Typological and social constraints on language contact: Amerindian languages in contact with Spanish
Gomez Rendon, J.A.

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This study investigates the influence of social and linguistic constraints on language contact through the analysis of linguistic borrowing from Spanish in three indigenous languages of the Americas (Ecuadorian Quechua, Paraguayan Guarani and Mexican Otomi). An extensive corpus for each language was collected and processed in search of loanwords and function words from Spanish. The analysis of the corpora was developed in the framework of the parts-of-speech theory and linguistic typology. In this way the study meets the requirements of a solid empirical foundation and a theory-driven approach.

After an evaluation of the fundamental concepts of language contact, the author proposes a multi-level model of causation to explain contact-induced language change, in which linguistic and nonlinguistic factors interact with each other. The model serves as a point of departure to explain the interplay of social and linguistic constraints on borrowing. To support the language-specific analysis, an extensive description of the recipient languages is provided in terms of their historical development, sociolinguistic situation, dialectal variation and typological profile.

The study confirms the dynamic nature of the causation model of contact-induced language change and the need to include specific typological, sociolinguistic and historical criteria in any evaluation of scales of borrowing and hierarchies of borrowability. Still, the major finding of the study is that not everything goes in linguistic borrowing: the outcomes are determined by the structural limits of the recipient languages and the resistance of basic typological parameters to change in contact situations.

The study provides a new insight into the relation between linguistic borrowing, language typology and bilingualism, and therefore is of interest to typologists, sociolinguists, psycholinguists and those students of language contact and Amerindian languages.
TYPOLOGICAL AND SOCIAL CONSTRAINTS

ON LANGUAGE CONTACT

AMERINDIAN LANGUAGES IN CONTACT WITH SPANISH

VOLUME II
Typological and social constraints on language contact

Amerindian languages in contact with Spanish

VOLUME II

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. D.C. van den Boom
ten overstaan van een door het college voor promoties
ingestelde commissie,
in het openbaar te verdedigen in de Agnietenkapel der Universiteit
op donderdag 2 oktober 2008, te 12.00 uur

door

Jorge Arsenio Gómez Rendón

Quito, Ecuador
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Dr. E. Hekking

Faculteit der Geesteswetenschappen
Universiteit van Amsterdam
Para mis padres,
Arsenio y Edith
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ABBREVIATIONS

For the identification and parsing of the loanwords in the corpora, two subsets of labels were used: one for signaling the parts of speech in the source language (Spanish); the other for signaling the syntactic functions of the major parts of speech in the recipient language. In addition to these labels, several others were used for the morphemic glossing of examples. The following tables contain the full list of abbreviations.

ABBREVIATIONS USED IN THE ANALYSIS OF BORROWINGS

<table>
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<th>Abbreviation</th>
<th>Syntactic Function</th>
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<td>N</td>
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<td>HR</td>
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<tr>
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<td>A</td>
<td>Modifier Referential Phrase</td>
<td>MR</td>
</tr>
<tr>
<td>Verb</td>
<td>V</td>
<td>Head of Predicate Phrase</td>
<td>HP</td>
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<tr>
<td>Adverb</td>
<td>D</td>
<td>Modifier Predicate Phrase</td>
<td>MP</td>
</tr>
<tr>
<td>Conjunct(ion)</td>
<td>C</td>
<td>Modifier of Modifier</td>
<td>MM</td>
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<td>Subjunct(ion)</td>
<td>S</td>
<td>Coordinator</td>
<td>COORD</td>
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<td>Determiner</td>
<td>T</td>
<td>Subordinator</td>
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PART III

THE ANALYSIS

The third part of the book analyses the statistics produced from the corpora and the samples of spontaneous speech which illustrate the findings.

Chapter 10 focuses on the analysis of lexical borrowing. The introductory part describes how Spanish loanwords are phonetically and morphologically integrated to the recipient languages. The core of the chapter discusses the borrowing data obtained from the analysis of parts of speech in the corpora. The individual contributions of lexical classes and their frequency of use in the recipient languages are discussed for the three corpora as a whole and for each language individually. The variation in borrowing behavior is further analyzed in dialectal and bilingual perspectives. The last part of the chapter summarizes the findings of lexical borrowing and tests the borrowing predictions on the basis of these findings.

Chapter 11 focuses on the analysis of grammatical borrowing. The topic of the first section is the morpho-phonological adaptation of function words to the recipient languages. The core of the chapter discusses the borrowing data obtained from the analysis of function words in the corpora, including their frequency and use in the host languages. The variation in borrowing behavior is analyzed in relation to dialects and groups of bilinguals. The last section summarizes the findings of grammatical borrowing and tests the borrowing hypotheses on the basis of these findings.

Chapter 12 puts all the findings together in order to present a comprehensive view of Spanish borrowing in the three languages and identify similarities and differences among them. As a major goal of this chapter, the interplay between typological factors and social conditions in the modeling of borrowing behavior is discussed taking as a framework the model developed in Chapter 2. The overall findings are evaluated in the light of the hypotheses from language typology. The chapter concludes with several guidelines for a long-term research program on linguistic borrowing.
Chapter 10

Comparative analysis: lexical borrowing

This chapter deals with Spanish lexical borrowing in the corpora of the three languages under study. I focus on the major parts of speech identified for Spanish (cf. section 5.3) which correspond to the four syntactic slots described in the model of parts of speech by Hengeveld (1992) and Hengeveld et al (2004): head of referential phrase (nouns); head of predicate phrase (verb); modifier of referential phrase (adjective); and modifier of predicate phrase (adverb). The first section addresses the issue of how Spanish loanwords from these classes are adapted to the phonology and morphology of the recipient languages. The second section discusses the statistics from the analysis of lexical borrowings in the corpora and how they differ from language to language. The third section analyzes the distribution of lexical borrowings across the major parts of speech, the cross-linguistic tendencies observed and the linguistic and nonlinguistic factors at work. The fourth section scrutinizes the use of Spanish loanwords from the four lexical classes in each recipient language. The fifth section evaluates the influence of dialectal and sociolectal variation on the borrowing behavior of speakers: it explores differences in the amount, type and use of lexical borrowings from different dialectal areas and different groups of bilinguals. The general goal of the chapter is to identify tendencies in the amount, distribution and use of Spanish loanwords according to lexical classes, dialects, and levels of bilingualism. Each section tests a set of borrowing hypotheses and examines the respective weight of linguistic and nonlinguistic factors. The discussion of figures and tendencies is supported with abundant examples from the corpus.

10.1. Morpho-phonological adaptation of Spanish lexical borrowings

One major difference between codeswitching and lexical borrowing is that borrowed items, unlike switched ones, usually follow the morpho-phonological patterns of the recipient language\(^1\). Depending on the level of bilingualism of the speaker (the more bilingual the speaker, the less adapted the loanword) or the age of the loanword (the older the loanword, the more adapted to the recipient language), adapted forms are usually perceived as native forms. Being of relevance not only for the study of lexical borrowing, the present section describes the morpho-phonological processes.

---

\(^1\) There is a number of unassimilated loanwords in the corpora which are fully integrated to the morphosyntax of the recipient language. This integration distinguish them from code switches (cf. 4.2.2).
of adaptation experienced by Spanish lexical items in the recipient languages under scrutiny.

The three languages show different degrees of loanword assimilation depending on the level of bilingualism of the speakers. In general Otomí speakers have lower levels of bilingualism, and therefore they tend to assimilate loanwords on an idiosyncratic basis, which results in a wider phonological variation eventually influencing the number of types in the corpus. In contrast, Guaraní speakers show a tendency towards non-assimilation, which is associated with their higher levels of bilingualism. Gregores and Suárez (1968: 29) found the same phenomenon of non-assimilation in their corpus of Paraguayan Guaraní. Quichua speakers, in turn, show different degrees of assimilation depending on the dialect in question and the levels of bilingualism associated with it. In the following I describe the principal mechanisms of assimilation in each recipient language.

10.1.1 Quichua

The adaptation of Spanish borrowings in Quichua involves two distinct processes. One is the accommodation to morpho-phonological patterns. The other is the freezing of loan forms (bound morphemes and lexical chunks) in non-analyzable units. Each process is discussed in the following.

The majority of Spanish loanwords are fully or partially assimilated to the phonological patterns of Imbabura Quechua. Unintegrated loanwords represent only a small number. The integration of Spanish loanwords depends heavily on an interaction of factors including age, frequency, pragmatics and discourse. Thus, an old loanword frequently used in discourse is always integrated to Quichua phonology while a recent loanword, even if frequently used, is only partially assimilated.

The phonological integration of Spanish loanwords involves mainly vocalic changes. Spanish medial vowels are generally raised (/e/>/i/, /o/>/u/) or otherwise pronounced as close as possible to their Quichua equivalents, as illustrated in (1).

1) a. Q [mísa] < Sp. /mésa/ ‘table’

Assimilation vary across idiolects, resulting in different pronunciations of the same word. Partial assimilation is frequent in words with several medial vowels, as shown in (1c). Words with more than one medial vowel have different phonetic realizations depending on their environment and frequency of use. The less frequent a loanword in everyday speech (i.e. the more external to basic vocabulary), the less assimilated to Quichua phonology. If assimilation produces homophones like (1a) and (1b), they
are disambiguated by various phonotactic mechanisms (e.g. the voicing of the sibilant). A further factor influencing phonological integration is the level of bilingualism of the speaker. The three realizations of the Spanish loanword in (1c) can be correlated to three decreasing levels of bilingualism, with the first realization corresponding to an incipient bilingual, the second to a subordinate bilingual, and the third to a coordinate bilingual.

The phonological adaptation of Spanish consonants is less frequent. One of the few consonant changes concerns the velarization of the fricative labiodental /f/, as illustrated in the following examples:

2)  
   a. Q [xi xu] < Sp. /fierro/ ‘(piece of) iron’
   b. Q [xurkita] < Sp. /forketa/ ‘pitchfork’

Both word forms reflect a typical Spanish American pronunciation and contrast with their Peninsular equivalents *hierro* [yɛɾo] and *horqueta* [orketa], both of which do not involve consonant onsets. The presence of a velar onset in the following loanword – which originally lacks a consonant onset – suggests that it was borrowed in an earlier phonological stage of the source language:

3)  Q [xazinda] < Sp. /asienʃa/ ‘estate’

The loanword [xazinda] in (3) resembles the sixteenth-century pronunciation of contemporary Spanish *hacienda* ‘estate’. Accordingly, the velarization illustrated in (3) is rather a phonological adaptation of an old Spanish word form. Notice also the sonorization of the intervocalic sibilant in the same example.

Another process of loanword assimilation is metathesis. The nature of this process is not only phonological but also morphological in so far it affects the syllable structure of loanwords. The order of syllables changes in some cases while syllables are replaced or simply deleted in others. Consider the syllable deletion in (4a) below. In a few other cases metathesis affects not the syllable proper but only a particular feature. This is the case of (4b) where the palatality of *l* goes to *l*.

4)  
   a. *tempora* < temporada (season, time)
   b. *sañora* < zanahoria (carrot)

The morpho-phonological integration of loanwords involves semantic changes too. Certain nouns and verbs are borrowed in the guise of other nouns and verbs but with different meanings:

5)  
   a. *rifuirso* (effort) < refuerzo (reinforcement)
   b. *kontrarina* (to meet) < encontrar (to meet with)
Verbs are particularly prone to morpho-phonological changes whereas nouns, adjectives and adverbs are less so. The integration of Spanish verbs in Imbabura Quechua involves the drop of inflectional endings. The resulting verbal root becomes the base form to which Quechua verbal morphology is added. The following example illustrates this process for the verb *tocar* ‘to play’. The raising of the stem vowel occurs also in this case.

6)  

\[ \text{tuka-} \quad \text{ni} \]  
\[ \text{< toca-} \quad \text{‘play’, ‘touch’} \]  
\[ \text{play-1.PRS} \]  
\[ \text{‘I play (music)’} \]

Once adapted to Quichua morpho-phonology, loan verbs behave exactly as any other verb. In (7) below the causative -*chi* and the gerund -*shpa* are suffixed to the Spanish verb root. The two meanings of Spanish *acabar* (‘finish something’ and ‘finish’) collapse in one (‘finish something’) because the causative -*chi* allows only a transitive reading.

7)  

\[ \text{akaba-} \quad \text{chi-shpa-mi} \]  
\[ \text{< acaba-} \quad \text{‘finish’} \]  
\[ \text{finish-CAUS-GER-VAL} \]  
\[ \text{‘making [someone] finish [something]’} \]

The second process of loanword adaptation involves the freezing of bound morphemes to their roots. The freezing of nouns and plural markers is shown in (8).

8)  

a. *barbas* < barba+s  
\[< \text{beard+PL} \]  
b. *huasipunguero* < huasipunguer+o  
\[< \text{hacienda.worker+M} \]

The borrowing of roots along with bound morphemes does not imply however the productive use of the latter in the recipient language. With a few exceptions Spanish bound morphemes do not occur in native forms. Evidence of this is the co-occurrence of the Quichua plural marker with the Spanish plural ending in pseudo double-marked constructions like (9).

9)  

\[ \text{kosas-kuna-ka} \]  
\[< \text{cosa+s} \quad < \text{things+PL} \]  
\[\text{thing:PL-PL-TOP} \]  
\[\text{‘the things’} \]

Loan adjectives usually occur with gender markers (10a), diminutives (10b) and superlatives (10c). Here are some examples:
Comparative Analysis: Lexical Borrowing

10) a. kuriusu < curios+o < curious+M
    b. mamita < mam-it-a < mother+DIM+F
    c. papaso < pap-as-o < father+SUP+M

The second type of freezing occurs across word boundaries. Loan phrases are chunks of words forming a phrase in the source language which are borrowed as indivisible units with their own meanings. The following are the most frequent loan phrases in the corpus of Imbabura and Bolivar Quichua. Notice the phonological assimilation in each case:

11) a. dirripinti < de repente (suddenly)
    b. diunabes < de una vez (at once)
    c. diltodo < del todo (completely)
    d. masuminos < más o menos (more or less)
    e. namaski < nada más que (only)
    f. unsolu < uno solo (only)
    g. diuslapagui < dios le pague (thank you)
    h. kalsunbaju < calzon bajo (long-trousers)
    i. diberas < de veras (really, actually)
    j. kaduno < cada uno (each)
    l. ilkimas < el que más (everybody)
    m. loki < lo que (which)
    n. inki < en que (what)

The main characteristic of loan phrases or phrasal borrowings is that their original constituents cannot be detached from the phrase, modified or otherwise subject to any derivational or inflectional mechanism. This is exemplified below:

12) a. kalsunbaju kalsunbaju-ta kalsunbaju-kuna long.trousers long.trousers-ACC long.trousers-PL
    b. kalsunbaju kalsun-ta baju* kalsun-kuna baju* long.trousers long.trousers-ACC long.trousers-PL

13) a. diunabes diunabes-mari diunabes-tak at.once at.once -EMPH at.once -EMPH
    b. diunabes diuna-mari bes* diuna-tak bes* at.once at.once -EMPH at.once -EMPH

In (12a) accusative and plural markers can be attached to the whole phrase kalsunbaju ‘long.trousers’ but not to either of its original constituents. In (13a), too, emphatic markers are suffixed to the entire loan phrase di-una-vez. These markers cannot be attached to one of the original constituents because the outcome is an ungrammatical construction like (12b) or (13b). Phrasal borrowings follow the same
constituent order of Quichua syntax. This is illustrated in (14a) below, where the verb occurs in sentence-final position, after the subject (loan phrase *ilkimas* ‘everybody’) and the object (*rundin* ‘pan flute’). In (14b) the dislocation of the subject produces an ungrammatical sentence. Similarly, the dislocation of the loan phrase *kaduno* ‘everyone’ produces an ungrammatical sentence (15b) different from its grammatical counterpart (15a).

14) a. *kunan-ka ilkimas rundin*  
   *tuka-ria-n*  
   today-TOP everybody pan flute play-DUR-PRS.3  
   ‘Nowadays everybody plays the pan flute’

   b. *kunan-ka*  
   *rundin (ilkimas)*  
   *tuka-ria-n*  

15) a. *kaduno sirbinti-kuna-ka*  
    *puri-ju-rka*  
    everyone servant-PL-TOP go-PROG-PST:3  
    ‘Every servant used to go (there)’

   b. *sirbinti-kuna-ka*  
   *kaduno*  
   *puri-ju-rka*  

Phrasal borrowings include noun phrases (e.g. 11h), prepositional phrases (e.g. 11a-c), and adverbial phrases (e.g. 11d-e). The only frozen verb phrases in the corpus are *o-sea* ‘that is’, with the third-person present subjunctive form of the verb ‘to be’; and the formula *dius-si-lu-pagui* ‘may God reward you’, itself an entire clause. Phrasal borrowings do not necessarily perform the same syntactic function as the original phrases in Spanish. Typically, phrasal borrowings modify predicate and referential phrases. They occur as heads of referential phrases and as connectives. A functional analysis of phrasal borrowings is presented in section 10.4. The frequency of phrasal borrowings in Quichua is higher than in the other languages.\(^2\)

The criteria used to distinguish phrasal borrowings from code switches are both phonological and morphosyntactic. On the one hand, phrasal borrowings have a distinctive stress pattern – main stress on the penultimate syllable following the stress pattern of Quichua words. This feature shows that phrasal borrowings are treated as one lexeme.

\[
\begin{array}{ccc}
\text{IQ} & \text{Sp} \\
\text{Ilkimas} & /\_\_\_\_\_/ & /\_\_\_/ \\
\text{Masuminos} & /\_\_\_\_\_/ & /\_\_\_/ \\
\text{Diuslupagui} & /\_\_\_\_\_/ & /\_\_\_/ \\
\end{array}
\]

A number of phrasal borrowings correspond to noun phrases referring to entities or concepts proper of Mestizo society (e.g. institutions, practices, etc.). In the following

\(^2\) The frequency and productivity of lexical chunks of the type analyzed here are documented for massively relexified varieties of Quichua in Imbabura and other areas of the Ecuadorian Highlands (Muysken 1985; Gómez Rendón 2005).
excerpt a loan noun phrase (in square brackets) co-occurs with single lexical borrowings (in slashes):

\[
\text{chayka /} \text{primer} / \text{watataka /} \text{nivel} / \text{shpa /} \text{kwinta /} \text{kida / parka,}
\]

\[
\text{chayra kay watami /} \text{primer} / \text{guman yaykushka kapan,} \text{[primer a} \text{ño}
\]

\[
\text{de colegio]man, chayka ninanda adilantashka kashka chaymanga.}
\]

As required by Quichua morphological rules, the allative suffix /-\text{man}/ is attached to the whole phrase and not to any of its constituents. According to Myers-Scotton (2002: 141ff), these phrases are ‘matrix-language islands’, i.e. phrasal units composed of embedded language material (e.g. Spanish) whose morphosyntactic matrix (bound morphology and constituent order) come from the matrix language (e.g. Quichua), that is, they are morphologically integrated to the recipient language.

Another morphological process involving phrasal borrowings is reduplication. Consider the following example from the corpus:

16) \text{bulla-bulla} ^3 \text{shamu-rka-nchi-ka}

\text{noise-noise come-PST-1PL-TOP}

‘We came noisily.’

Reduplication in Quichua is used to build adverbial phrases and to mark emphasis. Spanish nouns (e.g. \text{bulla} ‘noise’ \to \text{bulla-bulla} ‘noisily’) and adjectives (e.g. \text{bajo} ‘low’ \to \text{baju-baju} ‘slowly’) occur frequently in the corpus.

10.1.2 Paraguayan Guaraní

The process of morpho-phonological adaptation of Spanish loanwords in Guaraní is determined by the higher levels of bilingualism of Guaraní speakers. It is generally assumed that coordinate bilinguals show less phonological accommodation than subordinate or incipient bilinguals. The integration of Spanish loanwords to Guaraní is determined also by the level of literacy of the speaker. This factor shows a different correlation however: literate speakers, who usually know a larger Guaraní vocabulary in semantic fields related to modern culture and society, are expected to produce fewer loanwords than illiterate speakers, who lack such vocabulary and make use of Spanish items instead. This explains the seemingly contradictory observation made by Gregores and Suárez (1967) that it was “in the speech of the more imperfect bilinguals (as J.A) that Spanish borrowings occurred more frequently; in more educated speakers, such as L. de Á, P.A, and even V.S., all of whom spoke Spanish well, borrowings were much less common; in the speech of

\[ ^3 \text{Originally, Spanish ‘bulla’ means both ‘crowd’ and ‘screaming’. The Spanish loanword reinforces the idea of a group of people who came and made noise.} \]
Those speakers who use larger numbers of Spanish loanwords show more non-Guarani sounds (i.e. loanwords were not phonologically integrated) whereas those speakers whose Guarani is less Hispanicized usually adapt the few loanwords of their speech to Guarani phonology. Gregores and Suarez suggest a correlation between rural Guarani and a lower occurrence of loanwords. It is not clear, however, whether they draw the same correlation between a lesser occurrence of loanwords and literacy levels. Because literacy levels in urban and rural areas in Paraguay do not differ much from each other thanks to the implementation of bilingual education programs all over the country, the literacy factor may play a secondary role in the phonological adaptation of Spanish loanwords in Guarani, if compared to the role of bilingualism. Whatever the case may be, Spanish loanwords abound in colloquial Guarani and occur with or without phonological adaptation. The following description of how Spanish loans are adapted to Guarani phonology is based on my own observations and those of Gregores and Suarez (1967: 88-93).

The phonological adaptation of Spanish loanwords in Paraguayan Guarani involves the following mechanisms: (1) shift of stress, (2) nasalization of segments, and above all, (3) consonant changes. Spanish vowels remain largely unaffected, except for diphthongs.

1) **Shift of stress.** While loanwords preserving the stress pattern of Spanish are numerous, a large number of loanwords shift their original stress to the last syllable: e.g. Sp. *caballo* ‘horse’ [kabáño] > [kavayú]; Sp. *azúcar* ‘sugar’ [asúkár] > [asuká]. Other phonetic processes (e.g. drop of final consonants) usually accompany this shift. A stress-related phenomenon is the drop of the post-tonic syllable, without changes in the original stress pattern (Gregores and Suarez 1967: 91): e.g. *almohada* ‘pillow’ [almoáda] > [armoxá].

2) **Nasalization.** Two related mechanisms of adaptation concern nasalization. Vowels are nasalized when preceded or followed by a nasal segment such as [n], [m] or [ñ]: e.g. Sp. *ajeno* ‘another’s’ [axéno] > [axêño]; Sp. *sábana* ‘blanket’ [sábaná] > [savanã]. Nasal environments need not be immediate for nasalization to spread: e.g. Sp. *maldañ* ‘wickedness’ [maldád] > [mañêrá]. Some words ending in /n/ drop this segment and nasalize the vocalic nucleus of the last syllable. Only word-final syllables are affected: e.g. Sp. *melon* ‘melon’ [melon] > [merö]; *pelón* ‘bald’ [pelón] > [perö]. In a few cases the dropped consonant is not a nasal segment but a sibilant in nasal environment. Still, the result is a nasalized vocalic nucleus: e.g. *en vez* ‘instead’ [embês] > [emê].

3) **Consonant changes.** The major phonological adaptations of Spanish loanwords in Guarani involve consonants.
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a. Voiceless plosives ([p], [t], [k]) are normally preserved in loanwords: e.g. Sp. zapato ‘shoe’ [sapáto] > [sapatú]; vaca ‘cow’ [báka] > [baká]; Sp. atender ‘to pay attention to’ [attendér] > [atendé].

b. Voiced plosives ([b], [d], [g]) remain unchanged or otherwise modify their manner of articulation depending on environment, stress and position in the syllable (coda or onset).

i. The voiced bilabial stop [b] is preserved (see vaca ‘cow’, above) or otherwise nasalized to [m]: e.g. borrico ‘donkey’ [boriko] > [moriká]. The heterosyllabic cluster [mb] as found in Spanish en vez ‘instead’ is homosyllabic and may be nasalized as in [emê]. If followed by close back rounded [u], /b/ becomes a voiced rounded velar [γ]: e.g. abuelo ‘grandfather’ [ayγelo]. Similarly, /b/ is prenasalized in onset position of word-initial syllable: e.g. bromista ‘funny’ [bromista] > [em uni027Euni1EBD]. If followed by close back rounded [u], /b/ becomes a voiced rounded velar [γ]: e.g. abuelo ‘grandfather’ [ayγelo].

ii. The voiced alveolar [d] is replaced with the flap [dba] in certain words: e.g. almidón ‘starch’ [almidón] > [aramiðí]. The heterosyllabic cluster [nd] is simplified to [n] (e.g. entender ‘to understand’ [entender] > [nanteñê] ‘I do not understand’). Further evidence of this simplification was found by Gregores and Suárez (1967: 89).

iii. The voiced and voiceless velars [g] and [k] are replaced with the close central unrounded vowel [i] in homosyllabic and heterosyllabic clusters: e.g. agringado ‘gringo-like’ [agringado] > [airingado]; doctor ‘doctor’ [doítor]; consigna ‘watchword’ [konsíña] > [kosíña]. Because the same replacement is observed in Paraguayan Spanish, it should be interpreted as a convergence feature.

c. The voiceless fricative labiodental /f/ is replaced with [p] in old loanwords: e.g. alfíler ‘pin’ [alfíler] > [arapirê]. In a few loanwords /f/ is voiced as [v]: e.g. faltar ‘to lack’ [faltár] > [vatâ].

d. The voiceless affricate alveopalatal [č] is fricativized as [š] in all positions: e.g. chica ‘girl’ [čika] > [šika]; chicharrón ‘roast pork’ [čičarã] > [šičarã]. Also, the voiceless fricative replaces the fricative velar [x] in the word oveja ‘sheep’ [obexa] > [obešã]. This loanword entered Guaraní when /ʃ/ was still

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4 This change is reported for many rural dialects of Spanish in South and Central America (Gregores and Suárez 1967: 89) and therefore cannot be fully ascribed as a Guaraní-specific adaptation.
a distinct phoneme in Spanish (ca. XVI), hence the occurrence of the voiceless fricative.

e. The voiceless alveolar fricative /s/ is not adapted in word-initial and intervocalic positions: e.g. mesa ‘table’ [mesa] > [mesa]. However, if the sound occurs in coda position in word-final syllables, it is realized as a glottal fricative [h] or simply dropped: e.g. asistir ‘attend’ [asistír] > [asihtí]; e.g. capataz ‘overlord’ [kapatás] > [kapatá]. Because this phonetic change is attested in Paraguayan Spanish and other dialectal areas, including nearby Rio de la Plata, it is a result of convergence.

f. The nasal segments [m], [n] and [ŋ] remain largely unchanged. In a few cases they are dropped in coda position of word-final syllables. As a result, the vowel of the affected syllable is nasalized (cf. supra). Otherwise, nasal segments nasalize adjacent syllables: e.g. manejar ‘drive’ [manexar] > [manexã].

g. While the flap [ɾ] remains unchanged in loanwords (e.g. pero ‘but’ [pero]), the trill [r] is usually realized as a flap (e.g. corral ‘stockyard’ [koral] > [koral].

h. The palatal lateral approximant /ʃ/ is replaced by the palatal fricative, e.g. /ʃ/ caballo ‘horse’ [kabášo] > [kavajú]; dropped along with shift of stress, e.g. morcilla ‘blood sausage’ [morsíʃa] > [musíš]; or dropped with unchanged stress e.g. cebolla ‘onion’ [seboʃa] > [sevói]. Of these changes, only the last two are phonetic adaptations, properly speaking. Interestingly, the palatal fricative /ʃ/ as it occurs in certain loanwords contrasts with the fricative alveolar /s/ of Paraguayan Spanish (e.g. [kabášo]). This explains why Gregores and Suárez found in their corpus only one example of the palatal fricative /ʃ/ apart from [kavajú]. Such example involves a diphthong with /e/: i.e. hielo ‘ice’ [jelo].

i. The lateral alveolar /l/ remains unchanged, except for a few loanwords in which the lateral is realized as a flap: e.g. alfíler ‘pin’ [alfíler] > [arapiré]. Because this sound is not native, Spanish loanwords with the lateral alveolar should be considered unassimilated items. Still, there are a few words with the lateral alveolar whose origin is neither Spanish nor Guaraní. This led Gregores and Suárez (1967) to suggest an alternative non-Spanish origin for this sound.

j. Consonant clusters are occasionally simplified in loanwords. This adaptation is typical in old loanwords. In general, consonant clusters are maintained, with a few exceptions attributable to idiolectal variation. Gregores and

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5 The fricative sibilant changed into the fricative velar in the seventeenth century. Thus, an adaptation cannot be assumed in this case. The same sound occurs in Old Spanish loanwords in Otomí (cf. infra).
Suárez (1967: 90) identify two types of simplification: the insertion of a vowel between consonants\(^6\), as in *cruż ‘cross’* [krus] > [kurus]; the drop of a consonant in the cluster, as in *bolsa ‘sack’* [bólsə] > [vosá].

k. The insertion of the glottal stop at the beginning of a stressed monophonic syllable in word-initial position: e.g. *isla ‘island’* [ísə] > [íslə]; *hora ‘hour’* [óra] > [ʔóra]. Less noticeable than other phenomena involving consonants, this type of insertion is widespread not only in Paraguayan Guaraní but also in the Spanish of subordinate bilingual speakers.

4) **Vowel change.** The adaptive changes experienced by Spanish vowels are few if compared to consonants and affect mainly diphthongs.

a. Spanish vowels in loanwords do not change their value. The only known exceptions are: (1) nasalized vowels resulting from the drop of nasal segments; (2) the raising of /o/ to /u/ in old loanwords: i.e. *zapato ‘shoe’* [sapátə] > [sapatú]; *borrica ‘donkey’* [bořika] > [muřika].

b. According to Gregores and Suárez (1967), “all the vowel sequences of Spanish loanwords have been adapted in agreement with the non-diphthongal characteristics of Guaraní. Therefore, Spanish diphthongs are always represented in Guaraní by non-diphthongal sequences” (Gregores and Suárez 1967: 90). This phonetic adaptation is illustrated by *piola ‘cord’* [pióla] realized as [pi’óla], that is, the diphthong /io/ is separated by a glottal stop while the second vowel receives primary stress. De-diphthongization occurs across sociolects and idiolects of Guaraní but also in the Spanish of Guaraní-dominant bilinguals (see Chapter 5, Table 5.3).

Spanish loanwords are inserted directly without any derivation. Verbs are inserted after dropping the final /-r/. The base form of irregular loan verbs (those with vowel alternation in the root, e.g. *sentir ‘to feel.INF’* > /sient-/) is the verb root in infinitive form. Once the infinitive ending is dropped, the loan verb receives the same verbal morphology as a native verb.\(^7\) In the following example the loan verb *recoger ‘collect’* receives the prefix of third singular person (*o-*), and the suffixes of emphasis (*-paité*) and obligation (*va’erã*).

17) ndo-ro-japó-i mbə‘eve i-cóntra-pe pero ro-torva icherpe
   NEG-2PL-do-NEG nothing 3-against-LOC but 1PL.EXCL-annoy 3.ACC

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\(^6\) This simplification is reported also for old Spanish loans in Quichua, e.g. *crónica ‘chronicle’* [krónika] > [korónika] and for recent loans in other indigenous languages such as Sia Pedee (Gómez Rendón 2006e: 38). Both languages prohibit consonant clusters in onsets.

\(^7\) Loan adjectives and nouns used as verbs in Guaraní do not undergo any morphological adaptation (cf. *infra*).
porque ha’énte o-rekohe-paité-va’erã mandyju
because 3-only 3-collect-EMPH-OBLG cotton
‘We did nothing against her, but we annoyed her because she was the only one who should collect cotton in the area’

Adjectives and nouns are usually borrowed with gender markers. Some nouns are borrowed with their plural endings. Similarly, the mente ending occurs in several manner adverbs borrowed from Spanish. However, these bound forms occur only in loanwords and therefore are not used productively in the language.

Because frozen borrowing borders on codeswitching in Paraguayan Guaraní, it is difficult to tell whether multi-morphemic constructions are frozen borrowings or code switches. The criteria introduced to distinguish borrowings from code switches include: (i) the phonological adaptation to the recipient language; (ii) the morphological and syntactic integration in the recipient language; (iii) the re-semanticization of foreign elements in the recipient language; (iv) the frequency of foreign elements across speakers; (v) the frequency of foreign elements by word classes across speakers. As regards these criteria, the following conclusions can be drawn about frozen borrowings in Paraguayan Guaraní:

a. Single words with Spanish gender and plural morphemes should be considered lexical borrowings because these morphemes do not occur on native lexemes and co-occur with native forms (e.g. pseudo double marking) as illustrated in (18).

18) brasileros-kuéra a-ñemongeta hendi-kuéra heta vése
Brazilian-(Sp)PL-PL 1SG-talk 3.COM-PL many time.PL
‘Brazilian people, I talk with them many times’

b. Complex constructions of two or more phonological words are of two types. The first type involves noun phrases composed of a noun head plus a determiner or modifier. An example is given in (19) in square brackets.

19) Oi-ko [alguno líder] a-gusta-háicha
3-be some leader 3-like-so
‘There were some leaders who liked it that way’

In the above example alguno ‘some’ modifies the loan noun líder ‘leader’. However, the form of the modifier does not correspond to the Spanish quantity adjective. Because alguno líder is ungrammatical in Spanish, it is not a code switch but a native clause with a loan noun modified by a loan quantifier. Consider the following examples:
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20) \([\text{San Ignacio}]-\text{gua no-\text{-ri}}\) ko tembiapo ndive
San Ignacio-ABL NEG-3.be-NEG DEM work with
‘People from San Ignacio do not work together’

21) \(\text{nd-o-guereko-i-ha}\) [la \text{culpa}]
NEG-3-have-NEG-RLTZ ART blame
‘He is not guilty’

The noun phrase in (20) is a Spanish toponym. These constructions are frozen borrowings because: neither of their constituents can be individually modified nor otherwise dislocated inside or outside phrasal boundaries; their intonation contours characterize them as single phonological words; their occurrence is more frequent across speakers than ad-hoc switched phrases; and, their semantic meaning is delimited by physical, social or other referents in the speaker’s sociocultural space.

On the contrary, the noun phrase in (21) is a code switch because it occurs once in the corpus and calques the expression \(\text{tener la culpa}\) ‘to be guilty’. Other nouns phrases involve prepositions connecting nouns in head-modifier relation:

22) \(\text{Oi-há-pe-guive o-je-gueraha preso padre-de-familia}\)
3.be-RLTZ-LOC-ABL 3-PASS take imprisoned parent-of-family
‘Since then parents of families were imprisoned’

The phrase is a code switch because it is not integrated morphologically or phonologically to Guaraní. Prepositions occur as well in the second type of complex constructions: prepositional phrases functioning as objects, complements and heads of predicate phrases.

23) \(\text{nda-ha’e-i ko’âga sekundária-pe}\)
NEG-3.be-NEG nowadays high.school-LOC
\(\text{e-je-eksíhi}\) [a los alumnos]-pe
IMP-PASS-require [to ART.PL student.PL]-ACC
‘Nowadays (teachers) do not require high-school students to do their job’

24) \(\text{o-ñe-me’ê-va’erâ}\) [a los padres]
3-REFL give-OBLG [to ART.PL parent.PL]
‘It will have to be given to the parents’

25) \(\text{nda-i-deprovecho-mo’âi chupe la Guaraní}\)
NEG-3.be-useful-COND 3.ACC ART Guaraní
‘Guaraní wouldn’t be useful for him/her’
The bracketed phrases in (23) and (24) are headed by the Spanish preposition *a* marking animate direct objects and recipients. The phrases are different however: (23) shows the Guaraní accusative marker (*-pe*) while (24) does not. In these terms (23) is fully integrated to Guaraní morphosyntax and therefore a phrasal borrowing. By the same token, the lack of morphosyntactic integration of (24) makes it a good candidate for codeswitching. Still, there are a number of reasons to take into account: first, the noun phrase in (23) has Spanish bound morphology and shows gender and number agreement between constituents, like a code switch; second, neither phrase shows phonological adaptation; and third, both phrases result from syntactic calquing of equivalent Spanish expressions. In contrast, the phrase in (25) makes a clear case for borrowing: not only the prepositional phrase *de provecho* ‘useful’ is frozen as one phonological word, it is also adapted to Guaraní morphosyntax.

Admittedly, the issue of lexical borrowing in Paraguayan Guaraní is controversial. Except for single-word forms, which are straightforwardly identified as loanwords, it is not possible to establish beforehand whether a complex construction is a code switch or a loan phrase, so that an individual analysis of each occurrence is necessary on the basis of several criteria for an informed decision about their nature.

### 10.1.3 Querétaro Otomí

Owing to the complexity of Otomí phonology and phonetics, the phonological adaptation of Spanish loanwords looks dazzling. Few would suspect a genetic relation between Otomí *ndege* and Spanish *manteca*, or between Otomí *aste* and Spanish *aceite*. The adaptation of loanwords is a regular, systematic process, the scope and regularity of which are determined to a great extent by the speaker’s degree of bilingualism. Hekking notices different levels of loanword integration among different speakers of Santiago Mexquititlán (Hekking 1995: 128). In explaining the variation of the process, Hekking finds a correlation between the phonological adaptation of Spanish loanwords, on the one hand, and factors such as schooling, migration and degree of literacy, on the other:

“Los Otomíes que no adaptan los préstamos españoles a la pronunciación Otomí son en primer lugar los que saben escribir el español, en segundo lugar los que saben leer dicha lengua, en tercer lugar los escolarizados y en cuarto lugar los migrantes.” [Those Otomí speakers who do not adapt Spanish loanwords to Otomí phonology are, first, those who know how to write in Spanish; second, those who know how to read in this language; third, those who have gone to school; fourth, those who are immigrants] (Hekking 1995: 194; my translation).
A further correlation is attested between loanword assimilation, on the one hand, and register and topic, on the other. Soustelle, for example, noticed that Otomí peasants talking to each other about topics associated with events of their own cultural environment (e.g. the harvest) in the socio-communicative space of their communities used to speak only in Otomí. In such case only a few loanwords occurred, all of them perfectly adapted to the native patterns of the language (Soustelle 1937: 259). On the other hand, Soustelle noticed a type of Otomí-Spanish bilingual speech plagued with unassimilated loanwords related to religion and material culture. Soustelle adds that most of these loanwords had native equivalents, many of which used in everyday speech. He concludes that the prolific use of loanwords from Spanish is determined in these contexts by the wrong idea that Otomí words cannot convey the same meanings as Spanish words. Interestingly, Soustelle and Hekking considered bilinguals the leaders of lexical change in the speech community, not only because they borrow Spanish items most frequently but also because they borrow them without assimilation to native patterns. The following description of loanword adaptation in Otomí is based on Hekking (1995) and Soustelle (1937).

The phonological changes to which Spanish loanwords are subject in Otomí are five:

1. **Nasalization.** Vowel [a] is nasalized as [ã] if the onset is a nasal consonant ([m], [n], [ŋ]). Vowels in onset position are occasionally nasalized after a glottal stop: e.g. *alba* ‘dawn’ [alba] > [' añba]. Sibilants in coda position are dropped with the resulting nasalization of the vocalic nucleus: e.g. *apenas* ‘just’ [apenas] > [apenã]. Sibilants and plosives in onsets in word-initial position are nasalized: e.g. *cinco* ‘five’ [sinko] > [nsinku]; *desde* ‘from’ [desde] > [ndezde].

2. **Syllable change.** The vocalic nucleus of unstressed syllables is dropped in word-initial and word-medial position: e.g. *arreglo* ‘arrangement’ [areglo] > [reglo]; *bicicleta* ‘bike’ [biskleta] > [biskleta]; *aceite* ‘oil’ [aseyte] > [aste]. Consonant codas of stressed or unstressed syllables in word-final position, are dropped: e.g. *condición* ‘condition’ [kondisyon] > [kondsyo]. Vowel drop results in syllable reduction. Consonant drop does not change the number of syllables but makes syllables open (CV). Non-Otomí consonant clusters are simplified in onset position or across syllable boundaries: e.g. *alcohol* ‘alcohol’ [alko:] > [akol]; *octubre* ‘October’ [oktubre] > [otubre]. Alien consonant clusters inside or outside syllable boundaries are split by the tense close central unrounded vowel [i]: *hectárea* ‘hectare’ [ektarya] > [ekitarya].
3. **Vowel change.** The vocalic nucleus of unstressed syllables is generally replaced by the close central unrounded vowel [i]: e.g. `vispera` ‘eve’ [bíspira] > [bispira]; `caso` ‘case’ [kasoi] > [kasi]. Mid vowels in unstressed syllables are usually raised: e.g. `vecino` ‘neighbor’ [besino] > [bisinu]; `tomín` ‘small portion’ [tomín] > [dumi]. Soustelle also reports the inverse process, i.e. the lowering of high vowels, due to overcorrection in incipient bilinguals; e.g. `durazno` ‘peach’ [durasno] > [dorasno]. Spanish diphthongs are simplified after consonants [d], [f], [m], and [k]: e.g. `cuerpo` ‘body’ [kwerpo] > [korpo]; `aunque` ‘though’ [awnke] > [anke]; `siquiera` ‘at least’ [sikera] > [syker]. The simplified vocalic nucleus may have the same value of one of the vowels of the former diphthong and be subject to further raising or lowering.

