Typological and social constraints on language contact: Amerindian languages in contact with Spanish

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Chapter 2

Views on Language Contact

This chapter reviews the relevant literature on language contact and presents my views on several contact-related topics. In the first section I discuss the main elements in any definition of language contact. The second section deals with language contact from societal and individual perspectives and how contact is approached differently from the society and the speaker. With both perspectives as points of departure, the third section discusses the relation between language contact and individual bilingualism on the one hand, and between language contact and societal diglossia on the other. The relationship between bilingualism and diglossia is central to the analysis developed in the next chapters since most speakers of Indian languages in Latin America are, to different degrees, bilingual in their native language and Spanish or Portuguese but continue to live in a diglossic state where the European language is socially dominant. In addition, I discuss how levels of bilingualism within the speech community determine the speakers’ ability to incorporate items from other languages, the acceptance of incorporated items, and the attitudes towards language mixing. The fourth section deals with the social and historical factors of language contact. The discussion builds on the assumption that social factors as much as linguistic ones determine contact-induced language change. I demonstrate that the inclusion of social and historical factors in the analysis increases the predictive capacity of constraint models like those discussed in Chapter 3 and helps us outline their scope and limits. The fifth section approaches linguistic borrowing from two complementary points of view: processes and outcomes. I follow here a division adopted by authors such as Thomason (2001) and Winford (2005: 373-427) for the classification of contact-induced change. The use of both parameters to measure contact-induced change allows for a more dynamic view of linguistic borrowing, i.e. one that focuses on mechanisms and results. Different outcomes of language contact are linked to specific settings. Outcomes are grouped in three types, each with its own set of social and cultural factors: language mixing, language shift and language creation. The sixth section offers a critical discussion of the motivations and factors of language contact and change, in particular the interplay between linguistic and nonlinguistic (sociocultural) motivations and factors within a multi-causal and dynamic model. The chapter closes with a summary of the covered topics.
2.1. What is language contact?

**Contact** (adj./n.) (1). A term used in sociolinguistics to refer to a situation of geographical continuity or close social proximity (and thus of mutual influence) between languages or dialects. The result of contact situations can be seen linguistically, in the growth of loan words, patterns of phonological and grammatical change, mixed forms of language (such as creoles and pidgins), and a general increase in bilingualism of various kinds. In a restricted sense, languages are said to be 'in contact' if they are used alternately by the same persons, i.e. bilinguals. (David Crystal, *A Dictionary of Linguistics and Phonetics*, 2006: 102)

Considering the bulk of literature produced on language contact issues in the last decades, one cannot but be surprised that definitions of language contact are scarce. While some definitions are rather simplistic, others are more specific as regards the elements involved. The definition quoted above has, in my view, two advantages. On the one hand, it is explicit about the different meanings of the term 'contact'. On the other, it incorporates several elements of relevance such as geographical continuity, social proximity, alternating use, bilingualism and bilingual speakers. I do not intend here to provide my own definition of language contact but discuss the main elements any good definition should include by linking such elements to the specific contact situations analyzed in this book.

Any definition of language contact includes three basic elements, namely: two or more languages, the speakers of these languages, and a socio-cultural setting in which contact takes place. Of course, this is a simplification of facts since every contact situation is different, depending on a large number of variables going from the strictly linguistic to the social.

Contact involves two or more languages or dialects of one language. In the latter case we speak rather of dialect contact. In the Ecuadorian Highlands, for example, an intensive contact exists between speakers of urban and rural dialects of Spanish, and between the Mestizo speakers of these dialects and the Indian speakers of Spanish. Their contact led to a dialect continuum stretching from standard urban varieties of Spanish to interlanguage varieties of second-language Spanish spoken by Quichua native speakers in the cities, where they migrate seasonally for work. The same continuum is reported for dialects of Quichua, with a standard variety used for instruction in classrooms on the one end, and highly Hispanicized varieties

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1 Henceforth Ecuadorian Quechua will be called simply ‘Quichua’. Ecuadorian Quechua is classified as part of Quechua II (Torero 1964). Quechua II dialects share a number of traits with other varieties from Southern Peru, Bolivia and Argentina (Adelaar 2004: 185ss). The difference between Quichua and Quechua is explained in Chapter 6.
spoken by Indians in close contact with the Spanish-speaking society on the other end (Muysken 1985: 392).

Therefore, in any contact situation it is necessary to identify first whether the varieties in contact are languages from different families, from the same family, or dialects of one language. This is true even if mutual intelligibility is reduced enough to consider two dialects as different languages. This is the case of urban Guaraní dialects and ethnic dialects such as Mbya or Tavytera in Paraguay (cf. 5.3). In the present book I deal with languages from different families: Spanish, a Romance language of the Indo-European stock; Ecuadorian Quichua, a language of the Quechua family; Paraguayan Guaraní, a language of the Tupi-Guaraní family; and Otomí, a language of the Otomanguean family.

The second element in any definition of language contact is Janus-faced. On the one side are the speech communities; on the other, the individual speakers. A tendency prevails in language contact studies which focuses on languages (a systemic approach) and speech communities (a social approach). Individual speakers are generally set aside from the discussion, thereby obscuring the fact that speakers are the real agents of language contact. Considering both speech communities and individual speakers enables a more comprehensive interpretation of sociolinguistic factors such speaker’s perceptions and attitudes towards language contact and its outcomes (cf. 2.3). Moreover, an speaker approach opens a largely unexplored field in contact linguistics: the psycholinguistic processes at work when two or more languages or dialects are in contact. I address the individual dimensions of bilingualism in the analysis of borrowing in Chapters 10 and 11.

The sociocultural setting is the third element of language contact. Sociocultural setting refers to a number of physical, social and cultural variables that make up the communicative situation of contact. The first of these variables is the geographical space of the speech community (their ethnic space) and the geographical space shared by speakers of both communities (their contact zone). The latter space may be embedded in the ethnic space or be created on occasion by the coming together of both communities. However, speakers of two languages need not share geographical space for language contact to occur (Thomason 2001: 2). English is disseminated in non-English speaking communities through the media. The speakers of these communities incorporate a number of English words and constructions in their language without being in contact with English speakers at all. A further element of the sociocultural setting is social space. This embodies a coherent set of practices (including verbal behavior) accepted in the speech community. In the context of the

2 A pioneer study in this direction is Myers-Scotton (2006) in which contact-linguistic and neurolinguistic approaches are intertwined, with promising results for future research.

3 Likewise, speakers need not share time for contact to take place. The use of internet is illustrative in this respect. Separated by long distances, speakers communicate from their own spaces and local times through the cyberspace of the web.
present investigation linguistic data were collected from socially significant verbal practices (i.e. not elicited) inside specific geographical spaces (communities) in real time (face-to-face interactions).

Language contact may be defined from several perspectives, but any definition must incorporate the elements discussed above. Accordingly, when contact is mentioned in this study, it refers to the contact among individual (often bilingual) speakers from different speech communities who communicate with each other by using different linguistic strategies, one of which is language mixing (specifically, linguistic borrowing). The contact of people and languages develops within the social and cultural boundaries of the speech communities concerned.

2.2. Communities and speakers in contact

Agency in language contact may be analyzed from the perspective of the speech community or from the perspective of the speakers. Both approaches are not contradictory but complementary. Each sheds light on different processes of language contact. In this section I address first the notions of ‘speech community’ and ‘speaker’ to the extent that both have import to the processes and outcomes of language contact. Later I discuss the interface between the speech community and the speaker by bringing to light the relationship between social practices and individual linguistic behavior in language contact. Finally, I focus on the issue of language contact from the perspective of national societies and globalization, with particular reference to Latin America.

The term ‘speech community’ describes a group of human beings identified in terms of geographical and social spaces and the set of sociolinguistic practices which make them different from other groups (Crystal 2006: 427). This definition encompasses three elements (people, spaces and practices) which combine in different manners to characterize distinct speech communities. Space may be physical, geographical and social. Linguistic practices embody the linguistic behavior of speakers, including their language and the ways they use it for communication. Speech communities may be as different in size and character as nations, ethnic groups, immigrants, or groups of people sharing the same work or profession. These groups engage in linguistic contact with other groups of the same or different size: e.g. immigrant groups engage in contact with national societies just like ethnic groups take part in contact with other ethnic groups.

The socio-cultural setting analyzed in this book involves groups of Spanish-Amerindian bilinguals in contact with groups of Spanish monolinguals. This setting

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4 Other settings, not addressed here, involve 1) Spanish monolingual groups in contact with Amerindian monolingual groups, and 2) groups of Spanish-Amerindian bilinguals in contact with each other. While the first setting is rather infrequent, except for a few cases of isolated
generally involves a minority group embedded in the larger speech community of the nation-state.

‘Speech community’ and ‘speaker’ are theoretical constructs often imbued with reductionism, hence the need to make both concepts specific in discussions of language contact. For one thing, the concept of ‘speech community’ should not lead us to overlook that speakers of flesh and blood are the ultimate agents of linguistic contact and change: individual speakers from different linguistic backgrounds exchange information by means of verbal signs when they engage in communication. Any individual speaker is characterized by sociolinguistic variables such as sex, age, ethnic background and education. The integration of these variables in the analysis makes linguistic variation emerge from seemingly uniform speech communities. Linguistic data for the present investigation were collected in socially and geographically identifiable speech communities (e.g. the Quichua speech community of Otavalo or the Otomí speech community of Santiago Mexquititlán). Each of these communities, however, includes a number of sociolects which deserve special consideration, especially because sociolectal variation in one speech community may surpass dialectal boundaries in certain cases.

