BILINGUAL TEACHER TALK IN MALTESE SECONDARY CLASSROOMS

Antoinette Camilleri

Ph.D.
University of Edinburgh
1993
Declaration

I hereby declare that this thesis was composed by myself and that the work is my own.

Antoinette Camilleri
Abstract

This thesis explores the use of Maltese and English as media of instruction and the occurrence of codeswitching in Maltese secondary classrooms.

The first part introduces the topic of bilingual education. It reviews the relevant literature and distinguishes between the programmes found in the European and North American contexts, and the issues encountered in post-colonial multilingual countries. It considers the language distribution options in the classroom. A distinction is drawn between the choice of language for written and spoken functions. The nature and function of codeswitching in bilingual classrooms is examined.

In Maltese classrooms, language use is closely linked to societal factors. A background to the Maltese context is provided through a description of the relevant geographic, economic, historical, political, and sociolinguistic factors.

The empirical research described in Part 2 was conducted in sixteen secondary classrooms. The data is analyzed qualitatively and quantitatively. Language choice and the motivation for codeswitching in the lesson sample are interpreted in the light of relevant situational variables such as the participants' own language background and the use of written texts.

The notions of borrowing and codeswitching are applied to language contact phenomena in Malta. These are described in terms of a continuum of crosslinguistic influence. The quantitative analysis establishes a taxonomy of codeswitching and gives an account of different types and quantities of codeswitches in the lesson sample.

The final part provides a summary of findings and examines their implications for language policy and education in Malta. The study concludes with some suggestions for further research.
Dedication

Ghax jien nemmen li

xejn ma jiswielu l-bniedem
li jakkwista l-għerf kollu tad-dinja,
jekk ma jitghallimx ihobb u jemmen ...

Lil dawk li edukawni fl-imħabba u l-fidi
niddedika dan ix-xoghol.
Acknowledgements

I wish to express my gratitude to the following:

The Rev. Prof. Peter Serracino-Inglott, Rector of the University of Malta, and Prof. Albert Borg, Director of the Institute of Linguistics, for granting me the scholarship and study leave to read for a Ph.D. at the University of Edinburgh.

The teachers and the learners who made this research possible by allowing themselves to be analysed at work.

My supervisors Miss Jean Ure and Dr Gibson Ferguson for their help throughout the project.
Mrs Irene McCloud of the Department of Linguistics without whose guidance in the use of computing equipment the data analysis would have taken many years!

My family and all my friends in Malta and Scotland.
# Table of Contents

## PART A  BACKGROUND ........................................................................................................ 1

### CHAPTER 1:  INTRODUCTION ......................................................................................... 2

1.0 Introduction .................................................................................................................. 2

1.1 Outline of the thesis ..................................................................................................... 5

### CHAPTER 2:  BILINGUAL EDUCATION ........................................................................... 7

2.0 Introduction .................................................................................................................. 7

2.1 Bilingualism ................................................................................................................ 7

2.2 Bilingual education ..................................................................................................... 13

2.2.1 Bilingual education policies ................................................................................. 13

2.2.2 Bilingual Education: Evaluation ......................................................................... 24

2.2.3 Conclusion ............................................................................................................. 38

2.3 Language distribution options in bilingual education ................................................. 39

2.3.1 Language separation approaches ......................................................................... 40

2.3.2 Concurrent approaches ......................................................................................... 44

2.3.3 Functions of codeswitching in the classroom ....................................................... 46

2.3.4 Conclusion ............................................................................................................. 50

2.4 Issues in the choice of medium of instruction in post-colonial multilingual countries 53

2.4.1 The use of the mother-tongue in education ......................................................... 54

2.4.2 Language across the curriculum ......................................................................... 58

2.4.3 The teaching of languages as subjects ................................................................. 60

2.4.4 Conclusion ............................................................................................................. 62

2.5 English language norms in education ...................................................................... 63

2.5.1 The choice of a model ......................................................................................... 63

2.5.2 Implications ......................................................................................................... 66

2.6 Summary of Issues: the Maltese context ................................................................ 67

### CHAPTER 3:  MALTA: A DESCRIPTIVE OVERVIEW ...................................................... 69

3.0 Introduction .................................................................................................................. 69

3.1 The Maltese background ............................................................................................ 69

3.1.1 Geography .......................................................................................................... 69
3.1.2 Demography ................................................. 71
3.1.3 Economy .................................................. 76
3.1.4 History .................................................... 79
3.1.5 Politics .................................................... 82
3.1.6 Education ............................................... 84
3.1.7 Culture ................................................... 98

3.2 The Language situation in Malta .................................. 99
3.2.1 Domains of language use .................................. 99
3.2.2 Language varieties ....................................... 104
3.2.3 Surveys on language use and attitudes .................. 111

3.3 Conclusion ................................................. 123

PART B EMPIRICAL STUDY ........................................ 126

CHAPTER 4: RESEARCH DESIGN .................................... 127

4.0 The research theme ........................................... 127
4.1 The normative and interpretive approaches to research .... 128
4.2 Sampling considerations ...................................... 137
4.3 Data collection .............................................. 143
4.4 Summary .................................................... 149

CHAPTER 5: LANGUAGE CHOICE IN THE CLASSROOM AND INDIVIDUAL LESSON ANALYSES ........................................ 149

5.0 Introduction .................................................. 149
5.1 Written and spoken medium .................................... 149
  5.1.1 The written medium .................................... 149
  5.1.2 The spoken medium .................................... 151

5.2 Codeswitching motivations ..................................... 157
  5.2.1 Switching from Maltese to English: the influence of written language on spoken discourse 157
  5.2.2 Switching from English to Maltese: accommodating to the learners' language 160
  5.2.3 Topic and classroom management ..................... 165

5.3 Lesson A ...................................................... 168
<table>
<thead>
<tr>
<th>Chapter 5</th>
<th>Lesson B</th>
<th>173</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lesson C</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>Lesson D</td>
<td>177</td>
</tr>
<tr>
<td></td>
<td>Lesson E</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>Lesson F</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>Lesson G</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>Lesson H</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td>Lesson I</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>Lesson J</td>
<td>191</td>
</tr>
<tr>
<td></td>
<td>Lesson K</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>Lesson L</td>
<td>197</td>
</tr>
<tr>
<td></td>
<td>Lesson M</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>Lesson N</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>Lesson O</td>
<td>203</td>
</tr>
<tr>
<td></td>
<td>Lesson P</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>206</td>
</tr>
</tbody>
</table>

**CHAPTER 6: CROSSLINGUISTIC INFLUENCE AND CODESWITCHING**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>Introduction</td>
<td>209</td>
</tr>
<tr>
<td>6.1</td>
<td>Crosslinguistic influence</td>
<td>209</td>
</tr>
<tr>
<td>6.1.1</td>
<td>English influence on Maltese</td>
<td>221</td>
</tr>
<tr>
<td>6.1.2</td>
<td>Maltese influence on English</td>
<td>228</td>
</tr>
<tr>
<td>6.2</td>
<td>Codeswitching</td>
<td>237</td>
</tr>
<tr>
<td>6.2.1</td>
<td>Formal definitions of codeswitching</td>
<td>237</td>
</tr>
<tr>
<td>6.2.2</td>
<td>Syntactic constraints on codeswitching</td>
<td>241</td>
</tr>
<tr>
<td>6.2.3</td>
<td>Sociolinguistic approaches to codeswitching</td>
<td>246</td>
</tr>
<tr>
<td>6.2.4</td>
<td>Codeswitching as a communicative strategy</td>
<td>250</td>
</tr>
</tbody>
</table>
CHAPTER 7: TAXONOMIC AND QUANTITATIVE ANALYSIS OF CODESWITCHING

7.0 Introduction
7.1 Word Count
7.2 The coding scheme
   7.2.1 The basic unit of analysis
   7.2.2 The taxonomy of codeswitching
   7.2.3 The coding scheme
7.3 Units exclusively in one language
7.4 Intra-unit switching
   7.4.1 Terminology switching
   7.4.2 Phrase switching
   7.4.3 Interpersonal switching
   7.4.4 Translation switching
7.5 Inter-unit switching
   7.5.1 Topic/activity change switching (within speaker turn)
   7.5.2 Translation switching (within speaker turn)
   7.5.3 Translation switching (other speaker turn)
   7.5.4 Topic/activity change switch (other speaker turn)
7.6 Conclusions

CHAPTER 8: SPEECH ACTS AND LANGUAGE CHOICE

8.0 Introduction
8.1 An overview of the Sinclair and Coulthard (1975) System
   8.1.1 Description
   8.1.2 Evaluation
8.2 Results
8.3 Conclusion

PART C CONCLUSION

CHAPTER 9: DISCUSSION
9.0 Introduction ................................................................. 334
9.1 Summary of the findings .................................................. 334
9.2 Implications of the results ................................................. 336
  9.2.1 The constraint on the elaboration of Maltese ................. 337
  9.2.2 The intelligibility of Maltese English .......................... 341
  9.2.3 Codeswitching as a medium of instruction .................... 342
9.3 Language policy in education .......................................... 343
  9.3.1 Summary of recommendations .................................... 344
9.4 Conclusion ..................................................................... 347

CHAPTER 10: CONCLUSION ...................................................... 349
10.0 Summary .................................................................... 349
10.1 Further research ........................................................... 350
10.2 Conclusion .................................................................. 351

Bibliography .................................................................... 353

Appendices
List of Figures

Figure 2.1: Diglossia and bilingualism (Fishman 1967) .......................... 11
Figure 2.2: The development of BICS and CALP in L1 .......................... 29
Figure 2.3: The development of BICS and CALP in L1 and L2 ................. 30
Figure 2.4: Range of contextual support and degree of cognitive involvement in communicative activities (Cummins 1984b) .......................... 32
Figure 2.5: Subcategories of language distributional patterns (Jacobson 1990) ........................................ 40
Figure 3.1: Map of the Mediterranean ................................................. 70
Figure 3.2: Map of the Maltese Islands ................................................ 70
Figure 3.3: Population trends ............................................................... 72
Figure 3.4: Population structure .......................................................... 72
Figure 3.5: Contribution to GDP .......................................................... 77
Figure 3.6: National budget (1990) ....................................................... 78
Figure 3.7: Indicators of living standards ............................................... 79
Figure 3.8: Structural diagram of the education system ............................ 87
Figure 4.1: The use of language in its social context ............................... 136
Figure 5.1: Codeswitching motivations ................................................. 158
Figure 6.1: Continuum of crosslinguistic influence: Maltese and English ........................................ 218
Figure 7.1: Percentages of Maltese and English words in the sample 255
Figure 7.2: Percentages of Maltese and English words in each lesson 257
Figure 7.3: Percentage of Maltese and English words in each lesson in rank order ........................................ 258
Figure 7.4: Pitch contour of unit "it's too much imma" ............................. 265
Figure 7.5: Pitch contour of unit "irrid inzommhaintact" ............................ 265
Figure 7.6: Pitch contour of unit "xi tfisser radius squared" ........................ 266
Figure 7.7: Taxonomy of codeswitching ................................................. 271
Figure 7.8: Maltese, English and codeswitching units in the sample .......... 279
Figure 7.9: Maltese, English and codeswitching units in each of the lessons ........................................ 280
List of Tables

Table 2.1: Types of bilingual education programmes ........................................... 15
Table 2.2: The functions of codeswitching in bilingual classrooms ..................... 48
Table 3.1: Birth, death and fertility rates (1985-1990) ........................................ 71
Table 3.2: Population density (1988) ................................................................. 73
Table 3.3: GDP per head of Malta and a few other countries .............................. 76
Table 3.4: Foreign rule in Malta ........................................................................... 80
Table 3.5: Number of students and schools in the primary and secondary, state and private sectors ................................................................. 85
Table 3.6: Teaching staff in the state sector (1992) ................................................ 85
Table 3.7: Teaching staff in the non-state sector (1992) ......................................... 86
Table 3.8: Language in the Maltese family ........................................................... 102
Table 3.9: Spoken and written use of Maltese and English .................................. 104
Table 3.10: Language use by students at the Technical Institute (state, boys) ......... 113
Table 3.11: Language use by students at St. Aloysius School (private, boys) ........ 114
Table 3.12: Language use by students at Sacred Heart School (girls, private) ......... 115
Table 3.13: Use of Maltese with neighbours ........................................................ 115
Table 3.14: Languages use at home and school .................................................... 116
Table 3.15: Use of language by females at home ................................................... 117
Table 3.16: Use of language by males at home ..................................................... 117
Table 3.17: Use of language as medium of instruction ......................................... 118
Table 3.18: Language use in numerical expressions ............................................. 119
Table 4.1: Normative and Interpretive approaches to research ............................ 130
Table 4.2: Schools and lessons used as data ....................................................... 142
Table 4.3: The transcription conventions ............................................................. 147
Table 7.1: Maltese and English words ................................................................. 259
Table 7.2: Individual lesson and total time, number of words and units ............... 275
Table 7.3: Mean lesson length, mean number of words per lesson, mean number of units per lesson and mean unit length .............................................. 275
PART A
BACKGROUND
CHAPTER 1: INTRODUCTION

1.0 Introduction

This thesis investigates the use of Maltese and English as media of instruction and the occurrence of codeswitching in secondary classrooms in Malta. It sets out to describe the use of language at a micro-level and to place it in relation to the larger context of bilingualism within Maltese society.

In the literature on bilingual societies language use is generally associated with a specific variable such as ethnic group, geographical or political boundary, domain or interlocutor (e.g. Fishman 1972; Gumperz 1982:60). At the individual level, language use is sometimes linked to specific activities such as reading newspapers or listening to one's grandmother's stories (Davies 1991:77).

Similarly, education authorities normally outline a bilingual education policy, according to which each language is/should be linked to a specific variable such as the level within the education system, subject, teacher or time of day or week (see Tickoo 1986 on Singapore; Lord and Cheng 1987 on Hong Kong; Davis 1989 on Luxembourg; Rubagumya and Lwaitama 1990 on Tanzania; and Baker and de Kanter 1983 on the U.S.A.).

The Maltese context instantiates a different paradigm:

(i) At the societal level Maltese and English are not strictly associated with variables such as different speech communities, domains of use etc.; practically all Maltese people can be described as bilingual in Maltese and English, and both languages are used interchangeably in most spheres of life.

(ii) There is no explicit language policy in education.
There has recently been an upsurge in interest in linguistic issues in Malta, namely the maintenance of a "pure" Maltese language, (i.e. one that is not contaminated by English), and the proficiency of Maltese speakers of English, (in sociolinguistic terms, the emergence of a Maltese English variety). Many letters to newspaper editors in Malta condemn codeswitching by the population in general.

Surprisingly, however, reference has never been made to the use of language in the classroom. Therefore, this thesis sets out to answer the following question:

"How are Maltese and English used as media of instruction in secondary classrooms in Malta?"

As a school teacher at different levels for a number of years, I have noticed that both Maltese and English are used in classrooms, often with codeswitching between the two languages. However, as yet, there has not been any discussion or research on the issue. I believe that in order to answer this research question satisfactorily, i.e. in order to understand why Maltese and English are used in the ways they are in the classroom, it is necessary to look at the wider societal context and find out about the bilingual use of language outside the classroom.

Therefore the general research question stated above is sub-divided into other research questions as follows:

**A What type of bilingualism is prevalent within Maltese society in general?**

* What are the functions of Maltese and English?
* Which varieties of each language are used, when and by whom?
* What does the research on language attitudes in Malta suggest?
* What are the language contact phenomena in Malta?

These questions are answered in chapters 3 and 6.
B What type of bilingual education is taking place?...
...worldwide
* What types of bilingual education policies are found around the world?
* What are the issues involved in bilingual education programmes?

...in Malta
* What is proposed at the level of policy?
* What is the language of textbooks and examinations?
* What language is used as a medium by teachers and learners?
* How are Maltese and English used as spoken media in the classroom?
* Why are they used in these ways?

These questions are answered in chapters 2, 5, 7 and 8.

C What are the implications of the bilingual medium for future language planning in education?

* What does the empirical research suggest about language use in the classroom?
* How could this information be useful to teachers, teacher-trainers, and education administrators?
* What recommendations can be made for the improvement of bilingual education?
* What further research would be useful?

These questions are answered in chapters 9 and 10.

The classroom data consists of the recording and transcription of sixteen lessons in five different secondary schools, in nine subjects from forms 1 to 5. This has been determined to a large extent by the willingness of teachers to cooperate. For practical reasons such as school organization and time-tabling, the classrooms observed have all been chosen from the higher academic ability schools known as Junior Lyceums and from one boys' private school.
study is limited to the main island of Malta and there is no discussion about the Gozitan language context (see chapter 3).

1.1 Outline of the thesis

The content of the thesis reflects my personal journey during the three years of research. The study is based in my own community: Malta, and a familiar setting: the classroom. At the analysis stage, I started off from a structural-positivist perspective that draws on taxonomic and quantitative analysis of codeswitching. This includes the formal analysis of codeswitching and the identification of speech acts and their correlation with frequency of occurrence. As the study evolved, I found that I needed to provide an account of the way language use in the classroom is related to the pedagogic and communicative concerns of the teachers. Furthermore, I discovered how language choice and codeswitching in the classroom are related to contextual factors in Maltese society.

The thesis is divided into three parts.

Part A (chapters 1, 2 and 3) provides a background to the work. This chapter introduces the study and outlines the research questions. Chapter 2 reviews the literature on bilingual education programmes. It indicates the language distribution options available in bilingual classrooms and investigates the issues in bilingual education programmes in different contexts. This provides a background against which to set the Maltese situation. Chapter 3 presents the geographic, historical, social and linguistic factors that bear upon the use of language in the Maltese classroom.

Part B (chapters 4-8) consists of the empirical study. Chapter 4 outlines the research methodology. This encompasses both "emic" (meaning related, qualitative) and "etic" (formal, uncontextualized, quantitative) levels of analysis.
Chapter 5 discusses language choice and codeswitching motivations in the Maltese sample. These are interpreted in the light of relevant situational variables such as the participants' own language background and the use of written texts.

Chapter 6 reviews the literature on borrowing and codeswitching and examines the applicability of these concepts to language contact phenomena in Malta. These are described in terms of a continuum of crosslinguistic influence. Chapter 7 presents a quantitative analysis of the use of Maltese and English, and a taxonomy of codeswitching. Chapter 8 focuses on the speech acts performed by teachers and learners and correlates use of language (i.e. Maltese, English, Mixed) with type of speech act (e.g. elicitation, reply, etc.).

Part C (chapters 9 and 10) concludes the study. Chapter 9 provides a summary of findings and examines their implications for language policy and education in Malta. It presents some proposals for the improvement of language education. Chapter 10 makes some suggestions for further research.
CHAPTER 2: BILINGUAL EDUCATION

2.0 Introduction

This chapter provides a theoretical background to bilingual education. It reviews a range of definitions of "bilingualism" and describes different types of bilingual education programmes. The policies, the issues and the outcomes of bilingual education vary from one societal context to another. Here we distinguish between bilingual education in North America and Europe and evaluate its outcomes in the light of prevalent theories. Later we investigate the arguments for the use of the mother-tongue and/or a second language in post-colonial multilingual contexts. This discussion serves as a contrast to the Maltese situation: Malta is post-colonial, but it is ethnically homogenous, and bilingual rather than multilingual.

Section 2.3 discusses the language distribution options in bilingual classrooms. In this thesis a distinction is drawn between the use of language for written and spoken purposes. In Malta there is a language separation by subject in the written code. Codeswitching in the spoken code serves important discourse and pedagogic functions in various bilingual classrooms around the world as outlined in 2.3.3.

The choice of English language norms in education arises as a result of the spread of English and its institutionalization in some post-colonial countries. This discussion provides a comparison to the same issue in Malta.

The chapter concludes with a summary of the issues relevant to bilingual education in Malta.

2.1 Bilingualism

"Bilingualism" refers to the use of two (or more) languages either by

(i) an individual, or
A bilingual person may know and use two languages equally well (be a balanced bilingual), or may have a better knowledge of one language than of the other.
Hornby (1977:4) states that bilingualism is "not an all or none property but may exist to degrees varying from minimal competence to complete mastery of two languages". Similarly, Baetens-Beardsmore (1982:3) proposes that bilingualism be seen "as a cline with no clear-cut limits other than those of the pure monoglot at one end and the perfect ambilingual at the other".

Bilingual individuals will find themselves at different points along this continuum, with a minority approaching the theoretical perfect, balanced control of two languages, as is the case of many Puerto Ricans in New York who use Spanish and English with equal ease (Bloomfield 1933:56), and also in the case of some Maltese people who are equally fluent in Maltese and in English.

On the other hand, a bilingual person may:

* be able to only read and write in the second language;
* use each language in different types of situation e.g. one language at home and the other at work;
* use each language for different communicative purposes e.g. one language for talking about school life and the other for talking about personal feelings, or simply to listen to one's grandmother's stories (see Davies 1991:77 and Richards et al. 1985:28);
* There are other cases where a person may use the second language for thinking aloud, or inner speech (Mackey 1968:565). Fantini's (1985) Spanish-English bilingual son used Spanish, the language of the home for private speech and thinking aloud. Saunders (1982:69) found that his children, who were learning both English and German at home, used English for speaking to themselves.

D Use of each language

e.g. horizontal, vertical, diagonal bilingualism (Pohl 1965): horizontal bilingualism refers to situations where two distinct languages have an equivalent status in the official, cultural and family life of a group of speakers; vertical bilingualism refers to a standard language and a distinct but related dialect coexisting within the same speaker; and diagonal bilingualism where speakers
use a dialect with a genetically unrelated standard language (see diglossia below). Gaarder (1976) proposed a distinction between folk and elitist bilingualism, such that folk bilingualism refers to the condition of ethnic groups who become bilingual in order to survive, whereas elitist bilingualism is the privilege of middle-classes who are well educated and become bilingual by choice.

**Societal bilingualism** occurs when in a given society two or more languages are spoken. According to Mackey (1968:554) "An individual’s use of two languages supposes the existence of two different language communities; it does not suppose the existence of a bilingual community". While this may be so in the majority of cases, e.g. immigrant minorities co-existing within a majority language environment; and in bilingual/multilingual contexts like Belgium, Switzerland, India etc.; it sometimes happens that some members of the community become bilingual. In other cases, as in Malta and Hong Kong, each language has local functions within the same speech community.

Societies differ in degree or form of bilingualism. Appel and Muysken (1987:2) present three forms of societal bilingualism, which although theoretical, give an indication of the nature of the various bilingual communities around the world:

* the two languages are spoken by two different groups and each group is monolingual; a few bilingual individuals take care of the necessary intergroup communication, e.g. in former colonial countries where the colonizer spoke English and the native people a local language. This is also referred to as territorial bilingualism (Hamers and Blanc 1989:12) as in Belgium and Switzerland where each language has official status in its own territory;
* all people are bilingual as in many African countries and India where people have command of two or more languages, a local language and a lingua franca such as Swahili or English;
* one group is monolingual and the other bilingual as in Greenland where the people who speak Greenlandic Inuit must become bilingual, i.e. learn
Danish, while the Danish speaking group, socially dominant, can remain monolingual.

Diglossia (Ferguson 1959) refers to situations where two languages or language varieties exist side by side in a community and each one is used for different purposes: one variety has higher status (H) than the other (L). The H language is used in, for example, official documents and literary texts, domains of government and church, while the L language is used in family circles and among friends. The following are examples of H and L languages: Spanish and Guarani in Paraguay; French and Creole in Haiti; Classical Arabic and the Arabic dialects in the Arab nations.

Fishman (1967) makes a four way classification of bilingualism with or without diglossia:

Figure 2.1: Diglossia and bilingualism (Fishman 1967)

<table>
<thead>
<tr>
<th>DIGLOSSIA</th>
<th>+</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>-</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Diglossia with bilingualism refers to contexts where the H and L varieties are two distinct languages (rather than varieties of the same language) as in Paraguay;

2 Diglossia without bilingualism is characterized by Fishman as an instance of political or governmental diglossia in which two or more differently monolingual entities are brought together under one political roof as in Canada, Belgium and Switzerland;
Contexts where there is **neither diglossia nor bilingualism** are only a theoretical possibility of an absolutely monolingual community;

**Bilingualism without diglossia** refers to contexts where two languages compete for use in the same domains.

The functional complementarity in the use of Maltese and English in Malta fit the fourth description proposed by Fishman (1967), i.e. of bilingualism without diglossia. Chapter 3 outlines the functional distribution and overlap in the use of Maltese and English in Malta.

Martin-Jones (1993b) criticizes Ferguson's (1959) and Fishman's (1967) models of diglossia and bilingualism. These are her arguments:

(i) Language choice of individuals in this model is seen as a mere reflection of community norms. The concept of diglossia does not allow for individual variability, divergent interests and allegiances.

(ii) Power is treated as a secondary phenomenon. The model itself has served to reinforce the unequal distribution of power between the H and L languages.

(iii) The model does not provide a way of accounting for change over time.

Ferguson's (1959) and Fishman's (1967) paradigms may be useful as theoretical generalizations. But as Martin-Jones (1993b) points out they can be misleading. In the Maltese context, for example, it is very important to account for language variability across domains and individuals. There is frequent overlap in the use of the two languages such that it is not possible to talk in terms of language compartmentalization. There is extensive crosslinguistic influence which shows rapid language change over time. This must be seen as an evolutionary process, and there is no indication that one language is replacing another as suggested by Fishman (1967) about situations of bilingualism without diglossia (see Camilleri and Borg 1992 and chapters 3 and 9).
Bilingual education assumes different shapes in different contexts depending on the societal form of bilingualism and on various situational factors such as history, politics, economy, the social conditions and language attitudes of the communities concerned (see Ferguson 1988:44; Spolsky 1986; Ashworth 1985:24,39). The following section outlines various types of bilingual education.

2.2 Bilingual education

Bilingual education is an umbrella term for a complex and varied phenomenon. Various typologies of bilingual education have been proposed by, for example, Mackey (1968) and Baetens-Beardsmore (1993). In this work, as in Hamers and Blanc (1989), bilingual education refers to those situations where two languages are used and promoted in education, are taught as subjects and are used as media of instruction. To have a complete picture of contexts, sections 2.3 and 2.4 make reference to education policies where bilingualism is not necessarily fostered in the curriculum (as defined above) because there is a complete and sudden shift in the medium of instruction from one language (usually the mother tongue or a vernacular language) to the other (usually an international language such as English or French). Our review does not include second/foreign language learning.

2.2.1 Bilingual education policies

Monolingualism is the exception rather than the rule in the world as a whole. Schools rarely teach in the same language variety that the children are accustomed to speaking at home. This results in a language barrier between home and school; it leads to a conflict in values and critical and complex issues in the design of language education policies. Varied solutions to this phenomenon are offered in different parts of the world.

In what follows, the terms "minority" and "majority" are used in this way (following Shapson and D'Oyley (eds.) 1984):
Majority language students are children whose first language (mother-tongue) is the same as the language used by the schools as the medium of instruction; Minority language students are children whose mother-tongue (and the language predominantly spoken in their home) is not the same as the language used by the school as the medium of instruction.

There are cases where the language of the dominant power is not taught to the minorities. The ruling elite prescribes that education be solely through a vernacular language in order to maintain the subservience of minority groups, their segregation and to avoid political upheavals. For example, in the African apartheid system, Bantu education is given at the elementary level to Namibians in nine different mother-tongues (Skutnabb-Kangas 1988:23). In this way, language minorities "do not learn enough of the power language to be able to influence society or, especially acquire a common language with the other subordinated groups, a shared medium of communication and analysis" (Skutnabb-Kangas 1981:128; Lewis 1981:206).

Similarly, in Bavaria immigrant Turkish children are taught their first language in isolation from native-speaking German children. They are given little instruction in German because the aim is to repatriate them and their families before they are able to form part of the local community (Romaine 1989:219; Skutnabb-Kangas 1988:23; Hoffman 1991:chapter 14).

The majority-minority distinction also refers to power relationships between language groups such that majority language speakers normally enjoy power and control over the powerless and stigmatized minority language speakers (see Martin-Jones 1984:426). Quite often, immigrant minorities are the least privileged members of their society in terms of employment opportunities, housing and education. Although they may be better off in the host country than in their native country, their social status, housing, level of education and training and state of health tend to be low. In Germany, for example, immigrants suffer a 10% illiteracy rate (Hoffman 1991:301). Frequently minority students will not only be trying to cope with learning the majority (i.e. school) language, but they
will also be trying to learn the content of the curriculum at the same pace as their majority language peers.

In many cases, the minority languages are excluded in education. Bilingual education policies range from two antithetical approaches. There is a variety of options in between which shade into one another (e.g. transitional programmes may include English as a second language (ESL) component and mother-tongue support). On the one hand there are policies that suppress or intentionally disregard the languages of minorities. At the other end of the scale there are elitist policies, as in immersion education, that lead to additive bilingualism. In between the two extremes there are transitional bilingual education policies intended to assimilate even at the cost of forfeiting ethnic and linguistic identity and bilingual maintenance programmes which hope to maintain the language of minorities (Table 2.1).

Table 2.1: Types of bilingual education programmes

<table>
<thead>
<tr>
<th>Type of programme</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>suppression</td>
<td>- subtractive</td>
</tr>
<tr>
<td>submersion</td>
<td>↑</td>
</tr>
<tr>
<td>transitional</td>
<td>↓</td>
</tr>
<tr>
<td>maintenance</td>
<td>+ additive</td>
</tr>
<tr>
<td>immersion</td>
<td></td>
</tr>
</tbody>
</table>

Minority Language Suppression
The traditional policy which most nations pursued in the past was the eradication of the native language/culture of minorities. Minority children in countries like Australia, the United States (see Baker 1988), the United Kingdom (see Baker 1988) and the Scandinavian countries (see Skutnabb-Kangas 1981) were subjected to physical violence in schools for speaking their home language (Romaine 1989:217).
Skutnabb-Kangas (1981:309), for example, reports the experiences suffered by Finnish schoolchildren in the Tornedal area of Sweden who had to carry heavy logs over their shoulders or wear a stiff collar because they had spoken Finnish. Romaine (1989:218) reports that some children in Papua New Guinea received various punishments for speaking Tok Pisin at school. In Turkey the Kurdish language is not recognized and the teachers face prosecution and possible imprisonment if they use it at school. Furthermore, the Turkish embassy in Denmark tried to prevent a course in Kurdish literacy for teachers of Kurdish (Romaine 1989:228). In chapter 3 (3.1.6) we provide examples of punishments that Maltese students received in the past if they spoke Maltese at school.

Submersion education

In submersion programmes (also known as Structured Immersion in the U.S.), the language minority children are placed in majority language classes, alongside majority language children receiving mainstream education. They are taught all day in the majority language and both teachers and pupils are expected to use only the majority language in the classroom. The minority language pupils are expected to cope and they may "either sink, struggle or swim" (Baker 1993:154). The basic aim of submersion education is the assimilation of language minority children into the majority group. The mother-tongue of the minority group is not developed and the second language gradually undermines proficiency in the first.

Skutnabb-Kangas (1981) indicates the stresses of learning through an undeveloped language for the child. Listening to a new language demands high concentration, it is tiring, with a constant pressure to think about the form of the language and less time to think about curriculum content. A child has to take in information from different curriculum areas and learn a language at the same time. Stress, lack of self-confidence, opting-out, disaffection and alienation may occur.

Studies of submersion type of education programmes and accounts given by people who experienced them, suggest that such learners suffer numerous disadvantages. For example Marainen (1988) and Jalava (1988) both give
personal reports of submersion education in Swedish which for them meant many years of experiencing failure in school. Both authors experienced prejudice in school because they were Samis. They had to painfully learn to adjust to the Swedish system and learn to speak Swedish like a native speaker before they could be accepted within and outside the school. This meant the loss of first language competence in Sami and many years of self-conflict until in adulthood they could re-learn to appreciate their origins and their own mother-tongue.

This type of education has been very commonly experienced by immigrant children and other minority groups, not only in Sweden (Skutnabb-Kangas and Toukomaa 1976; Skutnabb-Kangas and Cummins (eds.) 1988) but also in the U.K. (Baker 1988) and the U.S.A (Baker and de Kanter (eds.) 1983).

In the U.S.A., submersion education was, in fact, found unlawful by the U.S. Supreme Court ruling on the Lau v. Nichols case (414 U.S. 563. 1974). This was a class-action suit against the San Francisco Public School District that alleged that the district's failure to provide special educational services to non-English speaking Chinese students violated both the equal protection clause of the Fourteenth Amendment and Title VI of the Civil Rights Act of 1964 (Baker and de Kanter (eds.) 1983).

Kerr (1984) finds that according to 1971 pre-school experiments in Sweden, set up to investigate the effects of integration or segregation of Finnish immigrant children most of the children who had failed to settle into pre-school came from Swedish language nurseries. When children received more instruction in Finnish they performed better on verbal standardized tests. Kerr (1984:173) notices that in Sweden, the consensus of public debate has increasingly moved away from support of assimilationist aims - as exercised through submersion education - towards recognizing the arguments for a pluralistic society (see also Kerr and Desforges 1988:38).
Transitional bilingual programmes
These programmes provide some instruction in the minority students' native language to help them keep up in their school subjects while they are "submerged" in mainstream classrooms. They may also provide extra English tuition in programmes for limited English proficiency students (e.g. on English Language Support in the U.K. see Thompson 1991:5-7, and on ESL instruction in the U.S. see Scarcella 1990; Ramirez and Stromquist 1979; and Krashen 1985).

One type of language support provided in the U.K. is known as "bilingual support". This involves a bilingual teacher (in English and in the minority language), to sit in class with the mainstream (monolingual in English) teacher, and help in various ways and to various degrees minority language students (see Thompson 1991:5-7 on secondary level; Martin-Jones and Saxena 1993 on primary level). Unfortunately, the use of certain mother-tongues by language support teachers in the U.K. are stigmatized (Driver 1979) and sometimes the minority pupils themselves "turn away" from the bilingual teacher when she tries to speak to them in their shared mother-tongue (Thompson 1991:37).

As in submersion, the aim of transitional bilingual education is assimilationist. Mother-tongue education is only provided until the learners' proficiency in English is developed enough for them to be able to cope with the syllabus. This is expressed in Cox (D.E.S. 1989:10.10):

"where bilingual pupils need extra help...there may be a need for bilingual teaching support...until such times as they are competent in English".

Transitional bilingual education in the U.S. is heavily emphasized in Title VII Elementary and Secondary Education Act. It has been implemented nationwide through the Office for Civil Rights interpretation of the Lau decision. It is virtually the only approved method of instruction for language minority students (Baker and de Kanter 1983).
Garcia (1990) reports findings on language use in transitional Spanish-English bilingual programmes in the U.S.A. At kindergarten level, almost all teacher and child initiations and replies were in Spanish. At third grade, both languages were used. Teachers used Spanish 56.5% of the time for discourse initiations and 44.5% for English. Students' interactions were primarily in Spanish (68%) although English was also used. Teachers' replies were also primarily in Spanish (62%). By fifth grade, all teacher and student discourse was in English.

Similarly, a study by Ramirez and Merino (1990) shows how the policy of transitional education takes place in classroom practice. They found that in early-exit transitional first grade classrooms, teachers used English two-thirds of the time (67.7%) and Spanish about one-third of the time (30.6%). First grade teachers in late-exit transitional programmes used English less than one-fourth of the time (22.1%) and Spanish 76.8% of the time. Second grade teachers displayed a similar pattern of language use across programmes. Student language use patterns were very similar to those of their teachers.

Appel (1988) reports on two bilingual experiments for Turkish and Moroccan children in Leyden and in Enschede in the Netherlands. These children followed a transitional bilingual programme with about 75% minority language teaching by teachers from their country of origin, in the first year, and 40% in the second year. After that they went to regular school with an average of 10% minority languages taught as a subject.

In Leyden, by the end of the second year, the group from the bilingual programme performed somewhat better than the dominantly monolingually schooled Turkish and Moroccan children with respect to oral Dutch skills. At the end of the third year, the bilingual group surpassed the other group in oral as well as written Dutch proficiency (as well as in arithmetic and socio-cultural development). Furthermore, the amount of time spent in minority language teaching in the transitional bilingual school had no retarding effects on the acquisition of Dutch - the bilingual group were even ahead (Appel 1988:74).
Similarly in Enschede, the bilingual children following the transitional bilingual programme surpassed the monolingually taught (submerged) children in Dutch language proficiency, arithmetic, Moroccan-Arabic, and had a better cultural orientation. On the whole, the Leyden and Enschede experiments seem to suggest that minority language teaching for immigrant workers' children has no negative educational or social effects; it can even have positive results when compared with the regular educational situation in which the minority language is at best marginally used and taught.

Language maintenance programmes
In these bilingual programmes (also known as Enrichment Maintenance Bilingual Programmes in the U.S.), instruction is given in the children's first language with the aim of advancing development of primary language skills. The goal is additive bilingualism for both the individual and the society.

The difference between transitional and maintenance language programmes is a matter of degree - the degree to which the first language is appreciated and used in the school. While in transitional education the child's first language is only an interim medium for school instruction (e.g. bilingual support in the U.K. and ESL programmes in the U.S.), in maintenance education both languages are used in school. The aim is to ensure that the child has good facility in both languages.

Enrichment minority language programmes are based on the desire of ethnic group members to have their children retain their language and its associated group identity and culture. These believe that language is a vehicle for transmitting their culture and thereby fostering a sense of self-esteem, ethnic identity and pride in their children.

For instance, the German minority school in Sønderjylland (southern Denmark), where Danish, German and Søderjysk are used,

"is perceived as the most influential force in the socialization of the individual as a member of the minority...Through attendance
at a German school, the pupils' minority membership is the dominant influence in their life". (Byram 1986:xiii)

Maintenance bilingual education is available in Wales, for example, where there has been an increase in bilingual schools in recent decades and in the number of subjects available and examined through Welsh (Baker 1988:68; Griffiths 1986; Munro 1987).

In Canada there are examples of language maintenance programmes such as the Hebrew-English-French trilingual programmes in Montreal (Genesee et al. 1978), and Ukrainian-English bilingual programmes in Alberta (Muller et al. 1977).

Hornberger (1990) compared the use of Spanish and Quechua in bilingual and non-bilingual classrooms in Puno, Peru. She found qualitative and quantitative differences between the two groups. Teachers in the bilingual classrooms use significantly more Quechua and a more linguistically complete Quechua, for primary communication and information content. These bilingual programmes thus lead to the maintenance and development of the Quechua language (Hornberger 1988; 1990).

The Foyer Model of bilingual education in Belgium, set up by a non-state organization for the welfare of immigrants, seeks to create the right conditions for children to become bicultural (in their own culture and that of Belgium) and trilingual (in their own mother-tongue, French and Dutch). Instruction is given in the various other tongues (e.g. Italian, Spanish, Turkish, Moroccan), and in Dutch, while the school language environment is French (Byram and Leman 1990). Jaspaert and Lemmens (1990) report that there have been positive outcomes from these programmes in that children in the experimental group who had a large mother-tongue input, did not suffer deficiency in the second and third languages and although set-back initially they succeeded in catching up on most of their arrears in proficiency in the course of primary school.
The European Schools (Council of Europe) offer another model of multilingual education. There is a network of nine European schools in six different countries with about 12,000 children. They are designed for the children of European Community officials and are generally considered elitist. However this has been refuted by Housen (1993) on the basis that these schools often accept other children including immigrant children. Each school's population is linguistically, culturally, and socio-economically heterogeneous and highly mobile. The children are taught in their mother-tongue for the first eight years. They are taught a second language as a subject from the beginning and this is then used as a medium of instruction from grades 8 to 12. A third language is introduced as a subject in grade 6 and may be used as a medium of instruction in elective courses in grades 11 to 12. The academic and linguistic achievement of these students is positive considering that 90% of pupils succeed in the European Baccalaureate (the end of school examinations). Housen (1993) interprets this success theoretically by comparing it to Cummins' hypotheses (see below) which allow for first language development to positively transfer to second and third language development.

Other research on maintenance bilingual programmes has shown that first language is maintained in addition to acquisition of proficiency in the L2 (see Hamers and Blanc 1989; Appel and Muysken 1987; Baker 1993).

**Immersion education**

The first language immersion education programme was set up in Canada in 1965 as a result of considerable pressure and agitation by a group of English-speaking parents (majority) in Quebec whose common concern was that their children become highly proficient in French (minority language). This concern reflected the political and economic realities of their environment since French was increasingly emphasized as the language of work (Swain and Lapkin 1982:1). In brief, the purpose of the programme was to promote functional bilingualism by using French as the language of instruction (Lambert and Tucker 1972:4).
In these programmes all the students come from English-speaking background; the teachers are bilingual but use only French in class and mother-tongue education is an integral part of the programme but is only introduced in the third or fourth year of schooling and is used increasingly until it equals French instruction after sixth grade.

**Immersion programmes** aim to (see Genesee 1983):
1. provide the participating students with functional competence in the second language;
2. maintain and develop normal levels of first language competence;
3. ensure achievement in academic subjects;
4. instill in the students an understanding and appreciation for the target language group, its language and culture without detracting in any way from the students' identity and appreciation for the home language and culture.

Immersion education is characterized by the following pedagogical conditions:
1. The students are permitted to use their home language;
2. The use of the second language is strongly encouraged;
3. Both the first and the second languages are used for regular curriculum instruction varying according to the type of immersion programme, e.g. early, late or partial immersion;
4. The teachers act as monolingual models.

Evaluation of the immersion programmes has shown linguistic, academic and social/psychological gains for the learners (Genesee 1983; Swain and Lapkin 1982):
1. Students in the experiments (French immersion) reached a high level of proficiency in both languages (English and French) and obtained grades as high as, or higher than those of monolingual English-speaking students of the same age (Siguan and Mackey 1987:88);
2. Teaching through French did not impair the students' academic achievement in any subjects in any way. In mathematics, science and social studies early total immersion students generally achieved as well as students studying these subjects in English (Swain and Lapkin 1982:84);
3. Results suggest that early immersion students adjust readily to their school environment even though there is a home-school language switch;
4. Early immersion students tend to see themselves as more similar to French Canadians than do their English-speaking peers. This suggests that immersion students have developed less rigid ethnolinguistic stereotypes of target language group members (Swain and Lapkin 1982:79).

Genesee (1983:39) summarizes the success of immersion education in the following way:

"The results of numerous longitudinal evaluations have consistently indicated that majority-language children participating in these programmes do not experience any long-term deficits in native-language development or academic achievement. At the same time, they achieve functional competence in the second language that is markedly better than that of students in core second-language programmes".

Other immersion programmes have been set up around the world following the Canadian model, e.g. Swedish immersion in Finland (Björklund 1993), Catalan immersion in Spain (Artigal 1991), English immersion in Australia (Clyne 1991) and English (or Russian/Spanish/Italian/French/German) immersion in Hungary (Duff 1991).

2.2.2 Bilingual Education: Evaluation

Research on bilingual education outcomes as measured by standardized tests (e.g. Lambert and Tucker 1972; Kerr 1984), and as reported by various researchers using other methods (e.g. Skutnabb-Kangas 1981; Skutnabb-Kangas and Cummins 1988), has provided contradictory evidence (e.g. Engle 1975; Dulay and Burt 1978; Spolsky and Cooper (eds.) 1978). Many studies have suggested that bilingualism can be established successfully without detrimental effects to the child's linguistic and personal development. On the other hand, positive results were not observed in many minority children who underwent schooling in the majority language.
The various inconsistencies in bilingual education outcomes can be outlined as follows (see Edelsky et al. 1983:1):

1 A school/home language switch is detrimental to the school success of submersion students (U.S. Commission on Civil Rights 1975; Skutnabb-Kangas and Cummins 1988) but not immersion students (Lambert and Tucker 1972; Genesee 1984);

2 Some bilinguals seem to enjoy cognitive advantages tied to their bilingualism (Siguan and Mackey 1987) while others do not (Jones 1959; Peal and Lambert 1962; Lado et al. 1980);

3 Children in some bilingual programmes achieve well (Byram and Leman 1990) while those in others do not (Landry and Allard 1992; Driessen 1992);


How can these contradictory findings be reconciled?

Research about the relationship between bilingualism on the one hand and intelligence and various cognitive processes on the other has been grouped into three overlapping periods that Baker (1988; see also Hoffman 1991) terms:

* the period of detrimental effects;
* the period of neutral effects;
* the period of additive effects.

The period of detrimental effects lasted from the nineteenth to the mid-twentieth century and expressed the belief that bilingualism has an adverse effect on the cognitive development of the child. Such conclusions were reached on the basis of research carried out in the U.S., Britain and Ireland which reported that lower IQ scores were achieved by bilinguals when compared to monolinguals.
In most of these experiments, however, relevant factors such as socio-economic background, school conditions and emotional aspects were not controlled, and in most cases the tests were carried out in the majority language, i.e. the weaker language for bilinguals.

The period of neutral effects refers to studies carried out largely in the 1950’s. At first they appeared to show a correlation between monolingualism and higher intelligence scores. However, after re-analysing the data and re-categorizing several variables (e.g. too high a proportion of bilinguals came from manual-work background) no significant differences between the two groups on IQ tests were found.

The period of additive effects started with Peal and Lambert’s (1962) investigations in Canada. Their test groups, children from middle-class French schools in Montreal, were matched for socio-economic class, gender, age, school grades and language proficiency. It was found than bilinguals scored more highly than monolinguals in both verbal and non-verbal measurements of intelligence. The authors argued that since bilinguals had a more diversified structure of intelligence and greater mental flexibility, therefore the cognitive functioning of bilinguals benefited from their bicultural experience and from positive transfer between the languages.

Although criticized for not accounting thoroughly for the children's social environment (e.g. MacNab 1979), Peal and Lambert’s research had a profound impact on studies on this field, e.g. Ianco-Worrall (1972) in South Africa, Ben-Zeev (1977a;1977b) in the U.S, and Scott (1973) in Montreal. All these researchers reported positive effects of bilingualism.

At the same time, however, in Scandinavia, it was found that the children of Finnish immigrants in Sweden frequently had poorly developed language skills in their home language when they started school, and that their levels of proficiency in Swedish (then the only school language) were also below those of comparable monolingual children in spite of their average intellectual ability. Hansegård (1968) and Skutnabb-Kangas and Toukomaa (1976) use the term
semilingualism or double semilingualism to refer to the retardation in the linguistic ability of these immigrant children in both Finnish and Swedish. These researchers argue that semilingualism should not be seen as a purely linguistic concept, but as one that includes cognitive aspects as well. The notion of semilingualism has, however, been severely criticized (e.g. Martin-Jones and Romaine 1986) for considering the bilingual speaker from a monolingual perspective.

There are varied mainstream hypotheses suggesting the "right" way to successful language education: the Maximum Exposure Hypothesis and the Linguistic Mismatch Hypothesis (see Ferguson 1988:53;58ff); the Thresholds Level Hypothesis and the Linguistic Interdependence Hypothesis (Cummins 1979; 1980; 1984a;1984b). Each of these is described and appraised below.

According to the Maximum Exposure Hypothesis, proficiency in a language is directly related to amount of exposure in the classroom to that language. Therefore minority language students need maximum exposure in the L₂ and need to start instruction in and through the L₂ as early as possible. This hypothesis is related to the belief that instruction should be given in only one language at a time - i.e. the separation approach (e.g. Swain 1983; 1986; Wong-Fillmore 1980).

This hypothesis has, however, been shown to be mistaken in educational terms by an increasing number of researchers. Many children who experience submersion in the L₂ continue to fail in education and not only suffer in L₂ but even suffer a decline in their L₁ proficiency (subtractive language education and semilingualism) (Skutnabb-Kangas and Toukomaa 1976; Skutnabb-Kangas and Cummins 1988; Lado et al. 1980). In fact, studies have shown that students instructed through a minority language for all or part of the school day perform over time as well as, or better, in the majority language (e.g. English) as students instructed exclusively through the majority language (e.g. Byram and Leman 1990; Kerr 1984; see discussion on BICS and CALP below).
The **Linguistic Mismatch Hypothesis** states that if the school language is different from the child's home language, the child is adversely affected and will probably show lower levels of achievement. This hypothesis was strongly advocated by the UNESCO report (1953) which emphasized the right of every child to start schooling in the mother-tongue.

However, linguistic mismatch does not always produce underachievement. Different minority groups perform differently. For example, immersion education of English students in French in Canada and of English students in Spanish in the U.S. were not adversely affected.

Cummins (e.g. 1979; 1984a; 1984b) proposes two related hypotheses, the **Threshold Hypothesis** and the **Linguistic Interdependence Hypothesis**, in order to account for the mixed findings on bilingual education. The first hypothesis is that linguistic, cognitive and academic advantages are associated with high levels of proficiency in both languages. In order for positive linguistic and cognitive consequences of bilingualism to manifest themselves, "threshold" levels of proficiency in both languages must be attained. In other words two thresholds are hypothesized: one below which cognitive growth would suffer without further linguistic development; and one above which cognitive growth would be enhanced. However, what actually constitutes threshold levels needs to be further specified (see Cummins and Swain 1986:6).

Cummins (1979) sees a distinction between surface fluency and conceptual-linguistic knowledge. Skutnabb-Kangas and Toukomaa (1976) made this distinction to explain why Swedish born minority students were able to converse in peer appropriate ways in everyday face to face situations in both L₁ and L₂ despite literacy skills which were below age-appropriate levels.

In Cummins (1980) the distinction between surface fluency and conceptual-linguistic knowledge is expressed in terms of BICS (basic interpersonal communicative skills) and CALP (cognitive-academic language proficiency). Cummins also outlines three hypothesized aspects of CALP: (i) vocabulary conceptual knowledge; (ii) metalinguistic insight and (ii) decontextualized
Cummins (1980) represents the development of BICS and CALP in L₁ (Figure 2.2) on a graph postulating that BICS develops rapidly, reaching a plateau at about the age of 5 or 6, whereas the development of CALP tends to be more in line with a child’s general intellectual development:

Figure 2.2: The development of BICS and CALP in L₁

Cummins (1980) argues that immigrant students generally appear to acquire a reasonably high level of L₂ fluency within about 1½ and 2 years of arrival in the host country but it may take 4 to 7 years for a child to develop CALP. It follows that if students are exited from transitional bilingual programmes on the basis of developed BICS they are likely to experience considerable academic difficulty in English only programmes and their ensuing failure will erroneously be attributed to deficient cognitive skills.

Skutnabb-Kangas (1981:113) shows that the period between 7 and 12 is the period of risk; the period when L₂ BICS is considerably more developed than L₂ CALP relative to the discrepancy in L₁ (Figure 2.3). In a similar way, the discrepancy between the time taken to develop age related BICS and CALP explains why immersion students in Canada tend to lag behind their monolingual peers for a short period. Thus, older learners whose L₁ CALP is better developed will acquire L₂ CALP skills more rapidly than younger learners.
The second hypothesis, the **Interdependence Hypothesis**, holds that some aspects of language proficiency are cross-lingual. This means that for those aspects of language proficiency which are interdependent across languages, instruction in one language will benefit both languages. Cummins has articulated the Interdependence Hypothesis formally as follows (1984a:143):

"To the extent that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or in the environment) and adequate motivation to learn Ly."

The most salient weakness of this hypothesis as Edelsky et al. (1983) have argued, is its lack of sufficient consideration of the powerful effects literacy has on proficiency levels and on cognitive growth. In order to take this aspect into account, the hypothesis can be modified slightly as follows (Danesi 1990:66):

"To the extent that instruction in Lx is effective in promoting proficiency and literacy in Lx, transfer of this proficiency and literacy to Ly will occur provided there is adequate exposure to Ly"
Cleary, sufficient exposure to the school language is essential for the development of academic skills. However, equally or more important is the extent to which students are capable of understanding the academic input to which they are exposed. In the case of minority students this is directly related to the conceptual attributes which have developed as a result of interaction in their $L_1$. Unfortunately, Cummins (e.g. 1979) and Cummins and Swain (1986) rely primarily on test data and they do not question the usual definition of reading as the ability to perform well on a reading achievement test, the definition of writing as the ability to work sheet-type exercises on vocabulary, synonyms, analogies etc. These definitions equate literacy with performance in discrete, otherwise purposeless tasks intended as practice for some other time. Thus, Cummins' hypothesis may be further refined as follows:

"To the extent that instruction in $L_x$ is effective in promoting proficiency and literacy in $L_x$ as measured by tests, transfer of this proficiency and literacy to $L_y$ will occur provided there is adequate exposure to $L_y$ (either in school or in the environment) and adequate motivation to learn $L_y$ and to perform well on tests".

Cummins (1984b) reconceptualized the general theoretical model of BICS and CALP along two continua of language proficiency as related to academic achievement (Figure 2.4):
The extremes are described in terms of "context-embedded" vs "context-reduced" language activities. In context-embedded communication there is a wide range of meaningful paralinguistic and situational cues and participants can actively negotiate meaning (e.g. by providing feedback that the message has not been understood). Such communication is typical of the everyday world outside the classroom. Context-reduced communication, on the other hand, relies primarily on linguistic cues to meaning and thus successive interpretation of the message depends heavily on knowledge of the language itself. The linguistic demands of the classroom reflect communicative acts which are close to the context-reduced end of the continuum.

The upper parts of the vertical continuum consist of communicative tasks and activities in which the linguistic tools have become largely automatised (mastered) and thus require little active involvement. At the lower end of the
continuum, there are tasks and activities in which the communicative tools have not become automatised and thus require active cognitive involvement.

The framework retains the BICS/CALP distinction. BICS concerns the first quadrant (A), CALP the fourth (D). It has the advantage of not dichotomising and of showing better the developmental nature of language proficiency in L₁ and L₂.

Bilingual education programmes should aim to foster high levels of proficiency in both languages (Cummins and Swain 1986:6). Different educational treatments for minority and majority language children will be needed to achieve this goal. For majority children large doses of education in their L₂ will be required, whereas for minority language children large doses of education in their L₁ will be necessary. The way to achieve high levels of bilingual proficiency is to promote the development of the minority language (the non-dominant, non-prestige language) in school. In societal situations where there is likely to be serious erosion of the first language, it is particularly crucial that school programmes aim toward its development and maintenance. According to Cummins' interdependence hypothesis, such an educational programme will support second language development as well.

Cummins' hypotheses have been accepted and applied by some bilingual education researchers (e.g. Baker 1988; Danesi 1990; Housen 1993), and criticized on various grounds by others (e.g. Edelsky et al. 1983; Martin-Jones and Romaine 1986; Rivera (ed.) 1984a). The major criticisms may be summarized as (see Baker 1988):

1. The theory is not expanded to acknowledge ethnic, cultural, social, political, community, teacher expectations, motivation, attitude and home factors, each of which may affect and explain school achievement. The relationship between language and social situation is not fully explicated. The high success of certain Asian groups and lower success of working-class children needs an explanation not covered by the theory. "Social
and cultural factors may be much more powerful than purely linguistic factors in influencing educational achievement" (Troike 1984:49).

2 The definition of school success tends to be narrow, and centres on the dominant, traditional, middle-class indices of achievement (e.g. literacy). Alternative outcomes of schooling (e.g. self-esteem, employment, attitude to continued learning) are not highlighted.

3 The relationships between similar constructs and the relationships of constructs to valid and reliable measurement are questioned (e.g. the relationships between linguistic skills, cognitive competence, academic skills, learning and cognitive retardation).

4 The research data provide pooled, averaged results. Variation within a class or group is rarely examined and individual exceptions are rarely explored. The effect of individual personality factors, for example, is not included.

5 The theoretical framework still requires empirical confirmation. The theory provides hypotheses which need testing in a variety of contexts. However, Martin-Jones and Romaine (1986:30) have doubts about the possibility of fully testing the theory (e.g. "the skills involved in CALP are related to culture-specific types of literacy" and hence are not comparable).

6 Terms such as BICS and CALP tend to be vague, value-laden, in danger of acquiring credence beyond their empirical validity, and exist on a continuum and not as a dichotomy. Just as Basil Bernstein's restricted and elaborated codes became simplified and misused, so these BICS and CALP labels may create over-simplification and stereotyping. (Note that Cummins developed the continua described above in response to this criticism).

Thus the major criticism of mainstream language education policies, is that they do not seriously take account of the numerous contextual factors that play a significant role in educational processes, including language acquisition. This is especially significant in bilingual education which is so closely related to societal factors. Effective bilingual education is neither a simple nor an automatic consequence of using a child's home language in school (as in
bilingual support in the U.K. and heritage language education in the U.S.), or a second language as in immersion programmes. A variety of home and parental, community, teacher, school and societal effects may act and interact to make bilingual education more or less effective.

Among the factors affecting the performance of language minority children in school, especially in learning the second language, and the success of bilingual education are the following:

**Learner age**
The learners' age interacts with cognitive factors. Skutnabb-Kangas and Toukomaa (1976) and Kerr (1984) report that older Finnish learners submerged in Swedish do better at school than younger learners. This, they interpret as a result of having acquired greater competence in L₁, i.e. reached the required threshold level for easier transfer of learning to L₂. However, age is also related to the amount of exposure the learner has had to the second language; the number of years he/she has lived in the L₂ dominant environment; and the actual degree and quality of exposure the learner has had to the outside environment (Tosi 1984; Moffatt 1991; Krashen et al. 1979; Izzo 1981).

**Students' motivation and self-concept**
Attitudes towards language, towards learning and towards first and second language learning are a significant motivational factor that can enhance or set-back achievement at school (Ellis 1985; Baker 1988). Both Lambert (1977) and Gardner (1985) include motivation and language attitudes as a central part of their models of (bilingual) language learning. Individual differences such as personality characteristics, intelligence, language aptitude and situational anxiety are other relevant and important factors in the learning context.

**Socio-economic status**
Minority language learners are almost always at a social and economic disadvantage. They belong to powerless groups and generally experience poverty, especially in the initial years of settlement in the host country. Rosenthal et al. (1983) compared the differences in achievement of Spanish-
dominant and English-dominant language elementary students in the U.S.. They found that most differences in achievement between the two groups was attributable to the poor socio-economic status of Spanish-dominant students. Once socio-economic factors are controlled, the effects of language become negligible, and in fact, the Spanish-dominant group occasionally show an advantage on the English-only students. (See also De Avila 1981; Moore and Parr 1978).

**Parental support for the education programme**

The experiences in Canada, Ireland and Hong Kong illustrate the potential and the limitations of bilingual schools.

In Canada, parents' perceptions that immersion is educationally sound has given rise to rapid expansion of immersion programmes across Canada (Cummins and Genesee 1985).

In Ireland, parents' and teachers' concerns about the educational wisdom of educating children from English-speaking homes through Irish was an important factor in the decline of Irish-immersion schools in the past. More recently, however, there has been a growth in parental interest in all-Irish medium primary schools (Murphy, personal communication).