4. **Consonant change:** The voiceless velar fricative [x] becomes a glottal fricative [h]: e.g. `bruja` ‘witch’ [bruja] > [bruha]; `mejor` ‘better’ [mexor] > [mehor]. The voiceless stops [p], [t], [k] become voiced: `peso` ‘weight’ [peso] > [beso]; `vaca` ‘cow’ [baka] > [baga]; `cinta` ‘ribbon’ [sinta] > [sinda]. The voicing of voiceless stops is restricted to old loanwords (Hekking 1995: 128). Sibilant [s] in onsets or intervocalic position is palatalized [ʃ]: `mesa` ‘table’ [mesa] > [męşa]; `sebo` ‘fat’ [sebo] > [šebo].

The above changes occur in Querétaro Otomí but also in the dialect of San José del Sitio (Mexico State) studied by Soustelle. Other changes are reported for the latter dialect but not for Querétaro Otomí. These include: 1) /d/ > /t/, e.g. `Rosario` ‘rosary’ [rosario] > [dosario]; 2) /tl/ > /d/, e.g. `azadón` ‘shovel’ [asadón] > [asar]; 3) the addition of vowel [i] to syllables ending in [l] to form a new syllable with the added vowel in the nucleus, e.g. `angel` ‘angel’ [ánxel] > [ánxele]; 4) the replacement of the consonant cluster /dl/ in intervocalic position with /-dn-/, e.g. `Pedro` [pedro] > [bednu] or [pegru]. Soustelle adds that stress in Spanish loanwords tends to shift to the last syllable, as in `hacienda` ‘estate’, pronounced [asyendá]. Primary stress remains unchanged in most loanwords in the Otomí corpus, even if syllables are dropped as a result of the aforementioned changes (Hekking p.c.). While there are no additional changes in the integration of Spanish loanwords, idiosyncrasies are observed according to their lexical class.

1. **Nouns.** Spanish nouns are borrowed in singular along with gender markers (masculine -o, feminine -a), as illustrated by Hekking (1995: 109):

```plaintext
26) Nu mtxi=falmya 'ne 'wgti 'ne
    DEM lPOSS.DIM=falmy:F also sew also
```
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hoki=ya    txi=dibuh-’u
make=DEF.PL DIM=draw=ing-MASC-EMP. H.PL. 3

‘My family sews and embroiders’

Notice that gender morphemes are not productive borrowings and therefore do not occur on native words. Loan nouns receive the same morphology of native nouns and can be used predicatively like them.

2. Verbs. Spanish loan verbs are inserted directly in Otomi. They do not require a pro-verb form (do-type) like loan verbs in Popolocan (Wichmann 1996: 79) or a loan-verb affix like loan verbs in Nahuatl (Wichmann and Wohlgemuth, forthcoming). The insertion process consists in isolating the verb root followed by the thematic vowels /-a/- and /-e/- (Hekking 1995: 113). Loan verbs with the thematic vowel /-i/- are followed by /-e/- instead of /-i/-.

One of the few exceptions is kumpli- (< cumplir) ‘comply with’. Additional changes in the verb root involve the occasional simplification of Spanish diphthongs. Spanish loan verbs receive the same morphology as native verbs. Example (27) illustrates a loan verb in context.

27) M-tada-gö    xi=regala-gi-tho-gö
POSS.1=father-EMP.H.1 PRF.3=give=away-DO.H.1-LIM-EMP.H.1

‘My father only gave it away to me’

3. Adjectives. Spanish adjectives are comparatively underrepresented in the corpus (cf. section 10.3). According to Hekking (1995: 123) all loan adjectives in Otomi occur in masculine singular form; the only adjective in feminine form is bib-a (< viva) ‘smart.FEM’ opposed to bib-o (< vivo) ‘smart-MASC’. Notice that Quichua and Guaraní borrow Spanish nouns and adjectives along with their gender markers. It is likely that gender markers on adjectives are peripheral to word structure and therefore more salient than gender markers on nouns. The outcome is that borrowers can parse gender markers on adjectives and restrict their borrowing. Examples (28) and (29) illustrate the loan adjectives biba ‘smart.FEM’ and riko ‘rich.MASC’.

28) ná’=är    nxtusi ná’ä
DEM.DIST.S3=DEF.S girl DEM.DIST.S3

8 Vowels /-a/- and /-e/- correspond to the third-person present verbal endings while /-i/- is the product of the raising of /-e/-.

This hypothesis is corroborated by the fact that loan verbs changing their root vowel /e/ into /i/ when conjugated, are borrowed in Otomi only with the latter vowel (Hekking 1995: 115).
The girl she is playing with is very smart

I sell at the shop where there are rich Mestizo people with money

Suddenly the wind began to blow strongly over the bridge

While that gentleman and obviously pulque with godfather’s parent and friend
‘Meanwhile the ladies and the gentlemen went to the fair to do their shopping and, obviously, to drink beers and pulque with their godparents, in-laws and friends’

Other cases of single words with bound morphemes are nouns with plural endings (e.g. kargero-s, porter-PL) or diminutive markers (e.g. pastor-sita, ‘shepherd-DIM’) and verbs with participial endings (e.g. us-ado ‘use-PTCP’) or tense markers (e.g. nkamby-o-byà ‘change-PST.3-PRS’). Except for the last example, the others do not show phonological integration to Otomí. Nevertheless, Hekking notes that “it is not always easy to apply the criterion of phonological adaptation because one often finds late loanwords that are not adapted yet to Otomí phonology” (Hekking 1995: 130; my translation). Other frozen constructions include noun phrases, verb phrases, adverbial phrases, conjunctional phrases, and phrasal discourse markers. Noun phrases are the most frequent and include toponyms, proper names, religious festivals, titles of prayers and songs. Here are some examples.

32) ...ger  baryo  primero’a
   NPd-DEF.S neighborhood  first-EMPH-S3
   ‘That is the Neighborhood-One’

33) Honda (mde...)  medya  ektarya
    Just  (half)  half  hectare
    ‘Only half of a hectare’

These phrases indicate concepts or entities belonging to the Mestizo society and culture for which no direct equivalence exists in Otomí. Because the phrases have a fixed structure that excludes dislocation but allows modification of the whole chunk, they are loan phrases representing the co-occurrence of lexical items. In similar terms, Hekking considers these nouns phrases complex borrowings. Nevertheless, the fact that noun phrases can be easily detached from discourse and used as code-switches requires an individual analysis of each case to support a borrowing or codeswitching interpretation.

---

9 This example can be classified as a matrix-language island. See above for a similar example in Quichua.
10.2 Linguistic borrowing in the corpora

Table 10.1 shows the overall number of borrowings in each language, i.e. including lexical and grammatical items. ‘Source’ stands for Spanish and ‘target’ for Quichua, Guaraní and Otomí. The number of informants is mentioned for each language.

<table>
<thead>
<tr>
<th></th>
<th>Quichua (EQ) N=25</th>
<th>Guaraní (PG) N=38</th>
<th>Otomí (O)N=59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>15098 (18.9%)</td>
<td>10056 (17.4%)</td>
<td>15571 (14.1%)</td>
</tr>
<tr>
<td>Target</td>
<td>64620 (81.1%)</td>
<td>47772 (82.6%)</td>
<td>94970 (85.9%)</td>
</tr>
<tr>
<td>Total</td>
<td>79718 (100%)</td>
<td>57828 (100%)</td>
<td>110541 (100%)</td>
</tr>
</tbody>
</table>

Differences among the three languages are small. The distance between Quichua and Guaraní – both typologically similar – is only 1.5%. The distance between Quichua, the language with the largest number of borrowings, and Otomí, the language with the smallest number, is 4.8%. Differences proved significant at a 0.5% level on a chi-square test. This suggests that the range between the highest and the lowest percentage represent clear tendencies in borrowing. However, linking the above figures to the contact situations of each recipient language produces somewhat contradictory results. On the one hand, the higher levels of bilingualism among Guaraní speakers lead to expect an equally higher degree of borrowing from Spanish, while the medium levels shown by Quichua speakers lead to expect medium degrees of borrowing. Yet, Guaraní and Quichua percentages are closely similar. On the other hand, the borrowing data of Otomí correspond to the lower levels of bilingualism of its speakers in the context of language shift.

The comparatively low contribution of linguistic borrowing to Paraguayan Guaraní does not mirror the extent of contact with Spanish. In fact, Guaraní-Spanish contact has been so long and intense that a number of mixed lects (hispanicized Guaraní, Guaranicized Spanish) have emerged. Therefore, it is necessary to consider another type of language mixing: codeswitching.

The contributions of linguistic borrowing and codeswitching are different in each language. Compare the totals of linguistic borrowing in Table 10.1 with the totals of codeswitching in Table 10.2, which indicates the contribution of codeswitching according to number of switches, average length, tokens per switch and percentages of the corpus.
Table 10.2  Totals of codeswitching per number of switches and tokens

<table>
<thead>
<tr>
<th></th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code switches</td>
<td>736</td>
<td>2103</td>
<td>110</td>
</tr>
<tr>
<td>Length in tokens</td>
<td>3.5</td>
<td>4.7</td>
<td>15.6</td>
</tr>
<tr>
<td>Tokens (%)</td>
<td>2767</td>
<td>10559</td>
<td>1717</td>
</tr>
<tr>
<td>Percentage of corpus</td>
<td>3.4%</td>
<td>18%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

The contribution of codeswitching in Paraguayan Guaraní is by far the largest: three times more than in Quichua and twenty times more than in Otomí. Also, Paraguayan Guaraní shows four and six times more switched tokens than Quichua and Otomí. In all, the contribution of codeswitching represent about one fifth of the Guaraní corpus, but only five percent of the Quichua and Otomí corpora as a whole.

The data demonstrate that the composition of language mixing is different across languages. Such composition is not related to typology, because typologically similar languages (Quichua and Guaraní) show completely different distributions of borrowing and codeswitching. At the same time, typologically different languages (Quichua and Otomí) prefer borrowing to codeswitching. To judge from a comparison of the absolute amounts of loanwords and code switches, linguistic borrowing in Paraguayan Guaraní is on equal grounds with codeswitching. Given that codeswitching requires from the speaker proficiency in both languages, it is clear why Guaraní speakers prefer this type of mixing to borrowing. On the contrary, Quichua and Otomí speakers prefer borrowing because their bilingual performance is smaller.

The preference for codeswitching in Paraguay is not an overnight development, although it has grown lately as a result of increasing levels of bilingualism. Rubin (1973: 127) noticed a clear correlation between higher levels of bilingualism and higher degrees of codeswitching. This correlation provides a different insight into the data. While Paraguayan Guaraní seems to be a rather conservative language in terms of Spanish borrowing, the language is actually the most innovative not only in terms of codeswitching but also in the use of both mixing strategies. It is this entrenched combination of codeswitching and borrowing what motivated Melià (1973; 1978) to characterize Paraguayan Guaraní as a third language different from Spanish and Guaraní. Elsewhere (Gómez Rendón, forthcoming/a) I analyze the co-existence of codeswitching and borrowing in Paraguayan Guaraní in the frame of the matrix language model.

A comparison of minimum and maximum percentages per speaker gives an accurate idea of the range of borrowing variation within each language. Table 10.3 contains both percentages plus averages of borrowing and standard deviations.
Chapter 10

Table 10.3  Minimum and maximum percentages of borrowings for speakers

<table>
<thead>
<tr>
<th>Minimum (speaker)</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0%</td>
<td>5.7%</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td>Maximum (speaker)</td>
<td>27.0%</td>
<td>28.5%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Mean</td>
<td>18.9%</td>
<td>17.4%</td>
<td>14.1%</td>
</tr>
<tr>
<td>SD</td>
<td>8.92</td>
<td>6.42</td>
<td>3.97</td>
</tr>
</tbody>
</table>

The borrowing behavior of speakers shows a wide range of variation in each language. The standard deviations demonstrate that Otomí speakers are highly uniform in their borrowing behavior (3.97%) while Quichua speakers are the most heterogeneous. In sum, borrowing tendencies are similar across the three languages but differ across speakers. Similar tendencies in borrowing are explained by the pressure exerted on the speech communities by the dominant language. Different borrowing behaviors are explained sociolinguistic factors such as age, gender, education, literacy and bilingualism. Table 10.4 shows the distribution of borrowing across varieties of the three languages.

Table 10.4  Borrowing percentages for dialects of each recipient language

<table>
<thead>
<tr>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imbabura</td>
<td>21.28%</td>
<td>17.69%</td>
</tr>
<tr>
<td>Bolivar</td>
<td>11.67%</td>
<td>16.77%</td>
</tr>
</tbody>
</table>

The widest range of variation across dialects is found in Quichua, with ten points of difference between both dialects. Less significant is the range between Santiago Otomí and Tolimán Otomí. Finally, the variation between the Guaraní sociolects is the smallest of all. Notice that the widest range of cross-dialectal variation (9.6% for Quichua) is still smaller than the narrowest range of cross-speaker variation (19.3% for Otomí). A comparison of the borrowing data per speaker and dialect of each language demonstrates that borrowing tendencies are more uniform across dialects than across speakers. In other words, variation in borrowing is influenced less by dialectal distribution than by sociolinguistic factors. Still, dialectal variation remains an influencing factor of borrowing. The percentages suggest that dialectal differences are decisively shaped by borrowing in Quichua, which is precisely expected from the relative distance between the dialects of Imbabura and Bolívar (section 4.4.3.1). It remains to be seen whether comparable differences are found in the distribution of loanwords according to parts of speech and syntactic use (cf. 10.5).

Once we have looked at the overall results of borrowing across languages and identified the ranges of variation for speakers and dialects, we shall inquire
specifically into the contribution of lexical borrowing and the tendencies observed cross-linguistically and language-specifically.

10.2.1 Lexical borrowing in the corpora

Lexical borrowing corresponds to major parts of speech, i.e. nouns, verbs, adjectives and manner adverbs. Borrowed items from other classes are categorized as grammatical. Table 10.5 gives the general percentages of lexical and grammatical borrowing in each language.

<table>
<thead>
<tr>
<th></th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexical</td>
<td>81.2%</td>
<td>63.9%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Grammatical</td>
<td>18.8%</td>
<td>36.1%</td>
<td>52.5%</td>
</tr>
</tbody>
</table>

The overall results of linguistic borrowing confirmed a close similarity across languages (Table 10.1). However, the tendencies in lexical and grammatical borrowings are strikingly different. The first tendency shows that the contribution of grammatical borrowing shows an increase inversely proportional to the decrease in lexical borrowing. Accordingly, Quichua has the highest percentage of lexical borrowing but the lowest of grammatical borrowing while Otomí has the highest percentage of grammatical borrowing but the lowest of lexical borrowing. The second tendency shows a gradual decrease between lexical and grammatical from Quichua to Otomí. The largest difference between lexical and grammatical borrowing is attested in Quichua (81% vs. 19%) and the smallest in Otomí (47% vs. 52%). Lexical borrowing is more frequent than grammatical borrowing in Quichua and Paraguayan Guaraní, thus confirming the prediction from the scales of borrowability (H.3). This prediction is not confirmed for Otomí, where grammatical borrowings slightly surpass lexical borrowings. Interestingly, the languages which confirm H.3 are similar to each other as regards their morphological type and their system of parts of speech. By the same token, subhypothesis H.3.1 on the precedence of open classes over closed classes in borrowing is demonstrated only for Quichua and Guaraní, where Spanish borrowings from open classes (i.e. verbs, nouns, adjectives and manner adverbs) are more numerous than borrowings from half-open or closed classes (function words).

The predominance of lexical borrowing cannot be established in absolute terms because distributions differ across languages. For an accurate assessment we must consider the number of tokens and types in lexical and grammatical classes (Table 10.6).
Table 10.6 Lexical and grammatical borrowing in terms of types and tokens

<table>
<thead>
<tr>
<th></th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tokens</td>
<td>12256 (81.2%)</td>
<td>6422 (63.9%)</td>
<td>7406 (47.5%)</td>
</tr>
<tr>
<td>Types</td>
<td>3188 (84.6%)</td>
<td>2159 (80.7%)</td>
<td>1431 (62.6%)</td>
</tr>
<tr>
<td><strong>Grammatical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tokens</td>
<td>2842 (18.8%)</td>
<td>3634 (36.1%)</td>
<td>8165 (52.5%)</td>
</tr>
<tr>
<td>Types</td>
<td>580 (15.4%)</td>
<td>518 (19.3%)</td>
<td>853 (37.4%)</td>
</tr>
</tbody>
</table>

Differences between types and tokens in the distribution of lexical and grammatical borrowings are confirmed by the data. The distribution of types strengthens the dominance of lexical borrowing in Quichua and Guaraní but also in Otomí, where the proportion between lexical and grammatical items is inverted in relation to Table 10.5.

Differences between types and tokens are attributed to the morphological type of the languages. In addition, it is possible that the phonological variation of loanwords motivated by their idiosyncratic assimilation produces a larger number of loan types, especially in Otomí. Still, the major contribution of grammatical borrowing in tokens and types in this language cannot be satisfactorily explained by discursive or phonological factors only. The following step in the interpretation of the data is to determine the structure of lexical borrowing according to lexical classes.

10.3 Distribution of lexical borrowings in the corpora: parts of speech

This section compares the distributions of lexical borrowings according to verbs, nouns, adjectives and manner adverbs in the three languages under study. The findings presented in this section test the borrowing hypotheses from the scales of borrowability (H.3.1) and the theory of parts of speech (H.4 and related subhypotheses). After a general discussion of the overall results, individual subsections analyze the borrowings from each lexical class. The following table presents the percentages of loanwords from the four lexical classes in relation to overall borrowing.

Table 10.7a Percentages of borrowings per lexical class

<table>
<thead>
<tr>
<th></th>
<th>Tokens</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nouns</td>
<td></td>
<td>54.4%</td>
<td>37.2%</td>
<td>40.7%</td>
</tr>
<tr>
<td>Verbs</td>
<td></td>
<td>17.7%</td>
<td>18.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Adjectives</td>
<td></td>
<td>8.5%</td>
<td>7.4%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Adverbs 10</td>
<td></td>
<td>3.4%</td>
<td>2.4%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Manner Adverbs</td>
<td></td>
<td>0.6%</td>
<td>0.9%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

10 This class includes all subclasses (manner, place, time).
Comparative Analysis: Lexical Borrowing

These percentages confirm the prediction from the scales of borrowability (N > V > A > Adv) for Quichua and Guaraní but not for Otomí: in this language loan adverbs are more frequent than loan adjectives. Also, the general prediction from the theory of parts of speech (V > N > A > Adv) is confirmed only partially. Moreover, neither the average frequencies nor the language-specific percentages confirm the order predicted by the hierarchy of parts of speech. The actual distribution of nouns and verbs (N > V) is precisely the opposite to the predicted order (V > N). On average, nouns are over two times more frequent than verbs. The noun-verb ratio is the highest in Otomí, with over eight nouns for one verb. But is this distribution syntactically motivated? Are the regular syntactic functions in each language influencing the distribution of borrowings in lexical classes? In order to answer for this question, individual samples of 1000 tokens were extracted from the corpus of each language in order to know the regular distribution of lexemes over HP, MP, HR, MR functions as a benchmark for the analysis. The following table gives the percentages of lexical borrowings versus the regular distribution of syntactic functions (HR=head of referential phrase; HP=head of predicate phrase; MR=modifier of referential phrase; MP=modifier of predicate phrase).

Table 10.7b. Lexical borrowings vs. regular distribution of syntactic functions

<table>
<thead>
<tr>
<th>LexClass</th>
<th>SynFunc</th>
<th>Quichua (EQ)</th>
<th></th>
<th>Guaraní (PG)</th>
<th></th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HR</td>
<td>SynFunc</td>
<td></td>
<td>SynFunc</td>
<td></td>
</tr>
<tr>
<td>Nouns</td>
<td>HR</td>
<td>67.6%</td>
<td>32.7%</td>
<td>59.1%</td>
<td>13.7%</td>
<td>85.9%</td>
</tr>
<tr>
<td>Verbs</td>
<td>HP</td>
<td>22.0%</td>
<td>33.1%</td>
<td>29.1%</td>
<td>24.0%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Adjectives</td>
<td>MR</td>
<td>10.5%</td>
<td>6.1%</td>
<td>11.8%</td>
<td>2.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Manner Adverbs</td>
<td>MP</td>
<td>0.7%</td>
<td>13.6%</td>
<td>1.4%</td>
<td>5.2%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

The following remarks are relevant concerning the distribution of regular syntactic functions as shown in Table 10.7b.

- Heads are higher than modifiers in the three languages, but the relative frequencies of syntactic functions vary in each language.
- On the one hand, only Otomí shows a higher frequency of heads of referential phrase. In the other languages, either heads of referential phrases are higher than heads of predicate phrases (Guaraní), or both functions are roughly similar (Quichua). Considering the preferential use of lexemes in predicative function in Guaraní, as described in Chapter 7, the higher frequency of heads of predicate phrases in this language is no surprise. However, the similarity of both functions in Quichua, a language without an extended predicational usage of lexemes, is surprising indeed.
- On the other hand, the function of modifier of referential phrase is higher than the function of modifier of predicate phrase only in Otomí; in Guaraní but especially in Quichua the latter function is clearly dominant over the other.
The low frequency of modifier functions in Otomí corresponds to its typological characterization as a type-6 rigid language. However, the higher frequency of predicate phrase modifiers in Quichua and Guaraní does not match the lack of a specialized class for this function in both languages, even though they do have a broad class of lexemes for this function, unlike Otomí, which lacks lexical means for the modification of predicate phrases.

Do the above particularities underlie the distribution of lexical borrowings? The first impression is that they do not: correspondences between both distributions are not significant. The following positive correlations were identified, although their degree of significance is extremely low: 1) the higher frequency of heads of referential phrase in Otomí is correlated vis-à-vis the higher frequency of loan nouns in the same language; 2) the higher frequency of heads of predicate phrases vis-à-vis the higher frequency of loan verbs in Guaraní in relation to Quichua and Otomí; and 3) the lower frequency of modifiers of predicate phrases in Otomí vis-à-vis the lower frequency of loan manner adverbs in the same language. However, for each of the above positive correlations, several negative ones were identified as well: 1) comparatively, the highest frequency of heads of referential phrases occurs in Quichua, but the frequency of loan nouns in this language is not the highest of the three; 2) the highest frequency of loan verbs occurs in Guaraní while the highest frequency of heads of predicate phrases is attested in Quichua; 3) the highest frequency of modifiers of predicate phrases occurs in Quichua but the highest frequency of loan manner adverbs is found in Guaraní.

In sum, the data do not show significant correlations between syntactic functions and lexical borrowings which can lead us to assume the former influence decisively on the latter. The corollary is that the distribution of borrowings per lexical class is not determined by the prototypical syntactic functions assigned to each class. Nevertheless, it remains to see if no correlation exists between the regular distribution of syntactic functions and the distribution of syntactic functions of those lexical classes which display a flexible behaviour (i.e. nouns and adjectives).

One further question to be answered is this: are the subhypotheses from the theory of parts of speech confirmed by the data? The percentages confirm subhypothesis H.4.1 for the three languages: phrase modifiers (A, Adv) are borrowed less frequently than phrase heads (V, N). The data equally confirm subhypothesis H.4.2 inasmuch as the three languages have borrowed items not only from the class of adverbs but also from all the previous lexical classes in the hierarchy. The corollary is that none of the languages shows a gap in the borrowing of lexical classes. Finally, the data confirm subhypothesis H.4.3 only for Guaraní and Quichua: loan nouns are the largest lexical class because they follow the last differentiated class in both languages, i.e. verbs. The data do not confirm the
subhypothesis for Otomí, in which adjectives should absorb the bulk of loanwords because they are the lexical class following the last differentiated class (nouns) in the Otomí system. Quite the opposite, loan adjectives in Otomí represent the smallest lexical class of all. Linguistic and nonlinguistic factors are at the heart of this phenomenon (cf. 10.3.3).

Differences in the borrowing of items of the four lexical classes are important across the three languages. While Quichua and Guaraní show pretty much the same distribution of borrowings per lexical class, Otomí deviates clearly from such distribution two ways: the primacy of nouns is overwhelming while the contribution of verbs is minimal. The similarities between Quichua and Guaraní may be due to their common flexibility in the system of parts of speech, as compared to the rigidity of lexical classes in Otomí. It is necessary, therefore, to explain the differences in the distribution of lexical classes across the languages from a cross-linguistic perspective.

10.3.1 Verbs

Verbs form an open class of lexical items occupying the slot of heads in predicate phrases. The occurrence of verbs in the corpora is predicted differentially by the theory of parts of speech (V > N) and the scales of borrowability (N > V). The data discussed in this section seem to confirm the latter prediction. The following table gives the totals of Spanish loan verbs, including types, tokens and their percentage of the overall borrowing.

<table>
<thead>
<tr>
<th>Loan verbs</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>17.7%</td>
<td>18.3%</td>
<td>4.80%</td>
</tr>
<tr>
<td>Types</td>
<td>15.9%</td>
<td>21.5%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

Verbs make a fairly equivalent contribution to overall borrowing in Quichua and Guaraní. In contrast, their contribution is much lower in Otomí. Guaraní shows the highest percentage of loan verbs, followed by Quichua and Otomí. The frequency of verbs in terms of types gives a similar picture. Guaraní has the largest number of different verb forms (21.5%), followed by Quichua (15.9%) and Otomí (10.3%). Interestingly, the contribution of types is twice as large as the contribution of tokens in Otomí due to phonological variation. In contrast, the percentages of types and tokens are closely similar in Quichua and Guaraní. If the number of types (distinct verb forms) determines the degree of borrowing innovation, then Guaraní is the most innovative of the three languages. If the number of tokens (all verb forms) measures the degree of borrowing productivity, then Quichua is the most productive of the
three languages for its prolific use of loan verbs in discourse. Let us consider the contribution of loan verbs to lexical borrowing (i.e. the four parts of speech).

Table 10.9 Loan verbs from the total number of lexical borrowings

<table>
<thead>
<tr>
<th></th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan verbs Tokens</td>
<td>22.0%</td>
<td>29.1%</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

The comparison of tables 10.8 and 10.9 demonstrates that the contribution of loan verbs to lexical borrowing is larger than their contribution to overall borrowing. The percentage of loan verbs in relation to the rest of lexical classes is higher for the three languages. This is particularly visible in Guaraní and Otomí. However, the relative positions of the languages in order of frequency remain identical.

It is useful to relate these findings to the systems of parts of speech of the recipient languages and the morphological type of the source language. On the one hand, it is noteworthy that the three languages have a separate lexical class for heads of predicate phrases. Therefore, it is expected that they show all similar tendencies in verb borrowing. The above statistics disprove this claim however. In addition, the predicative capacity of non-verbal classes in Guaraní cannot account for the large number of verb tokens and types in this language. On the other hand, the complex morphology of the Spanish verb and the fusional character of this language may be two inhibitors of verb borrowing in the three languages (cf. section 5.3). The influence of both structural factors becomes decisive when speakers are incipient bilinguals who cannot parse morphemes correctly and individualize verb roots for their morphosyntactic integration. While it is true that three languages do not have problems with the integration of Spanish verb forms (cf. 10.1), the influence of bilingual performance on morphological parsing could explain at least two facts of verb borrowing: the lesser occurrence of loan verbs in Otomí (incipient bilinguals); and the presence of a large number of loan verbs in Guaraní (compound and coordinate bilinguals).

A full account of verb borrowing calls for several factors, including not only the typology of parts of speech of the recipient language and the morphological type of the source language, but also the structure of discourse in both languages and the elements of the communicative setting. This will become clear when analyzing the usage of loan verbs.

10.3.2 Nouns

Nouns form an open class of lexical items occupying the slot of heads in referential phrases. Spanish nouns undergo various phonological processes of accommodation but find no impediment for their morphological insertion in the recipient languages. The occurrence of nouns is predicted differently by the theory of parts of speech (V
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> N) and the scales of borrowability (N > V). The data discussed in this section validate the second distribution: nouns are the largest class of lexical borrowings in Quichua, Guaraní and Otomí. Still, the relative contribution of loan nouns varies across languages. Table 10.10 gives the totals of Spanish loan nouns, including types, tokens and their percentage of the overall borrowing.

<table>
<thead>
<tr>
<th>Loan nouns</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>54.0%</td>
<td>37.2%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Types</td>
<td>54.0%</td>
<td>45.5%</td>
<td>47.8%</td>
</tr>
</tbody>
</table>

Quichua is the language with the largest number of loan nouns, followed by Otomí and Guaraní. The same frequencies are attested for types. The percentages of nouns from the overall amount of borrowings rank the three languages on the following scale of frequency: Quichua > Otomí > Guaraní. This ranking is different from the one based on loan verbs (Guaraní > Quichua > Otomí). The contribution of loan nouns to lexical borrowing (the four parts of speech) is presented in Table 10.11.

<table>
<thead>
<tr>
<th>Loan nouns</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>67.6%</td>
<td>59.1%</td>
<td>85.9%</td>
</tr>
</tbody>
</table>

The comparison of tables 10.10 and 10.11 demonstrates that loan nouns make a larger part of lexical borrowing than they make of overall borrowing. The percentage of loan nouns in relation to the rest of lexical classes increases in the three languages, but it is especially visible in Otomí. As a result, the ranking of the languages changes notably: Otomí > Quichua > Otomí. In the following I discuss the distribution of loan nouns from the perspectives of the systems of parts of speech of the recipient languages, their morphological type, and various pragmatic and discursive factors. Nonlinguistic situations that could speed up or slow down noun borrowing are considered too.

Of the three languages only Otomí has a distinct class of nouns. Quichua and Guaraní, both flexible languages, have a broader class of non-verbs which includes lexemes equivalent to nouns, adjectives and manner adverbs. Therefore, if the existence of a separate lexical class favors the borrowing of lexemes from the same class, the large number of loan nouns in Otomí is explained satisfactorily, but the even larger number of loan nouns in Quichua cannot be explained in this way. An alternative explanation for the large number of nouns in Quichua comes from subhypothesis H.4.3, according to which items from the lexical class following the last differentiated class attested in the recipient language are borrowed.
preferentially. Because verbs are the last differentiated class attested in Quichua, nouns are supposed to be borrowed preferentially. Yet, the explanation is invalidated by Otomi itself, because this language does not borrow adjectives preferentially, as expected from H.4.3.

As regards the typology of the source language, no factor seems to influence the contribution of loan nouns in any significant way. Spanish nominal morphology is simple in comparison to verbal morphology. Therefore, no structural obstacles to noun borrowing are expected, which may be interpreted positively as a factor promoting noun borrowing regardless of typological differences.

Situations in which nouns are surpassed by items from other classes, particularly verbs, are not uncommon in the literature. Nichols (2006) reports that nouns in Zuni (isolate, Southwestern United States) are borrowed only rarely and that their low frequency is explained in terms of grammatical factors such as restrictions on native nominal roots. Also, Epps (forthcoming) finds that Tukano loan verbs in Hup are more frequent than loan nouns, and explains this situation by the high levels of bilingualism among Hup speakers and the capacity of verbs to hide inside the complex Hup verb phrase. Only in this way, Epps concludes, a large number of verbs can enter the language despite social pressures against language mixing in the Hup speech community.

The factors proposed to account for the primacy of nouns in most borrowing situations can be summarized as follows:

a) Nouns are less morphologically complex (e.g. than verbs) and therefore especially borrowable.

b) The simplicity of nominal morphology prevents a typological mismatch between the morphosyntax of the donor language and the morphosyntax of the recipient language in noun borrowing.

c) Nouns are syntactically more independent than other lexical classes: they can stand alone in the phrase and do not rely on further arguments as verbs or adjectives do.

d) The syntactic independence of nouns makes them semantically autonomous so that they do not require further constituents to be conceptually complete.11

e) Nouns usually refer to entities in socio-communicative space of speakers which can be retrieved more easily than abstract referents as those encoded by adjectives (properties) or verbs (actions).

Contact situations are characterized by higher or lower degrees of acculturation of the speech communities involved. This acculturation implies the adoption of objects and practices alien to the social space of speakers before contact. In this context, the borrowing of form-meaning units referring to new entities is a helpful mechanism to

11 The fact that nouns are always acquired by children before verbs points in the direction of nouns’ morphological simplicity and more straightforward referentiality
cater for the communicative gap created by the contact of two different sociocultural systems. Nouns are the best candidates for borrowing in these situations, because their referential capacity makes them easily retrievable from discourse and their identification with referents is facilitated by their syntactic independence and saliency in speech. This explains why the earliest borrowings from Amerindian languages in Spanish are nouns (cf. section 5.4.1). In the contact situations analyzed in this book, the need to bridge the communicative gap with the dominant Spanish-speaking culture leads Amerindian speakers to borrow an increasing number of nouns referring to objects and practices with which they enter into contact as a result of their participation in the mainstream society. Because of their ethno-cultural background, speakers of Quichua and Otomí use borrowing as a strategy of immersion in the dominant culture. The same pressure is not felt by Guaraní speakers because they are not members of an ethnic minority and their participation in the national society is more active thanks to their bilingualism.

These arguments suggest that the explanation of borrowing should include both linguistic and nonlinguistic factors. Indeed, an eclectic approach combining typological and sociolinguistic elements helps us elaborate a more adequate model of constraints on linguistic borrowing.

10.3.3 Adjectives

Adjectives form an open class of lexical items occupying the slot of modifiers in referential phrases. Like nouns and verbs, they undergo a phonological process of integration to the recipient language. The great majority of adjectives are inserted directly (without derivation) into the native structure, even though they can be used in syntactic positions other than the prototypical of modifier of referential phrase. The frequency of adjectives is equally predicted by the theory of parts of speech and the scales of borrowability: \((N/V) > \text{Adj} > \text{Adv}\). The distribution of loan adjectives in Quichua and Guaraní confirm their position. In contrast, loan adjectives in Otomí are less frequent than adverbs. Table 10.12 gives the totals of Spanish loan adjectives, including types, tokens and their percentages of overall borrowing.

<table>
<thead>
<tr>
<th>Loan adjectives</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>8.5%</td>
<td>7.4%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Types</td>
<td>13.6%</td>
<td>11.9%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

While loan adjectives make a similar contribution in Quichua and Guaraní, their number in Otomí is minimal. The ranking of the three languages on adjective borrowing (Quichua > Guaraní > Otomí) differs from the ranking on nouns and
verbs. The contribution of loan adjectives from the total of lexical borrowings (the four parts of speech) is given in the following table.

<table>
<thead>
<tr>
<th>Loan adjectives</th>
<th>Quichua (EQ)</th>
<th>Guaraní (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>10.5%</td>
<td>11.8%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

The percentage of loan adjectives relative to lexical borrowing differs from their percentage of overall borrowing. This time Guaraní and Quichua rank first and second while Otomí remains third even though the absolute increase of loan adjectives is over hundred percent.

Considering the parts of speech of the recipient languages\(^{12}\), the main issue in need of explanation concerns the minimal contribution of loan adjectives in Otomí. In the following I discuss alternative explanations for this phenomenon.

To begin with, none of the three languages has a distinct class comparable to the class of Spanish adjectives. On the one hand, Quichua and Guaraní have a broader lexical class of non-verbs which covers the function of adjectives. On the other, Otomí has no lexical class for the syntactic function of referential phrase modifiers and uses compounding or stative verbs. The data disconfirm the prediction of hypothesis H.4.3 that Otomí will borrow adjectives more frequently because they follow the last differentiated class attested in the language. Quite the opposite, Otomí is the language with the smallest number of adjectives. This fact can be interpreted in two different ways: a) the lack of adjectives does not lead to their preferential borrowing; b) the lack of adjectives inhibits their borrowing. In my opinion, the question is not which of these interpretations is correct but what makes the lack of adjectives either a promoting factor or an inhibiting factor. Because the same factor may be interpreted in either sense, there should be another factor positioned higher up in the scale of causation (cf. section 2.6.2) which determines the direction of the former in the borrowing process. Accordingly, the interplay of linguistic and nonlinguistic factors is reinterpreted in the following terms: the extent of the influence exerted by typological factors is determined by bilingualism. If we assume that incipient bilinguals are more conservative of the typological profile of the recipient language, the lack of a lexical class in their language will inhibit the borrowing of loanwords from such class. On the contrary, if we assume that compound and coordinate bilinguals are more innovative and open the door to alien elements that eventually motivate structural changes, the lack of a lexical class in their language will promote the borrowing of loanwords from such class. This

\(^{12}\) As regards the morphology of the source language, adjective borrowing is facilitated by the relative morphological simplicity of Spanish adjectives and the freezing of roots and gender morphemes as single units.
argument requires the consideration of loanword usage in the recipient language. If the recipient language uses loan adjectives as such and not as something else (e.g. verbs, nouns) a typological change is in progress. In other words, the correlation between bilingualism and typology implies the correlation between bilingual performance and usage of lexical borrowings. The statistical study of this correlation is undertaken in section 10.6.

Another explanation for the observed distribution of loan adjectives is purely typological and may be formulated in the following terms: the presence of a class of flexible lexical items (e.g. non-verbs or modifiers) motivates the borrowing of lexical items used in any of the syntactic positions occupied by such flexible items, while the lack of lexical mechanisms to perform syntactic functions, as typical of rigid languages, inhibits the borrowing of lexical items. In other words, the borrowing of lexical items from a class unattested in the recipient language is favored by the presence of a lexical class performing an equivalent function (e.g. non-verbs in Guaraní and Quichua) but disfavored by the absence of a similar class (e.g. the lack of adjectives in Otomí).

For Quichua and Guaraní, flexible languages, two promoting factors of adjective borrowing could be a) the occurrence of adjectives in bare noun phrases without explicit noun heads, and b) the existence of a small subclass of adjectives used as modifiers of referential and predicate phrases without further measures. To weigh the influence of these factors, we need to explore the usage of loan adjectives and their subclasses. For reasons of space only the first task will be undertaken here (cf. 10.4.3).

In sum, the overall percentages agree with the frequency distribution of loan adjectives predicted by the theory of parts of speech and the scales of borrowability. However, the low frequency of adjectives in Otomí contradicts the prediction of subhypothesis H.4.3. Because the predictions are confirmed for Guaraní and Quichua, we assumed other factors should be playing a role in adjective borrowing in Otomí. One of them is the level of bilingualism. Incipient bilinguals like the bulk of Otomí speakers tend to preserve the typological profile of their language by disallowing alien elements which do not conform to such profile (e.g. adjectives). Additional factors concern the occurrence of adjectives in bare noun phrases and the semantic classification of flexible adjectives.

### 10.3.4 Manner adverbs

Manner adverbs form an open class of lexical items occupying the slot of modifiers in predicate phrases. Spanish manner adverbs are directly inserted into the morphological structure of the recipient languages. Spanish manner adverbs are borrowed in derived and non-derived forms. If borrowed in derived form, manner adverbs are frozen borrowings with the derivative morpheme -mente. The theory of
parts of speech predicts the relative frequency of manner adverbs (Adj > MAdv). The scales of borrowability predict the relative frequency of adverbs in general (Adj > Adv). In both cases adverbs are the lexical class with the lowest borrowability. The percentages of adverbs in Table 10.7 confirm their position in Quichua and Guarani but not in Otomí while the percentages of manner adverbs confirm the prediction from the theory of parts of speech in the three languages. The following table gives the totals of loan manner adverbs, including types, tokens and their percentage of overall borrowing.

<table>
<thead>
<tr>
<th>Loan manner Adverbs</th>
<th>Quichua (EQ)</th>
<th>Guarani (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>0.6%</td>
<td>0.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Types</td>
<td>1.0%</td>
<td>1.7%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

The percentage of manner adverbs in the corpora is very small if compared to other lexical classes. The ranking of languages on loan manner adverbs (tokens) is Guarani > Quichua > Otomí. In types the ranking is exactly the same. Also, notice that Otomí still ranks first in the borrowing other types of adverbs. Table 10.15 gives the percentages of loan manner adverbs to lexical borrowing (the four parts of speech) in the three languages.

