Introduction

Languages in contact, that is bilingualism at the societal level and bilinguality, its counterpart at the individual level, are an integral part of human behaviour. With globalisation and increasing population movements due to immigration and greater geographical and social mobility, and with the spread of education, contacts between cultures and individuals are constantly growing. While bilingual individuals already outnumber monolinguals, it can be expected that this trend will continue in the twenty-first century.

In this book we attempt to present the state of the art on the principal issues of bilingualism and languages in contact. Our approach is multidisciplinary insofar as we study the various phenomena at different levels of analysis: we analyse languages in contact first in the language behaviour of the individual, next in interpersonal relations, and finally at the societal level where we consider the role of language in intergroup relations. A better understanding of languages in contact calls not only for a multidisciplinary approach but for an interdisciplinary integration of these diverse disciplines (Blanc & Hamers, 1987). One of the major problems of an interdisciplinary approach is the integration of the macro- and the micro-levels of analysis. Because of the great methodological and theoretical difficulties, very few scholars have attempted it, and even fewer succeeded. If at times our discussions lack an interdisciplinary scope, it is because the state of the art does not allow it yet.

Each level of analysis requires specific disciplinary approaches: psychological at the individual level, social psychological at the interpersonal level, and sociological at the intergroup level. These disciplines are brought together when the different levels of analysis meet. We discuss only those theoretical constructs which either have been empirically confirmed or for which empirical verification is possible. We have rejected unsound and unverifiable models or, if we mention them, it is to stress their theoretical and methodological flaws. We have treated in a critical way data not based on theoretical assumptions, as well as theories based solely on anecdotal evidence; furthermore, we have not relied either on models constructed on

the grounds of evidence stemming from isolated case studies. However, we do not ignore this evidence, provided that it can confirm experimental data, or if it is the only available evidence. If we have ignored psychoanalytical approaches to bilingual behaviour, this is because we do not feel competent to evaluate them. We refer the interested reader to Amati Mehler, Argentieri & Canestri (1990). Typologies of bilingualism are mentioned only when they are based on some theoretical grounds and have therefore a predictive character; we consider a typology useful only in as far as a new classification of phenomena permits a better understanding of the psychological, sociological and linguistic processes and their interplay when languages are in contact.

It must be borne in mind that in English there is an ambiguity in the term *language*, which sometimes refers to a general communication process, rule-governed and shared by all humans (in French *langage*) and sometimes to the code of a specific speech community with its own rules (in French *langue*) (see also Le Page & Tabouret-Keller, 1985). As the reader continues, he or she will probably become aware that language does not necessarily have the same meaning in the different chapters. In the early chapters on the individual's language behaviour we use a more 'focused' definition of language, that is, it is defined as an abstract entity distinct from others, whereas in the later chapters we sometimes refer to a 'diffuse' definition, i.e. distributed on a continuum (see Le Page, 1978). In yet other chapters we take 'language' to mean a linguistic code used by a group of speakers who stand in a similar relationship to it and perceive it to be different from other linguistic codes.

Another problematic concept is that of *mother tongue*. UNESCO (1953: 46) defines it as 'the language which a person acquires in early years and which normally becomes its natural instrument of thought and communication'. At the psychological level the mother tongue can be defined as the first linguistic experience during the formative years of language development, regardless of the number of codes present and their use (Hamers, 1979). This means that the child's linguistic experience may vary from a differential use of several codes to the use of a single code. This definition has far-reaching implications when it comes to choosing a language of instruction for the child.

Our main concern is the identification of universals of behaviour when two or more languages are in contact. The phenomenon of language behaviour cannot be studied in isolation, as it is in constant interaction with other phenomena, namely with culture. Although language is part of culture there is no simple cause-and-effect relation between the two; rather, they are in constant interplay. When a chapter focuses on the one or other aspect, it must be kept in mind that one aspect of language behaviour, for

example interpersonal features, cannot be explained if other dimensions, e.g. intergroup relations, are ignored. This focusing, therefore, is a momentary simplification which enables us to analyse the phenomenon more closely. Similarly, when we use a dichotomisation, for example compound vs. coordinate bilinguality, it must be understood as two extreme poles on a continuum rather than as two distinct entities.

In trying to understand behavioural processes there is a danger of reifying such conceptual constructs as language, culture, society, cognition, frames, scripts, and so on. Because we view these concepts only as theoretical constructs which enable us to understand better human behaviour and are convinced that they do not exist in the absence of human behaviour, we have tried to avoid their reification. It is in this frame of mind that all constructs used throughout the book must be understood. We have proposed a set of theoretical guiding principles which we follow throughout the book and attempt to apply at all levels of analysis.