Similarly, in Hong Kong, parental views on the medium of instruction has resulted in an increase of English-medium schools. The government was concerned that English-medium education places too great a learning burden on pupils, and so tried to promote the use of Chinese as a medium of instruction in schools. This, however, met with great resistance from parents who believed that such a move would adversely affect their children's career prospects (Gibbons 1989). The result has been an increase in the number of English-medium schools and a corresponding decrease in Chinese-medium schools.

**Characteristics of the community**

One of the objectives of education is to provide manpower for spheres of activity in government and administration. It is likely that the official language of the
country will also play an important part in educational policy and that knowledge of the official language will be a condition of entry to official posts and will be needed for communication between governors and governed (see Emenyonu 1989).

Other relevant characteristics of the community include, for example, social standards of linguistic competence; the distance (perceived) between the language spoken in the home and that used in the classroom (Tosi 1984); cultural factors such as religious beliefs or conflicting value systems (e.g. dress, food) which may affect attitudes towards the minority group and motivation for learning; other demographic and geographical factors such as the size of the minority group and the shape of settlement.

For instance in 1982, one-third of all foreigners in Germany were under 21. Furthermore, there is a very high birth-rate among Turkish families who account for half the total of new births among migrants. This means that a large number of Turkish children will be receiving their education in Germany, probably in a second language (German). Also in Germany, the Frisian minority for example, is dispersed and enjoys no legal rights. The Danish minority, in contrast, is well-organized, is close to the country of origin and enjoys special legal rights and financial aid. Thus, the Danish children have a wider variety of facilities for learning and maintaining their first language when compared to the Frisians.

The Linguistic Minorities Project (1983; 1985) carried out in the U.K. provides a model for producing a linguistic profile of relevance to education. This project conducted surveys in England, and established a range of linguistic diversity in all the schools. It looked for the extent of literacy in minority languages, and conducted interviews to find out about use of minority languages by adults and their attitudes to language teaching provision. It provided useful information on the existing provision for minority language teaching (see also Alladina and Edwards (eds.) 1990-1991).
2.2.3 Conclusion

In order to be valid, the evaluation of bilingual education needs to represent a wide spectrum of interests and viewpoints of participants, and to encompass a great variety of cognitive and non-cognitive outcomes (Baker 1990).

Moffatt (1991) stresses that it is important in making decisions about the assessment of bilingual children to be informed about the overall linguistic skills of the child. These, she suggests, are apparent in natural non-test situations where a combination of mother-tongue and second language skills are employed pragmatically, including the effective use of code choice according to interlocutor, audience, topic and activity.

Baker (1990) suggests that *degree of progress* should be an important issue in the assessment of bilingual education in addition to a comparison in the level of performance achieved.

Other factors that need to be examined in the evaluation of bilingual education are: (i) pupil characteristics e.g. age, motivation, attitudes, years and quality of exposure to L₂; (ii) school and programme factors e.g. curriculum organisation (see section 2.4.3 below) and resources; (iii) teacher characteristics; (iv) parental involvement; and (v) contextual elements e.g. power relations between the groups involved and their socio-economic status, culture and tradition. Hoffman (1991:306) concludes that

"environmental, as well as psychological factors, then, can be seen to have a bearing on second language acquisition. They will often co-vary and cause a chain reaction, either increasing or decreasing the pressure and/or opportunity to acquire ... (German)".

There is a need for improved research methods into bilingual education and programme evaluations in order to determine which programmes are most effective with which types of children in which locations (Baker and de Kanter 1983; Walker de Felix 1990; Jacobson 1990; Martin-Jones 1993a).
The empirical part of this thesis is intended as a fact-finding exercise about the medium of instruction in Maltese secondary classrooms. Bilingual education in Malta is not planned: there is no statement of policy. It takes place by accident rather than by choice. In the light of the above, in our description of the bilingual medium in Malta we take into account the social context and the perceptions of those involved.

2.3 Language distribution options in bilingual education

Very little research has been carried out on the issue of how the two languages are distributed for content instruction in bilingual classrooms. Interest in the motivations and functions of bilingual medium is quite recent and is on the increase (e.g. Taha 1989; Ndayipfukamiye 1991; Lin 1990; Rubagumya 1993; Martin-Jones 1993a; and the first BAAL Seminar on "Bilingual Classroom Discourse" held at Lancaster University, July 1993).

Jacobson (1990) proposes a basic typology of three categories of bilingual methodology with ten sub-categories of language distribution patterns. The relationship of these categories is illustrated in Figure 2.5 below:

The category described as "merging" is problematic. Jacobson (1990) does not provide any justification why "immersion" and "submersion" education are grouped together as a "merging" category. In fact, the bilingual methodology proposed in each of these programmes is that of language separation. In what follows, the language separation and concurrent approaches are discussed.
2.3.1 Language separation approaches

The insistence on language separation as a medium of instruction comes from the belief that it would lead to uncontaminated acquisition of either language, whereas the concurrent use of both languages would lead to confusion, language mixing and inadequate language development in both languages (see Tikunoff 1985; Tikunoff (ed.) 1983; Wong Fillmore 1980; 1982). Language separation is one way of approaching the child’s learning through two languages allowing him/her to become bilingual by means of two monolingual processes in which he/she associates one language with some experiences and the other language with others.

The two languages of a bilingual programme, usually the majority and the minority language, can be separated on the basis of four criteria i.e. person, location, subject and time. Each of these is described below.
Separation by person (teacher)

<table>
<thead>
<tr>
<th>TEACHER A</th>
<th>TEACHER B</th>
</tr>
</thead>
<tbody>
<tr>
<td>language A</td>
<td>language B</td>
</tr>
</tbody>
</table>

This requires the presence in the classroom of two teachers one of whom communicates consistently in the first language, and the other in the second language. In this approach the children become accustomed to the fact that a given language is chosen according to the person whom they address.

In this type of bilingual instruction a teacher and a bilingual aide work together in the classroom using a team approach. For example, in Britain the monolingual class teacher uses English and works together with an aide, usually a native speaker of the language of ethnic minority children, who translates the lesson or generally talks to the children in their mother-tongue (Thompson 1991; Martin-Jones and Saxena 1993).

The biggest problem with this approach is the lack of availability of bilingual teachers (see Scarcella 1990; Reisner 1983). When more than one minority group is represented in the classroom there is a further difficulty of needing more than one bilingual aide. Sometimes there may even be difficult working relationships between the classroom teacher and the bilingual aide. The extent to which the two work together varies greatly from one classroom to another (Thompson 1991; Martin-Jones and Saxena 1993).

Separation by location

<table>
<thead>
<tr>
<th>ROOM 1</th>
<th>ROOM 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>language A</td>
<td>language B</td>
</tr>
</tbody>
</table>

A different language is used in different classrooms attended by the same children (see Cohen 1975:104-106). Where different rooms for these language-
controlled activities are unavailable, activity centres can serve the same purpose of serving as a cue for the child to respond to, as described for example, in Carrasco (1981).

The major difficulty of this approach is that language separation by location is a rather artificial way of separating language use. Bilinguals do not generally use each language separately on the basis of location only.

**Separation by subject**

<table>
<thead>
<tr>
<th>CONTENT A, B, C</th>
<th>CONTENT X, Y, Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>language A</td>
<td>language B</td>
</tr>
</tbody>
</table>

In this type of bilingual programme some subjects or topics are taught in one language and other subjects are taught in the other language.

The decision about which school subjects or topics are to be taught through which language could be either content-sensitive or content-insensitive (Jacobson 1990:5). The latter would involve a random split between school subjects such that one language is assigned as a medium of instruction to one set of subjects and the other language to the remaining set of subjects. The former would involve the assignment of languages on the basis of some appropriacy criteria. This presents the difficulty of having to support the notion that one linguistic system is good, say, to teach social studies but not math or science and the other system, to teach math or science but not social studies.

The separation by subject approach is observed in Malta, for example, where the written medium for some subjects is Maltese (in state schools) and for other subjects it is English (see chapter 5, section 5.1). The choice of Maltese for subjects like Religion and Social Studies is probably related to the fact that these are more easily treated in Maltese because textbooks in Maltese are available. On the other hand, the rest of the subjects have not yet been treated in written Maltese and so English is prescribed as the written medium.

42
The method of language separation by subject is commonly used in language immersion programmes in Canada (see Genesee 1983), and in more recently developed immersion programmes in, for example, Australia and Hungary. In Hungary, mathematics, history, physics, and geography (apart from English itself) are taught through English in the first year of the programme. Biology is added in the second year (Duff 1991). In Australia, subjects taught in German are science, art, and P.E. (immersion in the latter two subjects was discontinued due to lack of interest), while music and social studies are taught partially in German and partially in English (Clyne 1991). The latter programme in Australia combines the separation by subject with a separation by person approaches.

Separation by time

<table>
<thead>
<tr>
<th>MORNING/DAY 1/ ETC</th>
<th>AFTERNOON/DAY 2/ ETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>language A</td>
<td>language B</td>
</tr>
</tbody>
</table>

In this option each language is used at a different time, e.g. one language in the morning and another language in the afternoon, or one language one day alternating with another language the next day. This approach has been observed in the Philippines by Tucker (1970:281-300) and in the U.S.A. by Legarreta (1977; 1979).

Like Jacobson (1990) argues, all language separation approaches involve artificial ways of separating language use - i.e. in real life bilinguals normally codeswitch and experience overlap in the use of each of their languages.

Both Faltis (1990) and Lin (1993) report that the strict separation of two languages as required by most bilingual programmes is not faithfully adhered to in classroom practice. For example Ndayipfukamiye (1991) finds that in Burundi, at the transitional year when the medium of instruction changes from Kirundi to French, both languages are used (i.e. there is a certain amount of codeswitching). For a review of studies on codeswitching in bilingual education see section 2.3.3 below.
2.3.2 Concurrent approaches

The two languages involved in the bilingual education programme may also be used concurrently. Jacobson (1990) identifies four sub-categories of concurrent approaches to the bilingual medium. In concurrent approaches each language is used "at the same time" to ensure that the teacher's information is fully comprehended. There are no arbitrary limits on the use of either language but there are patterns of language distribution (except in flip-flopping according to Jacobson 1990).

The Preview/Review Approach
In this approach, each unit of teaching is presented first in $L_1$ and repeated in depth in the second language or vice versa.

The problem of this approach is that the child may internalize a watered-down version of the topic unless he/she can understand the language in which the in-depth treatment of the topic is conducted (see the review on Concurrent Translation Approach below).

The Concurrent Translation Approach
In this bilingual method the teacher consistently alternates between the two languages. Everything is repeated twice with the idea that the student will learn the second language as a result of immediate feedback in the $L_1$.

Baker and de Kanter (1983) criticize this method on the grounds that the translation of everything into the child's first language may prevent him/her from developing the required proficiency in the second language; the child may simply switch off during the instruction time in $L_2$.

Krashen (1985:18) also criticizes this language distribution pattern on the assumption that it blocks comprehensible input. He argues that in this type of bilingual programme there is no need to "negotiate meaning"; the child does not have to listen to the message in the second language, since he knows it will be
repeated in his first, and the teacher does not have to make an effort to make the input in L₂ comprehensible.

Another problem with the use of translation is that it might substitute actual explanation of concepts (Eddie Williams, personal communication 1993). Some examples of this are found in Rubagumya (1993) where the teacher translates some terms without explaining them, and in fact the learners show that they have not understood the meaning of the terms, but receive no further help.

Similarly, Thompson (1991) found that the translation provided by teachers often was not a full translation but a "condensed version and seen as supplementary to the English exposition. Nor was it carried out consistently every time there was an exposition" (p.37).

**Flip-flopping**
Jacobson (1990) refers to those cases where the teacher appears to switch languages without following any pattern as "flip-flopping". He describes it as a "random process which disregards any principle of unilingual consistency" as in bilingual conversation.

Jacobson (1990) however, is mistaken in considering codeswitching as a random activity. Below (section 2.3.3) we report several studies on codeswitching which show that it follows certain patterns, has certain motivations and performs a number of functions in discourse and in classroom pedagogy.

**The New Concurrent Approach**
This new method has been proposed by Jacobson as an alternative to the other concurrent approaches. It is structured in terms of four criteria (Faltis 1990:47):
1. Both languages are to be used for equal amounts of time;
2. The teaching of content is not to be interrupted;
3. The decision to switch between the two languages is in response to a consciously identified cue;
4. The switch must relate to a specific learning objective.
The teacher may decide to switch on the basis of the following needs (Faltis 1990:50)
1. for conceptual development in the native language - hence a switch from the second language to the native language;
2. to review a lesson previously taught in the native language - hence a switch from the native language to the second language;
3. to capture attention of students who are distracted - hence a switch to the students' native language;
4. for immediate praise or reprimand - hence a switch to the students' native language.

In the New Concurrent Approach switching must only be teacher-initiated; the alternation occurs mainly between "thought groups"; and only when the teacher can justify it on "several grounds"; this dual language use is consciously incorporated in the lesson in response to "certain cues" that the teacher wishes to acknowledge (Jacobson 1990).

Unfortunately Jacobson (1990) does not specify what he means by "thought groups"; what the "justification grounds" for codeswitching are and why he chose them; which "cues" the teacher should acknowledge; and why intersentential but not intrasentential codeswitching is accepted. We do not know why the teacher is allowed to codeswitch but the learners aren't. Furthermore we do not envisage how teachers could be expected to be able to justify each codeswitch before doing it when we know that codeswitching is a natural and spontaneous phenomenon in bilingualism.

2.3.3 Functions of codeswitching in the classroom

In this section we look specifically at the way codeswitching functions as a communicative and pedagogical tool in a variety of bilingual classrooms. We outline the results of six studies of bilingual classroom interaction. These studies have been carried out in a variety of sociolinguistic settings ranging from secondary schools in Hong Kong to primary schools in Friesland to the University of Khartoum, Sudan. The methodology used for the analyses of
naturalistic classroom data in each case has been ethnographic, or social interactional as described by Lin (1990). These are the studies:

* Ytsma (1988) focused upon aspects of language choice and the functions of Frisian-Dutch codeswitching in two primary bilingual classrooms in the Netherlands where Frisian and Dutch officially have an equal position as subjects and as media of instruction.

* Taha (1989) researched the "Arabicisation" process of Higher Education in Khartoum University, Sudan. He analysed codeswitching from Arabic to English in Arabic medium classes and from English to Arabic in English medium classes.

* Tuson (1985, 1990) explained Catalan-Spanish codeswitching in two Catalanian school settings where Catalan is the official medium of instruction: a primary school and a teacher training college.

* Lin (1990) examined the codeswitching behaviour of a bilingual teacher in an English language lesson at secondary level in Hong Kong.

* Ndayipfukamiye (1991) reported findings about the functions of codeswitching in three Burundi primary classrooms (grade 5) at a stage of transition from mother-tongue medium (Kirundi) to French medium of instruction.

* Merritt et al. (1992) looked at codeswitching in three Kenyan primary schools: one was English-medium, one was a Swahili-then-English medium, and another was Luo medium with English and Swahili as subjects and with English as medium from standard 4 onwards.

The various patterns or motivations for codeswitching discovered in each of these studies are tabulated in Table 2.2. They are presented in descending order on the basis of frequency across studies.
Table 2.2: The functions of codeswitching in bilingual classrooms

<table>
<thead>
<tr>
<th>Motivations for codeswitching</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Co-occurring with an aside or digression, especially a diversion from the pedagogic topic</td>
<td>Taha '89</td>
</tr>
<tr>
<td></td>
<td>Lin '90</td>
</tr>
<tr>
<td></td>
<td>Tuson '90</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td>2. To translate or give meaning of a term</td>
<td>Taha '89</td>
</tr>
<tr>
<td></td>
<td>Lin '90</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td></td>
<td>Meritt et al. '92</td>
</tr>
<tr>
<td>3. To elaborate on new information; sometimes the need is signalled by the learners</td>
<td>Taha '89</td>
</tr>
<tr>
<td></td>
<td>Lin '90</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td></td>
<td>Merritt et al. '92</td>
</tr>
<tr>
<td>4. As an elicitation technique; to involve the learners in the interaction</td>
<td>Taha '89</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td></td>
<td>Merritt et al. '92</td>
</tr>
<tr>
<td>5. To evaluate or comment on a learners' contribution in the same language</td>
<td>Taha '89</td>
</tr>
<tr>
<td>(accommodation)</td>
<td>Lin '90</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td>6. When doing comprehension checks</td>
<td>Lin '90</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td></td>
<td>Merritt et al. '92</td>
</tr>
<tr>
<td>7. To specify a particular addressee</td>
<td>Ytsma '88</td>
</tr>
<tr>
<td></td>
<td>Tuson '91</td>
</tr>
<tr>
<td>8. For affective reasons, e.g. expressing a personal relationship with the students</td>
<td>Taha '89</td>
</tr>
<tr>
<td></td>
<td>Lin '90</td>
</tr>
<tr>
<td>9. Co-occurring with a change in topic or activity</td>
<td>Tuson '90</td>
</tr>
<tr>
<td></td>
<td>Ndayipfukamiye '91</td>
</tr>
<tr>
<td></td>
<td>When quoting in another language</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>Discourse marker switching e.g. to mark a point in the interaction</td>
</tr>
<tr>
<td>11</td>
<td>Text-oriented switching, when referring to written materials in the other language</td>
</tr>
<tr>
<td>12</td>
<td>Use of terms in the other language, for lack of appropriate vocabulary</td>
</tr>
<tr>
<td>13</td>
<td>To attract attention, e.g. to emphasize certain points</td>
</tr>
</tbody>
</table>

From the results summarized in Table 2.2 we observe that a number of characteristics are common to bilingual classrooms.

All the codeswitching reported takes place in teacher discourse (except in Tuson 1990) who also looked at learner talk. In all the classrooms observed by these researchers, the teacher dominates the classroom: he/she organizes all the pedagogic and communicative activities. Hence, the functions of codeswitching are largely related to organizational activities: topic management (nos. 1, 9, 11, 14); classroom management (nos. 4, 5, 6, 7, 8) and for the effective transmission of knowledge (nos. 2, 3, 12, 13).

In all the six contexts a specific policy regarding the medium of instruction exists. In all but one setting (Friesland), only one language is officially recognized as medium at each level of the education system or in a particular class. However, we have enough evidence to understand that regardless of the policy, bilingual teachers codeswitch languages.

Lin (1990) reminds us that codeswitching is one more device in the hands of bilingual teachers for effective teaching and classroom management.
Codeswitching is an important addition to the bilingual teacher’s repertoire of communicative resources in the classroom (e.g. Lin 1990; Tuson 1991; Merritt et al. 1992). In these classrooms, codeswitching is used alongside other devices available to all teachers such as intonation, silence, clapping of hands, lowering of voice, knocking on the desk or blackboard to obtain the attention of the learners or to elicit a response.

Codeswitching functions are similar across education levels: primary (Nyapipfukamiye 1991), secondary (Lin 1990) and tertiary (Tuson 1991; Taha 1989); and across bilingual contexts: post-colonial multilingual Africa (Kenya, Burundi, Sudan); native minorities in Europe (Catalonia, Friesland); and bilingual states (Hong Kong; see Part B of this thesis on Maltese classrooms). Thus, not only is codeswitching a universal phenomenon in bilingualism; its functions are very similar across different sociolinguistic contexts.

2.3.4 Conclusion

Baker and de Kanter (1983) evaluated over 135 American studies on bilingual education. They conclude that having teachers or other adults available in the classroom who speak and understand the minority children’s language is probably an essential feature of any successful programme. Furthermore they suggest that:

* official recognition of L₁ by the school should have positive effects on student motivation;
* in order to learn, students must be allowed to ask questions in L₁ until they are able to formulate them in L₂;
* the occasional use of L₁ may be very effective in keeping the students engaged in the learning tasks.

Jacobson (1990) reports that according to his research results in the U.S.A., the two most effective bilingual methods are language separation by topic and the new concurrent approach. Educational goals were achieved in these programmes as the children became proficient in the second language (English)
and developed their mother-tongue to a degree that allowed them to learn through either language. "The unproven hypothesis that children will mix the languages when taught in a language alternation mode was rejected, at least when the latter is, as in the new concurrent approach, a carefully structured approach" (Jacobson 1990:15).

Jacobson's (1990) conclusion about the superiority of certain bilingual methods over others must be treated with caution. First of all we do not know how his research was conducted; secondly we do not understand the criteria he imposes on the use of two languages in the new concurrent approach; thirdly the evidence provided by Legarreta (1977; 1979) shows that there may be underlying features or a hidden agenda in a bilingual programme that need to be examined carefully, as outlined below.

Legarreta (1977; 1979) carried out a longitudinal study on the effects of five different programme models on the acquisition and maintenance of Spanish by native Spanish speaking kindergarten children. The five programmes were (1) submersion in English; (2) submersion in English with daily ESL; (3) bilingual concurrent translation; (4) bilingual, alternate immersion, half-day Spanish/half-day English, with little or no repetition of the same material; (5) bilingual, concurrent translation and daily ESL. The results of this study showed that a balanced 50% Spanish and 50% English was only imparted in the alternate immersion approach (4). The concurrent translation approach provided 28% Spanish and 72% English. On the whole the bilingual treatments (3) - (5) produced significantly greater gains in English oral comprehension and communicative competence in both Spanish and English.

Furthermore, it is important to note that in the concurrent translation method, English was used by teachers (who talked 80%-85% of class time), for warming or accepting the child's contribution, for directing and for correcting children. 76% of all disciplinary speech was conducted in English. Indeed this was frequently the only reason the teacher would switch from the child's first language to English. This suggests that quantity or amount of time dedicated to a language is not the whole story. The quality, or reasons for using that
language are equally important. For instance, the fact that English is widely used for classroom management purposes may pass on a covert message that English is the language of power - and this may perpetuate the minority students' feeling of inferiority.

In recent literature, codeswitching is increasingly understood as an additional communicative resource in the hands of bilingual teachers (see e.g. Lin 1990; Tuson 1985; 1990). The belief that codeswitching in the classroom may be harmful to the language learning process has not been proved (or disproved). It is very difficult to isolate the medium of instruction as an independent variable as opposed to, for example, the syllabus and teaching materials as the dependent variables. Many societal issues intervene in language learning processes (e.g. the status of each language in the community, the attitudes of the learners to the speakers of the other language and to language learning). For this reason each bilingual approach needs to be evaluated in the light of its societal context.

Hornberger (1990) concludes that in many cases, bilingual schooling is especially effective when the programme incorporates language use patterns that are familiar to the students, i.e. language use at home and within the community at large.

In Maltese education we find an important distinction in the choice of language as medium between the written and the spoken modes. In the use of language for written purposes there is a separation by subject approach. In the spoken mode, however, there is no formal policy and the use of codeswitching is common. Like Hornberger (1990) finds in Peru, language use patterns in Maltese classrooms are similar to those found within Maltese society. This is discussed in later chapters.
2.4 Issues in the choice of medium of instruction in post-colonial multilingual countries

Most research on bilingual education is about "biculural education" (e.g. Byram and Leman 1990; Shapson and D'Oyley 1984). This is because the language education of minority children is associated with their cultural education and the maintenance of their L1. However, there are multilingual societies around the world where language education through a second language, or international language, may not necessarily entail bicultural education. Language education issues in these contexts are treated separately in this section.

Examples of this context are found in some Southern American states e.g. Peru; some African states e.g. Tanzania, Kenya, Nigeria, Burundi; and some South Asian states e.g. India.

These countries share a dilemma that could be described as the tension between two driving forces at the politico-linguistic level. On the one hand they strive for modernization and for participation in world affairs through the use of an international language which has also acquired functions locally; on the other hand they wish to preserve their cultural identity and to promote local languages. The use of an international language is related to social survival and individual advancement, while the employment of one or more indigenous languages in education and in state affairs can be associated "with a period of cultural resurgence, and eventually with the growth of democracy" (Dakin et al. 1968:25).

These contexts are characterized by value conflicts and ambivalence in their language education practices (see Emenyonu 1989; Serpell 1989; Rubagumya (ed.) 1990; Phillipson 1992). The main questions in educational language planning in these contexts are:
should the medium of instruction be the mother-tongue (of which there are usually many in the country), a local lingua franca e.g. Swahili in Tanzania, or an international language e.g. English?

should the mother-tongue be used as a medium of instruction and for how long?

at which level of the education system should the international language be enforced as medium?

which vernacular languages should be taught as subjects?

2.4.1 The use of the mother-tongue in education

There are various arguments in favour of, and against, the choice of either a mother tongue or an international language as a medium of instruction. The arguments put forward against the use of the mother-tongue are usually used to favour the use of a second language.

Arguments for the use of the mother tongue

A child's mother-tongue is the most suitable medium of instruction for cognitive, educational and social reasons. Dakin et al. (1968:28) say that in India, for example, those children who receive an education through the vernacular in the long run outstrip the children who go to English medium schools due to their better grasp of general subjects learnt in the vernacular. (See also UNESCO 1953:691; the discussion in section 2.2.2 and Cummins 1987; Cummins and Swain 1986; Swain 1979; Swain 1983).

The use of the mother-tongue at school softens the shock that the child undergoes in passing from his home to his school life and promotes a better understanding between the home and the school. For the child, the mother-tongue is the system of meaningful signs which he uses automatically for expression and understanding. For successful cognitive development learners need to be able to ask questions in a language they are familiar with and to discuss that knowledge, thereby relating and integrating the new knowledge to the known. The child learns more quickly through it than through an unfamiliar linguistic medium.
In post-colonial multilingual countries the use of vernacular languages in education would promote the local culture and identities of indigenous populations giving them a sense of pride and motivation.

The use of the mother-tongue would lessen the gap between those who have access to the international language and those who don't, so that the latter would stand a better chance of furthering their education, and for upward social mobility.

**Arguments against the use of the mother tongue**

Linguistic, political and other arguments of practicality are often put forward against the use of the mother tongue in education.

The main practical contention in post-colonial countries is that there are too many mother-tongues. Many of these countries contain within them a large number of languages, e.g. Tanzania 135 (Fasold 1984:266); India 845 (Le Page 1964:53); Nigeria 400 (Emenyonu 1989). If each of the indigenous languages were to be given a place within the education system, this would impede national unity. It will encourage ethnic factionalism and not enough time will be left for a lingua franca to be learnt as required.

The numerous mother-tongues make it financially impossible to provide enough trained teachers and adequate teaching materials for each language.

The major linguistic argument is the lack of development of the indigenous languages. For a vernacular language to be accepted as either a subject of instruction or as a medium of instruction it has to be standardized. This involves the creation of a written form, or graphization, and processes of elaboration and modernization. Fishman (1977:37) argues that when a language moves into functions for which it was not previously accepted or employed, its modernization becomes necessary if it is to be able to fulfil its new roles. Technical, commercial and scientific terminologies and styles will have to be added. The greater the modernization of the language the more the possibility of it being used as a medium of instruction at higher levels of education.
The choice of a standard form for use in education is not simple. It involves various considerations which render the decision-taking process a difficult and complex one. For example, Walker (1984) mentions three linguistic axes: the temporal, the areal and the societal. The temporal axis involves considerations of language change over time which might make choice of linguistic norms difficult for a fast evolving language in contact with other languages. The areal axis refers to the variants of the same language spoken in different geographical locations which might make the choice of one problematic. The societal axis alludes to the fact that the choice of the norm often depends upon the degree to which the elitist group is capable of influencing the relevant authorities in establishing their dialect as the standard norm.

Slabbert (1993) argues that the concept of "mother-tongue" requires redefinition in the context of multilingual urbanized situations such as that of South Africa. "Mother-tongue" is a foreign concept in black society. It is the father's language and not the mother's that is used at home and that children grow up with. Furthermore, the notion of "mother-tongue" assumes that it is a single language. Slabbert explains that most of the eleven major South African languages are spoken in urban areas such as Soweto. The result is multilingual speakers, and for many speakers, a multilingual home situation showing crosslinguistic influence and multiple switching between as many as five languages. "Street-Tswana" for instance, would be Tswana based interspersed with elements of the other Sotho languages, English and Afrikaans. For many speakers the "street language" is also a home language, in other words one of the "mother-tongues". Therefore it is difficult to speak in terms of one home language as many speak more than one language at home. Furthermore, cultural identity is often unrelated to the language or languages acquired in the initial stages of life.

The educational argument against the introduction of the L₁ in education, is that with the mother-tongue the students will not get anywhere. They already speak it. They need to learn other languages to communicate with speakers of other mother-tongues in the same country, for international communication and to acquire a literary education (see Serpell 1989; Emenyonu 1989).
Arguments for the use of the international language

The arguments outlined above against the use of the mother-tongues favour the use of an international language. The need for, and the utility of a second language for self-advancement at the individual level and for international communication at the societal level is generally not contested (see for example Emenyonu 1989; Serpell 1989).

Emenyonu (1989) explains how the status of English in Nigeria is ambivalent: English is politically resented but in school it is emphasized as relevant to further intellectual pursuits and success in careers. It is a passport to academic and professional success, while the local languages are regarded as second best for educational purposes. Furthermore there is a lack of materials and teachers for the native languages.

The world-wide dominance of English in published academic writing, especially in scientific and technical fields is a serious constraint on the use of a national language and grants English an important place in education (see section 2.5).

Arguments against the use of a second language as medium of instruction

In post-colonial countries it is the colonial language, e.g. English, French, or Spanish that is designated medium of instruction at late primary, secondary and tertiary levels. According to Phillipson this has lead to linguistic imperialism (1988, 1992).

Phillipson (1988:344) refers to instances where a knowledge of English is seen as synonymous with having an education and is the real key to success. In such cases the mother tongue is merely tolerated and sometimes even rejected as a subject of education by its own speakers (see Fishman 1976; Skutnabb-Kangas and Cummins 1988; and Cheshire et al. 1989). The allocation of material resources to English and not to other languages is a system which qualifies the few and disqualifies the many. It has the consequences of forcing teachers to use a language of which they have inadequate command and the children benefit little linguistically and in content. The focus on English stigmatizes the local languages, and the professional guidance from native
English speaking countries is of dubious relevance to multilingual countries because of their linguistic, pedagogic and cultural inappropriacy.

This thesis is supported by Rogers (1989) who believes that there are cases where it is certain that students would be losing instead of gaining by being forced to learn through an L₂. Trappes-Lomax (1990) argues that a language such as English in Tanzania cannot effectively function as a medium of instruction when it does not serve any other communicative purposes intranationally, e.g. as a language of wider communication between speakers of different vernaculars, or as an official language used in public administration, the law and political activity.

Cooper (1989:112) summarizes the issue in this way:

"education is, from the state's point of view, a primary means of social control. From the individual's or family's point of view, it is a primary means for social mobility. It is scarcely surprising that the language of instruction should be an important political issue".

The actual implementation of change in the medium of instruction from that of an international colonial language to a local language is a difficult one (see Taha 1989 on the Arabicization of the curriculum at Khartoum University). It needs to be carefully planned and carried out in accordance with the wishes of the population (see Hornberger 1988; Ashworth 1985).

2.4.2 Language across the curriculum

Ferguson (1988:44) argues that each stage in the education process at school cannot be seen on its own. In fact, although pupils move from primary to secondary to tertiary levels in this order, whatever knowledge is required at higher levels exerts influence on what takes place at the lower levels. For example, Dakin et al. (1968:7) note that in India a gulf appeared between primary education in the vernacular languages on the one hand, and secondary education in English on the other.
At tertiary level in developing countries a world language is normally used as a medium of instruction, e.g. English in Tanzania and Nigeria, French in Burundi, Spanish in Peru. This is more practical in terms of the availability of books, journals and training of teaching personnel. Furthermore, the indigenous languages usually lack the linguistic resources to serve effectively as a medium of advanced study until they undergo the required processes of language development.

At secondary level then it is necessary for the students to acquire enough proficiency in the language used at tertiary level. At the same time it is also desirable for socio-political reasons to teach and possibly use the L₁ as a subject and as a medium at least for some subjects. Mother-tongue education enhances the importance of the local language, helps maintain the child's cultural and psychological identity, and makes education more accessible to all indigenous language speakers.

At primary level some countries officially accept the use of local languages during the first years of primary education, e.g. Kirundi in Burundi (Ndayipfukamiye 1991), Quechua in Peru (Hornberger 1988), the local languages in Zambia (Trewby 1983). After the first few years of primary education, a language foreign to the learners is generally enforced as medium for the reasons outlined above (see Ndayipfukamiye 1991 on Burundi; Rubagumya (ed.) 1990 on Tanzania):

<table>
<thead>
<tr>
<th>Years 1 to 3</th>
<th>Mother-tongue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 4 onwards</td>
<td>Second language</td>
</tr>
</tbody>
</table>

What in fact happens, especially in those years where the official medium is a second language, is that teachers and learners codeswitch between the mother-tongue and the second language (see section 2.3.3 above).
2.4.3 The teaching of languages as subjects

Language education policies involve important decisions. For example, decisions have to be taken about which languages are to be included in the school curriculum; which language variety is to be proposed as a model; how many hours are to be dedicated to each language, e.g. whether a language should be compulsory or optional; and how the syllabus is to be designed. Each of these issues is outlined below.

The choice of languages as subjects in schools are related to those of a choice of medium. Language teaching is often intended to complement the languages used as media in such a way as to further the aims of language education. The teaching of international languages as subjects permit partial reconciliation of conflicting objectives, e.g. in providing access to the literature of science and technology (Ferguson 1988:66).

In post-colonial multilingual countries the teaching of vernacular languages as subjects involves processes of graphization, standardization and cultivation. Syllabi have to be written; materials have to be produced for use in schools; and teachers trained to teach the languages. These are expensive programmes and require many co-ordinated efforts at various levels, e.g. the production of grammars and dictionaries and their adaptation for use in classrooms.

In countries where there are many small languages, a few of the more used languages are usually selected and developed as required for instruction in schools. The lesser used languages are invisible at policy level and in planning for language in education. For example in Nigeria with a population of 80 million and about 400 languages, English is the medium of instruction from the fourth year of primary school onwards. During the first three years some mother-tongues are used. Furthermore, each child is expected to learn one of the three major Nigerian languages: Hausa, Ibo and Yoruba.

The issue of choosing a particular language model for teaching in schools is directly related to the use of colonial languages in education. In British post-
colonial countries English continues to be used as a local lingua franca as in Nigeria, or as the language of education as in Tanzania. The institutionalization of English in a new cultural environment has meant that English has come to exhibit wider variability (see e.g. Richards and Tay 1981). This is discussed in section 2.5.2.

The number of hours to be dedicated to each language. After decisions have been taken regarding which language or languages are to be used as a medium of instruction, at which level each is to be used, and which languages are to be offered (compulsory or optional) as subjects, there sometimes can be a conflict as to how much time of the school time-table is to be dedicated to each language.

Social and political motivations often inform such decisions: the more politically dominant or socially valued a language is, the more time it is likely to be given on the curriculum. For example at secondary level in Malta, English is allocated twice as many lessons per week (6) as Maltese (3).

If English, or another international language is not used as a medium of instruction but taught as a subject, then it is likely that a large amount of time will be dedicated to its teaching, and much less time will be given to local languages.

The language curriculum. This is an important issue, but it is often not given much consideration at policy level. The difficulty with learning a language, and with its successful implementation as a subject, may not simply lie in the fact that it is a first or second language, but in the manner it is presented and taught in the classroom (see Dakin et al. 1968:22).

Ashworth (1985) outlines a number of characteristics of the language curriculum which may determine the outcome:

- goals of the programme;
- the theoretical model on which the curriculum is based;
the design of the curriculum;
the linguistic and cultural content;
the method used in the classroom (audio-lingual, cognitive-code, silent way, communicative approach etc);
the techniques used in the classroom (drills, small group-work; field trips etc);
the degree of emphasis placed on each of the four skills of listening, speaking, reading and writing.
the availability and/or choice of print and non-print materials;
the adequacy and funding for the programme;
the length of the programme and the frequency with which the class meets;
the size of the class;
the range of ability levels and ages within the class;
the qualifications of the teaching staff (pre-service and in-service).

Any resolutions regarding the teaching and the use of language in education must be consonant with the existing patterns of social interaction and with the role of languages in social life. As has been argued in section 2.2.3, many non-linguistic variables need to be taken into account in addition to linguistic and educational factors, in the implementation and evaluation of language education programmes.

2.4.4 Conclusion

Language education policies should be understood in the light of a host of societal factors. The success of education programmes depend on the social and historical forces of the context. If the content and methodology applied are not in line with the needs of the learners and the expectations of the society concerned, it is not likely that language teaching will be successful (see Phillipson 1992; Criper and Dodd 1984; Batibo 1990).
2.5 English language norms in education

The choice of norms in language education has a particular significance in relation to English because of the special status of the language world-wide. This is due to (i) the spread and use of English across linguistically, culturally and politically diverse areas — unprecedented in its rate and degree (Ferguson 1981:x), and (ii) the rise of new varieties of English (Kachru 1983:36; Fishman 1982:16). It is estimated that about two-thirds of the world's scientific publications, 80% of information in computer data and 75% of world mail is in English.

The spread of English, and the institutionalization of non-native varieties of English have been ably and interestingly discussed by a number of writers (e.g. Smith (ed.) 1983; Kachru (ed.) 1982; 1983; 1992; Platt et al. 1984; Judd 1989; Cheshire (ed.) 1991 and in the journals World Englishes and World English). The main concern here is to examine the implications of the emergence of these non-native varieties for language education policy. In other words, at what point and how, if at all, should they be given formal recognition in the education system (see Ferguson 1988).

2.5.1 The choice of a model

At the individual level, English is spoken as an additional language (second or foreign) to varying degrees of competence - from "broken" English to having an almost native "ambilingual" competence (Kachru 1982:2). This is reflected in the range of English varieties at the societal level. This range is described in terms of a lectal continuum ranging from a basilect (or pidgin English), to mesolect (middle variety), and an acrolect (a local educated variety of English). Not all speakers control all the lects which are in functional distribution.

Such variety in the type of English spoken gives rise to a central issue in education: which variety is appropriate as a model to be passed on (prescribed) to students? The dilemma lies in the choice between the local acrolect
(endonormative choice) and a standard, native variety of English - on the question of "standard English" see Strevens 1983 - such as British English (exonormative choice). We shall now outline the arguments surrounding the issue of English language norms in education.

One of the main arguments against the recognition of non-native varieties as models for teaching purposes arises from the fear that these varieties may in time become mutually incomprehensible, undermining English's usefulness as an instrument for international communication (see Nelson 1982).

Prator (1968) for example, thinks that its recognition would lead to loss of "widespread intercomprehensibility". He, therefore, proposes that only a native British or American standard be recognized as an adequate model for teaching (Prator 1968:469):

"...if teachers in many parts of the world aim at the same stable, well-documented model, the effect of their instruction will be convergent...if many diverse models are chosen...the overall effect is bound to be divergent. Widespread intercomprehensibility will be lost with no corresponding gain in intelligibility".

In support of this position, Prator claims that second language varieties are inherently more unstable than mother-tongue varieties; that every concession to non-native models has a multiplier effect, and that therefore it is unwise to tolerate deviation at one level of a language because of its effect on other levels.

There are, however, according to Quirk (1981), counter-balancing unifying forces at work. These are (i) the influence of broadcasting; (ii) popular music; (iii) more widespread opportunities for travel. To these one might add the diffusion of data in English on computers, e.g. electronic mail, and the large number of publications in English. Variation in the written language is less marked than in spoken English, and this helps "...transcend the vagaries of pronunciation" (Quirk 1981:154).
For instance, Smith and Rafiqzad (1983) and Smith and Bisazza (1983) have concluded, on the basis of studies in varies countries, that international intelligibility of spoken English does not seem to be threatened by the fact that it is used by non-native speakers of it.

Smith and Rafiqzad (1983) conducted a study to test the claim that a native variety of English is more likely to be intelligible to others (and hence should be the model in education) than the educated variety of a non-native speaker. Their empirical study involved 1,386 people from eleven countries. They found that native speaker phonology does not appear to be more intelligible than non-native phonology, and therefore there is no reason to insist that the performance target in the English classroom be a native speaker.

Similarly, Smith and Bisazza (1983) conducted a study in seven countries to test college students' comprehensibility of three varieties of English (Indian, Japanese, American). They concluded that one's English is more comprehensible to those people who have had active exposure to it (irrespective of whether it is native or non-native). They suggest, therefore, that students of English should have exposure to both native and non-native varieties of English in order to improve understanding and communication.

There are a number of scholars who believe that it is indeed appropriate to teach a non-native variety of English rather than a British or American standard (e.g. Kachru 1983; Richards and Tay 1981).

First of all, teachers in these countries are non-native speakers of the language. For this reason the choice of a local variety of English as a model in education is most practical. In most developing countries the school population has expanded enormously since Independence. For most of these students, English language learning serves the purposes of intranational not international communication, the latter being the province of the privileged few. In these circumstances one may again question whether it is appropriate to teach with reference to an external model.
An endonormative model would also serve the political purposes of disassociation with former colonial rulers and help in the democratization process where language education is developed under local control.

There is an increasing linguistic literature on the new varieties of English which has led to a greater awareness of their characteristics. While this has enhanced the feasibility of their use as teaching models, there are, as yet, few descriptive grammars, textbooks and classroom materials available.

2.5.2 Implications

In summary, there are difficult choices to be made. On the one hand nationalistic forces and the practical circumstances of English point to the recognition of non-native varieties as models for teaching purposes. The resulting differentiation in target models would at least acknowledge the different purposes for which English is used, e.g. its institutionalization in different countries. At the same time it might free the teaching of English from residual ethno-centric overtones, and allow for valid expression of national distinctiveness (Ferguson 1988:76).

On the other hand, there is a need to preserve intercomprehensibility between varieties so that English continues to fulfil the international functions on which its wider utility is based.

As a strategy for overcoming the problems and finding compromise between the conflicting arguments related to the choice of English language norms in education, the following elements might be useful:

(a) emphasis on the variegated nature of English.
It should be acknowledged in English language teaching that there is some variability in the nature of the English language; both in native Englishes (e.g. British, American, Australian) and in non-native Englishes (e.g. Indian and various African Englishes). As Smith and Bisazza (1983) and Smith and
Rafiqzad (1983) show, it is useful for students of English to be aware of these distinctions and to familiarize themselves with the differences.

(b) **explicit recognition and discussion of the various forms of English appropriate for use in different situations**

Richards and Tay (1981) distinguish three functionally differentiated sub-varieties of non-native Englishes; a basilect (low), a mesolect (mid) and acrolect (high). These sub-varieties are complementary as each lectal variety is used in different contexts and not all speakers control the full range. A polymodel approach to the teaching of English would see the task as one of "lectal expansion (from mesolect to acrolect)" (Richards and Tay 1981:55). It would refer to the appropriacy of each variety according to interlocutor, topic, situation etc. Native Englishes should also have a part in the general English curriculum, especially for those students who are likely to use English for international communication or particularly for communication in English native speaking contexts (e.g. for education in the U.K. or the U.S.A.).

(c) **a distinction between spoken and written norms**

Written English is more uniform world-wide. In written English syntax should not deviate substantially from a standard native variety. Speaking is different, however. "...In matters of pronunciation, stress, rhythm and intonation, the acrolect would serve as a teaching model" (Richards and Tay 1981:55).

2.6 **Summary of Issues: the Maltese context**

The Maltese population is described as bilingual in Maltese and English (Azzopardi 1981:2; Kontzi 1983:351; Cremona 1990:163). Most Maltese people are able to speak and write in both Maltese and English.

Bilingualism in Malta exists on two levels:

(i) **At the level of the bilingual individual who learns and uses both languages from childhood;**
At the societal level each language is used for several purposes and sometimes there is an overlap when both are used in the same situations as in the classroom.

Bilingual education in Malta takes place by accident rather than by choice. The use of English in education is a result of British colonialism (1800-1964). Maltese is increasingly being promoted and its use is related to the need of participants to communicate in their first language. Language distribution at policy level is largely by subject, such that a few subjects are examined in Maltese, a few in either Maltese or English, and most in English.

Micro-level analysis of language use in the Maltese classroom reflects macro-level societal bilingual use of Maltese and English. The factors that influence code choice are established in chapter 5; codeswitching motivations and functions are described and exemplified; while formal analysis of codeswitching is carried out in chapter 7.

The importance of English in education in Malta has increased in post-colonial Malta largely due to two factors:

(i) English has become a world language; it is the main language of technical, scientific and academic writing.

(ii) English is necessary for economic survival in Malta where the largest industry is that of tourism (with 50% coming from the U.K.).

English language teaching in Maltese schools is based on British texts, often produced for native speakers of English (see Appendix 7). The "exonormative" model of British English is considered appropriate by the population. These issues are discussed in the next chapter.
CHAPTER 3: MALTA: A DESCRIPTIVE OVERVIEW

3.0 Introduction

In various parts of chapter 2 we underlined the importance of the context and situational variables in bilingual education. In view of this, this chapter presents an overview of the geographic, demographic, historical, economic, political, cultural and sociolinguistic factors in Malta. We survey the use of Maltese and English at the societal level, and explore the results of previous questionnaires on language use and language attitudes in Malta. This information provides a background to the contextual factors that affect languages in education.

3.1 The Maltese background

3.1.1 Geography

The Maltese Islands consist of Malta, Gozo, Comino and two other very small uninhabited islands - Cominetto and Filfla (Figure 3.2). They are strategically situated in the middle of the Mediterranean Sea, at latitude 35° North and longitude 14° East. Distances to the nearest points in Europe and North Africa are 93 km and 288 km respectively (Figure 3.1).

The total land area of the Maltese Islands is 316 sq km. The main island of Malta covers an area of 246 sq km and Gozo that of 67 sq km. The longest distance in Malta from the south-east to the north-west is about 27 km, and the widest distance in the east-west direction is 14.5 km. Gozo is smaller - the corresponding distances are 14.5 km and 7.2 km respectively. The island of Comino is smaller still, and has a total land area of 2.7 sq km.

The climate is typically Mediterranean with hot dry summers and cool but not very wet winters. Most of the landscape is barren with expanses of small terraced fields. Massive urban development has recently taken over much of the countryside especially in central areas.
Geographical proximity to Italy, as well as cultural factors account for the popularity of Italian in Malta. It is possible to travel to Sicily and back in one
day. Rome is only one hour flight away and many short and long stays in Sicily and Italy are popular with Maltese people. Some Maltese people like to do their shopping in Italy. This had become especially fashionable in the early eighties when importation of goods to Malta had been restricted by the government. It is possible for the Maltese people to do this because most of them are proficient enough in Italian to be able to travel there whether on holiday or on a shopping spree.

3.1.2 Demography

The population of the Maltese Islands is about 350,000 (1988). It has been steadily increasing recently, due partly to natural reasons, and partly to an increasing migration balance, reflecting the socio-economic development of the country. Population projections indicate a total population of 375.8 thousand in the year 2000 (Figure 3.3) of which something like 80 to 82 thousand are expected to be in full-time education and a further 60 thousand will be over the age of sixty (Figure 3.4). Table 3.1 compares the birth, death and fertility rates of Malta to those of the U.K.

Table 3.1: Birth, death and fertility rates (1985-1990)

<table>
<thead>
<tr>
<th></th>
<th>Crude birth rate</th>
<th>Crude death rate</th>
<th>Fertility rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malta</td>
<td>14.7</td>
<td>9.8</td>
<td>1.90</td>
</tr>
<tr>
<td>U.K.</td>
<td>13.4</td>
<td>11.9</td>
<td>1.80</td>
</tr>
</tbody>
</table>

Figure 3.3: Population trends

(source: Educational Planning Section 1990)

Figure 3.4: Population structure

(source: Educational Planning Section 1990)

72
Table 3.2: Population density (1988)

<table>
<thead>
<tr>
<th>Population in millions</th>
<th>Density of population per sq. km.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malta</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>1,076.0</td>
</tr>
<tr>
<td>U.K.</td>
<td>57.08</td>
</tr>
<tr>
<td></td>
<td>233.8</td>
</tr>
</tbody>
</table>


The population density in Malta is the fifth largest in the world (The Economist Book of Vital World Statistics 1990) - Table 3.2. Living conditions are very comfortable for most of the population (e.g. most people live in large houses with plenty of spacious rooms; 70% of the population own their own home). However, as a result of high population density and the small size of Malta, the social networks are very "dense" (see Milroy 1980). The notion of social network is a useful one in this context and so we shall review it briefly.

In social network studies the individual is viewed as someone who interacts meaningfully with other people. Each person is viewed as a focus from which lines radiate to points (persons with whom he is in contact). These persons who are linked directly to "ego" (the focus) may be characterized as belonging to his first order network zone. Each of these people may be in contact with others whom ego does not know, but could come into contact with via his first order zone.

A person's network is said to be dense if a large number of the persons to whom ego is linked are linked to each other (see diagram).

In Malta, as a result of high population density, and of the small size of the island, social networks are also "dense". For instance wherever you go you are likely to meet someone you know or who knows your father or your cousin etc. Often, people living in the same street work in the same place and attend the same club. This, in fact, extends beyond the shores of Malta, e.g. among the
Maltese people I know in Edinburgh two were former colleagues of mine, one was my teacher and two were friends of my friends.

Milroy (1980) reports that normally type of social network, i.e. dense or open, is related to social status. For instance, low status speakers interact mostly within a defined territory and a given person's contacts will nearly all know each other. On the other hand, the "elites" would have an "open" personal network where each person's contacts would not necessarily know each other.

In Malta social networks are dense for everyone. In fact, they may be even more "dense" for members of the professional classes because they are very few in numbers. Hence, social network density needs to be understood in terms of population density, size of the land, and availability of persons from similar social and educational echelons.

Dense networks are generally considered to function as norm enforcement mechanisms. For instance, fashions spread very quickly. In fact, in Malta it is very difficult to be "different"; social isolation is almost impossible. The pressure for achievement, i.e. for upward social mobility has spread very quickly and forcefully. It has resulted in an increase of parents who speak in English to their children because they believe that this will help their children in their education (see Ellul 1978). There is an obsession among many Maltese parents with having their children "pass exams" and with learning and acquiring knowledge such that many children attend several private lessons after school, e.g. music lessons, religion lessons, academic lessons etc.. I know groups of parents who take it in turns to drive their children around to all sorts of lessons. This is probably a result of dense social networks.

Maltese people abroad
While the population of the Maltese Islands is less than half a million, another half a million Maltese immigrants are scattered around the world, mainly in Australia, Canada and the U.S.A.. Melbourne, Australia boasts to be the city with the largest Maltese population in the world!
Clyne (1982) compares the language shift to English of various immigrant groups in Australia. He finds that from those groups whose languages are structurally closer to English, the Dutch have the highest language shift in the first generation. The Italians have a low rate of language shift. The language that is structurally most distant to English is Maltese and the shift to English among Maltese-born is medium to very high. This is an unexpected result and Clyne (1982:35) explains it in this way:

"The Maltese have undergone strong cultural influence from Britain and Italy, something that is reflected in the lexicon of the language. This together with the high status of English in Malta at the time when most of the Maltese emigrated, distorts the 'linguistic-cultural similarity continuum'. While there has been considerable linguistic and cultural nationalism in Malta over the past decade, this has affected only the Australian cities with large and well-organized Maltese communities, Melbourne and Sydney, where language shift is not so high. It also does not affect most of the anglophile and English school-educated sections of the Maltese community. The unusual history of the Maltese makes them an exception to many rules".

Second and third generation Maltese normally speak Australian, Canadian or American English as a first language. However, their variety is considered as sub-standard in, for example, Australia (John Gibbons 1993, personal communication).

Some immigrants are returning back to Malta. They usually have passive knowledge of Maltese and normally seek to acquire Maltese as a second language. Sometimes it happens that second and third generation Maltese in Australia, for example, learn a dialect of Maltese from their parents and grandparents and this would be the only variety they know. When they visit Malta they use it in all circumstances, including in situations which call for the use of the standard.

At school level there have been isolated efforts to teach standard Maltese as a second/foreign language. However, these efforts at present depend on the initiative of individual teachers (Spiteri 1992, personal communication).
Foreigners in Malta

Generally, not many foreigners in Malta attempt to learn the Maltese language. They do not need to know it because they can communicate with everyone in English and it is of limited use outside of Malta. However, there seems to have been a significant increase in recent years in the number of people who want to learn Maltese as a second/foreign language. The Education Department has recently started to organize evening courses for the teaching of Maltese as a second/foreign language. To cater for these needs, the threshold level course for the teaching of Maltese is being prepared by Borg and Mifsud (forthcoming).

3.1.3 Economy

Table 3.3 shows Malta's Gross Domestic Product (GDP) per head in US $ in 1988. GDP per head is often taken as an indicator of relative wealth, although it does not necessarily reflect the living standards of the mass population. Although Table 3.3 shows moderate growth, in 1990 GDP reflected a growth of 8.8%, while the inflation rate stood at 3% (Department of Information 1992b).

Table 3.3: GDP per head of Malta and a few other countries

<table>
<thead>
<tr>
<th></th>
<th>GDP per head in 1988 in US $</th>
<th>GDP average annual growth rate(1980-88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malta</td>
<td>5,057</td>
<td>2.6</td>
</tr>
<tr>
<td>Greece</td>
<td>5,244</td>
<td>1.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>4,017</td>
<td>2.2</td>
</tr>
<tr>
<td>Turkey</td>
<td>1,382</td>
<td>5.3</td>
</tr>
<tr>
<td>U.K.</td>
<td>14,477</td>
<td>2.8</td>
</tr>
<tr>
<td>Italy</td>
<td>14,432</td>
<td>2.2</td>
</tr>
</tbody>
</table>


The main contributors to GDP are the manufacturing industries which provide employment for about 25% of the gainfully occupied and other market services
A significant labour force expansion has been experienced over the past four years. The labour supply increased by 6.5%, while the unemployment rate declined to 3.6% in December 1991.

One of the largest industries in Malta is tourism. About a million tourists visit the island in any one year (compare to the local population of about 350,000). Half of them come from the British Isles. Most of the other tourists come from European countries and speak English as a second language. About 2% of the national income comes from visitors who come to Malta to learn English in the schools set up for the teaching of English as a second/foreign language (Department of Information 1992b). English is a very important asset for the economic prosperity of the country.
Concomitantly with an increase in the financial wealth and economic and political stability, there has been an increase of interest in higher education. The government's education budget increased from 49.2 US $ million 1987 to 75 US $ million in 1990 - Figure 3.6 (Educational Planning Section 1990).

From 1987-88 student intakes at Sixth Form and University levels increased so much that new buildings became necessary to house the student population. The government and the people understand that Malta, lacking in natural resources (except for the sun and the sea) needs to invest in the education of its own people to assure its continuing development and survival in a competitive world in the future.
As a result of the nationalist government’s economic reforms (since 1987), there has been an increase in local investment by Maltese and foreign companies. Figure 3.7 gives some indication of the individual wealth of the people, i.e. private consumption, and the number of televisions, cars, telephones.

3.1.4 History

Malta has a long and colourful history. It has been dominated by a succession of Mediterranean powers (Table 3.4). It enjoyed limited degrees of self-government at various stages of its history.

The various Mediterranean races that occupied the Maltese Islands over the centuries left their mark on the life of the inhabitants. Their heritage is evident not only in the architectural styles remaining but also in the "anatomy" of the language.
Table 3.4: Foreign rule in Malta

<table>
<thead>
<tr>
<th>Period</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neolithic Culture (pre-history)</td>
<td>3800-800 B.C.</td>
</tr>
<tr>
<td>Phoenician domination</td>
<td>800-700 B.C.</td>
</tr>
<tr>
<td>Carthaginian domination</td>
<td>700-218 B.C.</td>
</tr>
<tr>
<td>Roman rule</td>
<td>218-870 A.D.</td>
</tr>
<tr>
<td>Arab rule</td>
<td>870-1090 A.D.</td>
</tr>
<tr>
<td>Norman rule</td>
<td>1090 A.D.</td>
</tr>
<tr>
<td>Arabs expelled</td>
<td>1224 A.D.</td>
</tr>
<tr>
<td>Swabians</td>
<td>1266 A.D.</td>
</tr>
<tr>
<td>Angevins</td>
<td>1266-1283 A.D.</td>
</tr>
<tr>
<td>Aragonese</td>
<td>1283-1410 A.D.</td>
</tr>
<tr>
<td>Castilians</td>
<td>1410-1529 A.D.</td>
</tr>
<tr>
<td>Knights of St. John</td>
<td>1530-1799 A.D.</td>
</tr>
<tr>
<td>French rule</td>
<td>1799-1800 A.D.</td>
</tr>
<tr>
<td>British rule</td>
<td>1800-1964 A.D.</td>
</tr>
</tbody>
</table>

(source: various)

Edwards (1985:187) makes reference to the linguistic debate concerning the type of Semitic roots which the Maltese language possesses. He reports that:

"Members and supporters of the Malta Labour Party (generally pro-Arab) encourage the importance of Arab roots - these date from the ninth to the eleventh centuries - and there is some mutual intelligibility between Maltese and Arabic. Those who are anti-Arab support a Hebrew influence, which dates from late Roman times; this is the stance of many in the National Party. Some older Maltese stress earlier Phoenician roots. All these allegiances are complicated by religious and socio-economic differences. Finally, Italians have claimed that Maltese is a variety of their language".

These are very wide generalizations that Edwards makes. The debate surrounding the issue of the roots of Maltese had already started long before any of the political parties were established. For instance the belief that Maltese is of Punic origin was held by Quintinus (1536) and Agius de Soldanis
On the other hand, Viperano (1567) and Gesenius (1810) support the view that it is an African language of Arabic origin. While in the past there may have been individual political party members propositioning either view, it would be false to attribute such beliefs about the origin of Maltese to either political party at present.

Mifsud (1992) ably describes the structure of Maltese in terms of three strata:

* the Semitic stratum from which Arabic elements form the basis of the phonology, morphology and to a lesser extent the syntax of Maltese;
* the Romance superstratum, represented by a large stock of lexical, syntactic, phonological and some morphological accretions;
* the English adstratum, consisting mainly of lexical material.

The language question
There was an interesting and harsh debate on the choice of a national language for Malta towards the end of the nineteenth century and during the first decades of the twentieth century known as "The Language Question". It contributed to the emergence of the two major political parties in Malta (see Frendo 1975:3).