<table>
<thead>
<tr>
<th>Loan manner adverbs</th>
<th>Quichua (EQ)</th>
<th>Guarani (PG)</th>
<th>Otomí (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>0.7%</td>
<td>1.4%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

The comparison of tables 10.14 and 10.15 demonstrates that the contribution of loan manner adverbs to lexical borrowing is larger that their contribution to overall borrowing in the three languages. Still, the ranking of the languages on verb borrowing remains identical: Guarani > Quichua > Otomí.

Given their systems of parts of speech, none of the languages are expected to borrow manner adverbs with particular frequency: while Otomí has no lexical class of items for the modification of predicate phrases, Guarani and Quichua have only a broad lexical class (non-verbs) for that purpose. Alternatively, Quichua and Guarani could eventually borrow manner adverbs to the extent that they use a lexical strategy for the modification of predicate phrases. The statistics provide evidence for this hypothesis. Still, it remains to see if loan manner adverbs are used as a new lexical class in Otomí. If bilingualism is positively correlated to typological stability, the emergence of a new lexical class in this language is excluded, given the incipient
bilingualism of Otomí speakers. The usage of manner adverbs is analyzed in section 10.4.4 and their correlation to bilingual performance in section 10.6.

Finally, it is possible that the distribution of manner adverbs is partially determined by the preference of phrasal constructions in the source language for the modification of predicate phrases. For example, the manner adverb rápidamente ‘rapidly’ is usually replaced with adverbial phrases such as a la carrera, volando or a las voladas. While these phrases are characteristic of informal registers, they are replaced by their lexical equivalents in formal speech. Because our data involve colloquial speech in informal situations, phrasal adverbs are expected in the corpora. I discuss the distribution of phrasal manner adverbs in section 10.4.5

10.3.5 Complex borrowings: frozen and phrasal

Complex borrowings are multi-morphemic loanwords containing either a root with bound morphemes of the source language, or free morphemes forming a single lexical unit. The first type is called ‘frozen borrowings’ and the second type ‘phrasal borrowings’. It is necessary to distinguish both types from code switches (cf. section 4.2.2). Here I analyze the contribution of complex borrowings in terms of frequency and syntactic function. Table 10.12 summarizes the contribution of complex borrowings in the corpora.

<table>
<thead>
<tr>
<th>Complex Borrowings</th>
<th>Quichua</th>
<th>Guaraní</th>
<th>Otomí</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>5.56%</td>
<td>5.13%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Types</td>
<td>10.97%</td>
<td>13.07%</td>
<td>16%</td>
</tr>
</tbody>
</table>

The contribution of complex borrowings is not unimportant. They occur more frequently than manner adverbs in the three languages, and more frequently than adjectives and verbs in Otomí. The presence of complex borrowings is still more relevant in a type analysis. At the same time, complex borrowings across the three languages are similar in tokens but less so in types. Still, the ranking of languages on this parameter is the same in both cases: Otomí > Guaraní > Quichua.

The unexpectedly large number of complex borrowings raises two problematic issues: one is their alternative analysis as code switches; another is the assignment of a lexical class to phrasal borrowings. The issue of the linguistic status of complex borrowings is briefly commented below on the basis of the discussion presented in

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13 A crucial difference between both types of complex borrowings is that frozen borrowings can be assigned to a lexical class of the source language while phrasal borrowings cannot. Therefore, a comprehensive evaluation of complex borrowings requires an analysis of their syntactic roles in the recipient language (cf. section 10.4.5).
sections 4.2.2 and 10.1. The accountability of lexical items in terms of lexical classes is left for section 10.4.5.

In previous sections I proposed to analyze multi-word stretches either as instances of complex borrowing or cases of codeswitching depending on various. Arguably, there is a correlation between the frequency of complex borrowings and code switches, on the one hand, and levels of bilingualism, on the other. In this perspective, incipient bilinguals prefer phrasal borrowing while compound or coordinate bilinguals favor codeswitching. Nevertheless, a comparison of complex borrowings and code switches does not confirm such assumption. The language with the largest number of code switches is Guaraní (18%). Accordingly, it is expected that Guaraní shows only a small number of complex borrowings, but that is not case. In any case, the variation across languages in the number of complex borrowings is not significant enough to allow a reliable measure of the relation of complementary distribution between complex borrowings and code switches.

10.4. The use of lexical borrowings in the corpora

This section deals with the usage of Spanish loanwords in Guaraní, Quichua and Otomí. This usage is based on the idea of flexibility, differentiation and rigidity: thus, lexical flexibility consist in the use of one lexical class for two or more syntactic functions; differentiation, the use of one lexical class for one syntactic function; and rigidity, no lexical class for one syntactic function and its replacement with morphosyntactic mechanisms. According to the classification of previous chapters, Spanish is a language with a differentiated system of parts of speech; Guaraní and Quichua have a flexible system and Otomí a rigid system. On the basis of this classification I proposed a set of hypotheses concerning the frequency and use of Spanish loanwords in general and for each language. While the hypotheses concerning the frequency of loanwords were tested in the last sections, those about the usage of loanwords are played against the borrowing data in the following. For the sake of clarity, this section is subdivided in several subsections, each devoted to the analysis of one lexical class and the uses thereof in the recipient languages. Statistics are supported with examples from the corpora.

10.4.1 The use of loan verbs

The data rank loan verbs second in the borrowing hierarchy against the predictions from the theory of parts of speech. The distribution of loan verbs cannot be explained alone by the systems of parts of speech of the recipient languages or the morphological typology of the source language, and requires the consideration of discursive, pragmatic and sociolinguistic factors. Because Quichua, Guaraní and Otomí have a distinct lexical class of verbs, a univocal relation exists between this
lexical class and the syntactic slot of head of predicate phrase. This typological feature restricts the use of loan verbs in other slots, as shown by the syntactic distribution of loan verbs in the corpora. Table 10.17 charts the syntactic functions of head of predicate phrase (HP), head of referential phrase (HR), modifier of referential phrase (MR) and modifier of predicate phrase (MP).

<table>
<thead>
<tr>
<th>Table 10.17 Distribution of loan verbs per syntactic slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbs</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>HP</td>
</tr>
<tr>
<td>HR</td>
</tr>
<tr>
<td>MR</td>
</tr>
<tr>
<td>MP</td>
</tr>
</tbody>
</table>

Loan verbs are used always in their prototypical function of heads of predicate phrases (HP). No functional adaptation occurs because the donor language and the recipient languages have all one distinct class for the syntactic slot of heads of predicate phrase. No functional specialization occurs either, because Spanish verbs correspond to the same slot occupied by verbs in the recipient languages. The following examples illustrate the use of loan verbs (in bold) in Guaraní (34), Quichua (35) and Otomí (36).

34) La **tekove-kuéra** o-heka pe hapichá-pe,
    DEM person-PL 3-loo.for DEM people-ACC
    i-katu-kuaua haguã-icha o-ño-ntende o-heka,
    3-be.able.to-know for-like 3-RECP-understand 3-look.for
    ‘People look for other people, so they can understand each other’

35) Chai **ña grupu-cuna-ta** forma-ri-shca cai presidinti
    DEM already group-PL-ACC form-REF-PRF DEM president
    alli-pacha shaya-ri-shpa-mi
    good-SUP stand.up-GER-FOC
    ‘And then the current president stood up strong and created the groups’

36) Nesesita da **nuya jä’ui da=hũunta**
    need FUT.3 DEM.PL person FUT.3=get-together
    pa da hoku ‘nar=mehe
    for FUT.3 build INDEF.S=well
    ‘These people need to get together in order to build a well’
37) chay tunel-ta rura-ngapa-ca
   DEM.DIST tunnel-ACC make-PURP-TOP
   ńucanchi pico-lla-mi minishti-ri-n
   1PL.POSS pick-just-FOC need-REFL-3PL

   ‘Our picks were needed to dig that tunnel’

   The verb roots –ntende ‘understand’, forma- ‘create’ and hũunta ‘get together’
   occupy all the slot of heads of predicate phrases in their respective sentences. Notice
   that the Spanish verb form necesita ‘need’ in (36) is not considered a loan verb
   proper but a loan auxiliary together with phrasal forms such as kreo-ke ‘I believe’
   and tyene-ke ‘it has to’.14 Loan auxiliaries are a special category of grammatical
   borrowing and receive special attention in section 11.3.5.3. Neither Quichua nor
   Guaraní have an equivalent loan auxiliary. Quichua does have minishti- ‘to need’
   (37), from Spanish menester ‘need’ in the periphrastic constructions es menester and
   haber menester ‘to be in need of’. The borrowing of this form dates back to the first
   years of contact, because these constructions have long fallen into disuse in
   colloquial Spanish and the form itself is fully assimilated to Quichua phonology.

   The only apparent exception to the predicative usage of loan verbs is
   represented by a small number of verb forms used as heads of referential phrases in
   Quichua. However, these cases are instances of nominalization, a derivational
   strategy to make noun phrases from verb phrases. Consider the following example:

   38) almozera ni-shca-cuna-man-pish tanda muti
      cook say-NMLZR-PL-DAT-ADIT bread boiled.corn
      carac carac chay servisio-ta rura-shca-cuna-man-pish
      give-HAB be-PST DIST service-ACC do-NMLZR-PL-DAT-ADIT
      carac carac servi-shca-cuna-ca almiza-ta rura-shca
      give-HAB be-PST serve-NMLZR-PL-TOP lunch-ACC make-PST

      ‘They used to give bread and boiled corn to the so-called almozeras, they used
to give them to those who did this job, and the maids prepared the lunch’

   The verb form servi- ‘serve, wait upon’ in (38) is derived into the noun ‘servers’ by
   the suffixation of the participle marker -shka. Similar constructions in (38) are
   almozera nishcacuna ‘the so-called almozeras’ and servisiota rurashcacuna ‘the
   ones who do the service (of preparing lunch)’. Because the verb form can be used as
   a noun only through further measures (i.e. nominalization), it is not flexible.
   Accordingly, all the instances of nominalization were not included in the statistics.

   14 Auxiliaries are not included in Table 10.13, hence the mismatch with the total of loan verbs
   in Table 10.8.
In sum, Spanish loan verbs in the three recipient languages show a straightforward distribution: they are used as heads of predicate phrases without exception. The few cases of Spanish verbs in the corpora that occupy other syntactic slots (e.g. head of referential phrase) or still other functions (e.g. modality) do not contradict this distribution: they are instances of nominalization or loan auxiliaries.

### 10.4.2 The use of loan nouns

Nouns are the largest class of Spanish loanwords in the corpora. The contribution of nouns to overall and lexical borrowing was discussed in section 10.3.2 and explained through discursive, pragmatic, semantic and typological motivations. Here I look into the use of loan nouns and explain such use in terms of linguistic and nonlinguistic factors.

Of the three languages only Otomí has an individual class of lexical items for the syntactic function of heads of referential phrases. Instead, Guaraní and Quichua have a multi-functional class of items covering this syntactic function plus those of modifiers of predicate and referential phrases. The hypothesis of functional adaptation predicts that loan nouns will be used in the same way as native nouns, i.e. flexibly in Quichua and Guaraní, but differentially in Otomí. In contrast, the hypothesis of functional specialization predicts that loan nouns will be used as they are in Spanish, i.e. only in their prototypical function.

Table 10.18a charts the syntactic functions of heads and modifiers of predicate and referential phrases. Apart from these functions, several others occur marginally in the corpora and concern grammatical borrowing.

<table>
<thead>
<tr>
<th>SynFunc</th>
<th>Quichua Tokens</th>
<th>Guaraní Tokens</th>
<th>Otomí Tokens</th>
<th>Total Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP</td>
<td>5</td>
<td>8</td>
<td>37</td>
<td>103</td>
</tr>
<tr>
<td>HR</td>
<td>7618</td>
<td>3675</td>
<td>6275</td>
<td>17671</td>
</tr>
<tr>
<td>MR</td>
<td>392</td>
<td>54</td>
<td>7</td>
<td>453</td>
</tr>
<tr>
<td>MP</td>
<td>141</td>
<td>1</td>
<td></td>
<td>142</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nouns</th>
<th>Types</th>
<th>Types</th>
<th>Types</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP</td>
<td>2</td>
<td>7</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>HR</td>
<td>1767</td>
<td>1214</td>
<td>880</td>
<td>3861</td>
</tr>
<tr>
<td>MR</td>
<td>215</td>
<td>37</td>
<td>3</td>
<td>255</td>
</tr>
<tr>
<td>MP</td>
<td>29</td>
<td>1</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

At first sight the numbers confirm the hypothesis of functional adaptation for Quichua and Guaraní (flexible languages): the distribution of loan nouns covers other syntactic functions apart from the prototypical one. On closer inspection, it is clear that the great majority of loan nouns perform the prototypical function, and
therefore functional adaptation is only partial. Comparatively, there is a difference between Quichua, on the one hand, and Guaraní and Otomí, on the other. Quichua is the most flexible of the three languages as regards the use of loan nouns. Less flexibility is observed in Guaraní and still less in Otomí. Notice that the high degree of rigidity observed in Otomí matches its system of parts of speech perfectly well, while the low degree of flexibility in Guaraní does not correspond to its typological characterization as a flexible language. In sum, the numbers confirm the hypothesis of lexical flexibility only for Quichua. The following table shows noun borrowing vis-à-vis the regular distribution of syntactic functions in the languages.

<table>
<thead>
<tr>
<th>SynFunc</th>
<th>Quichua Imbabura</th>
<th>Guaraní Urban</th>
<th>Otomí Santiago</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR</td>
<td>90.24%</td>
<td>98.14%</td>
<td>98.48%</td>
</tr>
<tr>
<td>HP</td>
<td>1.11%</td>
<td>0.17%</td>
<td>0.92%</td>
</tr>
<tr>
<td>MR</td>
<td>5.81%</td>
<td>0.17%</td>
<td>0.20%</td>
</tr>
<tr>
<td>MP</td>
<td>2.68%</td>
<td>2.4%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

A comparison of the distribution of syntactic functions of loan nouns with the regular distribution of syntactic functions in each language shows that the former is not determined in any important degree by the latter: put differently, we should exclude the regular distribution of syntactic functions as a linguistic factor modeling the distribution of loan nouns across syntactic functions. Thus, for example, borrowed nouns are used in the function of predicate phrase modifiers in Quichua in 13.6% of the cases but no case of this function is reported for loan nouns in Guaraní in spite of the fact that both languages have the same type of parts of speech (verbs vs. non-verbs). A language-specific analysis of the distribution of lexical classes is therefore required to account for the non-prototypical use of loan nouns in terms of typological and other linguistic factors.

**Spanish loan nouns used as heads of predicate phrases in Quichua**

The following examples show two Spanish nouns used as verbs in virtue of the gerund marker –shpa attached to the base:
Comparative Analysis: Lexical Borrowing

39) *chai amo ca-shpapish puca-ya-shpa ninanta*

DEM.DIST landlord be-though red-VBLZR-GER much

pleito ri-shpa upalla-ya-chi-na-lla colera-shpa-ca

fight go-GER silent-VBLZR-CAUS-HAB-just anger-GER-TOP

‘The small landlord used to blush [from anger], get into fights and become infuriated up to the point of remaining silent all the time’

40) *Mayordomo cashpa, mayoral cashpa, Overseer be-GER foreman be-GER shina cuida-ju-na cadaunu dueño-ya-shca*

like look.after-PROG-HAB each(Sp) owner-VBLZR-PRF

‘Either the overseer or the foreman were looking after [the harvest] and each as if he were the owner’

The predicative use of nouns in Quichua is unexpected because the language has a separate lexical class of verbs. On closer inspection, however, only *colera* ‘anger’ in (39) illustrate a noun used as a verb without further measures; (40) is a case of derivation through /-ya-/, which derives non-verbal classes, be they loan nouns like *dueño* ‘owner’ in (40) or native non-verbs like *puca* ‘red, redness’ in (39). Like cases of nominalization of loan verbs (cf. 10.4.1), those of verbalization of loan nouns have been excluded from the statistics. Apart from *colera* in (39), the other noun used as a verb in the Quichua corpus is *tunili* ‘barrel’, meaning ‘filling barrels’.

**Spanish loan nouns used as modifiers of referential phrases in Quichua**

Spanish nouns used as modifiers of referential phrases (adjectives) are the most frequent of loan nouns occupying non-prototypical slots. Consider these examples:

41) *quince año-manda pacha yanapa-shpa shamu-rca-ni cabildo ucu-pi*

fifteen year-ABL time help-GER come-PST-1S council room-LOC

‘I came to help in the office of the council since I was fifteen years old’

42) *ñuca taita-cuna mana escuela-pi viñachi-rca, 1S.POSS parent-PL NEG school-LOC grow-PST shinapash castellano shimi-cuna-ta rima-i yachaju-ri-shca*

however Castilian word-PL-ACC speak-INF learn-REFL-PRF

‘Our parents didn’t go to school, however they learnt to speak some words in Spanish on their own’
The semantic relation between the nouns of these examples is one of possession: the first noun (the modifier) indicates the possessor and the second noun (the head) indicates the possessed). Thus, the loan noun *cabildo* ‘council’ is the possessor of *ucu* ‘office’ in (41). Traditionally, nominal modifiers in possessive constructions occur after the head nouns with or without possessive -pak, except in cases of inalienable possession, where possessive -yuk is obligatory. In contrast, loan nouns in the above examples noun modify other nouns without the possessive marker. The loan noun *castellano* ‘Spanish language’ modifies Quichua *shimi* ‘language’ in (42). Notice that *castellano* is a loan adjective itself, but it is used in colloquial Spanish as a noun referring exclusively to the Spanish language, while *español* ‘Spanish’ qualifies entities by referring them to their geographical, social and cultural origin.

The last example of noun-noun modification (44) might be interpreted alternatively as a “pseudo-attributive” construction equivalent to a postpositional phrase, the head of which is the also loan noun *parti* ‘part’, which modern Quichua uses to reinforce the meaning of reference of the Quichua postposition -manta. Indeed, the phrase in (44) could be simply *charlagucunata saludmanta* ‘talks about health’.

**Spanish loan nouns used as modifiers of predicate phrases in Quichua**

Following the flexibility of parts of speech in Quichua, loan nouns can be used also as modifiers of predicate phrases, as illustrated in the following examples.

45) *chay falta-n ashata gulpi llanca-na na-chu,*

DEM.DIST be.missing-3 much jointly work-INF not-INT

*y si gulpi llanca-nehic,*

and if jointly work-1PL.PRS

*gulpi űnapac-man apa-i-ta usha-nehic* jointly front-ALL carry-INF-ACC be.able-1PL.PRS

‘That is missing, joint work, if we work jointly, we can make progress’
In (45) gulpi ‘jointly’, phonologically adapted from Spanish golpe ‘hit, blow’, modifies the Quichua verb llancana ‘work’. From the phonological accommodation of the word and the distant semantic relation between the Spanish noun and the loan noun, it may be considered a relatively old loanword. The second example (46) involves the loan noun jila ‘uninterruptedly’, from Spanish fila ‘line’. While the accommodation of the loan noun to Quichua phonology reveals its old age, there is a closer relation between the source-language meaning and the target-language meaning. The third example (47) has the loan noun empeño modifying the Quichua verb rina. Unlike the previous loan nouns, this one seems a recent borrowing because no phonological accommodation has occurred (i.e. no rising of /e/ and /o/ to /i/ and /u/). Finally, the loan noun lástima (48) modifies the Quichua verb causac ‘live.HAB’, with the meaning of ‘pitifully’. As it seems, the borrowing of this loanword is the Andean Spanish expression hecho una lástima ‘in a pitiful state’. It is not possible to establish the age of lástima solely from its phonetic form in Quichua. Nevertheless, it is clear that a high level of bilingualism is required for the proper understanding of the Spanish expression which served as a model. All these examples demonstrate that Quichua uses loan nouns as predicate phrase modifiers without derivation.
Spanish loan nouns used as heads of predicate phrases in Guaraní

Typologically similar to Quichua, Guaraní is less flexible in the use of Spanish loan nouns. Still, cases of flexibility are well attested, as evidenced by the following examples of loan nouns used as heads of predicate phrases.

49) la che gente-kuéra che rú-guí o-lado
   DET 1S.POSS family-PL 1S.POSS father-ABL 3-side
   ‘My family sides with my father’

50) nahäniri nd-o-dífikultá-i
    not NEG-3-difficulty-NEG
    ‘No, it will not be difficult’

51) ha entonces i-kuenta-vé-ta
    and then 3S-account-more-FUT
    ųa-ñe’ê inglés que la Guaraní
    1PL.speak English than DET Guaraní
    ‘And then it is more important that we speak English than we speak Guaraní’

52) che igual-n-te la ambo’e-ramo upéicha-n-te avei
    1S igual-just DET 1S-enseñar-si así-solo también
    che-paciencia-ta hese-kuera igual.
    1S-paciencia-FUT 3.COM-PL. igual
    ‘Also, when I teach, I will be patient with them as well.’

None of these examples involve derivation, because verbal morphology is attached directly to the base form of the loanword. Loan nouns used as verbs are assigned to different paradigms depending on their meaning, which is largely preserved given the high levels of bilingualism of Guaraní speakers: e.g. lado ‘side’ and dificultá ‘difficulty’ are used as areal verbs while kuenta ‘account’ and pasiensia ‘patience’ are used as chendal verbs.15

Spanish loan nouns used as modifiers of referential phrases in Guaraní

The use of loan nouns as modifiers of referential phrases is slightly more frequent in Guaraní (cf. 10.14). Consider the following examples extracted from the corpus:

53) ha la nde vecino roga piko moo
    y DET 2S.POSS neighbor house INT where
    ‘And where is your neighbor’s house?’

---

15 Verbs areales (so called for the first-person prefix /a-/l) are distinguished from verbs aireales (from first-person prefix /ai-/l) and verbs chendales (from first-person prefix /che-/l).
Comparative Analysis: Lexical Borrowing

54) *katuĩ* *oi-kove* *-ha* *ña-hendu* *Kirito* *ñe’e* ẽ

sometimes 3-live-RLVZ 1PL-listen Christ word

‘And sometimes they live and listen to Christ’s word’

55) *ha* *o-ñe’e’-rõ* *España* *ñe’e-me*,

and 3-speak-IF Spain language-LOC

*a-ñe’e’* hendive *España* *ñe’e-me*

1S-speak 3.with Spain language-LOC

‘If they speak the Spanish language, I speak the Spanish language’

56) *o-ñe’e’* *la* *Guaraní-me* *si* *oi-pota* *la* *kampesino* *voto*

3-speak DET Guaraní if 3-want DET peasant vote

*ha* *heta-iterei* *kampesino* *nd-oi-kuaá-i* *la* *kastelláno*

and many-very peasant NEG-3-know-NEG DET Spanish

‘They speak in Guaraní if they want to get the peasant vote, since many peasants do not know Spanish’

57) *La* *i-constructor* *arquitecto* *o-u-va’ekue*

DET 3.POSS-builder architect 3-come-NMLZ.PST

*Italia-gui* *o-diriji* *ko* *tembiapo*

Italy-ABL 3.lead DET work

‘The architect who came from Italy to lead the works’

First, notice that the loan noun *constructor* ‘builder’ in (57) is an example of attributive modification while the other loan nouns stand in a relation of possession to their respective head nouns. Similar constructions were attested in Quichua, where possessive constructions involving two juxtaposed nouns represent a large number of loan nouns in the syntactic slot of referential phrase modifier. In all cases of nominal modification, loan nouns are preposed to the noun heads without any derivation. On the other hand, the ambivalence of certain word forms like *vecino* ‘neighbor’ (53), *campesino* ‘peasant’ (56) or *constructor* ‘builder’ (57), all of which can be used in Spanish either as nouns or adjectives raises the question of their status. One way to answer this question is to collect a corpus of local Spanish and investigate whether they are used preferentially as adjectives or nouns and in which contexts. The occurrence of these lexemes in the Guaraní corpus is too limited for a valid generalization. Still, it is likely that the exclusion of potentially ambiguous loanwords leaves few uncontested cases, thus compromising flexibility in Guaraní.
Spanish loan nouns used as modifiers of predicate phrases in Guaraní

While there are no cases of Spanish loan nouns used in the syntactic position of predicate phrase modifier in the corpus, (58) below is an example of a loan noun used as a sentence modifier.

58) ha mba’émbo i-porã la ñane idioma, and because 3-nice DET 1PL.POSS language
pero lástima la nd-o-servi-r-i but pity PRO.DEM NEG-3-be.useful-EUF-NEG
‘and it’s because our language is nice, but it is a pity that it is not useful’

Notice that lástima occurs also in Quichua (48), albeit with a slightly different meaning. In (58), however, lástima does not really modify the predicate servi ‘be useful’ but the whole sentence la ndoservi. This is reflected in the English translation, where ‘it is a pity’ heads the sentence, instead of preceding the verb.

The examples discussed so far suggest that the lexical flexibility of loan nouns is only partial in Guaraní. While the language has a large potential for flexibility, it seems to make only a limited use of it in colloquial speech. The data point to the functional specialization of loanwords, i.e. their assignment to their syntactic slots in the source language. Because no typological constraints are involved, it seems realistic to assume that nonlinguistic factors play a decisive role here, in particular bilingualism. The analysis of other lexical classes and loan function words shall validate these provisional conclusions.

Spanish loan nouns used as heads of predicate phrases in Otomí

Because Otomí is a rigid language with a specialized class of nouns for the slot of head of referential phrase, it is not expected to use loan nouns flexibly in any way, which seems to be confirmed by the data. Still, there are a few cases of nouns used in non-prototypical slots. Consider the following examples of loan nouns used as heads of predicate phrases.

59) nu’bya ya=ngú ya=losa-’bya ya=teja nowadays DEF.PL=house DEF.PL=cement-PRS DEF.PL=tile
ya=laminä yá=njo’mi ya=ngú DEF.PL=tin.sheet POSS.3PL=roof DEF.PL=house
‘Now houses are build of cement, tiles and tin sheets and have a roof...’

60) kwando ar=Alemän mbi=prisidente bi=hyo when DEF.S=Alemán 3.PST=president 3.PRS=slaughter
boi go ba=ordenä-’ä ox EMPH 3.PST=order-EMPH.S.DIST
‘When Alemán was president he ordered the slaughter.’
The predicative use of nouns is a feature of Otomí (cf. section 8.3). Predicative nouns are preceded by any of a series of verbal proclitics or have a verbal suffix attached. Because nouns are used predicatively only in copulative constructions, they are not transitivized and their semantic value is preserved in full. The Spanish nouns *losa* ‘cement’ in (59) and *prisidente* ‘president’ in (60) are linked via the verbal suffix /-'bya/ and the proclitic /mbi/ to the referents *ya ngú* ‘the houses’ and *Alemán* (surname). The predicative use of nouns does not contradict the rigidity of parts of speech in Otomí because it does not involve those syntactic slots for which the language lacks a lexical class.

**Spanish loan nouns used as modifiers of predicate and referential phrases in Otomí**

The existence of a distinct class of nouns specialized in the syntactic function of head of referential phrase operates as a constraint on the use of loan nouns as modifiers. In this perspective, nouns are not expected to be used either as adjectives or adverbs. The corpus contains not a single case of a loan noun used adverbially, but a few of loan nouns used adjectivally. The latter are illustrated below.

61) \[ ne=r \ fleko \ majwi \ ne \ da=mät'=ar \ seda \]
\[ and=DEF.S \ fringe \ Indian.cloak \ and \ 3.FUT=spin-DEF.S \ silk \]
\[ ntu'ye \ ne \ gem'bu'bya \ ne \ da=tsut=ya \ nts'umgu \]
\[ handkerchief \ and \ after-ACT \ and \ 3.FUT=hang=DEF.PL \ earring \]

‘The fringed Indian cloak, and she will spin the silk handkerchief and after that she will put her earrings’

The three nouns used adjectivally in the Otomí corpus are *fleko* ‘fringe’ and *seda* ‘silk’ in (61), and *kadena* ‘chain’, not illustrated here. The low frequency of this use of loan nouns only confirms the rigidity of parts of speech in Otomí. In sum, the use of loan nouns in this language is coherent with its typological classification. A still, one question remains which is answered in the next section: how does Otomí use loan adjectives?

**10.4.3 The use of loan adjectives**

The contribution of loan adjectives to the borrowing process in terms of frequencies was discussed in section 10.3.3. It was found that Quichua is the language with the largest number of loan adjective, closely followed by Guaraní, while this class of loanwords is comparatively small in Otomí. In all, the data confirmed the borrowing hypotheses for Quichua and Guaraní but not for Otomí, where adjective borrowing was expected to be important (cf. H.4.3). In order to explain cross-linguistic
differences in the frequency of loan adjectives I put forward typological and non-typological factors. The exploration of continues in this section.

In analyzing the use of loan adjectives, it is necessary to consider the typology of the recipient languages in terms of parts of speech. Accordingly, none of the languages has a separate class of adjectives: their function is performed by non-verbs in Quichua and Guaraní and by morphosyntactic mechanisms in Otomí. Typologically, a language with a broader lexical class of modifiers or non-verbs is more likely to borrow loan adjectives than a language with no lexical class for this syntactic position. In this perspective the distribution of loan adjectives is not unexpected: the languages with a broader lexical class (Quichua and Guaraní) are precisely the ones that borrow adjectives most frequently, while the language without a lexical class borrows adjectives only seldom. If gap-filling is claimed, it is expected that a language without a specific lexical class borrows lexemes from this class preferentially. Nevertheless, the adding of a new word class to the system of parts of speech of a language implies a major typological change, and therefore gap filling through lexical borrowing is constrained by the natural tendency of linguistic systems to preserve their structural balance (cf. 3.1.4). How this tendency is reflected in the use of loanwords is an important part of the explanation.

Table 10.19a shows the distribution of loan adjectives per syntactic function in each recipient language. Table 19.b shows adjective borrowing vis-à-vis the regular distribution of syntactic functions in the languages.

<table>
<thead>
<tr>
<th>SynFunc</th>
<th>Quichua</th>
<th>Guaraní</th>
<th>Otomí</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tokens</td>
<td>Tokens</td>
<td>Tokens</td>
<td></td>
</tr>
<tr>
<td>HP</td>
<td>16</td>
<td>10</td>
<td>120</td>
<td>146</td>
</tr>
<tr>
<td>HR</td>
<td>287</td>
<td>199</td>
<td>11</td>
<td>497</td>
</tr>
<tr>
<td>MR</td>
<td>841</td>
<td>498</td>
<td>162</td>
<td>1501</td>
</tr>
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<td>35</td>
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<td>167</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>SynFunc</th>
<th>Quichua</th>
<th>Guaraní</th>
<th>Otomí</th>
<th>Total</th>
</tr>
</thead>
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<td>Types</td>
<td>Types</td>
<td></td>
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<td>242</td>
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<td>594</td>
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<tr>
<td>MP</td>
<td>49</td>
<td>18</td>
<td>1</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 10.19b  Adjective borrowing & regular distribution of syntactic functions

<table>
<thead>
<tr>
<th>SynFunc</th>
<th>Quichua Imbabura</th>
<th>Guaraní Urban</th>
<th>Otomí Santiago</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Adjectives</td>
<td>SynFunc</td>
<td>Adjectives</td>
</tr>
<tr>
<td>HP</td>
<td>25.52%</td>
<td>32.7%</td>
<td>30.06%</td>
</tr>
<tr>
<td>MR</td>
<td>58.16%</td>
<td>6.1%</td>
<td>62.04%</td>
</tr>
<tr>
<td>MP</td>
<td>14.10%</td>
<td>13.6%</td>
<td>5.20%</td>
</tr>
</tbody>
</table>
A comparison of the distribution of syntactic functions of loan adjectives with the regular distribution of syntactic functions in each language does not show any positive correlation. Accordingly, the regular distribution of syntactic functions cannot be seen as a linguistic factor modeling the distribution of loan adjectives across syntactic functions. For example, the percentage of loan adjectives in Bolívar Quichua used as heads of predicate phrases matches the number of loan adjectives with the same function in rural Guaraní, even though this syntactic function is considerably higher in the former language. This is positive evidence that the regular distribution of syntactic functions does not determine the distribution of loan adjectives in one or another function. At the same time, the perfect match between both languages as regards the predicative use of loan adjectives may be explained in terms of their system of parts of speech (flexible type-2), although it is not completely clear why Quichua should use adjectives predicatively at all, since an extended predicative function is only typical of Guaraní. The argumentation shows that a language-specific analysis of the functional distribution of lexical classes is required to account for the non-prototypical use of loan adjectives in terms of typological and other linguistic factors. This task is carried out in the following sections.

**Spanish loan adjectives used as heads of predicate phrases in Guaraní**

The use of loan adjectives as heads of predicate phrases is not surprising in Guaraní, given the capacity of this language to use any lexical class predicatively. Furthermore, a larger number of verbal adjectives were expected in the corpus. Consider these examples.

62) *Porque* i-triste-iterei la re-hecha la mità o-ñe’ê-ñ-va

because 3-sad-very PRO 2S-see DET child 3-speak-NEG-NOM

*castellano-pe* o-ñe-me’ê chupe *castellano-pe* la lesión

Spanish-LOC 3-MED-give 3.OI Spanish-LOC DET lesson

*porque* n-o-entendé-i la o-eskrivi-(v)a

because NEG-3-understand-NEG PRO.DEM 3-write-NOM

‘Because it is very sad to see that children do not speak [Guaraní] and they are given the lesson in Spanish because they do not understand what is written’
63) **i-porõ**  
3-good  
**i-ñ-importante**  
3-EUPH-important  
avei  
also  
**porque**  
**heta**  
**henda-pe**  
**i-de-provecho.**  
because  
many  
place-LOC  
3-useful  

'It is very important because in many places it is useful'

64) **che ningo**  
1S  
really  
**nd-a-menda-i,**  
NEG-1S-marry-NEG  
**che-soltero,**  
a-reko  
pe-teĩ  
che  
rajy  
**1S-singl**e  
1-have  
1S.POSS  
son  
**ha a-iko**  
la  
**i-sy-ndi(y)e**  
and 1-have  
PRO.DEM  
3.POSS-mother-with  

'I didn’t get married, I’m single and have a boy, and he is with his mother now'

65) **to-ñe-mbo’e**  
3-OBJ-PL  
**chupe-kuéra**  
**hi’ã**  
3.OBJ-PL  
**util-va’erã**  
3.OBJ-PL  
**chupe-kuéra,**  
**i-provechoso-va’erã**  
**pe**  
**i-vida-diaria-pe**  
3-useful-OBLG  
3.POSS-daily-life-LOC  

'That they be taught [Guaraní] as it seems it has to be useful for their daily life'

The great majority of loan adjectives in Guaraní carry verbal prefixes from the *chendal* paradigm including **i-** ‘3S’ (62) or **che-** ‘1S’ (64). *Provechoso* ‘useful’, *triste* ‘sad’ and *importante* ‘important’ are inflected for third person, while *soltero* ‘single’ is inflected for first person singular. Notice that **útil** ‘useful’ in (65) carries the marker of deontic modality (obligation) instead. The complex borrowing *de-provecho* ‘useful’ in (63) has the same meaning of *i-provechoso* in (65). Because the verbal inflection acts as a copula strategy in the absence of a linking verb, the resulting constructions correspond to English copulative equivalents “it is useful”, ‘it is sad’, ‘it is important’ and ‘I am single’. These ‘verby’ adjectives have only a non-dynamic reading, i.e. they refer to *states* or *qualities*, hence their association with the verbal paradigm of stative verbs. Gregores and Suaréz (1967: 133) state that “Spanish adjectives are adopted as quality [stative] verbs”, which agrees with the Guaraní system of parts of speech, where adjectives do not exist as a separate lexical class. Since there are more than three hundred different types of loan adjectives in the Guaraní corpus but only seven are used as verbs, the question is how the rest of the loan adjectives are used.
Spanish loan adjectives used as modifiers of referential phrases in Guaraní

The great majority of loan adjectives in Guaraní do not carry verbal morphology but occupy the syntactic slot of modifiers of referential phrases without any type of marking. Still, the coding of loan adjectives was not exempt from controversies. On the one hand, an important number of tokens correspond to the Spanish adjectives otro, alguno, and cualquiera. In spite of their classification as adjectives in the source language, these forms are distinct from other adjectives and their status is probably best defined as grammatical.\(^\text{16}\) They modify loan and native nouns alike, as illustrated in (189) and (190).

\begin{verbatim}
66) hikuái o-moį otro téra, o-mohéra hikuái Artigas
    3PL 3-put other name, 3-name 3PL Artigas
    ‘They gave it other name, they named it Artigas’
\end{verbatim}

\begin{verbatim}
67) pero che cualquier mbaraka che ai-karãi-ta
    but 1S any guitar 1S 1S-play-FUT
    ‘But I will play any guitar’
\end{verbatim}

On the other hand, an important number of adjectives occur in phrases whose noun heads are Spanish nouns, which suggests that both may be code switches rather than independent borrowings in one phrase. A large number of adjective-noun or noun-adjective constructions in which both constituents are Spanish have been therefore analyzed as code switches, even if native demonstratives are involved (68).

\begin{verbatim}
68) che-interesá ningo cheve pe [asunto deportivo]$_{CS}$
    1.OBJ-concern well 1.OBJ DEM [matter sport]
    ‘I am interested in sport matters’
\end{verbatim}

On the contrary, composites of two Spanish lexemes were analyzed as independent loanwords in two cases: a) if the syntactic position of the loan adjective does not coincide with its position in Spanish, as illustrated by entero ‘entire’ preposed to the noun head mundo ‘world’ in (69); and b) if gender or number agreement is absent, as illustrated by (70), in which the masculine ending does not agree with the feminine gender of the head noun inflamación ‘infection’. Both cases demonstrate that the loan adjectives are fully integrated to Guaraní morphosyntax and should be considered therefore as loanwords.

\(^{16}\) These forms can be used also as pronouns. This function is analyzed in the next chapter.
‘So that you spread [the Paraguayan culture] all over the world’

‘They detected a little infection and that cost us the abortion again’

Finally, some noun-adjective constructions were considered complex borrowings on the basis of the accommodation of their components to Guaraní phonology, the intonation contours and the recursiveness in the corpus: e.g. *vida-diaria* ‘daily life’ in (65) above.

The above examples show that the classification of loan adjectives in Guaraní is not straightforward. The fact that a large number of Spanish adjectives in the corpus occur in code switches suggests that this lexical class shows an incipient integration to the morphosyntactic matrix of Guaraní. While this statement disproves the hypothesis of functional adaptation, it is necessary to evaluate the findings for all the lexical classes.

Spanish loan adjectives used as heads of referential phrases in Guaraní

The following examples illustrate loan adjectives used as referential phrase heads.

‘He promoted his students to second grade and then to third grade.’

‘With my acquaintances I tell jokes and listen to music.’

‘As they received secondary instruction while others only elementary’
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74) Paraguay o-gana pe idioma oipuru-rupi.
Paraguay 3-win DEM language 3-use-because
porque la boliviano-kuéra n-o-entende-i-ete
because DET Bolivian-PL NEG-3-understand-NEG-EMPH
la Guaraní
DET Guaraní
‘Paraguay won [the war] thanks to the use of its language, because the
Bolivians did not understand Guaraní at all’

75) Ñandejara o-mbo’u ichupe ha fiel-kuera
Our.Father 3-send 3.OBJ and faithful-PL all
oimbá va’erã upé-pe pe misa
completely OBLG there-ALL DEM mass
‘Our Lord sent him [the priest] and the congregation has to go to the mass’

These examples contain different types of adjectives: the ordinal adjectives segundo ‘second’ and tercero ‘third’ in reference to school grades (71); the gentilic adjective boliviano ‘Bolivian’ (74); the adjectival participle konosido ‘known, acquaintance’ (72); and normal attributive adjectives básico ‘basic’ and fiel ‘faithful’. A large number of loan adjectives used as nouns correspond to gentilics. Interestingly, all the freestanding loan adjectives in the corpus correspond to freestanding adjectives in Spanish. The freestanding capacity of Spanish adjectives and Guaraní non-verbs in the referential phrase makes the syntactic analysis of loan adjectives particularly difficult. Guaraní-Spanish bilinguals are well aware of the freestanding occurrence of adjectives in Spanish, and therefore they may borrow adjectives precisely as nouns. The fact that many loan adjectives in the corpus correspond to ready-made expressions in Spanish partially confirm the argument: e.g. segundo grado ‘second grade’ is commonly abbreviated as segundo ‘second’, just like educación básica ‘elementary school’ is abbreviated as básica or básico ‘basic’. In this analysis, the use of a loan adjective is primarily determined by its use in the source language, especially if the speakers of the recipient language are bilingual.