Societal and individual aspects of contact are interconnected in complex ways. The interface between the speech community and the speaker is an ever-changing space of bidirectional influence where feedback from both sides is the rule. As noted above, a set of linguistic practices characterizes every speech community. These practices are the materialization of language usage, and individuals are raised in them as part of their socialization. In principle, individual linguistic behavior is determined by collective linguistic practices. Changes in these practices result in changes in individual linguistic behavior. In turn, provided certain conditions are met, changes in individual speech disseminate in the community and become collective linguistic practices. One condition for the spreading of individual changes in verbal behavior is the innovative role of the individual speaker in the speech community as determined by his/her political and economic position but also by his/her linguistic proficiency in higher and lower varieties in diglossic situations. Even if language contact does not require fluent bilingualism (Thomason 2001: I), individual bilingualism in any degree is a trigger of language contact and change. It is the bilingual speaker who by innovating his/her speech with the inclusion of foreign lexical or grammatical elements triggers off a chain of similar speech acts leading to the incorporation of the same elements in the group’s linguistic pool.

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communities which come into contact with colonizers in frontier zones (e.g. some groups of Wao speakers who have occasional contacts with timber merchants or oil workers in the Ecuadorian Amazon Lowlands), the second setting corresponds to contact between minority groups whose varieties are dialects of the same language (e.g. speakers of different Otomí dialects). Both settings are not studied in this book, however.
Summing up, contact-induced language change may be approached from the speech community and the speaker. Both standpoints are complementary for any satisfactory account of contact-induced language change. A speech-community approach views contact as a series of speech events with speakers of different languages, and language change as the outcome of those events. A speaker approach views contact as the coexistence of linguistic varieties in the speech of bilingual or multilingual speakers, and language change as the ways in which one linguistic variety influences the other in speech production. Hence the terminological distinction between ‘borrowing’ as used in historical and comparative linguistics (focusing on the speech community) and ‘transfer’ or ‘interference’ as used in second language learning (focusing on the individual speaker). A discussion of the term ‘borrowing’ and other related concepts is presented in section 2.5.2.

One final issue to be addressed here is language contact from the perspectives of national societies and globalization. I address this issue in the context of Latin America, the geopolitical space which concerns us here.

Since the emergence of the first nation-states in Europe in the sixteenth century, the sociopolitical space of the nation became a major locus of language contact in Europe and its colonies overseas. The building up of most European nations occurred at the expense of linguistic minorities which were and continue to be integrated in overall national projects – usually against their own will. The cases of Basque in Spain and Welsh in England are two examples. While the forced incorporation of linguistic minorities in the frame of the nation was not uncommon in Europe, it was the rule in the colonies.

A conservative estimate of the pre-Columbian population of the Americas gives some thirteen million people speaking over one thousand languages (Rosenblat 1954: 102). In South America, “the number of living languages is estimated to be around 500, but there is no doubt that they constitute a fraction of the languages spoken in South America at the arrival of the Europeans” (Tsunoda 2005: 21). All over the world the contact between European languages and native languages was accompanied by extensive language loss. As Tsunoda rightly notes, “colonization by European nations has exerted perhaps the most devastating damage in the way of language loss. The languages of the European powers spread to other parts of the world and exterminated, or at least diminished, a large number of aboriginal languages” (Tsunoda 2005: 4).

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5 By speech events I understand here “a communicative exchange made meaningful by culturally-specific structures of participants, genres, codes and other elements” (Crystal 2006: 428).

6 Interestingly enough, this scenario repeats in other non-European nations. Japan and China are two cases in point. For an evaluation of language contact and endangerment in Japan and other parts of the world, see Tsunoda (2005: 17ff).
In spite of an emerging worldwide sociopolitical formation based on transnational flows of people and goods (globalization), the nation in Latin America continues to provide the geopolitical frame for language contact between the official languages of the nation-states and the native languages of the embedded ethnic groups. The national society remains the matrix of language contact in the three situations analyzed in this book. Differences are noticeable however. Thus, for example, bilingualism characterizes the Paraguayan society regardless of ethnic affiliation while Spanish-Amerindian bilingualism in Ecuador and Mexico occurs only among Indian ethnic groups. Similarly, Guaraní is official in Paraguay together with Spanish while the latter is the only official language in Mexico and Ecuador. Thus, the concepts of multilingualism, bilingualism and diglossia become relevant only against the backdrop of states and national societies. These concepts are discussed in the next section, as they are used throughout this book to illuminate social, cultural and linguistic aspects of contact in Latin America.

2.3. Multilingualism and language contact

Societies nowadays are multilingual without exception. This does not mean all of their members are multilingual too. In former European colonies, multilingualism is typical of non-European speakers while citizens of European descent are often monolingual. Latin America is a case in point. The majority of the population of Latin American countries is monolingual in Spanish or Portuguese. Notwithstanding this fact, it is estimated that some eight hundred Amerindian languages are spoken nowadays in the continent. The three countries in which fieldwork was conducted for this investigation have an important number of Amerindian languages, with Mexico ranking as the richest in multilingual diversity followed by Paraguay and Ecuador. Differences in bilingualism are notable however. Approximately ninety

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7 Globalization is the backdrop for several forms of language contact, for example, between English and Spanish in the United States or Peninsular Spanish and Latin American Spanish. The latter case involves Spanish-speaking Ecuadorian immigrants in Spain. These cases provide rich material for an investigation of language contact in contemporary transnational scenarios but go beyond the scope of this study.

8 There is a certain disagreement with respect to the real number of languages in each country, which probably results from internal sociopolitical conflicts. Thus, for example, Ethnologue (2005) lists a total of 298 languages for Mexico, while the (Mexican) Instituto Nacional de Geografía y Estadística speaks of only 30 languages. In Ecuador we find a similar situation with respect to the number of speakers, with Indian native speakers varying from one to three million depending on who provides the figures. For an overview of the linguistic diversity in Mexico, see Flores Farfán and Nava López, La riqueza lingüística de México: un patrimonio seriamente amenazado (2007). The Indian languages in Ecuador and the state of the art of their research are presented by Montaluisa and Álvarez, Las lenguas indígenas en el Ecuador y el estado actual de sus investigaciones (2004). For linguistic data from the last census in Paraguay, visit the website www.dgeec.gov.py.
percent of the national population of Mexico and Ecuador is monolingual while a similar percentage of the population in Paraguay is bilingual. The widespread use of Spanish and Portuguese in Latin America is closely associated with the sociopolitical role played by these languages in colonial and republican times. For the last five hundred years Spanish and Portuguese have been the dominant languages in Latin American and the linguistic basis for national projects. This means that European languages and Amerindian languages have coexisted in a typically diglossic condition for a long time.

2.3.1 Diglossia and language contact

Introduced first by the Arabist William Marçais in 1930 and disseminated by Charles Ferguson in his classic article (Ferguson 1959) the term ‘diglossia’ refers to the compartmentalized use of two languages or two dialects of one language in mutually exclusive settings. Typical of diglossia is that one of the languages (the high variety, H) occupies a politically dominant position with respect to the other (the lower variety, L) the difference lying on the degree of formality of each variety and its association with public or domestic environments. In this context, one language (H) is learned in schools and spoken in public settings while the other (L) is acquired at home and spoken exclusively in the family or the community. Usually, the speakers of one variety (H) are of higher socioeconomic status than the speakers of the other. Ferguson insisted on the opposition between diglossia and bilingualism as “the analogous situation where two distinct (related or unrelated) languages are used side by side throughout a speech community, each with a clearly defined role” (Ferguson 1964,: 429). However, recent studies have demonstrated that diglossia in fact coexists with societal bilingualism.\textsuperscript{9}

Diglossia prevails all over Latin America to a greater or lesser degree, with Spanish or Portuguese as official languages and prestige varieties associated with culture and education. Even Paraguay, with its overwhelming number of bilinguals, is a diglossic society. In fact, the traditional characterization of Paraguay as a model bilingual society ever since Rubin (1968) has veiled the subordinate status of Guaraní and the actual compartmentalization of languages in this country.

Diglossia in Latin America is rooted in complex sociopolitical structures inherited from colonial times and reproduced with minor changes up to the present. In this diglossic context, Amerindian speakers learn Spanish or Portuguese in order to participate in the mainstream society and the market economy of their respective countries. The knowledge of Spanish or Portuguese helps people get jobs, buy and

\textsuperscript{9} For a terminological discussion and analysis of the literature on the topic with special attention to the Arab world, see Alan S. Kaye, “Diglossia: the state of the art”, \textit{International Journal of the Sociology of Language} 152 (2001), pp. 117-119.
sell their products, or simply have access to public facilities and services provided by the government. No similar pressure exists for Spanish or Portuguese speakers in Latin America, which explains why multilingualism is a reality only for those whose native language is not Spanish.