Towards the end of the nineteenth century and the beginning of the twentieth, feelings of nationalism came to the fore. Frendo (1975:22) describes the situation as a unique example:

"Nineteenth-century Maltese society is probably a unique example of the case in which trilingualism became a battle-ground in the successful quest for a national identity. Maltese nationalism rotated in time on this triple paradox: the championing of Italian as a non-Maltese national language; the active promotion of the British Imperial power as a means of expunging Italian; and the gradual emergence of Maltese as a national tongue and as the prime expression of anti-British sentiments."
The Language Question officially found an answer when in 1934 Maltese replaced Italian as the official language of Malta together with English. This is described by Frendo (1975:31):

"Paradoxically, the Maltese language emerged as a synthesis of the pro-English and pro-Italian rivalry. The Maltese vernacular served as a social and emotive bond and became a natural unifier. Both Anglophiles and Italophiles thus contributed, unwittingly to the success of Maltese nationalism and nationhood."

The Constitution
In 1964, Malta became an independent and sovereign state, enjoying full membership of the United Nations Organisation and the Council of Europe. In 1974 it became a Republic. In the Constitution of the Republic of Malta (1974), English together with Maltese is given official status, while the Maltese language is designated national language (The Constitution 1974, Section 5):

"(i) The national language of Malta is the Maltese language. The Maltese and the English languages and as such others as may be prescribed by parliament shall be the official languages of Malta and the administration may for all official purposes use any such language.

(ii) The language of the Courts shall be the Maltese language. Save as otherwise provided by Parliament, every law shall be enacted in both Maltese and English and if there is any conflict between the Maltese and English texts of any law, the Maltese text shall prevail."

3.1.5 Politics
The two major Maltese political parties, Labour and Nationalist, emerged towards the end of the twentieth century. During the first decades of their existence they battled against the colonial powers for constitutional reform which eventually lead to self-government.
The Maltese language acquired recognition as a result of pro-British and pro-Italian rivalry. Basically the Labour Party of the time was pro-British and for a time in the fifties wanted full integration with Britain. The Nationalist Party was pro-Italian, and some of its leaders (e.g. Herbert Ganado) were interned to Uganda during the second world war.

The foreign policies of the two parties have changed over the years. The Labour government of the seventies evinced an anti-British, pro-Arabic (namely pro-Gaddafi) policy. The teaching of the Arabic language in secondary schools was introduced as a compulsory subject but this was not welcomed by the population (see żammit Mangion 1992).

During the seventies there were attempts by the labour government to give more importance to Maltese products, e.g. campaigns to buy local products "Ixtri Malti"; the nationalization of broadcasting "Xandir Malta" instead of "Rediffusion" and "Television Malta", and the establishment of "Sea Malta" and "Air Malta".

There were a few attempts by broadcasting agencies to develop the Maltese language through its Arabic base. However terms such as "mitjar" for "airport" never caught on. These attempts failed because the Maltese people were not prepared to develop the Maltese language in a way that makes it sound more like Arabic. Maltese people prefer to use English and Italian terms and codeswitch to English as a sign of modernization and Westernization.

While the Labour government in the seventies wanted to Arabize the Maltese nation and failed, the Nationalist government at present¹ is determined to lead Malta towards becoming part of the European Community. This is reflected in some innovations in education.

¹In the General Elections of 1992 the Nationalist Party resumed power with a support of 52% of the electorate and a majority of three seats in Parliament, while the Labour Party obtained a support of 46% of the electorate. Over 96% of the population eligible to vote cast their votes.
Two new compulsory subjects have been introduced in schools since 1987 with the aim of "Europeanizing" the Maltese cultural ethos. At secondary level students are now taught to appreciate literary European texts in their original language. At Sixth Form level, a compulsory subject called "Systems of Knowledge" was introduced. It is designed with the aim of providing students with the opportunity to widen their academic interests - e.g. by acquiring and relating knowledge from fields such as History of the Mediterranean, History of Art, History of Science and Philosophy. A pass in the matriculation examination in this subject is a requirement for entrance to the University of Malta.

The Nationalist government has encouraged the use of Maltese by the civil service: two letters on the matter were sent to all government departments, see Appendix 11); various Ministries subsidize the publication of books in Maltese and on Maltese, and other activities such as the Meeting for Experts on Language Planning held in Malta in July 1992.

Party politics at present is not related to issues of language. Both political parties are in favour of the use of the Maltese language for local matters, and of English for international communication.

3.1.6 Education

Education is compulsory between the ages of five and sixteen. It is free of charge at all levels and students within the compulsory school age receive free textbooks and free transport to and from school. Practically all students in post-secondary education receive some form of state grant, generally subject to the condition that they perform one month of productive work each year in government or private organization.

State and Private Schools
Apart from state schools, several private Schools exist, largely run by church organizations (Catholic religious orders). These cater mainly for students within the compulsory school age bracket (about 30.5% of students at primary level
and for 46.7% at secondary level attend private schools) - Table 3.5. Church schools currently charge no fees and are subsidised by the State.

Table 3.5: Number of students and schools in the primary and secondary, state and private sectors

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRIMARY</td>
</tr>
<tr>
<td>STATE</td>
<td>PRIVATE</td>
</tr>
<tr>
<td>26,778 students</td>
<td>8,168 students</td>
</tr>
<tr>
<td>49 schools</td>
<td>25 schools</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECONDARY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SECONDARY</td>
</tr>
<tr>
<td>STATE</td>
<td>PRIVATE</td>
</tr>
<tr>
<td>14,790 students</td>
<td>6,913 students</td>
</tr>
<tr>
<td>25 schools</td>
<td>18 schools</td>
</tr>
</tbody>
</table>

(source: various)

According to the statistics shown in Tables 3.5, 3.6 and 3.7 there is one teacher per 10 students in state schools, and one teacher per seventeen students in the private sector.

Table 3.6: Teaching staff in the state sector (1992)

<table>
<thead>
<tr>
<th>Teachers</th>
<th>B.Ed. (Hons.)</th>
<th>628</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher's degree + P.G.C.E.</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Teachers' Training College</td>
<td>1833</td>
<td></td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>2611</strong></td>
<td></td>
</tr>
<tr>
<td>Instructors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>full-time</td>
<td>570</td>
<td></td>
</tr>
<tr>
<td>part-time</td>
<td>222</td>
<td></td>
</tr>
<tr>
<td>casual</td>
<td>184</td>
<td></td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>976</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Kindergarten Assistants

<table>
<thead>
<tr>
<th></th>
<th>full-time</th>
<th>part-time</th>
<th>casual</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>487</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>117</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>803</strong></td>
</tr>
</tbody>
</table>

Table 3.7: Teaching staff in the non-state sector (1992)

(it was not possible to obtain the pattern of teacher qualifications in the non-state sector).

<table>
<thead>
<tr>
<th></th>
<th>MALES</th>
<th></th>
<th>FEMALES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Religious</td>
<td>Lay</td>
<td>Religious</td>
<td>Lay</td>
</tr>
<tr>
<td></td>
<td>full-time</td>
<td>part-time</td>
<td>full-time</td>
<td>part-time</td>
</tr>
<tr>
<td>Church schools</td>
<td>46</td>
<td>41</td>
<td>134</td>
<td>21</td>
</tr>
<tr>
<td>Non-Church schools</td>
<td>2</td>
<td>-</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>48</td>
<td>41</td>
<td>163</td>
<td>22</td>
</tr>
</tbody>
</table>

**Structure of the Education System**

The Structural Diagram below illustrates the structural organization of the Maltese Education System. The following sections give an overview of the system.
Kindergarten Education

Kindergarten education is available for children who have attained the age of three years. The Law requires the State to provide a primary school in each village. Kindergarten centres are attached to each primary school. Attendance is entirely voluntary, and it is estimated that approximately 90% of three-year
olds and 95% of four-year olds are enrolled for kindergarten education (Educational Planning Section 1990:25).

**Primary Education**

Primary education lasts for six years, and co-educational primary schools generally cater for the needs of a particular self-contained community. Classes in primary school never exceed 30 pupils, and the majority of teachers are professionally trained (see Table 3.6).

Primary education is broadly divided into two cycles. The first three years emphasize social skills, pre-literacy and pre-numeracy skills, gradually progressing to more formal skills. In this cycle of primary education, as well as in the first year of the second cycle, all classes are of mixed ability and assessment is carried out by the school itself.

The second cycle of primary education is also of three years, and lays more emphasis on academic skills as children progress to secondary education. Assessment at this stage is more formal, and children are streamed during the last two years of primary school according to their performance in nationally set end-of-year examinations.

All schools provide remedial education on a withdrawal basis. The end-point of primary education is a qualifying examination leading to entrance into secondary education.

**Secondary Education**

Secondary education is in single-sex schools, of which there are two types in the State system: students who satisfy the requirements of a qualifying examination are admitted into Junior Lyceums; other students are admitted into area secondary schools.

The qualifying examination requires satisfactory performance in Maltese, English, Mathematics, Religious Knowledge (students may opt out of this examination on grounds of conscience) and Social Studies - the breadth of the
examination being intended to ensure adequate emphasis on all areas of the primary curriculum. Currently about 48% of girls and 38% of boys finishing primary school qualify for entry into Junior Lyceums.

In both types of school, the secondary course is five years long and is divided into two cycles as follows: an introductory two-year cycle where students follow a common curriculum which is compulsory and serves to orientate the students towards later studies; a more determinative second cycle of three years, during which students elect to study a limited number of subjects alongside a compulsory core curriculum. In general, students are guided to choose a range of subjects which will help them realize their vocational and higher education expectations.

Subjects taught are the following: Maltese, English, mathematics, physics, religion, physical education, integrated science, social studies; options from -Arabic, Italian, French, German, Latin, Russian, Spanish, chemistry, biology, human biology, Maltese history, European history, geography, accounts, commerce, economics, typing/shorthand, home-economics, needlework, art, music. All students study a minimum of three languages.

In secondary school, classes in the first two years have up to 30 students each; in the last three years, the class-size is a maximum of 25 students.

**Technical Education**

Technical education is available in a number of different schools. These generally fall under four main categories: Trade Schools, Technical Institutes, Specialised Training Centres and the Extended Skills Training Scheme (ESTS). The latter three categories provide post-sixteen education.

Trade Schools provide a craft-level technical education. Students generally enter Trade Schools after the first cycle of secondary education at their own choice. Some aptitude testing has recently been introduced to help them with their choice. The course is of four years duration, with the first year consisting of a series of modules of various trade bands (woodwork, automobile mechanics
and electrics, automobile body work, electrical installation, refrigeration, plumbing, bench fitting and general metalwork, electronic servicing, tailoring, hotel housekeeping, and traditional crafts). In each case the curriculum contains a core of academic studies (Maltese, English, mathematics) alongside trade-related theory and workshop practice.

Post-sixteen education is available to all students satisfying minimum entry requirements. There is a choice between those institutions providing university entrance courses and technical institutions.

Other Educational Provision

There are a number of other institutions which are designed to cater more closely for the needs of individual students. Opportunity Centres and Craft Training Centres are designed to provide remedial basic education and basic craft training for primary school graduates who have particularly low motivation or academic skills. The curriculum concentrates on basic numeracy and literacy, while providing elementary craft level training in a limited range of trades (e.g. pottery).

Special Schools provide education for children with physical or mental handicaps, as well as for children with serious behaviour problems.

The National Curriculum

The national minimum curriculum for kindergarten schools, published in 1989, lays emphasis on the socialization of the child, and encourages opportunities for guided intellectual, emotional and physical development.

A national curriculum was prescribed for all Primary Schools in September 1988, and for secondary schools in July 1990. Translation of the curriculum into learning objectives has been completed for primary schools, and new courses will be taught as from September 1990. A similar exercise for secondary schools started in October 1990.
Examinations
Examinations officially start in the fourth year of primary school and are held twice a year - in February and in June. The June examination results are used to stream pupils in their following year at school.

At the end of primary school students may opt to sit for the national Junior Lyceum examinations, a pass in which is necessary to attend the Junior Lyceums.

Secondary education leads to the General Certificate of Education at Ordinary Level; the University of Malta offers these examinations in an expanding range of subjects, but students still sit the examinations for several subjects offered by British Boards (Oxford and London Universities and City & Guilds).

Medium of Instruction
In the national report for Malta on The Development of Education 1988-1990 (Educational Planning Section 1990:10), reference is made to the Constitution of the Republic of Malta with regard to the recognition of Maltese as the national language and Maltese and English as the two official languages of the State.

There is no language policy with specific reference to medium of instruction in either state or church Schools (Scerri 1990, Ministry of Education, personal communication).

The only document that briefly refers to the medium of instruction is the recently revised National Minimum Curriculum Regulations (1989) according to which, at primary school level:

"Maltese will be the first language used in teaching but the teacher should also seek to speak English so as to accustom children to understand and speak the language. Those children who speak English at home should be trained to a more correct use of the language, in addition to their being taught Maltese".

(Schedule B.6)

Decisions have to be made, however, when new textbooks need to be produced locally or brought from overseas (usually Britain). In such cases there may be disagreements among educational officials about the choice of language. Textbooks are generally imported from the U.K., and the mathematics textbooks for primary level which were produced in Malta were also written in English with the excuse that they could be sold abroad, e.g. to Libya! This in fact never materialised with the consequence that some children (aged 7, for example) find it extremely difficult to understand some parts of the book (see Camilleri 1992b).

It seems to me that the issue of languages in education is not taken seriously at policy level. It is a sensitive issue because there are Maltese people in favour of English and others in favour of Maltese. Politicians probably prefer not to make public statements that would upset any section of the population. Usually no consensus is reached as far as spoken medium is concerned, and teachers are left to use "the medium which best communicates the concept at hand" (Scerri 1990, Ministry of Education, personal communication).

**Teacher Education**

All Maltese heads of primary schools, primary school inspectors and other high education officials were trained in the U.K. between 1881 until the 1960's (Zammit Mangion 1992:27).

Pre-service teacher training launched in 1944 was run by two British Catholic religious orders until the mid-seventies. Women teachers were trained by the Sisters of the Sacred Heart who ran a teachers' college in London (called "Digby Stuart" in Roehampton). Men teachers were trained by the De La Salle Brothers of the London Province. After 1957 the teacher training course in Malta was run on a two-year residential basis (Zammit Mangion 1992:56).
Teachers over thirty-five years in my lesson sample were trained in these Colleges. In chapters 5 and 7 we will see that they are more likely to use English as a spoken medium as a result of their education and teacher training through English. Younger teachers who have not experienced a strict English-education are likely to use more Maltese as a spoken medium of instruction.

Teachers, who now officially enjoy professional status, are being trained at the Faculty of Education of the University of Malta. Entry to the Faculty requires students to possess three subjects at Advanced level and five at Ordinary level. The four-year University course leads to a Bachelor of Education honours degree, and students are required to specialize in Education (theory and practice), a main and a subsidiary subject (taught in conjunction with the appropriate faculty and equivalent to general degree level in the main subject). Students also need to present a dissertation on a subject of their choice in order to fulfil the degree requirements.

Instructors (i.e. non-professional teaching staff) are recruited directly from suitably qualified persons. In the case of instructors teaching in technical and vocational education, entry qualifications are generally at technician level, although craft training in some areas is acceptable.

Kindergarten Assistants are recruited from persons who are a minimum of eighteen years old and who have a minimum of four O levels, including passes in Maltese, English and Mathematics.

**History of English in Education**

The use of English within the Maltese education system is a result of British colonization (for a history of education in Malta see for example Zammit Mangion 1992).

Up to the 1840's education in Malta was not organized and Blouet (1987:177) reports that it was described as "worse than that of the West Indies". As the administration started to think of setting up an education system, the choice of
a language as a medium of instruction came under consideration: should it be Italian, the language of the educated elite in Malta; should it be English, the language of the colonial powers; or should it be Maltese, the language of the people; and should Arabic be given a place at all in the curriculum?

Panzavecchia, a Maltese political figure, wanted the teaching to be in Maltese, but there was little available in terms of books, and little agreement on the form of the alphabet (Blouet 1987:178). In Keenan (1879) it was stated that Maltese should be the basis of instruction, and that English should be taught through the medium of Maltese. Italian was to be relegated to an additional, optional language which students might elect to take if they wished.

Knowledge of English by civil servants was enforced in the second half of the nineteenth century. This resulted in increasing efforts to teach and learn English. Sir Adrian Dingli, another Maltese political figure, pointed out, in an appendix to Keenan (1879) that the use of English among the Maltese had increased rapidly between 1851 and 1871.

Schooling was made compulsory for the first time in 1924 (Blouet 1987:178). We do not have specific information about the official medium of instruction in schools at the time. However Mr Ganni Cilia, headmaster at Mgarr primary school for forty years (from the late twenties to the late sixties) told me that Maltese was used as medium of instruction across the curriculum, and Maltese, English and Italian were taught as subjects.

Several private schools were opened by Catholic religious orders who came to Malta from Europe, mainly from Britain, during the nineteenth century and are still running to this day.

English was enforced in these schools at all times until the early seventies. Navarro and Grech (1984) report that in a boys' private school if a student was heard uttering a single word in Maltese, he would be handed a piece of metal on which was inscribed in Latin ACCIPÉ. This he would conceal in his pocket.
with the hope of being able to pass it on to another student as quickly as possible. He would lie in wait ready to catch out the next culprit, possibly his own best friend, whom he heard speak Maltese. At the end of the day the unfortunate fellow in possession of the **accipe** would present himself to the Prefect of Discipline and receive the allotted punishment, normally in the form of "six of the best" corporal punishment.

In a secondary school for girls (we are not told if it was a private or state school), Navarro and Grech (1984) say that much the same system was used: the flat metal piece being substituted by a brooch which could be concealed. It was referred to as **the pea** because of its shape, and the punishment in this case took the form of an hour's detention.

The preference for English as a language in education by school authorities during the twentieth century was due to its importance as a colonial language, and to its vast and respected literature. Maltese had been labelled as "the language of the kitchen" for many years and was not deemed appropriate for use by educated speakers, including students. The use of Maltese symbolised lack of education.

**Current educational administration**

**Historically,** the Maltese educational system was closely patterned on the English model. In recent years, in an effort to cater more precisely for the needs of Maltese society, there have been some modifications to the traditional pattern of education.

Currently, the overall control of education in Malta lies in the hands of the **Minister of Education.** It is in his power to change or create any education and/or language policies and his duty to secure the implementation of government policies and oversee compliance by both state and private schools. A Bill introduced in Parliament in 1989 (Bill 104 of 1089) includes a clause which empowers the Minister of Education to determine which subjects of instruction are to be taught through the medium of the Maltese language. No significant policies have been introduced in this regard. However other changes
within the education system that are related to language issues are under discussion.

For example, examination boards have been set up, consisting of members of staff of the University of Malta and officers from the education department, to review the local examination system. In the foreign language examinations (e.g. Italian and French) an oral component has been recently introduced, and a similar component is considered for inclusion in the Maltese examination. Local matriculation examinations in all subjects will replace the London and Oxford G.C.E. examinations by 1994 (Zammit Mangion 1992). As far as I know the language medium of the new matriculation examinations is not under discussion; English is likely to remain the medium (see chapter 9).

The Department of Education officials are qualified personnel in the field of education, with several years of experience in schools. They are responsible for the overall running of the schools, the recruitment of teachers, the administration of resources and general curriculum planning. At secondary level there are officials for each of the subjects on the curriculum, and each of these officials is responsible for that particular syllabus including the medium of instruction. However, none of these officials has specifically dealt with the issue of medium at the spoken level.

 Probably they consider English to be the best medium due to their British training (personal communication, education officer). At the same time they understand that the teachers need to use Maltese to make themselves understood. As far as I know inspectors do not usually comment about the use of language as a medium. In interview 2 (I. 550) I asked teacher P what language he uses when the mathematics inspector comes to class, and he replied in I. 552 "I-istess nuža I-istess lingwa nuža, cioe tahlita ta' Malti w Ingliz" (I use the same language, that is a mixture of Maltese and English).

At the University of Malta English was declared the only official language in 1947, while Maltese was declared official alongside English in 1971 (Aquilina
There is some pressure (e.g. by the Ghaqda tal-Malti a student body whose aim is to promote the Maltese language) to use more Maltese in official University correspondence.

I receive official correspondence from the University in both languages: generally the Rector of the University writes in Maltese while the administrative staff write in English. The latter are accustomed to writing in English as a result of their training. The Rector, who is a highly respected personality in Malta, makes a statement for Maltese each time he uses it.

The University of Malta influences the use of languages in education in three ways:

* by establishing entry requirements to the University, e.g. a pass in the Maltese matriculation examination is obligatory;

* through its Matriculation Boards of Examiners (now in conjunction with the Dept. of Education) who establish the language of the examinations, e.g. in Religion, Maltese History and Systems of Knowledge the candidate can answer in either Maltese or English;

* through the Faculty of Education which is responsible for all teacher training in Malta, e.g. some student-teachers are forced to use English as a medium during certain lessons because their supervisors were trained in the British tradition.

In interview 1, teacher D (Is. 280-284) reports that during one of her teaching practice sessions, the methodology lecturers criticized her for not using English all the time in the classroom. She thinks they are right because the book is in English: "ghax il-ktieb bl-Ingliż, l-eżami jridu jaghmluh bl-Ingliż, allura it makes more sense to explain in English" (because the book is in English, the (students) must sit for the exam in English, therefore it makes more sense to explain in
English) (Is. 284-286). However, she continues to explain, although she had made a decision during the first lesson of the term to stick to English, by the second lesson she had already switched to Maltese: "ghaliex ma kontx ihossnì nista' nikkomunika magghom bl-ingliż ma kontx ihoss li huma jifhmuni bl-ingliż biss" *(because I did not feel I was communicating with them in English I did not feel that they could understand when I spoke in English only)* (Is. 287-289) (see chapter 5).

3.1.7 Culture

The major features of cultural life in Malta are:

* interest in party politics;
* religion and religious ceremonies and festivals.
* football

The people tend to participate fully and enthusiastically in all the normal processes of democratic politics (about 97% of eligible voters cast their vote in the general elections held every five years). There are political party clubs in each town and village which are regularly attended in the evenings by members. These clubs organise large-scale activities for different sections of the village population, e.g. frequent coffee mornings for women, high teas for old people, parties for children etc. Mass meetings are held from time to time and become very frequent during the run-up to the elections. They often take the form of a half-day outing and are attended by about 35 to 50 thousand people.

The Catholic faith also plays a very significant part in the life of the Maltese. A high percentage of the population (over 75%) attend mass regularly on Sundays. Many religious feasts and celebrations are held throughout the year, both in-doors and out-doors. For example the yearly parish feast is accompanied by at least one week of events including fireworks, processions, street decorations, bands playing etc.
The most popular sport is football. There are several local teams and a national football team that competes at international level. It is interesting that in international football when the Maltese team is not involved, Maltese football supporters are divided into two: those who support the national Italian team and other Italian teams; and those who support English teams and the English national team. This however, is not related to language issues.

3.2 The Language situation in Malta

3.2.1 Domains of language use

Albeit a simplistic model in our context, it is useful to look at some domains and illustrate language use within them.

Administration

Parliament: Maltese is always used for all parliamentary purposes - debates and written records. It has been observed that the Maltese register of politics, like that of legal and literary studies is much more influenced by Italian than by English. Speakers in these domains are influenced by their studies of Italian and extensive reading of specialized texts in Italian.

Law courts: Maltese replaced Italian as the "binding" language and is now used in all court proceedings. The Minister of Education, Dr. Mifsud Bonnici, who is a lawyer, is quoted in the "The Times" (Malta) (Monday July 20, 1992, col. 2; see Appendix 10a) as saying that:

"In the courts, for example, the person who habitually speaks in English at home, may sound artificial and insipid even when this is not the case at all".

This reflects the fact that Maltese is clearly the language one is expected to use in the courts and if it is mixed with English the speaker will be stigmatized.
Civil service: Most administrative work in ministries, government departments, banks and private firms takes place in English. An increasing number of texts, such as letters from the bank and other official correspondence are bilingual (see examples in Appendix 9). Spoken interaction though, is most often carried out in Maltese.

The Catholic church: Following Vatican Council II (1964) which ordered the use of people's languages instead of Latin in religion, Maltese became the language of the church and is used in all activities and celebrations. A small number of services in English and other languages are held mainly for the benefit of visitors and other-language speakers on the island. Official documents are kept in English because they sometimes need to be consulted by the Vatican administration.

The media
Radio: A number of private and state-owned radio stations broadcast in Maltese. There are also a few local private radio channels in English.

Television: Until now there is only one local state-owned television station which broadcasts news, programmes on local culture and shows of entertainment (e.g. quizzes, sports, games) in Maltese in the evening. Films and documentaries are imported from the U.K., the U.S.A and Australia and are transmitted without any dubbing. During day-time a number of hours are dedicated to direct transmissions from the CNN, the BBC and French television. Furthermore, the Maltese television audience has access to a large number of Italian channels including state-owned RAI.

On the local television station I have noticed that sometimes English and Maltese are used concurrently as in the following examples:

- An advertisement just before Christmas showed Christmas wishes in English on the screen with voice over wishing a happy Christmas to the clients in Maltese.
The daily bank reports on exchange rates, the stock market etc. show tables and a summary of the main points in English on the screen with voice over in Maltese.

As in the administrative domain (civil service) and in education, in the media it also seems to be common practice to use English in writing and Maltese for spoken purposes. The reason for doing this on the television is, probably, to cater the needs of non-Maltese visitors to the island.

Cinema: All films shown in Maltese cinemas for the public at large are either in English or carry English sub-titles.

Theatre: Generally speaking most local theatre productions are in Maltese. The most popular theatre genre is known as "teatrin". Occasionally plays in English are also staged.

Publications: There are a few daily and weekly newspapers in both Maltese and English. A few periodical magazines and journals are also published in the two languages. A number of foreign newspapers and magazines are generally available. The publication of books in Maltese is on the increase. These are available for all ages and practically on all subjects.

Bilingual books are sometimes published on various subjects (for some examples see Appendix 8).

Work
In shops, factories, offices and other places of work, Maltese is generally used in spoken interaction while writing (e.g. receipts and letter heads) is more often carried out in English. However I have noticed an increase in the use of Maltese by clerks at the University of Malta and other offices when writing notes or memos for example.

It has to be pointed out at this stage, that in some places of work, as well as during leisure activities, a number of speakers normally interact in both Maltese
and English. In these cases it is not the domain or situation that dictates the use of a particular language variety but the linguistic habits and repertoires of the speakers involved. These largely depend on the speakers' family background (and type of education: state or private) which we discuss below.

Home
Four types of families (A to D below) are identified on the basis of (i) chronological acquisition of language varieties by the children, and (ii) their use of Maltese and English at home, implying a claim (based on informed observation) that the language acquired earlier is more frequently used.

Table 3.8: Language in the Maltese family

<table>
<thead>
<tr>
<th>Type</th>
<th>Language acquisition and use</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1. Standard Maltese; 2. English</td>
</tr>
<tr>
<td>C</td>
<td>1. Standard Maltese and English</td>
</tr>
<tr>
<td>D</td>
<td>1. English; 2. Standard Maltese</td>
</tr>
</tbody>
</table>

**Family type A:**
(i) a dialect of Maltese is acquired as a first language by the children. It is the first language of the parents and is spoken widely in the neighbourhood;
(ii) standard Maltese is acquired mainly through explicit teaching by the parents or other family members and by formal teaching at school;
(iii) English is also acquired formally at school.
(for a sociolinguistic study of this context see Camilleri 1987)

**Family type B:**
(i) standard Maltese is the first language of the family;
(ii) English is acquired through formal teaching.
Family type C:
(i) both Maltese and English are used interchangeably by the parents and children. This is a Mixed Maltese English variety acquired as a first language.

Family type D:
(i) English is spoken by one or both of the parents and is acquired as an L1 by the children.
(ii) Maltese is acquired later through formal teaching at school and through socialisation with speakers of Maltese.

Families of type A are found in the various villages around the island of Malta and in Gozo. They are also found in some central towns like Mosta and Birkirkara and in The Three Cities around the Grand Harbour.

Native speakers of standard Maltese (family type B) are found largely in towns like Valletta, Paola, Hamrun, Msida and Sliema all found in the eastern part of Malta. Although there may be slight variations in the standard Maltese spoken as a native language in the different towns these are minor ones; they are all accepted as standard forms.

Families of types C and D are associated with the Sliema - St. Julians conurbation. This part of Malta is considered as a "high class English-speaking" area. This has changed slightly recently. Old houses are being brought down and replaced by high rise buildings to accommodate a larger number of people from all over Malta. Furthermore, a number of families in other parts of Malta have started to use English at home.

It seems that language in family type A (and in some cases in family type B) is geographically determined while language in families type B, C and D are socially determined. Dialect speakers are generally stigmatized as "uneducated" and "unsophisticated" even when speak in standard Maltese. This is probably because they are associated with manual and farm work. Standard Maltese speakers and English speakers are more highly regarded probably
because they are perceived as having a higher standard of education. These attitudes are mere perceptions and do not necessarily correlate with reality. Nevertheless they can exert some force in shaping language use in Malta, e.g. a possible decline in the use of dialects of Maltese in favour of standard Maltese, and a more widespread use of a Mixed Maltese English variety.

Table 3.9 summarizes the use of Maltese and English in speech and in writing.

Table 3.9: Spoken and written use of Maltese and English

<table>
<thead>
<tr>
<th></th>
<th>MALTESE</th>
<th></th>
<th>ENGLISH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>spoken</td>
<td>written</td>
<td>spoken</td>
<td>written</td>
</tr>
<tr>
<td><strong>administration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>parliament</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>courts</strong></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>church</strong></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>b/casting</strong></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t.v.</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>radio</strong></td>
<td>+</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>theatre</strong></td>
<td>+</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>cinema</strong></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>newspapers</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>publications</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>work</strong></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>home</strong></td>
<td>+</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>education</strong></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

3.2.2 Language varieties

Although Malta is small in size there is a range of language varieties in use, namely varieties of Maltese and English. Italian plays some role. The teaching of Arabic has dwindled while European languages such as French, Spanish and German are acquiring more importance in school.
Arabic
As already mentioned in 3.1.1 and 3.1.5, attempts to raise the importance of Arabic in Malta failed. Between the late 70's and early 80's the teaching of Arabic as a language subject was enforced in all secondary schools (forms 1 - 5). Students received three hours tuition a week and a pass in the Ordinary Level Matriculation Examination was a requirement for entry to Sixth Form and University. Most of the teachers in schools were native Arabic speakers from Tunisia, Libya, Egypt and Iraq.

It was a very unpopular subject with the students for several reasons. The Maltese people in general resented the association with the Arab world due to religious and cultural differences and due to an increase of Arab terrorism in the world at the time. The teaching itself in schools was not very successful: the foreign teachers were not used to the Maltese education system; some had difficulty communicating with the students and maintaining classroom organization and discipline. Students in general found the language difficult to learn. Debono and Sammut (1982:4) in the secondary school annual examination report advise that,

"the very high number of students in ALL forms obtaining a low mark in Arabic, as well as the relatively high number of students also in ALL forms who absent themselves for the Arabic annual examination make it important that the inclusion of this subject as compulsory to all students in all forms to be re-studied by a special committee. Judging by these poor results obtained by students ... we cannot but conclude that in practically all schools the Arabic lesson tends to be a sheer waste of time".

In fact, soon after the 1987 national elections, when the Nationalist Party was elected to power, Arabic was demoted to elective subject and very few students now choose to learn it.

Italian
Italian is a very popular subject in schools. It is understood by a large majority of Maltese people and spoken by many others although it has limited functions on the island as a means of communication among Maltese people.
Italian television networks are very popular in Malta, and as already mentioned many Maltese like to go to Sicily for shopping. Italian does not play a role as a medium of instruction in schools, but it is gaining currency as a language of play among children who are exposed to it for many hours on television.

Italian influence on the Maltese language at present is most obvious at the lexical level, particularly in academic genres like literary criticism, music and the arts generally. This reflects the cultural proximity and the linguistic inclinations of those who have the power and authority to influence these genres (e.g. lecturers and students at the University of Malta; the most prolific literary authors and some journalists who obtained their training in Italy).

Other foreign languages
The most popular foreign languages as subjects at school are French, German and Spanish. Many people also attend regular evening classes in French and German organised by the Alliance Francaise and the German-Maltese Circle respectively (many also attend Italian classes at the Istituto Italiano di Cultura). These languages have instrumental value locally for those engaged in the tourist industry. However, Maltese people in general like to learn foreign languages.

Varieties of Maltese
Geographical varieties of Maltese differ from each other on all linguistic levels (although mutually intelligible to a large degree). Variation within villages themselves has also been observed (Attard and Caruana 1982). For linguistic descriptions of Maltese dialects see for example Aquilina and Isserlin 1981; Sciriha 1986; Camilleri 1987; Camilleri and Vanhove forthcoming).

Dialects of Maltese typically exist in a diglossic relationship with standard Maltese (see Borg 1980; Camilleri 1987). For type A speakers, dialectal Maltese characteristically serves Low functions: it is used with family members, at home, and in the village; and standard Maltese serves High functions: it is used in public, at work and in church, on formal and official occasions.
Standard Maltese is socially prestigious. It is a first language for a sizeable group of people concentrated mainly in certain urban areas, but a superposed variety for dialect speakers. Standard Maltese has been standardized: grammar books (e.g. Sutcliffe 1936; Borg 1981; 1988b); dictionaries (e.g. Serracino-Inglott 1984; Aquilina 1990; Buğeja 1982); books on idiomatic usage (e.g. Fenech 1980; Muscat Azzopardi 1975; Aquilina 1975; Bro. Henry 1977); and textbooks on correct spelling and writing (e.g. Fenech 1983; Diacono 1977).

The following will serve as examples of literature in Maltese: poetry (e.g. Buttigieg 1978, Cauchi 1983; novel (e.g. Sammut 1975, Borg 1984); drama (e.g. Aquilina 1969, Ebejer 1985, Calleja 1979); history of Maltese literature (Friggieri 1979).

There are many religious publications in Maltese which range from the monthly village bulletins to scholarly work about the Bible. The following are examples of religious books for young people - Giżwiti Maltin 1985; M.K.S.U. 1985.

The following are examples of pedagogical material in Maltese for children: writing, e.g. Zahra 1980; reading, e.g. Cutajar 1984; dictionary for children, e.g. Fenech 1982; reading comprehension, e.g. Casha 1984, Pace and Pace 1991; grammar, e.g. SKOLA 1988; workbooks, e.g. Puli 1990.

**Varieties of English**

English as used by speakers of Maltese was referred as *Maltese English* for the first time by Broughton (1976). It was also set forth by him as a realistic goal to aim for in the teaching of English in Malta. Maltese English as a term has since been employed to refer to the English spoken in Malta by other linguists (e.g. Borg 1980; Borg 1988a; Sciriha 1991). For linguistic descriptions of Maltese English see for example Delceppo (1986); Calleja (1987); Navarro and Grech (1984).

Maltese English is influenced by Maltese on all linguistic levels, namely phonology, grammar, semantics and discourse, but not on the lexical level, i.e.
there are no Maltese lexical items within a stretch of Maltese English speech. There is however, an influence from Maltese on lexical choice (see chapter 6). Thus, the cut-off point between the two varieties, namely Maltese English and Mixed Maltese English is here considered to be that of lexis. Mixed Maltese English, unlike Maltese English, consists of lexical items from both languages, and therefore involves various types of code-switching.

The statement about L₁ (Maltese) influence on English, is not only a linguistic one, but has psycholinguistic implications amongst others. For example, is Maltese always the base language, or L₁, for all speakers of English in Malta? Are there differences in the English of Maltese speakers depending on their home language background as outlined in Table 3.8 above? If so, what are these differences and how important are they in a classroom setting? Some tentative definitions of the speaker of Maltese English are presented below.

* those speakers born and brought up in Malta to Maltese parents and who acquired English after they had acquired a dialect or standard variety of Maltese (family types A and B);

* those speakers born and brought up in Malta to Maltese parents who acquired both Maltese and English as L₁ (as in family type C);

* those speakers born and brought up in Malta to Maltese parents whose L₁ was Maltese, or both Maltese and English. These speakers who acquire English as an L₁ are nevertheless exposed to the English of speakers with Maltese or Maltese and English (often Mixed) as L₁.

It seems to us that although the Maltese variety of English is influenced by Maltese on all linguistic levels, it cannot be considered as a localised variety of English (e.g. see Kachru 1982, 1986). The English model for Maltese people is largely British English provided by television and British tourists, supplemented by American English on television and in cinemas, and by the Canadian and Australian English spoken by returning Maltese immigrants. On a sociolinguistic level, Maltese English is not perceived as an entity: it is
fashioned on an exonormative (foreign, native English) model. The Maltese people have not felt the need to distance themselves from the British colonial period by establishing their own variety of English (see Camilleri 1992b).

**Mixed Maltese English**
The continuous use of both Maltese and English has been labelled *Mixed Maltese English* by Borg (1980, 1988a). It is considered as a new variety, and not simply as an instance of codeswitching or mixed usage related to register. We think that its status as a variety in its own right is justified on both linguistic and sociolinguistic grounds. In chapter 6 we describe Mixed Maltese English as having the majority of morphemes in English and a Maltese phonology and morphosyntax. On a sociolinguistic level it has become the native language of some Maltese speakers, namely those who belong to family type C. These linguistic evolutionary processes have taken place very recently in time, i.e. within the last twenty years, and so the situation is still in a process of change. We can say that the use of Mixed Maltese English is related to three factors:

- **Domain of language use**
- **Context of situation**
- **Attitudes of speakers**

**Domain**
*The home.* An increasing number of parents seem to be using English, in addition to Maltese, when talking to their babies and young children. The reason they give for this is that in this way they can prepare their children for schooling, which is closely associated with English (see Ellul 1981). The other reason is probably that they try to model their speech on that of the educated people who are perceived to be English speaking, thus aspiring towards upward social mobility.

*Higher education institutions.* Mixed Maltese English is also commonly used by young people attending tertiary level educational institutions such as Sixth Form and University. Tertiary level education is the place where learners from all the
different schools come together. Boys and girls find themselves in mixed classes after five years of single sex schooling. Furthermore, learners from state schools come together with others from private schools. It happens that when Maltese speaking students meet with English (usually mixed with Maltese) speaking students, mixed Maltese and English becomes the norm (for an account of such a situation see Spiteri 1988). Since English is more highly regarded as the language of education, speakers of Maltese accommodate to speakers of English, or rather of a Mixed Maltese and English variety, which seems to have become associated with higher educational domains.

**Context**

*Written texts in English.* Inside the classroom, codeswitching between Maltese and English which results in Mixed Maltese and English speech is described in terms of interaction between the written medium of English and explanations in Maltese (see chapters 6 and 7).

*Media in English.* There are other contexts, which are not as clearly defined as the classroom, where Maltese and English are mixed as a result of the interaction between two texts - one in English and one in Maltese. Maltese society is immersed in English media; television, films, advertisements, booklets of instructions on the use of equipment etc.; and pervaded by English speaking tourists. We hypothesize that when a Maltese speaker has been in contact with an English text, either spoken or written, and then starts to use Maltese, the English text affects his/her speech in Maltese.

What is read, written, heard or said in English is stored in the short-term memory of the Maltese bilingual speaker, and by the time he/she comes to use Maltese, the English equivalents are more easily retrievable than the Maltese terms and expressions stored in the long-term memory and probably not used for some time. This is a hypothesis which could be tested by psycholinguistic experimentation. In relation to this, some research could also be carried out to examine the lexical influence of English on Maltese compared to influence on other linguistic levels.
Attitudes
Reference has already been made to the positive attitudes towards English which is perceived as a symbol of modernization and education. At the same time, though, Maltese speakers of English are perceived as snobs and stigmatized by a large majority of the Maltese population e.g. they are referred to as "tal-pepe" (snobs). Therefore the mixing of English with Maltese can sometimes be used in order to present, or to avoid presenting, a certain image of oneself. For instance one would not want to use English exclusively so as not to be stigmatized as a snob; on the other hand the insertion of English terms in a stretch of Maltese speech would prevent one from being perceived as uneducated ("ta' wara l-muntanji" literally "from behind the mountains" i.e. backward).

In some cases Mixed Maltese and English has become the norm, as in social interaction among many University students. In other contexts it may just be the result of a particular situation and is used as an unmarked form or neutral tool of communication as in the case described by Borg (1988b:21) where a mother speaks to her teenage son in Mixed Maltese English in front of the fiance of her daughter. In this way she avoids being stigmatized either as a snob by using English all the time, or uneducated by using Maltese exclusively.

3.2.3 Surveys on language use and attitudes

Information about the use of languages in Malta has not been collected in any of the national censuses that are carried out regularly in Malta every ten years. However, a number of sociolinguistic questionnaires have been conducted by undergraduate researchers and their tutors at the University of Malta. Their results will be examined as they give indications about language use and attitudes in Malta.

Borg (1980) administered a small-scale questionnaire to undergraduate students in linguistics in their early twenties. The sample was too small for statistical analysis, but the responses revealed some interesting trends on the linguistic behaviour (and attitudes to it) in Malta. The respondents were divided into two
groups on the basis of their linguistic repertoires. One group, referred to as S-E (family type B) were native in a variant of standard Maltese and knew English; the other group referred to as D-S-E (family type A) were native in a local dialect but also possessed standard Maltese and English. The following are some of the insights obtained from these informants on language attitudes:

* a monolingual dialect-only speaker was judged negatively as unfortunate or backward by both groups of respondents;
* D-S-E speakers were judged luckier than either D or S-E speakers roughly by all respondents;
* in judging S-E speakers, D-S-E Maltese males accepted them as normal, while D-S-E Gozitan males thought they were generally snobbish. Females in general tended to favour S-E over D-S-E speakers.

Girls appear to use Mixed Maltese English more frequently than boys, i.e. in domains where boys would not use it such as when interacting among themselves. Other aspects of language use researched by Borg (1980) are emotive contexts like courting and expressing anger and talking to pets. More use of English on the part of females is explained in terms of the higher status of English, and more self-consciousness and concern with linguistic propriety on the part of females than of males.

Kontzi (1983) distributed a questionnaire to 1,400 students aged 16 from ten Maltese schools and asked them about their linguistic behaviour at home and at school; their reading and listening habits; their opinion about bilingualism and the value of their national language (see Tables 3.10, 3.11, 3.12 and 3.13).
Table 3.10: Language use by students at the Technical Institute (state, boys)

<table>
<thead>
<tr>
<th>with</th>
<th>M</th>
<th>E</th>
<th>M/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>parents</td>
<td>96</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>siblings</td>
<td>96</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>neighbours</td>
<td>89</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>friends</td>
<td>87</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>school-friends</td>
<td>89</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>teachers in class</td>
<td>45</td>
<td>2</td>
<td>53</td>
</tr>
<tr>
<td>teachers outside class</td>
<td>96</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>reading/writing</td>
<td>52</td>
<td>20</td>
<td>28</td>
</tr>
</tbody>
</table>

Total: 800

650 (81%) 32 (4%) 118 (15%)

(source: Kontzi 1983)

Table 3.10 shows that the large majority of the respondents in this school speak Maltese at home, at school and with friends, and English is mainly used to address teachers in class, for reading and writing activities and on a few occasions to talk to friends.
The results shown in Tables 3.11 and 3.12 contrast with those shown in Table 3.10. St. Aloysius and the Sacred Heart are private schools while the Technical Institute is a state school. Students attending private schools report that they use English, or both Maltese and English more frequently with all their acquaintances than students attending state schools. The main difference between the students attending St. Aloysius (boys) and the Sacred Heart (girls) is that boys report the use of both Maltese and Maltese+English more than the girls. The latter use English more. This result is similar to that obtained by Borg (1980) who found that females were more inclined to use English than males.
Table 3.12: Language use by students at Sacred Heart School (girls, private)

<table>
<thead>
<tr>
<th>with</th>
<th>M</th>
<th>E</th>
<th>M/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>parents</td>
<td>19</td>
<td>55</td>
<td>26</td>
</tr>
<tr>
<td>siblings</td>
<td>16</td>
<td>70</td>
<td>14</td>
</tr>
<tr>
<td>neighbours</td>
<td>27</td>
<td>46</td>
<td>27</td>
</tr>
<tr>
<td>friends</td>
<td>9</td>
<td>69</td>
<td>22</td>
</tr>
<tr>
<td>school-friends</td>
<td>1</td>
<td>85</td>
<td>14</td>
</tr>
<tr>
<td>teachers in class</td>
<td>2</td>
<td>93</td>
<td>5</td>
</tr>
<tr>
<td>teachers outside class</td>
<td>3</td>
<td>84</td>
<td>13</td>
</tr>
<tr>
<td>reading/writing</td>
<td>3</td>
<td>91</td>
<td>6</td>
</tr>
</tbody>
</table>

Total: 800

80 (10%) 593 (74%) 127 (16%)

(source: Kontzi 1983)

Table 3.13 shows the percentage of replies reporting the use of Maltese with neighbours. These were obtained from seven schools.

Table 3.13: Use of Maltese with neighbours

<table>
<thead>
<tr>
<th>School</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria Regina (state; girls)</td>
<td>96%</td>
</tr>
<tr>
<td>Minor Seminary (private; boys)</td>
<td>96%</td>
</tr>
<tr>
<td>Technical Institute (state; boys)</td>
<td>89%</td>
</tr>
<tr>
<td>St. Aloysius (private; boys)</td>
<td>67%</td>
</tr>
<tr>
<td>St. Andrews (state; girls)</td>
<td>65%</td>
</tr>
<tr>
<td>St. Dorothy (private; girls)</td>
<td>53%</td>
</tr>
<tr>
<td>Sacred Heart (private; girls)</td>
<td>27%</td>
</tr>
</tbody>
</table>

(source: Kontzi 1983)
The percentages shown in Table 3.13 indicate that students attending different schools come from neighbourhoods where different languages are spoken. However we notice that it is rather strange that it is the girls who report the use of English with neighbours, while boys report more use of Maltese. Therefore the use of Maltese and English with neighbours does not depend on the language spoken by the neighbours themselves, but depends on the image the speaker wants to project himself/herself, both when talking to neighbours and when answering a questionnaire.

When the researcher (Kontzi 1983) asked the students whether they thought that the Maltese language was dying, only 2% answered yes. The others reacted "very strongly" and said that they didn't think this would happen because they were proud of their language.

Three sociolinguistic questionnaires were conducted by undergraduate students: Meo (1988); Darmanin, Formosa and Mangion (1989) and Cassar (1991). Meo (1988) conducted fieldwork among 100 informants in Maltese state and private schools. The results are summarized in Table 3.14 below.

Table 3.14: Languages use at home and school

<table>
<thead>
<tr>
<th>Home Language</th>
<th>School Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>21 %</td>
</tr>
<tr>
<td>Maltese</td>
<td>72 %</td>
</tr>
<tr>
<td>Maltese &amp; English</td>
<td>7 %</td>
</tr>
</tbody>
</table>

(source: Meo 1988)

Darmanin et al. (1989) interviewed one hundred university students from the Faculties of Arts and Sciences. Some of their results are reproduced below.
Maltese is clearly spoken by the majority of informants, although there is recognition of the fact that either Maltese mixed with English (ME), or to a lesser degree English with some Maltese (EM) is sometimes used. A larger number of females admit they use English at home. This result is again similar to that obtained by Borg (1990).

Cassar (1991) conducted fieldwork among 200 University students to investigate their language use during and outside lectures. His results, which confirm those of Meo (1988) and Darmanin et al. (1989), are reproduced below.
Table 3.17: Use of language as medium of instruction

<table>
<thead>
<tr>
<th></th>
<th>E</th>
<th>M</th>
<th>E/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>61 %</td>
<td>24.0 %</td>
<td>15.0 %</td>
</tr>
<tr>
<td>Secondary</td>
<td>61 %</td>
<td>16.5 %</td>
<td>22.5 %</td>
</tr>
<tr>
<td>Post Sec.</td>
<td>45 %</td>
<td>20.0 %</td>
<td>35.0 %</td>
</tr>
<tr>
<td>University</td>
<td>42.5 %</td>
<td>1.0 %</td>
<td>51.0 %</td>
</tr>
</tbody>
</table>

(source: Cassar 1991)

Borg et al. (1992) report the results of another questionnaire on language use and attitudes. The random sample consisted of 186 informants (roughly equal male and female informants from all areas of Malta). 96% of respondents reported that they use Maltese at home, and the reasons they gave for this was that they were proud of Maltese and that it was their national language. Not only did they say that they wish to retain it as their national and native tongue, but they also expressed a preference for its use in schools if textbooks are provided in the language.

It seems to be the case that Maltese is by far the most common language used at home while English is more common in areas of education. It is spoken by a few (2%) people at home. About the latter, Sciriha (1991:12) comments;

"Most parents whose level of proficiency is very low have the audacity to speak to their children in what they consider to be English".

And Mifsud (1992:12) opines that,

"A slim percentage of Maltese parents also prefer to speak to their children in English during their early years whether for snobbery or on the basis of questionable linguistic convictions; some indeed are only unconsciously repeating a pattern of behaviour imposed on them by the family in which they themselves were brought up".
Another sociolinguistic survey on language use in Malta looked at the language used by secondary school students to express number terms in Malta (Cucciardi 1990). The results are summarized in Table 3.18.

Table 3.18: Language use in numerical expressions

<table>
<thead>
<tr>
<th>Category</th>
<th>Female Use</th>
<th>Male Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To express</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>67%</td>
<td>20%</td>
</tr>
<tr>
<td>CLASS AT SCHOOL</td>
<td></td>
<td>all replies were</td>
</tr>
<tr>
<td>DATE OF BIRTH</td>
<td>84%</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>in English</td>
</tr>
<tr>
<td>It is important to note that 9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of females and 20% of males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gave it in mixed Maltese and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English, e.g. &quot;tmienja ta'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jannar nineteen seventy-four&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(eighth of January nineteen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seventy-four)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NUMBER OF FAMILY MEMBERS</strong></td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>BUS NUMBERS</strong></td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td><strong>BUS FARE</strong></td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>WEEKLY LOTTO NUMBERS</strong></td>
<td>96%</td>
<td>90%</td>
</tr>
<tr>
<td>Sometimes numbers were repeated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in both languages during the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>interview.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXPENSES PER WEEK</strong></td>
<td>67%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>T.V. CHANNEL</strong></td>
<td>91%</td>
<td>71%</td>
</tr>
<tr>
<td>5% of females and 26% of males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>used both English and Italian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in reply to the interviewer's</td>
<td></td>
<td></td>
</tr>
<tr>
<td>question.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TIME</strong></td>
<td>67%</td>
<td>98%</td>
</tr>
<tr>
<td>31% of females and 1% of males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>repeated the time in both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltese and English during the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>interview.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(source: Cucciardi 1991)
Some general trends emerge from the results on numerical expressions. It is clear that Maltese is more frequently used to express time and number of family members, but English is used for almost all other numerical expressions tested in this study. There is always a higher percentage of females using English compared to males. Repetition of replies in both languages is common. Cucciardi (1990) concludes that there is no correlation between the use of language and sex and social class.

**Methodological remarks about the surveys**

First of all we note that none of the samples have been large enough to guarantee validity and reliability. In fact, the findings on language use show some discrepancies. The results of Borg et al. (1992) report a much higher percentage of use of Maltese when compared to the undergraduates (Darmanin et al. 1989; Cassar 1991). Surely in one year it is not possible that almost half the population shifted from English to Maltese! How could this discrepancy be explained?

The samples of Darmanin et al. (1989) and Cassar (1991) are not representative of the same population studied by Borg et al. (1992). Their research was conducted among university students. This is a plausible reason for the discrepancy.

Another reason could be that speakers themselves are not consistent in reporting their own use of language since they are bilingual and very often are unaware of which language they are using. Naturally there are also the other problems associated with sociolinguistic questionnaires such as the sincerity of respondents or the image they want to project. It is important to point out that very often speakers in Malta do not use either one or the other language, but use both in a stretch of discourse. They could then report themselves as using either, or both. This renders the task of the sociolinguist who wants to quantify very difficult. The results are not likely to correspond very closely to actual use.

According to the questionnaire results it is professional people who use English at home. However, it might be the case that actually, English, or rather
Mixed Maltese English is more frequently employed by those aspiring to higher social mobility. This could explain why the English being transmitted by parents to children is "incorrect". Such facts may or may not show up in questionnaire results.

What is referred to as "less than ideal fluency" (Sciriha 1991) could actually be a localized variety of English (Maltese English) which is not yet acknowledged or accepted as such by the population.

Different groups of speakers of Maltese and English have different attitudes towards language use in Malta. For example:

* Speakers of Maltese as L₁ (as in family types A and B) stigmatize speakers with Maltese and English or English as L₁ (as in family types C and D). The latter are perceived to be snobs. Respondents of the questionnaire conducted by Borg et al. (1992) rated those Maltese who speak English as either "proud or silly or nobody special" (p.12). Only 33% of informants rated Maltese speakers of English as intelligent or pertaining to the higher echelons of society. Borg et al. (1992:12) conclude that "the subjects' mentality is not colonial, at least with regard to the language issue, although English is still prestigious".

* Maltese speakers of English stigmatize speakers of Maltese, who are seen as less educated and as belonging to a lower social class. Some evidence of this has been provided by Borg (1980). In the Experts' Meeting on Language Planning held in Malta in July 1992, there were continual appeals from Maltese participants for the production of high standard journalism and other material in Maltese, so that Maltese will finally become associated with excellence. This, they hope, will counter the perception of English as "better" than Maltese.

The excellent models of the Maltese language are generally provided by the creative literature, e.g. novels, poetry, drama. We think that a more immediate effect on the use of Maltese is exerted by the media. People listen to the radio
and watch television in Maltese; the media provides them with models of life and language use and characters they identify with. Therefore we think that it is very important that the media, and secondly the daily newspapers, provide the best models of Maltese.

Language and gender
Maltese sociolinguistic questionnaires (Borg 1980; Kontzi 1984; Cucciardi 1991) have reported differences in language use such that females consistently use the higher varieties more often than males. This has been explained in terms of self-consciousness and concern with status in females.

This is a general sociolinguistic finding (e.g. Labov 1966 on New York; Trudgill 1974 on Norwich; Romaine 1978 on Edinburgh; Macauley 1977 on Glasgow). Typically women's scores are closer to the standard than those of men of the same status. These results have, however, been questioned by feminists who criticized almost every aspect of the quantitative paradigm's findings (e.g. Coates 1986; Coates and Cameron 1988; Cameron 1990). The methodology used in these sociolinguistic questionnaires, they argue, is riddled with bias and stereotype, e.g. women are normally ascribed a social status according to their husband's occupation which may not necessarily reflect their own (For an overview of issues in sex and language see Holmes 1992).

We would like to propose that the notion of "social status" itself is a problematic one. In Malta, for example, it is difficult to assign social status because financial wealth and education do not necessarily co-incide; who has a higher social status, someone with a doctorate degree and an average salary, or someone with a business who can afford computers and travel abroad etc.? Therefore, these quantitative results about language use in Malta, like similar quantitative results elsewhere, need to be treated with caution.
3.3 Conclusion

I shall conclude this chapter by reporting briefly about my own linguistic repertoire. This allows me to summarize many of the issues treated in the sections above.

I was born and brought up in a relatively isolated farming and fishing village to the west of Malta (Mġarr). Both my parents and three of my grandparents were born and brought up in the same village and spoke the village dialect at home and in the village. One of my grandparents is a native speaker of the Rabat dialect and although he has lived in Mġarr for sixty years he still speaks the Rabat dialect with family and friends. He runs a butcher shop in the village and uses standard Maltese with customers in the shop. When speakers of different dialects of Maltese interact they generally resort to standard Maltese. Within the family however, he uses his own dialect and we speak to him in our dialect. My mother (his daughter) and his other children who were brought up in the village speak the Mġarr dialect.

I learnt the Mġarr dialect as my first language. Later I acquired standard Maltese and English at school. By the time I was about seven years old I was able to interact in English with native English speaking children, e.g. neighbours who came from Australia for long holidays and tourists in the village playing field.

I had a number of penfriends from different parts of the world with whom I corresponded in English and later on in Italian with some of them.

Since I was very young I was consciously aware of the language difference between the village and the town. When my mother and I went to Valletta she always used to remind me that "when we get there we must speak bil-pulit (i.e. in standard Maltese) or else they will make fun of us". So my mother and I
used to make a conscious effort to speak standard Maltese when overheard by standard Maltese speakers.

At secondary school I started to interact in standard Maltese with my classmates since we all came from different dialectal backgrounds. By the time I was at University I was used to speaking standard Maltese almost all day long. However my undergraduate friends who came from family types B and C used to point out to me that I spoke differently: some of my consonants and vowels were different; my intonation pattern was slightly different; and some of my expressions were unfamiliar to them. It was made clear to me that my language background was stigmatized. I tried to make some more effort to "improve" my standard Maltese.

In written language however, I did not have any problems. The dialect is not written and at school we are taught to write standard Maltese. I was almost always first in school in Maltese as a subject. I think that my dialectal background, which had very little or no influence from English (unlike standard Maltese) was an asset when it came to writing standard Maltese, which is more conservative i.e. slightly more semiticised, than spoken standard Maltese.

At University, the more friends from family types C and D I made, the more English I started to use when interacting with them: I accommodated to their language probably because I wanted to sound "educated" like them. I noticed that sometimes they tried to accommodate to my language and switched to Maltese, possibly to show me that they too could speak Maltese. Most often we ended up talking Mixed Maltese English.

I still speak the dialect at home with family and village friends and other village people, e.g. in shops, youth centres and during leisure activities. I switch to standard Maltese in the village (like the rest of the village population) when addressing an audience (even if they are all dialect speakers), or in the
presence of standard Maltese speakers. At work in the University I speak standard Maltese with colleagues who belong to family type B, and Mixed Maltese English or English with colleagues from family types C and D. When delivering lectures I can use either Maltese or English depending on the course, e.g. if is it aimed at students with Maltese as a main subject I would use Maltese, if it is for linguistics students with different languages as main subjects I would use English.

I always write letters in Maltese to all my Maltese friends regardless of their language background. Some of them always reply back in English. I feel comfortable writing in Maltese whatever the genre. I feel less comfortable writing in English.

My own anxieties about my linguistic future are probably typical of most of the Maltese population. My fiancé is a native speaker of standard Maltese. With him I always use standard Maltese: this is an unconscious choice. We hardly ever use English together. I (we) plan to live and set up a family in my native village. The language problem for me is: which language am I going to speak to my children? Will I be able to speak to them in dialect? I would like to be able to because I think this would give them an identity, and make them feel part of the environment. On the other hand it would be unnatural for me to speak the dialect in front of my husband, and there will be pressures from his family to use standard Maltese to the children. I know that marriages between different dialect speakers or between dialect speakers and standard Maltese speakers have resulted in the loss of dialectal Maltese.