Other loan adjectives are not freestanding forms in colloquial Spanish, even if they originate in old constructions involving a noun head: such is the case of fiel ‘faithful’ in (198), an abbreviated form of fiel cristiano ‘faithful Christian’. In this case, even if the adjective fiel ‘faithful’ exists in Spanish, it is wiser to interpret fieles as plural noun meaning ‘the congregation’. In case the speaker is bilingual enough to make this difference in Spanish, he will borrow fieles as a plural noun and accommodate it to the Guaraní morphosyntactic matrix. This is confirmed in (75) by the use of the optional plural marker.
In short, loan adjectives used as nouns are numerous in the corpus but their functional adaptation cannot be determined on account of two factors: the freestanding capacity of some Spanish adjective and the same capacity of non-verbs in Guaraní, in both cases without further measures; the bilingualism of Guaraní speakers, which makes them aware of the freestanding use of Spanish adjectives.

**Spanish loan adjectives used as modifiers of predicate phrases in Guaraní:**

Spanish loan adjectives used as modifiers of predicate phrases are few. Still, it is worth considering some examples insofar as they evidence the flexibility of the language.

76) **ko’ápe oñe’ê meskládo.**

*Here they speak confusingly; there is none who teaches Guaraní*.

77) **a-lo-mel̃or o-jehe’a chugui o-ñe’ê atravesado la**

*Perhaps they make a mixture out of it [Guaraní], they speak confusingly when they speak Guaraní and Spanish*.

78) **che livianito-mi a-sena ha a-ke-ma**

*I have a light dinner and got to sleep*.

79) **jopará-ko hina [dos tres palabras] la Guaraní ha kastelláno**

*Jopara, a few words in Guaraní and Spanish, but here they speak Guaraní a bit*.

The loan adjectives *meskládo* ‘mixed’ in (76) and *atravesado* ‘crossed’ in (77) occur in syntactic calques from Spanish: *hablar mezclado* ‘to speak a mixture’ and *hablar atravesado* ‘to mix languages in speech’. Both adjectives are participial forms. Notice that the adverbial use of participles is common in Spanish. The adjective *livianito* ‘light:DIM’ in (78) also occurs in a Spanish calque: *cenar (algo) liviano* ‘to eat (something) light for dinner’. Because *liviano* stands for the noun head *algo*.
‘something’ in the Spanish expression, it should be considered an instance of a loan adjective used as a noun, hence the occurrence of the Spanish diminutive -ito and the Guaraní diminutive marker -mi.

Example (79) deserves special attention not only because it points to the functional adaptation of loan adjectives to the Guaraní system of parts of speech. The different semantics of the original Spanish form (‘slow’) and the loanword (‘more or less’) suggest that this entered Guaraní when bilingualism was incipient. It is precisely in the early stages of contact when the influence of bilingualism minimal and loanwords may be easily re-semanticized and accommodated to the system of parts of speech of the recipient language. The case of lento and a few others such as guapo (from guapo ‘handsome’, meaning ‘efficiently’ in Guaraní) confirm this assumption.

In sum, despite their small number, loan adjectives used as predicate phrase modifiers demonstrate the flexibility of the language, the same flexibility that is less visible in other cases for the influence of bilingualism on loanword usage.

**Spanish loan adjectives used as heads of predicate phrases in Quichua**

Spanish loan adjectives used predicatively in Quichua count ten different types. Here is one of them.

80)  

```
shina-mi  shina-mi  patron-ca  famado  nin
thus-AFF  thus-AFF  landlord-TOP  famous:M  REP
```

‘So it is, the landlord is famous’, they say’

Unlike Guaraní, Quichua cannot use other lexical classes than verbs in predicative function. Thus, the predicative use of adjectives is exceptional in Quichua. However, this use proves less exceptional on closer inspection.

Since no verbal morphology is attached to the loan adjective in (203), the predicative use of famado ‘famous’ is a side effect of the zero copula in third-person present-tense constructions – typical of Quichua and many other Amerindian languages. To the extent that (203) is not a case of copula elision but a grammatical mechanism of the language, it is expected to occur regularly, and indeed most instances of loan adjectives used as predicate heads in the corpus result from zero copula. This suggests that loan adjectives in Quichua are not used predicatively strictu sensu. Rather, they come to occupy the syntactic slot of the predicate phrase head as a result of the systematic drop of the copula in third-person present-tense constructions. Consider the following case of non-prototypical use of an adjective:

81)  

```
huaquin  curioso-ya-cuna-ca
some  curious-become-NMLZ-AG-PL-TOP
```

‘some of the people who became curious’
Similar to nouns, adjectives in Quichua can be verbalized through the changing-state marker /-ya-/ 'become’. An instance of this type of derivation is (40) above. Example (81) illustrates a verbalized adjective in a nominalized clause. Cases of loan adjectives used predicatively by virtue of derivation were not counted instances of flexible use (cf. supra). In sum, loan adjectives used predicatively in Quichua do not contradict the typological distinction of parts of speech in this language, because their use results from derivation.

Spanish loan adjectives used as heads of referential phrases in Quichua

The existence of a flexible lexical class of non-verbs in Quichua leads to expect loan adjectives used as nouns. In fact, loan adjectives used as nouns represent a quarter of the total number of loan adjectives, confirming the lexical flexibility of the language and the functional adaptation of loanwords. This adaptation corresponds to the incipient and compound levels of bilingualism in the Quichua communities investigated. Notwithstanding, several challenges to the analysis must be scrutinized. Consider the following examples.

82) *cunan chai organización-kuna nombra-ri-shpa-ca*

     today DEM.DIST organization-PL appoint-REFL-GER-TOP

     *ña casi contrario-cuna-ima tucurishca can*

     already so enemy-PL-some become-PST be-3

   ‘And now the organizations appoint themselves and have become almost enemies’

83) *chai título-cuna-pash tiya-n, chai-huan ṅucanchi*

     PRO.DIST title-PL-ADIT there.be.3 DEM-INST 1PL

     *ashata ashtahuan ricsi-shpa mayor-cuna-ta tapu-shpa-man*

     much more know-GER elder-PL-ACC ask-GER-COND

   ‘There are also the land titles; with them we know more and could ask the elders’

84) *ña importante ca-c ca-rca escuela-ca*

     already important be-HAB be-PST school-TOP

     *cunan-cuna-pi importante-pi chura-shpa*

     now-PL-LOC important-LOC put-GER

     *huahuacuna-ta-pash educa-chi-najunchic*

     child-PL-ACC-ADIT educate-CAUS-RECP-1PL

   ‘The school used to be important; nowadays it is important to put [the money] in the important things, like educating our children’
Freestanding adjectives in Spanish may acquire a nominal status and replace noun heads in colloquial usage. The use of contrario in (82) and mayor in (83) are illustrative in this respect. The instances of importante in (84), on the contrary, point to a nominal use not motivated by the input of the source language, since importante requires the neuter article lo or the explicit use of a noun head to be grammatical in Spanish (e.g. asunto importante ‘important matter’). While these forms are adjectives in Spanish, it is not clear whether the speaker borrows them as adjectives or nouns, and whether this affects the use of loanwords. The issue is less important when dealing with incipient bilinguals, but it becomes crucial when dealing with coordinate bilinguals. The levels of bilingualism levels in the Quichua communities of Imbabura and Bolivar are lower than the levels attested in Paraguay, but important differences exist between both communities. The effects of bilingualism on the frequency and use of borrowings are addressed in section 10.6. For the time being, suffice it to say that the frequency of loan adjectives used as nouns confirm not only the classification of Quichua as a flexible language but also the fact that Quichua adapts loanwords to its own system of parts of speech. This is further confirmed by the cases of adjectives used as modifiers of predicate phrases.

**Spanish loan adjectives used as modifiers of predicate phrases in Quichua**

The following examples show Spanish loan adjectives used as manner adverbs in Quichua.

85) *unido* trabaja-*c* ca-*rca-nchic cai comunidad Topo-*pi*
united work-HAB be-PST-1PL DEM.PROX community Topo-LOC
‘In the community El Topo we work together’

86) *pai-cuna-*pa ama unguy-*cuna* fasil-*lla* japi-*ri-chun
3-PL-BEN NEG sickness-PL easy-just catch-REFL-SUBJ
‘They do not catch sickness easily’

87) *nacutin* ishcai chacana-*pi-ca shuc lado-*ta* ligero-ligero
afterwards two ladder-LOC-TOP one side-LOC fast-fast
uriaju-*mu-na, nacutin* shuya-na tanda-naju-ngacaman
climb-CISL-HAB-PST afterwards wait-HAB meet-RECP-UNTIL
‘We climbed two ladders quickly on one side and waited there until the meeting’

88) *ñacanchi* shimi-*pi* carin tranquilo riman-*lla* compañera-*cuna*
1PL.POSS tongue-LOC AFF quiet speak-3-just fellow-PL
‘The fellow women speak easily in our language [Quichua]’
While the loan adjectives in the above examples function as modifiers of predicate phrases, some of them owe their function to syntactic calquing from Spanish and to the existence of a closed class of modifiers in this language which can be used indistinctively for referential and predicate phrases without further measures. Compare (85) and (88) with the Spanish expressions *trabajar unidos* ‘to work together’ and *hablar tranquilamente* ‘to speak softly’. In any case, it is always hard to tell whether a source-language construction motivated a syntactic calque: the century-long contact between Quichua and Spanish in the Ecuadorian Highlands have equally influenced both languages, and thus an expression in local Spanish may stem from a similar construction in Quichua as part of a recycling process (Spanish → Quichua → Spanish → …) in which it is very difficult to identify the ultimate source of the expression.

In general, loan adjectives in Quichua do not require a derivational process to be used as predicate modifiers, even though pragmatic markers may occur attached to them: e.g. *fasil* ‘easy’ in (86) carries the limitative marker /-lla / ‘just’. Also, because reduplication is used for emphatic purposes in Quichua, loan nouns can be reduplicated for the same reason, like the loan adjective *ligero* in (87). Notice that the reduplication of loan adjectives in the position of predicate modifiers is not a derivational mechanism and therefore does not disprove the lexical flexibility of loan adjectives.

**Spanish loan adjectives used as heads of predicate phrases in Otomí**

Of the three languages Otomí is the one with the smallest number of loan adjectives and the least flexible as regards their use. The predicative use of loan adjectives in Otomí represents half of the loan adjective types. Some examples are the following:

90) $\text{Nä} \quad \text{nxutsi} \quad \text{to} \quad \text{di}=\text{ñen-wi} \quad \text{x}=\text{ar} \quad \text{bibo}$

DEM girl who 1.PRS=play-DUAL much-DEF.S smart

‘The girl with whom I play is very smart’
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91) No hyaxtho mbi=he ya=tsi dutu dega
DEM daily 3.PST=wear DEF.PL=DIM clothing of
tsi manta tsi dutu korryente
DIM cotton.blanket DIM clothing common
‘Daily they used little clothes of cotton blanket, little common clothing’

92) Nä‘ää nxutsi i 'ñengi xe=r
DEM girl and play much=DEF.S obedient
obedyente
‘The girl who plays a lot is very obedient’

93) nesesaryo da=ya-pi ra=ye nà ra=nobyà
necessary 3FUT=ask-BEN DEF=hand DEM DEF=bride
‘It is necessary that he asks for the bride’s hand in marriage’

Loan adjectives used as verbs are accompanied by verbal proclitics and/or verbal suffixes. In a few cases, however, they occur in bare form: e.g. nesesaryo ‘necessary’ in (93) occurs without proclitics at the beginning and the end of the sentence, with the meaning of ‘it is necessary’. This use is closely related to the borrowing of verbal forms and periphrastic constructions to express deontic modality, as shown in section 10.4. In general terms, though, the predicative use of loan adjectives does not contradict the predictions of the theory of parts of speech, because such usage is based on a typical Otomí characteristic: the use of verbal proclitics with non-verbal classes.

Spanish loan adjectives used as heads of referential phrases in Otomí

Spanish adjectives used as nouns in Otomí are few, but their analysis is worthwhile inasmuch as this use is completely unexpected in a rigid language.

94) ¿Ne xä‘ää ar=bindo tsi=mbane?
And INT DEF.S=colored DIM=godfather
Nä‘ää mi=thàdì hingi 'bùì ar=bindo
PRO.DEM 3.IMPF=answer NEG 3.exist DEF.S=colored
‘And the colored, godfather? He answered: ‘the colored cow is not there’

Spanish bindo ‘colored’ in (94) is one of the four adjectives used as nouns in the Otomí corpus. Similar to native nouns, bindo is accompanied by the proclitic ar indicating definiteness and singular number. Notice that quality verbs playing the role of adjectives in Otomí (cf. Chapter 8) can be accompanied by nominal proclitics provided there is an explicit noun head in the phrase. However, this is not the case in the above examples. Both instances of bindo occupy the syntactic slot of head of
referential phrase because of the elision of the noun head, the referent of which cannot be inferred from the context of the utterance in (94). But is bindo an adjective or a noun? I claim that the few loan adjectives occurring as freestanding forms in referential phrases do not make a flexible class along with nouns. In fact, the absence of adjectives and manner adverbs exist in Otomí leads to assume that loan adjectives enter Otomí typically as quality verbs, hence their prominent occurrence as heads of predicate phrases (cf. supra).

**Spanish loan adjectives used as modifiers of referential phrases in Otomí**

A number of Spanish loan adjectives are used as modifiers of referential phrases in Otomí, despite that this language does not have a lexical class of adjectives. Consider the following example:

95) ’rego jā’i mi=heke, ne gaho yā=wa, gaho-r
   ten people 3.IMPF=cut.off and all 3.POSS=leg all-DEF.S
   ximhni, ggo-r sentro gaho mi=gaho mi=ðwi honse
   skin all-DEF.S trunk all 3.IMPF=all 3.IMPF=get only
   pur karne ar=ngo limpyo
   pure meat DEF.S=meat clean
   ‘Ten people cut off one big bull, they cut off everything, his legs, his skin, his trunk, and they got only meat, pure meat’

96) Hö ya=nei asta ’rato kwadriya ne ya=nxutsi
   Yes DEF.PL=dancer until six team and DEF.PL=girl
   ne ya=metsi ’rato ya=nei prinsipal ge Nxe
   and DEF.PL=boy six DEF.PL=dancer principal COP Saint.Michael
   ‘Yes, there are up to six teams of dancers, boys and girls, and six principal dancers from San Miguel’

In (95) the Spanish adjective limpyo ‘clear/clean’ modifies the Otomí noun ngo ‘meat’\(^{17}\). Also, the loan noun prinsipal ‘principal’ modifies the Otomí noun nei ‘dancer’ in (96). Both loanwords, however, do not carry verbal morphology, as expected from quality verbs. This suggests that we are before an incipient process of lexicalization (cf. H.7) by which the recipient language is replacing morphosyntactic strategies like compounding with lexical items for the modification of noun phrases. In other words, Otomí is seemingly undergoing an incipient contact-induced change consisting in the formation of a new lexical class specialized in the modification of referential phrases. The data suggests that a similar process is taking place in relation to loan adverbs.

\(^{17}\) The resulting phrase limpyo ngo alternates with the code switch pur karne ‘clean meat’.
10.4.4 The use of loan manner adverbs

The contribution of manner adverbs in the three languages is small if compared to other lexical classes. This is not surprising given the lower frequency of modifiers in relation to heads in most languages and the lower frequency of lexical adverbs in colloquial Spanish as compared to adverbial periphrastic constructions. Therefore, a comprehensive view of adverb usage in the three languages requires the comparison of the findings presented in this section with the analysis of complex borrowings playing an adverbial role (cf. 10.4.5). The following table shows the functional distribution of loan manner adverbs.

Table 10.20 Distribution of loan manner adverbs per syntactic slot

<table>
<thead>
<tr>
<th>SynFunc</th>
<th>Quichua Tokens</th>
<th>Guaraní Tokens</th>
<th>Otomí Tokens</th>
<th>Total Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP</td>
<td>88</td>
<td>95</td>
<td>31</td>
<td>214</td>
</tr>
<tr>
<td>HR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compared to nouns and adjectives, manner adverbs show uniform results. They occupy the syntactic slot of predicate phrase modifiers without exception. Accordingly, no flexibility in the use of this class of loanwords is attested. While this distribution meets our expectations for rigid languages, it is not what was expected from flexible languages in which a broad class of non-verbs is used, among other functions, for the modification of predicate phrases. Therefore, the main question for flexible languages is why manner adverbs do not show the same syntactic flexibility of nouns and adjectives. For Otomí, on the contrary, the question is why manner adverbs are borrowed at all, since the language does not have a lexical class of predicate phrase modifiers.

Spanish loan manner adverbs in Guaraní

Spanish manner adverbs derived from adjectives are characterized by the adverbial suffix -mente: e.g. exacto ‘exact’ + -mente ‘-ly’ → exactamente ‘exactly’. Derived adverbs are not uncommon in Guaraní. Here are some examples.

97) **sinceramente** a-agradece ndeve upéa-re

honestly 1S-thank 2.OBJ PRO.DEM-for

‘I sincerely thank you for that’
98)  
**Ha’e o-mano tranquilamente** 
3S 3-die quietly 
‘He died quietly’

99)  
**che nd-ai-kuaa-i-nte exactamente** 
1S NEG-1S-know-NEG-just exactly 
la mba’e parte-té-pa la nde roga o-ĩ 
PRO.DEM what place-very-INT DET 2S house 3-be 
‘I do not know exactly where your house is’

100) **justamente ko’ãga ojapo [seis años] avei** 
Precisely now 3-make [six years] too 
‘Precisely today it is six years [since then]’

Loan manner adverbs differ in the way they are used. They can be used as modifiers of verbs: the loan adverb **sinceramente** ‘sincerely/honestly’ in (97) expresses the manner of giving thanks to the interlocutor. Further examples of this use are **tranquilamente** in (98) and **exactamente** in (99). Loan manner adverbs can be used also as modifiers of other adverbs: the loan adverb **justamente** in (100) modifies the time adverb **ko’ãga** ‘now’. In addition, the corpus contains cases of loan manner adverbs modifying loan adjectives. These cases, however, have been considered instances of code switching for their low frequency in the corpus and their lack of integration in the morphosyntactic matrix. Finally, there are a few cases of loan manner adverbs whose scope is the sentence instead of the phrase and which have not been included in the statistics. In all, manner adverbs whose scope is the predicate phrase are relatively uncommon in the corpus.

**Spanish loan manner adverbs in Quichua**

Most loan manner adverbs in the Quichua corpus focus on the predicate phrase, as illustrated with the following examples.

101) **legalmente cati-shpa-ca derecho-ta chari-nchic-mi** 
legally follow-GER-TOP right-ACC have-1PL-AFF 
‘Legally speaking, we have the right’

102) **obligadamente estudia-chi-chun, ama migración-ta japi-chun** 
obligatorily study-CAUS-SBJ NEG migration-ACC take-SBJ 
‘They are forced to study obligatorily so that they do not choose to migrate’
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103) chai tiempo-ca **generalmente** ufiay ufiay
DIST time-TOP generally drink-INF drink-INF
‘In those times people in general drank and drank’

In addition, there are a few instances of Spanish manner adverbs with other scopes than the phrase. An example is *totalmente* ‘completely’ (104) which modifies the loan adjective *prohibido* ‘forbidden’.

104) **totalmente** prohibido-ca
PRO.DEM-TOP completely forbidden-A

‘That [is] completely forbidden, to make children work there’

Notice that *totalmente prohibido* ‘completely forbidden’ is not a code switch because the accusative marker *–ta* occurs on the second element. Composites of two Spanish loanwords are not uncommon in the corpus. Their status is explained by Myers-Scotton (2002: 114ff) as a compromise between the syntax of the source language and the morphology of the recipient languages.

**Spanish loan manner adverbs in Otomí**

Otomí does not have a separate class of modifiers of predicate phrases, but the corpus contains a number of loan manner adverbs. Here are two examples.

105) *ha* na’bu ga=’yat’e mälmente ke hinga
and when 2.PST=do wrongly ke NEG
‘Our Lord, and when you do wrong…’

106) a bos ma me=t’o kwando mi=nthäti
EXCL pues TEMP before when 3.IMPF=marry
ya=jä’i ena mi=nthäti hgandinä ena ya=thiza
DEF.PL=person REP 3.IMPF=marry only DEM REP DEF.PL=shandal
mi=t’it’i ’na ya=pahni mi=he ya=ngode ’na
3.IMPF=wear one DEF.PL=shirt 3.IMPF=wear DEF.PL=skirt one
mi=thäti embi de **pobremente’na** hinga mi=nthäti
3.IMPF=marry say of poorly:one NEG 3.IMPF=marry
njangu nubya di=nthäti ya=jä’i ’na
as now 3.PRS=marry DEF.PL=person one
‘Well in the past when people married, they used to wear sandals and shirts and skirts, that is, they married poorly, not like people marry today’
In (105) the loan adverb *málmente* from Spanish *malamente* ‘badly’ modifies the verb ‘*yo* tên’ ‘to do’. Similarly, the Spanish adverb *pobremente* ‘poorly’ in (106) modifies the verb *thäti* ‘to marry’. The fusion of the loan manner adverb and the Otomí quantifier ‘*na*’ stresses the poor quality of marriages in the past. Consider now the following example:

107) *prinsipalmente* nuya *behñä* hokya muñeka
mainly DEM woman make doll

“Women mainly make dolls”

The manner adverb *prinsipalmente* does not modify the verb head but the sentence as a whole. While these cases are only a few, they were not included in Table 10.20 because their scope of modification goes beyond the predicate phrase. Non-manner adverbs were not included either for the same reason. Still, the occurrence of non-manner adverbs (663 tokens of 61 types) cannot be overlooked. In fact, they are the second most frequent class in the Otomí corpus (cf. supra). Considering the adverbial use of adverbs in the previous examples but also the large number of loan adverbs, it is not unwise to suggest that modern Otomí is creating a specialized lexical class for the modification of predicate phrases and other constituents. Thus, a process of lexicalization of phrasal modifiers is underway. Further evidence of this process is the extensive use of adverbial periphrases (complex borrowings), as shown in the following section.

**10.4.5 The use of complex borrowings**

Two controversial issues concerning phrasal borrowings are their alternative interpretation as code switches and the analysis of their syntactic roles in terms of parts of speech. The first issue was dealt with in sections 4.2.2 and 10.1. The second issue turned out more problematic because it hindered the evaluation of phrasal borrowings in the framework of the parts-of-speech theory. This section looks into the syntactic functions of phrasal borrowings in the recipient languages. Table 10.7 presents the distribution of phrasal borrowings (types) in the four syntactic functions.

**Table 10.21 Distribution of complex borrowings per syntactic function**

<table>
<thead>
<tr>
<th>SynFun</th>
<th>Q</th>
<th>G</th>
<th>O</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR</td>
<td>15</td>
<td>1</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>HP</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>MR</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>MP</td>
<td>80</td>
<td>22</td>
<td>3</td>
<td>105</td>
</tr>
</tbody>
</table>
The function of predicate phrase modifier is the most frequent in the three languages. The function of referential phrase head ranks second in frequency, and those of predicate phrase head and referential phrase modifier are only marginal\textsuperscript{18}. A language-specific analysis shows differences in the distribution of syntactic functions. On the one hand, complex borrowings are not used as heads of predicate phrases in Quichua, while complex borrowings are not used as modifiers of referential phrases in Otomí. On the other hand, considering that MP and HR are the most frequent syntactic functions performed by phrasal borrowings, it is remarkable that Guaraní shows one single case of HR and Otomí hardly three cases of MP. I interpret the low frequency of these uses in Guaraní and Otomí as motivated differentially by the high levels of bilingualism among Guaraní speakers and the lack of a separate lexical class of adverbs in Otomí.

The widespread use of phrasal borrowings as predicate phrase modifiers (a prototypical adverbial function) is determined by the high frequency of periphrastic constructions for the expression of manner in Spanish.\textsuperscript{19} Interestingly, the high frequency of adverbial periphrases explains why loan manner adverbs are borrowed only marginally (cf. section 10.3.4). This is particularly visible in Quichua: the function of predicate phrase modifier in this language is 13.6\% (cf. Table 10.7b) while the percentage of manner adverbs of all lexical borrowings is only 0.7\%. The gap between the comparatively high frequency of predicate phrase modifiers and the low frequency of loan manner adverbs is bridged by complex borrowings performing this syntactic function.

Complex borrowings occupying the syntactic slot of heads of referential phrases include proper nouns referring to places (toponyms) and people (patronymys) as well as Spanish terms from the fields of administration and economics. The presence of these borrowings is not problematic given their widespread occurrence in contact situations (toponyms and patronyms are among the first words to be borrowed, even in cases of null or incipient bilingualism). Furthermore, the use of complex borrowings as referential phrase heads agrees with the privileged position of nouns in lexical borrowing. On the other hand, the use of complex borrowings as heads of predicate phrases in Guaraní and Otomí is explained by the predicative use of non-verbal lexemes in these languages.

A considerable number of complex borrowings do not have a specified syntactic function, because their function does not correspond to any syntactic slot of the source language, albeit their formal status is identified. Thus, \textit{de base} ‘of base’ is a prepositional phrase in Spanish but its function in the target language is ambiguous: it can be used either as an adjunct qualifying a noun head or as an adverbial phrase.

\textsuperscript{18} Other functions of phrasal borrowings corresponding to grammatical classes are analyzed in Chapter 11.

\textsuperscript{19} Compare the extensive use of lexical manner adverbs in English.
modifying a verb. More often than not the function varies depending on the recipient language. The same can be said of the prepositional phrase *a según* ‘according to’, used as a connective in Quichua and a discourse marker in Guaraní. Even if the syntactic function of complex borrowings can be established in several cases, they are different from complex items (root plus bound morpheme) because the latter can be clearly assigned a syntactic function.

The above analysis shows that the functions performed by complex borrowings in the source language and the recipient languages determine the occurrence of such borrowings. Thus, the occurrence of complex borrowings used as referential phrase heads is explained by the presence of phrasal constructions in the source language that refer to places, people, things and events proper of the contact situation. Similarly, the fact that the source language makes a frequent use of a large number of adverbial periphrases accounts for a large number of complex borrowings. Finally, the use of a small number of complex borrowings as predicate phrase heads in Guarani and Otomi is explained by the predicative potential of non-verbal classes in these languages.

This section concludes the cross-linguistic analysis of lexical borrowings in terms of frequencies and functional adaptation. In the following sections I undertake a similar analysis of loanwords, this time from the point view of dialects and bilingualism, with a view to understanding how linguistic and non-linguistic factors interplay with each other to produce specific borrowing configurations.

### 10.5 Dialectal variation in the distribution and use of lexical borrowings

The corpus of each language of the sample consists of two subcorpora corresponding to different dialects or sociolects. The corpus of Ecuadorian Quichua includes data from Imbabura (northern highlands) and Bolívar (central highlands). The corpus of Querétaro Otomi consists of the dialects of Santiago Mexquititlán and Tolinán. In contrast, Paraguayan Guarani comprises the urban and rural sociolects. The present section discusses the data on lexical borrowing from the perspective of dialects or sociolects. The goal is to identify tendencies in the borrowing behavior of speakers depending on their lect. The findings shall added value to the overall results of lexical borrowing inasmuch as they provide a further testing of the borrowing hypotheses. The analysis focuses on four parameters: a) the general distribution of lexical borrowings; b) the contribution of codeswitching as compared to linguistic borrowing; c) the distribution of parts of speech; and d) the use of loanwords in the recipient languages. The dialect-based results of lexical borrowing are presented Table 10.22.
Comparative Analysis: Lexical Borrowing

Table 10.22 General distribution of borrowings per dialect or sociolect

<table>
<thead>
<tr>
<th>Source</th>
<th>Quichua</th>
<th>Guaraní</th>
<th>Otomí</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imbabura</td>
<td>Bolívar</td>
<td>Urban</td>
</tr>
<tr>
<td>Tokens</td>
<td>21.3</td>
<td>11.7</td>
<td>17.7</td>
</tr>
<tr>
<td>Types</td>
<td>21.9</td>
<td>13.9</td>
<td>22.8</td>
</tr>
<tr>
<td>TTR</td>
<td>0.27</td>
<td>0.39</td>
<td>0.27</td>
</tr>
</tbody>
</table>

These data confirm the following tendencies: a) the ranges of dialectal (or sociolectal) variation in lexical borrowing distinguish Quichua and Otomí from Guaraní insofar as the latter shows a minimum range of variation between lects; b) the widest range of variation in lexical borrowing is found in Quichua. These tendencies attested the greater dialectal distance between Imbabura and Bolívar and the closeness between urban and rural varieties in Paraguayan Guaraní in relation to borrowing behavior. While the tendencies observed in Table 10.4 are identified from the analysis of tokens, no substantial differences come up when types are considered: Quichua and Guaraní remain the languages with the largest and shortest ranges of variation in relation to lexical borrowing.

In order to have a clear picture of the influence of Spanish across dialects, it is crucial to identify the characteristics of code switching number in each dialect. Table 10.23 shows the distribution of codeswitching per dialect: the number of switched tokens, the mean length of switches, and the average of switches and tokens per speaker. On a chi-square test this table was found to be significant at 0.5%, which means that the distribution of loanwords per lexical class and syntactic function is not random: it describes a clear tendency in the borrowing data.²⁰

Table 10.23 General distribution of codeswitching per dialect or sociolect

<table>
<thead>
<tr>
<th>Source</th>
<th>Quichua</th>
<th>Guaraní</th>
<th>Otomí</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imbabura</td>
<td>Bolívar</td>
<td>Urban</td>
</tr>
<tr>
<td>Total switches</td>
<td>489</td>
<td>116</td>
<td>1298</td>
</tr>
<tr>
<td>Total switched tokens</td>
<td>1929</td>
<td>371</td>
<td>7963</td>
</tr>
<tr>
<td>Mean length/switched tokens</td>
<td>3.9</td>
<td>3.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Mean switches/1000 words</td>
<td>13.1</td>
<td>14.3</td>
<td>32.7</td>
</tr>
<tr>
<td>Mean switches/speaker</td>
<td>40.8</td>
<td>14.5</td>
<td>56.4</td>
</tr>
<tr>
<td>Mean length/switch/speaker</td>
<td>160.8</td>
<td>46.4</td>
<td>346.2</td>
</tr>
</tbody>
</table>

²⁰The results of the chi-square tests for the relevant tables are included in the Appendices.
The data re-confirm the difference between Imbabura Quichua and Bolivar Quichua: the number of switches and tokens in Imbabura is four and five times larger, respectively. Although the mean length and the average of switches per 1000 words are similar in both dialects, the number of switches and their mean length per speaker are far larger in Imbabura. In other words, Imbabura is more influenced by Spanish not only in terms of borrowing but also of codeswitching, which in turn confirm the higher levels of bilingualism in Imbabura. Finally, the data provide further support to the characterization of Imbabura as an innovative variety subject to major changes induced by contact with Spanish.

The differences between Otomí dialects are less remarkable but still concordant with the overall tendencies of lexical borrowing. The occurrence of codeswitching in Otomí is highly restricted. Still, Spanish codeswitching seems more influential in Tolimán: the four times more switched tokens and fifteen times longer switches. Notwithstanding the differences, the distance between Otomí dialects in terms of codeswitching is less prominent than the distance between Quichua dialects.

Codeswitching in Guaraní is the largest of the three languages but marked differences exist between urban and rural lects. Urban Guaraní makes a more extensive use of codeswitching than rural Guaraní: the former variety shows three times more switched tokens. Although the average number of switches per speaker is similar in both varieties, the mean length of switches is two times larger in the cities. As a whole, the figures make a clear-cut distinction between urban Guaraní (Jopara) and rural Guaraní (Guaraníete) in codeswitching, albeit both varieties show similar tendencies in borrowing. The question now is whether these differences turn up when classes of loanwords are considered.

The frequency of loanwords per lexical class across languages showed that: a) Quichua has the largest number of loan nouns in comparison to Guaraní and Otomí; b) the numbers of loan verbs and loan adjectives are comparable for Quichua and Guaraní, but both classes are clearly underrepresented in Otomí; and c) Otomí shows the largest number of loan adverbs in comparison with Guaraní and Quichua, although the contribution of loan manner adverbs is negligible in the three languages. Let us see if these tendencies recur across dialects by comparing the data of the following table. The distribution was found to be significant at 0.5% on a chi-square test (cf. Appendices).

<table>
<thead>
<tr>
<th>Table 10.24 Distribution of parts of speech per dialect or sociolect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Nouns %</td>
</tr>
<tr>
<td>Verbs %</td>
</tr>
<tr>
<td>Adjectives %</td>
</tr>
<tr>
<td>Manner Adverbs %</td>
</tr>
</tbody>
</table>
The first impression is that the ranges of dialectal variation in terms of lexical categories are minimal. Still, two differences are remarkable in this respect: the first gap occurs in noun borrowing between Imbabura and Bolivar, with a range of variation of 9% in favor of the former dialect; the second gap occurs also in noun borrowing between urban and rural varieties of Guarani, with a range of variation of 13% in favor of the rural sociolect. Provisional explanations for these gaps have to do with the social positioning of the speakers. Imbabura Quichua speakers are known for their involvement in local politics and economy, enjoying a more prosperous status than their fellow Indians from Bolivar. I assume that the active participation of Imbabura speakers in the Spanish-speaking society motivates the borrowing of a large number of loanwords referring to objects and practices of that society. If the same argument is held for the sociolects of Guarani, the urban variety is expected to have a larger number of loan nouns, but that is not the case. I do not have a satisfactory explanation for the larger number of nouns in Garaníete, but assume there exists some kind of complementary distribution between codeswitching and borrowing, such that the lower degree of the former mixing mechanism is partially compensated by a higher degree of lexical borrowing, in particular of the most borrowable items, i.e. nouns. Whatever the case may be, the differences should not make us overlook the overall tendency: the extremely high degree of similarity between dialects and sociolects in the borrowing of lexical classes. I interpret this similarity as evidence that the dialects of each language are typologically similar and thus empirically comparable.

What happens if the analysis of dialectal variation is taken farther? This last step consists in the analysis of dialectal variation in the usage of loanwords. Table 10.25 shows the frequency of borrowings per lexical class and syntactic function for each dialect. The frequencies were found to be significant at a 0.5% level on a chi-square test (cf. Appendices).

The analysis of loanwords by lexical class and syntactic function confirmed that verbs and adverbs behaved differently from nouns and adjectives in the three languages: the former are used always in their prototypical positions while the latter often occupy different syntactic slots depending on the language. This tendency is confirmed at the level of dialects: loan verbs and loan manner adverbs are used only in their own syntactic slots. Furthermore, the percentages confirm similar borrowing behaviors across varieties. Yet, the differences in the use of nouns and adjectives require a language-specific consideration.
Table 10.25 Functions of loanwords per parts of speech and dialect

<table>
<thead>
<tr>
<th></th>
<th>Quichua (%)</th>
<th>Guaraní (%)</th>
<th>Otomí (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imbabura</td>
<td>Bolívar</td>
<td>Urban</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td>90.2</td>
<td>97.5</td>
<td>98.1</td>
</tr>
<tr>
<td>MR</td>
<td>5.8</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>HP</td>
<td>1.1</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>MP</td>
<td>2.7</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>MP</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Adj</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR</td>
<td>58.2</td>
<td>79.1</td>
<td>62.0</td>
</tr>
<tr>
<td>HR</td>
<td>25.5</td>
<td>15.3</td>
<td>30.0</td>
</tr>
<tr>
<td>MP</td>
<td>14.1</td>
<td>5.6</td>
<td>5.2</td>
</tr>
<tr>
<td>HP</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Adv</td>
<td>MP</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The lowest degree of flexibility is attested in the Otomí dialects. The only flexible uses in Santiago Otomí include three types of loan nouns used as modifiers of referential phrases and two types of loan adjectives used as head and modifier of predicate phrases, respectively. These uses hardly represent 0.2% of the total number of tokens. The use of loan nouns and loan adjectives as heads of predicate phrases and the rigid use of borrowings occur in both dialects of Otomí. It remains to see if the flexibility of nouns and adjectives shows a similar distribution across dialects.

Quichua and Guaraní dialects show the highest degree of flexibility in accordance with the typology of their systems of parts of speech. On the one hand, the flexible use of nouns and adjectives is rather uniform across dialects, although the percentages are low in certain cases. On closer examination another tendency is observed: the flexibility in Bolivar Quichua and rural Guaraní is fairly reduced, because they show a clear preference for the use of loan nouns and loan adjectives in their prototypical syntactic functions. Flexibility continues to be operative in Bolivar Quichua and urban Guaraní, but it is limited by the prototypical syntactic functions of loan items. The cross-dialect analysis of the borrowing data gives the following results:

a) All the dialects show a high degree of similarity with respect to the borrowing of lexical classes and their distribution.

b) Borrowing variation in Guaraní seems less influenced by dialectal than other, possibly sociolinguistic factors (e.g. bilingualism);
c) The dialectal distribution of loanwords confirms the greater divergence between Quichua dialects in comparison to Guaraní and Otomí dialects;

d) Imbabura Quichua and urban Guaraní are different from their dialectal counterparts in terms of codeswitching. However, the frequency of codeswitching matches the frequency of lexical borrowing in Imbabura Quichua, but not in urban Guaraní, where codeswitching is much more important than lexical borrowing.

e) Otomí dialects share the rigidity in the use of Spanish loanwords. In contrast, the flexibility of nouns and adjectives in Quichua and Guaraní occurs mainly in their innovative varieties: Imbabura Quichua and urban Guaraní.

10.6. Bilingual performance in the frequency and use of lexical borrowing

It has been mentioned throughout this study that linguistic borrowing is closely related to bilingualism in several ways. This section explores one of these ways: the influence of bilingual performance on the distribution and use of lexical borrowings. The sociolinguistic characterization of previous chapters has shown that bilingualism is a major factor in the contact situations under scrutiny. For the sake of space, however, I limit my analysis to the influence of bilingual performance on lexical borrowing in Quichua. This choice is based on the variety of levels of bilingualism in the Quichua speech community, which enables an extensive testing of the borrowing hypotheses. Such a testing is not feasible in Guaraní because bilingualism is generally more uniform and widespread in Paraguay. It is not feasible in Otomí either, because bilingualism in this language is generally lower.

The present analysis focuses on the texts produced by twenty Quichua speakers, of whom I have empirical evidence of their level of bilingualism on the basis of relevant sociolinguistic information and control samples of their Spanish idiolects. For the remaining speakers of the Quichua corpus neither the sociolinguistic information nor the samples were sufficient to establish their real level of bilingualism, for which reason they are left out of the analysis. Speakers were grouped according to their level of bilingualism in: incipient bilinguals (7 speakers: 4 from Imbabura, 3 from Bolivar); compound bilinguals (9 speakers: 5 from Imbabura, 4 from Bolivar); and coordinate bilinguals (4 speakers: 3 from Imbabura, 1 from Bolivar). Incipient bilinguals include five men and two women, all of them illiterate and above their fifties. The men work their own plots of land and go to neighboring cities to work as masons or in other temporary jobs; the women work at home and leave their communities only to sell and buy staples. The economic status of this group is generally low while geographical mobility is limited to the province in most cases. Compound bilinguals include six men and three women, all of them literate. Most finished the elementary school and lived for a few years in the capital city. They work in the service sector inside and outside their communities. The
women frequent the cities of Otavalo and Ibarra in Imbabura, and Guaranda in Bolivar. There they sell part of the produce of their plots. The social mobility and the economic status of this group do not differ much from those of the previous group. Coordinate bilinguals include two men and two women in their twenties and thirties. All of them have completed at least the third year of secondary school. Two of them work as teachers at the elementary schools of their communities. This group has permanent contact with the Spanish-speaking society through commercial activities, formal schooling and mestizo friends. Social mobility is the main concern for the members of this group, who look to improve their socioeconomic status even at expense of their community links.

A subcorpus was collected from the entire Quichua corpus for each group. The subcorpora are different in size because the number of speakers in each group is different too. The three subcorpora were analyzed in order to obtain the distribution of borrowings, code switches, lexical classes of loanwords, and lexical classes of loanwords and syntactic function. The following table shows the distribution of borrowings in the three groups of bilinguals. The table was found to be significant at 0.5% on a chi-square test (cf. Appendices).