Since the foundation of contemporary Latin American republics Amerindian peoples have experienced a permanent pressure for language shift. This pressure increased significantly in the twentieth century at the side of urbanization. The results are not uniform however. Some speech communities abandoned their native languages over the years while others maintained their linguistic heritage. The maintenance in this case was not gratuitous, and many languages experienced important changes in their structure. Language mixing is one of these changes. It includes the massive relexification of vocabulary as found in certain varieties of Nahuatl (cf. Hill and Hill 1986), the extensive use of code-switching strategies as typical of some lects of Paraguayan Guaraní (Gómez Rendón 2007b) or even the creation of mixed varieties (cf. Gómez Rendón 2008b). At the same time, those speech communities which have maintained their native languages show gradient levels of bilingualism among their speakers. One and the same speech community may have a wide variation of Spanish proficiency, from incipient bilingualism in older generations to fluent bilingualism in younger generations. This variation has resulted in a language continuum stretching from monolingual speakers of the native language (if any) to monolingual speakers of the national language (e.g. Muysken 1985: 392). On the other hand, attitudes towards language mixing vary from conservative stands that reject any form of borrowing and codeswitching (e.g. Guaraníete or pure Guaraní in Paraguay) to tolerant or even favorable positions with respect to language mixing (e.g. Media Lengua, a Spanish-Quechua mixed language in Ecuador). Attitudes and perceptions towards language mixing are often determined by social and historical factors rather than linguistic factors per se. The role of social and historical factors in a comprehensive understanding of language contact is the next topic.

2.4. Social and historical aspects of language contact and change

In communities of all sizes, from the tiniest villages to the biggest nations, language contact (which is itself a result of social history) has social consequences (Sarah Thomason, Language Contact: An Introduction 2001: 4)

This quotation highlights the importance played by nonlinguistic factors in the outcomes of contact as well as the nonlinguistic consequences of such outcomes. It also points out the need to include social and historical criteria in the analyses of
contact-induced language change. I address here how social history and nonlinguistic factors result in distinct linguistic outcomes.

As a means of communication, language is instantiated in society through individual verbal behavior. This instantiation is studied by sociolinguistics and makes the point of departure for contact linguistics. Language does not exist outside society and acoustic signals get their meaning only when used in communication. As a result, languages are subject to the specific conditions of their societal usage. Just like speech communities undergo transformations by the influence of external factors, languages experience changes.

An external factor influencing the drift of language change is the colonization of a human group by another group with a different language. In the last five hundred years language contact proliferated all over the world as a result of the expansion of Western civilization. The dissemination of the Spanish language is illustrative of this. Further external factors such as slavery and epidemics played a major role in the linguistic diversity of European colonies through the decimation of aboriginal speech communities. Clearly, the outcomes of contact can be properly understood only through social and historical motivations. Any explanation focusing on linguistic factors only falls rather short.

But linguistic factors do play a role in contact-induced change. Languages are not aggregates of sounds and words but sets of linguistic signs arranged in a system of rules and patterns. To this extent language change is expected to follow the paths of development determined by the linguistic systems involved. In other words, the linguistic system defines the scope of change in contact situations. Contact-induced change is not fundamentally different from internally motivated change; what makes it different are the factors intervening in each case. Internally motivated changes follow the paths traced by the system (e.g. the vowel shift in English or the consonant shift in Germanic languages) just like contact-induced changes occur within the boundaries of the system (e.g. the emergence of mixed varieties of Romani in different European countries).

There is no consensus among scholars concerning the ultimate reasons of language change. Some authors point out that linguistic forces are powerful enough to operate changes in language (Chomsky 1978). Others maintain that linguistic changes are mainly the result of some kind of language contact (Thomason 2001; Winford 2005). It is not my purpose here to take a stand in this debate but to illuminate the complex ways in which social factors interact with linguistic ones. My position with respect to the explanation of contact-induced change is explained in section 2.6. For the time being, suffice it to say that any assessment of the causes of contact-induced language change should make two crucial distinctions: one between linguistic and nonlinguistic causes; and other between primary and secondary causes. The explanation of contact-induced changes as described here is dynamic and relational in nature as it weaves different causes in one single mould.
To give an idea of how complex the intervention of factors may be in language contact and change, I describe a unique feature of contemporary Paraguayan Guaraní: the borrowing of Spanish articles.

Guaraní has been in contact with Spanish in the last four hundred years. As a result of this century-long contact, Paraguayan Guaraní shows numberless traces of Spanish both in the lexicon and the grammar (cf. Chapter 7 & 8). One of these traces is the presence of deictic forms *la* and *lo*. Most students of Paraguayan Guaraní classify these forms as articles (cf. Gregores and Suárez 1967; Trinidad Sanabria 1998; Krivoshein de Canese 2001). Given the close similarity between these forms and the Spanish articles plus the fact that pre-contact Guaraní lacked the category of articles, the contact explanation seems self-evident. After a closer look, however, contact does not explain everything and several questions remain without answer: how do we explain the presence of articles in a language which originally had none?; how do we explain that other languages without articles (e.g. Quechua) which have been in contact with Spanish as long as Guaraní have not borrowed articles at all?; and how are deictic forms *la* and *lo* used in Guaraní? Tentative answers to these questions have been discussed elsewhere (Gómez Rendón 2007b).

In my analysis both forms originate in Spanish articles but they are not used exclusively as articles in Guaraní: other, more frequent uses are anaphoric, cataphoric and elliptical. Moreover, the functions of *la* and *lo* resemble those of native deictics. Some of these native deictics are not used any more in contemporary Guaraní while the rest co-occur with the Spanish deictics. This suggests that the use of *la* and *lo* may be motivated by sociolinguistic and stylistic factors. An inquiry into the origin of this unique case of article borrowing shows that lexical chunks (frozen noun phrases) inserted as code switches in bilingual discourse should have been the source for the insertion of Spanish articles. Clearly, a contact explanation of article borrowing in Guaraní is not self-sufficient. A deeper investigation is required to unveil all the intervening factors and the intricacies of the processes of insertion and re-functionalization of grammatical borrowings.

So far I have insisted upon the importance of integrating social and cultural factors in the explanation of contact-induced change but have not mentioned their nature and scope. Myers-Scotton (2002: 31f) provides a list of six factors contributing to bilingualism which are, in her view, the primary causes of language contact. These factors include military invasion and colonization, living in a border area or an ethnonlinguistic enclave, migration for social and economic reasons, formal education, the spread of international languages and the emergence of ethnic awareness. While Myers-Scotton is right in stressing the interplay of factors, her statement that the cycle of language contact is ignited always by bilingualism is not entirely valid. Indeed, it is bilingualism that is ignited by language contact and different levels of bilingualism result in different linguistic outcomes.
2.5. Contact situations and outcomes

The outcomes of contact may be grouped in three general categories: language shift, language maintenance and language creation. Each setting has certain consequences for the speech community and the languages involved. Shift implies second language acquisition and results in the loss of a community’s native language. Maintenance in contact settings involves second language acquisition without loss of the native language, and mixing of elements from both languages through borrowing and code-switching. Language creation results in the emergence of novel varieties such as bilingual mixed languages, pidgins and creoles. The discussion of shift and maintenance is relevant for the present study inasmuch as both processes are underway in the speech communities investigated. Language creation in the form of mixed languages has been reported for the Ecuadorian Andes (Muysken 1985; Gómez Rendón 2005, 2008b) and Paraguay (Gómez Rendón 2007b) but will not be addressed here.

In the following I pay special attention to borrowing as it is the central topic of the book. I discuss several definitions of borrowing and pin down differences from code-switching. Also, I discuss the relation between borrowing and bilingualism and the processes of linguistic adaptation of loanwords in the recipient language.

2.5.1 Language shift: second language acquisition and language death

The term ‘language shift’ describes the process in which one language – generally the native language – is replaced by another. Language shift may be described for individual speakers or speech communities. It may be gradual or sudden depending on a series of sociopolitical factors. At a societal level language shift is typically unidirectional as only one of the speech communities in contact abandons its native language for that of the other community. More often than not, the shifting community occupies a subordinate place as a result of colonization by a foreign group or domination by one sector of the same society. From this perspective shift is imposed on the subordinate community by the hegemonic group. There are cases in which the dominant group learns the language of the subaltern group (Latin-speaking groups in Greece are a good example) but these are rather exceptional. In either case language shift ends with the demise of one of the languages. In other words, language death is the end point of language shift.

But language contact not always results in language shift. The literature describes a large number of cases in which the subordinate group learned the language of the hegemonic group but did not abandon their own. A number of factors influence the decision of speakers to maintain or abandon their native language. These factors are also responsible for speeding up or slowing down the shift. Ethnolinguistic loyalty and positive attitudes towards one’s language in
general promote maintenance. Negative evaluations of one’s language usually trigger shift. Of course, negative evaluations are not gratuitous but the result of social subordination. Speakers whose social and economic status is lower as a result of their lack of employment and education usually think their language puts them in a disadvantaged position in relation to the speakers of the dominant language and view language shift as the best choice to gain social mobility. Language compartmentalization in diglossic settings usually leads to the loss of the subordinate language and triggers negative evaluations about this language’s capacity to be an appropriate means of communication. To this extent social subordination is the beginning of a vicious circle of language decay that ends with the disappearance of the subordinate language. The circularity of the process has been sketched by authors like Dressler (1982: 325-325) to explain language endangerment, a process closely associated with language shift and death:

**Figure 2.1 A model of language shift and endangerment**

<table>
<thead>
<tr>
<th>social subordination</th>
<th>negative socio-psychological evaluation</th>
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<tr>
<td>↓</td>
<td>↑</td>
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<tr>
<td>sociolinguistic restriction</td>
<td>linguistic decay</td>
</tr>
</tbody>
</table>

Language shift is not a necessary consequence of language contact but an expected result of social subordination. The position of the shifting speech community with respect to other speech communities is decisive. Thomason (2001: 23) identifies four positions in a contact situation which may influence shift or maintenance: indigenous superordinate; migrant superordinate; indigenous subordinate; and migrant subordinate. Each position is associated with either shift or maintenance: for example, an indigenous superordinate group will never shift but a migrant subordinate group will do so rapidly. In general terms, superordinate groups tend to maintain their language while subordinate groups usually shift to the language of the dominant group.

