she is talking about the class. So she moved her finger around and around and around [reproduces gesture four times, rotating finger in air] to include everybody. Everyone [reproduces gesture]. She is talking about the whole class so she opened her hands [reproduces gesture]. It includes everyone, it shows what she means if you have doubts about the word 'everyone' or it emphasises the fact that we all understand her, if you know the meaning of the word.	Concrete deictic	Identify through pointing	
#2.20.	She is talking about the learning of a language and we made a comparison with the learning of another activity like swimming or studying the computer; and we spoke about the necessity to practice and when practicing you develop a reflex. So she moved her hand while she said the word reflex [reproduces gesture three times, balance both palms back and forward, palms up] to show what she means.	Iconic	Illustrating meaning	
	<i>I: Is this relevant?</i>			
	M: I know the meaning of the word 'reflex' so for me is not important the movement. But if I don't know the word, maybe this move can make me understand what she says.			Conditions for perceiving as relevant an act of NVB.
	In general, I don't see the teacher while she is speaking because I try to listen. In Italy teachers don't move their hands, but speak a lot. Sometimes			Cultural differences on gestural style.

more quickly than here, so for me it is not usual to watch their gesture, it is not a common situation.

I: What do you mean by that?

M: Well, in Italy teachers don't move their body to suggest something, for example a word, they make a long discourse to arrive at the explanation, they don't use their body.

I: So they explain the word with words.

M: Yeah, they don't use moves. If they don't arrive at the word, then they speak Italian. In this class it is not possible because the teacher doesn't speak Italian, doesn't speak all the languages in the world. So she cannot translate a word for all of us. So she is using moves to suggest what she means and to compensate for the fact that we are foreigners. In a foreign language, it is easier for you if a person is using gestures. It makes it clearer.

I: Why do you think that she does that?

M: Maybe because of the level of the class. If our English was better, she would speak quicker and without her hands. With us, she needs to explain more. But it is good if your teacher speaks slowly, like an English, and moves her body a lot, like an Italian.

#2.24. She was waiting for a word and Ronaldo now starts speaking; so she put her finger in the direction of this person [reproduces gesture, pointing with arm] until he speaks up.

Concrete deictic

Giving the speech turn

Compensatory role of gesture in relation to speech.

Factors perceived as influencing teachers' NVB.

I: What word was she waiting for? Do you remember the word?

M: No, I don't remember it.

- | | | | |
|--------|--|------------------|----------------------|
| #2.29. | M: OK. Now she has her hands in this position [reproduces gesture, palms facing class], so it's like 'attention to him speaking, to his words'. | Concrete deictic | Orienting attention |
| #2.22. | M: She was comparing the studying of a language with a physical activity and in general she is moving her body [reproduces gesture, arms tense, muscular show] she is doing this with her arms [reproduces gesture]. | Emblem | Illustrating meaning |

I: Why is that?

M: Because she is explaining a physical activity and this move [reproduces gesture] shows it for the students who don't know the word 'physical activity' showing the muscles helps them understand. But I knew the word or this expression, so for me this move was not relevant in other situation, if I don't know the word, I can use her move to understand better. I can close the eyes here and still understand what she means.

Factors influencing perceived relevance.

I: So if you know the word, her move doesn't matter?

M: Maybe if I forgot the meaning of a word and then I see her move, I can arrive at the word, I can remember it. But if I don't know the word, it's impossible to get the word only from her move. I forget many words, and then if I see a good move, I can remember the word.

Believed potential of gesture to aid retention and recollection.

- | | | | |
|--------|---|-------------------|----------------------|
| #2.32. | She is speaking and she moves her mouth [hand at mouth] in a strange way [laughs] because she is speaking about a physical activity and the study of the language; and she put these things together moving her face in a strange way so it is something physical and speaking which is mental. | Facial expression | Illustrating meaning |
|--------|---|-------------------|----------------------|

I: Is that relevant for the students in the class?

M: It is like a confirmation between that there is something physical in speaking a language.

- | | | | | |
|--------|--|------------------|------------------------|--------------------------------------|
| #2.37. | She is speaking about pronunciation; and she said the word ‘pronunciation’ in this way [reproduces gesture, hand in a cup, moves from mouth to class, fingers open gradually]. She said the word ‘pronounce’ when doing this [repeats gesture]. So the sounds of her voice moves in the same rhythm with her hand. For me, the move is just a confirmation, I know the word already. She is remarking the word with her hand/ but for me, the move is here is a surplus. It is like saying in two ways the same word/ it is a stronger way to say the same word. | Iconic | Illustrating meaning | Conditions for relevance of gesture. |
| #2.40. | Another time, she said ‘produce the sound’ [reproduces gesture, hands move from body to class and palms open]. The same situation, she is remarking the word with her hands. | Iconic | Illustrating meaning | |
| #2.42. | [laughs] She is remarking the word ‘a little bit’ with this [reproduces gesture, thumb and index together, right hand], she is repeating the word. In general, she is repeating the word with her hands. For me, again it is not important because I know the word ‘little’. | Emblem | Illustrating meaning | Conditions for relevance of gesture. |
| #2.45. | She was waiting for an answer [reproduces gesture, both palms up] open hands. She didn’t speak and she was waiting [does gesture again] she is waiting for a word from the students so she stopped speaking and she opened her hands [does gesture]. | Abstract deictic | Giving the speech turn | |

I: And what does that mean?