In Chapter 1, after reviewing a number of definitions of bilingualism which we reject as one sided, we put forward a general interactional model of human behaviour which we apply to language behaviour and development. In Chapter 2 we define a number of dimensions which enable us to analyse the different facets of bilinguality and of bilingualism. We then describe and discuss the different measures that have been developed to assess bilingualism at the individual and the societal level.

In Chapters 3 and 4 we address the issue of bilingual development. The empirical research data on the bilinguistic ontogenesis is discussed in Chapter 3: we analyse the simultaneous and early consecutive development of bilinguality. We also review the specific case of bilinguality when one of the languages is gestural and the other articulated. We finally discuss individual language attrition and loss. In Chapter 4 we study the cognitive and sociocultural dimensions of the ontogenesis of bilinguality

Chapter 5 deals more specifically with the social and psychological foundations of bilingual development: after analysing the nature of language behaviour and development we stress the role of social networks and socialisation. We propose a social cognitive interactional model of language and bilingual development. At the end of the chapter we examine different types of bilinguality through a number of hypothetical case studies.

Chapters 6 and 7 deal with the neuropsychological foundations of bilinguality and with information processing in the bilingual. In Chapter 6 we look at the empirical evidence from polyglot aphasics and brain-intact bilinguals. We compare the neuropsychological functioning of bilinguals with that of monolinguals and look at differences in hemispheric preference. Chapter 7 examines the psychological mechanisms relevant to

bilingual information processing, that is, representational mechanisms and in particular memory, and the access to these. Several models of representation and access are discussed and we stress the necessity of a hierarchical model. We further give a brief review of the bilingual's non-verbal behaviour.

The next two chapters deal with the social psychological dimensions of bilinguality. In Chapter 8 we examine the relationship between culture, identity and language behaviour in a multicultural environment. After a discussion of the relationship between language and culture, we analyse the bilingual's cultural identity and the social psychological processes which determine interethnic interpersonal relations. We end this chapter with a discussion of the social psychological processes which are relevant to second language acquisition. Chapter 9 addresses the issue of the interaction between interpersonal relations and linguistic behaviour: in the first part speech-accommodation theory and its consequences for bilinguistic behaviour and bilingual speech mode are discussed, while in the second part we describe communication strategies specific to intercultural interactions, such as code selection, speech modification, code-switching, code-mixing and borrowing

In Chapter 10 we turn to the analysis of societal bilingualism. The relationship between multiculturalism and intergroup relations are discussed from a sociolinguistic and social psychological standpoint. The role of language in intergroup behaviour is approached from different perspectives: language as a symbol and instrument of group identity, the concept of ethnolinguistic vitality and the interface between language and ethnicity in a multicultural setting. In the second part of this chapter we review the different types of sociolinguistic variations that arise from languages in contact: bilingual speech repertoires, diglossia, language shift, pidginisation, creolisation and decreolisation. We analyse their implications for language behaviour and linguistic theory. Finally we discuss language-planning policies and their consequences for groups and individuals with special reference to literacy.

Chapter 11 deals with language planning in education and with bilingual education. We first discuss the issue of literacy when languages are in contact, with special reference to developing countries and ethnolinguistic minorities. We then review bilingual education for majority/socially-advantaged children, in particular the immersion programs. We further examine the issue of educational programs for ethnolinguistic minority children. Finally, we briefly look at the potentials of community bilingual education.

This book is meant for all those who are interested in language behaviour or those who work with bilinguals: psychologists, psycholinguists,

sociologists and sociolinguists, linguists, educators, language teachers, speech therapists and administrators who have to plan bilingual education. Even though it has been necessary sometimes to give complex technical details, we have tried to define the bilingual's behaviour in a way accessible to all readers, regardless of their disciplinary background. Explanations are given in the text or in notes. Some of the most important terms and concepts we use are defined in a Glossary at the end of the book. This, we hope, will further help the reader unfamiliar with certain terms and concepts. Throughout this book we use the masculine form as a generic term, unless otherwise specified; 'he', 'him' and 'his' refer therefore to a person, regardless of gender.

Given the magnitude of the problem, some analyses may have escaped us. We apologise to the authors we have unwittingly left out and to those we have misinterpreted, either because we had to summarise their view in a few sentences or because we had to synthesise approaches and disciplines with which we are not very familiar. We will be rewarded if this book informs the reader on the state of the art of languages in contact. We hope that she or he will have a better grasp of these issues after reading this book. Our goal will have been attained if this reading provokes many challenging questions. However, we do not necessarily provide all the answers. So much is yet to come from research not yet thought of.