Focusing on Latin America, we find that language shift has been a steady process over the last five centuries. As a result of external and internal colonization in Latin America, ethnolinguistic groups occupy a subordinate position within their national societies. However, their linguistic reactions to subordination are not uniform: on the one side are speech communities that shift to national languages; on the other side are speech communities that maintain their native language in spite of having learned the official language. While language shift leads to societal monolingualism, language maintenance implies a diglossic distribution of languages across communicative spaces (cf. section 2.4).
In the speech communities of this study, language shift occurs differently depending on several factors. One factor inhibiting shift is the larger number of speakers of these languages in comparison with other minority languages. Another factor is the political position of the speech community in the mainstream society. A third factor is the ethnolinguistic loyalty and the awareness of the importance of language for the definition of ethnic identity in a multicultural society.

Quichua speakers make the largest non-Spanish speech community in the country and enjoy a strong political position. Both factors have certainly increased their ethnolinguistic awareness and slowed down language shift. A 1993 survey of the vitality of Highland Quichua (Buttner 1993) found that the native language was widely spoken at family and community levels across provinces while the great majority of Quichua speakers were bilingual to different degrees. The same survey found that language shift is particularly visible in immigrants who move to the cities for work and learn Spanish in order to increase their socioeconomic mobility. Still, urban migration does not necessarily result in language shift. Urban Quichua speakers maintain their native language as a means of communication in domestic spaces. In other words, Quichua in the cities become an in-group language agglutinating speakers of the same sociolinguistic background and furthering group cohesion.

Otomí shows a higher degree of language shift than Quichua (Bakker and Hekking 1999: 6). The speed of this shift varies across dialects and areas. A major cause is the subordinate status of the Otomí speech community in relation to the Spanish-speaking society and other better positioned Indian groups (e.g. Nahuatl speakers). The lack of language revitalization and education programs adds to social subordination to setting the conditions for a rapid shift to Spanish.

The case of Paraguay is notoriously different from the other two and particularly interesting from a sociolinguistic point of view. Paraguay boasts a ninety percent of bilingualism among their national population. The native language (Guaraní) is spoken both in the cities and the countryside, even if there is a high degree of mixture with Spanish and the language occupies a subordinate position vis-à-vis Spanish. Still, language shift to this language is reduced to the minimum.

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10 A reasonable estimate is 1.500.000 Quichua speakers in the highlands and the lowlands.
11 Chimborazo and Imbabura are the provinces with the largest Quichua-speaking population in the country. Chimborazo is the largest with some 250.000 Quichua speakers, followed by Imbabura with some 70.000 speakers (source: www.abyayala.org). These figures differ from those presented by Ethnologue (2005), for which speakers of Quichua in Chimborazo are 1.000.000 while Quichua speakers in Imbabura count 300.000. The differences lie on the fact that Ethnologue figures include the overall ethnic population, i.e. all those Indians who do not speak Quichua but consider themselves Quichua. Reasonable estimates for both provinces are around 350.000 speakers for Chimborazo and 200.000 for Imbabura. In both provinces, however, the number of bilinguals is different, with a higher degree of rudimentary bilingualism in Chimborazo.
Unlike the situation of Quichua in Ecuador and Otomí in Mexico, urban migration in Paraguay does not trigger shift but reinforces Guaraní-Spanish mixing through borrowing and code-switching (cf. Gómez Rendón forthcoming/b). As I show in the following, language mixture is typical of language maintenance in diglossic settings.

### 2.5.2 Language maintenance and mixing

The contact between one language in superordinate position and another in subordinate position does not end necessarily in language shift. Provided a number of conditions are met, subordinate groups can maintain their native languages even if the language of the hegemonic group continues to be the privileged means of communication in the larger society. How stable maintenance may be in diglossic settings remains unclear. If pressure on the subordinate group increases for some reason and the group’s ethnolinguistic loyalty weakens as a result of migration or intermarriage, the conditions are set for a rapid shift to the language of the dominant group. So far there are no sociolinguistic techniques that predict this type of changes. What is clear from the literature is that languages do not remain the same after contact.

Contact-induced language change requires some knowledge of a second language at the level of the speaker and certain degree of bilingualism at the level of society for a rapid dissemination of innovative forms in the speech community. Speakers with higher or lower levels of bilingualism develop a number of communicative strategies, a cover term of which is language mixing.

Language mixing refers to the mixture of lexical and/or grammatical elements of languages in contact. I prefer the term ‘language mixing’ to ‘code mixing’ for two reasons: 1) it is used also to refer to the mixture of registers or dialects; 2) ‘code mixing’ is used by some authors as equivalent to intrasentential codeswitching or switching of languages within the same sentence. The term ‘language mixing’ is therefore less ambiguous. It encompasses a great variety of linguistic phenomena associated with distinct sociolinguistic settings and distinguished on the basis of criteria such as phonetic accommodation, morphosyntactic integration, resemanticization, and frequency of use. Two of these phenomena are borrowing and code-switching.

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12 Assuming that bilingual speakers do not mix their languages is misleading. Quite the opposite, speakers with higher levels of bilingualism tend to mix their languages frequently with a variety of purposes (Thomason 2001: 53f). For an illuminating study of code mixing in the speech of Turkish immigrants in the Netherlands, see Backus (1996).

13 Another cover term equivalent to language mixing is offered by Muysken, who prefer to speak of language interaction “as a very general cover term for different, frequently highly innovative, results of language contact, both involving lexical items (as in code-mixing) and otherwise (e.g. phonological and syntactic interference)” (Muysken 2000: 1). Others like Holmes (1992: 34ff) make no clear distinction between code-mixing and codeswitching.
Borrowing and code-switching: a critical overview of definitions

The need to distinguish borrowing from code-switching was put forward first by Pfaff in a paper that summarized the state of the art on code-switching and borrowing at that time (1978: 295ff). The need to differentiate both phenomena has become more urgent since a great number of studies on borrowing and code-switching have appeared in the last decades.

Haugen pioneered a systematic study of borrowing in his article The Analysis of Linguistic Borrowing (1950). He defined borrowing as “the attempted reproduction in one language of patterns previously found in another” (Haugen 1950: 212). While he admitted that the term failed to describe the metaphor of mixture in proper terms, he believed it offered an advantage for its unambiguous use in linguistics as compared to others of ambivalent currency.\footnote{"The metaphor implied is certainly absurd, since the borrowing takes place without the lender consent or even awareness, and the borrower is under no obligation to repay the loan. One might as well call it stealing, were it not that the owner is deprived of nothing and feels no urge to recover his goods" (Haugen 1950: 211). Some of these ideas led Johansson to propose the term ‘code-copying’ as a more felicitous term. For a discussion of his terminology and the implications for contact research see Johansson (1998).} The term however was never as explicit as Haugen thinks. Since its origin in nineteenth-century historical linguistics, borrowing was used as the dustbin for everything that could not be explained in terms of sound laws (Myers-Scotton 2002: 234). Over the years borrowing was associated with lexical elements and became synonymous of loanword.\footnote{Nowadays both terms are used interchangeably albeit the former is still the cover term. For example, Thomason speaks of lexical, morphological and syntactic borrowing (2001: 70-1). Some authors use grammatical borrowing and syntactic borrowing as synonyms (Campbell 1995) while others speak of the borrowing of word order patterns of one language into another (Heine 2005; Heine and Kuteva 2005).} However, borrowing and loanword do not refer to the same things. Borrowing refers to the linguistic elements and the process of incorporation of these elements into the recipient language. Loanword refers to the linguistic elements proper. Still, some authors suggest a process behind such compounds as loan blend, loan shift and loan translation (Crystal 2006: 275). Henceforth I use borrowing or loanword to refer to linguistic units being borrowed and borrowing process to refer otherwise.