M: It is like ‘I want something’ or ‘give me something’ [puts right hand fingers in left hand palm].

Giving clues and eliciting

I: What does she want?

M: A specific word.

#2.48. She is speaking about mind [middle and index finger, left hand to temple] and put her finger at the head to remark mind or brain.

Concrete
deictic +
Iconic

Emphasising for
relevance

One way of learning new words is to memorise the word said by the teacher together with the gestures made when she said the word. And you do this especially when you are a beginner, and you don't have other ways to remember that word like a dictionary definition or so. For example, here she is speaking about the mind and she put her finger to the brain to remark the mind, the brain. So if you don't know the word mind, maybe this [repeats gesture to temple] is an indication and you remember the word because you have seen this move.

Factors conditioning
perceived relevance of
gestures.

I: So you say that for the beginners teachers' moves are more relevant than for the advanced.

M: Well, in general for people who study English or other language, they need to learn new words and to watch the moves helps you learn new words. But if we talk about a specific problem which I don't know about, then teacher's moves help you a lot. I think that moves are useful mainly to learn the vocabulary, when you don't know the word or don't remember it. So it is important for the beginners to see the teacher's moves.

Perceived relationship
between level of
proficiency and role of
teachers' NVB.

But if we speak about a technical issue or a specific language like medicine or philosophy, I don't see how gestures can help you understand. How could a teacher show you in gestures concepts like cancer or capitalism? But, for example, I don't know all the body parts in English, how to name them. So if I see the teacher saying this part [holds his leg] or

Beliefs about factors
affecting communicative
value of gestures.

this part [holds his hip] I can [points to his temples with both hands]. If the teacher then uses the names when she indicates with her arms the body parts I can [fingers point to head]. I am sure that this is the name and I should memorise the word.

Yes, I think moves are useful mainly to learn vocabulary. Mainly for students who don't know the word or don't remember it. So it is important for the beginners to see the teacher's moves.

It depends also on what you know already. A student may know all the body parts in English because he studied medicine. But I studied engineering, so what is important for me to see is not relevant for him.

Here is more difficult because the teacher doesn't speak our language. So she uses her body and her hands to confirm her words.

I: Can you explain this a bit more?

M: Well, we have seen before some examples. She uses her hands to confirm the word. She can say 'listen' [hand in a cup at ear], she moves her hand and she tries to confirm the sound. This is a stronger way, a clearer way to say something. It's like saying something in two ways.

I: Did you experience this yourself when speaking with other students here?

M: Of course, I am Italian and we speak with our hands. We can speak only with hands, even without voice. For example, a joke we have, if a person says a lie, we do this [right hand at face level, thumb to nose, small finger in air] the hand in this way like Pinocchio. And this means that you don't believe them, but in a joking way.

Perceived compensatory role of gestures.

Perceived individual differences in valuing teachers' NVBs.

Factors affecting teacher's use of NVBs.

Role of gestures in confirming the meanings expressed verbally.

Cross-cultural differences - beliefs.

I: Are the students in your class different in their use of gestures?

M: Japanese people and Chinese people speak only with words. We have only to listen to them. Sometimes we play games like mime or so and they cannot play it, they are too quiet. For Italian and Spanish people it is different, we are louder, while they are shy and quiet, not very out-going.

Perceived cross-cultural differences.

I: Let's move on to the second extract from your class. Here you've talked about the qualities of a good language learner. Do you remember that moment from the class?

M: Yeah, I remember, let's see.

#2.64. OK. Here she put her hand in Eunice's direction [repeats gesture, right hand straight forward] because she spoke and she said her name, Eunice, and at the same time she pointed at her with her hand to confirm that she talks about her.

Concrete deictic

Orienting attention / Identifying through pointing

Perceived individual differences in valuing teachers' NVBs.

I: Is this action important?

M: To me, the movement is not necessary here. We all know Eunice so she does not need to show her with her hand.

#2.65. Now she wants to express the meaning of the word 'ear' so she starts to move her hand around her face, around her mouth [rotates both hand repeatedly around mouth] like she is waiting for an answer.

Concrete deictic

Giving clues and eliciting

I: Why is she pointing to the mouth if she is talking about the ear?