<table>
<thead>
<tr>
<th>Quichua</th>
<th>Incipient</th>
<th>Compound</th>
<th>Coordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tokens</td>
<td>Types</td>
<td>Tokens</td>
</tr>
<tr>
<td>Spanish borrowings %</td>
<td>18.2</td>
<td>19.1</td>
<td>22.5</td>
</tr>
<tr>
<td>Minimum %</td>
<td>3.9</td>
<td>3.9</td>
<td>10.6</td>
</tr>
<tr>
<td>Maximum %</td>
<td>24.2</td>
<td>25.8</td>
<td>26.9</td>
</tr>
<tr>
<td>TTR</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

The percentages do not show a major variation between the three groups. The difference between the group with the largest number of borrowings (compound bilinguals) and the group with the smallest number (incipient bilinguals) is only 4.3% for tokens and 4.1% for types. Coordinate bilinguals show an intermediate position between these groups. This short range of variation demonstrates the great similarity in borrowing behavior across speakers with different levels of bilingualism. Less homogeneous are the minimum and maximum percentages per speaker, with a steady increase from incipient to coordinate bilinguals. The fact that compound bilinguals surpass coordinate bilinguals in the amount of linguistic borrowings is not entirely unexpected: both groups are subject to similar sociolinguistic pressures from Spanish, but coordinate bilinguals have a larger number of native lexical choices – because of their higher education – and monitor their speech more closely than compound bilinguals. From this point of view, compound bilinguals are the group most “vulnerable” to borrowing because they
lack the native vocabulary of incipient bilinguals while their proficiency in Spanish is inferior to the performance of coordinate bilinguals. On the other hand, compound bilinguals use codeswitching less frequently than coordinate bilinguals, as shown by the following table. Unlike previous tables, this table was not significant at 0.5% on a chi-square test, which is probably due to the different sizes of the corpora. Still, the data outline a tendency, as explained below.

**Table 10.27 General distribution of codeswitching per level of bilingualism**

<table>
<thead>
<tr>
<th>Quichua</th>
<th>Incipient</th>
<th>Compound</th>
<th>Coordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total switches</td>
<td>70</td>
<td>97</td>
<td>249</td>
</tr>
<tr>
<td>Total tokens</td>
<td>249</td>
<td>373</td>
<td>727</td>
</tr>
<tr>
<td>Mean switches</td>
<td>3.6</td>
<td>3.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Switches x speaker</td>
<td>10.0</td>
<td>10.8</td>
<td>62.3</td>
</tr>
<tr>
<td>Tokens x speaker</td>
<td>35.6</td>
<td>41.4</td>
<td>181.8</td>
</tr>
</tbody>
</table>

The data show marked differences in codeswitching behavior. First of all, codeswitching increases from incipient to coordinate bilinguals: 70 switches in the corpus of incipient bilinguals versus 249 switches in the corpus of coordinate bilinguals. Similarly, the number of tokens increases from 249 in incipient bilinguals to 727 in coordinate bilinguals. Because these differences may be largely determined by the different size of the subcorpora, it is recommended to use the average of switches per speaker and the mean length of switches per speaker as a more accurate index. Again, a steady increase is observed in both parameters: coordinate bilinguals switch to Spanish six times more frequently than incipient and compound bilinguals while the length of their switches is five times larger. This means that the differences in codeswitching behavior are much more important than the differences in borrowing behavior. In general, the data feature compound bilinguals as typical ‘borrowers’ and coordinate bilinguals as typical ‘switchers’. The fact that borrowing decreases as bilingualism increases provides some support to the hypothesis that borrowing and codeswitching are in complementary distribution. In any case, other linguistic and sociolinguistic factors not considered here might influence the use of each mixing strategy. The hypothesis must be tested on larger corpora before conclusions could be advanced. Let us now look into the distribution of lexical classes of loanwords in the three groups.
Table 10.28 Loanwords per parts of speech and level of bilingualism

<table>
<thead>
<tr>
<th></th>
<th>Quichua</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Incipient</td>
<td>Compound</td>
<td>Coordinate</td>
<td></td>
</tr>
<tr>
<td><strong>Tokens</strong></td>
<td><strong>Types</strong></td>
<td><strong>Tokens</strong></td>
<td><strong>Types</strong></td>
<td><strong>Tokens</strong></td>
</tr>
<tr>
<td>Nouns %</td>
<td>66.6</td>
<td>84.8</td>
<td>55.7</td>
<td>82.9</td>
</tr>
<tr>
<td>Verbs %</td>
<td>14.6</td>
<td>17.1</td>
<td>17.3</td>
<td>24.4</td>
</tr>
<tr>
<td>Adjectives %</td>
<td>7.6</td>
<td>14.6</td>
<td>9.9</td>
<td>21.0</td>
</tr>
<tr>
<td>Adverbs %</td>
<td>0.2</td>
<td>0.4</td>
<td>1.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

The distribution was found to be significant at 0.5% on a chi-square test (cf. Appendices). Except for loan nouns, differences in tokens and types are marginal. In nouns, compound bilinguals stand out for their larger number of types, in accordance with their overall characterization as typical ‘borrowers’. The absence of major differences in this case is due to the fact that the borrowing of items according to lexical classes is determined mainly by the linguistic features of the languages in contact and not by sociolinguistic factors such as the speaker’s level of bilingualism. In these terms, a more revealing yardstick of bilingual performance in borrowing is the usage of loanwords by groups of bilinguals. In previous sections I advanced the hypothesis that the use of loanwords in languages with two lexical classes (verbs and non-verbs) becomes less flexible as one goes from incipient to coordinate bilinguals.21 That is, the flexible use of loan nouns and adjectives (functional adaptation) changes into a rigid use (functional specialization), thus signaling an incipient typological shift in the borrowing language. Let us see whether this hypothesis is confirmed by the data of the Quichua subcorpora. Table 10.29 below contains the percentages of syntactic functions for each group along with the number of speakers who use loanwords of one class with different functions.

The data confirm the cross-linguistic and cross-dialectal analyses, according to which loan verbs and loan manner adverbs are used only with their prototypical function. The specialized use of loan verbs is not surprising, given that Quichua has a separate lexical class of lexemes for the syntactic slot of heads of predicate phrases. On the contrary, Quichua does not have a specific lexical class of modifiers of predicate phrases, and therefore the specialized use of manner adverbs is not expected in Quichua. The reasons for this use lies on the explicit marking of Spanish manner adverbs with the suffix –mente. This marking inhibits the use of derived manner adverbs in other syntactic positions. More interesting for the relation flexibility-bilingualism are loan nouns and loan adjectives.

21 The analysis of Quechua and Guaraní dialects show the opposite tendency: the more innovative the dialect, the more flexibly the use of loanwords. It is very likely that the semantics of loanwords play a major role here.
The data confirm that loan nouns are used flexibly by the three groups regardless of their level of bilingualism. There are, however, differences in the degree of flexibility across the groups. In terms of the number of speakers who use loan nouns flexibly, no significant differences are attested. However, if flexibility is considered in terms of the percentage of loan nouns used by each group, a decrease is observed in the direction predicted: loan nouns used as modifiers of referential phrases decrease from 7.57% in incipient bilinguals and 5.91% in compound bilinguals to 2.39% in coordinate bilinguals; also, loan nouns used as modifiers of predicate phrases decrease from 4.82% (incipient) and 3.83% (compound) to 0.69% (coordinate). The same decrease is confirmed for types in both syntactic functions. Simultaneously, an increase is observed in loan nouns used in their prototypical slot.

The abovementioned tendency recurs in loan adjectives. Focusing on the syntactic function of predicate phrase modifier, we find a ten-percent decrease in flexibility from incipient to coordinate bilinguals. For loan adjectives used as predicate phrase modifiers the decrease in flexibility is still more consistent: a twelve-percent difference in token percentages separates incipient bilinguals (22%) from coordinate bilinguals (2%).

The data shown in Table 10.29 provide further insights into the distribution of functions of parts of speech per level of bilingualism.

<table>
<thead>
<tr>
<th>Quichua</th>
<th>Incipient (7 speakers)</th>
<th>Compound (9 speakers)</th>
<th>Coordinate (4 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tokens %</td>
<td>nsp</td>
<td>Tokens %</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td>86.6</td>
<td>7</td>
<td>90.0</td>
</tr>
<tr>
<td>MR</td>
<td>7.6</td>
<td>5</td>
<td>5.9</td>
</tr>
<tr>
<td>MP</td>
<td>4.8</td>
<td>5</td>
<td>3.8</td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP</td>
<td>100</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>Adj</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP</td>
<td>2.7</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>HR</td>
<td>28.7</td>
<td>4</td>
<td>16.5</td>
</tr>
<tr>
<td>MR</td>
<td>45.3</td>
<td>7</td>
<td>64.7</td>
</tr>
<tr>
<td>MP</td>
<td>22.0</td>
<td>4</td>
<td>15.2</td>
</tr>
<tr>
<td>Adv</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP</td>
<td>100</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

The above data provide insights into the distribution of functions of parts of speech per level of bilingualism.
bilinguals (8%). Again, type percentages give closely similar results. Also, the
decrease in flexibility is accompanied by a corresponding increase in the functional
specialization of loan adjectives in their prototypical position.

The foregoing analysis gives support to the view that functional flexibility
of loanwords in flexible languages such as Quichua and Guaraní decreases
proportionately to the increase in the levels of bilingualism of speakers, even if
flexibility continues to be present in the speech of coordinate bilinguals, as
determined by the parts-of-speech system of their language. This demonstrates not
only that typological constraints interplay with sociolinguistic factors such as
speaker bilingualism, but also that typology continues to be operative in situations of
coordinate bilingualism.

Aware of the empirical limitations of the preceding analysis, I do not seek to
provide definitive answers to the question how bilingual performance influences
lexical borrowing. Instead, I have presented and discussed the results of the
subcorpora from three different groups of bilinguals in terms of amount of
borrowing, codeswitching, lexical class and functional flexibility. Further
investigation is necessary to expand the results on the basis of a larger corpus and a
fine-grained classification of bilingualism in relation to lexical and grammatical
categories. In any case, the following preliminary conclusions add value to the
analysis of lexical borrowing in this chapter:

a) The three groups of bilinguals show a similar distribution of Spanish
borrowings, which is taken as evidence of the strong pressure exerted by the
Spanish-speaking society on the Quichua speech community
b) Compound bilinguals prefer lexical borrowing to codeswitching while
coordinate bilinguals show the opposite preference. Accordingly, compound
bilinguals are characterized as typical ‘borrowers’ and coordinate bilinguals as
typical ‘switchers’.
c) The three groups show similar percentages in the amount of loanwords per
lexical class. Such percentages match those attested for Quichua in general.
d) Flexibility in the use of loanwords is observed throughout all levels of
bilingualism. At the same time, the degree of flexibility decreases
proportionately as bilingualism increases. Both tendencies comply with the
expected hypotheses of functional adaptation of loanwords and the relation
between flexibility and bilingualism.

Table 10.30 summarizes these findings by correlating level of bilingualism, amount
of Spanish borrowing, mean switches per speaker, and degree of flexibility. 22

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22 Flexibility was calculated by deducting the percentage of non-prototypical uses from that of
prototypical uses for nouns and adjectives, and then calculating the inverse average of the
resulting percentages.
Table 10.30 Borrowing, codeswitching and flexibility per levels of bilingualism

<table>
<thead>
<tr>
<th>Category</th>
<th>Incipient</th>
<th>Compound</th>
<th>Coordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish borrowing (%)</td>
<td>18.2</td>
<td>22.5</td>
<td>20.1</td>
</tr>
<tr>
<td>Switches per speaker</td>
<td>10.0</td>
<td>10.8</td>
<td>62.3</td>
</tr>
<tr>
<td>Flexibility (%)</td>
<td>65.6</td>
<td>43.35</td>
<td>30.45</td>
</tr>
</tbody>
</table>

10.7. Summary

This chapter analyzed lexical borrowing from different perspectives: the overall contribution of lexical borrowing; the relation between lexical borrowing and codeswitching; the classification of loanwords in lexical classes; the use of loanwords in typical and non-typical syntactic positions; the distribution of borrowing across dialects; and the influence of bilingualism on the borrowing outcomes. The discussion of lexical borrowing was contextualized by the theoretical framework of the theory of parts of speech and several borrowing hypotheses previously formulated. The following summary is an overview of results. For the sake of clarity, the findings are summarized according to the borrowing hypotheses discussed in Chapter 4, postponing hypotheses 1 and 2 until grammatical borrowing is analyzed in the following chapter.

Borrowing hypotheses from the Scales of Borrowability

H3. Lexical elements > grammatical elements. This prediction is confirmed only for Quichua and Guaraní, in which lexical borrowing clearly surpasses grammatical borrowing. In Otomí, grammatical elements are slightly more numerous than lexical ones.\(^23\) I interpreted this distribution as evidence of typological constraints on linguistic borrowing, but also as evidence of ongoing typological changes in Otomí as a result of contact.

H3.1. Open class > Half-open class > Closed class. Assuming equivalence between open class and lexical class, on the one hand, and closed class and grammatical class, on the other, the borrowing frequency holds only for Quichua and Guaraní. A more accurate evaluation of this hypothesis shall await the results of grammatical borrowing Chapter 11.

H3.2. Noun > Verb > Adjective > Adverb. This borrowing hierarchy is confirmed for the three languages provided the category ‘adverb’ includes only manner

\(^{23}\) The higher frequency of grammatical elements is maintained only if prepositions are considered grammatical. It is not unlikely, however, that prepositions are perceived as lexical items by incipient bilinguals.
adverbs. On the contrary, if all subclasses of adverbs are considered, the prediction is confirmed only for Quichua and Guaraní, but not for Otomí, in which loan adverbs are more numerous than loan adjectives and as frequent as loan verbs.

**Borrowing hypotheses from the Parts-of-Speech Theory**

**H4.** Contiguous borrowing hypothesis. The contiguity of the lexical classes in the borrowing process is confirmed for the three languages, because none of them borrow one lexical class without borrowing the lexical classes located previously on the hierarchy.

**H4.1.** Verbs > Nouns > Adjectives > Manner Adverbs. This borrowing hierarchy is disconfirmed in two ways: loan verbs rank second after nouns in the three languages; and loan manner adverbs are more numerous than loan adjectives in Otomí.

**H4.2.** Borrowing of previous lexical classes. The hypothesis is confirmed for the three languages. Additional evidence is that borrowed modifiers (adjectives and manner adverbs) often occur with borrowed heads (nouns and verbs) in the three languages.

**H4.3.** Borrowing of lexical class immediately following the last differentiated class attested in the recipient’s system. The hypothesis is confirmed for Quichua and Guaraní, because both languages borrow nouns preferentially and the last differentiated class attested in their systems is verbs. The hypothesis finds no confirmation for Otomí, because this language borrows adjectives only marginally (1.9%). However, the larger number of loan nouns in Guaraní and Quichua is not necessarily explained in this way: noun borrowing is deeply motivated by non-typological factors of discursive and pragmatic nature.

**H.5.** Functional adaptation. The hypothesis is confirmed for the three languages in different ways. The first piece of evidence of functional adaptation is the use of loan verbs exclusively as heads of referential phrases in the three languages, all of which have a separate lexical class for this syntactic position. The second proof of this hypothesis is the flexibility in the use of loanwords in Quichua and Guaraní, even though the latter languages shows only a limited use of lexical classes in syntactic positions other than prototypical. The third proof consists in the rigidity of Otomí in the use of loanwords. In addition, there is evidence from Quichua that functional adaptation in general and flexibility in particular decreases gradually as levels of bilingualism increase. Adjectives proved the most flexible of all lexical classes. Nouns show a lower degree of flexibility. Finally, manner adverbs show the same rigid use as verbs.
H.6. Functional specialization. The first proof comes from Otomí. This language uses adjectives and adverbs primarily with the function they have in the source language: modifiers of referential phrases and modifier of predicate phrases, respectively. Another proof is the predominant use of adjectives as referential phrase modifiers in Guaraní.

H7. Lexicalization hypothesis. According to H.6, evidence for the creation of novel lexical classes comes from Otomí, where loan adjectives and loan adverbs make two classes previously unattested in the language. Lexicalization implies a typological change in Otomí, in which massive grammatical borrowing also occurs.
Chapter 11

Comparative analysis: grammatical borrowing

This chapter deals with Spanish grammatical borrowing in Quichua, Guaraní and Otomi. It focuses on the borrowing of items of non-open classes such as conjunctions, adpositions and determiners. Unlike major parts of speech, non-open classes form sets of comparatively few elements. The analysis of statistic and examples from the corpus is based on the borrowing hypotheses.

The first section describes the morpho-phonological integration of grammatical borrowings. The second section presents an overview of the distribution of grammatical borrowings per recipient language and parts of speech. The third section is composed of five subsections: three of them describe the borrowing of different function words according to their special frequency in each language (Spanish conjunctions in Quichua, Spanish articles in Guaraní, and Spanish prepositions in Otomi); another subsection deals with discourse markers; and another one takes care of other parts of speech marginally represented in the corpora (e.g. pronouns, quantifiers and auxiliaries). The fourth section of this chapter analyzes the distribution and use of grammatical borrowings across dialects. The fifth section describes the influence of bilingual performance on the distribution and use of grammatical borrowings. Finally, the sixth section provides a summary of findings.

11.1 Morpho-phonological adaptation of grammatical borrowings

The morpho-phonological adaptation of grammatical elements, regardless of their native or foreign origin, is determined by the degree of grammaticalization, which makes grammatical items less salient in speech and particularly prone to simplification or fusion. The same morpho-phonological processes described for lexical borrowings are valid for grammatical borrowings. The raising of Spanish medial vowels (e>i, o>u) in Quichua also affects grammatical loanwords involving these sounds: e.g. the conjunction sino [siño] ‘but’ becomes [sinu] and the subordinator porque [porké] becomes [púrki], with stress on the penultimate syllable. Similarly, consonant changes and nasalization spreading occur on Spanish function words in Guaraní: e.g. the preposition desde [desde] ‘from’ becomes [dehde] (glottal fricativization), and the conjunction entonces [entónses] ‘then’ is realized as [ntónsê] (onset elision, nasalization). In Otomí, syllable and consonant changes alongside with nasalization spreading are common in Spanish function words: e.g. the conjunction apenas [apenas] ‘just’ becomes [penä] and the preposition desde [desde] ‘from’ turns into [ndezde] or [ndezu]. Apart from these
and other processes of morpho-phonological adaptation, two additional changes involving Spanish function words are: the fusion with neighboring elements in collocations form the source language; and the affixation of native grammatical elements. Like the morpho-phonological integration of lexical items, the adaptation of grammatical items depends on the speaker’s degree of bilingualism and the age of the function word in question. Depending on these factors, grammatical items may occur also as non-adapted forms both in phrasal borrowings and within code switches. In the following I describe the most important process of morpho-phonological adaptation of Spanish function words in Quichua, Guarani and Otomi.

11.1.1 Morpho-phonological adaptation of function words in Quichua

Because Spanish prepositions occur only in phrasal borrowings in Quichua, their only phonological change is the merger with immediate constituents. On the contrary, the morpho-phonological adaptation of Spanish conjuncts is a more extensive process because these function words make the largest class of grammatical borrowings in the corpus. Spanish conjunctions occur as phrasal connectors or discourse markers. When used within phrases, the morpho-phonological shape of Spanish conjunctions undergoes several changes. In contrast, when used outside sentence boundaries, no major changes are noticed. In general, the extensive use of Spanish conjunctions in Quichua activates several processes of accommodation which are absent in ‘normal’ lexical borrowing. The nature of these processes and their outcomes are described in this section.

Table 11.1 lists all the Spanish conjunctions in the Quichua corpus, including simple and complex ones. The adapted form of each item appears on the first column, with the original Spanish form on the second column. Notice the difficulty of identifying one single phonological realization for each item due to the influence of the level of bilingualism, which also determined the degree of the morphosyntactic integration.

<table>
<thead>
<tr>
<th>Phonologically adapted</th>
<th>Original Spanish</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 [tonsis] [tonses]</td>
<td>entonces</td>
<td>then</td>
</tr>
<tr>
<td>2 [anki] [anke]</td>
<td>a\textsuperscript{\textsc{unque}}</td>
<td>although</td>
</tr>
<tr>
<td>3 [sinu] [sino]</td>
<td>\textit{S}\textit{ino}</td>
<td>but</td>
</tr>
<tr>
<td>4 [peru] [pero]</td>
<td>\textit{P\textsc{ero}}</td>
<td>but</td>
</tr>
<tr>
<td>5 [purki] [purke]</td>
<td>porque</td>
<td>because</td>
</tr>
<tr>
<td>6 [dinu] [dino]</td>
<td>\textit{d}\textit{e no}</td>
<td>if not, unless</td>
</tr>
<tr>
<td>7 [máski] [máske]</td>
<td>más que</td>
<td>even if</td>
</tr>
<tr>
<td>8 [osea][osiáke]</td>
<td>\textit{o sea que}</td>
<td>that means</td>
</tr>
<tr>
<td>9 [siéske]</td>
<td>\textit{si es que}</td>
<td>provided that</td>
</tr>
<tr>
<td>10 [subrís]</td>
<td>sobre eso</td>
<td>moreover</td>
</tr>
</tbody>
</table>
The main phonological changes involving Spanish conjunctions are (1) the raising of medial vowels; (2) monophthongization; (3) first-syllable elision; and, most frequently, (4) the merger of individual words in collocations. All of these processes have been described elsewhere (cf. section 10.1) Nevertheless, some remarks are necessary in relation to complex borrowings used as conjuncts. First, the meaning of a complex borrowing in the recipient language usually is the same as in the source language (e.g. *sieske* ‘provided that’) or can be inferred from its constituents in this language (e.g. *sabríso* ‘moreover’, lit. ‘on top of that’). In other cases the original meaning is replaced by that of a similar construction in the recipient language (e.g. *dinu* ‘lest, for fear that’). Other complex conjuncts contain finite verb forms, e.g. *osíake* ‘that means’ (in explicative subordinate clauses) and *sieske* ‘provided that’ (in conditional subordinate clauses). The frequency and use of simple and complex conjuncts from Spanish are analyzed in section 11.3.2.

11.1.2 Morpho-phonological adaptation of function words in Guaraní

None of the Spanish conjunctions in the Guaraní corpus has undergone morpho-phonological changes similar to those described above for Quichua. The reason lies on the bilingualism of Guaraní speakers, which disfavors the morpho-phonological integration of loanwords in general. The only noticeable change in the phonological form of grammatical borrowings involves *entonse*, from Spanish *entonces* ‘then’, where the final sibilant is dropped. Notice that the elision of sibilants in word-final position occurs also in the Spanish of Paraguay and Rio de la Plata (cf. Table 5.3). Some phonological changes in Spanish conjunctions are not motivated by Guaraní phonology but result from dialectal peculiarities of the input. A detailed description of the types and use of conjunctions is given in section 11.3.2. Here I focus on the morpho-phonological adaptation of the Spanish article.

Paraguayan Guaraní has borrowed two forms of the Spanish article: *la* and *lo*. Although speakers use these forms extensively in colloquial speech, their function is not always equivalent to the Spanish article (cf. section 11.3.3). The form *la* corresponds to the feminine definite article. The form *lo* has two possible origins: either it comes from the neuter definite article *lo* or it results from the masculine plural definite article *los*, which is realized as [loʰ] in Paraguayan Spanish. Because the aspiration and eventual elision of the sibilant in word-final position is a common phenomenon in Paraguayan Spanish but also because the frequency of occurrence of the neuter singular article is low, it is more likely that the form *lo* has the latter origin.

Not a single instance of the masculine singular form *el* occurs in the corpus - which could be expected for reasons of frequency and paradigmatic consistency with the feminine singular form. According to Gregores and Suarez (1967: 133), one instance of this form occurs merged with the noun [eʰte] ‘East’ in the frozen form
lête ‘the East wind’. Similarly, all the instances of the form lo occur in frozen borrowings with Spanish or native nouns (e.g. lomitã ‘the people’; lomimo ‘the same’). Only the form la does not occur in frozen borrowings, with the sole exception of lamitã ‘the children’.

Functionally, the form la is used in Guaraní as a determiner and a pro-form with deictic function. When used as a determiner, la usually shares the same intonation contour of the content word it precedes. When used as a pro-form, it is realized as an individual phonological word. The use of the Spanish article in Guaraní is explored in section 11.3.3.

11.1.3 Morpho-phonological adaptation of prepositions and conjunctions in Otomí

An extensive study of the morphological and phonological processes involved in the accommodation of Spanish loanwords in Otomí is Hekking (1995). The main results from this study are summarized here for the two classes of grammatical items of most frequent occurrence in the corpus: prepositions and conjunctions. The findings of Hekking’s study are directly applicable to the corpus collected for this investigation because his study is based also on the Otomí variety of Santiago Mexquititlán.

Otomí has borrowed twenty-four types of prepositions from Spanish (Hekking 1995: 151). Six of them have undergone certain degree of phonological accommodation; eleven have been subject to phonological and morphological changes including their fusion with native grammatical elements; and six have not changed their phonological form. The semantic equivalences of the Spanish prepositions in Otomí (Hekking 1995: 151f) suggest that they have not been subject to semantic changes. In general, Spanish prepositions replace Otomí morphemes or co-occur with them depending on the level of bilingualism of the speaker.

Spanish conjunctions borrowed by Otomí correspond to twenty-eight different types. Eleven of them have been phonologically adapted to the Otomí matrix; seven have been subject to phonological and morphological processes; and ten have not been accommodated at all. Semantic changes are not attested in any of the Spanish conjunctions.¹ The extensive use of prepositions and conjuncts in Otomí leads to expect a far-reaching adaptation indicative of their grammaticalized status in the

¹ The only exception seems to be the temporal conjunction kwando ‘when’. According to Hekking (1995: 144), kwando was formerly used with temporal and conditional meanings, but nowadays its meaning is only temporal. Notice that cuando ‘when’ in Spanish basically has a temporal meaning, although it is used also as a conditional. Arguably, Otomí originally borrowed both meanings but collapse them to one because of the simultaneous borrowing of the conditional Spanish conjunction si ‘if’. 
Comparative Analysis: Grammatical Borrowing

language. Table 11.2 lists assimilated and non-assimilated prepositions and conjunctions Otomi.

Table 11.2 Assimilated & non-assimilated prepositions and conjuncts in Otomí

<table>
<thead>
<tr>
<th>Class</th>
<th>P·A</th>
<th>MP·A</th>
<th>N·A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep</td>
<td>[ista] &lt; hasta ‘until’</td>
<td>[komongu] &lt; como ‘like’</td>
<td>[sobre] &lt; sobre ‘upon’</td>
</tr>
<tr>
<td></td>
<td>[ko] &lt; con ‘with’</td>
<td>[serka dige] &lt; cerca ‘near to’</td>
<td>[según] &lt; según ‘as’</td>
</tr>
<tr>
<td></td>
<td>[pa] &lt; para ‘for’</td>
<td>[ndez] &lt; desde ‘from’</td>
<td>[entre] &lt; entre ‘between’</td>
</tr>
<tr>
<td>Conj</td>
<td>[penã] &lt; apenas ‘hardly’</td>
<td>[komongu’bu] &lt; como ‘like’</td>
<td>[i] &lt; y ‘and’</td>
</tr>
<tr>
<td></td>
<td>[mente] &lt; mientras ‘while’</td>
<td>[yage] &lt; ya que ‘since’</td>
<td>[o] &lt; o ‘or’</td>
</tr>
<tr>
<td></td>
<td>[por] &lt; porke ‘so that’</td>
<td>[sinku] &lt; sin que ‘without that’</td>
<td>[pero] &lt; pero ‘but’</td>
</tr>
</tbody>
</table>

This table includes cases of monophthongization (e.g. [mente] < mientras [myentras]); nasalization of the syllable nucleus after the elision of the word-final sibilant (e.g. [penã] < apenas [apenas]); and the elision of the final consonant in monosyllabic forms (e.g. [ko] < con [kon]. The shortening of para ‘for’ in [pa] is not exclusive of Otomí but occurs in many Spanish dialects in the Americas. Similarly, the shortening of the instrumental preposition con is reported in other Amerindian languages (e.g. Sia Pedee, Chocoan). The shortening of Spanish prepositions in Otomí indicates an advanced stage of grammaticalization as a result of their extensive use in everyday speech. Other cases of accommodation are:

a) The Spanish phasal adverb ya ‘already’ and the subordinator ke ‘that’ occur as one phonological word: e.g. [yage] < ya que ‘since’.

b) The Spanish place adverb serka ‘near’ forms a complex construction with the Otomí connective dige ‘on, from, of’: e.g. [serka dige] < cerca ‘near to’.

c) The Spanish preposition komo ‘as’ forms a doubled construction with the equivalent Otomí suffix -ngu ‘like’: e.g. [komongu] < como ‘like’. (cf. Hekking 1995: 166ff).

A further case of morphological assimilation is the fusion of the definite singular proclitic after a preposition. This assimilation often occurs with native items and is indicative of the advanced integration of Spanish prepositions in the morphosyntactic matrix of the language. Compare (1), where the Spanish preposition is fused with the definite singular proclitic, and (2), where the fusion involves an Otomí connective:

1)  

\[
\text{Ar=tsôha yot's komo=r uhñe} \\
\text{DEF.S=star shine as(Sp)=DEF.S mirror} \\
\text{‘The star shines like a mirror’}
\]
Otomí is the language that shows the most extensive process of morpho-
phonological assimilation of the three languages. This assimilation corresponds to
the high frequency of grammatical borrowings in Otomí and the incipient
bilingualism of its speakers.

11.2 The amount of grammatical borrowings in the corpora

This section presents the corpus-based statistics from grammatical borrowing in
cross-linguistic and language-specific perspectives. It pays special attention to the
types of grammatical categories borrowed from Spanish. The following table gives
the overall figures of grammatical borrowing in the three languages.

<table>
<thead>
<tr>
<th>Table 11.3 Contribution of grammatical borrowing to overall borrowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical Borrowings</td>
</tr>
<tr>
<td>Tokens</td>
</tr>
<tr>
<td>Types</td>
</tr>
</tbody>
</table>

The data unveil a clear tendency: a substantial increase in grammatical borrowing
from Quichua to Otomí. Throughout this book I have stressed the remarkable
contribution of structural borrowing in Otomí as compared to Guaraní and Quichua.
In addition, I noted that each language has a differential composition of bilingual
speech: a predominance of lexical borrowing over codeswitching in Quichua; a
predominance of codeswitching over lexical and grammatical borrowing in Guaraní;
and a predominance of grammatical borrowing over codeswitching in Otomí.
Linguistic and nonlinguistic factors underlie these distributions. The influence of
each factor on lexical borrowing was discussed in Chapter 10. Here I deal with the
influence of typology and bilingualism on grammatical borrowing.

I begin the analysis of typological factors by identifying the types of
grammatical borrowings in the corpora. These types and their frequencies are linked
to typological factors later in this chapter. Table 11.4 below includes the percentages
of Spanish function words ordered by categories. Percentages represent the
contribution of categories to the overall amount of borrowing in the corpus of each
dialect.

As regards the borrowing categories, Spanish conjunctions have been split into
coordinators and subordinators; Spanish prepositions, both grammatical and lexical,
have been classified under the general heading of ‘adpositions’; Spanish adverbs
other than those expressing manner (cf. Chapter 10) have been grouped under the
general heading of ‘adverbs’; finally, the category ‘pronouns’ contains also
demonstrative pronouns.

<table>
<thead>
<tr>
<th>Table 11.4 Grammatical borrowings (tokens) per category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Articles</td>
</tr>
<tr>
<td>Coordinators</td>
</tr>
<tr>
<td>Adpositions</td>
</tr>
<tr>
<td>Subordinators</td>
</tr>
<tr>
<td>Disc. Markers</td>
</tr>
<tr>
<td>Adverbs (other)</td>
</tr>
<tr>
<td>Numerals</td>
</tr>
<tr>
<td>Auxiliaries</td>
</tr>
<tr>
<td>Pronouns</td>
</tr>
</tbody>
</table>

IQ: Imbabura Quichua; BQ: Bolivar Quichua; UG: Urban Guaraní; RG: Rural Guaraní; S: Santiago Otomí; T: Tolimán Otomí

In terms of frequency, the first three categories in the table make a difference from
the remaining five. In all, articles, coordinators and adpositions represent over two
thirds of the Spanish grammatical borrowings. The category of articles (16.9%),
reported only for Guaraní, is the largest of all grammatical classes. Spanish
coordinators and subordinators – grouped as conjuncts – are the second most
frequent category (10.9%). Spanish prepositions (7.6%) occupy the third place on
the list of most frequent function words in the corpora. The rest of categories make
rather small contributions: discourse markers (3.3%), non-manner adverbs (2.9%),
numerals (1.3%), auxiliaries (0.6%) and pronouns (0.5%). These percentages are
mapped onto the following scale of borrowing.

**Figure 11.1 Borrowing scale of grammatical items according to frequency**

<table>
<thead>
<tr>
<th>Grammatical Borrowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>[articles] &gt; conjuncts &gt; adpositions &gt;</td>
</tr>
<tr>
<td>disc. markers &gt; adverbs &gt; numerals &gt; [auxiliaries] &gt; pronouns</td>
</tr>
</tbody>
</table>

In order to compare this scale with the second part of the implicational scale
proposed in H.3.2 (cf. section 4.3.3), the above categories are classified in half-open
and closed classes. Adpositions make a half-open class in which new elements can
be introduced through grammaticalization. Other half-open classes are non-manner
adverbs and discourse markers. Both classes are open to the entry of new elements
as a result of language contact or internally motivated changes in discourse. Finally, articles, coordinators, subordinators, pronouns and auxiliaries and numerals\(^2\) belong to truly closed classes.

Borrowing hypothesis H.3.2 predicts that items from half-open classes are borrowed more often than items from closed classes. The average percentage of items from closed classes amounts to 30.2%. The corresponding percentage of items from half-open classes is 13.8%. In other words, tokens from closed classes outnumber items from half-open classes. The difference between types from closed classes and types from half-open classes is virtually non-existing (23.5% vs. 24.1%). In both cases hypothesis H.3.2 is not confirmed.

What about the distribution of lexical classes in each language? For Quichua the token percentages of closed classes and half-open classes are 27.9% versus 12.7%. For Guaraní the gap between both classes is dramatic: 52.0% versus 5.4%. In contrast, the proportion is reversed in Otomí: items from half-open classes are more frequent (65.0%) than items from closed classes (29.3%). The analysis of types shows the same distribution in Quichua and Guaraní. In Otomí types of half-open classes outnumber types of closed classes. Therefore, a language-specific analysis confirms hypothesis H.3.4 only for Otomí.

Differences in the token distribution are due to a predominant grammatical class in each language: conjuncts in Quichua; articles in Guaraní; and adpositions in Otomí. This explains the disproportion between closed classes and half-open classes in Quichua and Guaraní, and the inverse proportion in Otomí. But even if the predominance of conjuncts, articles and adpositions explains the unbalance between classes in each language, we need to explain why they are borrowed with such a frequency. Both linguistic and nonlinguistic factors intervene to shape the distribution of grammatical borrowings in the contact situations analyzed here.

Hypothesis H.3.4 does not make any specific prediction about the relative frequencies of grammatical classes in the borrowing process. However, Muysken formulated (1981: 130) a borrowing continuum predicting the frequencies in the borrowing of grammatical classes (cf. section 3.5). Figure 11.2 maps the distribution of grammatical borrowings in the three languages onto this continuum. To make both distributions comparable the grammatical classes not included in Muysken’s continuum weew omitted. These are discourse markers, adverbs and auxiliaries.

\textbf{Figure 11.2 Muysken’s continuum and frequency distribution in the corpora}

<table>
<thead>
<tr>
<th>Muysken 1981</th>
<th>Adposition</th>
<th>Coordinator</th>
<th>Numeral</th>
<th>Article</th>
<th>Pronoun</th>
<th>Subordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
</tr>
<tr>
<td>Article</td>
<td>Coordinator</td>
<td>Adposition</td>
<td>Subordinator</td>
<td>Numeral</td>
<td>Pronoun</td>
<td></td>
</tr>
</tbody>
</table>

\(^2\) Though recursive, numerals are a closed class of items for the limited set of basic numbers.
The distribution of grammatical borrowings in the corpora matches the borrowing continuum only in one category (coordinators). Articles represent the largest mismatch: they rank first in our distribution but fourth in the continuum. The question is whether a language-specific analysis gives similar results. Figure 11.3 compares the distribution of grammatical borrowings in each recipient language with Muysken’s continuum. Matched categories are highlighted. Blank cells correspond to missing categories.

**Figure 11.3  Muysken’s continuum and frequency distribution in each language**

<table>
<thead>
<tr>
<th></th>
<th>Adposition</th>
<th>Coordinator</th>
<th>Numeral</th>
<th>Article</th>
<th>Pronoun</th>
<th>Subordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>Coordinator</td>
<td>Subordinator</td>
<td>Numeral</td>
<td>Adposition</td>
<td>Pronoun</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Article</td>
<td>Coordinator</td>
<td>Subordinator</td>
<td>Numeral</td>
<td>Adposition</td>
<td>Pronoun</td>
</tr>
<tr>
<td>O</td>
<td>Adpositions</td>
<td>Coordinator</td>
<td>Subordinator</td>
<td>Numeral</td>
<td>Pronoun</td>
<td></td>
</tr>
</tbody>
</table>

M=Muysken’s continuum; Q: Quichua; G: Guaraní; O: Otomí

The figure shows that Guaraní is the most deviant from the borrowing continuum, with only one matched category (coordinators). Quichua has two matched categories (numerals and pronouns) and Otomí three matched categories (adpositions, coordinators and pronouns). In all cases, mismatches are too many to allow relevant conclusions. Let us now compare the individual distributions of grammatical borrowings in the three languages. Figure 11.4 includes all grammatical categories in the corpora. Blank cells represent missing categories.

**Figure 11.4  Language-specific distribution of grammatical borrowings**

<table>
<thead>
<tr>
<th></th>
<th>Coord</th>
<th>D. Marker</th>
<th>Adv</th>
<th>Subord</th>
<th>Num</th>
<th>Adp</th>
<th>Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>Art</td>
<td>Coord</td>
<td>Adv</td>
<td>Subord</td>
<td>Num</td>
<td>Adp</td>
<td>Pro</td>
</tr>
<tr>
<td>G</td>
<td>Adp</td>
<td>Coord</td>
<td>D.Marker</td>
<td>Subord</td>
<td>Adv</td>
<td>Num</td>
<td>Aux</td>
</tr>
</tbody>
</table>

Pronouns are the only matching category for the three languages: they are the least frequent and most difficult to borrow of all grammatical elements. The categories of articles and auxiliaries show no cross-linguistic matches because they occur only in Guaraní and Otomí, respectively. There are three partially matched categories: coordinators in Quichua and Guaraní; subordinators in Quichua and Otomí; and adpositions in Quichua and Guaraní. The different distributions in the three languages seem to exclude cross-linguistic regularities in the borrowing process. However, the same differences confirm the different typological character of each language and therefore demonstrate the influence of this factor on grammatical borrowing. In this perspective, for example, the typological similarity of Quichua
and Guaraní explains one important match between these languages: they borrow only a very small number of prepositions because both are postpositional languages.

11.3 Distribution and use of grammatical borrowings in the corpora

This section presents a cross-linguistic analysis of the most frequent function words borrowed from Spanish: articles; conjuncts; prepositions; and discourse markers. The last part deals with parts of speech that make a marginal contribution to grammatical borrowing.

11.3.1 Articles

Spanish articles are the most frequent class of grammatical borrowings (17%). However, their occurrence is limited to Guaraní, and they represent two thirds of all grammatical borrowings in this language. Neither Quichua nor Otomí show any articles. None of these languages has a proper category of articles, although nominal proclitics in Otomí are similar to them in form and meaning. In the following I describe the distribution and use of Spanish articles in Guaraní and explain their occurrence in terms of typological factors.

Although article borrowing is a widespread phenomenon in Paraguayan Guaraní, the distribution of articles seems influenced by diatopic and diastatic criteria. Articles represent 22.53% of the total borrowings in urban Guaraní but only 11.25% in rural Guaraní. In these terms we may associate a higher frequency of articles with urban lects a lower frequency with rural lects. Since article borrowing requires bilingual proficiency, a higher frequency of articles corresponds to a higher degree of bilingualism.