Two further comments about terminology are pertinent. One has to do with the use made by Weinreich (1956) of the term interference as synonymous with borrowing. In his use of the word, interference refers both to lexical and structural (grammatical) interference:

The ways in which one vocabulary can interfere with another are various. Given two languages, A and B morphemes may be transferred
from A into B, or B morphemes may be used in new designative functions on the model of A-morphemes with whose content they are identified; finally in the case of compound lexical elements, both processes may be combined [...] The parallelism with the formulation of grammatical interference is evident. Equivalence of designative function here corresponds to identity of grammatical function in the previous chapter. The separation of the grammatical and lexical aspects of interference presupposes, of course, that many morphemes do have a designative function distinct from their purely grammatical function. (Weinreich 1968: 47)

The second comment concerns a similar use of the term interference in Thomason (2001). This author considers interference a cover term for borrowing and shift-induced interference. The decisive criterion is the occurrence of imperfect language learning. When imperfect learning of a second language plays no role and no language shift takes place, the outcome of contact is the borrowing of linguistic features from another language. When imperfect learning does play a role and language shift is in progress, the outcome of contact is shift-induced interference produced by native speakers of one language in the language they are learning. In other words, borrowing is a mirror image of interference because the effects on language are similar but their direction is the opposite. Borrowing affects first the lexicon and then morphology, syntax and phonology, provided contact is intense enough. Interference begins with grammar and affects the lexicon only later, though not necessarily. Thomason admits possible exceptions to the direction of both processes. In particular she points out their simultaneous occurrence in certain contexts:

A possible exception to this generalization might occur if the shifting group is a superstrate, a socio-economically dominant group, rather than a substrate [...] since in most group shift situations it is not the dominant group that shifts, however, most cases of shift-induced interference support the basic prediction. In fact, it is fairly easy to find examples of mutual interference, borrowing by dominant-language speakers and shift-induced interference by subordinate-language speakers that directly illustrate the contrast between the two types of interference. (Thomason 2001: 75f)

Unlike the study of linguistic borrowing, that of code-switching is of relatively recent origin in linguistics. Still, it has received increasing attention by linguists and sociolinguists in the last decades for the social functions it performs and the insight it offers into the processing of language in the bilingual mind. Even if codeswitching is not the topic of this book, it is necessary to make a distinction between codeswitching and borrowing as two different mixing strategies in bilingual
discourse. From the discussion of several definitions I identify differences between codeswitching and borrowing on the basis of linguistic features. These are used as heuristic criteria for the analysis of language data in the frame of this study.

Gumperz (1981) defined codeswitching in broad terms as “the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems” (1981: 59). More recently, Thomason has defined codeswitching as “the use of material from two (or more) languages by a single speaker in the same conversation” (2001: 132). Both definitions are equivalent in principle, but differences can be identified as well. First of all, Gumperz’ definition speaks of grammatical systems or subsystems while Thomason speaks of languages. While codeswitching occurs in languages, dialects and registers, a great number of sociolinguistic studies on codeswitching deal with occupational and domestic varieties rather than with languages in general. The second difference lies on the inclusion of more than two codes (be it languages, dialects or registers) in Thomason’s definition. The third difference is that codeswitching occurs within the scope of the conversation for Thomason but within the same speech for Gumperz. If we consider speech and conversation synonyms of speech event, both definitions are then roughly equivalent. What is crucial anyway is that codeswitching occurs within one exchange and not across turns.

Certain definitions of codeswitching make a distinction between intersentential switching (which occurs at sentence boundaries) and intrasentential switching (which occurs within the sentence). Others include (lexical) borrowing as one type of codeswitching (Muysken 2000: 32). In my view, borrowing and codeswitching are distinguished as separate phenomena on the basis of several linguistic criteria (cf. infra).

The relation of codeswitching to diglossia and bilingualism deserves some comment. Ideally, a diglossic situation in which the use of languages is compartmentalized impedes the emergence of codeswitching. To this extent diglossia and codeswitching exclude each other (Romaine 1989: 111). Recent studies show not only that both phenomena are not opposite, but also that bilingualism does not necessarily imply codeswitching. The results from our investigation provide additional evidence of this statement.

Borrowing and code-switching: differences and criteria for distinction

The discussion about the best procedure to differentiate borrowing from codeswitching is not settled. Still, several criteria have been put forward to establish

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16 This definition has been adopted, among others, by Suzanne Romaine (1989: 111).
17 Sociolinguists use the term ‘style shifting’ as interchangeable with codeswitching (cf. Crystal 2006: 79).
such distinction (Poplack et al. 1987; Romaine 1989; Poplack and Meecham 1998; Thomason 2001). The following is an overview of the relevant literature.

One way to make a distinction between codeswitching and borrowing is by establishing the bilingual or monolingual condition of the speaker. If language mixing occurs in monolingual speech, the process at work is borrowing. If mixing phenomena occur in bilingual speech, the process involved is codeswitching. The reason is simple: for codeswitching to occur, the speaker must know both linguistic systems; for borrowing to occur, only one system is required.

Another way to distinguish codeswitching from borrowing is the frequency of foreign elements. Foreign elements that disseminate in the speech community and recur in individual speech become established borrowings as opposed to code switches that are more idiosyncratic to the extent they serve different discursive, social and psychological purposes. There exists, however, a special type of borrowings identified in the literature as nonce borrowings (cf. Poplack and Meechan 1995) or single occurring elements (Myers-Scotton 2002: 153ff). Nonce borrowings are characterized as occurring only once in discourse and being of limited distribution in the speech community. They are single (content) words perfectly integrated to the morphology and syntax of the receiving language despite their non-recurrence in individual speech. Unlike established borrowings which are fully accommodated to the phonological system of the recipient language, the phonological integration of nonce borrowings is incomplete. The question is therefore how to distinguish nonce borrowings from code-switches. For some authors the answer is the structural integration of the foreign elements (Poplack et al. 1987). Often referred to as nativization, the integration of foreign elements is the third criterion to distinguish borrowing from code-switching: only singly occurring

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18 Poplack and Meechan (1998), on the other hand, maintain that singly occurring forms are nonce borrowings and not code switches. Far from being definitive, their proposal leaves a number of questions without answer, such as how to distinguish between established borrowings and nonce borrowings.

19 One related topic not addressed here for reasons of space but relevant to the effects of contact-induced language change is the idea that codeswitching results in borrowing through the crystallization of complex lexical items or chunks. For a discussion of the possible causal relation between both phenomena and their relation to contact-induced language change, see Backus (2005) and Field (2005). Field is particularly clear about the non-causal relation not only between codeswitching and borrowing but also between both phenomena and contact-induced language change (p. 341s).

20 Bilingual speakers too may produce monolingual discourse if the use of languages is compartmentalized as typical of diglossic situations. Cf. supra.

21 Types of codeswitching are, among others, topic switching, metaphorical switching, switching for affective functions or simply switching for flagging group identity. For a discussion of codeswitching types, see Romaine (1989: 112ff) and Holmes (2001: 34ff).

22 In a different perspective, nonce borrowings may result simply from the smallness of typical corpora. Thus, either they are infrequent borrowings – an early attestation of a new loanword – or indeed an instance of a rare code switch (Dik Bakker, p.c.).
elements adapted to the phonological, morphological and syntactic patterns of the recipient language are borrowings; those which fail to adapt are code switches.

However useful these criteria are for a distinction between (nonce) borrowings and code-switches, both of them are far from providing definitive answers. The reason is twofold. First, the frequency of occurrence of foreign elements at individual and societal levels – which is an index of their nativization – is difficult to measure with accuracy. Second, phonological nativization may be a function of the speaker’s bilingualism and newer loanwords may not be nativized anymore. This view is sustained by Thomason (2001: 135) and corroborated by my data of Quichua and Guaraní, where recent Spanish loanwords are widespread in social discourse and adapted to the morphology and syntax of the recipient language even if they remain phonologically unintegrated.

Further criteria for distinguishing borrowing from codeswitching are Sankoff and Poplack’s (1981) free morpheme constraint and equivalence constraint. The first constraint establishes that “a switch may not occur between a bound morpheme and a lexical form unless the lexical form has been phonologically integrated into the language of the morpheme” (Romaine 1989: 115). The equivalence constraint “predicts that code-switches will tend to occur at points where the juxtaposition of elements from the two languages does not violate a syntactic rule of either language” (op. cit. 116). Both constraints have been shown to fail in the case of hybrid forms (cf. Eliassion 1990; Moffat and Milroy 1992) and my data corroborate the non-applicability of these constrains in several cases.

In the cross-linguistic analysis of borrowing pursued in this study the following criteria were followed in order to identify foreign elements in discourse:

a) Morphological and syntactic integration in the recipient language, including participation in inflectional and derivational processes and native word order patterns and constructions.

b) Phonological adaptation to the recipient language, including raising and lowering of vowels, observance of stress patterns and syllable structure, and other phonotactic criteria.

c) Resemanticization of foreign elements in the recipient language.

d) Frequency of occurrence of foreign elements in one speaker and across speakers.

e) Frequency of occurrence of word classes in one speaker and across speakers.

Despite the overall applicability of these criteria, there are frozen idiomatic expressions which fail to make a clear case for borrowing or code-switching. These and other problems in the analysis of the data are addressed in Chapter 4.
2.6. An explanatory model of contact-induced language change through borrowing

In this section I resume the discussion about the role of linguistic and nonlinguistic causes in the explanation of contact-induced language change. After some terminological distinctions, I outline a multi-causative model for the explanation of borrowing and discuss the types of causes involved (motivations, factors and conditions) and their interplay in the shaping of linguistic outcomes.

2.6.1 Some terminological distinctions

In functional explanations there is an indiscriminate use of terminology referring to the causes of language change. Reasons, motives, motivations, factors, constraints and triggers are some of the most used terms. They are used interchangeably more often than not and without any previous discussion. The impression I have from reviewing most of the literature on the topic is that authors usually take for granted what these terms refer to. My position is that any investigation into the causes of contact-induced language change must define the use of these terms in the frame of an explanatory model.