M: Well, she wants to hear the word 'pronunciation'. She moves her hand around the mouth to suggest the correct answer 'pronunciation'; so this is the word she wanted. Because a good ear makes a good pronunciation. This is what she wanted to hear.

Giving clues for meanings

Strategies for decoding gestures: 'guessing' meaning of gesture.

- I: What were you thinking at that time?*
M: I didn't know the word. So I tried to guess, it's a good suggestion [rotates right left hand around mouth x2, then right hand x3].
- #2.70. OK she explains the difference between 'hear' and 'ear'; and when she said 'hear' [hand holds left ear], she did this movement. It's a way of helping the memory, you see and then you'll remember it. Concrete deictic Helping retention
- #2.76. OK, another time. Here is in a stronger way because she holds now both ears [reproduces gesture]. I didn't know the word 'ear' but I know the word 'hear'. She is remarking 'ears' by holding both ears and then you understand this part of body is called ear, but when you listen to somebody is 'hear'. I knew the word 'hear', but I forgot this [holds his ear] is called ear and I can see now clearer and memorise it. Concrete deictic Illustrating meaning
- #2.83. This is pick up [reproduces catching gesture in air], catch the sound. It is like a physical movement, but suggest the mental activity of the brain to catch an idea or a concept. An idea is like a light, she did this movement to make it less ambiguous. 'Pick up' [his arms crossed] is ambiguous, but 'pick up' [reproduces catching gesture] is not ambiguous anymore. It makes it clearer. Iconic Illustrating meaning
- #2.87. She said that many English words are similar, 'ad'vertisement or adver'tisement', so we should put our attention to understand it. Concrete deictic Orienting attention
- I: Did she say you have to pay attention?*
M: Well, she put her hands to her head to suggest 'think' and it's the same.
- #2.90. Here she is waiting for an answer [right hand at ear in a cup]. Emblem Giving the speech turn

#2.93. *I: Why is she doing this with her hand on the table?*

M: To stress the rhythm, the rhythm in the word.

I: Did you know the word?

M: No, I didn't know it.

I: Do you know it now?

M: Yes, now yes.

I: So why was she doing this? [Hand in a cup, backwards and then put on table]

M: Probably to suggest the stress in the word, I don't really understand this movement.

#2.95. Advertisement advertisement [right hand rotates in air x 2] she said two times the word 'advertisement' and rotates her hand [repeats gesture x 5 times] and her fingers come in the same position. So she wants to suggest the whole word and repeats the rotation to suggest the repetition of the word. Every movement means pronouncing once the word.

Meta+
Abstract
deictic

Giving clues and eliciting

#2.106. She says we are not learning American English but [both index fingers point to floor] she indicates the land. It is a suggestion for the British.

Abstract
deictic

Illustrating meaning / Giving clues

'Mixed' syntax, gesture communicates in absence of speech.

I: Is this again a supplement for the words?

M: We know the word British so it wasn't difficult to get the meanin. She pointed to the ground and we know that she suggest British, not American.

Gesture fails to elicit meaning.

I: Is it different here from the other situation when you said the move is a surplus?

M: I think it is not a surplus here because she was waiting for the word British. She didn't say the word British [points to floor with left index], she did this [repeats gesture] and then she waited for an answer.

Gestures communicating meanings in the absence of speech.

I: Is this situation different then?

M: Yes, it is a different situation. One is a surplus, one is when she wants a specific word from the students or in general she likes this dialogue about a specific problem.

#2.119. This is pick up [reproduces gesture], or catch the sound. It is like a physical movement, but it suggests a mental activity in the brain; to catch an idea or a concept. She did this movement to make the verb less ambiguous. Pick up [his arms crossed] is ambiguous. But pick up [reproduces gesture of picking up] is not ambiguous anymore. It makes it clearer.

Iconic

Illustrating meaning

Gesture perceived as crucial in clarifying meanings.

I: Why do you say that?

M : Because 'pick up' with a move makes you understand. The sound and the meaning. For me this movement [reproduces gesture] is necessary to understand perfectly the idea. In this case, the movement is necessary because 'pick up' has different meanings.

I: You said that in general you don't look for these moves, you don't pay attention to them.

M: In general no. Maybe when we use the word which has one main meaning is different. But if a word has different meanings, the move is a good suggestion, it is a confirmation.

I: Do you remember if you were thinking at this?

M: No. Well, in the class I saw the gest because 'pick up' for me is ambiguous if I only hear the word, but 'pick up' [reproduces gesture] is not ambiguous anymore.

I: What do you mean?

M: 'Pick up' means to understand something, to catch [repeats gesture] something, catch an idea, try and copy [hands balance back and forward], change the wrong with the good, change the wrong way with the with the good way.