Article borrowing is a very unusual phenomenon in the literature on contact linguistics. Except for Muysken’s continuum (cf. supra), scales of borrowability do not include articles. Still, loan articles occur in contemporary Guaraní in large numbers. The question is not only how Guaraní use loan articles but also why these are borrowed at all.

Guaraní boasts a complex system of deictics used to mark definiteness, spatial relations and other referential functions (cf. Gregores and Suárez 1967: 141, 144). Spanish articles have added to this system as determiners and pro-forms (Lustig 1996: 10; Gómez Rendón 2007b). The accommodation of Spanish articles to the Guaraní morphosyntactic structure suggests that Guaraní had a place for them in its structure. Of course, structure does not explain by itself why the language borrowed articles at all, especially if there is a complex system of native elements performing the function of articles satisfactorily. Typology is a promoting factor but not a motivation for borrowing. The motivation should be looked for rather in discourse strategies operative at the level of the bilingual speaker in multilingual contexts. I
have discussed the issue elsewhere (Gómez Rendón 2007b). Here I focus on the morphosyntactic integration of loan articles.

The Spanish article in Guaraní is used as a determiner cliticized to native or non-native nouns. As explained above, only two forms of the article have been borrowed: the feminine singular la and the plural masculine los - which dropped the final /s/ to become lo. The form lo is used quite rarely, and then only with plural nouns. Example (3) below is one of the few instances of lo in the corpus. The article is fused with the noun mitã and contrasts with lamitã in (4).

3) che a-segui va’ekue
   1S 1S-follow PST
   ko educasión rehguá lo-mítã apyté-pe
   DEM education concerning ART-people middle-LOC
   ‘I continued to support people on educational issues’

4) i-porã-iteri la oñe-mbo’e la-mítã-me
   3.be-good-very PRO 3-PAS-teach ART-child-OBJ
   ‘It is good that he teaches the children’

Loan articles do not comply with the agreement rules for number and gender which are characteristic of the Spanish article: for example, la precedes a plural noun (5) and a masculine loan noun in (6).

5) Ha umiva piko o-torva la mburuvicha-kuéra-pe
   And PRO.DIST EMPH 3-upset DET chief-PL-ACC
   ‘And that upset the chiefs’

6) Upéva o-me’ê la crédito ñemit-rã
   That 3-give DET credit plantation-PURP
   ‘They gave me the money for the plantation’

These examples show two things: a) the form la was not imported along its native categories in Spanish but is fully adapted to the morphosyntax of Guaraní; and b) this morphosyntactic integration confirms that composites of loan articles and loan nouns are not code switches but two independent loans.

Although the article used as a determiner does not receive primary stressed in Guaraní, it does not form one phonological word with the following noun, except for the few cases mentioned above. This feature allows the use of a possessive between the article and the noun head (7), or even between the article and a code switch (8).
7) \( ij\)-apyte-pe-\( ku\)\( é\)ra  o-u  \( la\)  che  tio
   3.POSS-middle-LOC-PL  3S-come  DET  1.POSS uncle
   ha  o-henoi  \( la\)  i\( ñ\)-\( er\)mano-\( ku\)\( é\)ra
and  3-call  DET  3.POSS-sibling-PL
“My uncle came with them and then called his brothers and sisters”

8) up\( é\)icha-ma  voi  \( la\)  ore  \[situación de pobreza\]
   like.that-PRF  EMPH  DET  2PL.POSS  situation of poverty
   “And our poverty was just like that”

Notice that the order of constituent in the above examples is not Spanish, because
articles never precede possessives in this language. In contrast, the sequence
determiner–possessive–noun is canonical in Guaraní, because possessives do not
mark definiteness and thus require the presence of the determiner. Consider the
following example:

9) nd-ai-\( ku\)\( á\)\( ë\)i  pe  nde  \( r\)\( ò\)ga
   NEG-1S-know-NEG  DEM  2.POSS  house
   ‘I don’t know your house’ [lit. I don’t know that your house]

The determiner \( pe\) refers to an object located away from the speaker and near to the
addressee. Trinidad Sanabria (2004: 696) classifies \( pe\) as a deictic of visual
reference. But this is not the function of \( pe\) in (9). Because an accurate identification
of referents in the communicative space is pragmatically relevant in Guaraní and
such identification cannot be done by possessives only, demonstratives are used for
this purpose, including the Spanish article. Gregores and Suarez (1967: 128) group
Spanish articles \( la\) and \( lo\) together with the native demonstrative \( ku\), because the
three can make nominalized clauses. Indeed, the form \( la\) co-occurs with one of a set
of tense-marked nominalizers, including -va for present tense, -va’ekue for past
tense, and -va’er\( ë\) for future tense. Each of these constructions is exemplified below.

10) \( la\)  o-\( ñ\)-\( ë\)mbo’\( é\)-va  nda-\( ha\)’e-i
   DET  3-PAS-teach-NMLZ.PRS  NEG-3.be-NEG
   \[la misma cosa\]  \( la\)  o-\( ñ\)-\( ë\)-\( ë\)-va
   [the same thing]  DET  3-REFL-speak- NMLZ.PRS
   ‘What is taught is not the same as what is spoken’

11) \( la\)  o-u-\( y\)-py-va’ekue  pete\( ë\)  tio
   DET  3-come  -first-NMLZ.PST  one uncle
   ‘An uncle who came first’
Comparative Analysis: Grammatical Borrowing

12) che ru la o-man-o-ma'ekue o-japo doce-año
   1S father DET 3-die-already-NMLZ.PST 3-do twelve-year
   ‘My father, who died twelve years ago’

13) nd-ai-kuaa-i la ha’e va’erã
   NEG-1S-know-NEG DET 1S.say NMLZ.FUT
   ‘I do not know what I would say’

The nominalizer and the article form relative clauses of restrictive (11) and non-restrictive (12) nature. These constructions are used if the nominalized clause is the subject (10) or object (13) of the main clause. To nominalize a clause standing in oblique relation to the main clause, the relativizer ha is used instead, without la. Notice that relative clauses involve the form la only: lo never co-occurs with nominalizers.

But these constructions do not exhaust all the possible uses of the Spanish article in Guarani. Other uses include pronominal roles in which la—and only la—occurs as a freestanding pronoun or relativizer. Freestanding forms can be used in two co-referential functions: cataphoric (14) and anaphoric (15-16).

14) nda-che-tiempo-i la a-japo hagua otra cosa
   NEG-1S-time-NEG PRO.DEM(3) 1S-do PURP (other thing)(3)
   ‘I don’t have time to do other things’

15) alguno-ko no-ñe’ê-i-ete la kastellano.
   some-DEM NEG-speak-NEG-very DET Spanish(3)
   oi-ke-rõ eskuela-pe-nte la ña-aprende-pa
   3-come-WHEN school-LOC-only PRO.DEM(3) 1PL-learn-ALL
   ‘Some [of us] don’t speak Spanish, only when we go to school, we learn it’

16) arema rei-ko nde ko Hernandarias-pe?
   long.time 2S-live 2S (DEM Hernandarias-LOC)(3)
   arema ai-me-te voi la a-nace ko’ápe
   long.time 1S-be-very thus PRO.DEM(3) 1S-be.born here
   ‘Do you live long here in Hernandarias? - I live long here where I was born’

In (14) la refers forward to the noun phrase otra cosa ‘something else’ (possibly a code switch), but in (15) the same form refers back to the noun phrase la kastellano ‘the Spanish language’. Accordingly, la stands for bare heads and whole phrases, thereby replacing the Guarani demonstrative pronoun kóva. Moreover, in (16) la refers back to the entire locative phrase ko Hernandariaspe ‘here in Hernandarias’.
A similar reading is valid for (17) below, where la refers back to Brasil, thus standing for a noun or an adverb.

17) che nda-se-guasu-i, Brasil-pe laₜ a-ₜ

“I don’t leave home too often, to Brazil (there) I have gone”

The productive use of the Spanish article in Guaraní is demonstrated by its ubiquitous occurrence in the corpus and the different functions it plays at the level of the noun phrase and the sentence. However, these uses are not contact-induced innovations: all of them existed in the language before contact, proof of which is the coexistence of the Spanish forms and the native deixics in most varieties of the language.

The morphosyntactic structure of Guaraní enabled the borrowing and productive use of the Spanish article, although the borrowing itself was motivated by external, nonlinguistic factors, including the restructuring of discourse strategies as a result of communicative pressures and the increasing bilingualism of the Guaraní speech community. As shown later in this chapter, a similar argumentation applies for other types of grammatical borrowings in Paraguayan Guaraní.

11.3.2 Conjunctions

By conjunct I mean any connective linking two phrases or clauses. If these phrases or clauses are at the same level, the connective is a coordinating conjunction; if one constituent is subordinate to the other, the connective is a subordinating conjunction. Conjunctions in general are the second most frequent category of function loanwords (11%) after articles, with the difference that conjunctions occur in the three languages, albeit in different numbers as a result of typological factors. Coordinators are two times more numerous than subordinators, but their contribution differs in each language: in Quichua, Spanish coordinators are ten times more frequent than subordinators; in Otomí, coordinators and subordinators are equally represented.

In general, conjuncts are peripheral to syntax, which makes them more salient and accessible in discourse. The assumption is that connectives are located higher on the scale of borrowability than most function words. Both Whitney and Muysken place conjunctions in the second position of their scales, after prepositions. In fact, conjunctions and prepositions are borrowed with particular frequency in situations of intense contact, like that between Spanish and Otomí. The high frequency of these function words is somehow reinforced by the fact that prepositions are used in several cases as conjuncts, just like conjuncts are often used as prepositions, on the basis of their common function of connectivity. In the rest of this section I illustrate the usage of Spanish coordinators and subordinators in each recipient language.
Comparative Analysis: Grammatical Borrowing

**Coordinators**

The number of coordinators is different in each language, but their types and usage are strikingly similar. Five simple coordinators occur in the corpora with the following frequency: adversative *pero* ‘but’; conjunctive *y* ‘and’; disjunctive *o* ‘or’; negative conjunctive *ni* ‘nor’; and contrastive *sino* ‘but’. This distribution is similar across the three languages. Consider the following instances of adversative *pero* in each language:

**Quichua:**

18) *paramo-ca pertenece-na-mi ſuanchic comunidad Ucsha-pac*

    *moor-TOP belong-HAB-VAL 1PL.POSS community Ugsha-BEN*

    *pero parti-ngapac muna-n*

    *but separate-PURP want-3*

    ‘The moor belonged to our community of Ucsha but they want to separate it’

**Guaraní:**

19) *oí heta aranduka castellano-pe jai-poru ara pero*

    *3.be many book Spanish-LOC 1PL-use need but*

    *mba’ichá jai-porú-ta la aranduka castellano-pe?*

    *how 1PL-use-FUT PRO.DEM book Spanish-LOC*

    ‘There are no books in Guaraní, there are many books in Spanish that we need to use, but how are we going to use the books in Spanish?’

**Otomí:**

20) *Nugi hin-di=he ya=’bitu nu-’u*

    *1S NEG-PRS.1=DEF.PL=clothing DEM-LOC.DIST*

    *hewa j=ar hìnini pero num=meni hā he*

    *town LOC=DEF.S pueblo but DEF.POSS.1=relative yes dress*

    ‘I don’t wear the clothes they use here in town but my relatives do’

Because the adversative occurs outside clause boundaries in all these examples, phonetic accommodation is not observed in any of the languages. The lack of phonological integration of these connectives contributes to their syntactic saliency. At the same time, the adversative can integrate easily in the structure of the recipient language and such integration does not result in visible morphosyntactic changes in the matrix of the borrowing language. None of the three languages has an adversative conjunct of its own. From a gap-filling perspective, the three languages have borrowed the Spanish adversative to lexicalize this semantic category.

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3 Only seldom *pero* ‘but’ is shortened to *pe* in Otomí, depending on the speaker.

4 The closest form is Quichua *shinapash* or *shinallatac*, equivalent to ‘however’ or ‘although’.
However, the ultimate motivation for conjunct borrowing is not the linguistic structure but the communicative pressure on minority-language speakers to meet the requirements of the Spanish-dominant discourse in a diglossic context. The argument is valid to the extent that connectives express clause structure and discourse organization. Another discursive motivation for the borrowing of the Spanish adversative might have to do with its function of shifter between code switches. This is illustrated in the following example. Spanish switches appear in square brackets.

21) Upévare che ha’e, ha aguereko heta mba’e ikatúva aguerojera [para demostrar que realmente si el Guaraní no es la matriz universal de todos los idiomas, es por lo menos la que más fielmente siguió en el tiempo o más ha permanecido con esa fuerza] pero la che ha’eva de-que pe ava ňe’ê oguerenko peteĩ ŉemomarandu, [un mensaje]

‘That’s why I say I have many things to show you [to show you that even if the Guaraní language is not the universal matrix of all languages, at least it is the one that has followed this matrix most closely over time and has preserved that strength] but what I say is that Guaraní has a message [a message]’

The adversative in this case does not express any opposition from the speaker to his previous statements. Instead, it marks the shift from one switch to another. While I have not exhaustively analyzed this use of the adversative, it is clear that pero may be used in contexts different from those of the source language. Notice, finally, that the adversative often co-occurs with a native conjunct, as illustrated below.

22) y  cunan-carin  cai    CEPCU  trava-ja-ju-pa-ni
and today-AFF DEM.PROX CEPCU work-DUR-HON-1S
pero  shinapash  na  oficina  trava-ju-llá  ca-pa-n
but however-NEG office work-LIM be-HON-3
sino  comun-ta  ñaupa-man  pusha-na  yuya-n
but community-ACC front-ALL lead-INF think-3

“And now I am working here at CEPCU, but this is not just office work, I think it is about leading communities to progress”

In this example pero co-occurs with shinapash ‘however’, where the latter is sufficient to convey the intended meaning. Doubled constructions perform more than a simple semantic function. In (22) pero tags the speaker’s level of bilingualism and therefore is not redundant but emblematic. Other cases of double

5 While some authors (e.g. Poplack 1981) would consider pero in (252) a code switch, I consider it a function loanword for reasons of frequency and integration in the Quichua morphosyntax.
marking are explained in similar terms, except when the loanword makes the relation more explicit. In general, the higher frequency of occurrence of pero in the corpora is reflected in its varied meanings in bilingual speech.

Another loan conjunct used with adversative meaning is sino ‘but’. However, pero and sino are used differently in the source language: pero connects clauses; sino connects phrases. As a loan conjunct, sino is used as a clausal connective along with que ‘that’.

23) Hi-mi= tho ya=mgti
   NEG-IMPF.3=kill DEF.PL=animal
   sino-ke mi=tuxho ir-’rangdi
   but IMPF.3=take:LIM to-the.other.side
   “They did not kill the animal but take them to the other side”

In a few cases sino is used as a clausal connective without que. Examples of this usage include (22) in Quichua, (24) in Guaraní, and (25) in Otomí.

24) ko’aga la kũkakarai-kuera la i-memby nd-o-mbohera-ve-i
   now DET mother-PL DET 3-child NEG-3-call-more-NEG
   pe ṃande réra paraguayo-ite sino o-ñeantoja
   DET 1PL.POSS name Paraguayan-very but 3-like 3-REFL-like
   chupe uní Ronal, Jonatan, ha mba’e-ngo o-mbohéra
   3.OBJ DEM Ronal Jonatan and thing-AFF 3-name
   ‘Nowadays women don’t name their children with real Paraguayan names anymore but name them Ronal, Jonatan and the like’

25) Pwes ya=nháti tōnsŋe yá=bestido,
   because DEF.PL=bridegroom buy.REFL POSS.3PL=dress
   este hingi tŋmbya kostumbre m’mégi’o
   NEG follow:BEN:DAT.PL custom before
   sino tŋmbya kostumbre ya=mbhů’bya
   but follow:BEN:DAT.PL custom DEF.PL=Mestizo-now
   ‘Because the bride and the bridegroom buy their clothing, eh, they do not follow the customs of the past but they follow the same customs of Mestizos’

The above examples show that pero and sino have the same adversative meaning irrespective of the phrasal or clausal status of the linked constituents. Nevertheless, the presence of the connective que ‘that’ (23) suggests that the coordinating function of the adversative might be used also to subordinate clauses or phrase. The use of this connective is further analyzed in the section of subordinating conjuncts.
Let us focus on the conjunctive \( y \) and the disjunctive \( o \). These connectives have not replaced native forms but co-occur with them in most cases. In the following examples the connectives link both phrases (26, 31) and clauses (27, 28, 29, and 30).

**Quichua**

26) **concierta** huarmi-cuna-man **lo-mismo** cara-c **ca-rca**

- debt-worker woman-PL-DAT the-same give-HAB be-PST

**rebozo** sira-shca-lla-tac, **huallca** y **muchiju**

- cloak sew-PTCP-LIM-AFF necklace and hat

‘They gave the same to female debt-workers: sewn cloaks, necklaces and hats’

27) **shina-shpa-ca** quiquin-pac **yuyai-lla-chu** ri-rca-ngui

- be.like-GER-TOP 2S-GEN thought-LIM-INT go-PST-2S

**o jinti-cuna-chu** quiquin-ta cacha-rca?

- or people-PL-INT 2S-ACC send-PST

‘Thus, did you go by your one initiative or did people send you?’

**Guaraní**

28) **ýramo ña-mboé’ va’erã o ja-reko va’erã peteī…**

- if.not 1PL-teach OBL or 1PL-have OBL one…

peteī curriculo o-mbohóvái-va kóva-pe

- one curriculum 3-answer-NMLZ.PRS that-ACC

‘If not, we have to teach or we need to have a curriculum to fight back’

29) **porque heta pira oï nda-i-katu-i-va o-je-cria**

- because many fish 3.be NEG-be-able-NMLZ.PRS 3-REFL-grow

**o-mbo’a la y nd-o-syry-i-hape**

- 3-lay.eggs PRO.DEM and NEG-3-flow-NEG-there

**ha entonce o-jagarra hikuai**

- and then 3-catch 3PL.be

‘Since fish cannot grow and lay eggs, water doesn’t flow and they catch them’

**Otomí**

30) **be’o fñts’i ne ‘ñuni ne ja da=yobi**

- before fallow y water y make FUT.3=fold

**y después ja=da mot’i**

- and afterwards FUT.3=sow

‘First fallow, then water and fold, and then sow’
Conjunction and disjunction are expressed differently in the three languages. In Otomí the time adverb ne ‘afterwards’ is used as a conjunctive and the particle wa as a disjunctive. Both connectives are widely used in everyday speech. In Guaraní, conjunctive ha and disjunctive terã are used only as connectives, although the frequency of the disjunctive is low in colloquial language. The case of Quichua is unique. On the one hand, this language does not have a disjunctive of its own but uses simple juxtaposition. On the other hand, conjunction is expressed through the additive marker -pash suffixed to each constituent. Since the scope of -pash is limited to phrases, conjunctive clauses in Quichua are traditionally juxtaposed. Comparatively, the linking strategies in Quichua differ more drastically from Spanish than the strategies in Guaraní and Otomí. In these terms, the largest number of conjunctive and disjunctive forms from Spanish is explained as a result of the calquing of the explicit linking mechanisms of this Spanish. Considering that Guaraní has the smallest number of Spanish conjunctives and disjunctives and Otomí a moderate number of these connectives, their frequency is inversely proportional to the use of native connectives. Thus, the language without native connectives for phrasal and clausal conjunction and disjunction (Quichua) is precisely the language that uses loan connectives most frequently. This means that the borrowing of connectives allows speakers with different levels of bilingualism to structure their discourse in more explicit ways as required by the communication frames of the dominant society.

The fact that y ‘and’ and o ‘or’ are the simplest connectives in form and semantics encourages their usage in other functions such as the reinforcement of contrast (32) and the shift between code-switches (33).
Another function of the Spanish disjunctive in Guaraní is illustrated by (34). In this case the connective does not express clause disjunction but helps the speaker to reword his statement while keeping the floor.

34) ha a-ñe-moarandu-ramo... o a-ñe-moarandu-hápe a-topa
and 1S-study-if or 1S-study-WHEN 1S-find
heta mba'e [que coincide con los últimos acontecimientos científicos]
many thing [that agree with the last scientific findings]
‘In my study I have found many things that agree with the latest scientific findings’

Because most instances of Spanish conjunctives and disjunctives in Guaraní are similar to those illustrated in (33) and (34), I conclude that the main role of both connectives in this language is to help the speaker control turns between code switches.

The negative conjunctive is the least frequent in the corpora. None of the languages has a negative conjunctive of its own. The negative connective is particularly interesting for its morphosyntactic integration. The form ni ‘nor’ can stand alone within the clause, but more frequently it occurs in pairs or triplets linking several clauses. In the following examples the negative disjunctive coordinates phrases (35, 36) and clauses (37):

**Quichua**

35) ni yachachic-cuna-pash huaquin-pi-ca, ni
nor teacher-PL-ADIT sometimes-LOC-TOP nor
taitamama-cuna-pash paicuna-pash macanaju-shca ca-n
parent-PL-ADIT 3.PL-ADIT fight-PTCP be-3
‘Sometimes neither teachers nor parents, they are upset with each other’

**Guaraní**

36) ni Liga-gua ni JAC-gua nd-oi-kuáá-i
neither Liga-ABL nor JAC-about NEG-3-know-NEG
‘I know neither Liga nor JAC’
The integration of the negative conjunctive is facilitated by its peripheral or extra-clausal syntactic position. Interestingly, the negative connective still requires the negation of the predicate in Guaraní, but not in Quichua and Otomí. The negative conjunctive is the most frequent in Otomí, in which language it coordinates multiple phrases, as illustrated below.

38) **Nixi Independensya nixi Reforma, nixi Rebolusyon**

neither Independence nor Reform nor Revolution

\[ bi=nkambyo \quad yá=kostumbre \quad de \quad ya=ñhoñho \]

PST.3=change POSS.3=costum of DEF.PL=Otomí

‘Neither the Independence nor the Reform nor the Revolution have changed the customs of the Otomí’

**Subordinators**

Subordinating conjunctions are the second type of conjuncts borrowed from Spanish. As a whole, subordinators are less frequent than coordinators in the three languages, but their distribution is different in each language: loan subordinators are fewer than loan coordinators in Quichua and Guaraní, but both connectives are equally represented in Otomí. In all the cases, Spanish subordinators are expected to influence the morphosyntax of the recipient languages to the extent that these prefer paratactic constructions and other syntactic mechanisms of clause linking: Quichua links clauses through nominalization and juxtaposition (cf. 6.4); clause linking in Guaraní is accomplished through juxtaposition; and Otomí uses verbal suffixes or particles to mark the relations between clauses. These mechanisms have been preserved to different degrees in each language and coexist with Spanish-modeled subordination.

The analysis of loan subordinators shows that not only their phonological form but also their grammatical categorization is matter of borrowing. The categorization features includes the syntactic slot of the function loanword and the matrix of relations between constituents. The data suggest that bilingualism is not a prerequisite for the borrowing of subordinators. Otomí speakers (incipient bilinguals) borrow a much larger number of subordinators than Guaraní speakers (compound and coordinate bilinguals). Section 11.5 explores in detail whether a
relation exists between bilingualism and grammatical borrowing on the basis of data from the corpora.

The most frequent subordinators are, in order of frequency, the following: *porque* ‘because’, *que* ‘that’, *como* ‘as’, and *si* ‘if’. They show different distributions depending on the language: subordinator *porque* is the most frequent in Guaraní; subordinators *que* and *como* the most frequent in Otomí; finally, *if* is the least frequent of subordinator in the three languages. The following examples of causal *porque* add to many others quoted in previous sections.

### Quichua

39) si tapa-nchik ñukanchik shuk-lla shimi-pi
if ask-1PL 1PL.POSS one-LIM language-LOC

*porque* paykuna-pa nima
because 3.PL-DAT nothing

‘If you ask students in Quichua, they don’t understand because it means nothing to them’

### Guaraní

40) n-a-ñe’-guasu-i pe Guaraní sai-voi añe’è
NEG-1S-speak-big-NEG DEM Guaraní bit-early 1S-speak

*porque* o-jeprohibi voi akue
because 3-MEDP-forbid early PRF

ñande epoca-pe
1PL.POSS time-LOC

‘I don’t speak good Guaraní, only a bit, because it was forbidden in my old times’

### Otomí

41) no=r bātsi bi=nzoni
DEM=DEF.S child PST.3=cry

*porke* bi=n-tsā’t’i na nts’edi-tho
because PST.3=REFL-burn very strong-LIM

‘The child cried, because it burned itself very much’

The Spanish subordinator replaces the postpositions -*manta* in Quichua (39) and -*rupi* in Guaraní (40), and the particle *ngetho* in Otomí (41). Still, the integration of the causal subordinator has not resulted in syntactic changes in the recipient languages.
Of similar meaning but less frequent occurrence is the Spanish subordinator *como*, present in the three languages but especially in Otomí. Again, the use of this connective accommodates to the structure of the recipient languages. Consider the following examples.

**Quichua**

42) *chayka como yapa alpa-ta chari-shpa-ka*

then because too land-ACC have-GER-TOP

*kay-kaman-mi ka-shka kan chay shuk hacienda*

this-ALL-VAL be-PRF be-3 that one hacienda

‘Because the hacienda had a lot of land, it reached up to this area’

**Guaraní**

43) *como la campesinádo-gui n-o-nohê-mo’à-i*

as DET peasantry-ABL NEG-get-COND-NEG

*respuesta kastelláno-pe*

answer Spanish-LOC

*ha’ekuéra tres meses-pe o-ñe’ê-kuaa porâ-iterei*

3PL three month:PL-LOC 3-speak-know good-very.much

‘As peasants don’t answer in Spanish, they learn to speak Guaraní in three months’

**Otomí**

44) *komu hin-te bí=zi-je, hin-te di=pädi*

as NEG-thing PST.3=say-EXCL.PL NEG-thing PRS.1=know

‘As they didn’t tell me, I don’t know’

Otomí has adapted the loanword by rising /o/ to /u/. The same adaptation was expected for Quichua but it is reported. Notice that Quichua uses *como* along with the conditional gerund for coreferential subjects -shpa. Traditionally, the gerund is sufficient for expressing conditional meaning. Double marking is common in subordinating constructions on the model of Spanish. An analysis of the three corpora suggests that *como* is used mainly with causal meaning. In a few cases, however, the subordinator is used in comparisons (44). In this Otomí example *como* occurs in double-marked constructions along with *jangu* ‘like’.

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6 The Spanish conjunct have two distinct syntactic functions: it is an adverb of comparison and a casual conjunction. As it seems, the loanword is borrowed with both functions in the three languages.
The use of these loan subordinators has not produced syntactic changes in the clause structure of the recipient languages. On the contrary, the use of conditional *si* ‘if’ seems quite disturbing. An example of this conjunct in Quichua is (39) above. There the conditional not only replaces the Quichua postposition -*cpi* but causes the reversal of word order from SOV to SVO. In fact, changes are more drastic for Quichua morphosyntax and lead to the occasional loss of coreferentiality in the use of conditional gerunds (-*cpi*, for non-coreferential subjects; -*shpa* for coreferential subjects). The speaker of (46) below is indecisive in the use of the appropriate form of the conditional gerund and repeats the connective in both clauses. Notice that the subject of the last conditional clause is not coreferential with the subject of the following clause.

46)  

<table>
<thead>
<tr>
<th>si</th>
<th>yayamama mana yacha-cpi si mama mana yacha-shpa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>if parents NEG know-if if mother NEG know-if</td>
</tr>
<tr>
<td></td>
<td>ńuca huahua-cuna-ta-ca imashina mana yanapa-i-ta yachani 1S child-PL-ACC-TOP how NEG help-INF-ACC know-1S</td>
</tr>
</tbody>
</table>

‘If parents don’t know, if mothers don’t know, I don’t know how to help children’

The conditional subordinator co-occurs also with the conjunctive, if the speaker intends to reinforce the meaning of the conditional clause. The following example illustrates such use.

47)  

<table>
<thead>
<tr>
<th>chai</th>
<th>faltan ashata, gulpi llancana nachu,</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEM.DIST</td>
<td>be.missing-3 much jointly work-INF NEG.INT</td>
</tr>
<tr>
<td>y si</td>
<td>gulpi llanca-nchic;</td>
</tr>
<tr>
<td>and if</td>
<td>jointly work-1PL.PRS</td>
</tr>
<tr>
<td>gulpi</td>
<td>ńaupac-man apa-i-ta usha-nchic</td>
</tr>
<tr>
<td>jointly</td>
<td>front-ALL carry-INF-ACC be.able-1PL.PRS</td>
</tr>
</tbody>
</table>

‘What is missing is joint work, and if we work jointly, we can progress’

The conditional subordinator occurs in the speech of speakers across generations and levels of bilingualism. However, I notice that the co-occurrence of Spanish conjuncts and native suffixes is characteristic of conservative dialects, while more hispanicized varieties have finite verbs to indicate coreferentiality and Spanish subordinators to head conditional clauses. From this perspective, the loss of the
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native strategies for clause linking is a gradual process, the stages of which occur in
different idiolects of the same speech community.

While the effects of the integration of conditional subordinators are visible in
Quichua, they cannot be tested in Guaraní and Otomí, because both languages do not
have fixed word order. It is probable that the relatively loose order of elements in
Guaraní and Otomí allows an easier integration of loan subordinators. Consider the
following examples.

48) o-ñe‘ë la Guaraní-me
   3-speak ART Guaraní-LOC
   si ha’e-küéra oí-pota la kampesino võto
   if 3-PL 3-want DET peasant vote
   ‘They speak in Guaraní if they want to get peasant’s vote’

49) si ‘nar=tajä da=du, nai‘ä-r
   if INDEF.S=godfather 3.FUT=die DEM-DEF.S
tyene-ke da=qam-ðu nar
   godchild has.to 3.FUT=buy-BEN INDEF.S
   ‘If the godfather dies, his godchild has to buy it’

While the Spanish subordinator has replaced the Guaraní postposition -ramo in (48)
and the Otomí particle nu‘bu in (49), no further changes have occurred in both cases.
Compare this with the far-reaching effects of the subordinator que ‘that’, present in
the three languages but particularly frequent in Otomí. In Quichua this subordinator
normally occurs after finite forms of verba dicendi. If one of these forms is the
reportative, it should be considered a finite verb like in following example

50) pero nin ca-rca que San-Juan chaya-na-pi-ca
    but REP be-PST that San-Juan come-INF-LOC-TOP
    quimsa punlla-ta mana mica-na cara-rca-ncic
    three day-LOC NEG eat-INF give-PST-1PL
    ni-shpa parla-ria-n shuc abuelo-cuna
    say-GER talk-DUR-3 some grandfather-PL
    ‘But it is said that before San Juan we didn’t eat for three days, some elders said’

Contemporary Guaraní shows a preference for SVO constructions, which is probably a
result of contact with Spanish. Classical Otomí is known to have a relatively fixed VOS order.
VOS word order is still present in contemporary Otomí, although a marked shift to SVO
constructions is attested. From contemporary descriptions of the language we cannot
determine the approximate period of time when SVO has come to prevail over VOS.
Therefore, we cannot assume that the borrowing of the connective is directly linked to this
shift. Further study is required on this issue.
In (50) subordinator que\(^8\) heads the complement clause of the finite verb nin ‘say.3.PRS\(^9\), with the linking verb carca ‘be.3.PST’ in between. The lexicalization of the reportative may be due to its semantic bleaching in the context of a new information structure that gives less emphasis to evidential values, on the model of Spanish discourse. Notice in (50) the occurrence of the gerund nishpa ‘saying’, which functions as a true evidential in opposition to parlana ‘tell’. Notwithstanding these changes, the subordinated clause preserves Quichua word order (SOV). Elsewhere (Gómez Rendón 2007a) I have demonstrated that syntactic changes resulting from the introduction of Spanish subordinators are underway in contemporary Quichua. The above example could therefore represent an unfinished stage of this ongoing change. Nevertheless, further study is required to establish the scope of changes caused by loan subordinators in Quichua.

The occurrence of subordinator que is prolific in Paraguayan Guaraní. The subordinator occurs in four different constructions: after certain Spanish prepositions used as conjunctions (51); in indirect quotations, with or without verba diciendi (52); in temporal expressions, to link the adverbial to the clause (53); and in adjective and adverb comparison, to link the terms compared (54).

51) \[ \text{durante que ha'e o-u, n-o-pená-i ore-rehé} \]
\[ \text{During that 3S 3-come NEG-3-worry-NEG 2PL-about} \]
‘During the Father’s visit, nobody worry about us’

52) \[ \text{pe ka'aru katu o-u jeyý-ma sitasión}\]
\[ \text{DEM afternoon well 3-come again-PRF notice}\]
\[ \text{ke karai Isaac t-o-hóje t-o-ñe-presenta-mi}\]
\[ \text{that mister Isaac, IMP-3-go IMP-3-REFL-report-MIT}\]
‘That afternoon a notice came that Isaac had to report’

53) \[ \text{el dia ke pe jeyy pende rape vai-gui}\]
\[ \text{DET day that DEM again 2PL.POSS way bad-ABL}\]
‘On the day you change your bad habits’

54) \[ \text{i-kuenta-vé-ta ña-ñe'ë inglés ke la Guaraní}\]
\[ \text{3.be-count-more-FUT 1PL-speak English than DET Guaraní}\]
‘The fact that we speak English will count more than we speak Guaraní’

\(^8\) It is important not to mistake subordinator que for the homophonous relative pronoun que. Instances of this pronoun have not been found in the Quichua corpus, although the compound pronominal loque ‘that which’ is definitely used in contemporary Quichua.

\(^9\) Notice that Quichua traditionally places the evidential nin at the end of the clause without a copula.
Example (51) illustrates one of few Spanish prepositions in Guaraní, which link two independent verbal phrases with the help of the subordinator.\(^\text{10}\) Example (52) is calqued from Spanish constructions in which the subordinator heads the quotation after the noun phrase. The Spanish subordinator occurs very often in indirect speech after \textit{ha\’e} ‘3.say’ and reportative \textit{ndaje} ‘3.PAS.say’. Traditionally, \textit{ha\’e} precedes the complement while \textit{ndaje} occurs in clause-initial or clause-final position. When the subordinator is used with the reportative, \textit{ndaje} occurs only clause-initially. In example (53) the Spanish subordinator links the adverbial expression \textit{el día} ‘the day’ to the main clause. I have analyzed adverbial constructions linked through the subordinator \textit{que} as complex borrowings on account of their frequency and morphosyntactic integration, even though some authors might consider them code switches. Finally, in (54) the subordinator links both terms of a comparison, with important consequences for Guaraní morphosyntax: the drop of the ablative marker on the second term of the comparison and the obligatory position of the second term immediately after the subordinator.\(^\text{11}\) In this case the effects of subordination on clause linking are much more disturbing.

Otomí borrows the subordinator \textit{que} with particular frequency, and the effects on Otomí structure are no less disturbing. This language has borrowed \textit{que} in four different contexts: 1) in complex conjuncts (e.g. \textit{sin-ke}, \textit{mas-ke}) where it is merged with another element forming one phonological word; 2) at the beginning of indirect speech; 3) after verbs of volition such as ‘want’ or ‘think’; and 4) before the reference of a comparison. Complex conjuncts with \textit{que} are discussed at the end of this section. The following examples illustrate the subordinator linking the clause of indirect speech to \textit{verba dicendi} (55, 57), the subordinate clause to a verb of volition (56), and the compared element to the reference of a comparison (58).

\begin{verbatim}
55) Mäng=ya jà’i ke ‘hu ar=t’ete
   say=DEF.PL people that be DEF.PL=sorcery
   ‘People say it is sorcery’

56) nuyâ ya=xömbate bilingwe
   1PL DEF.PL=teacher bilingual
   ne ke da=sifì nàr hnîni
   want that FUT.3=say DEM.S where
   ha ‘hu ya=indijena ko ñåñho embede Otomî
   and be DEF.PL=Indian with ñåñhi instead.of Otomî
   ‘We bilingual teachers want Indians to be named Ñåñho instead of Otomî’
\end{verbatim}

\(^{10}\) \textit{Durante que} is ungrammatical in Spanish. To coordinate two simultaneous clauses, the conjunction \textit{mientras} is used instead, with or without \textit{que}. Clearly, \textit{durante} is used as equivalent of \textit{mientras} on the basis of the common semantics of both connectives.

\(^{11}\) Traditionally the second term may somewhere else provide it takes the comparative marker.
Indirect speech is not marked but simply juxtaposed in classical Otomí. Juxtaposition is used also to link the subordinate clause of a volition verb. Only comparative constructions are marked, with the focus particle *dige*. In contrast to classical Otomí, where syntactic relations remain implicit in the semantic content of the verb, modern Otomí marks syntactic relations between clauses with the Spanish subordinator *que* in a explicit way.

The Spanish subordinator exerts a similar influence on the native structures of the recipient languages, but the degree of such influence varies according to the way each language marks relations between clauses and the preferred linking mechanism. The examples presented in this section make it clear that Quichua is the language most syntactically affected because of the rigidity of its word order. On the contrary, the structural changes in Guaraní are less visible because of codeswitching and syntactic calquing from Spanish. Otomí is the other side of the coin: despite the prolific use of the subordinator, the only change observed is the replacement of the focus particle in comparative constructions while syntactic relations are not affected because many of them were implicit so far.

To round off the discussion of conjuncts, I analyze now complex conjunctions. The number of complex conjuncts borrowed from Spanish is not trivial. They occur in the three languages but especially in Quichua. Complex conjuncts result from the fusion of various constituents in one phonological word: e.g. *o si no ‘or else’ > [osinó]; o sea que ‘this means’ > [oseáke]; más que ‘though’ [máske] etc. The most frequent of complex conjuncts in the corpora is the explicative *oseake*, from o sea que ‘that means’. It occurs in assimilated and non-assimilated forms, with or without the subordinator *que*. In the latter case, the conjunct can be analyzed alternatively as a discourse marker equivalent to ‘I mean.’ Another complex conjunct of widespread use is *máske*. The semantics of this conjunct is equally complex as its form. Consider the following examples.

58) **máske**  **ñuka ashta yapa-ta-lla wasi-pi rima-kpi-pash,** however.much 1S.Poss too much-ACC-LIM house-LOC speak-GER-ADIT

   **ñuka mama wasi-pi solo kichwa rima-n,** 1S.Poss mother house-LOC only Quichua speak-3

   ‘However much I speak [Spanish], at my mother’s place they speak only Quichua’
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59) **máke**

<table>
<thead>
<tr>
<th>kombymí-re</th>
<th>ha’e</th>
<th>oi-kové-va’ekue</th>
</tr>
</thead>
<tbody>
<tr>
<td>though</td>
<td>milk-DIM-with</td>
<td>3S 3-survive-PRF</td>
</tr>
</tbody>
</table>

‘He survived only with a bit of milk’

60) **'behehñā**

<table>
<thead>
<tr>
<th>DEF.PL=woman</th>
<th>PRF.3=walk-DEF.PL</th>
<th>foot</th>
</tr>
</thead>
</table>

| mäske        | PRF.3=happen-DEF.S | cold |

‘Women walked barefoot although it was cold’

The phonetic form of this conjunct is different in each language: unassimilated in Quichua; nasalized in Otomí; and shortened in Guaraní. In Spanish, más que has a concessive meaning, but only Quichua and Otomí use it with such meaning. Instead, Guaraní uses it with a limitingative meaning, even though a concessive use is not excluded. Notice that concession is expressed differently in the three languages: Otomí simply uses juxtaposition; Guaraní uses modal particles; and Quichua marks the subordinate predicate with either of two conditional gerunds -kpi or -shpa plus the additive marker -pash. From the examples it is clear that syntactic structures are not compromised in any of the languages.

In addition to the aforementioned conjuncts, Otomí makes frequent use of the complex conjunction para que, which is difficult to classify because of its morphophonological assimilation. The conjunct may occur both in full and shortened forms. An example of the shortened form (without the subordinator) is the following.

61) **nesesita**

<table>
<thead>
<tr>
<th>da ...</th>
<th>nuya</th>
<th>jā’i</th>
<th>da=hñunta</th>
</tr>
</thead>
<tbody>
<tr>
<td>need</td>
<td>FUT.3</td>
<td>DEM.PL</td>
<td>person</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pa</th>
<th>da=hoku</th>
<th>’nar=me</th>
<th>he</th>
</tr>
</thead>
<tbody>
<tr>
<td>for</td>
<td>FUT.3=build</td>
<td>INDEF.S=well</td>
<td></td>
</tr>
</tbody>
</table>

‘These people need to get together in order to build a well’

The form pa occurs 697 times in the corpus and represents a significant percentage of the grammatical borrowings in Otomí. But what is the origin of pa? A shortened preposition? The shortened form of a complex conjunction? There is no way to know the origin of this borrowing with certainty. The present analysis preferred to classify pa according to the function it performs in Otomí. Therefore, those instances used as clausal connectives were considered shortened forms of the

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12 The Spanish subordinator may co-occur with the gerund -kpi and the additive, as illustrated in (288).
complex conjunct para que while those instances used as phrasal connectives were considered prepositions. The prepositional use of pa is discussed in the next section.