The model presented in this section is functional in nature as it explains language change in general and borrowing in particular as a result of a series of causes motivated by contact among languages. The model is based on certain terminological distinctions that seek to identify the causes of contact-induced language change in more precise terms. These distinctions are based on the following definitions:

- **Cause**: a cover term for any nonlinguistic circumstance or any linguistic element which produces or prevents changes in language. Causes are classified in primary, secondary and tertiary. Primary causes correspond to the ultimate explanations of language change, i.e. those circumstances which first unchain a series of events leading to change. Secondary and tertiary causes add to primary ones to advance or prevent changes in language.

- **Motivation**: a term referring to primary causes. Motivations are nonlinguistic and include social, geographical and communicative. Motivations influence secondary and tertiary causes and induce language change even if these causes are absent.

23 Most books on contact linguistics do not include a glossary of terms. And if they do, they do not provide full explanations of such terms. Thomason’s *Contact Linguistics* (2001), for example, includes an extensive glossary of terms but none of those mentioned above even though they are used throughout the book.
• **Factor**: a term referring to secondary causes. Factors are linguistic (the system of language) and sociolinguistic (speech community, language loyalty, linguistic self-perception, etc.). Factors are those circumstances or elements which *inhibit or promote* language change. Factors do not act on their own but interplay with motivations (primary causes) to produce language change. Their influence may be either increased by promoting conditions (tertiary causes) or reduced by inhibiting conditions (tertiary causes). Inhibiting conditions are sometimes referred to as constraints in the literature while promoting conditions are often equivalent to triggers. Here I make a fundamental distinction between factors (secondary causes) on the one hand, and triggers and constraints (tertiary causes) on the other.

• **Conditions**: a term referring to tertiary causes. Conditions are linguistic (speech events, word frequency in the recipient language) and sociolinguistic (speaker variables such as age, gender or education). Conditions are those circumstances or elements which *speed up or slow down* language change. They are classified as positive or negative accordingly. Conditions do not act on their own but interact with factors in such a way that the influence of factors is increased or reduced.

The hierarchy of causes goes from primary (motivations) to secondary (factors) to tertiary (conditions). There is a general primacy of nonlinguistic causes over linguistic ones at all levels. This predominance is based on the notion that nonlinguistic circumstances are the ultimate causes of contact-induced language change. Nonlinguistic causes are also distinguished from linguistic ones in that the speaker is aware of the influence of nonlinguistic causes on his/her linguistic behavior (e.g. identity, loyalty, prestige) while linguistic causes usually act beyond the speaker’s consciousness (e.g. markedness, inflection, paradigmaticity, etc.). On the other hand, the interplay of causes is not excluded provided the primacy of nonlinguistic causes is observed. This interplay is not always symmetrical. Motivations may influence factors but not the opposite, but factors and conditions may influence each other. Motivations, factors and conditions of linguistic borrowing are discussed in the following section in the context of an explanatory model of contact-induced language change.

### 2.6.2. A functional explanation of contact-induced language change

Functional explanations of language change are based on the notion that languages are *not* autonomous entities evolving on their own but the result of socio-communicative needs. Not leaving aside the inherently systematic organization of language as a coherent set of elements governed by rules and patterns, functionalism in linguistics privileges a holistic view that comprehends not only rules and patterns...
but also concrete uses and communicative needs as determined by social praxis. In this perspective language is viewed as an individual behavior anchored in social practices. Consequently, changes in language are interpreted as adaptations of the linguistic system to the changing circumstances of society, which determine the communicative needs of individual speakers and speech communities. These adaptations are by no means random but obey the constraints of the linguistic system. In other words, changes in the linguistic system are externally motivated but internally ruled. This premise sustains most functional views of language change and embodies the paradigm of the present investigation, the goal of which is to provide support to it through the typological and sociolinguistic analysis of empirical data.

The model presented here is framed in the Principle of Functional explanation as elaborated by Dik (1986). This author studied the different elements that enter into a functionalist explanation of language change and grouped such elements in different categories ordered from the nonlinguistic to the linguistic. These hierarchies form the basis of the Principle of Functional Explanation.

**Figure 2.2 The Principle of Functional Explanation** (adapted from Dik 1986)

<table>
<thead>
<tr>
<th>Nonlinguistic: Social</th>
<th>&gt;</th>
<th>Areal</th>
<th>&gt;</th>
<th>Discourse</th>
<th>&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistic Pragmatic</td>
<td>&gt;</td>
<td>Semantic</td>
<td>&gt;</td>
<td>Formal</td>
<td>&gt;</td>
</tr>
<tr>
<td>Formal Syntactic</td>
<td>&gt;</td>
<td>Morphological</td>
<td>&gt;</td>
<td>Phonological</td>
<td></td>
</tr>
</tbody>
</table>

The Principle of Functional Explanation consists of one hierarchy containing three different subhierarchies of nonlinguistic, linguistic and formal causes. In this model nonlinguistic causes have primacy over linguistic ones. Within linguistic causes, the functional, pragmatic and semantic factors are placed higher in the hierarchy than formal factors of syntactic, morphological and phonological character. Bakker and Hekking (1999) offer a contact-induced change interpretation of the Principle which extends the model discussed here. For these authors “the higher factors give the motivation for languages to adopt and incorporate external elements [while] the lower factors provide the constraints on processes of language change while at the same time motivating still lower factors in a cascade-like way” (Bakker and Hekking 1999: 4). In Bakker *et al* (2008) the Principle is collapsed in one hierarchy in somewhat different terms. The linguistic part of this hierarchy corresponds to the levels of grammar as shown below:

**Figure 2.3. The Principle of Functional Explanation**
Both hierarchies distinguish between nonlinguistic and linguistic causes but still are different. Bakker et al do not include areal and discursive factors in the nonlinguistic subhierarchy. As far as formal factors are concerned, both hierarchies include three levels corresponding to the subsystems of grammar. Also, both hierarchies place social causes at the top and formal (linguistic) factors at the bottom, with communicative and discursive causes in the middle. The same arrangement of causes is preserved in the model outlined in Figure 2.4. The main characteristics of this model are summarized as follows:

a) The model makes two crucial distinctions: one between primary, secondary and tertiary causes; and another between motivations, factors and conditions. Each causal element occupies a place in the model which corresponds to a place in the hierarchies proposed by Dik (1986) and Bakker et al (2008).

b) At the higher level, motivations are classified into social, physical or discursive. At lower level, factors and conditions are grouped in linguistic and sociolinguistic.

c) The nonlinguistic-linguistic distinction traverses all the levels of causation and separates motivations from factors and conditions. At the same time, the linguistic-sociolinguistic distinction establishes a further division within factors and conditions.

d) The model is dynamic to the extent that feedback is permitted at different levels of causation. In general, motivations and factors work together, and so do factors and triggers. However, motivations may either intensify or cancel the contribution of linguistic and sociolinguistic factors and conditions. Also, the effect of factors may be intensified or weakened by conditions, just like these may be intensified or eventually canceled by factors.

e) At the lowest level, conditions do not effect changes directly but act through factors. Similarly, factors induce language change through motivations. This means that motivations determine the eventual effects of factors and triggers and the final shape of contact-induced change.

f) Even though motivations, factors and conditions are ordered in a hierarchy, the model enables the interplay of causal elements provided the hierarchy is observed. This interplay reflects the dynamics and the multi-causality of the model, with different elements contributing to effect changes in language but each at its own level.
FIGURE 2.4. CAUSATION MODEL OF CONTACT-INDUCED CHANGE

C A U S E S

PRIMARY

SECONDARY

TERTIARY

MOTIVATIONS
(non-linguistic):
Positive: ultimate causes of borrowing
Negative: ultimate causes of non-borrowing

CONDITIONS
(linguistic/non-linguistic):
Positive: speed up borrowing
Negative: slow down borrowing

FACTORS
(linguistic/non-linguistic):
Positive: promote borrowing
Negative: inhibit borrowing

Sociolinguistic: attitudes, perceptions, ethnolinguistic loyalty, prestige, etc.
Linguistic: typological similarity, word class equivalence, inflection, structural gaps, markedness, transitivity, frequency in source language, paradigmaticity etc.

Social: cultural, economic, identity, ethnic awareness, etc.
Geographical: areal, geographical, demographic
Communicative: discursive, pragmatic, communicational

Sociolinguistic: age, gender, education, occupation or mobility of speakers
Linguistic: frequency of linguistic forms in recipient language; speech events, etc.

LINGUISTIC BORROWING
In the following I illustrate each type of cause by means of examples focused on linguistic borrowing in order to show the interplay of motivations, factors and conditions.