'Copy' [reproduces gesture]. I know the word copy so in this case it's a surplus. 'Copy' I understand, it is not like 'pick up'. If I put my arms like this [arms crossed on body], I still understand the meaning. If I put my arms like this [arms crossed] and say 'pick up', then I don't understand.

I: So there are two different situations.

M: Yeah. I know the meaning of the word 'reflex' so for me this is not an important movement, it is a surplus, it confirms what I already know. But if I don't know the word, this move could make me understand what she says. So it is a matter of being a surplus or being useful, but this depends on every student.

I: In what way?

Beliefs about the individual use of gestures depending on individual needs.

Role of gestures in clarifying ambiguous speech.

Potential of similar gesture to be used in different circumstances. However, interpretations of the same gesture may differ with the new context.

M: It is relative and depending on what you know already. I know the word 'reflex', but another student might not know it. So what is for me a surplus, for him is very relevant, because he doesn't know the word and her moves help him understand.

Previous knowledge perceived as affecting the communicative value attributed to a gesture.

Because she doesn't know what we all know. We stay here just for three weeks and she doesn't know all of us, what we know each of us. She needs to be understood by all the students.

Maybe if I have a personal teacher or a teacher who knows me very well, he wouldn't use this move [repeats gesture] with a word like 'copy', because I know the word copy and the teacher would know what I know. So he would know that I understand the word copy without an extra gesture.

Belief on one's ability to adapt own's NVB in relation to the interlocutor.

I: So here the teacher is planning to do this?

M: No, I think the teacher is like this at all times. So I don't think she plans it. She needs to be understood so she makes more gestures. This is her habit in real life.

Individual NVB style, apparently contradicts previous idea.

Italian people for example move a lot. While other people don't. In Italy, if a guy is talking on the phone, he keeps the phone with the right hand [imitates action] and he keeps on moving his left hand like this [moves hand in air]. So he gestures even if he doesn't see the person he is talking to, in Italy this is common.

Cross-cultural differences of NVB style.

I talked about this situation with Faro, my friend from Indonesia, and he told me that in his country they think that this is typical for a crazy man, to move your hands all the time, so it is more a habit, than a cultural thing.

#2.120. 'Melody' [repeats gesture, both hands move laterally, in ondulatory move]. Like a director of an orchestra, melody. In this situation, it is a surplus, because I have a similar word in Italian, melodia. So for me it was easy to understand. I don't think they have a similar word in Japan, so for the Japanese in the class it could be a useful gesture.

Iconic

Illustrating meanings

I: So in general how many types of move are there, what do you think?

M: In general, we have a surplus or a suggestion, but when a move is one or another is relative for each of the students. I don't know the students in the class, we don't have the same history, the same background and the teacher doesn't know our potential. She uses her gests to make sure she is easy to understand for all of us.

I: Did you see any gestures which were different or surprising for you?

M: In Italy we have a lot of gestures, more than any other country probably. It is different for me because my hands move alone. I cannot control my hands.

I: OK, that was very interesting, is there anything else you'd like to say about teachers' behaviour in the class or about this teacher in particular?

M: I think she is very expressive, almost like an Italian person, and she does many moves. But probably this is because she needs to make clear her words, so she uses more gestures than other people in this country would normally use.

I: Ok, thanks for your interesting comments and for your time.

Beliefs on the individual use of a speaker's gestures.

Conditions believed to influence a teacher's NVB.

APPENDIX E

ABSOLUTE FIGURES OF TEACHERS' USE OF NON-VERBAL BEHAVIOURS

Table 1. Teachers' use of gestures (in the video extracts transcribed in Appendix C)

Teacher	Mins of video extract	Iconics	Meta phorics	Concrete deictics	Abstract deictics	Beats	Embl ems	Total gestures
Teacher 1	4' 25''	9	8	3	4	7	13	44
Teacher 2	4' 05''	11	17	33	10	18	42	131
Teacher 3	4' 50''	3	7	11	11	5	19	56
Teacher 4	4' 35''	10	4	8	-	9	15	46
Teacher 5	4' 40''	15	16	16	8	20	14	89
TOTALS		48	52	71	33	59	103	366

Table 2. Teachers' use of NVBs (in video extracts transcribed in Appendix C)

Teacher	Total gestures	Eye contact	Facial expressions	Space and posture	Total NVBs
Teacher 1	44	6	1	2	53
Teacher 2	131	12	13	14	167
Teacher 3	56	20	1	22	100
Teacher 4	46	16	2	12	80
Teacher 5	89	7	-	7	101
TOTALS	366	61	17	57	501

APPENDIX F

ABSOLUTE FIGURES OF NON-VERBAL BEHAVIOURS IDENTIFIED BY LEARNERS IN EACH FUNCTIONAL CATEGORY

CODE ABBREVIATIONS:

COGNITIVE FUNCTIONS (COG):

IP- Identifying through pointing;
ER- Emphasising for relevance;
GC- Giving clues for meanings;
RR- Facilitating retention and recollection;

AC- Asking for clarification;

IM- Illustrating meanings;
MC- Marking contrasts;
OA- Orienting attention;
AA- Agreeing and acknowledging
contribution;
DC- Disagreeing and correcting.