Furthermore there is the issue of English. Although speaking English in the home is unnatural for me I know that some young mothers in the village do use English when talking to their children; this, they say, is in preparation for their children's education (Ellul 1978). Societal pressures can be very strong and we are forced to make choices about the use of language in Malta in the future.
PART B
EMPIRICAL STUDY
CHAPTER 4: RESEARCH DESIGN

4.0 The research theme

In recent years there has been an increasing awareness in society of the complexity in the use of Maltese and English. Concern has often been expressed by educational authorities, lecturers, parents and the public - e.g. in newspapers (see Appendix 10) - about the contamination of the Maltese language by English on the one hand, and on the other hand, about the poor levels of English achieved by learners at school leaving level.

During the recent Language Planning Meeting for Experts in Malta (July 1992), several people from the Education Department, the University, the media and a University student body for the promotion of Maltese, voiced their anxiety regarding the language situation in Malta at the moment.

Teachers themselves however have not been drawn into this controversy. They told me during the interviews (Appendix 3) that they think that both Maltese and English are necessary in the teaching process: each language has a role to play in the classroom.

This research provides the first systematic information about the actual use of Maltese and English in the classroom at present. This whole research exercise has a practical purpose: that of informing decisions and future policy making about language in education in Malta. It is the first step in the language planning processes described by Rubin (1984:7): (i) fact-finding; (ii) policy-setting with goals specification, consideration of strategies and resources and predicted outcomes; (iii) implementation, and (iv) evaluation.

The main research question of the empirical study is:

"How are Maltese and English used as media of instruction in secondary classrooms in Malta?"
The objectives are to find out:

- whether either, or both, Maltese and English are used as media of instruction;
- whether one or the other is used exclusively;
- how much each language is used;
- what pedagogic factors lead to the use of each language;
- what motivates codeswitching in the classroom;
- what form codeswitching takes i.e. to establish a taxonomy of codeswitching;
- which speech acts are carried out in which language;
- whether the way the two languages are being used has any implications for language planning in education.

From our knowledge of the situation we would expect to find that:

- Maltese and English are used alternating or mixed in many lessons; teachers and learners across schools, levels and subjects codeswitch between the two languages.

4.1 The normative and interpretive approaches to research

As outlined in 1.1, the empirical analysis in the thesis represents my own research journey between the positivist, quantitative paradigm and the non-positivist, qualitative approach. Each of these two traditions has been common in social science research at different times, with the non-positivist, interpretive approaches gaining ground in education research in the 1970's as a reaction to the positivist, normative techniques of the 50's and 60's more commonly used in the natural sciences.

I started my data collection from a positivist perspective but soon discovered that this was neither appropriate nor ethical in the circumstances for reasons that will be explained later. Therefore, I resorted to non-formalized sampling.
Similarly, at the data analysis stage, I first conducted a taxonomic analysis of language use in an attempt to give some tangible, quantitative results about the medium of instruction. In the meantime I realized that giving counts of types of codeswitches does not explain why language is used in this way. I needed to look further for explanations; for instance through discussions with the teachers themselves, by looking at the societal use of language, and by considering more closely the way classroom discourse evolves as teachers and students react to one another's speech.

Both the positivist and non-positivist approaches to research are important and necessary. In Cohen and Manion's (1981:37) words:

"we see both the normative and interpretive approaches to the study of social reality as being equally valid; and that for a truer understanding of the complexities of social life, we must acknowledge the interrelationship and interdependence of the two methodologies".

In what follows, I will review each of the two research paradigms and then I will outline my own research design.

These different approaches to the study of human behaviour - in our case, of language behaviour - can be summarized as follows (adapted from Cohen and Manion 1981):

Table 4.1: Normative and Interpretive approaches to research

<table>
<thead>
<tr>
<th></th>
<th>Normative</th>
<th>Interpretive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophical basis:</td>
<td>Realism: the world exists and is knowable as it really is. Organizations are real entities with a life of their own.</td>
<td>Idealism: the world exists but different people construe it in very different ways.</td>
</tr>
<tr>
<td>Theory:</td>
<td>A rational edifice built by scientists to explain human behaviour. <em>Impersonal, anonymous forces regulate behaviour.</em></td>
<td>Set of meanings which people use to make sense of their world and behaviour within it. <em>Human actions are continuously recreating social life.</em></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Research:</td>
<td>Experimental or quasi-experimental validation of theory.</td>
<td>Search for meaningful relationships and the discovery of their consequences for action.</td>
</tr>
<tr>
<td>Methodology:</td>
<td>Abstraction of reality, especially through mathematical, <em>objective,</em> and <em>quantitative analysis</em> - structuralism.</td>
<td>The representation of reality for purposes of comparison. Analysis of language and meaning: <em>qualitative</em> as in phenomenology, ethnomethodology, symbolic interactionism.</td>
</tr>
<tr>
<td>Basic unit of analysis:</td>
<td><em>Macro-concepts:</em> the collectivity: <em>society, social systems, organizations, norms, positions, roles, expectations.</em></td>
<td><em>Micro-concepts:</em> <em>individuals</em> acting singly or together, negotiated meanings, definitions of situations.</td>
</tr>
<tr>
<td>Methods of understanding:</td>
<td>Identifying the conditions or relationships which permit the collectivity to exist. Conceiving what these conditions and relationships are - generalizing from the specific and explaining behaviour.</td>
<td>Interpretation of the subjective meanings which individuals place upon their actions - understanding actions.</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Prescription for change:</td>
<td>Change the structure of the organisation to meet social values and individual needs.</td>
<td>Find out what values are embodied in organizational action and whose they are. Change the people or change their values if you can.</td>
</tr>
</tbody>
</table>

According to the **positivist, normative approach**, social reality is external to the individual: it imposes itself on his consciousness from without. The view that knowledge is hard, objective and tangible demands of the researcher an observer role, together with an allegiance to the methods of natural science. These methods consist of a set of **scientific concepts** created by man to enable him to acquire some understanding of the apparent chaos of nature, and a **scientific method**. The scientific method begins consciously and deliberately by selecting from the total number of elements in a given situation. The principal working tool is the **hypothesis**, i.e. a statement indicating relationship (or its absence) between two or more chosen elements, and stated in such a way as to carry clear implications for testing. The scientist then choses the best method for putting the hypothesis to the test.

Common normative tools for classroom research and data analysis are coding schemes and questionnaires. I considered and rejected these two techniques as a main research method for the reasons outlined below.
Coding Schemes

A number of coding schemes have been developed for the analysis of classroom behaviour and interaction. For example FIAC (Flanders' Interaction Analyses Categories) consists of several categories intended to describe types of teacher talk and pupil talk; BIAS (Brown's Interaction analysis System) aims to analyze classroom verbal interaction in order to find out something about the sort of teaching and learning that goes on; the Mitchell and Parkinson instrument was developed to examine the strategies of foreign language teaching in Scottish secondary schools (for details on various coding schemes see Malamah-Thomas 1987).

There are two major problems in applying a coding scheme to analyze the medium of instruction. First of all, one has to work with a predetermined set of categories. Although these are normally developed on the basis of prior observation they do not necessarily account for all the complexities of language use and classroom interaction. They do not take into account the relationship between verbal and nonverbal behaviour or between behaviour and context (see McAleese and Hamilton 1978). (See also the evaluation of Sinclair and Coulthard (1975) scheme of classroom discourse in chapter 8).

Secondly, the coding is carried out in real time (whether in the classroom or when watching a video recording) and the coding sheet is marked at regular intervals. For example in the BIAS system coding takes place every three seconds. Time is an arbitrary unit and a system based on time coding fails to capture the interaction and the use of language in between each tally (see Mehan 1981). While a coding scheme based on a fixed time interval would tell us which language was used by whom (e.g. teacher or learner) and for how many minutes, e.g. the teacher spoke in English 50% of the time to elicit from the learners, it could not tell us when and why codeswitching took place. As Gruenewald and Pollak (1984:6) point out "language is rather continuously interacting between speaker, listener and environment". There is more to the use of language than the time factor. I was not interested simply in what percentage of time the teacher used Maltese to elicit, for example, but also why
she used Maltese at that particular stage of the lesson, e.g. because a learner had asked for clarification in Maltese.

Large scale questionnaire
During the preliminary investigation I spoke to several teachers about the use of Maltese and English in the classroom. Through my informal discussions with teachers, and formal meetings with the school staff at a new private school where a language policy was being drawn up, I realised that teachers in general were only vaguely aware of using a mixed medium. Asking them detailed questions about it put them in a situation where they had to give an answer without thinking about it too long. Sometimes they changed the subject or gave an answer that was not related to the question, e.g. about pupil behaviour. I noticed that teachers other than language teachers were very naive about issues of language use in the classroom. For example they were unaware that there are differences between spoken and written language, and were surprised upon looking at the transcript that "they did not speak in sentences".

In the case of those teachers who did reply about their use of language as a medium, I discovered that their perceptions about which language they used in the classroom were quite different from what they actually did. For example, they often reported themselves as using English only, but when I observed them teaching I found out that they used Maltese as well.

I decided to focus my research on the way language is actually used in the classroom and not on the teachers' perceptions of it. Therefore, the questionnaire was not an appropriate tool for my purposes.

The anti-positivist, interpretive approach rejects the mechanistic and reductionist view of nature held by the positivist paradigm, which, by definition, excludes notions of choice, freedom, individuality and moral responsibility. The anti-positivist approach sees knowledge as personal, subjective and unique. It therefore argues that the social world can only be understood from the standpoint of individuals who are part of the ongoing action being investigated. The researcher has to become involved with his subjects so that he can obtain
an understanding of the way in which the individual creates, modifies and interprets the world in which he or she finds himself or herself. Thus, linguistic ethnomethodology seeks to understand the structure of conversation from within, and symbolic interactionism perceives interaction as a continuous process where meanings are created, negotiated and recreated as the speakers react to one another.

According to symbolic interactionism (interestingly applied in a study on codeswitching in the classroom by Lin 1990), (1) human beings act towards things on the basis of the meanings they have for them; (2) this attribution of meaning to objects through symbols is a continuous process; and (3) this process takes place in a social context. According to this latter approach, classroom life can only be understood by knowledge of the specific organizational background in which it is embedded. In schools and classrooms, "pupils and teachers are continually adjusting, reckoning, evaluating, bargaining, acting and changing" (Cohen and Manion 1981:23). Individuals interact; societies are made up of interacting individuals. People are constantly undergoing change in interaction, and society is changing through interaction. Interaction implies human beings acting in relation to each other, taking each other into account, acting, perceiving, interpreting, acting again. The way this view could be applied to the Maltese situation studied here is schematically represented in Figure 4.1.
As shown in Figure 4.1, the use of language in one lesson is seen as embedded in a series of concentric circles of increasingly larger (more "macro") contexts. If we move from the micro-context of specific instances of language use (for example a specific instance of switching in lesson A) outward, these rings will include other interactions during the lesson taken as a whole and their dependence on participants' classroom characteristics (for example other switches by teacher A as a result of her own English language background and the need to interrelate with the learners whose first language is Maltese); the school (e.g. state or private); the society and its linguistic repertoire (chapter 5). Further out, we look at bilingual education in different contexts (chapter 2), and at codeswitching (chapter 6). The outer concentric circles (i.e. the information provided in chapters 2 and 3) provide the salient "macro" descriptive and "micro" theoretical definitions and explanations. Thus we can understand better the meanings and the implications of the bilingual medium of instruction in Malta.
Both the normative and interpretive approaches are useful and complementary techniques for the understanding of human conduct. In classroom research, it is sometimes more appropriate to use one than the other depending on the research issue at hand. Positivist methodology was inappropriate for data collection. However, at the data analysis stage, I draw on both research paradigms: qualitative in chapter 5 where I look at each lesson as an entity of its own, and try to unravel the reasons and functions of codeswitching in the light of situational and contextual variables; and formal, taxonomic, quantitative analysis of codeswitching, its correlation with situational variables in chapter 7, and with speech act types in chapter 8.

4.2 Sampling considerations

Originally it seemed desirable to obtain a stratified sample of lessons from both primary and secondary schools, and from specific regional areas, so as to be able to compare the use of language considering such variables as level within the school, type of school and geographical region. However, this was neither ethical nor appropriate. Since the data collection method requires an observer to sit and watch the lesson in progress with a video-camera and a separate audio-tape, no teacher could be forced to participate in the study unless they really wanted to. In fact it was quite difficult to obtain a sample of lessons as I explain below.

When I went to Malta for data collection, I set out with the aim of recording as many lessons as possible (given the limits of time and other practical constraints). I did not want my study to be limited to only two or three teachers as this would not have provided me with enough of a spectrum of what goes on in classrooms. Furthermore, it was unlikely that teachers would have accepted to be video-recorded more than once.

Permission from the Education Department is required for any research to take place in state schools. It is not easy to obtain an appointment with, and permission from, the relevant Assistant Directors of Education (one for Primary
and one for Secondary). It took me several days to obtain permission for access to Junior Lyceums and some primary schools. Trade schools and area secondary schools were not included in order to avoid certain practical problems such as those related to discipline, time-tableing and classroom organization. I was not allowed to distribute the document with the written permission myself, but was promised that a copy of it would be sent to the relevant schools. This caused the following problems.

The greatest problems were encountered in the primary sector. None of the primary schools acknowledged receipt of the official permission for the research from the Department of Education. This means that either the permission was not sent out, or the schools refused to acknowledge its receipt. I sought personal permission from three heads of primary schools but I encountered a number of difficulties. In one primary school, the school door-bell was never answered; in another one the head made it as difficult as possible for the research to take place because he demanded written permission from the parents of each child that might appear on the video-tape; and in another school I was asked to take over a class to teach it! It seems to me that the educational officials and primary school headteachers (most of whom are over fifty years old) are afraid of research; they prefer to keep the school as quiet as possible and avoid the intrusion of researchers that might challenge the comfortable status quo, as they see it. Given such problems, no further attempts were made to record any lessons at primary level.

At secondary level, serious problems were encountered in two schools. In a girls' Junior Lyceum, after I had fixed a schedule with the teachers for a whole week of recording, the school staff went back on their word and refused to participate altogether. In a boys' Junior Lyceum, permission was granted by the head, but the teachers sought and obtained backing from the teacher's union in Malta (the M.U.T.) to refuse to participate en bloc.

The resistance of teachers to participate in this study is not related to language questions since none of the teachers were told the topic of the research. They might have discovered if they asked about my specialization. If this were the
case then sensitivity about language issues is a possible explanation for their reluctance to be observed.

The reasons they gave me were, for example, that they were shy in front of a camera, and/or that they already had had their share of students observing them for the year (undergraduate student teachers from the University of Malta).

I discovered that those teachers who went back on their word to participate were not qualified as teachers but as instructors and they probably feared being judged negatively; secondly I was told that there were problems relating to the relationship between the staff and the head of the school that might have provoked this strange behaviour.

I think that the major reason for the general reluctance of teachers to be observed and filmed is that they feel that their classroom is a very private place. They do not welcome any outside intrusion. In my experience this reluctance to be observed is more common among the older teachers trained at the Teacher Training College (see chapter 3), than among the younger teachers with a degree from the University of Malta. The latter are used to being video-recorded and to having their lessons assessed several times by classmates and lecturers alike, in the course of their training. They perceive research as part of their professional development.

In the end, some successful recordings were made through my own personal contacts in schools. I used to teach in one of the schools, in another school the headteacher had been my own head of school as a student, in two other schools I knew the heads personally, in another one I had friends who taught there and in another one I obtained access through a friend who was in close contact with the headmaster.

In accordance with exchange theory (see Milroy 1980 after Homans 1958) in some cases the researcher needs to use his own personal contacts and social networks to gain access to the field.
A social network acts as a mechanism both for exchanging goods and services, and for imposing duties and conferring corresponding rights upon its members. Individuals will go to extraordinary lengths to preserve key network relationships. Messages which pass along network links can be seen as transactions, governed by the principle that the value gained by an individual in a transaction is equal to, or greater than, the cost. These transactions may consist of goods and services of many kinds, including greetings, civilities, jokes, information etc.. When goods and services flow in both directions between links, it is useful to speak of exchange. A fieldworker, can gain access to the field by participating in such transactions. For successful fieldwork he must provide tokens of exchange. In my case, for example, the teachers let me observe them in exchange for our friendship. They especially appreciated the information I passed on to them later about my findings. Amongst other things, I felt it was important to keep them informed by giving them a copy of my analyses. The staff of the private school in turn wanted me to observe and analyze every teacher! Another teacher wanted her video to be shown in Edinburgh in exchange for her help!

In those schools which participated in the study, I met the head of school, described the research project, and asked to video/audio-record (subject to the availability of the camera from the University of Malta) some lessons (various subjects and levels). This depended on the number of teachers willing to participate. There were instances where the head of school called teachers into the office, asked them if they were willing to participate and they refused. To make sure that at least some teachers did accept to be video-recorded I decided to record only one lesson, or a single session of a double lesson, per teacher. This, in fact, encouraged them to accept.

Table 4.2 lists the lessons and the schools where the recording took place. Due to the intrusive nature of video-recording, teachers were asked to be recorded during a lesson of their own choice. I wanted them to feel as comfortable as possible. The headteachers were aware of the real nature of the project, but the teachers were told that I was interested in "Maltese pupils' behaviour during normal lessons". I wanted the teachers to be unaware of the real purpose of the
study so that their oral performance would be as little affected as possible. During the interviews some time later, the teachers reported that the lessons were about 90% normal and since they did not know what the researcher was interested in, their verbal behaviour was "probably normal".

Table 4.2: Schools and lessons used as data

<table>
<thead>
<tr>
<th>Date</th>
<th>School</th>
<th>Lesson</th>
<th>Level</th>
<th>Audio/Video</th>
</tr>
</thead>
<tbody>
<tr>
<td>May '90</td>
<td>1 private</td>
<td>Maths</td>
<td>1</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>History</td>
<td>2</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biology</td>
<td>3</td>
<td>audio,video</td>
</tr>
<tr>
<td>Oct. '90</td>
<td>2 state</td>
<td>Economics</td>
<td>4</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maths</td>
<td>4</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English</td>
<td>3</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maltese</td>
<td>1</td>
<td>audio,video</td>
</tr>
<tr>
<td>Jan. '91</td>
<td>3 state</td>
<td>H. Economics</td>
<td>5</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maths</td>
<td>2</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td>4 state</td>
<td>Maths</td>
<td>4</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N. Work</td>
<td>1</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physics</td>
<td>3</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economics</td>
<td>3</td>
<td>audio,video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H. Economics</td>
<td>4</td>
<td>audio(^1)</td>
</tr>
<tr>
<td></td>
<td>5 state</td>
<td>S. Studies</td>
<td>1</td>
<td>audio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I. Science</td>
<td>1</td>
<td>audio</td>
</tr>
</tbody>
</table>

Total lesson time transcribed 8 hours 21 mins.
Average duration of lessons 30 minutes
Average number of words p. lesson 3,052
Total number of words 49,061

\(^1\)In the last three lessons listed only the audio-tape was used because the video camera got stolen from the University of Malta.
4.3 Data collection

This consisted of a preliminary observation session and a major data collection period.

Preliminary observation
In the conclusion to chapter 3 I presented myself as a participant-observer in the Maltese community. I attended a private (nun's) kindergarten because at that time there were no state kindergartens, and then went through the state primary and secondary education system and obtained a B.Ed. (Hons.) degree from the University of Malta. I have taught in state schools for a number of years at primary and secondary levels, at Sixth form and the University. I can say that I have experienced more or less the same situations as the teachers in my sample. Like them as a teacher, I had been vaguely aware of the use of a bilingual medium of instruction in the classroom.

However, I was not sure of how Maltese and English were used in the teaching process. I am unaware of any empirical research on the issue.

Darmanin (1989) conducted an ethnography of thirteen primary school teachers in Malta. Her case study focuses on centralized curriculum planning as experienced by teachers and educational planners in Malta in the 1980's. She (p. 3) notes that,

"Often Maltese speakers switch codes constantly not only within a sentence, but also with words. For example the article is given in Maltese, the noun in English, e.g. il-point (the point) or is-sea (the sea). Teachers in particular seem more prone to this switching of codes. They use Maltese as the language of explanation and English to give the textbook usage of stock phrases. For example, an explanation on decimal notation is given thus "imbaghad I move il-point (and then I move the point)..."

Darmanin (1989) was not concerned with the use of language as a medium of instruction in her thesis, and so she does not give any further information about
language use in the classroom. She only says that codeswitching between Maltese and English is very common.

During the first few months of my own project I conducted a preliminary investigation in a few schools. I wanted to clarify my objectives, narrow down my topic and orient my whole project in a viable direction.

I conducted a small pilot study in May 1990. I observed a number of lessons in three different private schools (two secondary and one primary) for preliminary feedback on the situation. Private schools were chosen at this stage to avoid all the "red tape" at the Department of Education. Three of the lessons I observed and recorded at the preliminary stage in May 1990 are included in the sample of sixteen lessons (see Table 4.2 and Appendix 1).

Preliminary observation of the data indicated that both Maltese and English operate as media of instruction across the curriculum in Maltese secondary and primary schools. Both languages are normally used within any one lesson in various ways and to various degrees.

For example it was noticed that:

* A teacher wrote points in English on the blackboard but explained them at the same time as writing them, in Maltese (as in lesson H, Is. 77-80);

* During group work, the learners spoke in Maltese but wrote notes etc. in English (as in lesson C, Is. 29ff; lesson D, Is. 243-335);

* When the teachers spoke in Maltese during lessons, they often used English terms (as in lessons P and B).

After the preliminary observation I decided to proceed with the investigation of the use of Maltese and English as media of instruction in secondary classrooms.
Major data collection
This data was collected and analyzed as the major part of the research. It consists of the following:

1. Observation and video/audio recording of sixteen lessons (8 hours 20 mins.);
2. Transcriptions of all the lessons (Appendix 1);
3. Informal interviews with four teachers, two at a time, during which they were asked to introspect on their use of Maltese and English, after watching their own lesson on video, and after reading a preliminary analysis of the data (see Camilleri 1991b in Appendix 12 and interview transcripts in Appendix 2);
4. A written questionnaire completed by the same four teachers after the interviews (Appendix 3);
5. Interviews with two Heads of Schools (Schools 4 and 5), and an interview with an Education Officer (Appendix 4).

Details about the collection of this data are given below.

1. The use of video and audio tape
Videotape recording has become an integral part of many studies. Leinhardt (1988:493) mentions the following advantages in using the video-camera:

* Audio-visual information is stored in real-time, and a permanent record is constructed. The instant replay permits it to be used as a stimulus for recall, as an artefact of action sequence that can be coded from multiple perspectives and the information can be scored and re-scored.

* It is useful for micro-level studies: a short event, representative of a larger system of actions can be intensely analyzed and studied in slow motion, if necessary, so that the implications of the micro-level actions for macro-events can be explored.

The two biggest disadvantages of videotaping are:
it is intrusive;
* taping can produce changes in the behaviour of the people taped possibly more than straightforward observation.

In my research the audio-tape alone would not have provided me with all the necessary contextual information, e.g. the teacher wrote notes in English on the blackboard. Therefore, I decided to record the lessons on video-tape as this would provide me with the necessary contextual information and with the possibility of re-viewing each lesson in the course of the analysis.

2 The lesson transcriptions
Careful and detailed transcriptions have been constructed. Ochs (1979) talks about transcription as theory and says that it is a selective process reflecting theoretical goals and definitions. Ochs (1979:44) encourages selectivity in the transcription process: "a transcript should not have too much information...it should reflect the particular interests and the hypotheses to be examined of the researcher".

The aim of my transcription is to help me look at the mixed usage of two languages. For this reason one of the languages, the lesser used one in each lesson (see chapter 6 on the distinction between the matrix and embedded language material) has been highlighted. This has been very useful when interpreting language choice and the use of codeswitching in each lesson.

In my transcription I have not included any phonetic information because this was not relevant. I have also left out all punctuation marks such as full stops, commas and question marks because this would have required some unnecessary interpretation. On the other hand, attention has been given to non-verbal actions. The video-camera was usually placed at the back of the classroom, behind the rows of learners facing the teacher, and so the teachers' verbal and non-verbal movements are better represented than those of the learners. The transcription conventions I have used are an adaptation of those used in Edinburgh at the Human Communications Research Centre (J. Miller 1991, personal communication) and in the Lancaster project on bilingual support
(M. Martin-Jones et al. 1992). My transcription conventions are given in Table 4.3.

Table 4.3: The transcription conventions

<table>
<thead>
<tr>
<th>Index</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>normal</td>
<td>mostly used language</td>
</tr>
<tr>
<td><strong>bold</strong></td>
<td>lesser used language</td>
</tr>
<tr>
<td><strong>underline</strong></td>
<td>reading from a text in Maltese</td>
</tr>
<tr>
<td><strong>bold/underline</strong></td>
<td>reading from a text in English when the lesson is in Maltese</td>
</tr>
<tr>
<td><em>(italics/underline)</em></td>
<td>researcher's comments</td>
</tr>
<tr>
<td>fresh line</td>
<td>new turn</td>
</tr>
<tr>
<td>T:</td>
<td>teacher speaks</td>
</tr>
<tr>
<td>L:</td>
<td>learner (unidentified) speaks</td>
</tr>
<tr>
<td>Ls:</td>
<td>learners (unidentified) speak together</td>
</tr>
<tr>
<td>TL:</td>
<td>overlapping in the speech of the teacher and a learner</td>
</tr>
<tr>
<td>TLs:</td>
<td>overlapping in the speech of the teacher and the learners</td>
</tr>
<tr>
<td>O:</td>
<td>observer speaks</td>
</tr>
<tr>
<td>I:</td>
<td>intruders (outsiders) speak</td>
</tr>
<tr>
<td>...</td>
<td>dots represent pauses (number of dots roughly relate to length of pause, roughly one dot per second).</td>
</tr>
<tr>
<td>()</td>
<td>unidentified speech</td>
</tr>
</tbody>
</table>

3 The interviews and introspection sessions with teachers

In addition to my own interpretations of the data, I interviewed four teachers and asked them to introspect about their own language behaviour in the classroom. Four teachers were given a preliminary analysis of the data (Camilleri 1991b), and their own lesson on audio-tape and transcript. They were asked to look at it and then come to the University of Malta, watch their lesson on video and discuss it with me (the transcripts of the interviews are provided in Appendix 2).
The aims of this exercise were
(i) to validate the analysis done by the researcher;
(ii) to expand on the interpretations given to the analysis by the researcher;
(iii) to find out the teachers' own perceptions about language use in the classroom.

In addition, this exercise had two instructional consequences:
(i) non-language teachers realized how naively they used to think about spoken language in the classroom;
(ii) it increased their awareness about the use of language in the classroom.

4 The written questionnaire
After each interview I asked the teachers to fill in a brief questionnaire. This was intended to capture the main ideas that teachers had about the use of a bilingual medium of instruction. It was a means of having a more permanent record of their beliefs and to help them express any idea they were shy to tell me orally. They were asked to fill it in after the discussion and introspection session. The questions were in Maltese; two teachers (E and P) replied in Maltese while two others (D and M) replied in English. Their answers are summarised in Appendix 3.

5 The interviews with Heads of Schools and an Education Officer
The main aim of this exercise was to find out the opinions that school administration staff have about language use in Maltese classrooms.

The answers obtained through the interviews are summarised in Appendix 4 and are referred to where relevant.

4.4 Summary
Watson-Gegeo (1988:579) draws a distinction between an "emic" and an "etic" level of analysis (after Pike 1964 who extended the phonetic/phonemic distinction in linguistic meaning to cultural meaning). "Etic" analyses and
interpretations are based on the use of frameworks, concepts and categories from the analytic language of the natural and social sciences and are potentially useful for comparative research across languages, settings and cultures. The "emic" or culturally specific framework is used by researchers of a society/culture for interpreting and understanding the meaning of experiences within an interpretive framework. The following is a preview to the data analyses methodology I adopted.

"Emic", qualitative data analysis
Chapter 5 gives the interpretations of language choice and codeswitching in each of the sixteen lessons: motivations are established and meanings assigned to the use of Maltese or English by each teacher, and to the motivations for switching from one language to the other. Links are observed between instances of language use and the situational and contextual variables of the participants and the environment. The classroom language experiences captured in this study are explained as products of the history and the current language situation of the teachers and the learners involved (see Heath 1983 and Hornberger 1988).

"Etic", quantitative data analysis
Chapters 6 and 7 present an "etic" level of analysis: a taxonomy of codeswitching and a formal description of (mixed) language use. This analysis is based on speech units which were coded on the basis of the codeswitching taxonomy. Counts were obtained of each type of codeswitch using the Oxford Concordance Programme (see chapter 7).

In chapter 8 I use an adapted version of the Sinclair and Coulthard (1975) coding scheme. This scheme involves the coding of a lesson transcript on various levels and aims to find out about the structure of spoken discourse (an "etic" level of analysis). The results obtained in this chapter are supplementary to the rest. This coding scheme provides a little insight into classroom interaction. It is not a satisfactory framework for the analysis of language use because it does not take into account the linguistic and non-linguistic context of the interaction.
Therefore we shall first present the qualitative analysis in the next chapter.
CHAPTER 5: LANGUAGE CHOICE IN THE CLASSROOM AND INDIVIDUAL LESSON ANALYSES

5.0 Introduction

This chapter investigates the situational variables and the features of the linguistic context that affect language choice and codeswitching in the classroom.

In what follows I give an overview of the situational variables that relate directly to the use of Maltese and English as written and spoken media. In the rest of the chapter I discuss the use of Maltese and English in each lesson.

5.1 Written and spoken medium

Table 5.1 lists the factors that bear upon the choice of language as a written and spoken medium in Maltese classrooms.

Table 5.1: Variables in the choice of written and spoken medium

<table>
<thead>
<tr>
<th>WRITTEN</th>
<th>SPOKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>examinations</td>
<td>school (state vs private)</td>
</tr>
<tr>
<td>textbooks</td>
<td>individual teacher attributes</td>
</tr>
<tr>
<td>reference works</td>
<td>subject</td>
</tr>
<tr>
<td></td>
<td>learner needs</td>
</tr>
</tbody>
</table>

5.1.1 The written medium

The choice of language for written purposes depends on three factors:
* The language of the examinations;
* The language of the textbooks;
* The language of reference works.

The language of the examinations
The only subject that is examined in Maltese exclusively is the Maltese language and literature examination. The examination papers for Religion, Maltese History, Social Studies and Systems of Knowledge could be answered in either Maltese or English. Unfortunately no records are kept about the number of papers answered in either language and the scores obtained by students, and therefore no correlations can be made of language with the grades obtained etc..

In state schools, the mid-yearly and end-of-year examination papers for these subjects are in Maltese, but in some private schools they are in English. The language subjects such as Italian, French, Spanish, Arabic etc. are examined in the language that is being examined. All the subjects mentioned above are examined locally at school leaving age (16) through the Matriculation examination system of the University of Malta.

All other school subjects, e.g. Mathematics, Biology, Chemistry, Physics, Geography, Technical Design etc. are examined through English (see Žammit Mangion 1993:433-441 for a list of subjects taught, the time dedicated to each and a description of the examination system). Students sit for the Ordinary and Advanced level examinations of London and Oxford Universities (U.K.). The mid-yearly and end-of-year examinations throughout the school system for these subjects are also in English.

The language of the textbooks
The language of the textbooks used in schools is the same as the language of the examination. The prescribed reading texts are therefore in English for almost all subjects mentioned above. Examples of a number of set textbooks at secondary level are given in Appendix 7.
The language of reference works

The vast majority of reference works are in English, including some texts required for subjects examined through Maltese. Reading is more often carried out in English than in Maltese. This, in turn, affects the use of English as a written and spoken medium in the classroom.

5.1.2 The spoken medium

The following variables affect the choice of a particular language as a spoken medium (Table 5.1):

* Individual school policy;
* Individual teacher policy;
* Subject/topic requirements;
* Learner needs.

Individual school policy

State schools in Malta are not autonomous institutions and they do not have individual policies. However, the attitudes and preferences of the Head of school are important and exert influence on the day to day language use within the school.

The Head of school can exert influence through for example the choice of language for school assemblies every morning, for internal school circulars and for school prize days and open days. Teacher M reported that the headteacher of the private school where she now teaches always uses Maltese in the daily morning assembly, in school circulars etc. (interview 2, l. 425). Teacher P however, said that his headteacher uses a Mixed Maltese English variety for spoken purposes, e.g. the morning assembly is 60% in English and 40% in Maltese (ls. 410-411).

The head of school may demand that students speak to her in a particular language. This was my own experience when I was at secondary school (in a rural area in the north of Malta where dialects of Maltese were spoken in the
homes of students (family type A - Table 3.8). The Head demanded that all students speak to her in English. This was due to her personal preference for English because she had been a teacher of English before being promoted to head. The reason she gave us was that we needed to practice our English in order to improve it. The implicit message that was passed on to us was that English was more appropriate in academic institutions and that the Maltese language had inferior status, and that when we spoke English we demonstrated our academic abilities!

The head of school can also exert certain pressure on teachers by for example using English herself all the time even when she is spoken to in Maltese, as was my experience as a teacher in a secondary school. In the course of data collection for this research I observed that in both state and private schools, teachers spoke in Maltese not only amongst themselves in staff rooms but also with the headteachers. Maltese mixed with English is common. I observed the following interactions in school offices while I was waiting to record lessons:

School X (11.1.91)

Teacher to Secretary: Jien m'inix ha niehu placement issa forsi ndeffishom fil-Conference.
(I am not going to accept a (re)placement now I'll try to squeeze them in the Conference (hall)).

Secretary to Student: Ir-register meta tara hafna absentees suppost tghid 'il form teacher.
(When you notice many absentees in the register you are expected to inform the form teacher).
Teacher to Secretary: Fil-każ Monday jekk ma tiġix inkellem 'il-Head.
(If she does not turn up on Monday I will speak to the Head).

School A (15.1.91)
Teacher to Head: Can I have kartončin (hard paper) from the school?

Secretary (on the telephone): Hello (name of school). Hello hold on please dalwaqt mieghek (I'll soon be with you).

turns to the other secretary: Għal K hawnhekk qiegħed? (It's for K (name) is he here?)

School catchment area has been suggested by teachers and education officials as a variable in the choice of language as spoken medium. Schools situated in the north-eastern part of Malta are associated with an English-speaking Maltese population (family types C and D). I have observed a primary school in this area (Sliema) and it did not seem to me that more English was being used in the classroom, in the corridors and in the yard, than in other schools. The reason for this could be that since a very large number of children from this area attend private schools, state schools here are mainly attended by Maltese speaking children (family type B).

Individual teacher policy
The factors that influence a teacher's choice of language are:

(i) the teacher's own experience at school as a student;
(ii) the teacher's home language background;
(iii) teacher training practices;
(iv) academic ability of learners in a class;

I shall now discuss each of these factors.
(i) the teacher's own experience at school as a student

The teachers themselves reported in the interviews and questionnaires that their own language of education affects their choice of medium. For example the teacher of lesson D (Interview 1 Is. 337-339) explained that she preferred English because she had attended a private school where English was used all the time; "jien l-iskola kont immur S.J. allura insistenza enormi li nitkellmu bl-Ingliż tgħallimtu bl-Ingliż biex nghid hekk l-Economics tghallimtu min kien ighallimuli bl-Ingliż kien jitkellem" (I used to go to S.J. (name of school) so there was enormous insistence on us to speak English, I learnt in English, I learnt Economics from someone who spoke English).

(ii) the teacher's home language background

Incidentally teacher D's home language background can also be described as English with some Maltese (family type C). School and home language often coincide: "ghax jiena nahseb I mix a lot in Maltese and English ghax anka perezempju nitkellem normalment niswiċċja hafna igifieri karatteristika tieghi" (because I think I mix a lot in Maltese and English because even for example when I speak I normally switch a lot, it is a characteristic of my own) (Is. 324-326).

The teacher's own linguistic repertoire is a factor affecting choice of a specific language (variety) in the classroom. For example it has been reported to me that in Gozo the dialects are sometimes used by teachers as a medium of instruction in the classroom where all participants are dialect speakers. I have also observed the occasional use of Maltese dialects by teachers (usually of an older age) in a village school (where both teachers and learners belong to family type A). The variety of English, or Mixed Maltese English used for example in lesson A and in lesson O depends on the teacher's own language background.

(iii) teacher training practices

As outlined above, teachers roughly over the age of thirty-five were trained in "British" colleges. These are more likely to use English as a spoken medium in
the classroom than younger teachers who have been trained in the post-independence period at the University of Malta.

(iv) academic ability of learners in a class
Some teachers said during the interviews that the choice between English or Maltese as a spoken medium depends on the academic ability of the learners in a particular class. Students in state schools are streamed on the basis of annual examination results. With the higher ability classes, some teachers feel that English is possible, and/or appropriate as a spoken medium. With lower ability classes they find that Maltese is more appropriate because the learners can understand better.

In interview 1, teacher E (Is. 39-41) says that her class was a lower ability one and so she had to use Maltese: "ma kellix one of the brighter, iktar kienu millower allura mingħajr ma trid aktar tispjegaha bil-Malti" (I did not have one of the brighter (classes), they were from the lower (stream) so without wanting to one uses Maltese). The same idea is repeated in Is. 101-102 and 116-117.

Teacher P (interview 2) suggests (l. 181) that the teacher's own linguistic competence is an important factor because if the teachers knew Maltese well they would not inflect English terms in Maltese such as 'niċċejngja' (from English "to change"). However teacher M argues in l. 175 that switching to Maltese depends on the learners' ability and not on the teacher's competence.

I observed teacher B during two mathematics lessons in school A. She conducted a maths lesson with the highest ability class completely in English (lesson not recorded), and codeswitched a lot with the lower ability class (lesson B).

This suggests that academic ability is equated with proficiency in English. Is this really the case, or is it the teachers' own perception? In private schools where English is used with all learners, no distinction is made between
academic ability and English proficiency. All learners are considered to be fluent enough in English for it to be used as a spoken medium of instruction. Teacher M (interview 2, Is. 467-480) explains that she taught in a different private school for seven years where English was used all the time inside the classroom from the beginning to the end of the lesson, and in corridors etc. (l. 469). Learners who were weak in English used to catch up and after 6-7 months used to be able to speak it fluently (l. 477). She adds that for this to happen the whole environment of the school must be English-oriented, e.g. the head always speaks in English, everything is written in English and everyone speaks English all the time.

It is important to note that the Maltese public in general, including teachers, believe that students in state schools come from Maltese-speaking home backgrounds, and that students in private schools come from English-speaking home backgrounds. These perceptions affect teachers' choice of language.

The reason for the choice of English as medium of instruction with the higher ability classes in state schools may also be related to the symbolic value of English as the language of academic work. The higher ability learners are perceived as members of an academic group with whom the use of English is possible and also more appropriate because of their higher academic ability.

Subject/topic requirements
The choice of language may depend on the particular topic being treated. For example, readings for particular topics in Social Studies or Maltese History may have to be done in English because of lack of texts in Maltese. This, in turn, affects the use of language as a spoken medium. On the other hand, during one geography lesson (observed during the pilot study) in a private school, a switch from the normal medium of English into Maltese occurred when the topic of farming in Malta was discussed.

Learner needs
The language needs of a particular learner, especially if he/she is a foreigner and does not understand Maltese over-rule all other variables. For example, in
state schools, if there is a foreign student in class, the teacher will use English as a medium of instruction. One such case was reported by the teacher of lesson P (interview 2, Is. 441, 458) who says that he had to use English in one particular classroom because one of the students was a foreigner and could not understand Maltese (l. 455): "inkellimhom bl-Ingliż imma naghmel traduzzjoni bil-Malti ezattament wara" (I speak to them in English but I translate to Maltese immediately afterwards - for the benefit of the Maltese speaking students). In private schools foreign students are admitted. Although no figures were available from the schools, it was reported to me that as much as 30% of the student population in one such school were foreigners. In another private school the head of school told me that there are foreign students in almost every class, and so it was imperative for teachers to use English.

5.2 Codeswitching motivations

Codeswitching takes place either from Maltese to English when speech (in Maltese) is influenced by the written text (in English), or from English to Maltese when the teacher accommodates to the learners' language. Codeswitching itself, irrespective of the direction of the switch, serves the purposes of topic and classroom management (see Figure 5.1).

5.2.1 Switching from Maltese to English: the influence of written language on spoken discourse

One very important component in classroom discourse is the interaction between the human participants on the one hand, and the written text on the other. There is continual interaction in most lessons between the written text and the spoken text. The written text is considered as the basic point of reference and is constantly being reiterated, paraphrased and reinterpreted by the teacher and the learners. As Lemke (1989:136) says,

"The problem of learning through texts is, I believe, fundamentally a problem of translating the patterns of written language into
those of spoken language. Spoken language is the medium through which we reason to ourselves and talk our way through problems to answers.... When we approach written text, we need to be able to do more than just decode letters to sounds.... To comprehend it, we need to be able to paraphrase it, restate it in our own words, and translate its meanings into the more comfortable patterns of spoken language".

Figure 5.1: Codeswitching motivations

In a monolingual classroom, the written text is translated into a spoken text in the same language. This happens in the language lessons themselves (I and K), and in the history lesson (L) which is completely conducted in English. But in those classes where a bilingual medium of instruction is used there is a further dimension. The written text in English is translated into a spoken text in Maltese.
Figure 5.2 shows the four textual possibilities of spoken and written language in Maltese and English, available to Maltese bilinguals. The classroom text can be in any of these four forms of text. Links are created between the vertical cells if the participants operate in a monolingual code, and horizontal and diagonal links are added when a bilingual discourse is created.

**Figure 5.2: Four textual possibilities**

<table>
<thead>
<tr>
<th>WRITTEN MALTESE</th>
<th>WRITTEN ENGLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPOKEN MALTESE</td>
<td>SPOKEN ENGLISH</td>
</tr>
</tbody>
</table>

In those lessons where both Maltese and English are used, some of the interaction is between the written text in English and the spoken text in Maltese. In lesson F, towards the end of the lesson the teacher assigns homework and dictates it in Maltese. He elicits for the translation of some terms in English (Is. 593-616) thus creating a link between written Maltese and spoken English.

Most of the switching from Maltese to English (78% of total switched units, see chapter 7) is due to the use of English technical terms and phrases within Maltese speech units.

English terms do have Maltese equivalents which are sometimes given by the teacher. Teacher M gives some examples in interview 2: pancreas frixa (l. 356); gall bladder marrara (l. 361); gut imsaren (l. 367); and by teacher P circumference ċirkonferenza (l. 30). Some more examples are given in the individual lesson analyses. Once the Maltese equivalent is given by the
teacher, the English term is used thereafter. Maltese translations help understanding but do not form part of the academic register. Teacher M gives the examples of the terms in Maltese for "chlorophyll il-hdura fil-weraq" (Is. 91 and 84); roots gheruq" which do not belong to the classroom register and so, she argues, she cannot use them regularly in class even though the learners know them.

There is continual interaction between the written and the spoken medium as the teacher and learners comment and elaborate on the written text, and as they apply and interpret the written theoretical knowledge in terms of their everyday experiences.

In lesson G, Is. 152-182 for example, the learners talk about their own experience of water, rain, wells and piped water (see 5.9). This is done in Maltese except for the use of technical terms like "boreholes" translated into Maltese as "spiera" (l. 191), "ilma tal-vit" translated into English "piped water" (l. 178). This discussion starts in English with the title of the topic read by a learner out of the book "Water Movement" (l. 26). The teacher summarizes the information discussed in Maltese by translating into English in l. 195 "a large part of our water comes from the underground reservoirs". In this way she creates a link with the written text in English.

5.2.2 Switching from English to Maltese: accommodating to the learners' language

Speakers normally adjust their linguistic behaviour in reaction to the person they are talking to by changing to a different language or using words or larger units from another language (see Fasold 1984). In the classroom three motivations for language accommodation from English to Maltese by the teacher have been observed:

* for explanation
* for elicitation
For explanation
Teachers switch from English to Maltese when they are not sure that the learners have understood fully what has been said in English.

All the teachers I interviewed said that it is necessary to explain the lesson in Maltese to a lesser or greater degree. For example in interview 1, teacher D says: "nispicca l-lezzjoni naghmel translation tan-notes" (in the lesson I end up translating the notes) (l. 100); "meta tuża l-Ingliz mhux kollox jinftiehem" (when English is used not everything is understood) (l. 106); "nipprova naghmlilhom Ingliż kemm jista' jkun sempliċi" (I try to use the simplest form of English) (l. 115). Teacher E in l. 282 says that when she used to speak in English all the time "ma kontx inhossni nista' nikkomunika maghhom" (I felt I could not communicate with them). In interview 2 (l. 463), teacher P says "igifieri ma tistax taffordja tkellimhom il-hin kollu bl-Ingliz ghax jintilfu" (it means that you cannot afford to speak to them in English all the time because they get lost).

In answer to my question about whether they thought they were helping the children by switching languages, teacher M says: "jiena nahseb li la taqleb biex it-tfal jifhmuk jiena fl-opinjoni tieghi nahseb li tginhom" (I think that if you switch to help the learners understand, in my opinion you help them) (l. 247). However teacher E is not sure: "am I confusing them by mixing languages pereżempju (for example) and what would be the best to stick to one language or use both" (l. 383). She wanted me to give her an answer but I did not want to pass judgement at that stage so as not to affect the discussion, and so I replied that an experimental study might provide us with an answer.

Sometimes, a switch to Maltese is triggered by a signal, verbal or otherwise, from a learner or learners for further explanation. For example in lesson N, up to l. 367 the lesson had been conducted in English except for a number of discourse markers in Maltese (Is. 333-340). At this point, (l. 367) a learner asks a question in Maltese to check his understanding of the formula. The teacher
accommodates to his language and answers in Maltese (l. 370). The interaction between the teacher and the learner continues in Maltese (with English terms) up to l. 384 when another learner makes a contribution in English (l. 385) and the lesson then continues largely in English. Towards the end of the lesson the teacher stresses the more important points of the lesson in Maltese because she wants to make sure that all the learners have understood the lesson well, e.g. in ls. 444 to l. 460 "fhimna kulhadd" (has everyone understood?); and from l. 498 to the end (in l. 539 the teacher asks again fhimna kulhadd?).

Translation of English terms to Maltese is one way of clarifying their meaning. Translation can be either spontaneous or accompanied by metalinguistic comments. In each case, the translation equivalent can be provided either by the same speaker or by his/her interlocutor/s (see chapter 7 on inter-unit switching).

In lesson F for example, switching by the same speaker occurs in l. 292 when the teacher repeats the term sun in Maltese xemx; switching by interlocutor occurs in l. 283-285, when hole in English is translated as toqba in Maltese; metalinguistic switching by the same speaker, in this case the teacher is observed in l. 293 when he says 'a little shower igifieri (means) ftit xita'; metalinguistic switching by interlocutors occurs in Is. 303-305 when the teacher asks 'Spring x'inhi bil-Malti' (what is Spring in Maltese?) and the learners reply correctly 'Rebbiegħa'.

In lesson A, a learner correctly translates (ls. 280-283) 'ličenzja' as 'licence'.

Translation is also used as a means of explaining and teaching the meaning of a word in English. For instance in lesson H the teacher explains that the meaning of the term land is different in Economics: Is. 9-11 'l-art li qeghdin fuqha' (the ground we live on); as opposed to the specialized meaning of the term land in the subject of Economics in Is. 11ff., where it refers to "natural resources" (l. 15).
For elicitation
A switch from English to Maltese is noticed at various elicitation points during classroom interaction. Some such switches occur not necessarily because the learners have not understood the teacher's question, but in order to provide them with the opportunity of answering in Maltese.

Two such examples are found in lesson M (Biology, Form 3) where the learners are preparing for the London Ordinary level examination. To enhance her elicitation technique the teacher switches to Maltese. Up to l. 66 the teacher conducts the lesson in English. She revises the structure of the leaf and now wants some feedback from the learners. She asks a simple question in English and then repeats it in Maltese and amplifies a little bit on it (Is. 67-71). On this occasion she does not wait for an answer from any of the learners but gives the answer herself (l. 73ff). At a later stage in l. 129, however, she asks another question in Maltese, and this time interacts with one learner in Maltese revising the opening and closing of the stomata (Is. 130-142).

In interview 1 teacher D, Is. 303-307 says "jiġri lil wkoll perezempju ehm insaqli domanda bl-ingliż ... u t-tfal ma jirrispondunix imbagnad ighiduli Miss ha nghidhielek bil-Malti, nghidilhom improya l-ewwel bl-ingliż, kultant ikolli nċedi jghiduli bil-Malti u nirrepetiha bl-ingliż" (sometimes it happens to me for example ehm I ask a question in English ... and the children do not answer me then they tell me Miss let me say it in Maltese, I tell them try in English first, sometimes I have to give in, they say it in Maltese and I repeat it in English).
Teacher M (interview 2, Is. 248-258) says that when a teacher switches to Maltese it helps "biex huma malli jkollhom difficultajiet taghhom ikunu jistghu jesprimu ruħhom ... id-difficultajiet taghhom jesprimuhom" (so that when they have their own difficulties they can express themselves ... they can express their own difficulties). Teacher P reports an example of a teacher who speaks English all the time: "jien naf teacher perezempju li jiġu jgergru t-tfal ghax ikellimhom il-hin kollu bl-ingliż ... jibżgu isaqshu" (I know of a teacher for example, the children complain about him because he speaks to them in English all the time ... they are afraid to ask him questions) (Is. 426-431).
To establish rapport

In lesson A (home-economics, form 5; see 5.3) the teacher elicits information from the learners and writes it down on the blackboard. On a few occasions she does not agree with the replies of the learners. In Is. 222-228 she switches to Maltese as she contradicts the learners. The topic of contention is the electricity bill that the fictitious family has to pay. Various learners give different answers. In Is. 226-228 the teacher says 'orrjalt halli ma niggiedux sewwa . twenty-five . every four months . mel'ejja nghidu twenty-four ...' (all right let us not quarrel . right . twenty-five . every four months . so let us say twenty-four). The fact that she switched to Maltese renders her final decision - which conflicts with the opinions of the learners - more acceptable to them. In fact in Is. 229 one learner agrees with the teacher 'ahjar hekk ghax tigi four pounds' (that is better because we have four pounds), and the learners laugh as they realize that the disagreement has been solved.

Teacher D (interview 1) says that during the first teaching practice (Is. 399) "kont ghamilt sforz konxju tkellimt bl-Ingliż biss ma' klassi minnhom, qishom ma kinux jaċċettawni" (I had made a conscious effort and spoke English only with one class, they did not seem to accept me); in Is. 402 she continues "qishom illejbjawni forsi kiesha jew xi ħaġa hekk ... ghax nitkellem bl-Ingliż biss allura qisu minn dak in-nhar bqajt noqghod attenta li almenu pereżempju jekk mhux fil-lesson imma casually speaking bil-Malti" (they sort of labeled me a snob or something like that ... because I speak in English only, so from that day I was careful that at least if not during the lesson but casually I speak in Maltese). Teacher D realized that if she wanted to secure the learners' co-operation and affection she had to use Maltese as well.

Normally in order to establish rapport with the learners, the teacher switches from English to Maltese. On two occasions however, switching from Maltese to English is used by teachers forcomic relief, creating a less formal and more pleasant relationship with the learners.
For example, in lesson F the two poems in English (Is. 219-222 and Is. 280-301) bring about some comic relief: the name of the flower "Jack in the pulpit"; the description of the seed as a "little pet" (l. 286); and the explanation given in Maltese by the teacher "speċi żżiegħel biha" (you sort of spoil it), all make the learners laugh.

In lesson J, Is. 65-76 the teacher explains the notion of "non-congruency" by describing the differences between his own hand and that of one of the learners. He mentions that he uses hand "cream" (l. 66) and that he is almost "ninety-five" years old (l. 72). The learners laugh (Is. 72 and 75). To make the description sound funnier (in this case a male teacher using "effeminate" terms) the teacher uses English expressions like "fingers" (l. 69), "dainty you know, slim" (l. 70) and "fragile" (l. 74).

5.2.3 Topic and classroom management

Codeswitching is sometimes motivated by factors like topic and classroom management. The switch can be either from English to Maltese or from Maltese to English.

Topic management
In lesson D, in Is. 79 to 148 the teacher dictates notes in English. She stops to explain in Maltese in Is. 85 to 97, 103-109, 119-143. She passes two comments in Maltese, one to check if she has the correct part of text "hux ġhekk ġhidilkom" (isn't that what I told you?) (l. 115) and the other to ask the learners to add something to their notes "żidu" (add) (l. 117). The fact that these asides are in Maltese signals to the learners that what she says in Maltese is not to be written down as notes; it is addressed to them.

Classroom management
In l. 452 (lesson G) the teacher switches from Maltese to English when she cuts short her conversation about body fat and decides to carry on with the topic of the lesson, referring the learners to the textbook. However, soon after, in l. 454,
she switches back to Maltese and starts another casual conversation with the learners by asking them about whether their mothers had washed the clothes that morning - the topic of the lesson being water and its uses. A language switch co-occurs with a change in activity:

| Conversation | - | Maltese |
| Explanation  | - | English |
| Conversation | - | Maltese |

Each codeswitch is a potential attention-getting device. When a codeswitch co-occurs with an aside or with a change in activity, it also highlights the change in the flow of information.

On other occasions, codeswitching co-occurs with the use of phrases directly related to classroom management as in the examples from lessons F, D and G below. These English phrases are common across the Maltese education system.

LESSON F
84    T:   that's enough
(later) 91    T:   eh dik il-jucca . issa attenti lil haw oqoghdu attenti please pay attention .. pay attention ... lestejilkom .... pay attention (that is the jucca . now pay attention here be careful pay attention .. pay attention ... I have prepared for you .... pay attention)

LESSON D
215   T:   ejja .... listen a little quiet .... kulhadd irid ikollu almenu
(coming on .... listen a little quiet .... everyone should have at least)

LESSON G
6     T:   now no more talking please se toqoghdu tiskantaw ohorju il-kotba w il-files
7
Apart from these formulaic forms however, when a teacher uses English for disciplinary purposes the learners are confused. In interview 1 (l. 286), teacher D says that if, for example, "tidhol tifla fil-klassi u pereżempju nghidilha next time knock go outside please tibqa' thares lejja" (a girl enters the classroom and for example I tell her next time knock, go outside please, she stares at me). I asked whether this happens because the learners do not understand English, but teacher D thinks that "nahseb mhux ghax ma jkunux fehmu imma it comes so much as a surprise li dii-command is in English it takes time to register and sort of translate into Maltese" (it is not because they do not understand but it comes so much as a surprise that this command is in English it takes time to register, and sort of translate into Maltese) (l. 290).

Having given an overview of the situational variables that affect language choice and codeswitching I shall now discuss language use in each lesson individually.
5.3 Lesson A

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 5</td>
<td>Age: 44</td>
</tr>
<tr>
<td>Age: 16</td>
<td>School education: private - English</td>
</tr>
<tr>
<td>Subject: home-economics</td>
<td>Teacher training: training college</td>
</tr>
<tr>
<td>Topic: home budgeting</td>
<td>First language: English</td>
</tr>
<tr>
<td>Class: option group</td>
<td>Present language: Maltese and English</td>
</tr>
<tr>
<td>Number of learners: 12</td>
<td>Geographical background: north-east</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit around one big table; teacher stands at the front by the blackboard.

This is a form 5 level lesson with a small group of students in their final year at secondary school (age 16). They are preparing for their Ordinary level examination in home-economics (set by London and/or Oxford Universities, U.K.). No textbook is prescribed but all the written work is done in English. The mid-yearly and end-of-year examinations, as well as the Ordinary level examination are in English.

The lesson takes place in the home-economics room which is fully equipped with cookers, sinks, utensils etc., and is in fact referred to as the "Kitchen". The atmosphere in the room is very relaxed and feels like a home. The walls are decorated with charts on topics such as caring for the home and family: and they are a reminder that this is a school.

The learners leave their classroom and come to the Kitchen for the home-economics lesson. There is only half a class of learners because the other half study a different subject. Normally the learners sit at separate tables around the Kitchen, but for this lesson which is the first session of a double lesson, they move the single tables together to form one large table by the windows towards the front of the class, and they all sit around it. The teacher stands at the head
of the table with the blackboard behind her and a file of notes open in front of her. Learners open a copy book and they copy down the notes that the teacher writes on the blackboard in English.

The tape recorder is switched on before the learners have completely settled down for the lesson. In Is. 4 and 5 the teacher gives directions to the learners to move their small tables to form one large table, to sit down around it and to take out their files.

As soon as the learners settle down, the teacher introduces the topic of the lesson: 'money management in the home' (l. 6). She then moves on to elicit from the learners various points of information related to the topic.

This lesson consists of one main transaction as the teacher and the learners work out a month's budget for an imaginary family. Each step in the lesson is introduced by the teacher, although she elicits a list of items and sums of money from the learners. At first the family income is established and then the expenditure is calculated. The teacher guides the learners through each step making sure they mention all the sources of income and all items of expenditure. She also makes sure that they do this more or less in the order that she has prepared it in her lesson notes. For example in Is. 133 and 134 the learners suggest an item of expenditure, but because it was not the next item that the teacher had planned to mention, she ignores it for a moment and continues to elicit for the item she had in mind which was "rent" (l. 142).

The lesson is basically conducted in English. This reflects the teacher's own education background and training, her geographical and present home language background, as well as her attitudes to language. As explained in section 5.1, teachers who are over thirty-five years, and who have had all their education through English at school and at the training college, use English in the classroom more than younger teachers.

However, this teacher consistently uses discourse markers like 'issa' (now) (e.g. l. 22) and 'mela' (so) (e.g. l. 31) in Maltese. Each time the teacher says issa,
she introduces new information about the topic; each *issa* marks a new step in the progress of the lesson, and in the exchange of information between the teacher and the learners. On the other hand, each time the teacher uses *mela*, she repeats some already given information. Some examples are given in Table 5.1.