Motivations of language change

Motivations are by definition non linguistic. They may be of three kinds, namely, social, geographical and communicative. Social motivations are those which have to do with changes in the structure of human groups. An example of a social motivation for language change is the reorganization of a colonized society by the colonizers. This reorganization may concern, among other things, the use of language in education. Inca rulers in the Andes used to bring young children of the local elites to their schools in Cuzco where they were raised in the Inca language and became bilingual in their parents’ language and Quechua (Manheim 1991). Social reorganization in colonial settings may also affect the use of language in public spheres. After the conquest of Tawantinsuyu, Spanish replaced Quechua as the official language of the former Inca Empire and became obligatory in official transactions, even for those who did not speak the language – who were the great majority of the Indian population in the first decades of colonization – thereby introducing an important pressure for the learning of Spanish. Other social motivations include migration and social mobility. In these cases individual speakers usually adopt bilingualism as a strategy for accommodating to the state of affairs, with the result of their languages influencing each other in different ways. Forced migration was common during the Inca rule in the Andes. It consisted in the uprooting of insurgent populations from their original places to other parts of the empire with the purpose of suppressing rebellions or helping the Inca take control of the new colonies. This practice explains the existence of a few Aymara words in several dialects of Ecuadorian Quichua but also the occurrence of Cañari words in Bolivia in spite of the thousands of miles that separate the respective speech communities.\footnote{Cañari was one of the nine languages spoken in Ecuador before Inca invasion. Although no grammar or dictionaries of these languages exist, their presence is well recorded by history, toponomy and anthroponomy. The most extensive study so far on the aboriginal languages of Pre-Inca Ecuador is due to Jacinto Jijón y Caamaño (1940).} This practice had important demographical consequences resulting in the transformation of the linguistic landscape of the northern Andes.

No less important for language change are geographical motivations. These include areal, demographical and geographical proper. Areal motivations are related to the distribution of peoples and languages in a geographical space. They determine contact between peoples who speak dialects of the same language or languages from different families depending on their distribution over a specific territory. The distribution of languages of the Guaraní family along the eastern Atlantic coast of
South America called the attention of the first Portuguese settlers, who became aware of the similarities across these languages and used one of them (Tupi) for the colonization of the Atlantic coast and faraway places in the heart of the Amazon basin (Holm 1989). Over the years Tupi became the lingua franca of large areas in Brazil and influenced non-Guarani languages. In the case of borrowing areal motivations explain the occurrence of allochthonous substrata in languages with a long history of contact with neighboring peoples. The existence of loanwords from Tsafiki (Barbacoan) in Imbabura Quichua is explained by the areal distribution of Barbacoan languages in Northern Ecuador in the past (Gómez Rendón and Adelaar, forthcoming).

Demographical motivations induce language change to the extent that the size of speech communities determines the rate and diffusion of contact-induced changes. Demographical motivations also influence group cohesion and affect ethnolinguistic loyalty and awareness. Demographic motivations are crucial in cases of language death as a result of a rapid demographical collapse caused by extinction or genocide. Reports on catastrophic events influencing language change are not uncommon. Dixon (1991: 241) mentions the extinction of the Tamboran language as a result of a volcanic eruption. Similarly, glottocide in Africa has been reported within the Khoisan language family and is responsible for the high rates of language shift and death until today in the area (Tsunoda 2005: 43). In the Americas, extinction and glottocide as motivations for language contact and change resulted from epidemic outbreaks in the first years of European colonization or slavery in rubber estates during the last half of the nineteenth century (Trujillo 1998: 460).

Geographical motivations proper have to do with the milieu of speech communities, the use of natural resources and the patterns of settlement. Geographical motivations determine linguistic processes such as dialectalization, language death or language contact with other speech communities. The speech community of Sia Pedee (Chocoan) in Ecuador is illustrative of this. Colombian Sia Pedee speakers migrated to Ecuador motivated by the exhaustion of resources in their original milieu by non-Indian colonization (Prodepine 1999). Because of their separation from the larger Sia Pedee community in Colombia and their everyday contact with speakers of Spanish, the Ecuadorian variety of Sia Pedee shows high degrees of Spanish borrowing and codeswitching accompanied by rampant levels of Hispanicization in the younger generations. According to the last sociolinguistic survey, the process of language shift in the Sia Pedee community will be completed in two generations with the eventual demise of the native language (Gómez Rendón 2006c).

Finally, communicative motivations as primary causes of contact-induced change encompass a rich gamut of causes which have to do with the transmission and receipt of information among speakers of one or different linguistic systems (languages, dialects, sociolects, registers). Communicative motivations include
discursive such as those determined by the organization of messages through language; pragmatic motivations such as those associated with the use of the linguistic system in specific social contexts; and communicational motivations such as those determined by the need to transmit messages in order to perform tasks in social contexts. An example of how communicative motivations induce language change in contact situations is illustrated by the first European conquerors in the Americas. They usually seized young male Indians in order to teach them Spanish and train them as translators. These lenguas (Sp. tongues) played a decisive role in the conquest as mediators between the Spanish monolingual conquerors and the Amerindian monolingual population. Later on, the lenguas became linguistic leaders in their native communities and agents of language changes induced by contact. Another situation in which communication motivated language change is the trade of African slaves. Slave trade usually began with the uprooting of entire speech communities and their moving overseas. During their transportation and their subsequent settlement speakers from different linguistic backgrounds found themselves forced to communicate with each other for practical reasons. The result was the emergence of a number of pidgins and creoles used by slaves for in-group communication.

Nonlinguistic motivations are the ultimate causes of language contact and deserve special attention in any model of contact-induced language change. For the sake of analysis I have separated social from areal, geographical and demographic motivations, but all of them work together in scenarios of contact and should be considered as acting concurrently.

Factors of language change

Factors are one type of secondary causes which effect language change through motivations and are influenced by the latter. Factors may be linguistic and sociolinguistic and promote or inhibit contact-induced changes. The different types of factors are sketched in Figure 2.5.

Figure 2.5 Types of factors inducing language change

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The attitude of speakers towards their language is one of the most important sociolinguistic factors influencing borrowing. Attitudes generally include sociolinguistic self-perception, ethnolinguistic loyalty, and linguistic awareness. The importance of sociolinguistic factors is well exemplified in the case of the Quichua-speaking community of Imbabura. The positive attitude of Imbabura Quichua speakers towards their native language and their ethnolinguistic loyalty are crucial factors in the maintenance of Quichua as compared to other Quichua communities with higher rates of language shift. Attitudes toward language mixing can be influential as well. Some speakers of Jopara (a heavily Hispanicized variety of Guarani) disdain their speech for being ‘corrupted’ and cultivate purism through the invention of neologisms. In this case a negative attitude towards language mixing inhibits contact-induced change. On the other hand, language mixing is considered positive in certain multilingual settings to the extent that it facilitates intercultural communication.

The prestige associated with foreign elements is a further sociolinguistic factor promoting linguistic borrowing. Zimmerman notes that lexical borrowing from Spanish in Otomí was induced by the prestige associated with linguistic forms of the European language in native discourse (Zimmerman 1999: 299-305). Of course, prestige is relative to the position of one of the languages in contact and results in diglossic use. This is obviously the case of Spanish and Otomí in Mexico. However, my view of prestige differs from Zimmermann’s in one important respect. From his analysis it becomes clear that prestige is a primary cause of linguistic borrowing whereas my model has prestige only as a promoting factor less influential than other social and historical factors.

Linguistic factors inhibit or promote language change in contact situations. One factor can operate in both directions depending on the presence or absence of the linguistic feature in question. As noted above, the literature on language contact often treats inhibiting linguistic factors as constraints. Thus, typological distance between the source language and the recipient language is an inhibiting factor in the case of borrowing: the lack of a grammatical category in the recipient language may inhibit the borrowing of items from this category. Accordingly, a postpositional language shall not borrow prepositions. Also, a language without grammatical gender shall not borrow gender markers as distinctive, productive units of meaning, even if it borrows masculine or feminine nouns or adjectives. Similar constraints are operative when phonological distinctions are absent in the recipient language which are otherwise present in lexical elements from the source language. In this case borrowings undergo a process of phonetic accommodation to the phonology of the recipient language. These examples should not be read, however, as if inhibiting factors prevent languages from borrowing lexical or grammatical elements which may be alien to their linguistic systems. There are a great number of cases in which foreign elements are borrowed in spite of their non-compatibility with the linguistic
system of the recipient language. The borrowing of Spanish prepositions in Otomí, a language without this category, is an example. The borrowing of Spanish articles in Guarani is another. More powerful (social) causes are at work in these particular cases.

Inflection is often mentioned in language contact studies as a linguistic factor inhibiting borrowing. The argument is that borrowing elements from inflectional languages is particularly difficult because form and meaning are not univocally equivalent, i.e. one bound form corresponds to several grammatical meanings (e.g. aspect, person and number). In contrast, agglutinative languages do show equivalence between form and meaning so that one morpheme usually corresponds to one meaning. Therefore, it is assumed that agglutinative languages shall borrow bound morphemes from inflectional languages only seldom. Of course, it is not only a question of morphological typology but also of the relative social position of one language with respect to the other. Nonlinguistic motivations may induce changes even if opposite to the morphological profile of the recipient language. Guarani and Quechua have borrowed many verbs from Spanish but not bound forms of verbal inflection. These forms have been borrowed, however, in cases of long-term contact including Southern varieties of Quechua (cf. Campbell 1987; Campbell 1993; Carranza-Romero 1998; Thomason 2001). In general, inhibiting linguistic factors should be understood as forces which resist but not cancel borrowing, the final outcome depending on a number of other motivations and factors.

Linguistic factors that promote contact-induced language change include, among others, typological similarity, structural gaps, markedness, word class equivalence and frequency in the source language.