EMOTIONAL FUNCTIONS (EMO):

RS - Looking relaxed and supportive;
NE - Showing nervousness or lack of motivation;
EI - Encouraging individual learners;
AH - Avoiding the public humiliation of learners;
RE - Reacting to learners' NVB;
EN - Energising classes;
CC - Accommodating cross-cultural differences.

ORGANISATIONAL FUNCTIONS (ORG):

CP - Checking individual participation;
MS - Manipulating space and objects;
GT - Giving the speech turn;
DT - Maintaining or denying the learner's speech turn;
LL - Listening to the learners;
PR - Performing classroom non-verbal rituals.

	Learners	IP	IM	ER	MC	GC	OA	RR	AA	AC	DC	Total COG	RS	NE	EI	AH	RE	EN	CC	Total EMO	CP	MS	GT	DT	LL	PR	Total ORG	Total NVBs identified
CLASS 1	Marianne		9		1	1		3	1	1	1	17	3		1			1		5		1	1			1	3	25
	Jose	1	1		2	1				2	2	9	1	1					1	3			1			1	2	14
	Vladimir	2	5		2						1	10	2	2	1					5			2	1			3	18
	Laura		6		1			1			2	10	2	3	1					6			1				1	17
	Daniel	2	3		3	1				1		10					1		1	2						1	1	13
CLASS 2	Marcus	2	10	2		5	3	1				23						1	2	3			4				4	30
	Armand	2	2	1	2		1	1				9			2					2							0	11
	Eunice	2	2		1	2	1		1		1	10	1		3	2	1	1	1	9		2	2		1		5	24
	Ronaldo	2	8	2	1	5	1	1	1			21	1		1		1	1	2	6			2		1	1	4	31
CLASS 3	Kali	2	5	1	1		2		1			12	3		1				2	6		1	1	1			3	21
	Nahiko	3	5	2	2	1	2		1			16	1						2	3					1		1	20
	Liang	1	5	1		2	3		2			14			1		1	2	3	7	1	1	1		1		4	25
	Reyno		3	3	2	1	2		1			12	1		1			1	1	4		1	1				2	18
	Theodor		5	1	2		1	1	1			11	2	1				1		4		1	1		1	1	4	19
CLASS 4	Kandar		3									3		1	1				2	4	1		1				2	9
	Mayumi		2						1	2	1	6	1		1		1	1	2	6	1		1			1	3	15
	Ayurda		2							1		3	1	1					1	3	1						1	7
	Narun		2	1					1		1	5	1	1	1	1		1		5	1	1	1				3	13
	Keiko		3							1	1	5			1					1		1			1		2	8
CLASS 5	Romeo	2	8	2	4				1	1	1	19			1			1		2		1		2	4		7	28
	Johan		2	1	1						1	5	3	1					1	5	2		1	1	5		9	19
	Sylvia	1	5	2	1		1	1		1	1	13		1	1		1	1		4	1	1		1	2	1	6	23
	TOTAL	22	96	19	26	19	17	9	12	10	13	243	23	12	18	3	6	12	21	95	8	11	21	6	17	7	70	408

APPENDIX G

OBSERVATION SHEET- TRAINEE TEACHERS

Title of session: *Non-verbal behaviour (NVB) in the classroom*

The focus of this session is the *teachers' non-verbal behaviour* in the classroom. We are interested this time in what teachers do rather than what they say in the class, in the context of language teaching/learning.

Instructions on conducting the observation

Try to describe the aspects of non-verbal behaviour that you notice during your observational activity, by using the following sub-codes of behaviour discussed during today's theoretical session:

- Gestures;
- Facial expressions;
- Eye contact;
- Posture and bodily contact;
- Use of classroom space and objects;
- Intonation, tone of voice, pitch, pauses.

You should use the following grid to systematise your observation (see 'Observation Sheet' attached):

ASPECT OF NVB NOTICED	CONTEXT (VERBAL, SOCIAL)	COMMENTS

The first column should include your description of the aspect of non-verbal behaviour noticed. This can be a descriptive sentence ("teacher brings her left arm to the mouth level in a gesture which suggests the action of eating"), a simple phrase ("eye contact with class") or even a drawing (☺ for a smile).

The second column should describe the context in which the behaviour occurred. Here you can simply transcribe what the teacher says at that particular moment or you can describe the social context (e.g. type of classroom interaction at that particular moment).