1 Definitions and guiding principles

The aim of this book is to review critically the state of the art in the field of languages in contact. By 'languages in contact' we mean 'the use of two or more codes in interpersonal and intergroup relations as well as the psychological state of an individual who uses more than one language'. We distinguish between bilingualism and bilinguality. The concept of bilingualism refers to the state of a linguistic community in which two languages are in contact with the result that two codes can be used in the same interaction and that a number of individuals are bilingual (societal bilingualism); but it also includes the concept of bilinguality (or individual bilingualism). Bilinguality is the psychological state of an individual who has access to more than one linguistic code as a means of social communication; the degree of access will vary along a number of dimensions which are psychological, cognitive, psycholinguistic, social psychological, social, sociological, sociolinguistic, sociocultural and linguistic (Hamers, 1981).

1.1 DEFINITIONS

The concept of bilingualism seems at first sight to be non-problematical. According to Webster's dictionary (1961) bilingual is defined as 'having or using two languages especially as spoken with the fluency characteristic of a native speaker; a person using two languages especially habitually and with control like that of a native speaker' and bilingualism as 'the constant oral use of two languages'. In the popular view, being bilingual equals being able to speak two languages perfectly; this is also the approach of Bloomfield (1935: 56), who defines bilingualism as 'the native-like control of two languages'. In contradistinction to this definition which includes only 'perfect bilinguals' Macnamara (1967a) proposes that a bilingual is anyone who possesses a minimal competence in only one of the four language skills, listening comprehension, speaking, reading and writing, in a language other than his mother tongue. Between these two extremes one encounters a whole array of definitions as, for example, the one proposed by Titone (1972), for whom bilingualism is the individual's capacity to

speak a second language while following the concepts and structures of that language rather than paraphrasing his or her mother tongue.

All these definitions, which range from a native-like competence in two languages to a minimal proficiency in a second language, raise a number of theoretical and methodological difficulties. On the one hand, they lack precision and operationalism: they do not specify what is meant by native-like competence, which varies considerably within a unilingual population, nor by minimal proficiency in a second language, nor by obeying the concepts and structures of that second language. Can we exclude from the definitions of bilingual someone who possesses a very high competence in a second language without necessarily being perceived as a native speaker on account of a foreign accent? Can a person who has followed one or two courses in a foreign language without being able to use it in communication situations, or again someone who has studied Latin for six years, legitimately be called bilingual? Unless we are dealing with two structurally different languages, how do we know whether or not a speaker is paraphrasing the structures of his mother tongue when speaking the other language?

On the other hand, these definitions refer to a single dimension of bilinguality, namely the level of proficiency in both languages, thus ignoring non-linguistic dimensions. For example, Paradis (1986: xi), while suggesting that bilinguality should be defined on a multidimensional continuum, reduces the latter to linguistic structure and language skill. When definitions taking into account dimensions other than the linguistic ones have been proposed, they too have been more often than not limited to a single dimension. For example, Mohanty (1994a: 13) limits the definition of bilingualism to its social-communicative dimension, when he says that 'bilingual persons or communities are those with an ability to meet the communicative demands of the self and the society in their normal functioning in two or more languages in their interaction with the other speakers of any or all of these languages'.

More recent definitions insist on the specific characteristics of the bilingual. For example, Grosjean (1985a) defines a bilingual speaker as more than the sum of two monolinguals in the sense that the bilingual has also developed some unique language behaviour. Equally for Lüdi (1986) bilinguality is more than an addition of two monolingual competences, but an extreme form of polylectality.[1]

Baetens Beardsmore (1982) has listed some definitions and typologies of bilingualism, very few of which are multidimensional. These dimensions are further discussed in Section 2.2. But we have no intention of reviewing all the definitions or typologies that have been put forward for bilingualism. In this book, we will mention only those which are operational and can be applied in empirical research or those which are based on a

theoretical construct. While discussing most of the important theoretical approaches to the study of bilingualism, we will also propose our own approach, which follows from the theoretical guiding principles underpinning the study of language behaviour outlined in the next section. It should be clearly understood that any adequate model of bilingual behaviour must be consistent with a more general model of language behaviour.

1.2 GENERAL GUIDELINES TO LANGUAGE BEHAVIOUR

In our view, language behaviour does not and cannot exist outside the functions it serves. By this we mean that language is in the first place a tool developed and used to serve a number of functions, both social and psychological, which can be classified in two main categories: communicative and cognitive (for more details, see, for example, Halliday, 1973; Bruner, 1990). Language does not exist in itself but has a use for the overall behaviour which is meaningful in a given culture. Functions of language are universal but the linguistic forms vary across languages and cultures. To some extent language is one of the variables which define culture. Moreover, language cannot be isolated from other aspects of behaviour. When language is processed by an individual it is always intermingled with cognitive and affective processes.