Table 5.1: "Issa" and "mela" as markers of new and given information

<table>
<thead>
<tr>
<th>Issa: new information</th>
<th>Mela: given information/confusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 93</td>
<td></td>
</tr>
<tr>
<td><em>issa</em> what... else do we get</td>
<td><em>mela</em> we are going to add... all this up. <em>orrjat</em></td>
</tr>
<tr>
<td>(The teacher here elicits for more information on income sources)</td>
<td>(This marks the conclusion to the preceding discussion on income)</td>
</tr>
<tr>
<td>I. 114</td>
<td></td>
</tr>
<tr>
<td><em>issa</em> the bonus... how much is the bonus</td>
<td><em>mela</em> water and electricity</td>
</tr>
<tr>
<td>(The teacher elicits for a sum of money that has not yet been mentioned)</td>
<td>(The teacher accepts a learner's contribution)</td>
</tr>
<tr>
<td>I. 126</td>
<td></td>
</tr>
<tr>
<td><em>issa</em> this sum of money has to be distributed...</td>
<td><em>mela</em> let's take the one in between</td>
</tr>
<tr>
<td>(At this stage the teacher moves from the topic of income to that of expenditure)</td>
<td>(The teacher makes a choice from the alternatives mentioned)</td>
</tr>
</tbody>
</table>

The teacher uses terms like *issa* *(come on)* (I. 93), and *ara* *(look)* (I. 151), as well as tags like *sewwa* *(is that right?)* (I. 170) and *hux veru* *(is that right?)* (I. 168). These serve as eliciting devices, whereby the teacher encourages the learners to think and to participate in the lesson even if non-verbally, for example by looking at her or at the blackboard.
As the lesson progresses, the teacher starts to use a limited number of Maltese verbs and phrases, as in Is. 80, 114, 122 'ghandna' (we have); in Is. 98, 130 'naghmluha' (we make it); I. 141 'ejja niehdu' (let us take) and I. 156 'ejja nghidu' (let us say). As the various sums of expenditure are being discussed, the teacher uses the first person plural form of the Maltese verb. On each of these occasions she presents her final decision about an item to be written on the blackboard. For instance in I. 141 she decides that this imaginary family lives in a government rented flat and not in a house as the learners had suggested; in I. 151 she decides the average rent; and in I. 156 she decides on the sum of ninety-six pounds 'halli jkollna (so that we have) a round figure'. Using the first person plural form of the verb, and doing so in Maltese, makes it appear as though it is the learners' decision as well, and not her's alone. In this way, although she almost dictates what is to be written down, she creates a sense of "working this out together", of convincing the learners and of reaching a consensus. The use of Maltese serves as a means of manipulating the content of the written text (which is copied from the blackboard by the learners onto their files).

The teacher switches from English to Maltese at points in the lesson apparently to render the interaction more personal and to emphasize a higher degree of solidarity. The following are some examples:

In I. 66 the teacher rejects a learner's reply that was in Maltese, starting off a unit in Maltese, but then switches to English before finishing the unit she started in Maltese. At this point the teacher had almost been drawn into the interaction using Maltese, but immediately realised it, and, switching to English, she started a new unit. To her, English is perhaps the more appropriate medium to use as a teacher as a result of her own home and education language background.

In I. 161 the teacher rejects a reply by the learners and uses a common Maltese expression of ridicule 'minn fejn ġibniha' (where did we get that idea from). It is an aside, marked by the use of Maltese and by the use of the first person plural form of the verb to tone down the expression of ridicule. In I. 342 the
teacher uses Maltese again 'ha nhalluha ftit' (let us forget about that for the moment). This is another aside in Maltese, by which the teacher asks them to put an idea to one side.

Towards the end of the lesson, in l. 545, the teacher wants the learners to pay attention as by now they had become distracted. She starts in English 'listen girls', and then adds in Maltese 'ejja ha nkomplu' (let us continue), probably to secure cooperation.

The use of Maltese by this teacher can be seen as a "letting-in device" (Ure 1989:86), that is as a means of helping the learners to take part in the ongoing interaction. Codeswitching on the part of the teacher functions as a means of interrelating "my code" (English) with "your code" (Maltese).

The learners consistently use Maltese. Their contributions in Maltese are of three types:

(i) replying to the teachers' elicitation as in Is. 46, 65 and 189;
(ii) asking genuine questions as in l. 176; and
(iii) participating in the lesson by providing personal experiences regarding home management as in Is. 150, 195, 236, 244 and 263.

This is possibly due to the fact that the topic of the lesson is normally discussed in their homes in Maltese. The teacher does not at any stage of the lesson demand the use of English, on the contrary, by using discourse markers, tags, cues and some verbal expressions in Maltese she clearly invites and accepts learners' contributions in Maltese. In this lesson it is also interesting to note the use of Maltese English when alluding to features of Maltese life as in l. 84 'with the government' (mal-gvern); in l. 142 'rented by people from the government' (mikri minghand il-gvern); l. 175 'water geyser' (water heater); l. 200 'cooker which works with electricity' (kuker li jahdem bl-elettriku) for "electric cooker".

172
This is a mathematics lesson at form 4 level. The class consists of 20 learners who are preparing for the London Ordinary Level Examination. The learners are seated at single desks, in single rows, all facing the teacher who stands behind her desk in front of the blackboard. The teacher uses the blackboard throughout the lesson to work out sums that the learners are asked to copy onto their copybooks at certain points of the lesson.

This teacher is head of the mathematics department in this school. She teaches the "best" (top of the stream) and "worst" (bottom of the stream) classes. This is the transcript of her lesson with the "worst" class. I have observed her teaching the "best" class and found that, as she had told me, she uses English exclusively with the best class, and Maltese (mixed with English) with the worst class. Classes are streamed on the basis of their end-of-year examination results. Thus, according to this teacher, English is associated with and appropriate for the higher ability classes, while Maltese is appropriate for the lower ability classes because she thinks they cannot cope with English as a spoken medium of instruction. For this teacher, English language proficiency is equated with academic ability.
Throughout the lesson the teacher gives directives in Maltese, e.g. l. 19 'Daniela jekk jogħġbok aqrálà' (Daniela please read); l. 364 'ahdmu miegh?' (work with me). She elicits in Maltese, e.g. l. 131 'x'talabnà' (what are we asked for); l. 193 'tis ċif' (come on, how?); l. 417 'kif ċitgibha' (how am I going to write it?). She checks that the learners understand and follow the explanation, e.g. l. 154 'qegħdin niftiehmà' (do we understand?); l. 166 'qed tikkupjawhom hu' (you're copying them aren't you?).

The sums read out in English from the textbook for the first time are translated into Maltese. The teacher explains the text in Maltese by eliciting the meaning of what is read in English from the learners. For example in Is. 183-184, the meaning of 'papering a wall' is elicited from the learners in Maltese because as the teacher says this is not commonly done in Malta. In Is. 402-403, the words 'path' and 'surrounded' are translated into Maltese, and later on in Is. 451-455 the expression 'total surface area' is also explained in Maltese.

While speech acts are carried out in Maltese, and information units are basically in Maltese, English terms and phrases are used all the time. As the teacher works out the sums on the blackboard, she consistently uses textbook terms such as 'area' (l. 47), 'height' (l. 206), 'cylinder' (l. 452) etc. She also uses phrases like 'length times breadth' (l. 109), 'to three significant figures' (l. 328), and works out the sums in English, e.g. 'fourteen all over seven' and so on. Learners are familiar with these English phrases because they are used all the time in mathematics lessons (all the mathematics textbooks are in English - see Appendix 7).

From an educational point of view, it is relevant to note that the kind of mathematical problems and examples these learners have to work with, such as papering walls, carpeting floors and measuring swimming pools are alien to them. In Malta, walls are painted not papered, floors are tiled and not carpeted, and people generally swim in the sea and very rarely in swimming pools, which are only found in hotels. Learners are not familiar with the topics of the text - this makes their lesson more difficult.
These English textbooks have been written for British learners and are used in Malta because for decades Maltese students sat for the English London and Oxford Ordinary and Advanced level examinations. It might be helpful to the weaker learners in their attempts to understand the subject matter, if the examples are taken from their everyday life experiences.

5.5 Lesson C

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum A</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 3</td>
<td>Age: 34</td>
</tr>
<tr>
<td>Age: 14</td>
<td>School education: private - English</td>
</tr>
<tr>
<td>Subject: physics</td>
<td>Teacher training: B.Educ.</td>
</tr>
<tr>
<td>Topic: the lens</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: average ability</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 25</td>
<td>Geographical background: central</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit on high stools around laboratory benches; the teacher at first stands on a platform behind a laboratory bench, and later she goes round the learners as they work in groups.

The recording of this lesson starts at the beginning of the second session of a double lesson. The lesson takes place in the school’s physics laboratory. When the recording starts the teacher is finishing a demonstration of an experiment that the learners then try out for themselves in groups.

There are three large laboratory benches and the learners are seated on high stools around the benches facing the teacher. The teacher’s bench is elevated on a platform in front of the blackboard. The teacher stands on the platform behind the bench facing the learners.

As soon as the teacher finishes the demonstration in English, in l. 14 she asks if the learners had any questions. Three questions are asked in Maltese by the learners. This is the first attempt in the lesson to understand the written text in
English through the use of spoken Maltese. It is important to note that learners are not forced to ask questions in English: that might hinder them from participating. The teacher replies to their requests for clarification in Maltese, thus accommodating to their language choice. The teacher probably knows that it is important for the learners to ask questions in Maltese and to discuss the written text in Maltese as this helps them to internalize the knowledge better.

The learners then carry out the experiment in groups. The rest of the transcript represents the interaction of one group of learners as they fill in a handout in English during the experiment.

At first the learners are very shy of the tape-recorder, and it takes them a few minutes to settle down to their task. They pass comments in Maltese and complain (l. 29) that they cannot talk freely among themselves because of the tape recorder. They give the impression that usually, when they work in groups, they take the opportunity to relax from the teacher dominated atmosphere, and have a good time talking to each other, complaining about teachers and homework, and teasing each other about boyfriends, as they in fact do in Is. 29-31 and 407-411.

All the interaction between the learners takes place in Maltese (from l. 29 to the end). They use classroom jargon in English such as 'metre ruler' (l. 33); 'test' (l. 35); technical terms of physics such as 'lenses' (l. 39); 'focus' (l. 121); and numerical expressions such as 'seventeen point two' (l. 157) and so on.

It is interesting that when the teacher joins this group and repeats the directions about how to carry out the experiment she does so in Maltese (Is. 45-56) although she uses some English terms like 'experiment', 'screen', 'image' etc. Thus, whereas the teacher addresses the whole class in English (formal), she addresses a small group of learners in Maltese (informal) even when she is talking about the same experimental procedure.
5.6 **Lesson D**

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum A</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level:</strong> form 3</td>
<td><strong>Age:</strong> 24</td>
</tr>
<tr>
<td><strong>Age:</strong> 14</td>
<td><strong>School education:</strong> private - English</td>
</tr>
<tr>
<td><strong>Subject:</strong> economics</td>
<td><strong>Teacher training:</strong> B.Ed. (Hons.)</td>
</tr>
<tr>
<td><strong>Topic:</strong> bank services</td>
<td><strong>First language:</strong> English/Maltese</td>
</tr>
<tr>
<td><strong>Class:</strong> option group</td>
<td><strong>Present language:</strong> English/Maltese</td>
</tr>
<tr>
<td><strong>Number of learners:</strong> 15</td>
<td><strong>Geographical background:</strong> central</td>
</tr>
</tbody>
</table>

**Seating arrangement:** at first the learners sit at double desks facing teacher, but later they form groups. The teacher at first stands on a platform behind her desk in front of the blackboard, but during group work she walks round the groups.

This is the first session of a double lesson. There is only a small group of learners (15) because the other half of the class left the classroom for a different option. The learners sit in twos facing the teacher who stands behind her desk on a platform in front of the blackboard, facing the learners.

The teacher starts the lesson by referring to the topic that is being dealt with: "banking". She elicits from the learners some information given in previous lessons as a means of revising the main points covered so far. Then she moves on to talk about "the cheque", and dictates some notes in English. Economics examinations are in English, and written work is done in English. There is no prescribed text for this topic and so the teacher prepares some notes and dictates them to the class. She explains some of the points that she dictates in Maltese, e.g. Is. 85-169.

The explanation of the written text in English in spoken Maltese results in a certain amount of codeswitching. The following are examples of how elements from both languages create links with previous lessons. For example in I. 5 there is an inter-unit switch. The teacher invites the learners to remember 'what
we've been doing so far' and then she suddenly switches to Maltese and says 'fil-bidu aħna għidna' (in the beginning we said). This inter-unit switch has the effect of contrasting the metastatement about what the learners were invited to do at the beginning of this lesson, with a link to what was said in the past. Maltese is thus used for contrast between two speech acts: a metastatement about a future activity and an informative about what has been covered in the past, as well as an intertextual link with the work already covered. This is done in Maltese probably because Maltese is more likely to elicit a positive response from the learners.

The teacher dictates notes in English in Is. 80-82, 98-100 and 110-115. In each case she dictates a sentence, then stops and explains it in Maltese. For instance in Is. 86-97 she explains the meaning of a "post-dated cheque" at length in Maltese, and in Is. 119-128 she explains the meaning of "branches" by giving examples of branches of shops in Malta; and about the need for having a code number in magnetic ink on each cheque.

Codeswitching is also used for asides or to mark a change in activity. In l. 22 after the teacher reminds the learners, in English, about what they had covered in the previous lesson, she switches to Maltese when she refers to what is going to happen now: 'mela issa ċa nkomplu hemmhekk' (so now we will continue from there).

After the teacher stops dictating notes, she introduces a new activity. The learners form groups of 4 or 5. The introduction to this activity takes place in Maltese, roughly from l. 172 to l. 230. The teacher codeswitches as she gives the instructions up to l. 178 when she addresses a particular learner and asks her for the reason why she did not go to the bank. She talks to various learners about their visits to different bank branches. This part of the lesson is rather informal and takes place in Maltese as it involves the learners talking about their experiences of visiting banks and collecting leaflets.
Each group is expected to discuss the information leaflet that they had picked up at a bank about bank services. The learners are asked to write down points about the bank service they choose and then present their information to the rest of the class. However, they are not given any instructions as to which language to use for these activities. In L. 267 a learner asks the teacher whether they were expected to address the whole class in English at the end of the group work, and the teacher replies in the affirmative.

During group work, the learners discuss the activity in Maltese but read, write and dictate points to each other in English. It is more natural for them to use Maltese - they use it amongst themselves - but English is used in written work.

Towards the end of the lesson the teacher elicits in Maltese, and most of the rest of the lesson is conducted in Maltese. It is unlikely they would have felt confident to present the notes fluently in English unless they read them - these learners do not seem confident to address the class at length in English. Spoken English seems to be used only by the teacher. In fact, the teacher occasionally translates the learners' points into English so as to link the Maltese text produced by the learners with the English subject text.
5.7 Lesson E

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum A</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 1</td>
<td>Age: 24</td>
</tr>
<tr>
<td>Age: 12</td>
<td>School education: state - English/Maltese</td>
</tr>
<tr>
<td>Subject: needlework</td>
<td>Teacher training: B.Ed. (Hons.)</td>
</tr>
<tr>
<td>Topic: types of fabrics</td>
<td>First language: Maltese dialect</td>
</tr>
<tr>
<td>Class: low stream</td>
<td>Present language: Maltese dialect, standard Maltese and English</td>
</tr>
<tr>
<td>Number of learners: 25</td>
<td>Geographical background: Gozo</td>
</tr>
</tbody>
</table>

**Seating arrangement:** learners sit in three long rows facing teacher who stands in front of the blackboard, behind her desk, facing the learners.

The recording of this lesson starts towards the end of the first session of a double lesson and goes on into the second session until learners start doing some individual work.

This is a very tiny classroom, used as a needlework room. A few sewing machines are placed at the sides of the room. The learners sit facing the teacher in three horizontal rows with no space in between for any one to move around. The teacher stands behind her desk and in front of the blackboard facing the learners. She does not change her position during the lesson. She has a file of lesson notes opened on the desk in front of her, at which she looks every now and again. The learners have a copy of the teacher's notes on their desks.

The needlework examination is in English and the written work is carried out in English. However the lesson is practically conducted through Maltese, except for the English terminology that is used throughout the lesson. This teacher comes from type A family, where a Maltese dialect is spoken at home. Furthermore she is young and had a state school education where the use of
English was not enforced. These factors, coupled with the fact that the learners come from a low stream have probably resulted in the use of Maltese as a spoken medium in this lesson.

Codeswitching is used in this lesson in the following ways:

(i) The repetition of words in both languages. In Is. 37-39 a reply and an accept are carried out in English, but in the second part of I. 35 the teacher elicits in Maltese. The learners provide a reply in English in I. 36, which the teacher accepts in I. 37. In I. 39 she elicits again in Maltese, this time asking for the Maltese equivalent of 'silk worm'. The learners reply in Maltese, the teacher elicits again in Maltese, but this time some learners answer in English (I. 42) and some in Maltese (I. 43). The teacher accepts the reply in Maltese in I. 45.

(ii) Explaining the English text in Maltese. In Is. 97 to 102 the teacher explains the English text by amplifying the meaning in Maltese. She does not actually translate word for word, e.g. 'warm' in I. 96 is repeated in Maltese in I. 101 'isaẖhan'; two synonyms in Maltese 'iqaxxruhom. iğiżżuhom' are given in I. 98 for the English term 'shear'; then the teacher uses a mixed Maltese and English compound verb in I. 102 'qieghed shearing' literally "being shearing".

(iii) The alternating use of the two languages: from I. 173 to I. 190 the teacher narrates in Maltese the story of how silk was discovered by a Chinese princess. In I. 185 the teacher announces 'issa ha naraw kif jaghlu s-silk' (now we are going to see how silk is made) and continues in Maltese 'l-evwel ikollok il-moth' (first there is the moth). In I. 188 she switches to English as she reads from her lesson notes 'from the caterpillar' etc. She repeats in Maltese in I. 190 that the silk moth lays up to four hundred eggs. When the teacher uses English in Is. 188-189, it is because she looks at her written notes in English. It is important to note that the new information is not necessarily passed on in English first and then translated into Maltese. Sometimes, as in I. 197 (and in Is. 98 and 108) the new information is introduced first in Maltese and then reiterated in English. It
seems that the essential thing is for the teacher to repeat the information in both languages: in Maltese to ensure understanding and in English to ensure familiarity with the written text.

Most of the English terms used in this lesson are repeated in Maltese to ensure understanding, for example l. 14 'sheeting lożor'; Is. 170-171 'silk wom dudu tal-harir'; l. 173 'under a mulberry tree taht sigra tat-tut'.

Some terms are not translated even if they do have Maltese equivalents because the latter have unsuitable connotations; they do not form part of the academic register, e.g. l. 26 'natural fibres'; l. 30 'vegetable fibres'; l. 32 'animal fibres'.

In l. 151 the teacher uses the verb "to crease" in English and then she switches to Maltese, and instead of using the Maltese term jitkemmex she says 'jikkrisja', i.e. she gives a Maltese morphological form to the English verb. In l. 207 the teacher uses the Maltese noun 'fospqa', then she uses the English noun 'cocoon' in l. 209; but in l. 210 instead of repeating the Maltese noun "fospqa" she uses a Maltese form 'kukuni' from English "cocoon" meaning the same thing.

This is possibly due to the effect of written English. It may be quicker for the teacher to transform an English verb which is in her short term memory into a Maltese morphological form, than to retrieve a Maltese verb stored in her long term memory. These observations naturally require psycholinguistic experimentation for verification.
This lesson takes place in the school library because the teacher is the school librarian and makes use of the library as a classroom. The learners sit around one very long table in the middle of the school library, surrounded by book shelves. The teacher stands at the head of the table facing the learners with a blackboard behind him. During this lesson the teacher refers to books and plants in the library, these being part of "the environment" which is the topic of the lesson.

The lesson starts with a prayer. The teacher specifies that this is unusual, and it is taking place not because there is an observer in the classroom, but because he thinks that it is really necessary. He elicits from the learners about the reason for praying. The learners reply that a prayer for peace is important because this is the eve of the Gulf War (Is. 15-22).

After the prayer the teacher picks up the theme of war and peace and introduces the topic of the lesson: safeguarding the environment.

This subject, social studies, is studied in Maltese and written work and examinations are in Maltese. The use of English in this lesson is related to the following factors:
(i) The use of English terms for classroom control as in l. 2 'sit down' and 'pay attention'; l. 84 'that's enough'; and for the cueing function in l. 15 'raise up your hand' (note the Maltese English expression used by this teacher); and other school register terms such as 'library' (l. 94); 'reference' (l. 158) and 'lending' (l. 159).

(ii) The use of non-technical English words and expressions that have become common usage in Maltese, as in l. 12 'as such', 'telephone' in l. 50 and 'pot' in l. 71 and 'rock garden' in l. 129. Number terms are used in English (e.g. l. 141 and 151).

(iii) the use of English because one of the learners is a native speaker of Canadian English whose family have recently returned to Malta. The teacher uses English in l. 55 to acknowledge his reply).

(iv) The reading of two poems in English which are explained in Maltese. Some English terms are used within Maltese speech as used in the poems, e.g. in l. 223, 227 the teacher uses the term 'Spring' not its equivalent in Maltese 'rebbiegha'; in l. 288 the teacher elicits about what the 'wish' mentioned in the poem refers to, and in l. 296 the teacher describes the 'poem' as 'helwa hafna' (very sweet).

It is interesting that the teacher uses two poems in English to illustrate a point he wants to make about the beauty of the natural environment. The poems help introduce some comic relief at the same time. The use of English in this lesson shows how teachers, who are individually responsible to a large extent for language medium, do not restrict themselves to one language, or just unwittingly codeswitch, but exploit knowledge of both languages in the classroom in order to provide the best possible learning experiences for the learners.

Some observer effect is noted in this lesson. At one point the learners start getting very unruly. The teacher gets angry and finds it difficult to control the noise level in the classroom. At one particular moment he orders the learners
to shut up but the pointer he uses breaks in two and the whole class bursts out laughing. It was only towards the end of the lesson that the reason for the disorderly behaviour and talkativeness on the part of the learners became clear.

In I. 423 the teacher admits that he has been trying to conduct this lesson in a slightly different manner than usual. Normally he allows each learner to provide a reply to his elicitations one after the other in the order they are seated. On this occasion, probably because of the observer, he asked them to put their hands up. The learners could not behave in this unusual manner where the teacher elicits and the learners bid, and then the teacher nominates etc. with the result that the lesson ended in confused behaviour and noise because all the learners talk at the same time.

This is one instance of how the presence of the observer affected the teacher's classroom management process. At another point in the lesson the teacher comments that because there is a tape-recorder at the front of the class he could not move around the learners to show them some pictures in a book. This teacher seems to have been particularly aware of the tape-recorder and of the observer (there was no video-camera).

5.9 Lesson G

<table>
<thead>
<tr>
<th>School: Boys Junior Lyceum</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level:</strong> form 1</td>
<td><strong>Age:</strong> 42</td>
</tr>
<tr>
<td><strong>Age:</strong> 12</td>
<td><strong>School education:</strong> state - English</td>
</tr>
<tr>
<td><strong>Subject:</strong> integrated science</td>
<td><strong>Teacher training:</strong> training college</td>
</tr>
<tr>
<td><strong>Topic:</strong> water</td>
<td><strong>First language:</strong> Maltese</td>
</tr>
<tr>
<td><strong>Class:</strong> upper stream</td>
<td><strong>Present language:</strong> Maltese</td>
</tr>
<tr>
<td><strong>Number of learners:</strong> 25</td>
<td><strong>Geographical background:</strong> south</td>
</tr>
</tbody>
</table>

**Seating arrangement:** learners sit on high stools around three large laboratory benches; the teacher stands behind a laboratory bench on a platform facing the learners.
The learners come into the science laboratory from another class but settle down quickly. They sit down on high stools around three large laboratory desks, one behind the other, equipped with taps and bunsen burners. The teacher stands in front of the blackboard, behind a large laboratory desk on a platform, facing the learners.

Both the teacher and the learners keep the science textbook open in front of them for the entire lesson, as required by the teacher in I. 9. However, the textbook is only directly referred to at any length towards the end in Is. 502-504 when a chapter is read out aloud and some classwork and homework from the textbook is assigned.

Most of the lesson consists of discussions between the teacher and the learners about various aspects of the uses of water in everyday life and the water problem in Malta. It is relevant to note that on the page being read from the textbook, reference is made to rain in Britain. This book published in Britain is intended for British students, and so it was appropriate that the teacher tackles the problem from a Maltese point of view of which the learners have first hand experience.

Like lesson F, this lesson takes place on the eve of the Gulf War in January 1991, and both teachers mention this fact: in lesson F a prayer for peace is said at the beginning of the lesson; in lesson G the teacher comments about the reason for the war, i.e. oil production. These two non-textbook references to life outside the classroom are done in Maltese.

English is used at the beginning of the lesson while the topic is being introduced, and during the brain-storming session about the uses of water. It is used at the end of the lesson, which is centred around the textbook, and includes the reading of a few pages and the assignment of work.

Maltese, on the other hand, is used largely in the middle part of the lesson, roughly from Is. 102 to 473. During this time, the interaction between the teacher and the learners is on a more informal basis as they discuss the
availability and use of well-water in the home, the problem of drought and the quality of underground water. They then talk about oil and the Gulf War and this leads on to a discussion of table oil and fat in food, until it is time to settle down to a classroom activity based on the textbook.

This lesson takes place on a very rainy day (unusual in Malta) and the teacher refers to the rain outside. In I. 460 the teacher asks the learners if their mother had washed clothes on that day, expecting them to say no. Instead she gets two interesting replies: one learner says that his mother can let the clothes dry inside (in Malta clothes are normally hung on roof tops to dry), and another one says that his mother is in hospital having a baby! In I. 470 the teacher asks whether the puddles of water outside were likely to dry up in the rain and she gets a wrong answer at first and then a correct one. In I. 500 she says that she will not go outside to wet the paper towel or she will get wet. In each case Maltese is used to talk about this first hand experience of rain and water.

Maltese and English are used in interesting ways in this lesson. The teacher elicits in English (e.g. in Is. 33, 40, 56, 133) and in Maltese (e.g. in Is. 22, 43, 47, 60). The learners reply in English and the teacher accepts their replies in English as in Is. 39-44, 46-65. She also performs some informatives in English as in Is. 16, 31 and 198.

The topic "water" is explored through a variety of grammatical constructions and semantic roles in both Maltese and English. For example, it is used by the teacher in I. 26 'water movement' as a pre-modifier within a nominalization, and as an actor; in I. 31 'water is very important' where it is the topic and subject of the clause; in I. 33 'what can you tell me about water' where water is embedded in a prepositional phrase and the subject of discussion; and in I. 36 'its uses' functions as an adjective and as an instrument. The topic is discussed by the learners for example in I. 39 'we can use it for fish to drink' where "it" is a direct object and acts as a vital process; in I. 41 'you can put fish in a bowl of water' where "bowl of water" is a noun phrase within a prepositional phrase; and also in Is. 44 and 48 'wash the clothes' and 'have a bath' where "water" is understood as an instrument in the process of human activity. Throughout this text the
semantic use of these different forms provides lexical cohesion, including the Maltese translations, e.g. I. 49 'biex tinhasel have a bath'; I. 51 'drink biex nixorbu'.

These various grammatical forms give the learners practice in a variety of structures that are needed to talk about a particular topic. This is done in both Maltese and English. Furthermore, a range of semantic roles are practised in both languages. This is very useful for the learners who need to develop their proficiency in both Maltese and English.

I believe that this shows how the use of Maltese and English at the same time does not necessarily mean that the speakers have problems speaking either language. On the contrary, these examples show that these speakers can and do exploit a variety of semantic and grammatical structures when talking about the same topic in both languages.

During the discussion in Maltese, some informal personal interaction takes place between the teacher and the learners. For example the teacher makes reference to her age in I. 170 'forsi jien daqs il-mama taghkom' (maybe I am the same age as your mother) when describing the way people had to draw water from a communal tap or reservoir in her childhood. The learners also offer some personal accounts about the uses of water. For example one boy talks about his great grandmother (Is. 165-166) and says that she adds some chemicals to well water to make it good for drinking.

Every now and again, during these discussions, the teacher makes a link between these personal experiences of water and the subject-matter. She does this by either passing comments, or by eliciting as in I. 195 'a large part of water comes from the underground reservoirs'; in I. 272 'think of the surroundings'; in I. 362 'give me some examples ... of things that are produced from this black gold'. It is probably the use of English which signals to the learners that what they are doing is not simply sharing a few stories, but learning some scientifically relevant facts.
5.10 Lesson H

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum B</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 4</td>
<td>Age: 25</td>
</tr>
<tr>
<td>Age: 15</td>
<td>School education: state - English /Maltese</td>
</tr>
<tr>
<td>Subject: economics</td>
<td>Teacher training: B.Ed.(Hons.)</td>
</tr>
<tr>
<td>Topic: conservation</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: grouped by option</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 20</td>
<td>Geographical background: north</td>
</tr>
</tbody>
</table>

Seating arrangement: the learners sit at individual desks in single rows facing the teacher. The teacher sits at her desk in front of the blackboard facing the learners, but occasionally stands up to write some points on the blackboard.

I entered this classroom with the intention of recording the next lesson (lesson J). However the teacher said she did not mind if I recorded the last part of her lesson as well. So the transcript represents the last part of this lesson.

The teacher conducts the lesson mainly in Maltese even though the examination and written work are done in English. English is used for terminology that is specific to the topic being treated. The teacher uses technical terms such as 'natural resources' in l. 67 and 'standard of living' in l. 70. She does not translate or explain them in Maltese; the learners did not seem to have any problems understanding them; probably because they had been introduced and explained on previous occasions.

The teacher introduces a new concept in English: 'policy of conservation'. She explains it extensively in Maltese in Is. 90-94, and continues to expand on the notion until the end of the lesson. It seems that an English term or concept is explained in Maltese when it is first introduced. On subsequent occasions it is used in English and there is no need to provide a translation or further
explanations in Maltese. This probably accounts for the low frequency of translation switches observed in chapter 7.

5.11 Lesson I

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum B</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 3</td>
<td>Age: 27</td>
</tr>
<tr>
<td>Age: 14</td>
<td>School education: private - English</td>
</tr>
<tr>
<td>Subject: English literature</td>
<td>Teacher training: B.Ed. (Hons.)</td>
</tr>
<tr>
<td>Topic: poetry appreciation</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: middle stream</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 25</td>
<td>Geographical background: north</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit at single desks placed in single rows facing the teacher who stands in front of the blackboard, behind her desk facing the learners.

The teacher introduces the lesson by reminding the learners of what had been done in the previous literature lesson: (l. 5) 'remember last time we read those two poems and we talked a little about them'. The introduction goes on up to l. 24. At this point the teacher starts to elicit responses from the learners about the day's topic.

This lesson is an introductory lesson to poetry appreciation. The teacher introduces literary notions like 'mood' and 'theme'. She uses an interesting technique for doing this by first talking about pictures and the visual tools used to express feeling, such as colour, size and shade. She elicits most of the ideas from the learners. She then goes on to talk about poetry. She presents two poems from the syllabus and helps the learners express their reactions and understanding of the poems by analogy with drawing.

This lesson is conducted in English by the teacher, and all the learners' contributions are in English. However, the teacher's English is heavily
influenced by Maltese intonation, and at times by Maltese expression and syntax. The following are examples of Maltese English found in this lesson.

(i) The overuse of the general term for the specific:
* the use of the term 'words', e.g. in Is. 16, 101, and 179.
* the use of the term 'things', e.g. in Is. 15, 116, 128.

(ii) The use of English expression which appears to be a literal translation of Maltese idiom:
* I. 62 'there is the fact that every painter' (hemm il-fatt ili kull pittur);
* I. 334 'that he is in the poem himself' (li qiegħed fil-poeżija hu stess).

The teacher is probably slow to introduce terms like "message", "theme", "expression" and "device" because they are all new to the learners and so she uses "things" and "words" instead. In fact she does introduce the terms 'mood' in I. 110 and 'theme' in I. 115. Thereafter she uses them frequently as in Is. 203, 272 and 273.

5.12 Lesson J

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum B</th>
<th>Teacher: male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 4</td>
<td>Age: 47</td>
</tr>
<tr>
<td>Age: 15</td>
<td>School education: state - English</td>
</tr>
<tr>
<td>Subject: mathematics</td>
<td>Teacher training: training college</td>
</tr>
<tr>
<td>Topic: congruent and similar triangles</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: middle stream</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 25</td>
<td>Geographical background: north</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit at single desks in single rows facing teacher who stands in front of blackboard facing learners.
This mathematics lesson takes place with the same class of learners as in lesson H. At the end of lesson H, a few learners come back from another lesson, and settle down quickly. The lesson starts with a prayer in English. It is common for lessons at primary and secondary level in Malta to start with a prayer.

The Maltese population is largely practicing Catholic (over 75%) and religion plays a very important role in the life of the people. They do not hesitate to show this. For instance many people make the sign of the cross at the start of each bus journey; some make the sign of the cross and say a prayer as they pass by a cemetry or by a holy statue or a church. The daily school assemblies consist of prayers and hymns and end with the National Anthem which is a prayer to God asking Him to help the Nation.

Some teachers prefer to start each lesson with a prayer. Others only say a prayer on special occasions, e.g. in lesson F the prayer is said because of the Gulf War. In lessons L, M. and N which take place in the private school run by a religious order, each lesson regularly starts with a prayer.

In this lesson, the prayer is said in English while the lesson itself is conducted in Maltese. This is probably because the teacher who is over thirty-five years and was trained at the "British" religious training college is used to saying prayers in English in the education setting (while outside the school, in church, etc. all prayers are said in Maltese). It is a formulaic prayer and a formal stage in the lesson. Thereafter the teacher accommodates to the learners' language and conducts the lesson in Maltese. Maltese is also his first language at home (family type B).

Most of the English used in this lesson is due to the use of mathematical terminology. Some of the mathematical terms in English are translated into Maltese probably to ensure that the learners understand their meaning (see examples below). Others are not translated even though Maltese equivalents are available, probably because the Maltese equivalents are not considered appropriate.
In Is. 37-40 the teacher talks about 'congruent triangles'. He explains in Maltese that all 'three sides' 'huma inzertaw it-tlieta l-istess' (all three of them are the same). In l. 86 the teacher concludes 'mela that is congruency. meta xi hağa tpoğjiha fuq xi hağa u tigi eżatt eżatt x'izjed' (so that is congruency. when you put something on top of something else and it is exactly how) and the learners reply 'l-istess' (the same).

At other stages of the lesson the teacher elicits the meaning of terms in English and asks for Maltese equivalents. For example in Is. 229 to 236, the teacher elicits the meaning of the term 'similar' in Maltese. The learners give various answers and in the end the teacher accepts the Maltese term 'jixxiebhu'.

In l. 46 the teacher mentions 'wahda mill-kondizzjonijiet' (one of the conditions) that is necessary for congruency and he talks about it in Maltese. However later on, in Is. 148, 184 and 186 he talks about it in English. The use of English at this point is probably due to the fact that he was writing the points down on the blackboard and the mathematics questions are always set in English.

Some of the mathematical and classroom terms used in English in this lesson do have Maltese equivalents, but they are not translated because the Maltese terms do not belong to the academic register. The following are examples of terms used in English for which there are Maltese equivalents: 'geometry' in l. 20 (gometrija); 'revision' in l. 23 (reviżjoni); 'triangle' in l. 32 (trijanglu); 'interior' in l. 166 (interjuni); 'Included angle' in l. 171 (angolu inkluż). The use of Maltese in these cases would sound strange because these concepts are normally expressed in Maltese in the classroom.

It is interesting to note that a language switch accompanies a shift from one reference point on the blackboard to another. For example while referring to angles of triangles on the blackboard, the teacher uses Maltese to refer to one angle and switches to English to refer to the next angle. In l. 151 the teacher draws another two triangles on the blackboard. He refers to one angle in English 'this is six', and then switches to Maltese when he refers to the
corresponding angle on the other triangle 'u dan naghmluha six ukoll' (and this one we make it six as well). Then he moves back to the first triangle and refers to it in Maltese: 'dan huwa seven jew (or) seven point five'. Then, when he refers to the corresponding angle on the second triangle he switches back to English 'this one is seven point five ukoll' (as well).

This teacher seems to be rather keen on ensuring that the learners know the exact meaning of certain mathematical terms in English. In fact, he describes the grammatical construction of the term 'equiangular' in Is. 275-297. He talks about 'parts of speech' in I. 279, and says that 'angle huwa n-noun' (angle is the noun), and 'angular mhux adjective' (isn't angular an adjective?). The learners have difficulty with the use of English grammatical terms which shows that they were not taught English in the same way that the teacher was. It is probable that the teacher studied English using the structural approach, whereas the learners have little exposure to grammatical analysis of English.

On the whole this lesson is conducted through spoken Maltese. English is used when writing on the blackboard and when using mathematical terms and phrases. The variables affecting the choice of Maltese are the teacher's own language and geographical background and the learners' own language background: Maltese.
This is a Maltese literature lesson at Form 1 level which also took place at the beginning of the scholastic year in October. The first part of the lesson is spent correcting homework. Learners read the questions that had been set for homework the previous week, and then a few learners read out their answers. The questions are all factual, seeking information about the story read in class, such as 'x'kien il-passatempt ta' Toninu?' (what was Toninu's hobby?) (I. 52). The rest of the lesson is spent reading another short story from the same Maltese anthology of short stories. The teacher asks various learners to read aloud from the textbook. Each learner reads a few paragraphs. The teacher finds that the learners are rather slow at deciphering some Maltese words, and have difficulty with the intonation. He ascribes this poor reading ability to the fact that the learners do not read at home. He suggests that they should read the stories several times at home before class.

As they read parts of the story aloud, the teacher corrects the learners' intonation (Is. 219, 237). He elicits explanations of the idioms used in the text (I. 202, 289 and 307). He takes the opportunity to introduce some humour into the lesson by interpreting the idioms literally and mimics the gestures described in the idioms. He interrupts the learners as they read in order to explain the...
meaning of some Maltese words used in the text that are no longer used, e.g. 'xelin' (shilling) in I. 245 and 'karestija' (stinginess) in I. 254.

Although the lesson is conducted in Maltese, a few English terms used. Most of these have now become adopted to Maltese pronunciation, e.g. 'farm' in I. 87; 'tricky' in I. 94; 'birthday' in I. 123;; 'five cents' in Is. 254-248, and 'films' in I. 464. Except for "films" and "tricky" there are Maltese equivalents for all the other terms: "razzett", "gheluq snienek" and "hames centezmi" for "farm", "birthday" and "five cents" respectively. When the term "birthday" is used by a learner, the teacher corrects her and gives the more archaic forms, e.g. 'gheluq snienek' (Is. 124-126). The teacher corrects his own use of the English phrase 'fingers up' in I. 155 by immediately repeating in Maltese 'gholli jdejk'. This shows that it is considered natural to use English sometimes; after all some English expressions are part of classroom jargon. Teachers of Maltese, then have to make a conscious effort to use Maltese terms where available and appropriate (it is suggested they do this in the state school syllabus for the teaching of Maltese at secondary level). Teacher P who also teaches Maltese said (interview 2) that it was his duty to set a good example by using Maltese exclusively (Is. 300, 302).

The following are some observations about the teaching of Maltese as a first language at school:

(i) The teaching of Maltese is strongly associated with literature. Through reading literary texts, the learners are taught how to read (the teacher corrects the learners' intonation as they read); Maltese culture is also associated with the teaching of Maltese; the teaching of Maltese spelling plays a major role. About two thirds of Maltese lesson time or more is dedicated to such activities. The rest is taken up by writing grammar exercises.

(ii) Learners cannot speak at length to an audience with confidence. They are only able to provide the answers that they have written down - they are unable to judge as to whether their answer was correct or incorrect from the gist
of what their classmates say - they have to read it out as written before they can mark it correct. Furthermore, their answers are closely based on the text, either copied straight from the book, or a very near paraphrase. This type of language exercise is carried out throughout the education system and results in the students' lack of ability to express themselves in their own words. To counteract such failure, the introduction of an oral component in the matriculation examinations is being discussed by an examination board set up to revise the Maltese examination (Mifsud 1992, personal communication).

5.14 Lesson L

<table>
<thead>
<tr>
<th>School: Boys' Private School</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 2</td>
<td>Age: 45</td>
</tr>
<tr>
<td>Age: 13</td>
<td>School education: private - English</td>
</tr>
<tr>
<td>Subject: history</td>
<td>Teacher training: training college</td>
</tr>
<tr>
<td>Topic: Egypt</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: not streamed</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 30</td>
<td>Geographical background: north</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit in twos on double benches in four rows facing blackboard; teacher stands at the front by the learners.

Practically, the whole of the lesson is conducted in English. It starts with a prayer in English. Ls. 13 to 68 consists of a revision period done through an elicitation-answer-accept type of interaction between the teacher and the learners. All the learners' contributions are in English.

This teacher shows great skill in topic and classroom management. She elicits most of the information from the learners rather than giving it to them herself. She does this by making them think before they talk, for example l. 91 'let's put down our hands and think a little bit more'. She does not simply ask the learners for facts, but encourages them to think about the reasons behind those facts. For example in l. 73 she asks 'what are the qualities which a leader
would need to have?' and when the learners give her some answers she wants to know "why" and "how", e.g. I. 75 'why would a strong person be good?', I. 92 'how did they become rich?' The learners do provide the right answers and they do so in English which shows that are able to participate fully in the lesson using English.

Later on in the lesson the teacher asks the learners to observe some pictures on their textbook. She does not simply ask them to describe the pictures but wants the learners to give some explanations, e.g. in Is. 147-153 the learners realize that the 'big person' represents the pharaoh as opposed to the 'smaller people'. In Is. 169-188 the teacher elicits the meaning of the symbols shown on two headdresses worn by 'two pharaos (...) who are really the same person' (I. 172).

The only two instances of Maltese words used by the teacher are, one in I. 221/329, a prompt 'isa'; the other in Is. 138/119, an acceptance of a learner's answer: 'sewwa'. The only Maltese used by the learners are, in I. 256 when the class uttered an expression of awe in Maltese 'il'; and I. 356 when a learner used the Maltese article il- in front of the noun 'leopard'.

The use of English throughout this lesson depends not only on the textbook, but also on her own education background - she is over thirty-five and attended the residential training college. This is a private school and so use of English is the norm; furthermore this teacher is very confident in the use of English and very capable of involving the learners in the lesson. The learners co-operate with the teacher throughout the lesson by answering her questions in English all the time.
5.15 Lesson M

<table>
<thead>
<tr>
<th>School: Boys' Private School</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 3</td>
<td>Age: 39</td>
</tr>
<tr>
<td>Age: 14</td>
<td>School education: private - English</td>
</tr>
<tr>
<td>Subject: biology</td>
<td>Teacher training: training college</td>
</tr>
<tr>
<td>Topic: the structure of the leaf</td>
<td>First language: Maltese and English</td>
</tr>
<tr>
<td>Class: not streamed</td>
<td>Present language: Maltese and English</td>
</tr>
<tr>
<td>Number of learners: 15</td>
<td>Geographical background: north-east</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit at double desks in four rows facing teacher's bench and blackboard; the teacher sits on a platform behind a large laboratory bench, with a white board behind her and a slide projector beside her.

1This lesson takes place in a large science laboratory. The sides of the laboratory are covered with various models of the human body and other scientific apparatus. On the teacher's bench there is a slide projector that the teacher uses in the course of the lesson to show some diagrams. The biology textbook is kept open and is used at various stages of the lesson. At the end of the lesson some work is assigned from past Ordinary Level examination papers.

The beginning and end of the lesson offer a striking contrast in terms of the use of Maltese and English - compare the first two pages (up to l. 66) which are all in English with the last two pages where much more Maltese is used. This lesson alternates between stretches of English and stretches of Maltese mixed with English. For example in l. 324 the teacher starts an exchange in English with the framing move "ok. now let's do this transport system" but switches to

1 In analyzing this lesson we find it useful to use some of the terms found in the Sinclair and Coulthard (1975) scheme of classroom discourse like "exchange" and "framing move". See chapter 8 for a description of this system.
Maltese in l. 326 with another framing move 'issa ha naraw...' (now we're going to see...). This exchange is concluded in l. 355 with the framing move "ok and here we have the structure of the leaf", and immediately starts another exchange with the framing move "now we're going to have the O' level question" in l. 371.

This teacher reported in the interview (interview 2, Is. 153-157): "nispjega bil-Malti . u mbaghad iridu jiktbu bl-Ingliż meli l-ewwel nispjega bl-Ingliż . u mbaghad insaqsi bl-Ingliż jekk ma jifhmunix nenfasizza bil-Malti it-tfal insaqsun biex iridu l-aqwa li jkunu fehmuni imma l-ahhar conclusion tal-lesson itkun bl-Ingliż ghax hekk iridu jiktbu fl-ahhar fl-ezami" (I explain in Maltese. and then they have to write in English, so first I explain in English. and then I ask in English, if they have not understood I emphasize in Maltese, the children can ask me in either language, the most important thing is that they understand me, but the final conclusion of the lesson will be in English because that is how they have to write in the end in the exam). This is this teacher's own perspective of what she does. However, as we have mentioned above, towards the end of the lesson she uses much more Maltese (to explain) than at the beginning when she is revising the previous lesson.

This language alternation seems to correlate with the amount and quality of learners' contributions to the lesson. During the first part of the lesson, learners' contributions are all teacher directed, and it is all based on already given and familiar information - it is after all a revision of the previous lesson. But as the teacher introduces more and more new information, more Maltese is used, e.g. some non-technical terms are repeated in Maltese as in 'sieve passatur' l. 257; 'baxx dim' l. 268. Although it is not always the case that the new information is introduced in Maltese or rather Mixed Maltese and English, it is usual to repeat each bit of information in both languages in this lesson. Some terms are repeated in Maltese at various points such as 'ilma' (water), 'weraq' (leaves), 'vini' (veins), 'ikel' (food), 'dawl' (light), 'pjanta' (plant). Other terms however, are not translated such as 'root', 'starch', 'cells', 'sugar', and the adjectives 'hard' and 'moist', probably because their Maltese equivalents do not
belong to the academic register. Towards the end of the lesson there are some genuine questions from the learners about the subject-matter, and elicitations from the teacher to check acquisition of new information; this is done in Maltese.

In this lesson framing moves and language switches coincide. It is appropriate to talk of language alternation rather than codeswitching because there are long stretches of speech in each language. Each framing move indicates that the teacher is going to present new information. At these points there is a switch to English; when the framing move indicates revision of information, there is a switch to Maltese mixed with English terms. This occurs quite regularly, roughly every 5-10 lines (e.g. see l. 240 to end).

This teacher's language background, education and training is very similar to that of teacher A. Their linguistic behaviour in class is similar: discourse marker switching to Maltese is common.

5.16 Lesson N

<table>
<thead>
<tr>
<th>School: Boys' Private School</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 1</td>
<td>Age: 45</td>
</tr>
<tr>
<td>Age: 12</td>
<td>School education: state - English</td>
</tr>
<tr>
<td>Subject: mathematics</td>
<td>Teacher training: training college</td>
</tr>
<tr>
<td>Topic: the circle</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: not streamed</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 30</td>
<td>Geographical background: central</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit at double benches in four rows facing blackboard; teacher stands by the blackboard.

This lesson takes place in a rather small classroom where the learners are seated in twos on double benches, in four rows. The teacher stands by the blackboard all the time. No books or lesson notes are used.
This lesson is mainly conducted in English (private school, college trained teacher, some English background learners). As the lesson progresses, one learner asks a relatively long question (Is. 370, 373, 378) in Maltese. The learner shows that he had understood what the teacher had been saying in English but wanted to probe further on the topic. The use of Maltese is a useful supplement to clarify understanding. The teacher replies in Maltese (Is. 377, 381-384). At this point the teacher accommodates to the learner, showing that she allows the use of Maltese by the learners.

After this brief incident, the teacher continues in English. There is, however, an interesting switch over to Maltese towards the end of the lesson (from l. 497). This contrasts with the rest of the lesson. It starts and ends with teacher's checks: "kulhadd qed jifhem?" (l. 498) and "fhimna kulhadd?" (l. 539), both meaning "has everyone understood?". This text in Maltese consists of the revision of the most salient points of the lesson, namely the meaning and applicability of the formulae learnt on that occasion.

The use of Maltese at this stage of the lesson indicates that:

(i) the lesson had come to the recapitulation stage and this teacher prefers to summarize the main points in Maltese;

(ii) this revision stage is a very important one in the lesson plan, highlighted here by a language switch;

(iii) the teacher did switch consciously because as she reported to me later, it is normal for her to do so, especially when she wants to make sure the salient points have been understood by everyone.

During the explanation in Maltese, the only English components are terms like 'circle' (l. 500), 'perimeter' (l. 501), 'diameter' (l. 504) and 'area' (l. 505) and 'line' (l. 510). For 'circle', 'area' and 'line' there are terms in Maltese: "cirku", "arja" and "linja" consecutively. However, the more common meaning for "cirku" is "circus", for "arja" it is "air" while the word "linja" is used to refer to the public bus service in the expression "karozza tal-linja". For the other terms, there are no Maltese equivalents: the English terms are always used.
5.17 Lesson O

<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum C</th>
<th>Teacher: female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 5</td>
<td>Age: 26</td>
</tr>
<tr>
<td>Age: 16</td>
<td>School education: private - English</td>
</tr>
<tr>
<td>Subject: home-economics</td>
<td>Teacher training: B.Ed. (Hons.)</td>
</tr>
<tr>
<td>Topic: care labelling</td>
<td>First language: Maltese and English</td>
</tr>
<tr>
<td>Class: not streamed</td>
<td>Present language: Maltese and English</td>
</tr>
<tr>
<td>Number of learners: 5</td>
<td>Geographical background: central</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit in twos at double tables; the teacher moves around but mainly stays facing the learners in front of the blackboard.

This lesson takes place in a home-economics classroom referred to as Kitchen as in lesson A. The equipment and the lay-out of the two Kitchens is very similar.

This is a very small class of four students. It is not uncommon to have small classes at form 5 level, especially in subjects like home-economics, because learners either leave school to work as soon as they are sixteen, or pass their examinations at form 4 level and start attending Sixth Form.

This teacher comes from type C family where both Maltese and English are used at home. In fact, Maltese and English are used almost to the same extent in this lesson (see Figure 7.2). The teacher elicits in Maltese and English and accommodates to the learners when accepting their replies (see for example the interaction in Is. 11-16 and 80-84).

The following are illustrations of how the two languages are used in this lesson.
The teacher translates, and/or amplifies the meaning of the information presented in English, in Maltese. Sometimes she repeats it again in English. For example:

* l. 3 'what are care labels taf x'inhuma care labels'
* l. 38 'ahna nghallu we can boil'
* l. 65 'it shrinks o.k. iğiżieri. jew drapp li jinxtorob material which shrinks'
* Is. 142-143 'do not iron the materials . right tant ikunu delikati li ma jkunux jistghu jiġu mghoddijin'
* l. 205 'lukewarm iğiżieri fiettel'
* l. 206 'suds hm huma is-soap . biċċiet biċċiet tas-soap'.

Some of the informatives are in Mixed Maltese English, e.g.

* l. 65 'you know what suede is eh I showed you a picture of it. suede jekk naħslih jittebbba . allura that we don't wash' (...if washed suede gets stained . so ...)
* ls. 88-89 'hwejjeg li huma ghandhom il-kulur fihom you can't bleach it bleach them' (coloured clothes...)
* l. 122 'immagżina kemm indumu biex nghadduhom hawn let alone if we have one dot' (think of how long it takes us to iron them here...)
* l. 27 'knitted fabrics we don't even have to iron them għax ma tantx jitkemmxxu' (because they do not crease very much)
* l. 194 'jahbat ma' l-ghonq allura eh it gets dirty very very quickly' (where it touches the collar...).

This teacher does not seem to prefer one language over the other as a medium of instruction. She comes from family type C where both Maltese and English are used and her language is characteristic of the Mixed Maltese English variety as explained in chapter 6.
<table>
<thead>
<tr>
<th>School: Girls' Junior Lyceum C</th>
<th>Teacher: male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level: form 2</td>
<td>Age: 29</td>
</tr>
<tr>
<td>Age: 13</td>
<td>School education: state - English / Maltese</td>
</tr>
<tr>
<td>Subject: mathematics</td>
<td>Teacher training: B.Ed. (Hons.)</td>
</tr>
<tr>
<td>Topic: interest</td>
<td>First language: Maltese</td>
</tr>
<tr>
<td>Class: upper stream</td>
<td>Present language: Maltese</td>
</tr>
<tr>
<td>Number of learners: 25</td>
<td>Geographical background: south</td>
</tr>
</tbody>
</table>

Seating arrangement: learners sit at individual desks placed in three rows of two facing teacher who stands at the front by the blackboard.

This lesson takes place with a class of 25 learners who sit at single desks placed in three rows of two, all facing the blackboard. The teacher stands at the front, often working out sums on the blackboard. At the end the teacher sits at his desk and asks the learners to come to his desk one by one so that he can check their written work.

(For most of the lesson there is a loud and disturbing noise coming from the classroom next door. It was obvious that no substitute teacher had arrived and the learners were unable to organize themselves.)

This lesson is largely conducted in Maltese (teacher and learners’ language background). Mathematical terms and phrases in English are used e.g. I. 18 'equation', 'principle'; I. 19 'formula'; I. 38 'substitution tat-terms'; I. 22 'rate times interest all over time'; I. 155 'cross multiplication'.

English is also used when writing and reading aloud from the blackboard, e.g. Is. 238-240, 273-275 and 306-309. However, the teacher and the learners work orally in Maltese to find the required solutions for the problems posed in English.
Language use in this mathematics lesson is very similar to that found in two other mathematics lessons (B and J). This is illustrated more clearly in the quantitative analysis in chapter 7.

5.19 Conclusion

This chapter has reviewed the situational and linguistic variables that affect language choice and codeswitching in the classroom. An "emic" interpretation has been provided and validated by the teachers' own understanding of the situation. We summarize it below.

The clearest distribution between Maltese and English can be seen on the written level: in four subjects - Maltese, Social Studies (also Maltese History and Religion not included in the sample) - the written work is done in Maltese. However, in preparation for the matriculation examination teachers may use texts in English in the classroom. All other subjects (except the language subjects which are written in the language studied) are written in English.

At the spoken level we have noticed that some lessons are conducted in Maltese with some English; some lessons are mainly conducted in English with some Maltese; while in two lessons, Maltese and English were used almost equally.

Lessons are mainly conducted in English in private schools where as many as thirty per cent of the students are foreigners and many others are Maltese English-speaking students coming from family types C and D. In my sample the teachers in the private school are all over thirty-five years. They were all trained at the "British" Teacher Training Colleges (see chapter 3) and are more likely to use English in the classroom. Teachers under the age of thirty-five obtained a B.Ed.(Hons.) degree from the University of Malta and are more likely to use Maltese especially if they had state education.
Teachers' own experience of language in education and their home language background affects their choice of language as medium. For example teachers from family types A and B are more likely to have attended state schools and to use Maltese as a spoken medium, while teachers from family types C and D more commonly attend private schools and are more likely to use English as the medium of instruction.

Learners' home language background is an important variable in the choice of language as medium. If only one learner in class is English speaking and does not understand Maltese, the teacher is likely to speak English for his/her benefit. In classes where all the learners are Maltese speaking, the teacher may either use Maltese if he/she is young and comes from a Maltese speaking background, or switch from English to Maltese especially if he/she is over thirty-five years to communicate better with the learners and to establish rapport.

Codeswitching commonly takes place from Maltese to English in those lessons where the main spoken medium is Maltese and the written text is in English. In such cases teachers use technical terms and phrases in English instead of their equivalents in Maltese because the basic (written) text is in English and the learners need to learn and practise the English terminology as they are required to use it in written work and examinations.

Teachers who use English as the main spoken medium codeswitch to Maltese for three reasons:

(i) in order to explain or translate English terms;
(ii) in order to enhance their elicitation techniques;
(iii) to establish rapport with the learners.

Teachers reported in the interviews that learners are more likely to reply to the teachers' questions and participate in the lesson if the teacher does not use English exclusively. Teachers also think that Maltese learners in state schools generally do not like teachers who speak to them in English.
English is a more formal means of communication in Maltese classrooms. For instance it is used by teacher C to address the class as a whole, and by teacher J to say a prayer at the beginning of the lesson. Maltese is used as a more informal medium, e.g. when addressing individual learners or learners working in groups, and when talking to students outside the classroom.

Codeswitching is used as an additional communicative resource by the teacher in the classroom, e.g. for topic and classroom management. It may also signal a shift from one topic or activity to another, or from a friendly mode to a formal mode. These findings are supported by the quantitative analysis in chapter 7. Next we shall examine crosslinguistic influence and codeswitching phenomena as this will serve as a theoretical background to chapter 7.
CHAPTER 6: CROSSLINGUISTIC INFLUENCE AND CODESWITCHING

6.0 Introduction

This chapter investigates various theoretical approaches to borrowing and codeswitching, and tests their applicability to the language contact phenomena observed in Malta. This literature review serves as a theoretical background to the taxonomic analysis of codeswitching in Maltese classrooms in chapter 7.

Since both Maltese and English are known by practically all Maltese people, and are used at the individual and at the societal level in almost all domains (see chapter 3), extensive language contact has resulted. This, we describe in terms of a continuum of crosslinguistic influence which ranges from the assimilation of English loanwords at one end of the scale, through various types of codeswitching, to the influence of Maltese on English at the other end of the scale.

We identify a number of findings within the Maltese language contact situation which present contradictory evidence to that found in the literature. For example, according to the Matrix Language Frame Model (Myers-Scotton 1992) the matrix language provides the larger number of morphemes in a given codeswitching text. It also sets the morphosyntactic frame of borrowing and codeswitching elements. We find two texts (two whole lessons) in our data where the majority of morphemes are in English but the morphosyntactic frame is set by Maltese.
6.1 Crosslinguistic influence

In this work the term *crosslinguistic influence* is put forth as an umbrella term describing language contact phenomena in Malta including borrowing and codeswitching.

The term crosslinguistic influence is used in Kellerman and Sharwood Smith (1986) to describe the interplay between earlier and later acquired languages. Unlike borrowing, it is a neutral term (see Cassano 1977; Camilleri 1991a) which subsumes under one heading such phenomena as transfer, interference, avoidance, borrowing and language loss. Although introduced as an interlanguage expression, it is here extended to include the sociolinguistic phenomena resulting from language contact at the societal level such as loanwords at one end of the scale, to the formation of new varieties of languages (e.g. New Englishes) at the other end. The most common phenomena in language contact, i.e. borrowing and codeswitching will now be reviewed.

Borrowing and Codeswitching

The phenomenon of borrowing itself is common in the Maltese context, but we have a number of reservations about the way it has been defined in the literature.