Finally, in *the last column* you should include your thoughts on the aspect of behaviour considered. These could be:

- An analysis of the relationship between behaviour noticed and context;
- Considerations on verbal- non-verbal combination;
- Relevance of the aspect of NVB noticed for the learners;
- Cross-cultural interpretations;
- Specificity of the act of NVB noticed for language classroom etc.

Focus topics for your report

In your report, you could consider discussing:

- What is the relevance of teacher's NVB in the language classroom?
- What aspects of NVB might have been relevant for the learners?
- Did you identify certain patterns of behaviour at different stages in the lesson?
- Why do teachers use certain NVBs and in what contexts are these involved?
- Which are the factors that might influence a teacher's NVB?
- Did you notice moments in which teacher's NVB had a significant role to play in the interaction?
- How might learners interpret these significant NVBs?
- What is the role of students' cultural background in interpreting teachers' NVB?

Further reading:

1. Argyle, M. (1996) *Bodily communication*, London: Routledge.
2. Grant, B. M. and Grant Hennings, D. (1971) *The teacher moves: An analysis of non-verbal activity*, Columbia University: Teachers College, 1971.
3. Neill, S. (1991) *Classroom non-verbal communication*, London: Routledge.

OBSERVATION SHEET – NON-VERBAL BEHAVIOUR IN THE CLASSROOM

Date of observation:

Class observed:

Teacher:

ASPECT OF NVB NOTICED	CONTEXT (VERBAL, SOCIAL ETC.)	COMMENTS

APPENDIX H

A TRAINEE TEACHER'S REPORT ON CLASS OBSERVATION

AUTHOR: ALEXANDER, A TRAINEE TEACHER FROM BRUNEI

Introduction

- This observation report will focus on the teacher's Non-Verbal Behaviour (NVB) and how this behaviour affects learners' attitudes during the lesson I observed on Monday, 4th of March, 2002. This report is organised into six areas of observation: Gestures; Facial expressions, Eye contact; Posture and bodily contact; Use of classroom space; Intonation, tone of voice, pitch, pause.
- It is important to note that this class is for Lower Intermediate learners. The topic for the oral skills lesson was 'Likes and Dislikes'. Initially, the learners were instructed to work in pairs and find out about the other person's background by asking each other questions provided in the text book. Later, each learner was given the opportunity to share their information with other learner from the class and this caused some shifting of learners' initial seating position, as shown in Figure 2. The teacher was (name of teacher), male, and the learners, nine of them altogether, came from different nationality backgrounds as follows:

<u>Country</u>	<u>Students (gender)</u>
• Japan	1 (M) / 4 (F)
• Taiwan	1 (F)
• Spain	1 (F)
• Libya	1 (M)
• Iran	1 (M)

The teacher's and learners' initial positions in the classroom are shown in Figure 1 below and the changes afterwards are shown in Figure 2.