1.2.1 A functional approach to language behaviour

According to Bates & MacWhinney (1982) there are at least two levels of language processing: the functional level, where all the meanings and intentions to be expressed are represented; and, the formal level, at which all the surface forms used in the language are represented. Function plays a strong causal role in the way particular forms have evolved over time and in the way those forms are used by adults and acquired by children. Language is not just a device for generating structures but is seen as a potential for making meaning (Halliday, 1975). The linguistic system is only one form of the realisation of the more general semiotic system which constitutes the culture. In our approach we make a distinction between social functions, cognitive functions and semiotic-linguistic functions. Among the many cognitive functions that language fulfils, the semiotic-linguistic function (actor, action, goal) plays an active role in constructing meaning and therefore in developing formal language. Functions precede forms in the development and use of language, in the sense that forms are mapped onto the functions they serve.

Although the study of language can be conducted at several levels of analysis, in our view the nature of language behaviour, like that of other

complex human behaviours, remains the same regardless of the level of analysis:[2]

(1) There is a constant interaction between the dynamics of language behaviour at the societal level and language behaviour at the individual level. In other words, whereas at the individual level we view language behaviour, at least in part, as the outcome of societal factors, we consider also that language behaviour at the societal level is the outcome of individual language behaviour.
(2) At all levels and between levels there is a constant and complex mapping process between the form of language behaviour and the function it is meant to fulfil. We consider that the approach of the competition model used at the individual level (see Bates & MacWhinney, 1987) applies equally at the societal level.
(3) Language behaviour is the product of culture and as such it follows the rules of enculturated behaviour. It is not a mere product of a biological endowment, but it is a product of culture, transmitted from one generation to the next in the socialisation process and appropriated by each individual; but, in turn, language behaviour moulds culture, that is, cultural representations are shaped by language behaviour.
(4) Self-regulation is a characteristic of all higher-order behaviours and therefore of language behaviour. By this we mean that a behaviour is not a mere response to stimuli but that it takes into account past experience; furthermore, it does not follow a pattern of trial and error but is an evaluative response calling upon the individual's cognitive and emotional functioning, adapted to a given situation.
(5) Finally, one concept central to this dynamic interaction between the societal and the individual level is valorisation. By valorisation we mean the attribution of certain positive values to language as a functional tool, that is, as an instrument which will facilitate the fulfilment of communicative and cognitive functioning at all societal and individual levels (Hamers & Blanc, 1982). The concept of valorisation is of the utmost importance in language-contact situations.

In addition, when two languages are in contact there can be a state of equilibrium between the two languages at each level and for each form–function mapping, in which case the use of both languages is constant and predictable. This equilibrium is not unlike the one existing in ecological systems. Any change of the relation between the two languages, due to a change in form–function mapping or to a change in valorisation at any level, will provoke a change in language behaviour.

Interactions between the dynamics of individual behaviour and the

dynamics of the environment are current in biology and in evolutionary sciences. For example, the Neolithic revolution started with a change in individual behaviour, as a few humans started cultivating edible grasses rather than gathering them; when the behaviour spread and was adopted by a growing number of individuals, it started shaping the environment as woodlands gave way to cultivated fields; as cultivated fields spread, they in turn influenced the structure of the society which became organised around agriculture; this in turn changed the structures and called for a more collective behaviour in production and distribution, thereby changing the power relations in the society. Thus, a new form of behaviour (cultivating) served an existing function (need for food); when this mapping of form and function – that is when the new form of behaviour – became linked to the existing function, spread to a large enough number of individuals, this in turn changed the form of the landscape (from woods to fields) which came to serve the function of food growing. This twofold interplay between individual and society and between form and function is characteristic of processing in complex human behaviour.

Another example involving language behaviour is that of the origin of writing in Mesopotamia (see Schmandt-Besserat, 1992). Before a new language behaviour, i.e. writing, could come into existence, it started as a single mapping between form and function. Tokens with a specific shape (form) were designed and used as symbols for specific objects (e.g. a jar of oil) in order to record agricultural products (function); these symbols were first used in a one-to-one relationship with the objects (for example, five ovoid tokens stood for five jars). Next, a primitive system of counting appeared, e.g. one token was marked with five incisions. An important cognitive step was taken when an ovoid token (form) no longer represented a specific jar but the concept of jar and when the incisions represented an abstract concept of number (new functions). By introducing a system of counting (form), a large number of functions could be served; abstracting the concept of number enabled people to count any object. However, this did not happen before the use of the tokens had spread to a large enough area of the Ancient Near East and they were used by a critical but not necessarily large number of individuals. This critical mass[3] consisted of a few individuals who had power and status in the society (bureaucrats, administrators and scribes).

Each individual who had to use the system had also to develop the new concepts at the individual level. For example, at the cognitive level, a distinction had to be made between 'how much' and 'how many'. Each new form invented had to serve a specific function. In turn, creating a new form–function mapping and a new system would first be reflected in the individual's use of language and, in a next stage, in the language used in