The first reservation is related to the way borrowings are identified. Borrowing is defined as "the process in which elements from one language are taken over and used in the context of another" (Haugen 1956:39) (see also e.g. Hudson 1980:58; Mackey 1968:569; Haugen 1972:81; Richards et al. 1985:30). They are distinguished from codeswitching items when they become an integral part of the language into which they have been borrowed. The criterion is that they are also used by monolingual speakers who may know nothing of the language from which such features originated (Mackey 1968:569; Bhatia and Ritchie 1989:262).
Poplack et al. (1989:403) draw a distinction between established and nonce borrowings. Both kinds of borrowing are integrated morphologically, syntactically and phonologically. Established borrowings belong to a restricted lexicon, and are recurrent within individuals, widespread in the community and accepted; nonce borrowings occur infrequently or even once in a corpus of data, and can be from the entire lexicon although restricted to content words.

We think that the distinction between established and nonce borrowings is not a very useful one. In Myers-Scotton's (1992:32) terms "no explanatory value is gained in exchange for adding a category of description unrelated to other categories or constraints within the codeswitching mode". Whether a borrowed item occurs frequently or infrequently does not tell us anything about its formal linguistic status, or about whether it is an instance of borrowing or codeswitching.

Myers-Scotton (1992:32) distinguishes between borrowing and codeswitching in that borrowing forms are considered as part of the matrix language mental lexicon and are available to monolinguals, whereas codeswitching forms remain as embedded language material and are used by bilinguals only.

In the Maltese context these criteria do not apply. All Maltese speakers are bilingual to varying degrees of proficiency (Azzopardi 1981; Cremona 1990). The English language is part of their mental lexicon in Myers-Scotton's terms.

We distinguish between elements of borrowing and elements of codeswitching on the basis of (i) whether they take Maltese morphological patterns, and (ii) their use in written language. Furthermore, we shall explain how language contact in Malta is best described in terms of a continuum of crosslinguistic influence where borrowing and codeswitching must be seen as existing on a cline. In our study, borrowing refers to English loanwords that have become fully integrated in Maltese such that they take Maltese morphological shapes and are written in Maltese orthography; other English borrowings are signalled by the use of inverted commas when they are used in Maltese writing which indicates that their foreignness is acknowledged (like the terms 'bowser',
'tarmac', 'cassette' and 'stocks' in Appendix 10). Other English terms used in stretches of Maltese speech (e.g. the technical terms and phrases used in the classroom) are never written in Maltese texts but only in English texts. These we refer to as codeswitches. Consider the following examples (highlighted in this transcription) where we identify three types of English elements:

* items that are underlined originally come from English but have become completely integrated in Maltese and are here inflected in Maltese (in this case they are verbs);
* items that appear in small capital letters are borrowed terms from English which have not yet become integrated in Maltese and they would be highlighted if used in Maltese written texts;
* items that appear in bold are examples of codeswitching because they would not be written within stretches of Maltese text.

This text comes from a discussion largely conducted in Maltese between a headmaster (A), a linguist (B) and myself (C) about the formation of a language policy for a private school (4.1.'91).

Translation

A: then problems start when people start reacting
C: in a way it's more down to earth and if it is down to earth it will affect your son or daughter
A: we are going to propose methods of tackling both English and Maltese in other areas as well for example (later)
B: if the school is going to cater for the general population (later)
B: I feel sorry that two reasons have been given explaining the situation, one is that there are more attractive materials AVAILABLE for the teaching of English, and the other is that the majority of the children attending the school at present (unclear) and therefore it is easier to introduce LITERACY in the language with which they are more familiar.

Our second reservation about the definitions of borrowing is that they assume that it is one language which influences another. But when languages come in contact, in our case at both the individual and the societal levels, the influence occurs in both directions: each of the languages influences the other.

Py (1986) and Rouchdy (1978) give two examples of crosslinguistic influence. Py (1986) gives examples of language attrition in the native language of Spanish migrant workers in Switzerland as a result of their learning and interacting in a second language. Rouchdy (1978) describes an immigrant Arabic community in the U. S. A. and reports that she observed interferences, or crosslinguistic influence, not only from English (in Bloomfield's (1933) sense majority/dominant) to Arabic (minority/subordinate), but also from Arabic to English although to a smaller degree.

While both languages influence each other when they come in contact at the societal level, their effect is not necessarily balanced or symmetrical. Burling (1970:169) explains that this is because two languages rarely meet on equal terms due to the relative social positions of the speakers of each language, and
because of the attitudes of the community towards each language. For these reasons the two languages can be expected to undergo a different type of influence.

Kachru (1992) explains that the long-term contact of English with other languages in multilingual and multicultural contexts manifests itself in the processes of *nativisation* and *acculturation*. Nativisation refers to the creation of new varieties of a language. Acculturation gives the new varieties distinct local cultural identities. Another process that has resulted from the contact of English with other languages is the *Englishisation* of these languages.

In Malta, knowledge and regular use of Maltese and English, and the frequent interchange in their use, has resulted in a situation of extensive language contact and consequently of crosslinguistic influence. It appears that, for example, the influence of Maltese on English is very strong at the phonological level, e.g. intonation, while the influence of English on Maltese takes place more commonly at the lexical level.

**Continuum of crosslinguistic Influence**
The use of Maltese and English in mixed speech and the influence that each of the languages exerts on the other even in the monolingual code is best illustrated by a continuum of crosslinguistic influence.

Linguists dealing with Maltese/English codeswitching have described it in terms of a range of possibilities. For instance Darmanin et al. (1989) say that bilingual speech in Malta could range from: mainly Maltese (M), to mostly Maltese with some English (Me), to mainly English with some Maltese (Em) to mainly English (E):

```
M       Me       Em      E
```
Ellul (1978:4,5) presents a "taxonomy of lingual responses" as follows: Maltese (M), to mainly Maltese with some English (Me), to both Maltese and English (ME), to mainly English with some Maltese (Em), to English (E);

<table>
<thead>
<tr>
<th>M</th>
<th>Me</th>
<th>ME</th>
<th>Em</th>
<th>E</th>
</tr>
</thead>
</table>

This range of Maltese and English usage can be illustrated with samples taken from the classroom data (Appendix 1) as follows:

MALTESE

T: ma nintrabtux wisq mal-ktieb .... ghidli
L: kien ighix ġo kerrejja qisma bħal ... ma kellux fejn joqghod kellu joqghod fejn in-nies kienu johorġu fuq l-ghatba
T: brava . tajjeb xi ġadd iehor mel'ghidna kien joqghod kien ighix f'kerrejja ghidna li llum dawn il-kerrejjiet inqatghu orrajt . nirringrazzjaw 'l Alla bil-ftit fadal minnhom ghidna dan l-ambjent . ma tantx . kien sabih wisq tajjeb
T: sir fl-isqaq tiegħu haw fit-triq tiegħu ħafna tfal kienu johorġu barra jaghmlu ħafna storbju jilaghbu

(lesson K, Is. 2-10)
MAINLY MALTESE WITH SOME ENGLISH

L: minn dawk il-kotba nistghu noħorġuhom jew narawhom haw
T: bičča minnhom huma reference . ċiġifieri . tarahom ġol-library . biċċiet ohrajn ikunu lending . ċiġifieri jistghu johorġuhom
L: sir
T: yes
L: ghalfefjn tal-hodor taqrahom hawnhekk
T: w imbaghad nispjegalkom fuq hekk ghax inkella sa nahlu l-lesson . dak mhux ġa ghamilna konna xi haġa fuq hekk qed niftiehmu . ghandek nofs il-library reference ghidiżtilkom fuqha
Ls: x'ċiġifieri

(lesson F, ls. 157-166)

MALTESE AND ENGLISH

T: tistghu taqtghu line . issa ġa nagħmlu ftit group work .... intom kellkom tmorru l-banek . hux veru you had to go to make . to to see the bank . let me see . who managed to go Vany did you go .... how come you didn't go . x'ċienet il-problema .. Marisa inti mort .. laqqas . x'qed tistenna eh . min mar (learners put their hands up)
L: ok ġa nara Michelle . inti fejn mort . liema branch mort
T: il-Mid-Med
L: il-Mid-Med Bank . ta' fejn mort inti
L: tal-Marsa

(lesson D, ls. 169-178)

MAINLY ENGLISH WITH SOME MALTESE

T: children's allowance (writes on b/b) issa jekk huma ghandhom two children . sewwa . le two children ghandhom about . eighty or eighty-one . sewwa . and it is every three months . mela jekk aħna nagħmluha . division by three . because we are going to consider the . wage . the
money. that we have each month. orrajt.. kemm tiği eighty-one division by two come on work it out

L: one three
L: twenty seven

(lesson A, Is. 95-102)

ENGLISH
T: they were tombs. and why did pharaohs have. a special place to be buried in ordinary people didn't have pyramids. why did a pharaoh have such a big tomb and such an important
L: because the people considered them as gods
T: first of all the pharaoh was nearly a god. ok. the pharaoh was so important they considered him to be a god. and then they believed. in what. in fact think of what they used to put in the pyramid. ok perhaps David can tell us a little bit because he's been to Egypt recently. what did they put in the pyramids

(lesson L, Is. 123-131)

Our continuum of crosslinguistic influence ranges from the phonological, morphological and lexical (fully assimilated) English loanwords at one end, through different examples of codeswitching, to Maltese phonological, grammatical and lexical influence on English at the other end as represented in Figure 6.1.
Figure 6.1: Continuum of crosslinguistic influence: Maltese and English

MALTESE
Influence from English
(a) lexical and phonological
(b) morphological
(c) calques
(d) syntactic

Codeswitching: Maltese/English
(e) tag switching
(f) discourse marker switching
(g) intra-sentential switching
(h) inter-sentential switching

ENGLISH
Maltese influence on English
(i) phonological
(j) grammatical
(k) idiomatic
(lexical choice)
The following is an extract from the home-economics lesson (Appendix 1, Lesson O, Is. 65f) in which we find some of the different categories identified in Figure 6.1. Each letter in brackets appearing after an element of speech refers to a type of crosslinguistic influence shown in Figure 6.1.

T: it shrinks ok (f) īġifieri. jew drapp. li jixtorob (h) material which shrinks right hm is not washed. or else material which is delicate (h) jew inkella ĵirilu xi ħaġa fil-machine (a) pereżempju bhal l-isuede (a). right suede. jekk you know what suede is eh l showed you a picture of it. suede (g) jekk naħsluh jibda jittebba a'allura (g) that we don't wash (h). ikollkom ikollkom fuq il fuq il-care label (a) ikollkom. hm marka bhal din. (f) right. now. this is for washing (writes on b/b) issa. imbagħad (g) there are these two symbols. Pauline. there are these two symbols (h). ġhandkom ideja ġhal x'hiex inhuma dawn is-symbols (a,h) ġhafjejn

Ls: bleach
T: very good bleach. one of them right. one of them. we can bleach and this one

Translation
T: it shrinks ok that means either material which shrinks when we say it shrinks right hm is not washed or else material which is hm delicate or else that something happens to it in the machine for example like suede right suede if you know what suede is eh l showed you a picture of it suede if it is washed gets stained so that we don't wash it says on the care label you have hm a sign like this right now this is for washing (writes on B/B) now then there are these two symbols that is there are these two symbols have you any idea what these symbols stand for what for

Ls: bleach
T: very good bleach one of them right one of them we can bleach and this one we do
(writes on B/B) we do not bleach now. what types of material can be bleached

L: cotton
T: cotton. Marica
L: (h) ġa nsejt
T: ġa nsejt int. hm ovvjament. ippruvaw aħseb pero. ipprova aħseb x'tipi illi meta pereżempju libsa bhal tieghi . din nista' nibbličjaha
L: le
T: le ghaliex ġhal x'hiex
L: ghax tmur il-kulur
T: ghax imur il-kulur. iġifieri. (g) it is simple. I mean (g). ħwejjeg li huma. li ġhandhom il-kulur fihom (g) you can't bleach it bleach them ok (e) ghaliex il-kulur imur.

(LESSON 0, Is. 65-90)

not bleach now what types of material can we bleach?

L: cotton
T: cotton Marica
L: I've forgotten already
T: you've forgotten already obviously try to think that for example a dress like mine can I bleach it

L: no
T: no why not
L: because it runs colour
T: because it runs colour that means it is simple I mean coloured clothes you can't bleach them ok because they run colour.

In the example from lesson 0 above we learn that various tokens of crosslinguistic influence can be found within a brief text. It is interesting that in the data as a whole we also find a range of possibilities: the lessons range from those mainly in Maltese or mainly in English, with various types of Maltese and English usage in between.

In what follows we discuss:

(a) the Englishisation of Maltese,
(b) the nativisation of English in Malta, and
(c) codeswitching between Maltese and English.

Most of the data comes from the classroom transcriptions (Appendix 1), from our own field notes, and from theses at the University of Malta.

6.1.1 English influence on Maltese

The most widespread influence of English on Maltese is lexical. Haugen (1956) distinguishes between wholly and partially assimilated items. Following Hsia's (1981:23) observation that orthography is a useful criterion in judging the social integration of transliterated loanwords, we apply the criterion of orthography when judging the integration of all loanwords. Words that originated from English and which are now written using Maltese orthography are considered to be wholly assimilated e.g. orrajt, čekk, while those items for which English orthography is still used when they are inserted in stretches of Maltese writing, are considered partially assimilated.

Loanwords fall between two extreme poles of complete morphemic importation and complete substitution (Hsia 1981:21). Three major types of loans are distinguished at word level by a formal comparison of the "model" word in the source language and its replica in the recipient language: loanwords; loanblends; and loanshifts or calques (some examples are given in the following pages).

In loanwords there is complete morphemic importation. Loanwords are further classified according to the degree of phonemic assimilation: complete or partial assimilation or no assimilation when there is no adaptation to the phonology of the recipient language (Haugen 1956).

In loanblends there is only partial morphemic importation; a native morpheme has been substituted for part of the foreign word (we have not encountered examples of loanblends in our data);

In loanshifts or calques there is complete morphemic substitution: only the meaning is imported.

221
The linguistic integration of borrowings, i.e. the adaptation of loan material to the phonological, grammatical and lexico-semantic structures of the recipient language depend not only on linguistic criteria, but also on extra-linguistic factors. For example the more prestige the source language carries, the more likely that the borrowed items will retain their original pronunciation; the higher the degree of bilingualism the more likely they will not be subjected to the morphological structure and syntactic system of the borrowing language; spelling may also affect pronunciation (Hsia 1981).

English items in Maltese are largely shaped by Maltese phonology even though English is prestigious. It is only in the more extreme cases of the influence of English on Maltese (probably individuals from type D family see Table 3.8 or other adults aspiring to project that sort of image, i.e. of being English speaking), one finds phonetic influence such as vowel reduction and loss or orthographic "r" in English loans which are today considered as part of Maltese, in "kuker" for example realized as [kuks].

When English items are used in stretches of Maltese speech, whether singly-occurring lexemes or larger constituents such as phrases and clauses, they are largely shaped by Maltese phonology and morphosyntax. The following are some examples:

<table>
<thead>
<tr>
<th>English spelling</th>
<th>Maltese pronunciation</th>
<th>English pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;mechanical&quot;</td>
<td>['mek:anikal]</td>
<td>not</td>
</tr>
<tr>
<td>&quot;technical&quot;</td>
<td>[teknikal]</td>
<td>not</td>
</tr>
<tr>
<td>&quot;fan&quot;</td>
<td>[fan:]</td>
<td>not</td>
</tr>
<tr>
<td>&quot;calculation&quot;</td>
<td>[kalkju'lei' in]</td>
<td>not</td>
</tr>
</tbody>
</table>

We shall now give examples of wholly and partially assimilated loanwords and calques. The influence of English on Maltese extends to grammatical features, examples of which are given below.

1Maltese phonetic transcription as in Azzopardi 1981. English phonetic transcription as in Gimson 1980.
Lexical and phonological assimilation

It is difficult to find examples of English linguistic items used by Maltese speakers that have not in some way or other been adapted to the phonology of Maltese. The following are some examples of wholly and partially assimilated elements. Wholly assimilated items are written in Maltese spelling; "partially assimilated" refers to items that are widely used in Maltese society and are pronounced according to the Maltese phonological rules. Since English spelling is retained they are not considered as "wholly assimilated".

Examples of **wholly assimilated** items:

<table>
<thead>
<tr>
<th>Maltese spelling</th>
<th>English spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>kuker</td>
<td>cooker</td>
</tr>
<tr>
<td>kejk</td>
<td>cake</td>
</tr>
<tr>
<td>Amerka</td>
<td>America</td>
</tr>
</tbody>
</table>

Examples of **partially assimilated** items:

<table>
<thead>
<tr>
<th>Maltese spelling</th>
<th>English spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;cream&quot;</td>
<td>cream</td>
</tr>
<tr>
<td>&quot;rock garden&quot;</td>
<td>rock garden</td>
</tr>
<tr>
<td>&quot;structure&quot;</td>
<td>structure</td>
</tr>
<tr>
<td>&quot;function&quot;</td>
<td>function</td>
</tr>
<tr>
<td>&quot;triangle&quot;</td>
<td>triangle</td>
</tr>
<tr>
<td>&quot;symbols&quot;</td>
<td>symbols</td>
</tr>
<tr>
<td>&quot;shrinks&quot;</td>
<td>shrinks</td>
</tr>
</tbody>
</table>

Other phonological influence appears in, for example the importation of the phoneme /ʃ/ already present as an allophone, as in "television" [televiʃin], and "beige" [beːʃ].
The influence of English on Maltese can also be seen on the level of phonological rules. Maltese has a rule of devoicing (voiced) phonemes when they appear in final position. For example,

<table>
<thead>
<tr>
<th>English</th>
<th>Maltese</th>
</tr>
</thead>
<tbody>
<tr>
<td>[flowəz]</td>
<td>[flowers]</td>
</tr>
<tr>
<td>[kukəz]</td>
<td>[kukers]</td>
</tr>
</tbody>
</table>

However, this rule is not operative on all loanwords i.e. the phonological rule of voicing in English has also been imported along with the loanwords, for example,

<table>
<thead>
<tr>
<th>English</th>
<th>Maltese</th>
<th>Not</th>
<th>English</th>
<th>Maltese</th>
</tr>
</thead>
<tbody>
<tr>
<td>[sʌθz]</td>
<td>[sʊŋgz]</td>
<td>not</td>
<td>[sʌŋz]</td>
<td>[sʊŋz]</td>
</tr>
<tr>
<td>[slaɪdz]</td>
<td>[slaɪdz]</td>
<td>not</td>
<td>[slajds]</td>
<td>[spiːt]</td>
</tr>
<tr>
<td>[spiːd]</td>
<td>[spiːd]</td>
<td>not</td>
<td>[slajd]</td>
<td>[lɪ:k]</td>
</tr>
</tbody>
</table>

The last example contrasts with "leak" (n) [lɪ:k]

There has also been a re-interpretation of some consonant clusters following the English model, e.g.

"irrigetta" (to throw up, to reject) re-interpreted as "irrigektja"
"mostru" (monster) re-interpreted as "monstru"
"ispirat" (inspired) re-interpreted as "inspirat"
"omogeneju" (homogeneous) re-interpreted as "homogeneju"
"gerusalem" (Jerusalem) re-interpreted as "gerusalem"
"jaltera" (to alter) re-interpreted as "jolter"a"

In interview 2 (Appendix 2), teacher M produced four different versions of the Maltese word "awtomatikament" and English "automatically". In l. 66 she
produces the Maltese version; in l. 351 she produces an English version; in Is. 47 and 66 she mixes the Maltese and English pronunciation as follows:

I. 66  \text{imma awtomatikament} \ kif \ tar\ a\ li\ huma\ blank\ \\
\ (\text{but as you see that they are blank you automatically (switch)})

I. 47 \text{qaltli otomatikament it-teacher tal-maths} \ \\
\ (\text{the maths teacher told me that (she) automatically (switches)})

I. 70 \text{imma owtomatikament bil-Malti} \ \\
\ (\text{but (one speaks) automatically in Maltese})

I. 351 \text{pero insib li automatically naqleb ghall-Malti} \ \\
\ (\text{but I find that I automatically switch to Maltese})

These examples are a clear indication of the variability in the speech of Maltese bilinguals. There is rapid language change over time. For these reasons we consider the continuum of crosslinguistic influence an appropriate tool of description.

\textbf{Lexical and morphological influence}

Some English loanwords are imported on a lexical and phonological level, and are then adapted to the Maltese morphological processes. In the following example the grammatical category of number is then realised by a native Maltese form, in this case the so-called broken plural.

\begin{tabular}{lll}
\textbf{English} & \textbf{Maltese} & \textbf{Maltese plural} \\
\hline
kettle & kitla & ktieli \\
\end{tabular}

English terms are often adapted to Maltese \textit{inflectional morphology}:
to book  tibbukkja [ti'b:uk:ja]
to manage  timmeniğġja [tim:e'nig:ja]
to spell  tispelli [ti'spel:i]
to store  tistorja [ti'stor:ja]
to stretch  tistreččja [ti'streččja]
to dry clean  tiddrajklinja [tid:rajklin'ja]
to bleach  nibblijtćja [nib:liti:jtja:]

Other loans come into the language with some of their accompanying morphology, e.g.

English  Maltese
cooker  [kuko]  kuker  [kuker]
cookers  [kukɔz]  kukers  [kukers]

The presence of this English plural morpheme in these loanwords is such that it is today considered an integral part of Maltese pluralising morphology.

Calques
The following examples involve the literal translation of English idioms or metaphors in Maltese.

<table>
<thead>
<tr>
<th>Calque</th>
<th>English</th>
<th>Maltese</th>
</tr>
</thead>
<tbody>
<tr>
<td>tonfom imniehrek</td>
<td>to blow one's nose</td>
<td>tommhot</td>
</tr>
<tr>
<td>jijbed is-saqajn</td>
<td>to pull one's legs</td>
<td>twaqqa' ghač-čajt</td>
</tr>
<tr>
<td>jiddependi fuq</td>
<td>to depend on</td>
<td>jiddependi minn</td>
</tr>
<tr>
<td>grazzi ghal</td>
<td>thanks to</td>
<td>bis-saňha ta</td>
</tr>
<tr>
<td>qieghed fuq btala</td>
<td>to be on holiday</td>
<td>mar btala</td>
</tr>
<tr>
<td>tfittex ghal</td>
<td>to look for</td>
<td></td>
</tr>
<tr>
<td>titlob ghal</td>
<td>to ask for</td>
<td></td>
</tr>
</tbody>
</table>
The last two examples normally require a direct object but due to the influence of English their grammatical status has changed and they now take an indirect object.

On the lexico-semantic level, lexical items are seldom, if ever, borrowed with the full range of meanings that they have in the source language; they have their meaning modified through a narrowing, extension or shift in meaning. We observe the following "English" nouns used in Malta with a different meaning, for example:

<table>
<thead>
<tr>
<th>ME</th>
<th>English Meaning</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>flushing</td>
<td>for cistern</td>
<td></td>
</tr>
<tr>
<td>sink</td>
<td>for wash basin</td>
<td></td>
</tr>
<tr>
<td>bowser</td>
<td>for (small) tanker</td>
<td></td>
</tr>
<tr>
<td>geyser</td>
<td>for water heater</td>
<td></td>
</tr>
</tbody>
</table>

(see Appendix 10d) (Lesson A, L. 187)

(ii) SYNTAX

English influence on Maltese is not restricted to the lexical, phonological and morphological levels but is also apparent on the syntactic level. The following are two examples of syntactic influence of English on Maltese.

* The omission of the definite article corresponding to English usage where Maltese structure demands it, e.g.

Maltese: Grazzi talli użajt is-servizz ta’ (I-) Mid-Med Bank
English: Thank you for using the services of Mid-Med Bank

Maltese: (Ir-)Reftieghek
English: Your Ref.

* The use of the analytic passive corresponding to English structure where in Maltese, one would prefer either an active construction or a
morphological passive (this is common in journalese probably due to translations from English), e.g.

"hu mifhum li" for "it is understood that"
instead of "wiehed ghandu jifhem li"

"kien maq tul" for "he was killed"
instead of "inqatel"

These processes can be described as the "Englishisation" of Maltese (after Kachru 1992). On the other hand, we find that the English spoken in Malta is influenced by Maltese, hence its "nativisation" as a Maltese English variety.

In the following section we give various examples of how English is linguistically nativised by Maltese bilingual speakers. We do not find however, examples of the "acculturation" of English in Malta. This is due to the fact that in Malta, unlike other post-colonial countries like India and Nigeria, Maltese serves all the nationalistic and cultural needs, and intra-state communication. The Maltese speech community has not felt the need to sever ties with the colonial powers through the acculturation of English. On the contrary (British) English can be considered part of Maltese culture (see Camilleri and Borg 1992).

6.1.2 Maltese influence on English

This occurs largely and most obviously at the phonological level.

(i) PHONOLOGY

We shall give examples of the phonological influence exerted by Maltese on the English spoken in Malta at the segmental level: consonants and vowels; and at the suprasegmental level, namely features of intonation.

---

2 For a detailed treatment on the intonation patterns of varieties of Maltese and English in Malta see Vella (forthcoming).
Segmental Level: Consonants
Practically all Maltese speakers replace the English alveolar /t/, /d/ and the fricatives /θ/, /ð/ by the Maltese dental /t̪/, /d̪/, as in "the" [d̪i]; "breadth [bretː]; "length" [leŋgt].

Voicing distinctions made in standard English differ slightly in Maltese English. Maltese devoices obstruents word finally. Therefore Maltese English is characterized by non-standard (English) patterns of voicing. Word final devoicing is frequently noted, as in "plug" [plakː] not standard English [plAg]; "us" [aːs] not standard English [aːz].

A phonetic distinction made in standard English which is conspicuously absent in Maltese English is that of the environmentally conditioned "dark l" as for example at the end of the word lull as opposed to the "clear l" at the beginning of the word lip. The phoneme /l/ is indiscriminately realised as [l] in Maltese English and never as [ɬ].

Differences between standard English and Maltese English at the level of phonetic realisation arise, for example, because of the fact that place of articulation is not usually identifiable to a definite point. As a result, the contact made in the articulation of consonants is normally more retracted or more advanced; or involving more of the surface area of the tongue body; or being made for a longer or shorter time etc., in the speech of the Maltese English speaker as compared to that of the standard English speaker.

Characteristics of a more overlying nature such as lip shape vary for Maltese English. Apart from obviously having an effect on the quality of other sounds in the environment, spreading of lips in Maltese English where standard English would most likely have lip rounding, would obviously have repercussions on the quality of the consonants. Fricatives seem especially prone to this particular effect. For example [ʃ] in shape, which would be highly likely to have lip rounding, or at least neutral lip shape in standard English, would very likely be accompanied by lip spreading in Maltese English.
Voice onset timing and timing durations in Maltese English are different to those in standard English. Aspiration, for example in the environmentally conditioned contrast between [p] in *spin*, [pʰ] in *pin*, contrasting in turn with [b] in *bin* may not be as clearly defined in Maltese English as it would be in standard English. Another point worth noting may be the influence on Maltese English of the relationship which exists between short/long vowels and geminates in Maltese. Phonologically Maltese makes a distinction between V:C: and V: C, but where this sequence occurs word finally, C is normally voiceless which means that there is a distinction between V CVI: # and V: CVI#. In English the parallel word final possibilities are either V: CVd# or V CVI#. (CVI = voiceless consonant; CVd = voiced consonant). In other words, there is a slight overlap of phonological environments (see diagram).

![Diagram of Maltese vs English vowel contrasts](image)

**Segmental Level: Vowels**

Centralised vowels do not have phonemic status in Maltese and this could account for the fact that the renditions of central vowels of Maltese English are peripheralised; [ɔ] and [ʌ] being given articulation more appropriate for standard English [æ], [e] and also [ə] e.g. 'focal' [fɔkəl].

Vowel reduction seems to be much more restricted in Maltese English than it would be in standard English. There is a tendency in Maltese English not to reduce vowels, even when these occur in what would be unstressed positions, including the phonetic realization of orthographic "r", as in "cooker" /kukə/. This
has implications for the rhythm of Maltese English as compared with the rhythm of standard English. Calleja (1987:113) outlines three related features that characterise Maltese English in this sense:

i. the occurrence of vowels of same quality in both stressed and unstressed positions;
ii. the increased number of stressed syllables and therefore of feet in the utterance;
iii. the increased number of tonic stresses and therefore the increased number of tone groups.

**Suprasegmental Level**

It is extremely difficult to find a Maltese speaker of English whose speech is not influenced to a greater or lesser extent by the intonation of Maltese.

For example at word-level there is a tendency to shift stress towards the end of the word. Stress in Maltese is either penultimate or final, and only very rarely - and usually only in loan words - antepenultimate. Thus, where the stress rules of English would give *Arabic* with stress on the first (i.e. antepenultimate) syllable, Maltese English would have stress on the second (i.e. penultimate) syllable, thus *Arabic*. In Maltese English there is no distinction, for example, between *survey* (noun) and *survey* (verb), both being pronounced *survey*.

Similarly, where operation of the compound stress rule in English would give *fire-engine* with main stress on *fire*, Maltese English would invariably have main stress on the first syllable of *engine*. This occurs quite systematically in compounds whose second component is two or more syllables long. For example, *fire-fighter* and *fire-alarm* would both be pronounced with primary stress on the first syllable of their second component and secondary stress on *fire* where standard English would have the primary stress on the second component.

Tone does not operate distinctively at word level in Maltese. On a larger lever tonal patterns on Maltese English utterances can quickly be seen to be
reflections of the tonal pattern on the Maltese structures. Thus, in Maltese one would ask:

\[ \text{Ganni gej? or Roberta kielet?} \]

aligning the Low High pitch accents signalling the grammatical questions with the stressed syllable of the verbal components (Vella 1991). In the case of the second example, the Low High pitch accent aligns with the penultimate syllable of the verb. In Maltese English one would ask:

\[ \text{John is coming? or Roberta has eaten?} \]

aligning the Low High pitch accents signalling the grammatical questions in a way quite reminiscent of the alignment for the Maltese versions (Vella forthcoming).

(ii) GRAMMAR

The following are some examples of Maltese grammatical influence on the English spoken in Malta.

**Possessive**

In the following examples, the possessive construction is almost a literal gloss from the construction in Maltese.

\[ \begin{align*}
3\text{ME} & : \text{The book is at you} \\
M & : \text{il-ktieb qieghed ghandek} \\
SE & : \text{"You have the book"}
\end{align*} \]

\[ ^3\text{ME} = \text{Maltese English}; \ M = \text{Maltese}; \ SE = \text{standard English} \]
This is the car of John

Din il-karozza ta' John

"It's John's car"

Comparative and topicalisation pattern

The comparative construction and topicalisation pattern in the following examples follow that of Maltese.

They are more cold

Dawn huma iktar keshin

Like that, I told you to do it.

Hekk ghidtlek tagħmilha

At four they close.

Fl-erbgha jagħliqu.

The latter two examples are considered as instances of Maltese English, not so much because they are idiosyncratic to this variety, but rather because they occur more frequently than expected, i.e. in contexts where they would be marked in Standard British English.

Navarro & Grech (1984) document other examples of the influence of Maltese on English, such as the omission of the negative where English structure demands it but Maltese does not; and the omission of 'do' or 'would'.

Omission of the negative:

Mind you cut your foot on the rocks

Ara taqta' saqajk

Omission of 'do' or 'would':

You want ice-cream?

Trid ġelat
LEXICAL CHOICE

The following two examples come from a Maltese newspaper in English.

"They went into the garden where the boy used to pass nearly all the day..."
(The Sunday Times (Malta), 7 February 1993 (748): 17 Col. 1, Letters to the Editor)

"We also know that he suffered tremendously and accepted."
(ibid: 17 Col. 2, Letters to the Editor)

In both cases we observe an error in the choice of the verb: pass and accepted from Maltese "ghadda" and "accetta".

Navarro & Grech (1984) give some examples of lexical choice deviance e.g.

ME  Don't stand in the middle
M   Togoghdx fin-nofs
SE  "Don't stay in the way"

ME  I'm going to buy
M   Se mmur nixtri
SE  "I'm going shopping"

ME  I couldn't swallow it
M   Ma stajtx innizzilha
SE  "I couldn't believe it"

ME  She put my nerves up
M   Tellaghthomli
SE  "She got on my nerves"

The following are examples from the lesson transcripts.
(lesson A, I. 200)
ME The cooker works with electricity
M Il-kuker jahdem bl-elettriku
SE "It is an electric cooker"

(lesson A, I. 84)
ME He works with the government
M Jahdem mal-gvern
SE "He works for the government"

(iv) SEMANTIC

The following are two examples of English lexemes used in English newspapers in Malta which show a narrowing and a shift in meaning from that in British English.

"The Labour Party has not exactly been enthusiastic about local government. Indeed, only the other day, Dr. Gatt's talk of local councils was dubbed "alienation from the PN's real problems" by the Labour-leaning press...."

(The Sunday Times (Malta), 7 February 1993 (748): 14, Editorial)

"Moreover, political alienation should not prevail over justice."

(ibid.: 18 Col. 3, Letters to the Editor)

In these two examples the word alienation is used with the meaning of "distraction": the Maltese word "aljennazzjoni" means "distraction" (Aquilina 1987). According to the Collins Cobuild Dictionary, "alienate" in English means "to become unfriendly or unsympathetic", or to "emotionally or intellectually separate". The word "alienare" in Italian, according to the Zingarelli Vocabolario della Lingua Italiana, means "allontanare/rimuovere (proprieta) dall'amore o devozione" (to distance property or affection from somebody'). Thus, the meaning of the noun alienation has been modified in Maltese English and is restricted to the second meaning given by Collins Cobuild i.e. "to emotionally
or intellectually separate", or in other words "to distract one's attention from something".

The term *abuse* has also shifted meaning in Maltese English. Consider the following example:

"Over the years, the Confederation of Malta Trade Unions (CMTU) has repeatedly called for government action against *abuse* and exploitation."

(ibid.: 16, Col. 1, Letters to the Editor)

According to the *Collins Cobuild* dictionary "abuse" in English refers to those instances where someone is rude, offensive or unkind: "abuse of someone is the cruel and violent treatment of others; abuse of something is the use of it in a wrong way or for a bad purpose". In Italian "abuso" means "misuse of authority, oppression" (*Il Nuovo Ragazzini Dizionario Inglese Italiano, Italiano Inglese*). In Maltese the word "abbuz" refers to "unjust or corrupt practice" (Aquilina 1987). The meaning of the word *abuse* in Maltese English has been restricted to that of "political oppression", hence a narrowing of meaning.

In the newspaper report (*The Times* (Malta), Monday, July 20, page 40, col. 1) (Appendix 10a) about the Meeting for Experts on Language Planning (Malta, July 1992), the writer confuses the technical phrase "random sample" with "random survey". This results in a drastic change in the meaning.

**Conclusion**

We have now seen how Maltese/English bilingualism has resulted in widespread crosslinguistic influence between the two languages. The different influence of English on Maltese and of Maltese on English can be described as *borrowing transfer* and *substratum transfer* respectively (see Odlin 1989:12). *Borrowing transfer* refers to the influence of a second language on a previously acquired language, most commonly on a lexical level, while *substratum transfer* involves the influence of a native language on the acquisition of a target language, and
is more obvious on the phonological level. In the following section we shall investigate another language contact phenomenon, that of codeswitching.

6.2 Codeswitching

The terms *codeswitching* and *code-mixing* have been variably used in the literature and each linguist defines them according to his own criteria. Gumperz's definition (1982:59) however, is widely accepted (e.g. Romaine 1989; Taha 1989; Tuson 1985, 1990):

"the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or sub-systems".

Eastman's (1992:16) definition is similar to Gumperz's:

"the use of at least two languages (or dialects or registers) within a particular genre (song, conversation) during a speech event often in a multilingual (primarily urban) setting."

Studies of codeswitching are grouped into three:

(i) Studies about the syntactic constraints that determine the form of codeswitching;
(ii) Studies about the sociolinguistic criteria which determine when, with whom and why codeswitching takes place;
(iii) Studies about the use of codeswitching as a communicative strategy.

We shall now describe each of these approaches.

6.2.1 Formal definitions of codeswitching

Codeswitching can be of different types depending on the size of the constituent that is codeswitched. The two most common types of codeswitching mentioned in the literature are *intrasentential* and *intersentential* codeswitching.
For example, Bokamba (1989:278), Kamwangamalu (1989:321) and Cheng and Butler (1989:295) distinguish between intrasentential codeswitching which they call code-mixing; and intersentential codeswitching which they refer to as codeswitching.

Other types of codeswitching are, for example, tag-switching (Poplack 1980), and discourse marker switching (Tay 1989; Merritt et al. 1992). Tags are "short clauses at the end of a statement which change the statement into a question" (Collins Cobuild Dictionary). A tag can consist of an auxiliary verb + pronoun, or a noun phrase or an elliptical clause (see Wales 1989:452-455). Tag-switching refers to those instances where the interrogative structure at the end is in a different language from the statement. Discourse markers are defined by Schiffrin (1987:31-36) as "sequentially dependent elements which bracket units of talk...at the boundaries of units as different as tone groups, sentences, actions etc.". Markers are a closed class of items, disregarded in grammar, which often precede sentences but are independent of sentence structure. They are devices that work on a discoursal level and have important functions - as floorholders (e.g. now), and to monitor feedback (e.g. o.k.?). When markers are in a different language we can talk of discourse marker switching.

Other types of switching are situational switching roughly equivalent to diglossia (Gumperz 1982), and metaphorical switching (Blom and Gumperz 1972) - see below.

The following are a range of examples of codeswitching in our corpus.

**Intrasentential switching**

Tag-switching can occur either in Maltese or English utterances as in:

- It's a little spec tara? (can you see?)
- There will be deductions hux venu? (is that right?)
- Ninety-five years mhux hekk? (isn't it?)
- Two sides equal hu vera? (is that right?)

238
Similarly discourse marker switching occurs in either language:

- Issa (now) I'll find the other register
- Issa (now) look at those two triangles
- Mela (so) the water passes through the xylem
- Now imbaghad ghandna... (then we have ...)
- So nispera li tifhmu l-importanza taghha l-kwistjoni (I hope you appreciate the importance of the issue).

The following example comes from a personal letter written in mixed Maltese and English:

- Anzi (on the contrary) better short but frequent letters

Phrase switching

The first example below comes from the same letter as in the example above. Codeswitching has only been observed in written form in this personal letter. The rest of the examples all come from spoken data.

- I've been told he's very sick. Biex (the fact that) he had not advised Angela to go abroad! Issa naraw (Now we'll see). His latest....
- that changed food ikun jista' jghaddi mit-tube ghas-cells (will be able to pass from the tube to the cells).
- il-hwejjeg li ghandhom il-kulurfihom you can't bleach (coloured clothes can't be bleached).
- Hold it halli I'll give it to you (...so that...)
- Aunty tafli I didn't do it (...she knows...).
- Kollha broke down (They all...).

Intersentential switching

This occurs either within a speaker turn, or in turn-taking.

Within a speaker turn:
Teacher: we have substances going in and out issa ħa naraw minn fejn sa jidhlu (now let us see where they get in from);

Teacher: basta jkollok two sides u included angle (as long as you have two sides and included angle).

Teacher: there are these two symbols ghandkom ideja għal x'hiex inhuma? (have you any idea what they mean?).

Learner: Eighteen point three. Min se jniżże? (Who is going to write it down?)

Teacher: lgifieri mingħajru ma tghaddix (That is, you cannot do without it). What else can you tell me?

Teacher: No more talking please. Se toqoghdu tiskantaw? (Are you just going to stare?)

In tum taking:

Teacher A: Ma qallek xejn tajjeb jew ħażin? (didn't he tell you anything whether it was right or wrong?)

Teacher B: He didn't say anything, nothing.

Metaphorical coeswitching

Blom and Gumperz (1972) describe an instance of metaphorical codeswitching where

"a variety normally used only in one kind of situation is used in a different kind because the topic is the sort which would normally arise in the first kind of situation".

In the following examples the speakers switch from Maltese to English when they quote what somebody else has said in English:

Learner: and an angle

Teacher: eh mela mhux and an angle (no of course not and an angle).
In Interview 1 (Appendix 2), teacher E says in Is. 313-315:

"u qbilt hafna mieghhek meta inti ghidt interactions in Maltese and written work was in English I mean in fact that is what I do"

(and I agree completely with what you said ...).

Here the teacher switches to English when she mentions an activity that is carried out in English i.e. written work.

6.2.2 Syntactic constraints on codeswitching

Three syntactic constraints on codeswitching have been postulated and examined by various researchers (e.g. Poplack 1980; Bentahila and Davies 1983; Berg-Seligson 1986). These are:

* an equivalence of structure constraint, i.e. codeswitching is only allowed at syntactic boundaries common to both languages;
* a size-of-constituent constraint, i.e. major constituents (e.g. sentences, clauses) tend to be switched more frequently than lower-level constituents, or smaller ones (i.e. one-word categories such as nouns, determiners, verbs, adverbs, adjectives);
* free morpheme constraint, i.e. codes may be switched after any constituent in the discourse provided that the constituent is not a bound morpheme.

According to Poplack (1980), the equivalence constraint limits the occurrence of codeswitching to those points in the discourse where juxtaposition of L₁ and L₂ elements does not violate a surface syntactic rule of either language. She claims that in her data of Puerto Rican Spanish-English bilingual speech, there were no ungrammatical combinations of L₁ and L₂, regardless of bilingual ability of the speaker. Furthermore, Poplack (1980) claims that type of codeswitching in her data reflects different degrees of bilingual ability, such that the higher the
bilingual ability of the speakers, the more intrasentential switching they are likely to produce.

Contrary to Poplack's findings, Bentahila and Davies (1983) found that in Arabic-French data, codeswitching occurs at all syntactic boundaries above the word level. They claim that the equivalence constraint whereby a switch must conform to the surface structure patterns of both languages does not apply. Codeswitching does not occur, though, at word-internal morpheme boundaries (free morpheme constraint).

Similarly, Berg-Seligson's (1986) results based on Spanish-Hebrew codeswitching show that neither the equivalence constraint nor the size-of-constituent constraint were applicable. Her informants, being predominantly intrasentential switchers, largely refrain from switching larger constituents in favour of smaller ones. Berg-Seligson (1986) also rejects the use of type of codeswitching as a measure of bilingual ability. In her data, type of codeswitching (intra- vs inter-sentential codeswitching) is unrelated to degree of bilingual ability.

The free morpheme constraint seems to be the most robust of the three constraints. We have not encountered any literature reporting evidence to the contrary. However, in our observations we have encountered the word sidek (from English "side" and the Maltese morpheme "k" for "yours"). This was uttered in great seriousness by a driver to his passenger asking her Arali sidek (check your side for me) before overtaking on a busy main road. On another occasion, a different speaker (from the same village) used the term sidi (from English "side" and the Maltese morpheme "i" for "mine"). This was also uttered in a car. The speaker was sitting next to the driver and was narrating how she had got a fright when an old driver shot from a side street out onto the main road they were driving through. Although these are the only two examples in our data, it seems to us that more such examples may be found, and if so, we would be inclined to conclude that the free morpheme constraint does not apply to the Maltese data.
Myers-Scotton (1992) posits the Matrix Language Frame Model which is intended to account formally for the process of language contact phenomena, namely codeswitching and borrowing. The matrix language in a given text is identified on the basis of relative frequency of morphemes. It also sets the morphosyntactic frame for codeswitching utterances. The embedded language/s is that from which material enters a matrix language. In this way borrowing and codeswitching forms are seen as related processes which undergo largely the same morphosyntactic procedures from the matrix language during language production. However, constraints on their occurrence are different: borrowing forms have become part of the matrix language mental lexicon; whereas codeswitching forms remain as embedded language material which only occur in the matrix language morphosyntactic frames during codeswitching discourse.

Some aspects of the matrix language model are used in this work. For example we find it useful to distinguish between matrix and embedded language material on the basis of relative frequency of morphemes. The embedded language material is highlighted in the transcripts for easier recognition (Appendix 1).

One of the hypotheses explored by Myers-Scotton (1992) is that the matrix language sets the morphosyntactic frame for borrowing and codeswitching. This is apparent in two ways:

(i) matrix language and embedded language constituents conform to the morpheme order of the matrix language and,

(ii) in matrix language + embedded language constituents, articles and inflections (system morphemes with non-lexical information) come from the matrix language.

The following are examples from the lesson transcripts (Appendix 1) where the matrix language provides the larger number of morphemes, and provides the system morphemes, while the embedded content words are in English.
In this extract from lesson P, the embedded material in English is restricted to technical mathematical terms - formula, rate - and phrases - i equals p r t over hundred. In l. 391 an English clause is embedded within a Maltese clause. The latter provides the system morphemes: the determiner 'l-' (the) and the adverb of place 'hawnhekk' (over here).

LESSON J

128 T: Mela dik hija marka tajjeb . very necessary (So that is a very necessary mark...).

This example also conforms to the matrix language frame model. It is taken from a lesson where the majority of morphemes are in Maltese and the morphosyntactic frame is set by Maltese.

Now consider the following example from the biology lesson.

LESSON M

64 T: I told you there is something in particular about them I told you that these guard cells . have something in particular the epidermis cells don't have it . what do they have ... x'ghandhom ghidna s-cells l-ohrajn . is-cells l-ohrajn bhall-palisade cells u s-cells ta' l-ispongy layer . kellhom il-chloroplasts biex jaghmlu l-photosynthesis . orrajt . imbaghad ghidna fl-epidermis irid ikun transparenti bhal (unclear) issa dawn il-guard cells . li jaghmlu l-istomata . orrajt . x'ghidna li fihom . dawna fihom il-chloroplasts . ukoll
Lesson M is mainly conducted in English, and the extract above is one of a few passages where codeswitching takes place (see Appendix 1, lesson M). In the codeswitched passage, the morphosyntactic frame is set by Maltese: the larger number of morphemes are in Maltese, the system morphemes are provided by Maltese and the syntactic structure is Maltese.

Notice, however, that in line 64 just before the teacher codeswitches to Maltese, the English utterance is also influenced by the Maltese syntactic frame: these guard cells have something in particular the epidermis cells don't have it (from Maltese "dawn il-guard cells ghandhom xi hağa partikolari li s-cells ta' l-epidermis m'ghandhomx") where in Standard English we would have "these guard cells have something in particular which the epidermis cells don't have".

This shows that the formal distinctions between matrix and embedded language material, as postulated by Myers-Scotton (1992), do not apply to our data. In the example above while English provides the larger number of morphemes, the morphosyntactic frame is set by Maltese. The following example further shows the inadequacy of the Matrix Language Frame Model to account for the formal characteristics of codeswitching data.

LESSON D

150 T: min jaf ighidli what is a cheque
(who can tell me what a cheque is)

In this example from lesson D we find an English phrase inserted within a Maltese unit. The morphosyntactic frame is set by Maltese such that the morphemic order of the English phrase is regulated by the morpheme order of Maltese.

Both lessons D and O contain a larger number of morphemes in English (see Table 7.1 and Figure 7.2), which according to the Matrix Language Frame Model should result in English being the matrix language and Maltese as embedded material. However, we have seen how Maltese sets the morphosyntactic frame.
Furthermore, Maltese also sets the phonological frame since the intonation patterns and pronunciation features are clearly Maltese. The Matrix Language Frame Model potulated by Myers-Scotton (1992) does not make any reference to phonological criteria which are another level of linguistic organization and hence ought to be considered, and it does not cater for instances such as these found within our data.

We conclude that in some of our bilingual data, the criteria of relative frequency of morphemes and the setting of the morphosyntactic and phonological frame as identification of the matrix language are in contradiction. Although in the transcripts we highlight the language material in the less used language, this does not always coincide with the embedded language material as defined by Myers-Scotton (1992).

6.2.3 Sociolinguistic approaches to codeswitching

Languages are not neutral tools of communication but carry various social and political attributes associated with their speakers. The choice of language in a particular situation (where, when and with whom) in a bilingual context is not straightforward. It is linked with, and dependent on other non-linguistic criteria, such as language attitudes and the relative power of different language groups which affect which social group the speaker might want to be identified with.

Gumperz (1982) uses the term situational codeswitching to refer to language alternation as in diglossia, where each point of switch corresponds to a change in the situation. In situational codeswitching distinct varieties are employed in certain settings (such as home, school, work) that are associated with different kinds of activities (e.g. public speaking, formal negotiations, special ceremonials, verbal games), or used with different categories of speakers (e.g. friends, family members, strangers, social inferiors, government officials). In such cases language alternation "always corresponds to structurally identifiable stages or episodes of a speech event.... There is a simple, almost one to one, relationship between language usage and social context, so that each variety
can be seen as having a distinct place or function within the local speech repertoire" (Gumperz 1982:61).

For example in Hemnesberget, a Norwegian village studied by Blom and Gumperz (1972), Bokmal is used when the situation is considered rather formal and relatively remote from local and personal concerns, while Ranamal is used if the situation is one of closeness and is part of the specifically Hemnsberget community (as opposed to the Norwegian scene as a whole).

Gal (1979) shows how in Oberwart, Austria, Hungarian acts as the traditional ingroup language of one segment of the society, while German, the national language of Austria, is the High variety. Hungarian has lower status and is associated with traditional rural values: hard work, ownership of farm animals and land (the latter provides a higher status). German is the language of education and of the professional class and symbolises the more "Austrian" urban values.

In Oberwart, Hungarian-German bilinguals are often under pressure to switch to German in the presence of monolingual German speakers. Sometimes they conform to these expectations, as in the example of the bilingual construction workers who switch to German at lunch time in the presence of monolingual overhearers. At other times they don't, as in the case of the Hungarian couple who do not switch to German in the presence of a neighbour who helps them with pig-killing (Gal 1979:161-166).

On the whole Gal (1979) finds that the older members of the Oberwart community are more likely to speak and be addressed in Hungarian. The younger members, however, have shifted to German because this to them symbolises the more urban, pan-Austrian values, as opposed to "peasantness" associated with Hungarian.

Codeswitching is sometimes used for role identification, that is for placing the speaker in the hierarchy of the social network. In India, for example, codeswitching with English ranks highest in attitudinal terms and cuts across
language boundaries and the caste barriers. It is a marker of modernization, of socio-economic position, and of membership in an elite group. (see Kachru 1978a, 1978b; Sridhar 1978; Tay 1989; and Myers-Scotton 1989).

Sridhar (1978) distinguishes between codeswitching of English with Perso-Arabic which is considered an indicator of "rowdy" behaviour and a strange, non-normal upbringing, and codeswitching of English with Kannada which is considered prestigious, and a mark of education, urbaneness and sophistication.

Heller (forthcoming) discusses the ways in which the study of codeswitching is relevant to the politics of language. By this she means "the ways in which language practices are bound up in the creation, exercise, maintenance or change of relations of power". Codeswitching is to be seen as an interactional movement whose significance can only become apparent when linked to other instances of language use.

Language is seen as related to power in two ways. First, it is part of processes of social action and interaction, part of the ways in which people do things, get things and influence others. Second, language itself thereby becomes a resource which can be more or less valuable to the extent that the mastery of ways of using language is tied to the ability to gain access to and exercise power. Linguistic resources are among the symbolic resources which are, generally speaking, not equally distributed in society. Some people, by virtue of their social position, have access to more- or less- highly valued forms of language, and are more- or less- able to able to control the value accorded to linguistic resources in society in general.

The symbolic value of language as power in the Maltese context can be understood in the following ways:

(1) English is perceived as the language of education and of the educated, especially of those in the professions. Knowing and using English is a symbol of power. As a resource it is unequally distributed. Note, however, that
education as a status symbol may not necessarily go hand in hand with other symbols of power such as wealth.

Those people who come from less educated backgrounds, and who aspire to upward social mobility within the Maltese community, strive, in various ways, to acquire a range of symbolic items, e.g. luxurious cars and a large villa, and the English language as an everyday language of communication.

From a linguistic point of view we observe that these people normally switch frequently between Maltese and English, and their English is more heavily influenced by Maltese. But this does not matter, because they perceive themselves and the rest of the population perceive them as "English speakers".

In this way, the acquisition of English as a home language, is a symbol of status and power. Through the use of English they hope to get access to the higher echelons of society and exercise power once they are looked up to by the rest of the population.

(2) On the other hand, there is a conspicuous movement for the promotion of Maltese. At the same time, this movement works against the use of English by Maltese speakers. These significant individuals and groups (e.g. students at the University) also belong to the educated class and seek to promote the use of Maltese as an educated variety. This is necessary, they feel, since there is a growing number of users of English who look down upon Maltese and its dialects as "uneducated" varieties. The support for Maltese as a national language comes from a very large sector of the population.

The extremists within this movement, however, are frowned upon by the majority of the population as they are seen as "purists" of the language. Not many people would like to be associated with a "purist" movement as this is understood as anachronistic. The "extremists" themselves, for example, do not use an "uncontaminated" form of the language, but a language that is influenced by Italian and English.
Codeswitching is used extensively in society. It reflects a psycho-social reality experienced by the Maltese nation. Many value the Maltese language and generally endeavour to promote its use. At the same time they cling to the colonial heritage of English, a world language, indispensable for the Maltese economy based on tourism, for professional development and for international communication. By codeswitching, which has become the norm in many situations, a speaker avoids being associated with "Maltese purists" and also with "snobbish speakers of English". By codeswitching, one can appear to know enough Maltese, a symbol of identity, and enough English to be considered an educated person. In the school context, the teachers and the learners themselves have reported that keeping strictly to either language is not appreciated and creates a barrier between the participants (see Appendices 2,3,4). Each codeswitch in the Maltese context potentially reflects the linguistic ambivalence in Maltese society.

6.2.4 Codeswitching as a communicative strategy

Conversational codeswitching is accompanied by no change in situation or topic. In conversational codeswitching, apart from the language alternation itself, there are all the earmarks of ordinary conversation in a single language: no hesitation pauses; changes in sentence rhythm; pitch level or intonation contour marking the shift in code (Gumperz 1982:60).

Romaine (1989:111) accepts Gumperz's (1982:61) view that in this type of codeswitching, "the items in question form part of the same minimal speech act. They are tied together prosodically as well as by semantic and syntactic relations equivalent to those that join passages in a single speech act". Kachru (1978a:112) explains that such codeswitching is tied by lexical cohesion in a way that the integration of the units of another code into the system of the receiving code are organised, in a semantic relationship.

Another communicative function of codeswitching is related to the use of registers of science and technology, higher level administrative bureaucracy technical terms in English in certain registers (Sridhar 1978; Kachru 1978a,
1978b). Codeswitching of Indian languages with English is used in the and modern literary criticism. In other registers such as in friendly conversation about family matters, English terms such as "wife" may be used because they are more "neutral".

Codeswitching functions as a tool for elucidation and interpretation of meaning (Kachru 1978a, 1978b). In these cases codeswitching is used because of lack of register stability in the L1; terms from English are used to reduce ambiguity. Pakir (1989:38) refers to reiteration in codeswitching which, according to her, serves the function of mere repetition and the aim is to plainly translate. However, she adds, there are other aspects of reiteration such as modification and clarification of a message, and the use of codeswitching for emphasis. These, she calls, co-operative activities in the context of everyday conversation, where reiteration serves to build a better interaction and understanding of shared abilities in message processing. Tay (1989:413) and Sridhar (1978:116) think that the effectiveness of elaborating with the same code or across different languages as a communicative strategy does not depend on choice of code but depends on the user's perceptions of special connotations such as expressiveness, refinement and powerfulness of the mixed elements as opposed to their equivalents in the borrowing language.

According to Kachru (1978a:112) in (technical) register identification, codeswitching has the function of "foregrounding", i.e. to attract attention and make oneself understood, and in neutralisation it has the function of "automisation", i.e. the use of lexical items which are attitudinally and contextually neutral.

Other conversational functions of codeswitching mentioned in the literature are: topic marking; emphasis; and foregrounding of information (Gysels 1992). In the Maltese data we find examples of the use of codeswitching for sequential contrast for example, where a switch to the other language is related to an aside, a parenthesis or commentary, thus marking a deviation from the sequence of thought (see chapter 5).
Addressee specification is a common function in codeswitching especially when each speaker comes from a different speech community and it relates to the inclusion or exclusion of certain participants from the conversation (Gumperz 1982; Auer 1984). In the Maltese classroom data we find one such example in lesson F where one of the learners is a native speaker of Canadian English and the teacher addresses him in English.

In Gumperz (1982), personalisation vs objectivisation, code contrast is related to such things as the distinction between talk about action and talk as action, the degree of speaker involvement in, or distance from, a message, whether a statement reflects personal opinion or knowledge, whether it refers to specific instances or has the authority of generally known fact.

These are some of the ways in which codeswitching is exploited in creative ways by bilinguals as a communicative resource.


"the separation of style-shifting from codeswitching has no theoretical justification. Speakers from monolingual and bilingual communities express by code choice and code variation similar social meanings".

Style-switching, like language accommodation (see Fasold 1984), is essentially the speaker's response to their audience: such that a speaker switches from one language to another in order to accommodate to his interlocutor's language (or in other cases may not accommodate in order to be different). Bell (1984) proposes the framework of "audience design" where he distinguishes and ranks audience roles according to whether or not the persons are known, ratified or addressed by the speaker. The main character is the addressee; third persons may be present but not addressed (auditors); others whom the speaker knows to be there but who are not ratified participants (overhearers); and yet others whose presence is unknown (eavesdroppers); all influence language choice and
style. Style differences within the speech of a single speaker are accountable as the influence of the second person and some third persons who together compose the audience to the speaker's utterances (Bell 1984:159).

Some of the functions of codeswitching are similar to style shifting, e.g. to specify a particular addressee, to accommodate to the interlocutor's language, when quoting or when changing a topic or activity, or for a digression. Other functions however, are only found in the switching of languages, e.g. to translate, to amplify on a meaning or elaborate on new information, to check comprehension or to mark specific points in the discourse, or for lack of appropriate vocabulary.

The functions of codeswitching in the classroom, described in chapter 2 are similar to those found in naturally occurring conversation outside the education contexts, e.g. to elaborate, give meaning or translate and the use of technical vocabulary in the other language (Kachru 1978a; 1978b; Pakir 1989; Tay 1989; Sridhar 1978); topic marking, for emphasis and foregrounding (Gysels 1992); addressee specification which is related to language accommodation and the establishing of interpersonal relations (Gumperz 1982; Auer 1984); when quoting in another language (Blom and Gumperz 1972).

The only classroom based functions of codeswitching are its use as an elicitation technique, to make comprehension checks and text-oriented switching. These functions have only been reported in classroom based research. In normal conversation speakers do not normally elicit answers which they already know, make comprehension checks or analyse written texts in a different language to the one they speak.

6.3 Conclusion

We have seen how the similarities in the individual interlanguages of Maltese bilinguals come together at societal level bringing about changes in the Maltese language and creating a Maltese variety of English. Extensive codeswitching
between Maltese and English by bilinguals equally fluent in both languages has given rise to a new linguistic variety: Mixed Maltese English. Linguistically Mixed Maltese English consists of a larger number of morphemes in English and a Maltese phonology and morphosyntax.