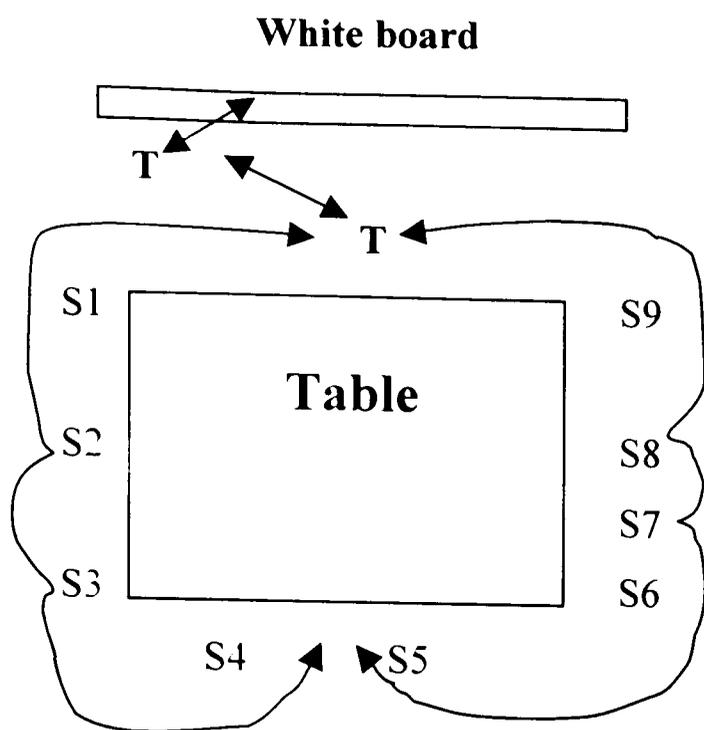


Figure 1

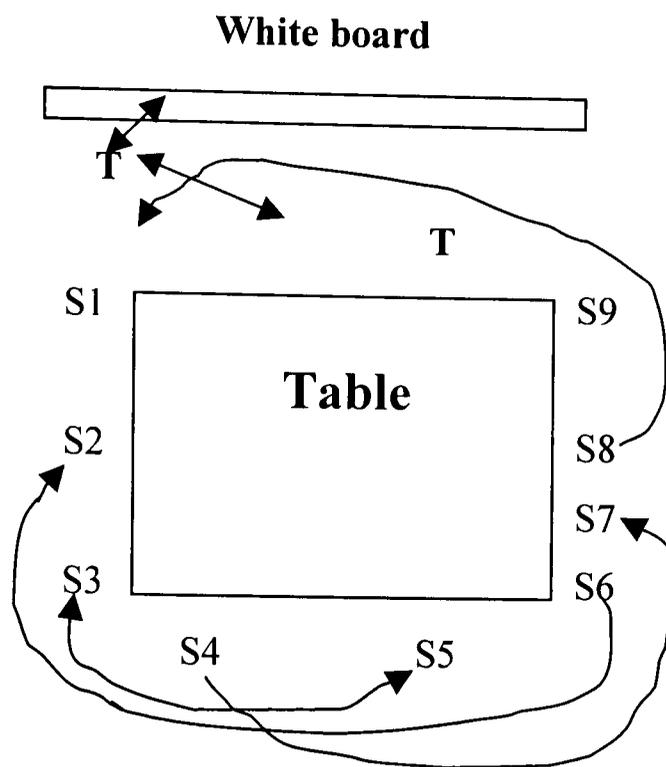


Figure 2

In both figures the teacher often walked around the classroom, and in some occasions, he sat down next to the learners and tried to listen to what each pair of learners was talking about. If required, he corrected the learners' way of questioning or answering certain question in correct grammatical forms.

Gestures

The teacher quite often used gestures, as in the following situations observed:

- Pointing with an index finger to each learner, not directly in their face, while he was giving some explanation on the general ideas that learners needed during the lesson;
- Use of palm(s): In addressing each learner to move from one place to the other; answering a question and identifying whose turn was next; facilitating an explanation when learners were noticed to be in a state of confusion or doubt apart from situations when T wrote the phrase or word on the board.
- Raised both of his hands and with both palms facing the learners (both palms were level just above each shoulder and in line with his head) indicating a negative command. For example, the teacher said 'You may write on it if you have a pencil, but

if you don't (pause) ...ahh... (he raised his hands in the gesture mentioned above)'. Each learner seemed to understand what was the message implied.

- At times, once after the instructions for a particular task were completed, he used to play with the marker pens, making noises with his tongue, drumming fingers on the table. These were, perhaps, distractions for the students in the class. I asked the students in the class if he does this a lot and they said yes, he does it quite often.
- Nod and sway his head: Nodding was quite often used to indicate agreement and also to give complement or praise to a correct response from the learners. Sometimes, it was used to direct an instruction from one learner to another. Swaying his head was used to indicate an unapproved of manner or incorrect response by learners. This gesture was very distinctive and essential to learners' learning process.

Facial Expressions

- Frown: The teacher showed wrinkled brows for having doubts or misunderstanding what the learners were saying/ replying to him. For instance, the teacher said 'do you understand what I mean by an ex-girlfriend'? ' No, we don't' answered the learners. Then two learners came up with a suggestion and said 'past!' [which indicates that 'ex' means 'past']. At his stage, the teacher frown and then paused for a while before giving a better word, like 'previous' or 'former' to clear the learners' misunderstanding.
- Smiling: When there was an indication of humour or something elicited his state of emotion that excited him, he smiled. These situations were equally shared and significantly noticed by the learners throughout the lesson.
- Firm and serious expression: At the time of giving instructions or an explanation on how to carry out a given task, and this included the situations when he made some verbal corrections to individual learners.

Eye contact

The teacher used eye contact quite often in the following situations during the lesson:

- Sitting at the same level with the learners, he would move his eyes from learner to learner, as a key to control and discipline in the class. In this way, he was showing them that they are watched and make them concentrate on the task.

- To exploit learners' understanding on what was being said and check if they were doing what they were supposed to do in the task.
- Through eye contact he checked if they looked confused or if they had any doubts or questions. This happened mainly after giving a command or changing the topic. When he would notice their confusion, perhaps when he spoke too fast, he would then repeat what he said previously, but in a simpler way.
- The teacher's eye contact seemed to have less contribution to some learners' motivation. For example, the learners from Lybia, Iran and Japan may think eye contact is of less importance when talking with someone. In their culture, having eye contact with a person you talk to may be a sign of intimidation, rudeness, patronising and maybe humiliating the others. Moreover, they feel that eye contact can be misleading/deceiving others to believe in you.