According to Hekking (1995: 173), Otomí borrows more subordinators than coordinators from Spanish and this frequency is explained by “a need of accuracy”: Spanish conjunctions express more economically and accurately what Otomí expresses with complex periphrastic constructions. Hekking is right about the “need of accuracy” but this is not sufficient explanation. As mentioned above, the ultimate motivation for borrowing must be looked for in sociohistorical and sociolinguistic factors. This implies that the explanation of a linguistic fact (e.g. the borrowing of conjunctions) cannot be based on linguistic facts exclusively. In this perspective, Quichua and Otomí borrow conjunctions not only because they do not have equivalent grammatical elements for clause linking but also because the Spanish dominant discourse imposes a frame of thought and communication – including accuracy and economy, as mentioned by Hekking – where the explicitness of relations between propositions becomes a must for multicultural understanding. Therefore, the borrowing of discourse-sensitive items such as conjunctions or prepositions is less a need of accuracy motivated by a structural shortcoming than the capacity of a language to adapt to new communicative circumstances with a strong linguistic loyalty to the mother tongue where others have shifted to the dominant language.

### 11.3.3 Prepositions

Prepositions rank third in frequency according to Table 11.4. The overwhelming majority of prepositions occur in Otomí (21.8%). There are few Spanish prepositions in Quichua (0.66%) and still fewer in Guaraní (0.44%). Prepositional phrases were not analyzed as grammatical borrowings but as frozen lexical borrowings (cf. 10.3.5 and 10.4.5).

The low frequency of Spanish prepositions in Quichua and Guaraní is not surprising given the postpositional character of both languages. Moreover, hypothesis H.3.2 predicts that Quichua and Guaraní will not borrow prepositions at all. But they do, and the few cases reported need some explanation. Furthermore, for Otomí this explanation should describe typological changes, if any, in the structure of the recipient language.

**Spanish prepositions in Quichua**

The most frequent prepositions in the Quichua corpus are como ‘like’ and según ‘according to’. Both occur also as conjunctions in the syntactic periphery of clauses (cf. section 11.3.2). In the terminology of Bakker (2002) and Dikker (2005: 42f) both prepositions are “lexical predicative prepositions”, because they link two constituents, one of which is the predicate of the other. The use of como and según is
Illustrated below. Notice that loan nouns follow the prepositions in all the cases, which might be interpreted as a distributional constraint on the latter’s occurrence.

62) \textit{chay timpu-pi-lla-ta jazinda}

\textit{Ugsha jinti-ta-ca como isclabu chari-shca nin-ca}

‘It is said that at that time they treated people from Ugsha like slaves’

63) \textit{chashna porti tanda-ta-mi rura-shpa cara-c ca-rc a,}

\textit{chai tanda-ca segu\textit{n} maitra}

‘They used to make pieces of bread this big, the pieces were of different sizes if they were made by trainers or expert kneaders’

64) \textit{familia-cuna-ca shamu-c ca-rca segu\textit{n} familia}

\textit{huaquin taza sara-huan, huaquin-ca costal sara-huan,}

‘Each family used to bring something, some came with bowls of maize, others with sacks of maize, and still others with full loads of maize’

In (62) \textit{como} links the noun \textit{isclabu} ‘slave’ in its quality of predicate to the noun phrase \textit{Ugsha jintica} ‘people from Ugsha’. In (63) \textit{seg\textup{\textup{\textup{\textup{\textup{n}}}}}} links the clause \textit{chai tandaca} ‘those pieces of bread’ to the nouns \textit{maitra} ‘trainer’ and \textit{masadoracuna} ‘expert kneaders’ in their quality of predicates. The same preposition in (64) links the noun \textit{familiacunaca} ‘families’ to the phrases \textit{huaquin taza sara huan}, \textit{huaquin costal sara huan}, \textit{huaquinca carga sara huan} ‘some came with bowls of maize, others with sacks of maize, and still others with full loads of maize’. In both cases Quichua verb-final order is preserved and topic markers occur exactly in the expected position. That no syntactic change is motivated by both prepositions is due to their peripheral position in the sentence. Finally, as mentioned above, \textit{seg\textup{\textup{\textup{\textup{\textup{n}}}}}} functions also as conjunct, which is illustrated in (65).
65) según cai uchilla-gu-ca
   If DEM.PROX little-DIM-TOP
cai-manda-ca iscuila-ta tucuchi-shpa ri-pa-rca
   DEM.PROX-ABL-TOP school-ACC start-GER go-HON-PST
   ‘When they are little children, since then, they start going to school’

In (295) según subordinates the clause cai uchilaguca ‘if they are little children’ to the sentence iscuilata tucuchishpa riparca ‘they started school’. The use of según as a clausal connective is not unknown in Spanish provided it is accompanied by the subordinators que ‘that’ or si ‘if’. However, there is no evidence that según in (295) is a shortened form of the complex junction según si ‘it depends on whether’. It is more likely that the preposition acquired a connective use with an equivalent meaning. The structural changes become clear when (295) is compared with the following sentence:

66) cai uchilla-gu ca-shpa-ca
   DEM.PROX little-DIM be-GER-TOP
cai-manda-ca iscuila-ta tucuchi-shpa ri-pa-rca
   DEM.PROX-ABL-TOP school-ACC start-GER go-HON-PST
   ‘When they are little children, they start going to school’

In (66) the loan preposition has induced two changes: 1) the co-referential gerund indicating conditionality has been elided; 2), as a result of this elision, the topic marker -ca has shifted backwards to its nearby constituent.

Cases have been observed in which conditional si ‘if’ – equivalent in meaning to según in (66) – co-occurs with the Quichua gerund provided that the subjects of the subordinate and the main clause are not coreferential (cf. section 11.3.2). In these cases, the semantics of the recipient language co-determine the use of grammatical borrowings beyond the syntax of the source language. Semantic constraints are particularly strong if a function loanword does not convey all the semantic features of its native counterpart (e.g. coreferentiality) and therefore does not mark those syntactic relations which are obligatory in the recipient language. Double marking seems the best solution. The next examples illustrate prepositions in double-marked constructions. Notice again the occurrence of loan nouns after the prepositions.

67) paycuna apusta-rca chashna entre haciendero-pura-cuna
   3PL bet-PST so among estate.owner-among-PL
   ‘They bet among estate owners only’

68) chaica vacaloca ri-naju-na, vacaloca-ca hasta punta-pi
   then vacaloca go-RCP-INF vacaloca-TOP up.to end-LOC
The postpositions -pura and -pi in the above examples co-occur with the Spanish prepositions entre ‘among’ and hasta ‘up to’, respectively. The reason for doubling is basically semantic. Entre means both ‘between’ and ‘among’ – irrespective of number – while Quichua -pura denotes always more than two elements. The number of hacendados in (67) is plural, not dual. Therefore, the sole use of the Spanish preposition would cause ambiguity. Similarly, hasta means ‘up to’ without including the end point. The Quichua postposition -pi does include the end point. Thus, the sole use of the Spanish preposition would result in an ambiguous sentence – because the speaker wants to emphasize that players got to the end point of the pole and won the prize for that. These few examples confirm that loan prepositions are not always semantically more specific than the original element, as Bakker and Hekking (1999: 3) suggest for Spanish prepositions in Otomi.13

Summing up, the integration of prepositions in Quichua left the morphosyntactic matrix largely intact. The reasons for such preservation are various. First, the majority of loan prepositions are predicative in nature, i.e. they only mark the equative case. Second, some loan prepositions have extended their original function to become phrasal and clausal connectives. Third, Spanish prepositions find fewer restrictions for syntactic integration on account of their peripheral position (cf. section 11.3.2.). And fourth, if a Spanish preposition causes ambiguity, the easiest solution involves the additional use of an equivalent marker. For a complementary evaluation of loan prepositions in Quichua, the correlation between their usage and the level of bilingualism of speakers is tested in section 11.5.

Spanish prepositions in Guaraní

Like Quichua, Paraguayan Guarani is a postpositional language, and preposition borrowing is therefore not expected. Still, the corpus contains quite a few prepositions. Most of these prepositions are instances of como ‘like’, as illustrated in (69) and (70) below. Once again, the prepositions are followed by Spanish loans, thereby leaving the door open to the characterization of both constituents as code switches. Nevertheless, I have decided to analyze these cases as combinations of grammatical and lexical borrowings.

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13 An alternative reading is that semantic specialization implies the adoption of only one subset of the source-language meanings and not the specialization of the semantics itself (Bakker, p.c.).
69) ha upéi a-je-recibi universidad-pe como abogado
and then 1S-graduate university-LOC as lawyer
‘Afterwards I graduated from the University as a lawyer’

70) o-corre o-hó-vo la tiempo ha peicha
3-run 3-pass-DUR DET time and thus
hágui-nte la presidente ha che a-mba’apo
NMLZ.PST-very DET president and 1S 1S-work
como secretario hendive
as secretary 3.COM
‘Time passed swiftly and he became president and I worked as his secretary’

For Quichua I characterized como ‘like’ as a predicative preposition, because one of the linked constituents is predicate of the other. The same analysis is applicable here: como links the (implicit) first-person singular subject to abogado ‘lawyer’ in (69), and the verbal predicate to secretario ‘secretary’ in (70). Because Guaraní does not have a fixed word order – as opposed to Quichua – syntactic changes resulting from the use of prepositions are not visible at the level of the clause. Still, a comparison with the Spanish expression recibir-se como ‘to graduate as’ suggests that (69) is a syntactic calque. Calquing from Spanish is frequent in Paraguayan Guaraní and increases with higher levels of bilingualism. In this context, the use of the preposition results from the phrasing of Spanish expressions through native and borrowed items and the preservation of morphosyntactic structures. Of course, it is pertinent to ask ourselves to what extent sentences like (69) continue to be Guaraní, if everything in them is Spanish except verbal and case morphology. In my opinion, the preservation of native morphology makes these cases instances of Guaraní, but certainly quite different from traditional Guaraní.

The second most frequent Spanish preposition in the Guaraní corpus is entre ‘between, among’. Unlike the examples of entre in Quichua, the instances of this preposition in Guaraní have either a plural or dual meaning depending on the context. In the following examples the preposition occurs together with loan nouns:

71) entre seis roi-me, ha’ekuéra entre compañero
among six 2.PL-be 3.PL among fellow
o-ñe’e-ve solo Guaraní-me
3-speak-more only Guaraní-LOC
‘Among six people, they speak only Guaraní among friends’

72) entre brasilero ha paraguayo che a-topa
between Brazilian and Paraguayan 1S 1S-find
heta ha’ekuéra oĩ diferencia
many 3PL 3.be difference
‘I find there are many differences between Brazilians and Paraguayans’
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73) che-saluda  hamba’e  óga-pe  entre  óga-pe
1S-greet and.so house-LOC between house-LOC
‘People greet me and the like from house to house’

The above examples illustrate different uses of the Spanish preposition. In (71) we find two instances of entre, each with its own (Spanish) argument: seis ‘six’ and compaño ‘fellow’. It has been suggested that the sequences of loan preposition and loan noun like entre seis and entre compaño in (71) are code switches. However, if this analysis is valid for the first of the phrases, it cannot be maintained for the second, which is ungrammatical in Spanish for the lack of number marking on the loan noun. In (72) entre ‘between’ links two arguments with the addition of the Guaraní connective ha ‘and’, which excludes a classification of the sequence as a code switch. Finally, in (73) entre functions like a conjunctive, even though the original meaning is preserved and indicates the intermediate space between two objects. This innovative use of the prepositions reveals the reinterpretation of its original syntactic and semantic functions.

Another Spanish preposition in Guaraní is hasta ‘up to’. Its use is illustrated with the following examples.

74) che  la  a-logra  chugui-kuéra  hasta  o-jerure  che-rehe
1S PRO 1S-get 3PL-from up.to 3-request 1S-for
hikuai la  director-pe  kuri la  a-pyta  haguã
3PL.be DET director-ACC IMPF  PRO.DEM 1.stay PURP
‘I got them even to ask the director for me to stay’

75) i-katua-ha-peve  ja-ha-ta  upéicha,  ajepa,
3-be.able-NMLZ-until 1PL-go-FUT so right?
[hasta donde podamos cantar, vamos a cantar]
[until we could sing, let us sing]

In both examples hasta indicates the end point of the action described in the first sentence. Yet, there is a crucial difference between them: hasta is not accompanied by Guaraní morphology in (74) but co-occurs with two instances of postposition -peve ‘until’ and an explanatory code switch in the middle in (75). It is not unlikely that the code switch motivates the occurrence of the Spanish preposition in an otherwise monolingual utterance. Notice that the complex connective hasta que is
used with the same meaning of hasta in the previous examples. It is likely that hasta is a shortened form of the complex connective.

The use of según ‘according to’ in Guaraní is equivalent to the use attested in Quichua: the Spanish preposition serves as a clausal connective expressing conformity to something. In example (76) below según heads a reportative clause confirming the proposition of the first sentence. In (77) it heads an embedded clause evaluating the next statement according to the speaker’s opinion.

76) i-mitã-re o-ho [la guerra del Chaco]
según ha’e o-mbe’u oreve
according.to 3 3-tell 1PL.EXCL.OBJ
‘They went to the Chaco War for their children, as we were told’

77) che según a-topa, oí heta teta ambué-re,
1S according.to 1S-find 3.be many country other-for
o-ñe-mbo’e-ha universidad tuicha-há-re
3-REFL-teach-NMLZ university big-NMLZ-for
‘According to me, there are many other countries where it is taught at university’

Contra ‘against’ in (78) is case of a pseudo-preposition in Guaraní:

78) che na-ñe’ê-i rapicha cóntre-pe
1S NEG-speak-NEG people against-LOC
‘I do not speak against people’

At first sight the loanword in (78) seems to be the preposition contra ‘against’. However, contra is the argument of the locative postposition –pe. This leads to interpret contra rather as the loan noun contra ‘opposition’, which forms the complex preposition en contra de ‘against’. Accordingly, cóntrepe is calqued from Spanish en contra de ‘against’ but used as postpositional phrase.

A number of Spanish prepositions in the Guaraní corpus occur in syntactic calques from Spanish. These calques are not unexpected, given the bilingualism of most Guaraní speakers. Prepositions in calques follow the Spanish syntax, although their constituents take Guaraní morphology. In general, loan prepositions have not caused major changes in Guaraní, perhaps because many structures of pre-contact Guaraní have changed already.
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Spanish prepositions in Otomí

If the finding of loan prepositions in a postpositional language is unusual, the finding of a large number of them in a language without adpositions is even more puzzling. One explanation given to this phenomenon is gap filling, according to which the recipient language would cover a structural deficiency. The pros and cons of this explanation were discussed in section 3.1.4. I recommended caution when using the idea of ‘structural gaps’ for explaining language contact phenomena because the very idea of ‘gap’ is relative in itself and could evoke euro-centrist interpretations of language ‘evolution’ and hierarchies of thought. Furthermore, I demonstrated that the idea of gap filling must be relativized by considering the respective positions of the languages in contact. For Otomí in contact with Spanish, Bakker and Hekking (2007) have suggested that Amerindian languages borrow Spanish prepositions precisely to fill a gap in its structure. While their arguments are well substantiated, they require the consideration of various other factors.

Gap filling is, in my view, only part of the explanation. Gap filling per se does not motivate a language without adpositions to borrow prepositions. According to my model of contact-induced language change through borrowing, the ultimate motivation of any contact outcome is nonlinguistic: social, geographical or communicative. In this perspective, gap filling is just one link of the chain of language contact. If structural gaps in Otomí are considered a linguistic factor modeling the borrowability of prepositions, it is wise to find the ultimate cause of preposition borrowing in the sociocultural and communicative circumstances in which contact takes place for this particular language. These circumstances are outlined in the following.

In so far as Otomí speakers find themselves in a diglossic situation with respect to Spanish speakers, they experience ongoing pressures to shift their native language to the dominant language (Spanish). The pressures promote a) an increasing bilingualism in the Otomí speech community, and b) an increase in the degree of language mixing in the speech of speakers in closer contact with the Spanish-speaking society. This mixing behavior takes two shapes: on the one hand, speakers borrow lexical and grammatical elements; on the other, they code switch between languages. In previous sections I showed that the contribution of codeswitching to Otomí bilingual speech is minimal (1.7% of the total corpus) while the contribution of lexical borrowing is moderate and the contribution of grammatical borrowing very important. Furthermore, I attested an inverse proportion between borrowing and codeswitching, on the one hand, and between lexical borrowing and grammatical borrowing, on the other. In these terms, the extensive borrowing of grammatical elements in Otomí should be considered a language-specific answer to the pressures of contact. The specific situation of Otomí-Spanish contact is primarily determined by socio-communicative conditions and modeled by structural factors.
such as the typological distance between both languages. The socio-communicative conditions are embodied by the relative position of the dominant language (Spanish) with respect to the minority language (Otomí). As a result, the discursive and communicative strategies of the dominant language are imposed to the dominated language. In this context, Otomí is expected to borrow all those elements, both lexical and grammatical, which enable its speakers to reproduce the discursive and communicative structure of Spanish monolingual speakers. Since one of the major typological differences between Spanish and Otomí lies on the marking of syntactic and semantic relations (implicit or paratactic in Otomí; explicit or hypotactic in Spanish), it follows that Otomí will borrow a large number of Spanish connectives (prepositions and conjunctions), even if loan prepositions are not used as they are in Spanish. In fact, the data show that loan prepositions are used within the Otomí matrix, and their use cannot be explained in terms of Spanish morphosyntax.

Hekking (1995:150) identified twenty-four different prepositions in Querétaro Otomí. I have found the same number in the Otomí corpus of this investigation, except for the complex preposition mparte < Spanish en parte ‘in part’. A crucial difference exists, however, between the present analysis and the analysis conducted by Hekking (1995), which has to do with the coding of grammatical category and the assignment of function. In this study I identify prepositions on the basis of their classification in the source language, thus following formal criteria. Hekking (1995), on the contrary, assigned to the category ‘preposition’ the forms classified as prepositions in the source language as well as those which function like prepositions in Otomí, even if they belong to other categories (e.g. adverbs). For example, Hekking (1995) classifies the adverbs después ‘afterwards’ and antes ‘before’ as prepositions along with their assimilated equivalents después dige and antes dige.

Differently, I analyzed simple prepositions as distinct from complex prepositions and included adverbs of time and place in the broader category of adverbs, regardless of their function in the recipient language and their combination with other parts of speech (e.g. después de). Nevertheless, the number of basic prepositions identified in both studies matches perfectly. The eight most frequent Spanish prepositions in the corpus are, in this order, the following: con ‘with’; para ‘to, for’, de ‘of’, hasta ‘to, up to’; sin ‘without’; desde ‘from’; por ‘by’; and como ‘as, like’. These prepositions have different realizations according to their level of morpho-phonological adaptation to Otomí. Thus, desde ‘from’ has eight different

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14 In situations of widespread bilingualism the mechanism to bridge the gap between the communicative strategies of both languages is codeswitching. In the case of Otomí and Spanish, however, codeswitching is not viable because the Mexican society is largely monolingual.

15 Hekking’s method is justified inasmuch as there are many forms which function either as prepositions or conjunctions in Otomí, although their phonological shape brings them closer to prepositions.
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phonetic realizations, but *de* ‘of’ and *por* ‘for’ have only two. Excluding *hasta*, which occurs in Guaraní and Quichua, all the other prepositions do not occur in these languages. I illustrate the typical usage of loan prepositions from the most frequent to the least common. Consider the following examples of *con* ‘with’.

79)  
\[ \text{Ar}=jä'i \quad bi=dg=kär \quad k'eñä \quad \text{kon} \quad minge \]
\[ \text{DEF.S}=\text{man} \quad 3.\text{PST}=\text{attack}=\text{DEF.S} \quad \text{snake with} \quad \text{pickaxe} \]

‘The man attacked the snake with the pickaxe’

80)  
\[ \text{mande} \quad ngi=ňo-hu \quad ko \quad hui \quad ya=nxutsi \]
\[ \text{Yesterday} \quad 2.\text{IMPF}=\text{walk-INCL.PL} \quad \text{with} \quad \text{three} \quad \text{DEF.PL}=\text{girl} \]

‘Yesterday you walked with three girls’

The preposition *ko* (*kon*, *konge*) is used mostly to mark the instrumental (79) and comitative cases (80). In the first example the preposition replaces the native particle *ir nge*. In the second it co-occurs with the plural inclusive marker which marks also the comitative case in traditional Otomí. According to Hekking (1995: 157), the co-occurrence of loan prepositions and native particles or suffixes performing the same function is not uncommon. But *ko* indicates also the substance of something, as illustrated in (81), where the preposition merges with the nominal proclitic to form one phonological word.

81)  
\[ \text{Ya}=\text{tsita} \quad Nt'ökêwä \quad xi=\text{thoki} \quad \text{ko}=r \quad \text{yeso} \]
\[ \text{DEF.PL}=\text{saint} \quad \text{San Ildefonso} \quad \text{PRF.3}=\text{made} \quad \text{with}=\text{INDEF.S} \quad \text{gypsum} \]

‘The saints from San Ildefonso are made of gypsum’

The second most frequent preposition in the corpus is *para*. It generally occurs in the shortened form *pa*. It serves to mark the benefactive case, as shown in (82), where the preposition and its immediate constituent merge in one phonological word, following the rules of Otomí morphophonemics.

82)  
\[ \text{Nä}=r \quad \text{hyokunguu} \quad bi=\text{hyok-wu} \quad 'nar=nguu} \]
\[ \text{DEM}=\text{DEF.S} \quad \text{architect} \quad \text{PST.3}=\text{build-BEN} \quad \text{INDEF.S}=\text{house} \]
\[ \text{pa}=r \quad ts'í-yubi \]
\[ \text{For}=\text{DEF.S} \quad \text{governor} \]

‘The architect built a house for the governor’

Classical Otomí uses the verbal suffixes *-pi* or *-wi* to mark the benefactive case. In modern Otomí these suffixes normally co-occur with the Spanish. *Para* serves also to mark the purpose of the action in the main clause (83), which was unmarked in Classical Otomí.
In (83), however, *pa* functions rather as a connective linking the main clause to the subordinate clause. These cases have been classified as instances of Spanish prepositions used as conjuncts in the recipient language.

The usage of the preposition *de* ‘of’ covers a wide range of meanings including possession (84), source (85), partitive (86), material (87), and reference (88).

84) *Nixi Independensya nixi Reforma nixi Rebolusyon*  
neither Independence nor Reform nor Revolution  
*bi=nkambyo yá=kostumbre de ya=ñhöñhö*  
PST.3=change POSS.3=habit of DEF.PL=Otomí  
‘Neither Independence nor Reform or Revolution changed the habits of the Otomí’

85) *Ya dá=pengi de Jalpa*  
already PST.1=come.back from Jalpan  
‘I already came back from Jalpan’

86) *'na de ge'u i=ndude kaha*  
One of DEM.3 PRS.3=carry box  
‘One of them carries the box’

87) *hoku 'nar=krusi de 'nar=xithe*  
make INDEF.S=cross REF INDEF.S=wood  
‘He makes a cross of wood’

88) *di=ñä-jwi de byaje pa Maxei*  
PRS.1=speak-INCL.DU REF trip to Querétaro  
‘We talk about the trip to Querétaro’

While possession is expressed by juxtaposition (possessed-possessor) in classical Otomí, the other syntactic functions performed by *de* were traditionally unmarked. Therefore, the borrowing of this preposition results in the explicit marking of syntactic relations and a consequent structural similarity between Otomí and Spanish.

The preposition *hasta*, of low frequency in the corpus, serves to mark the allative case or the end of an action. In the second case it occurs as a clause connective. The following example illustrates the first function:
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89) \[ bi=dexu \quad asta \quad mñä \quad di\text{ge} \quad j=ar \quad zaa \]
PST.3=climb \quad till \quad on.the.top \quad REF \quad LOC=DEF.S \quad tree

‘He climbed to the top of the tree’

Prepositions \textit{sin} ‘without’ and \textit{desde} ‘from’ have specialized in the marking of privative and ablative cases, as illustrated below:

90) \[ ya=nxutsi \quad xi=mboni \quad \textit{sinke} \quad ar=nänä \]
DEF.PL=girl \quad PRF=leave \quad without \quad DEF.S=mother

‘The girls have gone without their mother’

91) \[ ndezu=r \quad jey-a'à \quad hi-mi \quad nänfo \quad ya=txi=jä'i \]
from-DEF.S \quad year-EMPH \quad NEG-IMPF \quad Spanish \quad DEF.PL=DEM=person

‘Since that year Indians do not speak Spanish’

\textit{Sinke} in (90) is a merger of the preposition \textit{sin} ‘without’ and the subordinator \textit{que} ‘that’. \textit{Sinke} (privative) is not a clause connective in (90) but remains a true preposition. In (91) \textit{desde} (temporal reference) accommodates phonologically and morphologically to Otomí by merging with the nominal proclitic in one phonological word. Traditionally, Otomí expresses the privative meaning through the verb \textit{otho} ‘there is no’, and marks temporal and spatial reference with the particle \textit{dege}. However, the Spanish prepositions in the above examples do not co-occur with their native counterparts.

The last two prepositions of the most frequent in the corpus are \textit{por} ‘for, by’ and \textit{como} ‘as’. Both loanwords have specialized in marking specific semantic relations: \textit{por} indicates cause or reason (92) whereas \textit{como} links two predicates in an equation (93).

92) \[ pwede \quad ke \quad da=du \quad 'nar=jä'i \quad \textit{por} \quad t'ete \]
possible \quad that \quad FUT.3=die \quad INDEF.S=person \quad by \quad sorcery

‘A person can die by sorcery’

93) \[ xi \quad mi=txinga \quad mi=mpefi \quad \textit{komongu} \quad 'nar=mëgi \]
much \quad PST.3=work.to.death \quad PST.3=work \quad like \quad INDEF.S=animal

‘They worked themselves to death working like an animal’

The preposition in (92) marks the arguments of the verb which indicates the origin or cause of dying. Traditionally, Otomí does not mark this relation. Equative constructions, on the contrary, are marked with particle \textit{ngu}, the same particle which occurs merged with the Spanish preposition in (93).
To conclude this section, let us briefly discuss the use of Spanish complex prepositions in Otomí. Example (94) illustrates the use of *embesde* from Spanish *en vez de* ‘instead of’. Notice the merger of the preposition and the enclitic *ar*.

94) **Embesde**$^{=}$ $k'ani$ $nu'bya$ $t'am'-bya$ $t'afi,$
Instead.of-DEF.SG vegetable now buy-ACT sweet
$ya=gayeta$ $'neh=ya$ $refresko$.
DEF.SG biscuit=DEF.S soft drink
‘Instead of vegetables they buy now sweets, biscuits and also soft drinks’

From the preceding examples it is clear that prepositions are deeply entrenched in Otomí grammar. In fact, Otomí is different from Quichua and Guaraní in the frequency and morphosyntactic integration of prepositions. The great majority of these prepositions specialize in the marking of grammatical relations. At the same time, Otomí, like Guaraní and Quichua, uses certain prepositions as clausal connectives. The usage of prepositions as connectives is based on their formal similarity to conjunctions in Spanish, but also on the linking role played by both function words at different levels of linguistic structure.

### 11.3.4 Discourse Markers

The contribution of Spanish discourse markers is different in each language. Otomí is the language with the largest number of Spanish discourse markers, followed by Quichua and Guaraní. Based on the principle of functional explanation, hypothesis H1.1 predicts that discourse markers will be borrowed more easily than non-discourse markers. The data do not confirm this prediction. Discourse markers make only a marginal contribution to linguistic borrowing in the three languages, including Otomí, where this class of items represents hardly 6.9% of the total borrowings. A few remarks are necessary, however.

On the one hand, discourse markers in any contact situation are always outnumbered by content words because the ultimate motivation for borrowing is the increase of the referential capacity of a language. Therefore, we cannot expect that discourse markers be more numerous than non discourse markers. In these terms, the prediction from hypothesis H1.1 must be reformulated in the sense that discourse markers will be the largest class of grammatical borrowings. Still, the data disconfirm this prediction as well: discourse markers are a marginal category within grammatical borrowing. On the other hand, the low frequency of discourse markers in borrowing is determined by the small number of their types, their use only in specific positions in discourse, and the lack of morphological means to mark discourse functions in Spanish, most of which are fulfilled by syntax and intonation. In these terms, it is expected that the languages in contact with Spanish borrow...
syntactic structures and intonation patterns from this language instead of morphological or lexical items performing discursive functions. An analysis of the Spanish influence at these levels has been carried out elsewhere (Gómez Rendón, 2007a). In the following I discuss the use of discourse markers borrowed from Spanish in the three languages.

The first thing to notice is that the number and types of discourse markers are different in each language. The Guaraní corpus contains nine types but the Quichua corpus only five. In contrast, Otomí has seventeen types of discourse markers, including simple and complex forms. Only two discourse markers are common to the three languages: *bueno* ‘well’ and its phonetic variants *[gweno]* or *[jweno]*; and *entonces* ‘then’, with its phonetic variants *[tonses]*, *[ntonse]* and *[ntonses]*. The analysis suggests that most of these discourse markers are used differently by speakers depending on their level of bilingualism.

The following examples illustrate the resumptive function of *bueno* in Quichua and Guaraní. Because the understanding of discourse markers requires contextualized speech, the following examples are framed in larger conversational exchanges. The English translation is not literal but conveys the overall meaning.

**Quichua**

95) A: Ña ima huatacunapitac iscuelapi caparcangui
   B: Ñucaca chai edad de ocho años gumi escuelapi capashcani, ajá
   A: Nachu huatatacuyaripangui
   B: Na huatatatcuyu yuyaripanica (.) *bueno*, cai Ucshaca Topomancaparca puntacuna.

   A: In what year did you go to the school?
   B: I went to school when I was eight years old, yes
   A: You don’t remember the year
   B. No, I don’t remember the year (.) **anyway**, they say Ucsha belonged to Topo, right, it did since a long time ago.

**Guaraní**

96) A: ndahasýi, umi he’iva Guaraní hasy ha cheveroguararo ojejav. Ndo hemoaranduinte la Guaranime, ndoestudiai la Guaraní, ha

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16 It is important not to confuse these discourse markers with the adjective *bueno* and the time adverb *entonces*. Because of the lack of a specialized class of discourse markers in Spanish, many of them belong to other lexical and grammatical classes: adjectives (e.g. *bueno*, *claro*), adverbs (*entonces*), demonstratives (e.g. *este*), nouns (e.g. *verdad*), and conjunctions (e.g. *pues*). The use of these forms as discourse markers is an extension of their original meanings. This criterion is important in the analysis of Spanish discourse markers.
oestudiáramo pya’e ohechakua’a ndahasýi ha pe Guaraní, ndahasýi
Guaraní, castellano ayse teve chugui

B: hasyet ev chu guí la castellano?
A: hasyet ev chu guí la castellano
B: hasyet ev chu guí la castellano, bueno

A: ‘It is not difficult, some people say that Guaraní is difficult, but
according to me they are wrong. They don’t even study Guaraní, they
don’t study Guaraní, because if they studied, they would see that it is
not difficult, Guaraní, Spanish is more difficult’
B: ‘More difficult than Spanish?’
A: ‘More difficult than Spanish’
B: ‘More difficult than Spanish, ok’

Bueno performs a number of pragmatic functions in Spanish. One of them is to refer
to previous moves made by the same or other speaker. This resumptive function is
one of the most frequent in Spanish and is present in the target languages. This
function also implies the positive or negative evaluation of the propositions of
previous moves. In (95) bueno signals the point at which speaker (B) resumes his
line of argumentation after he was interrupted two times by speaker (A), who was
looking for additional evidence in support of B’s argument. The argument is
concisely summarized in the last part of B’s move. Speaker B admits that he does
not remember the exact date. After a short pause, he insists that dates are
unimportant and back up his statement on reported information. To downplay his
failed supply of information, speaker B uses the Spanish discourse marker,
translated here as ‘anyway’. Although Quichua has the equivalent form shinallatac
‘however, despite’, the broad semantics of this elements may have encouraged
speakers to use the Spanish discourse marker for accuracy. In (96) bueno serves a
similar evaluation of previous statements. The example shows two adjacency pairs
containing contradictory opinions: speaker A presents a statement in the first move;
speaker B asks A to revise his statement because he thinks it is wrong; speaker A
formulates his statement in exactly the same terms; finally, speaker B repeats A’s
statement and closes his turn with bueno. The Spanish discourse marker signals the
willingness of B to accept A’s argument, even if he does not fully agree with him. In
this sense, bueno represents an agreement between A and B and the invitation for A
to resume his argument.

Another function of bueno is illustrated in the following examples from
Guaraní:

97) A: nde nemohu la kuarahy…pe tupaópe
    B: el ocho guare la rokaipaitê, ko kuarahyetépe romba’apo...
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A: *hēe* (...) *bueno* jahápy

A: ‘you burn in the sun [when working] at the church’
B: ‘yes, since eight o’clock we work in the sun…’
A: ‘yes (...) *ok*, let’s go’

98) A: *ko’agã o falta* Daríonte *ma oñe’ê avei, bueno, oima, mboguéntema pea*

A: ‘now, only Darío has not spoken yet, *well*, that’s it, just turn it off’

In both examples *bueno* anticipates the end of the conversation. In (97), after an additional piece of information provided by B in relation to the comment made by A in the preceding turn, A declares his intention to terminate the exchange and leave the place: the Spanish discourse marker serves to flag A’s intention. Similarly, the speaker in (98) rounds off the exchange with a comment and signals the end of the conversation with *bueno*. The co-occurrence of Guaraní *oima* ‘that’s it’ and the Spanish discourse marker reinforces the pragmatic meaning of the utterance.

Just like *bueno* marks the end point of a conversation or the speaker’s intention to terminate the exchange, it marks the start of a speaker’s turn. In example (99) from Quichua, speaker B marks the start of his turn and his willingness to answer A’s questions.


B: *Bueno ñuca shutimi capan Roberto, ñucami capani Chaupi Inti Caluquí llactamantac.*

A: ‘Good afternoon, could you please tell us first your name and from which community you come’
B: ‘*Okay*, my name is Roberto, I am from the community Chapui Inti Caluquí’

Given the various roles of this marker, it is not uncommon to find several instances of it in the same move. In the following Quichua example, *bueno* occurs two times in one turn.

100) A: *Shinashpaca quiquinpac yuyaillachu rircangui o jinctucunachu quiquinta cacharca?*

B: *Bueno chai tapuita tapushcamanta achcata agradeçini (.) bueno, mana ñuca yuyaimantaca rishcanichu*

A: ‘So, did you go by your one initiative or did people send you?’
B: ‘*Well*, thank you very much for the question (.) *well*, no, I did not go by my own initiative’
The first *bueno* in (100) marks the beginning of B’s turn and shows his willingness to answer A’s question. The question refers to a delicate issue concerning B’s leadership. The answer to the question is, therefore, extremely important for the course of the conversation. Speaker B is aware of it and hesitates for a moment because he knows his answer does not match A’s expectations. It is precisely at this moment of hesitation and after a short pause that B uses *bueno* for a second time.

The second *bueno* serves purely phatic purposes and helps B formulate his answer in the best terms possible for A to understand his position. A similar analysis is valid for the Otomi example in (101): in this case the speaker uses *weno* (a phonologically assimilated form) to gain time in processing his argument.

101)  
A: *Xu gi püdí ha gi ha ska ḟyode t’ot’uwar Ḟykwa ... Ḟykwa ya ḟete nwa t’ot’uwar t’etewar jar hini? Ah hâ, mängya já’i mi ḟu ya já’i ot’ar t’ete, pero hâdi komo kasi hinti di nügö. Wenu nu ya já’i di okö hmä embi Ḟyor ...*  
B: Have you heard what they do here...are there sorcerers here in the village? Oh yes, people say there are people who did sorcery, but since I hardly see them, *well*, I hear these people tell...

A similar function of *bueno* is illustrated in (102), where the Spanish discourse marker gives B time enough to process the intended meaning of the ambiguous question posed by A while keeping the floor.

102)  
A: *Quiquinpac causaica ima shinatac callarishcanca?*  
B: *Ñuca (.) bueno, ñuca causaína uchilla pacha cai comunidad Gradas Chicopi huacharishcani*  
A: How were the first years of your life? (lit. how did your life start)?
B. I (.) well, I was born in this community of Gradas Chico

The second discourse marker common to the three languages is *entonces* ‘then’, although this does not serve various purposes as *bueno*. The function of *entonces* in Spanish consists in marking narrative sequences and resuming a sequence of events after a digression. The examples show that *entonces* plays the same role in Quichua (103), Guaraní (104) and Otomí (105).

103)  
A: *chaicuna yalishcata yuyarini, ñuca yuyarishcatalla parlani, entonces, chai tiempoca fiestata yalic cashca nin*  
B: ‘I don’t remember the details well, I am just telling you from what I remember, *thus*, at that time it is said that there were many festivals’
A: roime once hermano, ha ore mboriahu ha ore tua ndaipu’akāi orerehe, entonces che aheja la che estudio ha aha amba’apo, aha amba’apo, la edad de 14 años

B: ‘we were eleven children, we were all poor, and our father could not care for us, then I left school, and I went to work when I was fourteen years old’

A: porque despues nā’ā mbi tho ya tsi boi komu mi hont’u mi usa’u pa ndi mpg ja yá ’bgei, este entonces ny’bya bi … pwes … bi dam’bya nuya txi māzo, ya fani, ya burru gem’bya bi mpg’bya’u.

A: ‘because later when they had killed the little oxen, as they used them only to work with, eh, then now…eh…they bought now mules, horses, donkeys and then worked with them’

In the Quichua example (103) entonces plays a resumptive function similar to the function of bueno in (105), i.e. it helps the speaker continue with his story. The same use is attested by the Otomí example (105). Differently, entonces marks a narrative sequence in the Guaraní example (104): it links the preceding clauses (the cause) to the following ones (the effect) and signals a cause-effect relation. Although both functions of entonces are attested in the three languages, the preference for one function is likely determined by the use of the marker in local Spanish.

Other Spanish discourse markers occur in only two languages. For example, claro ‘of course’ occurs both in Quichua and Guaraní, but not in Otomí. The markers este ‘this’ and pues ‘well’ occur in Guaraní and Otomí, but not in Quichua. It is evident that the occurrence of certain markers in one language is a result of their use in local Spanish, that is, the distribution is determined by the input. The following examples illustrate several instances of claro in Guaraní (106) and Quichua (107, 108).

106) A: La Guaraní ñande paraguayo la Guaraní la ñande jurüpe nunca ndofalaarai oímehape ani

B: claro, chengo la Guaraní la che jurüpe henyhēte voi

A: ‘The Guaraní language, for us Paraguayans, will never be absent from our mouths’

B: ‘Of course, our mouths will be full of Guaraní’

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17 The functional similarity of discourse markers and clause linkers brings the former closer to connectives.
A: Ñuca juisu apashcamandaca, ñucaca ña cuarenta y tres añosta charini, chaimandaca escuela tiyarcami shuclla, claro, tiyana chai escuelapica tucui gradota

A: As far as I remember, I am now forty-three years old, at that time there was only one school, of course, the school had all grades.

A: shinallata, yuyaicunapash osea, ashata shuc diferente can, tandanajuyucunapi ricipapash shuc can, osea, yachajuna importantiaccunapi ricipapash shuc can Nachu, o-sea, claro, runacunallata canchic, pero shinapash ashata diferenciami tiyan...

A: however, also ideas, I mean, some ideas are different, you see it during meetings, I mean, you see it in important things that should be known, I mean, yeah, we are all Indians, but there are lots of differences.

The main function of claro is to signal the speaker’s agreement with the content expressed by his interlocutor. Notice that claro as a discourse marker is different from the homonym adjective. This marker typically occurs at the beginning of a conversational turn (106), between clauses (107) or between connectives and clauses (108). The syntax of this discourse marker confirms its functional similarity to connectives, as typical of Spanish.