It is often assumed that typologically similar languages offer better structural conditions for borrowing. Typological similarity is no doubt operative in borrowing, but in-depth studies are required to establish the specific contribution of typology. Similarly, structural gaps favor borrowing to the extent they provide blank spaces to be filled by elements from another language. While linguists usually explain a number of contact phenomena by means of structural gaps, their explanatory value is controversial to say the least. The notion of ‘gap’ is relative and may lead to misinterpretations, as it suggests that some languages are more ‘complete’ and developed than others without a certain category or linguistic element.²

² Because the lack of certain linguistic features in one language is determined only with reference to the features of another language, the notion of gap implies structural dissimilarities between two different linguistic systems rather than structural insufficiencies in one of them. It is relevant to speak of a non-structural communicative or socio-cultural gap only when structural dissimilarities between two languages in contact produce communicative failures or the unsuccessful transmission of messages between speakers of these languages. Also, because any function in language implies the use of linguistic material to perform a communicative task it is relevant to speak of functional gaps only when structural
Markedness is another linguistic factor often mentioned as promoting borrowing. In principle, foreign items are more borrowable when they are not marked for a given linguistic feature. Take the example of marked nouns versus unmarked nouns in Spanish. According to the markedness argument, singular nouns are more borrowable than plural nouns because their word structure is unmarked and therefore more transparent to speakers of the recipient language. A further promoting factor of linguistic nature is paradigmaticity. The argument holds that the openness of a lexical or morphological class in the recipient language facilitates the borrowing of elements belonging to such class. In this perspective, open classes (e.g. nouns, verbs) are more borrowable than closed classes (e.g. pronouns, articles). This is related in turn to word class equivalence. Traditional linguistic theory considered word classes as cross-linguistic categories. However, several authors have demonstrated that lexical classes are language-specific (Schachter 1985; Hengeveld 1992; Hengeveld et al 2004). Hengeveld (1992) for instance shows that lexical classes are unevenly distributed in a sample of sixty languages. Hengeveld’s theory of parts of speech is discussed in detail in section 3.2.

The last promoting factor of linguistic nature mentioned here is frequency in the source language. Because frequently used forms are more ‘visible’ to the borrower and more relevant from a communicative point of view, it is not unwise to assume that their borrowability is greater than that of less frequent forms which are less instrumental in communication. Obviously, any validation of this hypothesis requires a corpus-based study of frequencies in the source language.

Muysken and van Hout (1994) have evaluated most of the aforementioned factors thorough the statistical analysis of Spanish borrowings in Bolivian Quechua. Their conclusions are the following:

dissimilarities result in a failure by one language to convey the semantic and pragmatic meanings expressed by the linguistic structure of the other language in contact. This failure results in borrowing alien linguistic material to transmit the intended meanings. This view goes beyond a univocal semantic relation between form and meaning because two different forms may have the same referent but each is associated with a different set of cultural and pragmatic values. This is indeed the origin of couplets, composed of native and borrowed lexemes which signify one and the same object but from different perspectives. In the case of Otomi in contact with Spanish, Bakker and Hekking show that “more often than not, the [Spanish] loan turns out to be semantically more specific than the original element, at least in the reading in which it is borrowed” (Bakker and Hekking 1999: 3). While borrowing can be considered enrichment in this case, it is neither structurally nor functionally “necessary” for the borrowing language. Furthermore, the use of the loanword is felicitous only to the extent that it is associated with the cultural value given by the Spanish-speaking society. It becomes clear, therefore, that the notion of “gap” is potentially misleading and should be used only with extreme caution.

3 Still, I have reported pronoun borrowing in Imbabura Media Lengua (Gómez Rendón 2005; 2008b) and article borrowing in Guaraní Jopara (Gómez Rendón 2007b).
“The B values show that paradigmaticity is the strongest structural factor in our model. The second strongest structural factor is inflection in the donor language. Frequency has a (somewhat weaker effect), whereas peripherality has a clear effect, but opposite to what we predicted. […] The most difficult categories to borrow consist of functional elements that are nominal in nature and form tightly organized subsystems. […] We can conclude that the constraints model, operating on the basis of a comparison between a donor and a recipient language corpus, seems to be a promising way of studying the process of lexical borrowing. The results may be interpreted in such a way as to set up a new hierarchy of borrowability” (Muysken and van Hout 1994: 60-61).

Muysken and van Hout warn us about generalizing these conclusions to language pairs other than Spanish and Bolivian Quechua. Still, their analysis sheds light on the effective incidence of linguistic factors on the borrowing process. While these factors have been often addressed in previous studies, none of them has pondered their contribution in quantitative terms on the basis of a corpus. My purpose here is to advance a quantitative analysis of linguistic factors on the basis of large corpora of spontaneous speech collected for three typologically different languages.

**Conditions that speed up or slow down language change**

The last category of causation corresponds to conditions. Conditions speed up or slow down contact-induced language change in specific situations. They occupy the lowest position in the hierarchy and their influence is mediated by motivations and factors. Because conditions do not operate on their own, motivations and factors intervene every time a condition is at work. To this extent conditions differ from factors by a) their dependent action, and b) the degree of influence they exert on the borrowing process.

From the point of view of the individual speaker, sociolinguistic conditions such as age, gender, education and spatial mobility influence the degree borrowing. Generally speaking, older generations are more conservative in their linguistic usage than younger ones, and women usually preserve more archaic forms in their speech than men. The majority of Quichua monolinguals are older women who have never left their home communities. Traditionally, gender-based views of language change in the Andes consider women as depositories of the linguistic heritage of their communities and men as innovators and shifters. But gender roles are rapidly changing in the Andes and today it is not uncommon to find bilingual young women who migrate to the cities on a regular basis for trade or waged-labor and become agents of language change in their communities. In fact, the role of women was
decisive in the emergence and dissemination of Media Lengua in Imbabura (Gómez Rendón 2005: 46).

The role of education is decisive for contact-induced language change. In the Andes, educated Quechua speakers are usually more conservative than non-educated speakers. To be sure, purism is characteristic of literate speakers. The majority of members from institutions meant to preserve the purity of the Quechua language in the Andes, such as the Academia Mayor de la Lengua Quechua del Cosco in Peru or the newborn Academia de la Lengua Quichua in Ecuador, are Spanish-Quechua bilinguals with university education.4 On the other hand, the position of literate speakers in Paraguay is ambiguous with respect to the use of conservative or innovative forms. Interestingly enough, purism may produce the opposite of the desired effect because illiterate speakers unaware of non-mixed choices prefer to switch to the dominant language instead of mixing (Floyd 2005). Fortunately, the effects of purism practiced in academic circles are limited to these circles for the most part. Purism is more influencing if fostered by the speech community itself and motivated by social circumstances such as ethnic awareness or ethnolinguistic loyalty. In this case purism is not simply a condition but a factor inhibiting language contact and change.

A good candidate for a linguistic condition is word frequency in the recipient language. It is different from word frequency in the source language (cf. supra) for the position it occupies in the hierarchy: frequency in the recipient language is a condition of contact-induced change while frequency in the source language is a factor. The reason for such a distinction is that word frequency in the recipient language is further determined by factors such as markedness or paradigmaticity (Muysken and van Hout 1994: 54).

The frequency of an element in the recipient language may influence borrowing in two ways: first, if a native form is very frequent in the recipient language, it may be resistant to be replaced by a borrowing; second, if a native form is very frequent in the recipient language but has two or more meanings, a borrowed form may take over the less common meaning. The first prediction has been demonstrated substantially by Muysken and van Hout (1994: 53). The second prediction is harder to test. To the best of my knowledge there is no statistical study of a bilingual corpus which analyses the semantic specialization of borrowings in the recipient language. The occurrence of doublets from two different languages might be considered indirect evidence. Traditional Nahuatl used doublets as a stylistic strategy (Silver and Miller 1997: 108). Contemporary varieties of this language keep using doublets, but in this case one member of the doublet comes from Spanish and its meaning

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4 Academic purism may result in neologisms which violate the language’s own rules of word formation. For an overview of purism and language contact as part of linguistic ideologies in the Andes, see Howard (2007: 345-348).
differs slightly from that of the native element. Similar findings are reported for Otomí, one of the languages of this study (cf. Bakker and Hekking 1999).

2.6 Summary

From the assumption that any definition of language contact must integrate linguistic and nonlinguistic elements, I approach contact phenomena from a perspective that links sociocultural settings to linguistic outcomes. The interaction of societal and individual aspects is reflected on the ways in which individual bilingualism and societal diglossia shape language usage and the communicative strategies of speakers in multilingual situations. These strategies induce either language shift or language maintenance but in either case respond to specific social and cultural motivations. Besides, each strategy is associated with different linguistic mechanisms. Shift involves primarily second-language acquisition while maintenance in contact situations involves language mixing in the form of code-switching and borrowing. Both mixing mechanisms consist in the simultaneous use of elements from two (or more) languages in the same speech event. Various criteria separate code-switching from borrowing, the most important one being the adaptation of foreign elements to the phonological and morphosyntactic structure of the recipient language.

An important part of this chapter was devoted to discuss an explanatory model of contact-induced language change. In order to determine the specific weight of causes and their individual contributions, I made two fundamental distinctions: one between primary, secondary and tertiary causes; and another between linguistic, sociolinguistic and nonlinguistic causes. Primary causes were identified with nonlinguistic motivations while secondary and tertiary causes were classified in factors and conditions of linguistic and sociolinguistic nature. Factors inhibit or promote contact-induced change. Conditions speed up or slow down changes. The model was characterized as dynamic and multi-causal, with primary, secondary and tertiary causes influencing each other and nonlinguistic, sociolinguistic and linguistic causes concurring to shape the outcomes of contact.