In the following chapter we shall look more closely at the formal characteristics of codeswitching in the Maltese lesson sample.
CHAPTER 7: TAXONOMIC AND QUANTITATIVE ANALYSIS OF CODESWITCHING

7.0 Introduction

In this chapter a taxonomy of codeswitching is established. A unit of analysis is defined and is used as a basis for the quantification of types of codeswitching. As a supplementary quantitative analysis I have counted Maltese and English words in each lesson transcript (spoken only). I shall first give the results of the word count.

7.1 Word Count

All the words in the lesson transcripts (excluding names) were counted to support the analysis carried out on the basis of a speech unit. Figure 7.1 shows the total percentages of Maltese and English words in the sample. Figure 7.2 shows the percentages of Maltese and English words in each of the sixteen lessons, and Figure 7.3 shows the lessons in rank order from mainly Maltese to mainly English. Table 7.1 shows the quantities of Maltese and English words (spoken not read or written) in the lesson sample.

Figure 7.1: Percentages of Maltese and English words in the sample

```
Words in English (51.8%)
Words in Maltese (48.2%)
```
The word count shows that there are almost equal amounts of Maltese and English words in the sample. There is a slightly higher quantity of English words because there are two lessons (I and L) almost completely in English, whereas only one lesson (K) is almost completely in Maltese. Lessons A, M and N have very high proportions of English. The rest of the lessons conducted mainly through Maltese include substantial amounts of English terms.

English is slightly more common due to the use of English terminology (words and phrases) in those lessons that are otherwise conducted through Maltese. On the other hand, in the lessons conducted through English little recourse is made to Maltese. This has been explained in chapter 5.

From Table 7.1 and Figures 7.1, 7.2 and 7.3 we can make a number of observations as follows.

The Maltese lesson (K), social studies (F) and economics (H) are largely conducted in Maltese. It is not surprising that the Maltese and Social Studies lessons are in Maltese since the written medium is Maltese. The use of Maltese in the economics lesson can probably be explained by the fact that this young teacher was educated at the University of Malta and comes from family type B.
Figure 7.2: Percentages of Maltese and English words in each lesson
Figure 7.3: Percentage of Maltese and English words in each lesson in rank order

- **Maltese**
  - K: Maltese Social Studies (99.5%)
  - G: Integrated Science (75.2%)
  - B: Maths (88.1%)
  - A: Home Economics (87.1%)

- **English**
  - F: Social Studies (95.6%)
  - E: Needlework (75.1%)
  - O: Home Economics (54.5%)
  - N: Maths (92.7%)
  - H: Economics (82.4%)
  - C: Physics (75.8%)
  - J: Maths (73.5%)
  - P: Maths (70.1%)
  - D: Economics (44.6%)
  - M: Biology (78.9%)
  - L: History (99.9%)
  - I: English (100.0%)
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Maltese Words</th>
<th></th>
<th></th>
<th>English Words</th>
<th></th>
<th></th>
<th>Total Words</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>frequency</td>
<td>%</td>
<td></td>
<td>frequency</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>564</td>
<td>12.91</td>
<td></td>
<td>3806</td>
<td>87.09</td>
<td></td>
<td>4370</td>
</tr>
<tr>
<td>B</td>
<td>2249</td>
<td>66.15</td>
<td></td>
<td>1151</td>
<td>33.85</td>
<td></td>
<td>3400</td>
</tr>
<tr>
<td>C</td>
<td>1410</td>
<td>75.81</td>
<td></td>
<td>450</td>
<td>24.19</td>
<td></td>
<td>1860</td>
</tr>
<tr>
<td>D</td>
<td>1431</td>
<td>44.59</td>
<td></td>
<td>1778</td>
<td>55.41</td>
<td></td>
<td>3209</td>
</tr>
<tr>
<td>E</td>
<td>1725</td>
<td>75.07</td>
<td></td>
<td>573</td>
<td>24.93</td>
<td></td>
<td>2298</td>
</tr>
<tr>
<td>F</td>
<td>3821</td>
<td>95.45</td>
<td></td>
<td>182</td>
<td>4.55</td>
<td></td>
<td>4003</td>
</tr>
<tr>
<td>G</td>
<td>2591</td>
<td>75.21</td>
<td></td>
<td>854</td>
<td>24.79</td>
<td></td>
<td>3445</td>
</tr>
<tr>
<td>H</td>
<td>690</td>
<td>82.44</td>
<td></td>
<td>147</td>
<td>17.56</td>
<td></td>
<td>837</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>0.03</td>
<td></td>
<td>3094</td>
<td>99.97</td>
<td></td>
<td>3095</td>
</tr>
<tr>
<td>J</td>
<td>1567</td>
<td>73.53</td>
<td></td>
<td>564</td>
<td>26.47</td>
<td></td>
<td>2131</td>
</tr>
<tr>
<td>K</td>
<td>3442</td>
<td>99.48</td>
<td></td>
<td>18</td>
<td>0.52</td>
<td></td>
<td>3460</td>
</tr>
<tr>
<td>L</td>
<td>4</td>
<td>0.11</td>
<td></td>
<td>3507</td>
<td>99.89</td>
<td></td>
<td>3511</td>
</tr>
<tr>
<td>M</td>
<td>858</td>
<td>21.05</td>
<td></td>
<td>3218</td>
<td>78.95</td>
<td></td>
<td>4076</td>
</tr>
<tr>
<td>N</td>
<td>315</td>
<td>7.29</td>
<td></td>
<td>4004</td>
<td>92.71</td>
<td></td>
<td>4319</td>
</tr>
<tr>
<td>O</td>
<td>1008</td>
<td>45.49</td>
<td></td>
<td>1208</td>
<td>54.51</td>
<td></td>
<td>2216</td>
</tr>
<tr>
<td>P</td>
<td>1985</td>
<td>70.12</td>
<td></td>
<td>846</td>
<td>29.88</td>
<td></td>
<td>2831</td>
</tr>
<tr>
<td>Total</td>
<td>23,661</td>
<td>48.23</td>
<td></td>
<td>25,400</td>
<td>51.77</td>
<td></td>
<td>49,061</td>
</tr>
</tbody>
</table>

A number of lessons (C, E, J, Pand B) are three quarters in Maltese and a quarter in English. The use of English in lessons J, B and P, the mathematics lessons, is ascribed to the use of English mathematical terms and phrases throughout the explanations in Maltese. In lesson C the teacher demonstrates
the experiment in English and the learners use technical terms and classroom jargon in English as they carry out the experiment themselves. In lesson E, technical and semi-technical terms are expressed in English. Although these terms are related to needlework activities carried out in the home, Maltese people in general use English terms in many such activities. There may be some Maltese equivalents but these are not passed on or promoted in education. English terms are used as a result of the fact that they are read in English in textbooks and reference works.

In lessons D and O there is an almost equal number of words in English and in Maltese, with a slightly higher percentage of English. These two teachers are both under twenty-five years of age, and both come from type C families (see Table 3.8) where English and Maltese are spoken as first languages at home. Teachers with this type of family background are more likely to use Mixed Maltese and English as explained in chapter 6.

Lessons mainly in English with a small percentage of Maltese words are lesson M (biology), A (home-economics) and lesson N (mathematics). All three teachers are over thirty-five years of age and had their education and teacher training through English. As a result they use English as the main spoken medium of instruction. However they allow the learners to use Maltese, and they themselves (lessons M and N) switch to Maltese occasionally to make sure their explanations are understood by the learners.

7.2 The coding scheme

This quantitative analysis involves the following steps:

* the establishment of a basic unit of analysis
* the design of a codeswitching taxonomy
* the coding of each unit according to type of codeswitching, and
correlating the codeswitching quantities with the relevant situational variables.

Each of these steps is described below.

7.2.1 The basic unit of analysis

In what follows we examine various criteria for the identification of a speech unit. The pause is considered as a boundary marker of speech units, while the intonation unit and the clause are investigated as unit-internal defining criteria. In the end an operational definition of a unit is given.

During the word-by-word transcription process, I noticed that teachers communicated small bits of information one at a time. They also elicited from the learners very brief answers. This structuring of knowledge into small pieces seemed to help to keep the learners' attention focused on what was being said, to help them follow the argument of the teacher, and to assimilate the information. As Grimes (1975:274) puts it,

"... the speaker in addition to having to decide on the content of what he is talking about and how it is to be organized, decides also how much of it he thinks his hearer can take in at one time ..."

The exchange of information in very small quantities is particularly significant in the classroom context. The teacher is expected to go over a certain amount of knowledge with the learners in a way that enhances their acquisition of knowledge (e.g. step by step from the known to the unknown).

Researchers working with spoken language data have noted that speech is not one continuous flow of sound, but is produced in brief utterances. For instance, Chafe (1980:13) maintains that,

"A property of spontaneous speech readily apparent to anyone who examines it closely is that it is produced, not in a flowing stream, but in a series of brief spurts. In listening to speech we
apparently iron out its intermittent quality retaining an impression of integrated smoothness that was not actually present in what the speaker transmitted.

These brief spurts are commonly defined as "utterances" by Lyons (1968) in this way:

"any stretch of talk, by one person, before and after which there is silence on the part of that person"

This definition of utterance is not very useful in data analysis. The notion of silence or pause needs to be investigated further.

The pause
During the transcription process it was noticed that pauses are of various lengths and have different functions in the discourse.

Pauses are found at major constituent boundaries, i.e. between clauses (e.g. lesson D, Is. 160-162; lesson G, Is. 198-202) and between subject and predicate (e.g. lesson G, I. 91; lesson M, I. 50). Pauses occur before words of high lexical content: before nouns and noun phrases (e.g. lesson G, I. 170); before verbs or verb-phrases (e.g. lesson G, I. 541). Pauses also occur between determiner and following noun (e.g. lesson M, I. 201).

Pauses have various functions in the discourse. They can serve a planning function, i.e. essentially a holding operation while the speaker plans the remainder of the sentence. In teacher talk the following pause functions are found:

(i) as a narrative device for suspense and to make the situation sound very serious, e.g. when the teacher of lesson F in Is. 34-35 talks about wars and the destruction left as a consequence of wars;

(ii) as an imitation of the passage of time, e.g. when the teacher, again in lesson F, Is. 195-199 describes the process of preserving wild flowers, and he pauses after describing each step of the process;
(iii) as a means of class control, to indicate to the learners that the teacher is expecting them to be quiet e.g. in lesson G, Is. 13-16). Pauses are used as a classroom management device at the beginning of lesson B, Is. 5-14 when the teacher pauses frequently to show the learners she is waiting for them to settle down;

(iv) in lesson C in Is. 4-13 the teacher pauses while demonstrating an experiment in order to give the learners time to observe and remember what she is doing.

Pauses can occur at certain points in the discourse where they have a unit-internal function, as in (i), (iii) and (iv) above, and so they cannot be used as boundary markers.

**Turn-taking**

Turn-taking is easy to identify and could provide an objective way of identifying units as turns. Each contribution by a speaker could be considered as a unit. In fact each turn is always considered as a unit in the transcripts, marked by the beginning of a fresh line. As Ferrara (1980:245-6) argues, a turn-unit always achieves at least one speech act:

"...it is impossible to be speaking during one's turn and not to perform any speech act...the turn is the most elementary unit of verbal interaction which is given to the hearer for the processing and detection of a 'point'..."

Reference is made in chapter 8 to the comparatively longer turns by some teachers. Since quantitative comparison will be made across lessons on the basis of a speech unit, a unit comparable in size must be used. The turn is sometimes too long to be accepted as the basic unit of analysis. In such cases, the turn unit needs to be broken down further into other units. Therefore another unit of analysis is needed.
The intonation unit

Laver (1970:68) defines the tone-group (the terms 'tone-group' and 'intonation unit' are used interchangeably in the literature) as a:

"stretch of speech which lasts, on average, for about seven or eight syllables, and which contains only one very prominent syllable, on which a major change of pitch occurs in intonation. The prominent syllable, ... the 'tonic syllable', is usually located at or near the end of the tone-group... The tone-group is also characterized by pauses, which are usually optional but sometimes mandatory, as its boundaries".

Like many other units of linguistic analysis, the intonation group is essentially a theoretical construct. According to Cruttenden (1986: 72) some notion of 'intonation-group' is probably universal:

"almost all analysts operate with some notion of intonation-groups although most writers have no explicit discussion of how the division between intonation-groups is signalled".

A few intonation groups have been submitted to pitch contour extraction. These pitch contours were obtained using the Entropic Signal Processing System (ESPS) with Waves version 2.1 as interface between the ESPS and the SUN system 4.1, which was used with the UNIX operating system using X windows software. Speech causes variations in sound pressure. Each tone unit goes in from the audio-tape to the computer as a speech wave form, where it is transferred from analog to digital, because a digital wave form is machine readable. A formant analysis (using a mathematical algorithm) of pitch contour gives fundamental frequency in Hertz, as shown in the three examples below. Figures 7.4, 7.5 and 7.6 below are useful as an illustration of intonation units within which code-switching has occurred.
Figure 7.4: Pitch contour of unit "it's too much imma" (lesson A, l. 505)

Figure 7.5: Pitch contour of unit "irrid inzommha intact" (lesson G, l. 506)
These pitch contours illustrate that these bilingual speakers codeswitch within one tone unit without any hesitation markers or pauses. This may have some psycholinguistic significance as outlined below.

Laver (1970:69) says that the tone group "is handled in the central nervous system as a unitary behavioural act". Evidence that the tone-group is the unit of neurolinguistic pre-preparation comes from the fact that (Laver 1970:69):

"intonational and (sometimes) syntactic choices in the early part of the tone-group can depend on choices made in the latter part, and logically therefore have to anticipate the latter choices ... The linguistic unit in English which seems to be the most promising candidate for the typical preassembled stretch is what has been called a tone-group".

Often, in fact, the Maltese determiner which precedes the noun is adapted phonologically to the noun in English as in the examples explained in 7.2.3 below.
Chafe (1980) works with the notion of 'idea units'. Later (1986), he adopts the term 'intonation units' which he defines as "a single focus of consciousness". This, he describes as a "small chunk of thought on which the speaker was focusing his or her attention at the time the intonation unit was produced" (Chafe 1986:219). He continues to explain that these foci of consciousness are related to the notion of short-term memory. In Chafe (1980:15f) a relation is established between idea units and eye movements. Here, Chafe reports an experiment where a girl's verbal description of a picture from memory corresponded remarkably well to these eye movement patterns, such that the first 10 eye fixations corresponded to what was verbally expressed and described as the first 10 idea units. This is an interesting experiment which might have significant implications for the understanding of neural language organisation. However, these matters require further investigation.

The occurrence of codeswitching within the tone unit, a unit of neural pre-preparation, might tell us something about the retrieval of bilingual knowledge in the brain. This requires specialist investigation and here we can only say that we have observed codeswitching within some tone units.

The use of the tone unit as a unit of analysis in this research was not possible. Its identification requires special phonetic training and very time-consuming analysis on the computer. For these reasons the tone unit could not be adopted as the defining unit of speech in this research.

The syntactic unit
Halliday (1970:162-3) relates his tone units to clauses, but says that,

"while each tone group represents what the speaker decides to make into one unit of information... This is not necessarily the same length as a clause, though it often is so."

In the present data, tone units relate to clauses (e.g. lesson G, Is. 103-104; lesson O, Is. 104-107); to phrases (e.g. lesson G, Is. 70-71; lesson L,
Is. 274-275); to noun phrases (e.g. lesson G, Is. 61, 65; lesson I, l. 136); or even to single lexical items (e.g. lesson B, is. 41, 44, 51).

The clause cannot be applied as a single criterion for minimal unit identification. While it can be used to define the largest possible unit, it does not cater for the definition of units that are smaller than a simple clause. When a turn consists of a unit smaller than a clause it is considered as a unit since it functions as a speech act; when a turn consists of several clauses the turn is broken down into units each equivalent to a clause.

**Defining the speech unit**

Schiffrin (1987) deals with units of talk at some length. She concludes that "sometimes those units are sentences, but sometimes they are propositions, speech acts, tone units" (p. 35). Each of these units is treated at different levels of linguistic analysis which do not always coincide. For instance Inkelas and Leben (1990:19) say,

"intonational phrases - or prosodic constituents in general - do not necessarily match syntactic constituents".

Consider the following example from lesson N.

**LESSON N**

49  **T:** *(elicit with a questioning intonation)* therefore the circumference and the perimeter 

50  **TLs:** *(finish the clause together)* are the same 

In this example, what the teacher says in l. 49, and what the learners say in l. 50, form one clause; in discourse they count as two separate units because they are produced by different speakers, and because they perform two different acts: elicitation and reply.

268
The same happens in lesson H (see example below), where the teacher in l. 48 elicits, and the learners reply in l. 49, finishing off the teacher's clause.

LESSON H
48 T: (elicits with a questioning intonation) igifieri bhala riżors huwa elic|it
(that is as a resource it is)

49 TLs: (reply finishing T's clause) limitat
(reply)
(limited)

In other cases there are various turns taking place in between the beginning and the end of a phonological and syntactic unit, as in the following:

LESSON F
3 T: illum
(today)
(at this point T suspends the unit, and asks O a question starting a new unit)

4 T: nintrodučik Miss
(shall I introduce you Miss)

5 O: Miss Camilleri

6 T: (finishes off the unit started in l. 3) ghandna lil Miss Camilleri
(we have Miss Camilleri (here with us))

Here as in Chafe (1980), units often start with discourse connectives like 'because' and 'therefore'. The following are some examples:

LESSON F
37 L: ghax imutu n-ńies
(because people die)

LESSON L
24 T: because there was fertile soil
T: therefore really the circumference of the circle .. what is it as well

Operational definition of the basic unit of analysis

The basic unit of analysis is here defined as possessing one or more properties:

1. it is never larger than a clause, but can be a phrase or a word if
2. it functions as a speech act; and
3. it usually coincides with an intonation unit, having at least one pitch accent.

7.2.2 The taxonomy of codeswitching

In chapter 6 reference is made to the distinction common in the literature on codeswitching between intra-sentential and inter-sentential codeswitching. In this research we distinguish between intra-unit and inter-unit switching since speech units cannot be described as sentences as illustrated above.

Some units are in Maltese or in English, but sometimes there is a language switch either at the unit boundary or within the unit itself (see Figure 7.7). In what follows the term "codeswitching" is used to refer to all those instances where elements from both Maltese and English are used within a unit, or when units in different languages are juxtaposed. In chapter 6 we argue that the definition of "borrowing" does not apply to the Maltese data and language contact phenomena in Malta are described in terms of a continuum of crosslinguistic influence.
Intra-unit switching is subdivided into single word switching, when only one item from the other language is used, and phrase switching when longer stretches than a single word from the other language are involved. Inter-unit switching occurs either within a stretch of speech by the same speaker, or at turn-taking.

Word switching can be of various kinds: terminology, interpersonal and translation switching. The terminology switched can be technical, semi-technical, classroom jargon, numerical expressions or non-technical. Interpersonal switching consists of discourse marker switching in Maltese and
in English and tag-switching in Maltese. Translation switching is either from English to Maltese or from Maltese to English.

Inter-unit switching relates to the language preference of the speaker. Often this depends on the topic or activity being dealt with. Translation equivalents are sometimes provided by the same speaker or by the interlocutor.

Before presenting the quantitative analysis of the various types of codeswitches in the lesson sample, I shall first explain the coding scheme.

7.2.3 The coding scheme

Each unit in the lesson transcripts was coded on the basis of the codeswitching taxonomy (as shown in Figure 7.7). Counts were obtained of each type of codeswitch using the Oxford Concordance Programme.

The Oxford Concordance Programme
The Oxford Concordance Programme, known as OCP, is a computer programme which makes concordances, indexes and word lists from texts in a variety of languages and alphabets. It can be used for many text analysis applications. The user must present two sets of information to OCP: the text which is to be analyzed and a set of commands describing the analysis to be carried out. The printout from the computer will be in the form of a concordance, an index or a word list. In this case, the text analysed consists of the sixteen lesson transcripts in which all the speech units are identified and each of which is written on a fresh line. The commands used, and examples of printouts are given in Appendix 5.

The following is a brief extract from Lesson D (economics) showing how each information unit is coded on the OCP. Speech acts are coded in this extract as a justification for unit identification. They were not coded on the OCP.
LESSON D

70 T: mela (so) J Borg is the drawer
71 the person who we are paying
72 hands up
73 Ls: payee
74 T: the payee
75 in this case it is
76 Ls: D Mifsud
77 T: D Mifsud
78 mela (so) J Borg is the drawer
79 he's the person who's writing the cheque
80 D Mifsud is the
81 Ls: payee
82 T: payee good
83 0x7c mela konnawasalna
   (so where were we)
84 hawnhekk fid-date hu veru
   (we had written the date hadn't we)
85 illebjiljaw bhala id-date number eight
   (label the date as number eight)

Key to codes (see Appendix 5)
OM - Maltese unit (see section 7.3)
0E - English unit (see section 7.3)
0n - a name
0x2b - classroom terminology switch (see section 7.4.1)
0x6a - discourse marker switch (see section 7.4.2)
0x7a - phrase switch (see section 7.4.2)
0x7c - inter-unit switch, coded in between a unit in Maltese and a unit in English
   (see section 7.5).

Unit length varies from single words as in Ls. 73 and 81, to phrases like 'hands up' in L. 72, to clauses as in L. 70. In L. 80, the teacher starts a clause that the learners finish in L. 81. In L. 79, the teacher reiterates the information given in L. 78. Ls. 78 and 79 are coded as two separate units since the information is
given in two clauses. Thus, each line represents a unit which performs a speech act described in the final column, and which coincides with at least one intonation unit and a syntactic unit not larger than a clause.

The extract from lesson D above consists of 15 units, 9 of which are in English (ls. 70-75, 79-82). There is only one unit in Maltese (l. 83). The code 0x7c at the beginning of l. 82 marks an inter-unit switch which co-occurs with a change in activity: from oral discussion to the dictation of notes by the teacher. There are two discourse marker switches in ls. 70 and 78, and in both cases the teacher repeats given information, and in fact the two units are identical in content. In l. 84 the teacher uses the term 'date' in English, which is very common in the Maltese classroom. L. 85 is coded as a phrase switch as there are three items in English within one unit. Two units (ls. 76 and 77) consist of names and they are not considered as language units.

In l. 84, an instance of the Maltese inflectional morphological influence on the English verb 'to label' is observed. 'To label' becomes 'illebjiljaw' a second person plural imperative form. A switch between determiner in Maltese and noun in English is noticed in l. 84 'fid-date' (literally 'we had arrived at the date'), and again l. 85 'id-date' (the date) where the English phoneme /d/ is interpreted according to Maltese phonological rules. Very often the phonemes used in Maltese determiners are shaped by and anticipate the English phonemes. This is in line with our description of Mixed Maltese English as consisting of English content words and Maltese system words which set the morpho-syntactic frame (see chapter 6).

Table 7.2 shows the length of each lesson in minutes and seconds, the number of words, the number of information units identified and the percentage of units from the sample total. Table 7.3 shows mean lesson length, mean number of words and mean number of units in each lesson and the mean unit length.
Table 7.2: Individual lesson and total time, number of words and units

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Time</th>
<th>Words</th>
<th>Units</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>38:53</td>
<td>4370</td>
<td>768</td>
<td>8.6</td>
</tr>
<tr>
<td>B</td>
<td>31:00</td>
<td>3400</td>
<td>683</td>
<td>7.0</td>
</tr>
<tr>
<td>C</td>
<td>36:40</td>
<td>1860</td>
<td>436</td>
<td>4.6</td>
</tr>
<tr>
<td>D</td>
<td>35:33</td>
<td>3209</td>
<td>598</td>
<td>6.6</td>
</tr>
<tr>
<td>E</td>
<td>21:30</td>
<td>2298</td>
<td>459</td>
<td>4.7</td>
</tr>
<tr>
<td>F</td>
<td>44:28</td>
<td>4003</td>
<td>983</td>
<td>10.2</td>
</tr>
<tr>
<td>G</td>
<td>33:41</td>
<td>3445</td>
<td>722</td>
<td>7.5</td>
</tr>
<tr>
<td>'H</td>
<td>9:45</td>
<td>837</td>
<td>202</td>
<td>2.0</td>
</tr>
<tr>
<td>I</td>
<td>36:47</td>
<td>3095</td>
<td>522</td>
<td>5.5</td>
</tr>
<tr>
<td>J</td>
<td>20:00</td>
<td>2131</td>
<td>526</td>
<td>5.4</td>
</tr>
<tr>
<td>K</td>
<td>31:12</td>
<td>3460</td>
<td>703</td>
<td>7.1</td>
</tr>
<tr>
<td>L</td>
<td>30:22</td>
<td>3511</td>
<td>573</td>
<td>5.8</td>
</tr>
<tr>
<td>M</td>
<td>37:24</td>
<td>4076</td>
<td>648</td>
<td>6.7</td>
</tr>
<tr>
<td>N</td>
<td>31:15</td>
<td>4319</td>
<td>791</td>
<td>8.0</td>
</tr>
<tr>
<td>O</td>
<td>19:45</td>
<td>2216</td>
<td>398</td>
<td>4.1</td>
</tr>
<tr>
<td>P</td>
<td>25:46</td>
<td>2831</td>
<td>626</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>8 hrs 21 mins</td>
<td>49,061</td>
<td>9,638</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7.3: Mean lesson length, mean number of words per lesson, mean number of units per lesson and mean unit length

<table>
<thead>
<tr>
<th>Mean lesson length</th>
<th>30 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean words per lesson</td>
<td>3,052</td>
</tr>
<tr>
<td>mean no. of units per lesson</td>
<td>653</td>
</tr>
<tr>
<td>mean unit length</td>
<td>4 words</td>
</tr>
</tbody>
</table>

1 Lesson H consists only of the last part of the lesson - see 5.10.
7.3 Units exclusively in one language

Some of the units are exclusively in one language, i.e. either in Maltese or in English.

**Maltese units**

The Maltese lesson is almost completely conducted in Maltese, and other lessons have long stretches in Maltese. Therefore, a large number of units in these lessons are Maltese units. The following are examples of Maltese units:

**LESSON D**

94 T: sadanittant jien ghandi l-hin immur il-bank

*(in the meantime I can go to the bank)*

95 T: u ndahhal kemm irrid indahhal

*(and deposit the amount I want)*

**lesson C**

**LESSON C**

260 L: fejn niktbuhom

*(where do we write them)*

261 L: dawn ha naghmluhom eh maghhom

*(we're going to put them together)*

The highest number of Maltese units are found in lesson K, the Maltese lesson, and in lesson F, the social studies lesson. This is to be expected since these two subjects are taught and examined through Maltese. However small proportions of English are found in both lessons. These amount to a few words in English in lesson K; reading two poems in English and the use of some English terms in lesson F. While in the Maltese lesson the teacher gives Maltese equivalents to some of the English terms he uses in order to teach the Maltese terms, in the social studies lesson the teacher gives or elicits Maltese equivalents to make sure the learners have understood the poems in English.
This social studies teacher does not feel obliged to use Maltese exclusively as a medium of instruction, but feels free to use English when necessary. This reflects the flexibility in the system regarding the use of specific languages as media of instruction.

Lessons I and L contain no Maltese units. Lessons A (home-economics), I (English), L (history), M (biology) and N (mathematics) have a small percentage of Maltese units. Each of the other lessons have between 40% and 60% of units in Maltese. Thus nine of the lessons have about half of the units in Maltese. The other units are either in English or in mixed language (see Table 7.4, Figure 7.8 and Figure 7.9).

Table 7.4: Distribution of Maltese and English units across lessons

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Maltese</th>
<th>English</th>
<th>Lesson</th>
<th>Maltese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94</td>
<td>454</td>
<td>I</td>
<td>0</td>
<td>519</td>
</tr>
<tr>
<td>B</td>
<td>192</td>
<td>146</td>
<td>J</td>
<td>256</td>
<td>65</td>
</tr>
<tr>
<td>C</td>
<td>260</td>
<td>68</td>
<td>K</td>
<td>690</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>311</td>
<td>153</td>
<td>L</td>
<td>3</td>
<td>568</td>
</tr>
<tr>
<td>E</td>
<td>229</td>
<td>44</td>
<td>M</td>
<td>120</td>
<td>375</td>
</tr>
<tr>
<td>F</td>
<td>817</td>
<td>75</td>
<td>N</td>
<td>40</td>
<td>692</td>
</tr>
<tr>
<td>G</td>
<td>444</td>
<td>140</td>
<td>O</td>
<td>100</td>
<td>163</td>
</tr>
<tr>
<td>H</td>
<td>122</td>
<td>24</td>
<td>P</td>
<td>231</td>
<td>173</td>
</tr>
<tr>
<td>Total</td>
<td>3,909</td>
<td>3,659</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

English units
Lessons I and L are conducted almost completely in English. The other lessons have some English units. The following are examples of English units:

LESSON N
31 T: now if I go round the circumference
   all round the circumference

277
Lessons I and L are conducted in English. Lessons M and N score the next highest counts of English units. All three lessons L, M and N were recorded in the same boys' private school and all three teachers are over 35 and were trained at the residential teacher training college. All these factors probably contribute to the high incidence of English used.

The teacher of lesson I however, is a young teacher and her lesson is English literature. In this case English is used as a spoken medium of instruction.

As can be seen from the totals in Table 7.4, there is an almost equal number of Maltese and English units. Both languages play an important role in the classroom. Both languages are used more or less to the same extent, although this does not apply to every teacher. Maltese and English units together amount to 7,568 units out of a total of 9,638 units. Intra-unit switches amount to 2,070. There are only 372 inter-unit switches. In this corpus, Maltese units amount to 40.6% of the whole, English units amount to 38.0%, while intra-unit switching amounts to 21.5% (Figure 7.8). The distribution of Maltese, English and codeswitching (Maltese and English) units in each lesson is shown in Figure 7.9.
Figure 7.8: Maltese, English and codeswitching units in the sample

- Maltese (40.6%)
- English (38.0%)
- Codeswitching (21.5%)
Figure 7.9: Maltese, English and codeswitching units in each of the lessons

A: Home Economics
   - Maltese: 28.6%
   - English: 12.2%
   - Codeswitching: 21.4%

B: Maths
   - Maltese: 12.2%
   - English: 28.1%
   - Codeswitching: 50.6%

C: Physics
   - Maltese: 60.6%
   - English: 24.8%
   - Codeswitching: 25.6%

D: Economics
   - Maltese: 61.5%
   - English: 39.0%
   - Codeswitching: 41.0%

E: Needlework
   - Maltese: 40.6%
   - English: 27.7%
   - Codeswitching: 27.7%

F: Social Studies
   - Maltese: 83.1%
   - English: 51.6%
   - Codeswitching: 19.1%

G: Integrated Science
   - Maltese: 0.0%
   - English: 99.1%
   - Codeswitching: 0.3%

H: Economics
   - Maltese: 99.4%
   - English: 0.6%
   - Codeswitching: 0.6%

I: English
   - Maltese: 23.6%
   - English: 67.9%
   - Codeswitching: 18.6%

J: Maths
   - Maltese: 39.0%
   - English: 12.4%
   - Codeswitching: 7.5%

K: Maltese
   - Maltese: 98.2%
   - English: 1.8%
   - Codeswitching: 0.0%

L: History
   - Maltese: 23.6%
   - English: 36.9%
   - Codeswitching: 35.5%

M: Biology
   - Maltese: 75.9%
   - English: 18.1%
   - Codeswitching: 6.1%

N: Maths
   - Maltese: 41.0%
   - English: 87.6%
   - Codeswitching: 26.1%

O: Home Economics
   - Maltese: 27.5%
   - English: 33.9%
   - Codeswitching: 27.5%

P: Maths
   - Maltese: 36.9%
   - English: 36.9%
   - Codeswitching: 36.9%
7.4 Intra-unit switching

Intra-unit switches include either a single lexical item or a phrase from the embedded language (see Figure 7.10).

Figure 7.10: Types of intra-unit switching

Word switching can be of three types:
- Terminology switching
- Interpersonal switching
- Translation switching

Examples of each type are given below.
Figure 7.11: Percentages of intra-unit switching in the sample

- Technical Phrase Switching (43.4%)
- Non-Technical Phrase Switching (22.2%)
- Terminology switching (28.5%)
- Translation switching (0.8%)
- Interpersonal Switching (5.1%)
7.4.1 Terminology switching

Units that include terminology switching are Maltese units with different types of English terms within them. Maltese units that include English terms are further subdivided as shown in Figure 7.12. The distribution of terminology switching across lessons is shown in Table 7.5.

Figure 7.12: Terminology switching

<table>
<thead>
<tr>
<th>Technical terms</th>
<th>Sub-technical terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERMINOLOGY SWITCHING . . .</td>
<td></td>
</tr>
<tr>
<td>Classroom jargon</td>
<td>Numerical expressions</td>
</tr>
<tr>
<td>Non-technical terms</td>
<td></td>
</tr>
</tbody>
</table>

The following are examples of each type of terminology switching.

(a) Technical (subject-specific) terms

School subjects that are studied through the medium of English make it necessary for teachers to use and to teach certain technical terms that belong to the subject being treated. For example:

LESSON B
278 T: x'inhu l-characteristic hija tiftakru
(what is the characteristic, do you remember)
Table 7.5: Distribution of terminology switching across lessons

<table>
<thead>
<tr>
<th>Lesson</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>14</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>B</td>
<td>125</td>
<td>8</td>
<td>18</td>
<td>34</td>
<td>3</td>
<td>188</td>
</tr>
<tr>
<td>C</td>
<td>55</td>
<td>2</td>
<td>17</td>
<td>12</td>
<td>2</td>
<td>88</td>
</tr>
<tr>
<td>D</td>
<td>16</td>
<td>58</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>95</td>
</tr>
<tr>
<td>E</td>
<td>48</td>
<td>64</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>119</td>
</tr>
<tr>
<td>F</td>
<td>24</td>
<td>3</td>
<td>35</td>
<td>1</td>
<td>8</td>
<td>71</td>
</tr>
<tr>
<td>G</td>
<td>53</td>
<td>26</td>
<td>9</td>
<td>1</td>
<td>15</td>
<td>104</td>
</tr>
<tr>
<td>H</td>
<td>30</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>J</td>
<td>72</td>
<td>1</td>
<td>13</td>
<td>32</td>
<td>17</td>
<td>135</td>
</tr>
<tr>
<td>K</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>L</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>117</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>121</td>
</tr>
<tr>
<td>N</td>
<td>25</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>O</td>
<td>25</td>
<td>19</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>P</td>
<td>114</td>
<td>0</td>
<td>12</td>
<td>17</td>
<td>1</td>
<td>144</td>
</tr>
<tr>
<td>Total</td>
<td>709</td>
<td>187</td>
<td>131</td>
<td>121</td>
<td>68</td>
<td>1216</td>
</tr>
</tbody>
</table>

Key

(a) Technical (subject-specific) terminology
(b) Semi-technical terminology
(c) Classroom terminology
(d) Numerical expressions
(e) Non-technical terminology
LESSON C

53  L: se nerga' nikkonferma l-ewwel parti ta' l-experiment
(I re-confirm the first part of the experiment)

54  insib il-focal length
(and find the focal length)

A number of subject-specific technical terms is used in most lessons (Table 7.5). A total of 709 instances of terminology switches has been identified, with the highest occurrences in lessons B (125), M (117) and P (114). Lessons B and P are both mathematics lessons while lesson M is a biology lesson. A higher number of terminology switches appears in these lessons because Maltese is used as the spoken medium, but technical terms are in English. The use of English technical terminology in those lessons which are mainly conducted through English has not been coded since it does not give rise to codeswitching. The use of English technical terminology in those lessons conducted through Maltese results from the fact that the textbooks are in English, and Maltese equivalent terms are not available for use in the classroom.

(b) Semi-technical terms

There are some terms that although subject-specific, are used within Maltese society generally. These are classified as semi-technical.

LESSON B

25  T: il-frame irid ikun ikbar mill-istampa jew izghar
(should the frame be larger or smaller than the picture)
LESSON D
363 T: ikollok dan il-wallet
iddahhal il-flus fil-wallet
iddahhlu fin-night safe
(you have this wallet, and you put the money in the wallet, in the night safe)

LESSON F
490 T: m'inix se nillimita ruhi ghas-south jew ghan-north
(I'm not going to limit myself to the south or to the north)

From a total of 187 such terms (see Table 7.5) the highest numbers are found in lesson E (needlework) 64; lesson D (economics) 58; lesson G (integrated science) 26; and lesson O (home-economics) 19. The use of semi-technical terms depends on the subject and topic concerned.

For instance the needlework and home-economics lessons are about the availability and care of different types of fabrics; issues directly related to everyday life and to people's pastimes. In the economics lesson, the topic of bank services is treated. These services are available to the whole of Maltese society and the English terms are used generally. There have been no attempts to introduce Maltese equivalents for the English terms and therefore many English loanwords are used.

(c) Classroom terminology

Some English terms used in the classroom are directly related to the education domain. The following are some examples: lesson B, 'correction', 'tests'; lesson C, 'handout', 'timetable'; lesson F, 'unit', 'explanation'; lesson J, 'annual paper', 'past paper'; and lesson P, 'workbook', 'problems'. When the teacher speaks in Maltese but uses English terminology, in this case classroom-specific terms, intra-unit switching occurs as in the following:
Lesson F
351 T: illi tagħmlu xi project
(that you make a project)

Lesson H
97 T: ħġifieri biex ġejt teacher
(for me to have become a teacher)

Żammit Mangion (1992) published a glossary of 522 "current and important Maltese education terms". All of them are in English, and less than half, 241 to be exact, appear with Maltese equivalents in brackets. The education system set up in Malta was directly based on that of Britain during colonial rule, and as a result the English terms are still used. As Żammit Mangion (1992:490) says;

"In general, it is the English terminology which is most widely used. The English usage is also the official word in use. There exist Maltese counterparts to many of these terms, some of them have become popular language and are used by tradition... Where no Maltese word is supplied, it is because it is the English term that is generally used."

There are 131 occurrences of classroom- and education- related terms in the transcripts. In some lessons a higher number of classroom-specific terms are used (Table 7.5). The use of such terms in these lessons is more obvious because the main spoken medium is Maltese. Classroom terminology is also used in the lessons conducted in English but since it does not entail codeswitching it has not been coded.

(d) Numerical expressions

The use of English number terms within stretches of Maltese speech is also common in Maltese society (Cucciardi 1990). Number terms in Maltese are taught at early primary school, but in the second year the multiplication tables are introduced in English. From the third year of primary school onwards the
mathematics textbooks are in English. The English textbooks used throughout the education system contribute to more widespread use of English numerical expressions in Malta.

Cucciardi (1990) concludes that the use of numerical expressions in English in Malta cannot be related to variables such as social class or geographical background. English numerical expressions are used by all Maltese people (although not in all domains, e.g. Italian is used to refer to Italian T.V. channels) (see chapter 3, section 3.2.3). The following are examples of intra-unit switches due to the use of English numerical expressions.

LESSON F
151 T: imma mhux eight hundred
   (but they are not eight hundred (years old))

LESSON A
443 L: twenty-five intihomlha jien
   (I would say twenty-five)

The quantities of numbers in English used within units in Maltese are shown in Table 7.5. Naturally, the greatest quantities of this type of switching are found in the mathematics lessons, particularly lessons B, J and P. The other mathematics lesson was conducted mainly in English.

There are some occurrences of numerical expressions in English within Maltese units in the physics (lesson C), economics (lesson D) and home-economics (lesson A) lessons where numbers and counting were relevant to the topic under discussion.

(e) Non-technical terms

General terms and idiomatic expressions in English are occasionally used by some teachers. For example:
Table 7.5 shows that the number of non-technical terms used in these classrooms is very small. Lessons G (15), J (17) and K (10) have the highest number of occurrences. This is surprising in the case of lesson K, the Maltese lesson. The English terms used in this lesson are 'farm', 'tricky', 'birthday', 'yes', 'please', 'five cents', and 'films', all very current in Maltese speech.

7.4.2 Phrase switching

In this case, rather than switching single items within the speech unit, speakers switch phrases; elements longer than one word but not long enough to be units on their own. Phrase switching can be either from Maltese to English when technical phrases are used within Maltese units or from English to Maltese (Figure 7.13). In the latter case the teacher accommodates to the learners' language.

Figure 7.13: Phrase switching

Technical . . . . M→E

PHRASE SWITCHING . . . . . .

Non-technical . . E→M

The following are examples of technical phrase switching:
LESSON P

T: cross-multiplication kif ghamilna l-bierah
(cross-multiplication like we did yesterday)

Mathematical phrases in English as in the examples from lessons N and P above are very common in mathematics lessons conducted in Maltese, namely lessons B, J and P. The use of these technical phrases is similar to that of technical words, except that they are longer than a word.

The following are examples of non-technical phrase switching:

LESSON A

108 T: mel'ghandna l-mother's allowance
(therefore we have the mother's allowance)

LESSON O

200 T: fast colours means fejn il-biċċa drapp tkun tal-kulur
(fast colours means where the material is coloured etc)

208 T: īġifieri ara how handy this is
(this means look how handy this is)

254 T: aghmiha fuq il-karta where there is home
(write it on the paper where there is home etc)

In lesson A the teacher switches to Maltese to establish rapport and to show solidarity with the learners. In lessons P, M, N and O the teachers switch phrases from English to Maltese to elicit (e.g. lesson D, l. 351; lesson M, l. 241; lesson N, l. 399; lesson O, l. 29) and to explain English terms in Maltese (e.g.

Table 7.6: Distribution of phrase switching across lessons

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Technical phrase switching M→E</th>
<th>Non-technical phrase switching E→M</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>B</td>
<td>145</td>
<td>-</td>
<td>145</td>
</tr>
<tr>
<td>C</td>
<td>20</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>D</td>
<td>-</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>E</td>
<td>47</td>
<td>-</td>
<td>47</td>
</tr>
<tr>
<td>F</td>
<td>11</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>G</td>
<td>30</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td>H</td>
<td>19</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>J</td>
<td>61</td>
<td>-</td>
<td>61</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>L</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>-</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>N</td>
<td>-</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>O</td>
<td>-</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>P</td>
<td>63</td>
<td>-</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>388 (18.7%)</td>
<td>214 (10.3%)</td>
<td>602 (100%)</td>
</tr>
</tbody>
</table>

Table 7.6 shows the distribution of technical and non-technical phrase switching across lessons. Lessons mainly conducted in Maltese (B, C, E, F, G,
H, J, K and P) include technical phrase switching from Maltese to English. The mathematics lessons B and P have the highest quantities of technical phrase switching in the same way that they contain larger amounts of technical terms in English (Table 7.5).

Lessons mainly conducted in English, on the other hand, consist of non-technical phrase switching. The home-economics lessons A and O have the higher quantities probably because the two teachers accommodate to the learners' language more than the other teachers.

7.4.3 Interpersonal switching

This type of switching is related to the interpersonal function of language, i.e. the establishing and maintaining of social relations.

In conversation speakers make use of discourse particles such as tags to establish rapport with each other. Tags request confirmation of what is being said by the speaker, and act as a way of drawing the addressee into the conversation. They sometimes entail a change of turns (Wales 1989:453).

In bilingual conversation tag-switching is observed. By switching tags the bilingual speaker not only tries to establish and maintain contact with the addressee, but also tries to present a particular image of himself/herself. For example, in her paper on codeswitching in Singapore Tay (1989) distinguishes between the use of /la/, /ha/ and /a/ by speakers from non-Chinese groups, and the use of /lo/, /le/, /ma/ and /me/ by participants who speak or understand some dialect of Chinese. The use of particular particles conveys distinctive group identity and solidarity with a particular speech community.

Tags in Maltese are found within English units in the classroom data. Tag switching from English to Maltese shows partial accommodation on the part of the teacher to the learners whose first language is Maltese. By switching tags the teacher resolves the conflict between the need to use English to deliver the lesson and the need to use Maltese to relate to the learners (as explained in
chapter 5). In this lesson, the teacher also invites the learners' confirmation of and participation in what is going on in the classroom.

The following are examples of tag-switching:

LESSON A

58 T: there will be deductions hux veru
(there will be deductions won't there)

199 T: if you don't use a lot of heaters sewwa
(if you don't use a lot of heaters right)

Tag-switching occurs only from English to Maltese. We have not observed any English tags within Maltese units except for the tags 'o.k.' and 'orrajt'. These however can also be considered Maltese as they have been in use for a long time. For example:

LESSON M

332 T: u fejn sa jmur o.k.
(and where it is going o.k.)

Apart from tag-switching, another type of interpersonal switching is observed in Maltese bilingual classrooms: discourse marker switching.

Discourse markers are described as "sequentially dependent elements which bracket units of talk" (Schiffrin 1987:31). They are expressions used to organize conversational interaction.

Gysels (1992) noticed discourse marker switching in her French and urban Lubumbashi Swahili codeswitching data. For instance the French particle "bon" inserted in Swahili functions as a turn-taker, while the French particle "donc" is a floor holder. Similarly Merritt et al. (1992) found the codeswitching of discourse markers in English (e.g. the use of "O.K." and "alright"), Kiswahili (e.g. "Haya" meaning "O.K. then") or Dholuo (e.g. "Koro" meaning "now then").
These discourse marker switches were observed in Kenyan primary schools and Merritt et al. (1992) call them "interactional particles". Unfortunately no more information is provided about their functions in the discourse.

The most commonly used discourse markers in Maltese classrooms are 'issa' (now) and 'mela' (so). They are used by all the teachers. We find that 'issa' is used to introduce new information to the learners, whereas 'mela' is used when reiterating given information or when concluding a topic. Consider the following example from lesson O:

**LESSON O**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>T: now what you have over there (...)</td>
</tr>
<tr>
<td>24</td>
<td><em>issa</em> if you have old pieces of clothes right</td>
</tr>
<tr>
<td>25</td>
<td><em>mela</em> the dark one the black one</td>
</tr>
</tbody>
</table>

Up to l. 21 the teacher has been introducing the topic of the lesson, i.e. the importance of knowing how to read care labels and how to care for one's clothes. In l. 21 she introduces a change in the topic of conversation by asking the learners to look at their files and she starts describing the codes shown on the file. In l. 24 she changes the topic again and introduces an example from everyday experience. In both Is. 21 and 24 the new information is introduced using the marker 'now', once in English and once in Maltese. In l. 25 the teacher refers back to the codes already mentioned in l. 21 using the marker 'mela' (so) in Maltese.

The following is an example of the use of 'mela' from lesson P.

**LESSON P**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>287</td>
<td>Ls: (reply) <strong>two and a half years</strong></td>
</tr>
<tr>
<td>288</td>
<td>T: (accepts) <strong>two and a half years</strong></td>
</tr>
<tr>
<td>289</td>
<td><em>mela</em> l-answer huwa <strong>two and a half years</strong></td>
</tr>
</tbody>
</table>
| 290 | T: **mela da kien eżempju**  
(***so this was an example***)

294
In I. 288 the teacher uses 'mela' when accepting the answer given by the learners. Again in I. 289 the teacher uses 'mela' when concluding a specific topic of discussion.

We have seen in the example from lesson O that the teacher uses the discourse marker 'now' once in English and once in Maltese for the same function, i.e. the introduction of new information. The discourse marker in Maltese indicates that the teacher is accommodating to the learners' language while structuring the information.

Discourse marker switching can be described as a bilingual style adopted by these speakers as a way of coping with the tension of using English as a medium of instruction with a Maltese-speaking audience. Bell (1984:145) talks about audience design, which he describes as "essentially speakers' response to their audience". Speakers accommodate primarily to their addressee, but third persons - auditors and overhearers - affect style to a lesser but regular degree. It is significant that these bilingual speakers switch discourse markers and tags. In fact they usually carry on speaking largely in English except for interpersonal switching. This is a stylistic device used to interrelate with a Maltese speaking audience.

Figure 7.14 summarizes the two types of switches relating to the interpersonal function of language and the quantities found in the Maltese data.

Figure 7.14: Types of interpersonal switching

<table>
<thead>
<tr>
<th>Discourse Marker Switching</th>
<th>Maltese (165)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (6)</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Switching</td>
<td></td>
</tr>
<tr>
<td>Tag Switching</td>
<td>Maltese (46)</td>
</tr>
</tbody>
</table>

295
There are in all 46 examples of tags in Maltese within English units. Thirty-three of them occur in lesson A while the rest are spread out among five lessons (see Table 7.7). Similarly, out of 171 occurrences of discourse marker switching 97 of them are found in lesson A. These quantities indicate that this type of codeswitching may be more typical of some bilingual speakers than others.

It seems to me that this teacher represents a particular group of speakers who have a tendency to codeswitch tags. In my experience persons of about the same age as this teacher, living in urbanized parts of the North-West of Malta (e.g. Sliema, St. Julians) who come from the educated echelons of society and who have had all their education through English, have a tendency to codeswitch tags. I interpret this in terms of resolving the conflict between being a member of type D family, whose geographical, home and education background is English, but who continually need to relate to Maltese speaking audiences. By switching discourse markers and tags these speakers can continue to use English for long stretches without appearing too distant or snobbish to the rest of the population.
Table 7.7: Distribution of interpersonal switching

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Tag switching</th>
<th>Discourse marker switching</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>33</td>
<td>97</td>
<td>130</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>H</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>J</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>K</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>L</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>O</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>P</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>171</td>
<td>217</td>
</tr>
</tbody>
</table>

7.4.4 Translation switching

The following two metalinguistic categories of codeswitching (Figure 7.15) are based on their pedagogical function of explaining terms in the two languages. In each case a translation equivalent or an explanation is provided in the other language.
Figure 7.15: Translation switching

<table>
<thead>
<tr>
<th>English to Maltese</th>
<th>(34)</th>
</tr>
</thead>
</table>

Translation switching . . .

<table>
<thead>
<tr>
<th>Maltese to English</th>
<th>(1)</th>
</tr>
</thead>
</table>

(a) Translation of English terms to Maltese

The following are examples of English terms translated in Maltese:

LESSON G
476 T: puddle hija ghadira ilma eh
    (puddle is a (puddle) of water)

LESSON M
257 T: tistghu timmaġinaw sieve passatur
    (can you imagine sieve (sieve))

Translations of English terms into Maltese amount to 37 in total and are quite spread out across lessons. A higher number of occurrences was expected, considering that the written material is in English while the learners' primary language is Maltese. It is interesting that teachers provide translation equivalents of English terms in Maltese on only 37 occasions. This is very little when compared to a total of 1,216 single items in English identified within Maltese speech.

It is possible that those technical terms that are not translated had been translated on a previous occasion by the teacher, and so they are already familiar to the learners. In some other cases the meaning is clear because the
terms are shown in diagrams and other teaching materials. However, I think that such few instances of translation switches shows that these Maltese learners are very familiar with English terminology as a result of English medium (written) instruction throughout the education system.

(b) Translation of a Maltese term to English

The translation of a Maltese term into English only featured once, in the Maltese lesson, when a learner needed to distinguish between the homonyms nar and nhar and thus resorted to English fire:

LESSON K

103  L: nar fire
     (fire (fire))

Bilingual knowledge (rather than spelling for example), is used in this case to show understanding of two Maltese homonyms.

7.5 Inter-unit switching

Inter-unit switching refers to those instances where two units, one in Maltese and one in English are uttered one after the other. This is done either within a speaker's turn, or at different speaker turns i.e. at turn-taking (see Figure 7.16).

Intra-unit switching within a turn has one of two functions:
♦ to mark a change in topic or activity, or
♦ to provide a translation equivalent.

Similarly, inter-unit switching at point of turn-taking occurs either,
♦ to provide a translation equivalent, or
♦ to mark a change in topic or activity.
The switching at turn-taking points, both when it co-occurs with a change in topic as well as when speakers translate each other's words, is related to the fact that some speakers prefer to use one language over another for particular activities. Normally preference for Maltese relates to the presentation of personal experiences by the learners and explanations by the teacher. English is preferred when referring to written work. English is also a teacher variable related to age and teacher training, such that older teachers are more likely to use English as a spoken medium of instruction as a result of their own English-medium education. For instance the teacher of lesson A uses English throughout as a result of her own education and home language background, while her learners use Maltese all the time because it is their first language.

Figure 7.16: Types of inter-unit switches

<table>
<thead>
<tr>
<th>Inter-Unit Switching</th>
<th>topic/activity change switching within speaker turn . . . translation switching</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>topic/activity change switching other speaker turn . . . translation switching</td>
</tr>
</tbody>
</table>

The following are some examples from the lesson transcripts of each of the four types of inter-unit switching identified.

7.5.1 Topic/activity change switching (within speaker turn)

LESSON C

131 L: eighteen point three

min sa jnixel

(who is going to write it down)
In this example the learner gives the answer in English and then switches to Maltese to address her classmates during group work, asking them who is going to write the answers down for the group.

LESSON G
452  T: mhux it-tfal kollha jaharquh
     (not all children use it up)
     now page forty please

In this example from lesson G the teacher replies in I. 452 in Maltese to a learner's question, and then switches to English to address the whole class asking them to turn to their books on page forty. The use of Maltese when talking to the learners about everyday experiences is ascribed to the informality of the discussion and to the need of the learners to apply the written knowledge in English to their already existing knowledge in Maltese; the use of English in I. 452 signals a shift of focus from the informal discussion to the use of the written word in English.

These switches occur at a point of topic or activity change. In this way the transfer from one topic to another, or from one activity to another is highlighted by a change in the language. Some interesting examples of this occur for example in Lesson G, when the teacher starts talking in Maltese (I. 16-17), and switches into English as soon as she mentions her second point. Another interesting example occurs in Lesson J, when the teacher refers to two angles of a triangle in Maltese, and to the third angle in English (I. 305).

In the example from lesson A below, the switch marks a change from the act of accepting a learners' reply, and the act of eliciting. The use of Maltese to elicit may function as a sign of encouragement to reply in Maltese.

LESSON A
151  T: ninety every six months
     x'iktar

301
(what else)

LESSON E
188 T: from the caterpillar of the silk worm

l-ewwel ikollok il . silk moth
(first you have the silk moth)

189 T: which lays up to four hundred eggs in summer

fis-sajf dan jaghmel ibid erba' mitt bajda

In the example from lesson E the teacher reads her lesson notes in English (Is. 188, 189). In l. 188 she switches to Maltese when she starts to describe the process of silk production. By using Maltese the teacher probably aims at making the description more understandable to the learners. In l. 190 the teacher actually translates what she reads in English into Maltese.

7.5.2 Translation switching (within speaker turn)

Sometimes the same speaker repeats what he/she said in one language in the other language. In the examples below the teacher translates the information in English into Maltese probably to make sure that the learners understand the explanation.

LESSON M
209 T: the water is buoyant
210 it holds them up (...
211 l-ilma jkun jista' jżommhom

LESSON A
183 T: imma x'ghandkom

what (appliances) do you have
In the example from lesson A the translation is from Maltese to English. Although the teacher is eliciting information from the learners she repeats the question in English. In this way she tries to familiarize the learners with the English expressions required in written work.

7.5.3 Translation switching (other speaker turn)

In this case it is the interlocutor/s who provides a translation equivalent. Sometimes the teacher repeats what the learners say in one language in the other language, regardless of which language the learners use. The learners sometimes also provide a translation equivalent to the term used by the teacher. The following are some examples.

LESSON A

276 L: xi lira fix-xahar
277 T: one pound orrajt

310 T: one cylinder a month
311 L: wiehed fix-xahar

343 L: ir-rigali
344 T: presents

LESSON G

488 L: a hot day
489 T: ix-xemx

The fact that during lesson A the teacher chose to speak in English and the learners preferred to use Maltese resulted in inter-unit switching at turn-taking points between the teacher and the learners.
7.5.4 Topic/activity change switch (other speaker turn)

In lesson G there were certain moments in the lesson when the teacher spoke English, e.g. when she was explaining the written work at the end of the lesson (see example below). The learners spoke Maltese when they were discussing their everyday experience relevant to the topic. This also results in codeswitching where language preference depends on the kind of activity being carried out.

LESSON G
505 L: minghajr ma nqattghuha Miss
(without tearing it Miss)
506 T: of course

In the example from lesson F below, the teacher accepts a learner’s reply in English in l. 193 because Stefan is an English speaking boy, but then a Maltese speaking learner asks a question (l. 194) in Maltese.

LESSON F
193 T: it was a project yes Stefan
194 L: Sir imma dawk qatghuhom
(Sir but did they pick cut those up)

Table 7.8 shows the distribution of the different types of inter-unit switches across lessons. Altogether inter-unit switches amount to 372 which is little compared to the 2,070 of intra-unit switches. The reason for such a high amount of intra-unit switches lies in the fact that teachers use English terminology within Maltese units. The largest amount of inter-unit switching is accounted for by switching at change of topic or activity (Figure 7.17). In these cases, a language switch highlights a topic or activity change. This is more often done by the speaker himself in the course of a stretch of discourse (56.2%) but occasionally also happens at turn-taking points (24.7%). Inter-unit switching, like word translation (Figure 7.11) accounts for a very small
percentage of total switching in this corpus. This indicates that learners are familiar with the English terminology probably due to the use of English throughout the education system and teachers to not need to translate everything.

Table 7.8: Distribution of inter-unit switching across lessons

<table>
<thead>
<tr>
<th>Lesson</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>18</td>
<td>3</td>
<td>8</td>
<td>50</td>
<td>79</td>
</tr>
<tr>
<td>B</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>D</td>
<td>39</td>
<td>8</td>
<td>1</td>
<td>10</td>
<td>58</td>
</tr>
<tr>
<td>E</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>F</td>
<td>30</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>39</td>
</tr>
<tr>
<td>G</td>
<td>38</td>
<td>9</td>
<td>5</td>
<td>18</td>
<td>70</td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>J</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>K</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>L</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>12</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>O</td>
<td>25</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>P</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>209</td>
<td>49</td>
<td>22</td>
<td>92</td>
<td>372</td>
</tr>
</tbody>
</table>

**Key**

a: Topic/activity change switch (within speaker turn)
b: Translation switch (within speaker turn)
c: Translation switch (other speaker turn)
d: Topic/activity change switch (other speaker turn)

Sometimes teachers explain English terms in Maltese without giving the translation equivalent. This type of switching is not counted using OCP because when giving explanations teachers use more than a single speech unit. Our
taxonomy does not look at units larger than a "speech unit" because it is intended to look at the "type" of the codeswitched units rather than their functions in the discourse. The functions of codeswitching are discussed in the individual lesson analyses (chapter 5).