Posture and bodily contact

- The teacher's posture was quite appropriate: He sat straight up right and thus, convinced the learners that he was very alert, active and ready to start the lesson or to give instructions.
- Stretched his upper body backward in his chair on one occasion, but this had no particular role in the teaching process and learners did not seem to notice it.
- The teacher sometimes stood in front of the white board with one knee slightly bent outwards and this continued while he was giving some explanations.

Use of classroom space

- The teacher quite often walked around the classroom and occasionally, the teacher would sit next to the learners who were working in pairs. He listened to their conversation, during the questioning and answering session between partners, and always made an immediate amendment if they made a mistake. Again, it was a gentle way of controlling them and also giving them opportunities to ask individual questions.

Intonation, tone of voice, pitch, pauses

- The teacher quite often made use of intonation, tone of voice, pitch and pauses throughout the lesson. This included the times of giving explanations, information,

examples, or during his participation in pairs, during the question and answering session.

- Sometimes, during the verbal explanation, the teacher's use of intonation, tone of voice and pitch was followed by a physical action. For example, he said ' Don't write the answers ...(taking the learners' pencils from their hands and putting them down on table beside them)...just practice the conversation task with your partners'.

Other NVBs

- Touching his nose with the index finger. This occurred when the teacher felt reluctant to say or share some information with his learners. For example, the teacher said 'You are so nosy!' to one of the learners, while doing this gesture. It appeared that not all learners in the class understood what that particular remark meant.
- At times, once after the instructions for a particular task were completed, he used to play with the marker pens, making noises with his tongue or drumming fingers on the table. These were, perhaps, distractions for the students in the class. I asked the students in the class if he does this a lot and they said that yes, he does it quite often.
- Making noises with her tongue, not whistling. The teacher was making some strange noises with his mouth on one occasion, right after he instructed the learners on how to do a task. This mannerism had no importance for the learning process and learners paid no attention to the noise. This is another unwanted distraction to the learning process.
- Drumming his fingers on the table right after an instruction was given to the learners. This gesture received no significant feedback from the learners since no attention was given to it and probably can be considered as a distraction to the learning process.

Conclusions

- During the lesson, the teacher used predominantly these gestures: finger pointing, use of palms, head nod/sway. Each learner recognised immediately these gestures and they tend to follow and understand the messages send by the teacher's gestures during the class.
- Quite often the gestures used by the teacher required a combination of other non-verbal behaviours, such as eye contact, facial expressions, intonation, tone of voice,

pitch and pauses in giving a command, providing some information, explanation, examples etc. during the conversation task.

- The teacher seemed to be aware of the learners' different cultural background and of that they might feel offended by certain uses of non-verbal behaviour. During the conversation task, some learners appeared to use less facial expressions and eye contact than others.
- Nevertheless, both teacher and learners enjoyed the lesson. Participation from all learners was welcomed and there was no sense of fear to talk with the others, even if they made mistakes, as the teacher would always be there to help.

NB I attached the 'Observation form' with the notes I made during the class.

Observation form

ASPECT OF NVB NOTICED	CONTEXT (VERBAL, SOCIAL ETC)	COMMENTS
Pointing an index finger, not directly in the face of the learner	'You do the task first with your friend and then you are going to share the information with another partner later'	A combination of verbal and gesture – essential to make them understand what the teacher wants them to do.
Nodding head	'Yes! Good'	Compliment/ praise for learners to notice their correct response and to motivate their learning.
Looking (eye contact) at everyone in the class	'I want you to work in pairs and practice this'	The best way to check learners' understanding and to discipline them during the time of giving instruction/ information.
Looking at learners when addressing the question	'You don't like to work! Why?' The learner replayed with her eyes (face) looking at the floor	Different cultural back ground - students might feel offended by eye contact during the conversation.
Intonation. tone of voice, pitch, pauses	'Did you go abroad ...(pause) ...last summer?'	Very important to learners because it relates to specific feeling/emotion expressed by each learner.
Frown brows/ Brow wrinkle	'Do you understand ex-girlfriend?' The learners replied 'No' or 'Is it past?'	Essential for teacher to notice when their faces are puzzled, so that he can give them a better explanation.
Sway his head sideways	The teacher correcting learners	This gesture is crucial for the learners to comprehend that their response is incorrect and it needs an amendment.
Walk around the class while learners do their task, i.e. monitor	Those learners who were having some doubts/ confusion were eager to ask the teacher questions when he reached their group	Some learners from more strict cultures feel uncomfortable if the teacher stands next to them and maybe criticises them.
Drumming his fingers on the table	The teacher has just completed giving the instructions for the following task	This could be beneficial for the teacher, as he might be focussing on something or trying to think what to do next in the lesson. For the learners however, this is a distraction in the task.