Figure 7.17: Percentages of inter-unit switching in the sample

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Topic/activity change switch (within speaker turn)</td>
<td>56.2%</td>
</tr>
<tr>
<td>B Translation switch (within speaker turn)</td>
<td>13.2%</td>
</tr>
<tr>
<td>C Translation switch (other speaker turn)</td>
<td>5.9%</td>
</tr>
<tr>
<td>D Topic/activity change switch (other speaker turn)</td>
<td>24.7%</td>
</tr>
</tbody>
</table>

A = Topic/activity change switch (within speaker turn)
B = Translation switch (within speaker turn)
C = Translation switch (other speaker turn)
D = Topic/activity change switch (other speaker turn)

7.6 Conclusions

The following conclusions are drawn from the quantitative analysis:

A. Maltese and English are used almost to the same extent as media of instruction.
   - The word count shows that 52% of the words are in English and 48% of words are in Maltese.
   - The analysis based on speech units shows that most classroom speech is either in Maltese (40.6%) or in English (38.0%) i.e. there are long stretches in either language.
   - Codeswitching amounts to 21.5% of speech units.
B. Intra-unit switching amounts to 21.5% of the total number of information units identified.
   - It consists of terminology switching: single lexical items (58.8%) and phrases (18.7%). The use of English terminology in the Maltese classroom is mainly due to the use of English as a written medium of instruction.
   - Interpersonal switching amounts to 10.5% of codeswitching units and is largely found in lesson A. This type of switching has been explained in terms of the need of English speaking teachers to relate to Maltese speaking learners.
   - Translation switching amounts to only 1.6% of codeswitching units. This means that although teachers use a large amount of English terms and phrases they rarely need to translate or explain them to the learners - possibly because the learners' English is good enough, or because they have been explained in Maltese some time in the past at an earlier stage in the education system.
   - When Maltese is used as a spoken medium, many English terms are used. When English is used by the teacher as a spoken medium, very little recourse is made to Maltese.

C. Inter-unit switching has been observed on 372 occasions. It occurs either within a speaker turn or at turn-taking points.
   - The most common type of inter-unit switching is when it co-occurs with a change in topic or activity within the same speaker turn (56.2%), or at turn-taking (24.7%).
   - Other inter-unit switches occur when the speaker provides a translation equivalent (13.2%) or when the interlocutor provides a translation equivalent (5.9%).
   - This type of codeswitching is closely related to the language preference of the speaker. For instance in lesson A the teacher speaks in English as a result of her own education and home language background, and the learners speak in Maltese because it is their first language. This results in inter-unit codeswitching at turn-taking points.
• Other codeswitching depends on the language preference of the speaker in relation to the topic or activity at hand. For instance in lesson G the teacher prefers to use English when introducing a topic from the book, or giving out homework based on the book although the lesson is mainly conducted in Maltese.

D. Language use corresponds to subject and topic, school and teacher variables. The quantitative results have shown that:

• Teachers over thirty-five years use more English than teachers under 35. This is due to their own English education and teacher training available during the colonial period. Teachers under thirty-five years prefer Maltese. The use of Maltese has increased as a result of Malta's independence concomitantly with the establishment of a Maltese identity and nationhood.

• English is used more in the private school compared to state schools. This reflects the general policy of private schools to use English as a medium of instruction: a number of English speaking Maltese students and foreigners attend private schools.

• English and intra-unit switching is higher in mathematics lessons when compared to the other content lessons. This is due to the use of technical words and phrases in English within stretches of Maltese speech. This is necessitated by the English textbooks, and it is also a reflection of the use of English numerical expressions by Maltese society.

E. Teachers D and O who come from type C family where both Maltese and English are spoken in the home, seem to use Maltese and English more equally than the other teachers (Figure 7.3). This however does not mean that they codeswitch more than the other teachers (Figure 7.10).

In lessons D and O there is a relatively high number of topic/activity change switches compared to the other lessons (Table 7.8). Some terminology
switching, phrase switching and interpersonal switching also occurred in these lessons but not to a greater degree than in other lessons (Tables 7.5, 7.6, 7.7).

Table 7.3 shows that there are more Maltese units than English units in lesson D, and more English units in lesson O. The greater use of Maltese units in lesson D is a result of more learner participation in the latter part of the lesson which consisted of group work and the reporting back of the group work by the learners to the rest of the class. These learner activities are carried out in Maltese.

The taxonomy of codeswitching provides an explicit classification of codeswitching types. The quantitative analysis of language use in the classroom clearly shows that both Maltese and English play an important role as media of instruction. These quantitative findings support the qualitative analysis in chapter 5.
CHAPTER 8: SPEECH ACTS AND LANGUAGE CHOICE

8.0 Introduction

This chapter focuses on the speech acts performed by teachers and learners. It has been used by Milk (1981) and Taha (1989) to analyse bilingual classroom discourse. Our aim is to correlate the language used (i.e. Maltese, English or Mixed), with type of speech act (e.g. elicitation, reply, directive etc).

The Sinclair and Coulthard (1975) scheme of classroom discourse was applied to three small samples (Appendix 6). In the course of the analysis many problems were encountered:
(i) problems arising from the system itself;
(ii) problems relating to the way it was applied to our purposes.
For these reasons the results should only be seen as subsidiary to the major analyses in previous chapters.

8.1 An overview of the Sinclair and Coulthard (1975) System

In this section we describe and evaluate the Sinclair and Coulthard (1975) system of analysis.

8.1.1 Description

Sinclair and Coulthard's (1975) scheme of classroom interaction provides a systematic analysis of classroom discourse. Their smallest unit of analysis is the speech act, i.e. an "illocutionary act" or "the making of a statement, offer, promise etc. in uttering a sentence, by virtue of the conventional force associated with it, or with its explicit performative paraphrase" (Levinson 1983:236). Sinclair and Coulthard (1975) identify twenty-two speech acts in the traditional teacher-centred classroom situation.
In teacher-centred classrooms the teacher stands at the front talking to the learners as a group:

![Diagram](image)

The teacher continually decides what the next step in the lesson should be: when the learner is to talk (after an elicitation); and what he/she is to say (e.g. provide a specific reply). Teachers sometimes elicit by providing the first part of the clause and let the learners finish it by providing the last missing word (e.g. acts 14 and 15 in Figure 8.2 below). Learners' individual contributions to the lesson are very limited and very brief. For example, learners are not allowed to initiate topics or talk for extended periods and there is no learner-learner interaction. Furthermore, learners often have to bid before the exchange of information is carried out.

Teacher dominated interaction follows the pattern T-L-T, T-L-T, T-L-T, where the teacher typically elicits, the learner's answer, and the teacher follows-up and then elicits again so that the teacher has twice as many chances to talk as the learners (as a group). Individual learners have less opportunity for participation.

In group work the interaction is between the learners. Sometimes the teacher talks either to the group as a whole or to individual learners:
In pair work the interaction is between the two learners:

\[
\text{learner} \leftrightarrow \text{learner}
\]

The interaction in pair work (and group work) is more similar to normal conversation because the distribution of talk across two participants (A and B) follows the structure A-B-A-B-A-B etc. (see Levinson 1983:304). It is not our purpose here to evaluate the teaching methodology. However we suggest that research on the teaching methodology and its relation to the use of language be carried out in the future.

Sinclair and Coulthard's (1975) system of analysis, based on teacher-dominated classroom interaction, consists of a hierarchy of five ranks (Figure 8.1). The largest unit refers to the particular language situation being investigated: the lesson itself. In Maltese secondary schools, the lesson is defined in terms of time (e.g. 30 minutes), and the beginning and end of each lesson is signalled by a bell. Sometimes the lesson starts formally with a prayer.

A lesson is made up of a series of transactions, the ordering of which "varies for each teacher" (p. 60). Three major transaction types are identified: informing, directing and eliciting depending on the type of exchange/s within the transaction. However, Sinclair and Coulthard (1975:56) admit that "we do not ... feel sufficiently confident in an identification of these structures to make the labelling of these transaction types a major element of coding".
Figure 8.1: Rank scale of classroom discourse (after Sinclair and Coulthard 1975)

- move . . . frame . . . . . . . . . act marker
- boundary exchange . move . . . focus . . . . . . . act info
- transaction
- LESSON . . . . teaching exchange . move . . . opening . . . . . . . act elicit
- move . . . answering . . . . . . . act reply
- move . . follow-up . . . . . . . act accept
- transaction exchange . . . . . . . move . . . etc.
- transaction exchange . . . . . . . etc.
At the rank below transactions are exchanges. There are two major classes of exchange: boundary and teaching. The boundary exchange signals the beginning or end of what the teacher considers to be a stage in the lesson. Teaching exchanges are the individual steps by which the lesson progresses. The most prototypical structure of a teaching exchange is as follows (bracketing indicates optionality):

**INITIATION** - *(RESPONSE)* - *(FEEDBACK)*  
I - R - F

following the moves:

**OPENING** - *(ANSWERING)* - *(FOLLOW-UP)*

**Moves** are made up of acts, and moves themselves occupy places in the structure of exchanges. There are five classes of moves and they realize two classes of exchange: framing and focusing moves realize boundary exchanges; opening, answering and follow-up moves realize teaching exchanges. Framing moves are indications by the teacher that one stage in the lesson has ended and that another is beginning.

Framing moves are frequently followed by focusing moves, the function of which is to talk about the discourse, to tell the learners what is going to happen or what has happened.

Twenty-two speech acts make up the structure of moves (Sinclair and Coulthard 1975:40-44). For example, 'elicit' is typically an opening move, while 'reply' is typically an answering move. Each speech act is equivalent to a clause in the Sinclair and Coulthard system. Figure 8.2 represents the application of this system to a mathematics lesson sample.
Figure 8.2: Application of Sinclair and Coulthard (1975) to a sample from lesson N (Is. 2-16)

<table>
<thead>
<tr>
<th>Lesson N (mathematics)</th>
<th>Exchange type</th>
<th>Move</th>
<th>Act</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>T everybody look here</td>
<td>boundary</td>
<td>frame</td>
<td>dir</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>frame</td>
<td>marker</td>
<td>2</td>
</tr>
<tr>
<td>today we're going to</td>
<td></td>
<td>focus</td>
<td>metast</td>
<td>3</td>
</tr>
<tr>
<td>talk about the circles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(writes on B/B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>what's that</td>
<td>teaching</td>
<td>Opening</td>
<td>elicit</td>
<td>4</td>
</tr>
<tr>
<td>Ls circle</td>
<td></td>
<td>Answering</td>
<td>reply</td>
<td>5</td>
</tr>
<tr>
<td>T circle</td>
<td></td>
<td>Follow-up</td>
<td>accept</td>
<td>6</td>
</tr>
<tr>
<td>what do we call this</td>
<td></td>
<td>Opening</td>
<td>elicit</td>
<td>7</td>
</tr>
<tr>
<td>round edge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ls circumference</td>
<td></td>
<td>Answering</td>
<td>reply</td>
<td>8</td>
</tr>
<tr>
<td>T what do we call it</td>
<td></td>
<td>re-Opening</td>
<td>elicit</td>
<td>9</td>
</tr>
<tr>
<td>(follow-up)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ls circumference</td>
<td></td>
<td>Answering</td>
<td>reply</td>
<td>10</td>
</tr>
<tr>
<td>T circumference</td>
<td></td>
<td>Follow-up</td>
<td>accept</td>
<td>11</td>
</tr>
<tr>
<td>now</td>
<td>boundary</td>
<td>frame</td>
<td>marker</td>
<td>12</td>
</tr>
<tr>
<td>here in the middle</td>
<td></td>
<td>focus</td>
<td>starter</td>
<td>13</td>
</tr>
<tr>
<td>there is a point</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>which we call the</td>
<td>teaching</td>
<td>Opening</td>
<td>elicit</td>
<td>14</td>
</tr>
<tr>
<td>Ls centre</td>
<td></td>
<td>Answering</td>
<td>reply</td>
<td>15</td>
</tr>
<tr>
<td>T what do we call it</td>
<td></td>
<td>re-Opening</td>
<td>elicit</td>
<td>16</td>
</tr>
<tr>
<td>(follow-up)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ls centre</td>
<td></td>
<td>Answering</td>
<td>reply</td>
<td>17</td>
</tr>
<tr>
<td>T the centre of the circle</td>
<td></td>
<td>Follow-up</td>
<td>accept</td>
<td>18</td>
</tr>
</tbody>
</table>

In the coded sample from lesson N there are four exchanges: two boundary exchanges followed by two teaching exchanges. Each boundary exchange consists of a frame (made up of a directive or marker) and a focusing move (consisting of a metastatement or starter). The teaching exchanges consist of opening (eliciting), answering (replying) and follow-up (accept) moves.
The follow-up move (Figure 8.2) on two occasions consists of another exchange of the type Opening-Answering-Follow-up, in acts 9 to 11 and 16 to 18. The function of these exchanges is to reinforce the previous answering moves (in 8 and 15). Each of these sub-moves is in fact related to the whole exchanges in 4 to 8 and 14 to 15.

The analysis of the three lesson samples in Appendix 6 is limited to the coding of speech acts as shown in Table 8.1. The codes (T) and (L) indicate whether a particular speech act is performed by the teacher (T) or by a learner (L) or by either (T,L). The abbreviations highlighted in brackets refer to those used in the coding (Appendix 6). The second level of analysis is related to the choice of language as in Table 8.2.

Table 8.1: The speech acts

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Marker (mark)</td>
<td>Realized by a limited class of items: 'issa' (now), 'mela' (so), 'ok', 'now'. Its function is to mark boundaries in the discourse.</td>
</tr>
<tr>
<td>2. Directive (dir)</td>
<td>Realized by an imperative. Its function is to request non-linguistic response, such as closing the door, opening a window, finding a particular page on the book and other instructions relating to learner behaviour.</td>
</tr>
<tr>
<td>3. Informative (inf)</td>
<td>Realized by statement. Its function is to provide information.</td>
</tr>
<tr>
<td>4. Elicitation (elic)</td>
<td>Realized by a question, or first part of a statement but with the intonation of a question. It is always asked by the teacher and is not a genuine request for information; its function is to involve the learners in classroom interaction by getting them to produce the knowledge they already have.</td>
</tr>
<tr>
<td>5. Prompt (prompt)</td>
<td>Realized by items such as: 'issa' (come on), 'a nara' (let me see), 'iktar' (more), 'g aliex' (why), 'come on'. Its function is to reinforce an elicitation or directive.</td>
</tr>
<tr>
<td>6. Clue (clue)</td>
<td>Realized by statement or question. Its function is to provide additional information which helps the pupil to answer an elicitation or to do something.</td>
</tr>
<tr>
<td>7. Cue (cue)</td>
<td>Realized by a limited class of items such as: 'g ollu jdejkom' (put up your hands), 'fingers up', 'hands up'. Its function is to evoke a bid or reply.</td>
</tr>
</tbody>
</table>
8. **Reply** *(reply)*
Usually realized by a statement. Its function is to provide a linguistic response which is appropriate to the elicitation.

9. **Accept** *(accept)*
Realized by 'yes', 'ok' or, very commonly, by the repetition of the reply. Its function is to indicate that the teacher has heard the reply and considers it correct.

10. **Reject** *(reject)*
Realized by a negative or a statement indicating that the reply is not acceptable. Its function is to notify the pupil, after a reply, that it was wrong.

11. **Question** *(ques)*
Realized by a question form. It is a genuine request for information. It is used by learners to signal to the teacher that they need clarification or by the teacher to find out things about learners. (This is different from elicitation - see act no. 3).

12. **Check** *(check)*
Realized by items such as: 'sewwa' (is that right?), 'orrajt'. Its function is to enable the teacher to find out whether the learners are following the explanation, and whether there are any problems preventing the successful progress of the lesson.

13. **Bid** *(nom)*
Realized by a closed class particularly 'Miss' or 'Sir'. Its function is to signal a desire by the learners to contribute to the discourse.

14. **Nomination** *(nom)*
Realized by names of pupils or other references such as 'inti' (you) or 'hemm wara' (there at the back). Its function is to signal to a particular learner or group of learners that they are expected to provide a reply.

15. **Meta-statement** *(mtst)*
Realized by a statement which refers to some future time when what is described will occur, or to the past when something has occurred. Its function is to help the pupils to see the structure of the lesson, the purpose of an exchange, the importance of a point.

16. **Conclusion** *(conc)*
Realized by a statement. Its function is to summarize the preceding discourse.

17. **Loop** *(loop)*
Realized by items such as 'pardon' or 'x'g idt' (what did you say?). Its function is to return the discourse to the stage where it was at before the interlocutor spoke.

18. **Aside** *(aside)*
Realized by statements. Its function is to signal a change in topic for a very short time.

19. **Meta-language** *(mtlg)*
Realized by statements and sometimes involves translation of terms from one language to another. Its function is to make learners aware of the use of language at particular points in the lesson.
20. Reading (read)
Realized by the reading from a book, sheet etc. (T,L)

21. Prayer (pray)
Realized by prayer forms very often formulaic ones. Its function is to ask for God's help in the lesson that is just starting and to formally signal the beginning of the lesson (T,L).

Acts 1 to 18 are taken from Sinclair and Coulthard (1975:42-44). Some acts originally used in Sinclair and Coulthard (1975) are here collapsed into one: starter is considered as an elicitation; comment is considered as an informative; acknowledge and evaluate are both coded as accept. Two acts, react and silent stress are left out because non-verbal reactions are accompanied by verbal acts in our coded sample.

Acts 19 to 21 are introduced here because they occur in my data but are not found in the Sinclair and Coulthard (1975) system.

Table 8.2: Language choice

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>m</td>
<td>when a speech act is totally in Maltese</td>
</tr>
<tr>
<td>e</td>
<td>when a speech act is totally in English</td>
</tr>
<tr>
<td>mix</td>
<td>when a speech act is in mixed Maltese and English</td>
</tr>
<tr>
<td>n</td>
<td>when a speech act consists of a name only</td>
</tr>
</tbody>
</table>

By coding on these two levels it is hoped that:

(i) each speech act can be characterized in terms of its function in discourse;
(ii) language choice (Maltese, English or Mixed) at level 2 can be correlated with speech function at level 1.

As we have already mentioned, while we were trying to apply this system to a small sample from three lessons we realized that there were some serious problems with this method of analysis. In what follows we shall first evaluate
it and in section 8.2 we will give the results we obtained from the small sample as supplementary information to the results in chapters 5 and 7.

8.1.2 Evaluation

Two major problems are found in the Sinclair and Coulthard (1975) system:
(i) the identification of speech acts, and
(ii) the lack of consideration given to the context.

The identification of speech acts
Levinson (1983:289-293) lists four theoretical problems inherent in speech act theory. Below we list each assumption that the theory makes and exemplify the problems we encountered.

(a) There are unit acts - speech acts or moves that are performed in speaking, which belong to a specifiable, delimited set.

Identifying and coding each speech act is difficult. The function of a particular speech act in a particular place in the discourse is not always clear. Sometimes the coder has to decide on the basis of the participants' reactions to it. For example in lesson G, acts 29 and 94 (Appendix 6) seem to be providing a conclusion or summary to the discourse. However it is too early in the interaction to call them conclusions. They point forward towards what was still being discussed rather than backward. So they have been coded as informatives.

Thus, speech units cannot be always easily categorized and identified on the basis of pre-specified criteria.

(b) Utterances are segmentable into unit parts - utterance units - each of which corresponds to (at least one unit act).
But single sentences can be used to perform more than one speech act. Further, there are many sub-sentential units that occur as utterances and perform appropriate responses to utterances.

For instance, act 206 in lesson G 'ehe' is a non-linguistic vocalisation which performs an act, that of indicating to the speaker that the hearer is following the argument.

When speech acts have more than one function in our sample, both functions are coded. In calculating the total only the first function is counted. For instance in lesson H (Appendix 6), act 19 is a prompt and a metastatement: it is followed by several reply and accept in acts 21 to 30. In lesson G (Appendix 6), acts 78, 80 and 82 the teacher repeats the reply of the learner with the intonation of a surprise which indicates to the learners that it is not quite what she wanted to hear, and that she wants to hear something different. Learners provide more replies in acts 79, 81 and 83.

Sometimes there is a problem in the identification of boundaries between speech acts. For example in lesson G, acts 3 to 5 and 15 to 19 are coded separately because different directives are given by the teacher. The informative acts 114 to 119 (lesson G) have also been coded separately because the topic of the information changed.

Sinclair and Coulthard (1975) developed their system on the basis of primary school lesson transcripts where teachers do not speak at length. In their case almost all speech acts are equivalent to a clause. At secondary level teachers sometimes talk for long periods of time. This makes the coding of these long acts (usually informatives) problematic because the coder does not have formal criteria to judge whether a long act should be coded as one, e.g. as one informative, or sub-divide it into clauses and count each clause as an informative act.

For example, act 166 was difficult to code. The teacher gives one main piece of information in the form of a narration about the collection of water in her
childhood. Several clauses and "mini" units of information could be identified within this one informative. But we found their identification problematic and so coded it as one informative. We suggest that there may be two levels of "informative speech acts" in teacher talk: "macro" informatives as in act 166, and "micro" informatives relating to each clause.

We argue that it is often very difficult or impossible to identify unit boundaries, i.e. to segment utterances into speech acts without a great deal of interpretation.

(c) There is a specifiable function, and hopefully a procedure, that will map utterance units into speech acts and vice-versa.

We have given examples above about the difficulty of specifying single functions to utterance units. The units in question seem to be functionally defined by the actions they can be seen to perform in context and therefore a pre-designed procedure for mapping utterance units into speech acts and vice versa may be misleading or inappropriate if it is not context-sensitive.

(d) Conversational sequences are primarily regulated by a set of sequencing rules stated over speech act (or move) types.

The sequencing of speech acts is represented in Figure 8.3. Bracketing indicates optionality because most of the acts do not occur in particular positions and are not strictly related to other acts in my data.
Figure 8.3: Sequencing of acts in teacher-centred classroom discourse (following Sinclair and Coulthard 1975)

<table>
<thead>
<tr>
<th>OPENING</th>
<th>ANSWERING</th>
<th>FOLLOW-UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(inform)</td>
<td>(reply)</td>
<td>(accept)</td>
</tr>
<tr>
<td>(elicit)</td>
<td>(question)</td>
<td>(reject)</td>
</tr>
<tr>
<td>(clue)</td>
<td>(bid)</td>
<td>(inform)</td>
</tr>
<tr>
<td>(cue)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(nominate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct</td>
<td>non-linguistic</td>
<td></td>
</tr>
</tbody>
</table>

This model, however, does not cater for the existence of "ill-formed sequences". We do not think that it is correct to code a unit as a particular type of act, e.g. a reply simply because it follows a specific speech act, e.g. an "elicitation". In fact, in lesson H for example, act 1 is an elicitation followed by a question (Appendix 6, act 2), and not by a reply as would be expected on the basis of the sequences I - R - F. In section 8.2 below we show that the sequencing of acts I - R - F does not necessarily apply to all classroom interaction.

The context
Both sequential context and extra-linguistic context can play a crucial role in the assignment of utterance function (Levinson 1983:291). In this coding scheme no attention is given to the linguistic and non-linguistic context of utterances. For example, we do not know whether the use of a particular language is related to other factors, e.g. whether markers in Maltese are used within Maltese or English texts. Is the use of a particular language for a particular act related to its linguistic context at all? Is there any correlation between the choice of a particular language at a particular stage in the lesson and the non-linguistic context such as the use of textbooks? Since these factors are not accounted for by this system, a more ethnographic approach is required, which takes into account the sequentiality of language choice and codeswitching (see chapter 5).
In the following section I describe the procedure of data analysis using an adapted version of the Sinclair and Coulthard (1975) discourse scheme. Initially we wanted to see if it would give us any insight about or data. However, only three lesson samples are analysed due to the problems encountered as described above.

8.2 Results

This section describes the results obtained from the application of the modified version of the Sinclair and Coulthard (1975) coding scheme to the three lesson samples in Appendix 6.

Lesson G

In this lesson (integrated science, boys, form 1), elicitations occur mainly in Maltese (Table 8.3). There is a higher number of reply, accept, reject, question and check in Maltese than in English. This indicates that acts relating to the direct involvement of the interlocutor, acts requiring a verbal response, or that constitute such a response in the case of accept, are carried out in Maltese.

In the previous chapters we have seen that the use of Maltese for elicitations and questions by the teacher encourage learner participation. Learners were actively involved in this lesson and they performed 19 informative acts, 14 of which are in Maltese and 5 in mixed language. As in the case of lessons at Khartoum University researched by Taha (1989) the language of instruction used (e.g. Arabic and English in Sudan; Maltese and English in Malta) is a primary factor facilitating or inhibiting participation by the students.

Nominations are sometimes carried out in Maltese. This teacher has not yet learned all the learners' names, even though six months have passed from the beginning of the school year. She uses circumlocutions in Maltese such as 'hemm wara' (you at the back) as an informal way of nominating.
Table 8.3: Speech acts in lesson G - Integrated science (Appendix 6)

<table>
<thead>
<tr>
<th>Act</th>
<th>Maltese</th>
<th>English</th>
<th>Mixed</th>
<th>Names</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>marker</td>
<td>9</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>directive</td>
<td>15</td>
<td>11</td>
<td>7</td>
<td>-</td>
<td>33</td>
</tr>
<tr>
<td>informative (T)</td>
<td>11</td>
<td>4</td>
<td>23</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>informative (L)</td>
<td>14</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>elicitation</td>
<td>22</td>
<td>7</td>
<td>7</td>
<td>-</td>
<td>36</td>
</tr>
<tr>
<td>prompt</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>clue</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>cue</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>reply</td>
<td>31</td>
<td>23</td>
<td>8</td>
<td>-</td>
<td>62</td>
</tr>
<tr>
<td>accept</td>
<td>21</td>
<td>11</td>
<td>9</td>
<td>-</td>
<td>41</td>
</tr>
<tr>
<td>reject</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>question (T)</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>question (L)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>check</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>metalg</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>metast</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>read</td>
<td>-</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>bid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>nominate</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>loop</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>conclusion</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>aside</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>151</td>
<td>93</td>
<td>76</td>
<td>26</td>
<td>346</td>
</tr>
</tbody>
</table>

Informatives by the teacher in English are few (4) but quite a number (23 by the teacher and 6 by the learners) are in mixed language. Mixed language
informatives consist of Maltese clauses with English terms as in acts 12, 30, 93 and 114. Details about this are given in chapter 7.

Unlike the bilingual civics class researched by Milk (1981) in California where English predominated over Spanish in directives (92%) and metastatements (63%), in this lesson there are almost equal proportions of markers and directives in Maltese and in English. Milk (1981) interpretes his results as a signal that English is the language of power. In this case Maltese and English are used equally by the bilingual teacher to organize and manage the class and her own discourse. Therefore, applying the same interpretation as Milk, we conclude that neither language symbolizes power in this classroom. Maltese and English are used equally to mark the flow of information in discourse and to direct others' behaviour.

English is used in some replies, elicitations and accepts because the textbook is in English. It is considered to be the primary source of knowledge and hence the acquisition of knowledge is demonstrated by the use of English in these acts.

Similarly, clues and conclusions are performed in English: they refer to the written work; and they are aids to help the learners produce satisfactory classwork and homework in English. For example in act 317 the teacher gives a clue to the learners about suggestions for the use of appliances to carry out the experiment at home. In acts 326, 328, 331 and 333 she gives further clues. These come at the last stage of the lesson after the class had read the chapter (in acts 258 and 260) and the written work had been assigned. The lesson has now moved to a more formal stage. The use of English creates a link between the assignment of homework in English and the work that the learners have to write in English.

**Lesson H**
In lesson H (economics, girls, form 4) 43% of speech acts are in Maltese, 27% are in English and 30 % are in mixed language (Table 8.4).
Markers, prompts, checks, metastatements and nominations are exclusively in Maltese. In these instances the teacher uses Maltese in order to involve the learners in the interaction and to check their understanding. The learners also ask questions in Maltese on two occasions. Maltese is probably used because through it the learners can assimilate the information better.

Table 8.4: Speech acts in lesson H - Economics (Appendix 6)

<table>
<thead>
<tr>
<th>Act</th>
<th>Maltese</th>
<th>English</th>
<th>Mixed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>marker</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>informative (T)</td>
<td>1</td>
<td>-</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>elicitation</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>prompt</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>clue</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>cue</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>reply</td>
<td>5</td>
<td>8</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>accept</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>question (L)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>check</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>metalg</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>metast</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>nominate</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26(43%)</td>
<td>16(27%)</td>
<td>18(30%)</td>
<td>60</td>
</tr>
</tbody>
</table>

However, there are higher occurrences of accept and reply in English. Replies consist of textbook examples that have either been encountered in written form in English or that will have to be written down at some stage. The teacher accepts the learners' replies very often by repeating them (see acts 21 to 30).

English is associated with formality and achievement. This is made manifest in providing the correct replies in English (e.g. acts 21-30).
Informatives and elicitations are performed in mixed language. This is due to the use of English terminology related to the subject of the lesson (e.g. act 55). Metalanguage refers to those instances where Maltese equivalents of English terms are given, or to explain certain concepts. This happens mostly when a new term in English is introduced for the first time, or when the learners themselves request some clarification (e.g. acts 16, 17, 36 and 37).

The structure Opening-Answering-Follow-up does not apply to this lesson sample. In act 1 the elicitation or opening move by the teacher, is followed by a question by the learner and then by several turns by the teacher (elicitation, marker, metastatement, informatives, metalanguage, check etc.). She then moves on to elicit from the learners in act 19 and there are various turns of reply and accept alternating. Elicitations (opening moves) are followed by acts such as a marker in act 4; cue, clue and check in acts 12, 13 and 14 following the opening move in act 11. In act 53 the teacher puts herself in the position of the learners and asks a question that she thinks they might be wanting to ask, and then provides a reply in act 54. This lesson sample shows that pre-established structures of classroom discourse as outlined in section 8.1.1 can be inappropriate for the analysis of some classroom discourse.

Lesson F
This sample is taken from the beginning of lesson F (social studies, boys, form 1) which takes place in the library. The learners came in for this lesson from another lesson and so they take some time to find their places. For the first few minutes the teacher gives several directives until the learners settle down completely.

Almost all the acts are in Maltese (Table 8.5). This is to be expected as in social studies the examinations, the textbooks and the written work are done in Maltese.

English is used twice to give cues. It is normal in Maltese classrooms to use phrases like 'hands up' and 'be quiet'. This teacher (and the teacher of Maltese), repeats each cue or directive in Maltese (see acts 2 and 3). English
is used automatically because it is widely used throughout the education system, but teachers F and K still translate the English directives into Maltese.

Table 8.5: Speech acts in lesson F - Social Studies (Appendix 6)

<table>
<thead>
<tr>
<th>Act</th>
<th>Maltese</th>
<th>English</th>
<th>Mixed</th>
<th>Names</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>marker</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>directive</td>
<td>14</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>informative (T)</td>
<td>12</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>elicitation</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>prompt</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>clue</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>cue</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>reply</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>accept</td>
<td>5</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>reject</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>question (T)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>check</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>metast</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>pray</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>bid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>65 (85%)</td>
<td>6 (8%)</td>
<td>3 (4%)</td>
<td>2 (3%)</td>
<td>76</td>
</tr>
</tbody>
</table>

The reply in English in act 64 is given by a learner whose first language is English. The teacher follows it up in English in act 67. When a learner in class does not understand Maltese the teacher normally switches to English. This particular learner has learnt some Maltese and so the teacher did not need to translate everything. However, for him it was more natural to answer in English.

Unlike lesson H, lesson F (e.g. acts 50 to 76) exemplifies the structure of teacher-centred classroom discourse:
8.3 Conclusion

From the application of an adapted version of the Sinclair and Coulthard (1975) system to three lesson samples, we have learnt the following facts about the bilingual teaching methodology (see Table 8.6):

Maltese classrooms are teacher-centred, containing a high proportion of teacher talk. The teacher is continuously responsible for directing learners' participation and content of lessons.

Learners participate in the lesson by responding to the teachers' elicitations. The most common interaction pattern is T-L-T where the teacher elicits, the learners respond, and the teacher evaluates.
Table 8.6:  Speech acts in lessons G, H and F

<table>
<thead>
<tr>
<th>Act</th>
<th>Maltese</th>
<th>English</th>
<th>Mixed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>marker</td>
<td>14</td>
<td>11</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>directive</td>
<td>29</td>
<td>13</td>
<td>7</td>
<td>49</td>
</tr>
<tr>
<td>informative (T)</td>
<td>24</td>
<td>4</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>informative (L)</td>
<td>14</td>
<td>-</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>elicitation</td>
<td>35</td>
<td>7</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>prompt</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>clue</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>cue</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>reply (L)</td>
<td>45</td>
<td>32</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>accept</td>
<td>28</td>
<td>18</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>reject</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>question (T)</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>question (L)</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>check</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>metalg</td>
<td>-</td>
<td>1</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>metast</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>read</td>
<td>-</td>
<td>8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>pray</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>bid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>nominate</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>loop</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>conclusion</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>aside</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>241 (50%)</td>
<td>115 (24%)</td>
<td>97 (20%)</td>
<td>29 (6%)</td>
</tr>
</tbody>
</table>

The interactional structures tell us something about the way the subject-matter is recycled during the lesson. In the three samples (Table 8.6), there is an almost equal amount of elicitations (53) and replies (86) as there are informatives (62 by the teacher and 20 by the learners). The lesson content is
not simply delivered by the teacher but is also elicited from the learners. Furthermore, the information is given by the learners not only in the form of replies, but also in the form of informative acts.

Learners' informatives are in Maltese because this is when they talk about their everyday experience. Genuine questions are asked by teachers in Maltese. That is, when teachers seek out answers to questions for which they do not already have an answer and which are not related to the subject matter, they address the learners in the first language.

Learners' replies are mainly in Maltese (45) but also in English (32). We have looked at lesson A, which is mainly conducted in English, and found that 48 of all the learners' replies are in Maltese, 54 in English and 15 in mixed language. In lesson B which is mainly conducted in Maltese, learners' replies are mainly in English (49) due to the use of mathematical and numerical expressions in English. (14 are in Maltese and 16 are in Mixed up to l. 351). This shows that the language used in replies is not necessarily related to the medium preferred by the teacher but possibly to other factors such as the use of textbooks and discussions about life outside the classroom.

In this sample reading is exclusively carried out in English. English speech acts amount to 24% and mainly consist of replies and accepts due to the importance of the written text in English. The use of English in conclusions and clues is also related to the use of English in written work. Almost half of the directives and some cues are in English because they consist of established classroom terms like "hands up" which are widely used in English throughout the Maltese education system.

Mixed language is used in elicitations, informatives and accepts where English technical terms are embedded in Maltese utterances.

Although some useful information has been gained about the use of Maltese and English in classroom interaction from the scheme, several problems were
encountered at the coding stage. The two major problems are: the identification of speech acts and the lack of consideration given to the context.

Some speech acts are performed by very long utterances and are difficult to code and/or describe as a single act. Furthermore I noticed that the category "Mixed language" is too general to describe the use of Maltese and English. (For this reason in chapter 7 we identify a taxonomy of codeswitching and use a minimal speech unit as a basic unit of analysis).

The Sinclair and Coulthard (1975) system does not account for sequentiality of language alternation and for linguistic and non-linguistic contextual information that influence language choice. This has, however, been dealt with in chapter 5. Therefore the information obtained from this analysis should be seen as further confirmation of the major analysis in chapters 5 and 7.
PART C
CONCLUSION
CHAPTER 9: DISCUSSION

9.0 Introduction

This chapter summarizes the findings of the empirical study. It discusses their implications for language education in Malta and makes some recommendations for the improvement of bilingual education.

9.1 Summary of the findings

Bilingualism within Maltese society
Maltese and English are used in most domains of social life. Maltese is used exclusively for spoken and written purposes in parliament and in the law courts where the written version in Maltese is considered binding. In all other spheres of life the two languages are used interchangeably. Bilingualism in Malta exists on both the individual and the societal level (bilingualism without diglossia). This has resulted in crosslinguistic influence, observed mainly on the spoken level.

The influence of English on Maltese is largely lexical, while the influence of Maltese on English is mainly phonetic and phonological. Mixed Maltese English texts consist of a larger number of morphemes in English and a Maltese morpho-syntactic and phonological frame. Mixed Maltese English is used by families of type C (Table 3.8) as a first language of the home and by many students attending higher educational institutions.

Maltese people generally perceive themselves to be either Maltese- or English-speaking; in fact they use and mix both languages to a lesser or greater degree. In general, speakers of Maltese stigmatize those Maltese speakers who use English as a first language as "snobs". The latter generally stigmatize the former as "uneducated". English is a symbol of education and modernization; Maltese is a symbol of national identity.
Bilingual medium in Malta

In the domain of education there is no policy about the medium of instruction at secondary level. Maltese, religion, social studies and Maltese history are taught and examined in Maltese in state schools. The Matriculation examination paper in these subjects (with the exception of Maltese) can be answered in either language. In all other subjects (except the language subjects), the written medium is English. The spoken medium is Maltese mixed with English in state schools and mainly English with some Maltese in private schools.

Both languages are spoken almost to the same extent in the classroom, but English is used for writing purposes in a larger number of subjects than Maltese (Table 9.1).

Table 9.1: Spoken and written medium in the Maltese classroom sample

<table>
<thead>
<tr>
<th>MALTESE</th>
<th>ENGLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPOKEN</strong></td>
<td><strong>SPOKEN</strong></td>
</tr>
<tr>
<td>words 48 %</td>
<td>words 51.8 %</td>
</tr>
<tr>
<td>speech units 40 %</td>
<td>speech units 38 %</td>
</tr>
</tbody>
</table>

21.5% of speech units are in Maltese and English mixed

<table>
<thead>
<tr>
<th>WRITTEN</th>
<th>WRITTEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4 subjects)</td>
<td>(all subjects)</td>
</tr>
</tbody>
</table>

Most teachers in my sample (13 out of 16) use both Maltese and English to a significant degree in the teaching process. In the content subjects, some teachers are inclined to use more English than Maltese as a spoken medium. Older teachers are more likely to use English than younger teachers; English
is used to a greater extent in private schools than in state schools; the teacher's own (and the learners') language background (i.e. family types A, B, C and D), determines language use in the classroom.

Contextual variables lead to a certain amount of codeswitching (21.5% of total speech units). Codeswitching has a functional role to play in the classroom: it is an additional communicative resource of bilingual speakers. It occurs either from Maltese to English or from English to Maltese. Switching from Maltese to English is mainly accounted for by the use of English technical terms and phrases (77.8% of codeswitching units). Switching from English to Maltese serves the purposes of translating and explaining English technical terms and concepts in Maltese, for eliciting, and for enhancing the interpersonal relations between the teacher and the learners (22.2% of codeswitching units).

When the teacher uses Maltese as the main spoken medium, a larger quantity of English is used (technical); when English is used, the teacher switches to Maltese less frequently. In general younger teachers codeswitch more as they use technical expressions in English within stretches of Maltese speech.

9.2 Implications of the results

The above results have the following implications:

- The use of English terms impedes the use and development of Maltese technical terms because it does not allow for the learning and practice of already existing Maltese terminology and idiom.
- The English spoken in Malta is heavily influenced by Maltese which, in some cases, might render it unintelligible to non Maltese English speakers.
- In those cases where Mixed Maltese English is acquired as a first language there is the danger that its speakers will be unable to speak either Maltese or English exclusively.
This situation fits Fishman's (1967:35-6) description of bilingualism without diglossia. This, he warns, is a transitional phenomenon leading to language shift or language loss:

"As role compartmentalization and value complementarity decrease under the impact of foreign models and massive change, the linguistic repertoire also becomes less compartmentalized. Languages and varieties formerly kept apart come to influence each other phonetically, lexically, semantically and even grammatically much more than before. Instead of two (or more) carefully separated languages each under the eye of caretaker groups of teachers, preachers and writers, several intervening varieties may obtain, differing in degree of interpretation. Such fused varieties may, within time, become the mother-tongue and only tongue of a new generation. Thus bilingualism without diglossia tends to be transitional both in terms of the linguistic repertoires of speech communities as well as in terms of the speech varieties involved per se. Without separate though complementary norms and values to establish and maintain functional separation of the speech varieties, that language or variety which is fortunate enough to be associated with the predominant drift of social forces tends to displace the other."

Fishman (above) suggests that the two languages need to kept functionally separate to safeguard language shift and the loss of one of the languages. In the education domain, as also in other domains, we have identified a separation between Maltese and English in the written and spoken functions, especially in content lessons where the textbooks are in English and the spoken medium is Maltese. This however leads to codeswitching which, in turn, poses a threat to Maltese terminology.

Contrary to Fishman's prediction, however, we do not observe the replacement of Maltese by English in Malta. Rather, we find both languages used, linguistically influencing each other, and giving rise to a mixed variety as explained in chapter 6. This variety is associated with certain domains and contexts and is not accepted in others, especially in formal situations and in writing.
We shall now proceed to discuss the linguistic implications of codeswitching and crosslinguistic influence as follows:

♦ the constraint on the elaboration of Maltese;
♦ the intelligibility of Maltese English;
♦ codeswitching as a medium of instruction.

9.2.1 The constraint on the elaboration of Maltese

From the quantitative analysis of the data (chapter 7) it results that a large amount (77.8%) of switching from Maltese to English in the classroom is due to the use of English technical terms and phrases. The reasons for the use of English terms in Maltese speech are:

(i) Lack of Maltese equivalents: Maltese has only recently started to be used in technical and scientific writing. English has been used for these functions for many years. Therefore there has been no need to elaborate the Maltese language, i.e. to create vocabulary and develop the Maltese morpho-syntactic structures and stylistic varieties for use in academic writing. The discourse community of scientists in Malta is very small. It functions in English and finds no reason for starting to use Maltese. The use of English in academic and scientific genres is accepted as part of the Maltese language situation. There is, therefore, no demand for terminological development in Maltese. The Maltese language academy, "l-Akkademja tal-Malti", which might supply that development, has been solely concerned with the normalisation of Maltese orthography.

(ii) Maltese equivalents do not belong to the academic register: Maltese equivalents do exist in a range of registers but they are not usually used in class because they do not belong to the academic register (some examples are given in chapter 5). Until they are introduced into the classroom through the written texts, they are not likely to be used or to develop academic connotations.
(iii) The English terms are used because the written text is in English: This reason is the most powerful argument put forward by teachers for codeswitching from Maltese to English. As long as the written medium remains English, English terms will continue to be used in the classroom because the learners need to learn them and to use them in their exercises, homework and examinations.

Due to extensive lexical codeswitching from Maltese to English, there is a trend for Maltese vocabulary to be replaced by English. The following are examples from the lesson transcripts: 'teacher' instead of "ghalliem/a" (lesson H); 'birthday', 'farm' instead of "razzett" and "gheluq snieni" (lesson K); 'cotton', 'silk' and 'scarf' instead of "qoton", "harir" and "velu" (lesson E). The Maltese language is rich enough in vocabulary and expression to be used for many spoken and written academic purposes. Such Maltese terms should be valued as a terminological resource and rather than being ignored and forgotten, they need to be taught and developed for use in a range of domains.

Appendix 10b presents a newspaper article in which the author claims that a student wrote to him asking him to explain the structure of the leaf in Maltese as supplementary information to the topic covered in English in class. The student explains that he would understand an explanation in Maltese better. The writer describes the structure of the leaf completely in Maltese and on only two occasions gives the English term in inverted commas. This shows that (i) there is a demand for scientific texts in Maltese for use in the classroom; (ii) it is possible to use Maltese in scientific writing.

It is necessary to counter the threat of loss of Maltese terminological and other linguistic resources. Bilingual education in Malta in the future should be designed with this in mind.

In view of this, we recommend the following innovations.
Textbooks in Maltese should be produced in all subjects for all levels of school education (i.e. from primary to school leaving). The written text is considered basic in education. It dominates all that takes place in class, including the spoken language. Therefore, the use of written Maltese would enhance the spoken variety.

Technical and scientific texts already in existence in Maltese such as the regular publications on social, agriculture and scientific matters by the "Moviment Azzjoni Soċjali" could be used in schools. Texts more appropriate and relevant to the classroom need to be produced.

This is a major, very expensive and essential undertaking for the improvement of education in Malta. We shall now discuss the organisation of such a project.

The textbooks should be produced by teachers, scientists and other professional people in the fields concerned, working alongside Maltese language specialists. This project should be on-going. It should aim at producing a few texts each year, e.g. one topic introduced each year over a period of five to ten years. In the meantime the project should be monitored, tested and evaluated by the authors together with a team of specialists. This would give early indications about how the project works and will allow for the improvement of materials. Those items which prove satisfactory could then be published in book form.

There are many publishers in Malta (many are mentioned in the bibliography) who can offer high quality printing, e.g. in colour and with pictures. The publishers who offer the best service (efficiency, cost, quality) will be chosen.

The Department of Education would normally carry the financial burden. To lower the cost of the design and writing of the materials, the writers and researchers could be asked to do it during normal school/working hours; the first trial packs would be printed cheaply using stenciling or photocopying for example; the schools could be asked to help through their parent-teacher
associations who normally raise funds for the educational needs of the school. The publishers should be able to offer good prices for the final publication since they will be producing thousands of copies.

These structures already exist. Educational officers in conjunction with headteachers and teachers working as a team have been in the past, and some still are, engaged in similar projects for the production of textbooks for schools - e.g. the series of mathematics textbooks in English for primary level; the social studies and geography textbooks in Maltese for secondary level. Similar projects for the production of textbooks in Maltese in all subjects and for all levels should be organised.

These texts in Maltese would then be prescribed as part of the syllabus - alongside English texts on similar topics, at primary level. At secondary level they would initially be provided as reference and supplementary material. When there are enough textbooks available, and an increase in demand for them (if the implementation is successful in the early stages), they would be given a more central place in the curriculum.

In this way:

♦ Maltese terms will acquire the necessary academic connotations.

♦ The Maltese language will be developed through its use in all fields as a written medium.

♦ The Maltese language will gain more respect.

♦ The learners will be able to: understand the subject matter better and assimilate the knowledge and participate more fully in the learning process.

♦ Maltese speakers of English (types C and D) e.g. in private schools, would benefit because while they could cover the syllabus in English
first, they would also be exposed to the same or similar content in Maltese. This would be of benefit to them when they form part of the Maltese work force where Maltese is used.

♦ The continued use of English across subjects will allow and facilitate access to reference works in English; it will prepare the learners for future and further education and will ensure a high standard of English in Malta.

9.2.2 The intelligibility of Maltese English

The heavy influence of Maltese on English can be seen as a threat to its international intelligibility.

Maltese people in general and especially those who work in the tourist industry and other service industries such as banks, public transport, etc. require an internationally intelligible variety of English to communicate with native and non-native English speaking tourists.

The more academically-oriented learners such as those attending Junior Lyceums need to use English for academic purposes, particularly for further education in English at University level in Malta and sometimes abroad. The use of English in written work at secondary level is advantageous for these students in their future academic careers. Also, learners attending technical institutes and trade schools require English for technical purposes e.g. for the understanding of handbooks accompanying equipment etc..

It is necessary to examine English language acquisition by speakers of Maltese so as to design English language teaching in Malta according to these needs. Those areas which are found to be more problematic such as phonetics, intonation, lexical choice and vocabulary, and some areas of grammar should be directly addressed in the classroom.
Perceived declining standards of English, if observed, should not be automatically correlated with the use of Maltese as a medium in content subjects. The way English itself is taught needs to be considered as playing a crucial part.

We recommend the following projects:

♦ an evaluation of English language teaching in Malta at present. The teaching of English at primary level has been recently given priority by the Department of Education - through a joint project with the British Council (the Primary English Project). We recommend that the teaching of English at secondary level be given attention so that it can become more effective in preparing the learners for the use of spoken English.

♦ in English language teaching, it should be acknowledged that there is some variability in the nature of different Englishes, native and non-native. This is significant in the Maltese context since students are very likely to come across a variety of speakers of English in the future. While Standard British English will continue to be set as the target model (as seems to be preferred by parents, teachers and administrators), it is also useful for students to be aware of distinctions in varieties of English and to familiarize themselves with the differences.

9.2.3 Codeswitching as a medium of instruction

This research has shown that codeswitching is a useful pedagogic and communicative resource. There is no evidence that it is harmful to the teaching/learning process of content. Although it has not been proved superior to the use of a monolingual medium, we have evidence from learners and teachers to show that the classroom is a better learning environment when codeswitching is used. For example, learners do not like teachers who force them to use English exclusively when speaking, for example. In fact, switching to Maltese enhances teacher-student interaction, allows learners to participate actively in lessons and to reproduce the internalized knowledge. The use of
English, on the other hand, is required for the learners to bridge the gap between spoken medium in Maltese and the written texts in English.

**We recommend that:**

♦ These findings be disseminated among teacher-trainers, teachers and school administrators (and parents when appropriate);

♦ Student-teachers must not be penalized for codeswitching;

♦ The Faculty of Education must include a component about 'language as medium of instruction' as part of all its teacher-training courses.

### 9.3 Language policy in education

The most transparent deficiency in the Maltese education system is the lack of a coherent policy. Innovations are always introduced overnight and imposed on the schools by the Ministry. Examples have been given of the compulsory teaching of Arabic, and more recently the introduction of the subject of multilingual text appreciation (see chapter 3). It is important for the development of educational practices in Malta, that a policy for policy making be devised (see Corson 1990). This would include details about the responsibilities of various education officials for decision-taking, consideration for the involvement of teachers, learners and parents in the evaluation of educational practices, and a long-term plan for an on-going appraisal of the system and the implementation of change.

The involvement of teachers through their representatives and more directly through personal consultation is essential.

Darmanin (1989:589-590) concludes her ethnographic study of Maltese primary schools in this way:
"Classroom pedagogy and the opportunity to learn for Maltese pupils cannot be determined apart from the same teachers and pupils, who together actively construct the teaching-learning process. As such, any educational innovation in the Maltese system should consider the ambition of its members. Where change has been imposed from above, through the state or through the centralized bureaucracy of the Department of Education, it has been met with resistance, obstructionism and confrontation of teachers, parents and pupils".

We also agree with the writer of the letter to the Editor of The Sunday Times (Malta), June 23, 1991 (Appendix 10c) who proposes that,

"...the inclusion of certain books in school or other syllabi should be more carefully planned and possibly involve consultation, of some sort, with teachers, who are, in this matter, the nation's yardstick".

The following is a summary of our recommendations.

9.3.1 Summary of recommendations

Language teaching
The inclusion of an oral component in Maltese and English lessons. Opportunities must be given to the learners to practice spoken Maltese for various purposes in the Maltese lesson and English in the English lesson. Learners need to be able to speak at some length about various topics and in different communicative situations, in each language separately.

The teaching of Maltese. This needs to be revised and upgraded. At the moment too much emphasis is placed on orthography and traditional grammar (which excludes the Romance and English influence on the structure of Maltese); on structural exercises and on the correction of written work (Camilleri 1988). More emphasis needs to be given to the use of Maltese in a variety of domains and situations represented in the classroom through role play, for example.
The teaching of English. Needs analyses and studies of English language acquisition by speakers of Maltese are required so that English language teaching in Malta might directly address the specific needs and problems. There needs to be a revision of English language teaching methodology at secondary level and more emphasis on the development of spoken proficiency.

Teaching methodology. The four language skills, reading, writing, speaking and listening can be incorporated in activities related to the media (see Corson 1990:272). For example, the production of a short video, a class journal, or simply charts or models will generate a lot of talk and discussion among the learners. It will necessitate looking up information and reading books in libraries, and the reproduction of knowledge in writing. It would also generate a high degree of motivation in language learning especially if the topic is chosen by the learners themselves.

Bilingual education

The Department of Education should immediately set up a committee which includes teachers among its members, to design bilingual education policy and to oversee the following project:

* the provision of textbooks in Maltese for all subjects at primary level;
* the provision of supplementary texts in Maltese for all subjects at secondary level;
* the evaluation of these texts.

Each section for each subject at the Department of Education should be responsible for the production of these texts simultaneously. We recommend that one text per year for each subject be produced starting from the first years (Year 1 in primary and Form 1 in secondary) to the final years. This means that the first cycle of textbook production will take five years (e.g. from 1994/1995 to 1999/2000) by the end of which there will be Maltese textbooks in all subjects for every year at school.
The following revisions should be made by the sections concerned in the Department of Education together with the relevant staff at the University of Malta:

* revision of the Maltese language syllabus;
* revision of the English language syllabus.

The University of Malta should provide personnel to help in these projects, e.g. specialists in each of the subjects, and linguists of Maltese.

The Faculty of Education should immediately:

* disseminate the findings of this research;
* stop penalizing student-teachers who codeswitch as a medium of instruction;
* include a course on bilingual medium of instruction in all its courses;
* encourage further research on the issue.

As soon as textbooks in Maltese are available, e.g. by the academic year 1999/2000, the Matriculation Examinations Board should:

* set examination questions in Maltese in a larger number of subjects;
* allow students to answer examination questions in Maltese.

Private Schools should evaluate their own 'implicit' language policy and contribute to this project, e.g. by providing personnel to work on the projects, by participating in the dissemination of information, piloting the early drafts and implementing the innovations on a long-term basis.

The "Akkademja tal-Malti" should support these endeavours also by helping in the dissemination of information, e.g. by organising public talks, and by providing personnel to work on the project where relevant.

The Malta Union of Teachers should encourage its members to participate in research of this kind; help in the dissemination of information, e.g. through its regular publications and teacher representatives, and encourage the development of bilingual education in Malta.
Parents who are adopting Mixed Maltese English as the language of the home need to be made aware of its dangers for the language proficiency of their children.

The people's representatives in parliament, especially the Ministry of Education, should be aware of the linguistic situation and bilingual needs of the younger members of the society and should support these recommendations, namely by providing the financial and other resources required.

9.4 Conclusion

This chapter has discussed issues related to bilingualism and bilingual education in Malta. The discussion has lead to the identification of requirements for improvement in the education system. Some proposals for the amelioration of language teaching and bilingual education in Malta have been presented. These in turn point towards the need for further research as will be outlined in the next and final chapter.
CHAPTER 10: CONCLUSION

10.0 Summary

This research has revealed how, in the absence of a language policy, Maltese and English are employed as media of instruction in secondary classrooms.

Chapter 1 stated our research questions and objectives.

Chapter 2 provided a background to models of bilingual education programmes, and an evaluation of the current theories. We found that issues in the choice of language as a medium of instruction in post-multilingual countries has to be treated differently from those in European and North American contexts. We have considered the language distribution options in bilingual classrooms and distinguished between the use of language as a written and as a spoken medium.

Chapter 3 gave the relevant contextual information to the Maltese bilingual situation which is a result of historical, economic and political factors. Maltese has existed as the language of the people for many centuries and has been influenced by different languages over the years. English is a colonial heritage, but is also seen as part of Maltese culture generally. Both languages are used almost interchangeably in all spheres of life. Examples of codeswitching and crosslinguistic influence between Maltese and English have been given in chapter 6.

Chapter 4 outlined the research methodology. The rest of the work analysed bilingual teacher talk in two ways: qualitatively and quantitatively. Chapter 5 looked at the situational variables that affect language choice and studied language use in each of the sixteen lessons separately. Chapter 7 analysed bilingual teacher talk quantitatively. Chapter 8 provided supplementary information about classroom interaction, speech acts and language choice. These three chapters have shown that both Maltese and English are necessary
as media of instruction: each language has a role to play and codeswitching is an additional pedagogic and communicative tool in the hands of teachers.

Chapter 9 discussed the implications of the empirical research. It recommended the production of textbooks in Maltese in all subjects to enhance the use of Maltese terminology.

Below I identify and propose a number of research projects for the further study and improvement of the situation.

10.1 Further research

The design, implementation and on-going evaluation of improved language teaching methods and bilingual texts across the curriculum. The evaluation of these innovations should be concerned with their effectiveness in learning and language development. An on-going assessment is required so that any faults in the design project or implementation process can be diagnosed and remedied in time. The successful sections of the project can be recognized and utilized for further development.

The following research is necessary in relation to the suggested innovations: a study of the vocabulary requirements for the production of texts in Maltese; studies of the acquisition of English by speakers of Maltese in order to identify those items which need to be emphasised in English language teaching in Malta; studies of the acquisition of Maltese by speakers of family types A, B, C and D and by non-Maltese people who learn it as a second or foreign language. These studies should point towards the improved design of Maltese language teaching materials.

Large scale surveys of language use in Malta are needed. No questions about language have ever been included in the national censuses conducted every 10 years. We suggest that as from the next national census (due in 1996) questions be included about the use of Maltese dialects, standard Maltese and
English. Although replies about language use should be interpreted with caution, this information could give an indication of the language situation and would allow for the identification of language shift.

Psycholinguistic experimentation about the storage and retrieval systems of bilingual knowledge in the brain, with special reference to the Maltese bilingual scheme. Apart from its intrinsic and academic value, this could help us further understand language learning in a bilingual context.

10.2 Conclusion

The language situation in Malta has moved from one of bilingualism with diglossia where English and Maltese (and Italian and Maltese before that) had separate functions in different domains, to one of bilingualism without diglossia. Maltese is becoming more common in academic domains and English is increasingly spoken in the home. This, in turn, results in extensive codeswitching and crosslinguistic influence. There seems to be a preference for English over Maltese vocabulary. At the same time, English in Malta is increasingly influenced by Maltese.

This points to the need for conscious decisions at the individual and policy levels about Malta’s linguistic future. At the individual level, decisions are normally taken by parents, for example, about which dialect or language variety to speak to their children. A national campaign - e.g. through the media - to educate parents on linguistic matters (e.g. the dangers of using a Mixed Maltese English variety), could help inform such decisions.

Within the domain of education, there is a demand for guidance at policy level. The dissemination of information (e.g. the results of this thesis), and relevant discussion at school, union (MUT), departmental (Education) and University levels would help to make the process of innovation successful.
There is increasing awareness among the general public about language issues. We believe that the promotion of these discussions to the professional and official levels would greatly benefit the linguistic future of the Maltese islands.
Bibliography


Aquilina J. 1971. "The role of Maltese and English in Malta". *Journal of the Faculty of Arts, Royal University of Malta*: 171-182.


Danesi M. 1990. "Mother-tongue literacy and the 'Shaping' of knowledge: the experience of the Italian children". In M. Byram and J. Leman (eds.): 64-76.


362


Martin-Jones M., M. Saxena, D. Barton and R. Ivanič. 1992. "Bilingual resources in primary classroom interaction". Research project in progress, Lancaster University, funded by the Economic and Social Research Council (ESRC) as part of a broader initiative on 'Education for a Multicultural Society'.


Meo E. 1988. "Negative transfer of Maltese on English: a study of five phonological variables". Undergraduate project, University of Malta.


370