While este and pues occur both in Guaraní and Otomí, their frequency is visibly higher in Otomí thanks to the widespread occurrence of these discourse markers in Mexican Spanish. Consider the following examples:

A: Ha upeí ambo’e la centro-regionálpé, heta ambo’e ha siempres la...este... ndahejai la purahéi, siempres la che mbarakami che pope,

A: And then I work at Centro Regional, I worked there a lot and always the...este...I don’t quit singing, I am always with my guitar

A: Ar Xuwa bi...este ...bi hñuxú ‘nar he’mi pa bi mändawí ár mpädi Enrike

A: John wr...uu...wrote a letter in order to send it to his friend Henry

Este comes from a demonstrative form but has no semantic, pragmatic or discursive meaning of its own. The function of this marker is to help the speaker keep the floor when he cannot retrieve information easily and needs time to formulate his utterance. This use is clear in (110), where the speaker hesitates in the formulation of his utterance and uses the marker to fill the pause. For the same reason este is expected to occur in long pauses. The phatic function of this marker enables the speaker to use it anywhere in the utterance and along with other loan markers such as entonces, as shown in examples (111) from Otomí and (112) from Guaraní.
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111) A: pero himbi thogi ... himbi tho hñ̃t̃o mpa mi māŋgar mb̃baŋa nj̃a'byu pwes
g̃e bi ndaŋthī ya tsi boi, i entonses este ge'ña ... ge'ña mi t'embar hñēni
fỳebre-afətosə nj̃a'byu mi mā'ñu ya mb̃baŋa janye mb̃i ndaŋthī ya m̃eti bi
māndə nə'byə ra ...

A: But just eight days ago...the Mestizo said so, eh that oxen got sick and
then...eh...this sickness was called foot-and-mouth disease, so said the
Mestizos, therefore when the animals were sick, they ordered...

112) A: ha eremina cheve Julian este entonce nde ere la icuenta ha la oñēmbə'e
la Guaraní la escuela universidakuera harupi ajea?

A: and tell me Julian, este, then, tell me, in your opinion, it’s good that
Guaraní be taught in schools and universities, don’t you think so?

Pues plays an important role in Otomí pragmatics. This role is reflected not only in
the high frequency of this marker but also in the functions involved, which are the
same as in Spanish: emphasis (113), code switches (113), contrast (114) and
resumption.

113) A: pwes ya nbūya bi wadi di mpe ya tsi jā'i to ya tsi bojā bos yo por-mi-
parte di enqə

A: well, nowadays Indians work with tractors, well, I say as far as I am
concerned

114) A: temu gi mā-nge?

B: pwes nugg di mā-ngə gətko ar zg

A: What do you think?

B: Well, I think everything is okay.

The first pues in (113) is emphatic while the second signals the beginning of a code
switch. The same marker has two phonetic realizations: [pws] and [bos]. In all,
there are five different pronunciations of this marker in Otomí, each associated with
a different discursive function. It is clear that the frequency and the use of this
marker in Otomí are correlated with the high frequency and the varied use of it in
Mexican Spanish. The premise underlying this correlation is that grammatical
borrowing implies not only the integration of phonological forms but also the
copying of their functions, which is self evident in the case of discourse markers, the
borrowing of which is the calquing of discourse structures of the dominant language.

The frequency of Spanish discourse markers in the corpora does not confirm
hypothesis H1.1 in terms of frequency. Still, a different interpretation of this
hypothesis predicts that discourse markers are borrowed early on in the process
while their actual frequency eventually depends on two factors: the predominance of
content words over discourse elements; the small set of lexical discourse markers in Spanish, most of which belong to different parts of speech. It is remarkable that even though discourse markers are borrowed by the three languages, the frequency and type of borrowed forms are different in each language depending on their frequency and types in the local varieties of Spanish. How decisive the input of borrowing may be is illustrated by Mexican Spanish in contact with Otomí, where the usage of *pues* has been copied into this language almost with the same frequency and function as in local Spanish.

11.3.5 Other parts of speech

This section analyzes those parts of speech which make a marginal contribution to grammatical borrowing. I focus on four classes, namely: pronouns; numerals, non-manner adverbs and auxiliaries. Pronouns and auxiliaries are traditionally classified as part of grammar, while non-manner adverbs are usually considered part of the lexicon. I decided to include non-manner adverbs in this section because they belong to a closed class of elements. Non-manner adverbs include place adverbs, time adverbs and phasal adverbs. Non-manner adverbs, numerals and pronouns occur in the three languages, whereas auxiliaries are reported only for Otomí.

**Pronouns**

Pronoun borrowing appears in the literature on language contact only rarely. Pronouns are considered the prototype of hard-to-borrow linguistic units and thus placed last on borrowing scales (cf. section 11.2). Nevertheless, pronoun borrowing is far from extraordinary in situations of long-term intense language contact. The corpora of this investigation contain several cases of loan pronouns, including personal, relative, interrogative and indefinite pronouns. The label ‘pronouns’ as used here includes, therefore, all those pro-forms which stand for other linguistic units.

Compared to other lexical or grammatical classes, the contribution of loan pronouns is minimal. Pronouns are the least frequent of all grammatical categories in the three languages: 0.5% in Quichua, 0.8% in Guaraní and 1.1% in Otomí. The differences are not significant to indicate the possible influence of typology on pronoun borrowing. Still, the use of pronoun types in each language sheds light on several typological issues.
Spanish pronouns in Quichua

The only type of pronoun borrowed from Spanish in the Quichua involves the complex pronoun \textit{lo-que}. The use of this pronoun has induced the gradual loss of nominalization in Quichua (cf. section 6.3). The same effects on nominalization have been confirmed for Spanish subordinators (Gómez Rendón 2007a). Although Quichua has not borrowed the relative pronoun \textit{que}, it uses a phrasal structure which consists of the neuter article \textit{lo} and the subordinator \textit{que}. The use of this complex borrowing is not uncommon in Quichua, especially in Imbabura and in coordinate bilinguals. The following example shows how this pronoun changes the Quichua morphosyntactic matrix on the model of Spanish.

\begin{verbatim}
115) pai-cuna-llea chaya-shpa pai-cuna apa-shca-n
    3-PL-LIM arrive-GER 3-PL take-PRF-3
lo-que muna-shca-n
    that-which want-PRF-3

   ‘Upon their arrival they took what they wanted’
\end{verbatim}

Compare the above example with its nominalized equivalent in (116) below. In this case the subordinate clause of (115) is embedded as a noun phrase which is the object of the predicate \textit{apashcan} ‘they wanted’.

\begin{verbatim}
116) pai-kuna-llea chaya-shpa pai-kuna muna-shka-ta apa-shka-n
    3-PL-LIM arrive-GER 3-PL want-NMLZR-ACC take-PRF-3

   ‘Upon their arrival, they took what they wanted’
\end{verbatim}

A morphosyntactic comparison of both examples gives the following differences:

\begin{verbatim}
\begin{tabular}{|l|l|}
\hline
Subordination (345) & Nominalization (346) \\
\hline
1. Predicate \textit{munashcata} subordinated in main clause & Predicate \textit{munashcata} embedded in main clause \\
2. Finite verb form in subordinate predicate position & Non-finite verb from in embedded predicate position \\
3. No case marking of the subordinated predicate & Case marking (accusative -\textit{ta}) of the embedded predicate \\
4. SVO & SOV \\
\hline
\end{tabular}
\end{verbatim}

18 A pronominal loan blend is also reported. It involves interrogative pronoun \textit{imauras} ‘when, at what time’, which consists of the loan noun \textit{ura(s)} ‘hour(s)’ and the interrogative marker \textit{ima} ‘what’. The loan blend is used as a relative pronoun in indirect questions as the following:

\begin{verbatim}
ñakutin arma-ngapa-pash pai-kuna-ka yacha-n imauras-mi yaku-ka
  then bathe-PURP-ADIT 3-PL-TOP know-3 when-VAL water-TOP
chiri chiri ka-shka-ta-pash imauras-mi yaku-ka kunuc-lle ka-n
  cold cold be-PTCP-ACC-ADIT when-VAL water-TOP warm-LIM be-3

   ‘If they have a shower, they know when the water is very cold and when it is warm’
\end{verbatim}

The use of \textit{imauras} is widespread across dialects, lending to assume an early introduction.
The most important of these effects on the morphosyntax of Quichua are the loss of case marking and the change in word order, i.e. the same effects produced by the borrowing of Spanish subordinators (cf. supra). As an extreme case of Spanish pronoun borrowing in Quichua we can quote the replacement of the entire paradigm of personal pronouns in the Media Lengua spoken in Imbabura (Gomez Rendón 2005). In this language a similar complex pronominal is used for relativization and question formation. The fact that other dialects report cases of pronoun borrowing suggests the influence of structural factors.

Spanish pronouns in Guaraní

Instead of relative pronouns, Guaraní has borrowed the pronominals alguno ‘somebody’, otro ‘other’, and the loan blend nipetei ‘nobody’. The same forms can be used as referential phrase modifiers. That one form (i.e. alguno) is not an adjective in the source language but a indefinite pronoun is a convincing piece of evidence that the adjectival use of alguno, otro and petetí is only an extension of their pronominal use. Noun heads modified by these forms can be Guaraní native lexemes or Spanish loan nouns. In the latter case the co-occurrence of the adjective and the noun, both from Spanish, is not an instance of codeswitching because both forms do not agree with each other in gender and number. The pronominal and adjectival use of the aforementioned forms is illustrated in these examples.

117) alguno o-maneja-ve ko situación,
some 3-control-more DEM situation
‘Some controlled this situation better’

118) o-tí Ko alguno líder o-gusta-háicha
3-be some leader 3-like-so
‘There were some leaders that liked it that way’

119) che a-hecha-háicha pe Chaco-pe o-tí pe jopara castellano
1S 1S-see-as DEM Chaco-LOC 3-be jopara Spanish
ha Guaraní oñondive heta mba’e castellano-pe,
and Guaraní with.each.other many things Spanish-LOC
pete i o-jeipuru castellano-guí ha otro o-jeipuru Guaraníme
one 3-use Spanish-ABL and other 3-use Guaraní-LOC
‘From what I saw in the Chaco there is mixed Spanish, and Guaraní with many things from Spanish and some speak Spanish while others speak Guaraní’

120) Piribebyí o-je-aparta-ité-voi ha o-moí otro téra
Piribebyí 3-REFL-apart-very-AFF and 3-put other name
‘Piribebyí separated and adopted other name’
121) *nipeteĩ na-i-ñapyszê-i ore rendá-pe,*
nobody NEG-3-appear-NEG 2PL.POSS house-LOC
‘Nobody showed up by our house’

122) *che nipeteĩ parte nd-a-juhú-i i-vai-ha*
1S no part NEG-1S-find-NEG 3.be-bad-NMLZ
‘I found that no part was bad’

All these forms are used both as pronouns and adjectives. However, *alguno* is used only for people, while *otro* and *nipeteĩ* are used for people and things indistinctively. In the above examples none of these forms is marked for number, although the can refer equally to singular or plural entities. Because sibilants in word-final position are usually dropped on Spanish loanwords in Guaraní, it is not unlikely that *alguno* and *otro* derive from the plural forms *algunos* and *otros*. Considering that these pronominals coexist with native forms, they are largely used with contrastive purposes. In (119), compare the consecutive use of the Guaraní pronoun *peteĩ* in the first sentence and Spanish *otro* in the second. The use of native and loan forms contrastively for rhetoric purposes is known also in Quichua (Gómez Rendón 2007a).

Spanish pronominals in Guaraní are much more frequent than the Spanish relative pronoun in Quichua. Despite the frequency of loan pronouns, no syntactic changes are reported in Guaraní: loan pronouns simply coexist with native forms; they do not make a novel class of elements nor create a new grammatical category.

*Spanish pronouns in Otomí*

Otomí is the language with the largest number of pronoun types and the most extensive usage of these grammatical elements. Spanish pronouns in Otomí include the following:

- Relative pronoun *ke*
- Complex relative pronoun *lo-que*;
- Relative pronouns *donde* ‘where’ and *kwanto* ‘how much’;
- Indefinite pronouns: *algo* ‘something’; *ni’na* ‘none’; *kadu’na* ‘each’; *kwalkyera* ‘anyone’, *kadya kyen* ‘everyone’; *nada* ‘nothing’; *ningunä* ‘nobody’; *todo* ‘all’;
- Interrogative pronouns: *porke* ‘why’, *pake* ‘what for’, *komo* ‘how’, *ketanto* ‘how much’;
- Emphatic pronoun *mismo* ‘self’.

Of this gamut of pronominal forms, the relative pronoun *ke* ‘that’ is the most interesting for a cross-linguistic study because it occurs also in Quichua and
involves the replacement nominalized constructions with subordinate clauses. In Otomí, the relative clause is juxtaposed to the main clause without any type of connection other than agreement markers in both clauses. Known as the gap strategy (Comrie: 1989: 147f), this mechanism continues to be used for clause relativization in Otomí (Hekking 1995: 176). Nevertheless, other, contact-induced strategies for relativization coexist in contemporary Otomí: a) the use of deictic markers in the relative clause to refer to the antecedent in the main clause; b) the use of the Otomí interrogative pronoun to 'who'; and c) the use of the Spanish relative pronoun ke. The following examples illustrate the last mechanism.

123) \texttt{När=tsudi tsa ya=mansana ya ke ya tō-gi de ar=boy}  
DEF.S=pig eat DEF.PL=apple DEF.PL PRO.REL DEF.PL fall-EMPH of DEF.S=tree  
'The pigs eat the apples that fall from the trees'

124) \texttt{nuya dänxu ke bi=ňohni}  
DEM old.woman PRO.RELPRS=cross.oneself  
tuhu a xadi  
sing and pray  
'The women who cross themselves sign and pray...'

In Otomí virtually any element in the clause can be relativized: the subject, the direct object, the indirect object, the accompaniment, the instrument and the locative. To relativize the accompaniment and the instrument, modern Otomí makes use of Spanish ke and preposition con ‘with’, as shown below. Notice the clusivity marker on the verb of the relative clause; this marker signals the accompaniment in traditional Otomí.

125) \texttt{nu m-pädi-gö kon ke ndi=ńoje}  
DEM. POSS.1-friend-EMPH.1 with PRO.REL IMPF.1=walk-EXCL.PL  
\texttt{Otomí mi=ńā=r}  
Otomí IMPF.3=speak=DEF.S  
'Otomí ‘The friends with whom I walked used to speak Otomí’

Consider now the complex relative pronoun \textit{lo-ke}. While this form was reported also for Quichua, its frequency in Otomí is much lower. The following example is taken from the Otomí corpus.

\footnote{For an analysis of other pronouns, see Hekking (1995: 182-185).}
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If we compare the use of the complex relative in Quichua and Otomí, it becomes evident that the impact on the syntax of Otomí is minimal as compared to the impact in Quichua: in the case of Otomí, word order and case marking are largely preserved. But what about the impact of the relative *ke*? According to Hekking (1995: 181) the integration of *ke* does not counter Otomí syntactic rules. This author states that the relative pronoun can easily accommodate to Otomí syntax because the language has a syntactic position for it, which is occupied by the proclitics of deictic reference *nāˈā* or *nuˈu*. Indeed, the pronoun may co-occur with these proclitics in relative clauses, a illustrated in the following example:

127) *ja ‘bʉg=ar sei ke nāˈā ngi=ödi*

   be be:LOC=DEF.S pulque that that IMPF.2=ask

   ‘Here is the pulque you asked for’

   (Hekking 1995: 179)

Although the co-occurrence of the loan pronoun and the deictic proclitics does not necessarily imply that the former occupies the same syntactic slot as the latter, Hekking’s explanation is still convincing. For a more accurate assessment of the effects of pronoun borrowing in Otomí, however, it is necessary to conduct an extensive survey about the frequency of each relativization mechanism across different groups of ages and levels of bilingualism. This task goes beyond the scope of this book but should be considered for future research.

Comparatively, the occurrence of *lo-ke* in Quichua and Otomí and the absence of relative *ke* in Quichua suggests the older age of the complex pronoun. From a diachronic perspective the borrowing of *lo-ke* is the first step in the shift from nominalization to subordination. Thus, the borrowing of *ke* by Quichua is expected in later stages of contact, although it may well occur in highly hispanicized idiolects.

Pronouns are a marginal category in borrowing, but the sole fact of their occurrence leads to consider them vectors of contact-induced language changes. These change are all the more disruptive if the syntactic order of the recipient language is fixed and involves constructions like nominalization radically different from those of the source language.

**Numerals**

Spanish numerals are ubiquitous in Amerindian languages. The languages of this investigation are no exception. In terms of frequency, Otomí uses more Spanish
numerals than Quichua and Guaraní, although the differences are not significant. The following examples contain loan numerals in Quichua (128), Guaraní (129) and Otomí (130).

128) iscuila-manda-ca llucshi-hua-rka ňa tres aña-mi
     school-ABL-TOP leave-1S-PST already thirteen year-FOC
     llucshi-rc-a-ni, kai kuartu gradu-manda ňaka-ka
     leave-PST-1 DEM fourth grade-ABL 1S-TOP

     ‘I quit school when I was thirteen, I went to school since fourth grade’

129) che a-reko once familia,
     1S 1-have eleven family
     ocho kuimba‘e ha tres kuña
     eight man and three woman

     ‘I have eleven children, eight boys and three girls’

130) ar=primero ar=renero ge nu ya=dängo ‘na’yo nigya
     DEF.S=first DEF.S=January N.PRED DEM DEF.PL=feast new year

     ‘The festival of New Year is on the first of January’

In the corpora the majority of loan numerals refer to times and dates (128, 130) and fewer to people (359). In the first case it is usual to find numerals modifying loanwords referring to periods of time such as aňo ‘year’, mes ‘month’ or día ‘day’. Spanish numerals show no combinatory restrictions: they modify loanwords and native items alike. Notice tres ‘thirteen’ modifying a loan noun in (128) and ocho ‘eight’ modifying a Guaraní lexeme in (129). Ordinal numerals in the corpora are few. Ordinals kuartu in (128) and primero in (130) refer to specific collocations expressing concepts of the Spanish-speaking society. While the occurrence of these numeral in specific collocations suggest their probable status of code switches, their phonological and morphosyntactic integration to their respective languages makes them clear instances of borrowings. Spanish numerals in the corpora are either modifiers or heads of referential phrases. However, considering the closedness of the class, they are considered function words rather than lexical borrowings (cf. section 11.2).

Spanish numerals have not influenced the morphosyntax of the recipient languages, but numeral borrowing has ultimately restructured the native numerical systems. Each language has its own original numerical system: decimal in Quichua; vigesimal in Otomí; and pentavalent in Guaraní.

Quichua numerals are increasingly less frequent in colloquial language: some speakers may count up to one hundred in Quichua, but most actually use native numbers only up to ten. Moreover, Spanish numerals coexist from five to ten with
Quichua numerals. Also, Quichua ordinal numbers, obtained by adding the suffix -niki to the cardinals, have been almost completely replaced by Spanish ordinals in modern Quichua. The situation of Guaraní numerals is not very different. In hispanicized urban sociolects, the vernacular number system has been almost completely replaced by Spanish. In rural sociolects, less immersed in a market economy, the native number system is still used extensively, although it coexists with Spanish for higher numbers. Efforts have been made since the last century to expand the Guaraní system on the basis of neologisms, but their actual use by the speech community is reduced to writing. This is valid for cardinals and ordinals. Finally, the situation of Otomí makes no difference from the previous ones: Spanish numbers are present in all dialects. They have replaced most vernacular numbers. In other words, the three languages show the relexification of their numeral systems on the basis of Spanish.

**Auxiliaries**

Spanish auxiliaries are borrowed only in Otomí in very small numbers. They are a unique borrowing phenomenon and deserve some discussion. Recall that Spanish auxiliaries in Otomí were not analyzed as loan verbs and therefore not included in lexical borrowing. The main reason is that loan auxiliaries do not take verbal proclitics. Instead, they occur always in the form of the third-person singular present. The semantics of loan auxiliaries do not necessarily match their meanings in Spanish, although most retain the essential semantics of the Spanish verb form. The case of *nesesita* is illustrative in this respect.

131)  

\begin{align*}
  \text{*nesesita} & \quad \text{da... nuya} \quad já'ui \quad \text{da=hñunta} \\
  \text{need} & \quad \text{FUT.3} \quad \text{DEM.PL} \quad \text{person} \quad \text{FUT.3=build} \\
  \text{pa} & \quad \text{da=hoku} \quad 'nar=mehg' \\
  \text{for} & \quad \text{FUT.3=build} \quad \text{INDEF.S=well} \\
\end{align*}

'n These people need to get together in order to build a well'

The example contains the loan verbs *hñunta* ‘get together’ and *nesesita* ‘need.PRS.3’, but only the first one is a loan verb in narrow terms. *Nesesita* is a Spanish verb form borrowed as an auxiliary. Spanish auxiliaries in Otomí have the status of modal particles which have grammaticalized from a Spanish verb form. *Nesesita* is a modal auxiliary of necessity. It comes from the periphrastic construction *necesitar* + V ‘need to + V’. Spanish auxiliaries in Otomí occur as bare forms, i.e. not preceded by proclitics of person and tense. Other Spanish modals used in periphrastic constructions are *pwede* ‘can’, *tyene-ke* ‘have to’, *pares-ke* ‘it seems that’, *kreo-ke* ‘I think that’ and *as-kwenta* ‘suppose that’. With the exception of *nesesita* and *pwede* – the most frequent of all auxiliaries in the corpus – the other
are complex forms resulting from the fusion of two immediate constituents, one of
them a finite verb. Most auxiliaries replace equivalent Otomí forms: e.g. \textit{necesita}
replaces \textit{mahyoni} ‘be necessary’, and \textit{pwede} replaces ‘\textit{ar tså} ‘be possible’. The
Otomí forms are part of serial verb constructions. Here are more examples of
Spanish auxiliaries in Otomí.

132) \textit{ya mi=pwede nda=maqs'i j=ar batha}
\textit{already IMPF.3=be.able FUT.3=help LOC=DEF.S field ‘They could already help in the field’}

133) \textit{pero tyene-ke nda=mpefi}
\textit{but have-to FUT.3=work ‘But they had to work’}

134) \textit{kreo-ke bì ordenà pa nda eh-ya sundado}
\textit{think-that PST.3 order for FUT.3 come-DEF.PL soldier}
\textit{nda=xih=ya já'i nda=ziq=ya nda=tho}
\textit{FUT.3=say=DEF-PL people FUT.3=take=DEF.PL FUT.3=kill}
\textit{meti pa ma}
\textit{animal for go ‘I think they ordered soldiers to tell people to take the animals to kill them’}

135) \textit{pares-ke 'bu 'ra ja ya=txi=thuxi}
\textit{seems-that be some be DEF.PL=DIM=flute ‘It seems that there are some little flutes’}

Because complex auxiliary forms carry Spanish verbal morphology (e.g. /-o/
1S.PRS, in \textit{kreg-ke}) and are followed by the subordinator \textit{ke}, they could be
interpreted as code switches. The following arguments can be provided against this
interpretation. First, complex auxiliary forms correspond to fixed expressions in
colloquial Spanish which have been integrated as phrasal borrowings. Second,
complex auxiliary forms have their own intonation contours, i.e. they are
pronounced as one phonological word and experience phonetic assimilation
including vowel elision, e.g. \textit{kreo-ke} $\rightarrow$ \textit{kre-ke}, and \textit{pares-ke} $\rightarrow$ \textit{pares-ke}. Third,
complex auxiliary forms cannot be modified by manner adverbs or adverbial
periphrases. These facts suggest that complex auxiliary forms result from frozen
borrowing and specialize in the expression of epistemic modality. This is also valid
for auxiliaries \textit{es-ke} and \textit{as-kwenta} in the following examples.

136) \textit{Dar=tsö gi=pede 'naxtui dige ar=mpöti}
\textit{FUT.3=possibility PRS.2=tell something as.for DEF.S=change}
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137) hiní bi=kanta pa 'nar=hñäñhä  purity=r
nothing  PRS.3=sing  for  INDEF.S=Otomí  pure=DEF.S
ya=thuhu mi=as-kwenta ra ya=kasteyano
DEF.PL=song IMPF.3=assume-that some  DEF.PL=Spanish
'The did not sing anything in Otomí, only some songs like as if in Spanish.'

These complex forms are different from the other auxiliaries in that they play the role of linking verbs: es-ke links two consecutive clauses in (136); as-kwenta links the main clause to a subordinate clause in (137).

Loan auxiliaries make a new word class in Otomí. They are the result of a process of grammaticalization which makes them different from common loan verbs. Most members of this new class specialize in the expression of epistemic modality, while a few others play the role of linking verbs. It is not unlikely that loan auxiliary be further grammaticalized in the future as markers of evidentiality or mirativity. The question remains however why Guaraní and Quichua have not borrowed auxiliary verbs from Spanish. A tentative answer lies on the type of verbal morphology of each language: Guaraní and Quichua have a set of marker of tense, aspect and mood, whereas none of the Otomí proclitics expresses mood.

Non-manner Adverbs

The contribution of manner adverbs is small in comparison to other lexical classes. In addition to manner adverbs, other subclasses of adverbs include time, place and phasal adverbs. I decided to label these adverbs ‘non-manner adverbs’ in order to distinguish them from the lexical class of manner adverbs. Non-manner adverbs are different from manner adverbs in one crucial way: they form a closed class composed of a limited number of elements. To this extent loan non-manner adverbs belong to grammatical borrowing, and I have consider them as grammatical elements even though non-manner adverbs can generally modified like other lexical elements. The great majority of non-manner adverbs in the corpora are time adverbs. In fact, time adverbs are the most frequent of all adverbial types. The number of loan non-manner adverbs is closely similar to the number of manner adverbs in Quichua and Guaraní, but not in Otomí, where non-manner adverbs are eight times more frequent than manner adverbs. The variety of time adverbs in Otomí is also greater: there are eight different types of time adverbs in Quichua, nine in Guaraní and sixteen in Otomí. The most frequent of time adverbs are the semantic pair *siempre*
'always’ and *nunca* ‘never’. Here are some examples in Quichua (138, 139) and Guaraní (140, 141).

138) *chayka chay ladu-kuna-man-lla-mi*  
thus that side-PL-ALL-LIM-VAL  
*ašhtaka siympre chiri-chiri ka-na-ta yacha-n*  
much always cold-cold be-INF-ACC know-3  
‘So it is always very cold around those places’

139) *cay Ilumán, Quinchuquí, Peguche chay-cuna-ta,*  
DEM.PROX Ilumán Quinchuquí Peguche DEM.DIST-PL-ACC  
*nunca na tarpu-na-chan punta tiempo-ca*  
never NEG sow-HAB.PST-NEG before time-TOP  
‘Ilumán, Quinchuquí, Peguche, they never sowed in these places in the past’

140) *año ochentaidos rupi ro-temina la colegio*  
year eighty.two around 1PL.excl.-finish DET high-school  
*ha ro-continua la amista ko’agã peve,*  
and 1PL.continue DET friendship now till  
*siempre ro-jotopa oñondive,*  
always 1PL.excl.-meet with.each.other  
‘In eighty-two we finished high school and continued to be friends till now, we always meet with each other’

141) *[habia sido] i-japyte-pe-kuéra paraguayo o-estudia-va*  
*[it was that] 3-among-LOC-PL Paraguayan 3-study-NMLZ.PRS  
*ha nunca nde-ir-i-va ha’ekuera paraguayo-ha*  
and never NEG-say-NEG-NMLZ.PRS 3PL Paraguayan-NMLZ  
‘A Paraguayan was among them and he never told them he was a Paraguayan’

From the examples it is clear Spanish time adverbs are easily adapted to Quichua and Guaraní phonology and syntax. *Siempre* is assimilated as *siympre* (vowel rising) in Quichua, but the same adverb occurs unassimilated in Guaraní. Time adverbs can also modify clauses and sentences. This is the case of *siympre* in (139) and *nunca* in (141), the scope of which is broader than the predicate phrase. Notice that the native adverbial forms equivalent to *siempre* and *nunca* are preserved in many idiolects: Quichua uses the periphrastic forms *ima pachapi* ‘at all times’ and *mana ima pachapi* ‘not at all times’; Guaraní uses the lexical forms *meme* ‘always’ and *máramo* ‘nunca’. Given the availability of these forms, no gap filling can be invoked. Instead, it seems that the discourse of the dominant language and the high frequency of these time adverbs in Spanish influence decisively their borrowing.
Further time adverbs in the corpora are *ahora* ‘now’, *antes* ‘before’ and *luego* ‘afterwards’. Example (142) illustrates the use of the time adverb *antes* in Quichua.

142) \(\begin{align*}
\text{ñucanchic} & \quad \text{tarpu-shca-nchic} \\
\text{sólo} & \quad \text{hortaliza-ta}, \quad \text{cai}
\end{align*}\)

\(\begin{align*}
1\text{PL} & \quad \text{cultivate-PRF-1PL} \\
\text{only} & \quad \text{vegetable-ACC} \quad \text{DEM.PROX}
\end{align*}\)

\(\begin{align*}
ucu-pi & \quad \text{antes-carin} \\
cabildu & \quad \text{ucu-manta} \quad \text{caramu-shca}
\end{align*}\)

inside-LOC before-CONT council inside-ABL give.away-PRF

‘Here we cultivated only vegetables, in the past the council gave us vegetables’

The next example contains the assimilated form of the time adverb *ahora* in Quichua. Of the three meanings of this adverb in Spanish (i.e. ‘now’, ‘today’ and ‘nowadays’), only one (‘today’) is preserved in the loanword; the others are expressed by Quichua *kunan*.

143) \(\begin{align*}
u\text{aura-pi-mari} & \quad \text{nachu} \\
fishta\text{-kuna-pi-ka} & \quad \text{nachu}
\end{align*}\)

today-LOC-AFF NEG.INT festival-PL-LOC-TOP NEG.INT

\(\begin{align*}
\text{chay} & \quad \text{kuitis-shina-lla} \\
rucu-ta & \quad \text{ninanta} \quad \text{reventa-chi-n}
\end{align*}\)

that rocket-like-LIM old-ACC much explode-CAUS-3

‘Nowadays, they have lots of those old fireworks in the festivals’

The time adverbs *aura* and *antes* may co-occur with Quichua markers, including the locative -pi and the affirmatives -mari and -carin (143).

Of special interest for the analysis is the case of the time adverb *luego*. The frequency of this adverb in Otomí is the highest of the three languages and corresponds to the same frequency of the adverb in Mexican Spanish as compared to Ecuadorian Spanish and Paraguayan Spanish. Consider the following example:

144) \(\begin{align*}
m\text{-tada-ga} & \quad \text{penä} \\
\text{bi=xokar} & \quad \text{goxthi},
\end{align*}\)

POSS.1-father-EMPH.1 hardly PST.3=open-DEF-S door

\(\begin{align*}
l\text{wego} & \quad \text{bi=umb=ar} \\
\text{ndutse}
\end{align*}\)

afterwards PST.3=give-DEF.S shiver

‘Immediately after my father opened the door, he caught a shiver’

The cases of the time adverb *luego* and the discourse marker *pues* (cf. supra) are examples of how the frequency of an item in the input models the borrowing outcome.

Phasal adverbs make another subclass of non-manner adverbs. Phasal adverbs indicate aspect and their scope of modification is the predicate phrase. Two phasal adverbs occur in the corpora: *ya* ‘already’ and *todavía* ‘still’. The first form indicates an accomplished state of affairs, as shown in the following Guaraní example:

145) \(\begin{align*}
kova & \quad \text{ko} \quad \text{masâña} \quad \text{ya} \\
\text{hi'ayupa-mâ}
\end{align*}\)

PRO DEM apple already 3.ripe-completely-PRF

‘This apple is already completely ripe’
The phasal verb in (145) co-occurs with the perfective marker mã, which results in a double-marked construction. Actually, Spanish phasal adverbs do not occur by themselves in Guaraní. The phasal adverb todavía ‘still’ is especially frequent in Otomí. Example (146) shows two instances of this adverb, assimilated as tobe in Otomí.

146) Hin-di  pã-ka’a  in-xka  q-ka’a
    NEG-1.PRS  know-EMPH.1-EMPH.3  NEG-1.PRF  hear-EMPH.1-EMPH.3
    nuga  tobe  ndi=bâtsiga  tobe
    1S.PRO  still  IMPF.1=child-EMPH.1  still
    di=muk’a’a  el  año  cincuenta-y-seis
    PRS.1=live-EMPH.1-EMPH.3  DET  year  fifty-six
‘I don’t know I haven’t heard, I was still a child, I was born in fifty-six’

Spanish place adverbs in the corpora are only few, including cerca ‘near’, adelante ‘ahead’, atrás ‘behind’ and the complex form en frente ‘in front’. The following example shows the place adverb cerca ‘near’ as occurs in Otomí.

147) Nu=r  m’ot’si  ’bui  serka  dige  nu=r
    DEM=DEF.S  bed  be  close  as.for  DEM=DEF.S
    bentana  ’ne=r  goxthi
    window  also-DEF.S  door
‘The bed is close to the window and the door’

Spanish adverbs in the corpora include several subclasses. A sizeable number of non-manner adverbs occur adapted phonologically and morphologically to the recipient languages suggest the productivity of this class, particularly in Otomí, and especially time adverbs. The distribution of non-manner adverbs in the corpora is largely influenced by their frequency in Spanish, where they are used also as discourse markers (cf. supra). Typological factors seem to play no role in this case. Nonlinguistic factors such as changes in the social organization of the speech community definitely induce the borrowing of time adverbs, but this borrowing induces, in turn, changes in the organization of discourse.

11.4. Dialectal variation in the distribution of grammatical borrowings

Section 10.6 showed how the distribution of lexical borrowings is influenced by dialectal variation. The frequency and usage of lexical borrowings corpus showed that Quichua dialects diverge from each other more than Otomí dialects while the differences between Guaraní sociolects are base on distinct levels of bilingualism. This section explores differences in the distribution of grammatical borrowings as
determined by dialectal variation. Table 11.5 contains percentages for grammatical category and dialect.

**Table 11.5 Percentage of grammatical borrowings per categories**

<table>
<thead>
<tr>
<th>Category</th>
<th>Quichua (EQ)</th>
<th>Guarani (PG)</th>
<th>Otomi (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imbabura</td>
<td>Bolivar</td>
<td>Urban</td>
</tr>
<tr>
<td>Articles</td>
<td>22.5%</td>
<td>11.2%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Coordinators</td>
<td>8.5%</td>
<td>11.2%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Adpositions</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Subordinators</td>
<td>1.3%</td>
<td>2.0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Disc. Markers</td>
<td>0.3%</td>
<td>5.4%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Adverbs (other)</td>
<td>2.9%</td>
<td>2.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Numerals</td>
<td>1.2%</td>
<td>0.6%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Auxiliaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pronouns</td>
<td>0.1%</td>
<td>0.4%</td>
<td>0.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14.8%</td>
<td>27.6%</td>
<td>37.3%</td>
</tr>
</tbody>
</table>

The data show differences in the distribution of grammatical borrowings only in the dialects of Quichua and Guarani. Otomi dialects show similar percentages. In the case of Quichua, the percentage of grammatical borrowings is twice higher in Bolivar. But this difference cannot be explained on the basis of dialectal divergence because both dialects are typologically similar. Neither can the differences be explained by the sociolinguistic factor of bilingualism, because the larger number of grammatical borrowings is present in Bolivar, where bilingualism levels are generally lower. My preliminary conclusion is that neither typology nor bilingualism play a direct role in Spanish grammatical borrowing in Quichua. Nevertheless, it is not unlikely the stability of the bilingual situation in each speech community could account for the distribution of grammatical borrowings in Table 11.5. The speech community of Bolivar is known to have a more extensive degree of Hispanicization in contrast to the speech community of Imbabura, where an increasing bilingualism is accompanied by the maintenance of the native language. I consider that the shift-maintenance relation marks a fundamental difference in the linguistic behavior of both communities. In this perspective, Bolivar Quichua speakers are more innovative than Imbabura Quichua speakers, and this innovative character leads them to adopt more grammatical elements from the language to which they are shifting. In turn, Imbabura Quichua speakers tend to preserve the grammatical structure of their native language even though they borrow large numbers of lexical

\[20\] Notice in addition that most of the Bolivar Quichua speakers are compound bilinguals, and it was noticed that compound bilinguals were characterized as ‘typical borrowers’. Accordingly, it is evident that Bolivar speakers show themselves the most innovative in grammatical borrowing. The relation between bilingualism and grammatical borrowing is explored in the next section.
elements. The correlation between shift and grammatical borrowing is assumed for sociolects of the same speech community depending on their levels of bilingualism, and the degrees of maintenance or shift.\textsuperscript{21}

On the basis of Thomason’s scale, borrowing can be characterized as a three-stage process: the first stage involves nouns and discourse markers; the second stage, nouns, verbs and a large number of grammatical elements; finally, the third stage involves the preferential borrowing of verbs and nouns and less grammatical elements. Borrowing in Bolivar Quichua and Imbabura Quichua correspond to the second and third stages, respectively. One major issue remains without explanation however: if higher levels of bilingualism are a pre-requisite of grammatical borrowing as generally assumed, why Imbabura speakers (most of them coordinate bilinguals) are precisely those who borrow less grammatical elements. This could be explain, I maintain, if coordinate bilingualism is assumed to inhibit grammatical borrowing and privilege code switching, as seems to be demonstrated by the data on lexical borrowing (cf. 10.6). This hypothesis is tested on the borrowing data of three groups of Quichua-Spanish bilinguals in the next section.

Guaraní sociolects shows differences and similarities to Quichua dialects in the overall distribution of grammatical borrowings. On the one hand, urban varieties (Jopara) have two times more grammatical borrowings than rural varieties (Guaraníete). I showed that Jopara remains basically congruent with Guaraníete in typological terms but also shows a number of innovative morphosyntactic features. The innovative character of Jopara is confirmed also for grammatical borrowing. This demonstrates that the preference for grammatical borrowing in Jopara is motivated by the typological character of this variety. As a whole, the borrowing data corroborate the existence of recycling circle in which the innovative typology of Jopara motivates more grammatical borrowing, and this borrowing causes further typological changes in this variety. In turn, the typological differences between Jopara and Guaraníete reflect and are reflected in the bilingualism of their speakers, with Jopara speakers displaying higher levels of bilingualism.

Differently from Quichua and Guaraní varieties, the dialects of Otomí show remarkable similarities in grammatical borrowing. As explained in Chapter 8, Santiago and Tolimán belong to one dialectal group (Querétaro Otomí) with the same typological profile. In this sense, the typological similarity of both Otomí dialects is one of the causes of their similarity in grammatical borrowing. The other cause is sociolinguistic: the low-moderate levels of bilingualism in both speech communities accompanied by a steady process of shift towards Spanish make Otomí speakers more innovative in their borrowing behavior (‘typical borrowers’). Notice

\textsuperscript{21} A similar process has been reported for other Amerindian languages experiencing strong pressures to language shift. The case of Nahuatl in contact with Spanish in Mexico is perhaps the best documented (Hill and Hill 1986: 233ff).
that a similar tendency was attested among Bolivar Quichua speakers, where medium levels of bilingualism and a rapid process of language shift induced higher degrees of grammatical borrowing.

The foregoing discussion has made several references to the correlation between bilingualism and grammatical borrowing. This correlation, already demonstrated for lexical borrowing, is tested in the following section for grammatical borrowing in three groups of Quichua-Spanish bilinguals.

11.5. Bilingual performance in the distribution of grammatical borrowings

The analysis of the influence of bilingual performance on lexical borrowing found positive evidence that flexibility in the use of loanwords decreases gradually as one goes from incipient to coordinate bilingualism. This section explores if a similar correlation exists between the distribution and use of grammatical borrowings and the type of bilingualism. I analyze the borrowing data of three groups of Quichua speakers with different levels of bilingualism: incipient (7 speakers); compound (9 speakers); and coordinate (4 speakers). The criteria used for the grouping of the speakers are discussed in section 10.6. Table 11.67 below contains the borrowing data of each group, including the type of grammatical items and the number of speakers who use items of each class. The last row includes the totals of grammatical borrowing for each group. Articles and auxiliaries were not included because neither class occurs in Quichua.

Table 11.6 Percentages of grammatical borrowings per level of bilingualism

<table>
<thead>
<tr>
<th>Group 1 (incipient)</th>
<th>Group 2 (compound)</th>
<th>Group 3 (coordinate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>Nsp (7)</td>
<td>Types</td>
</tr>
<tr>
<td>Coordinators</td>
<td>4.0%</td>
<td>7</td>
</tr>
<tr>
<td>Adpositions</td>
<td>0.5%</td>
<td>5</td>
</tr>
<tr>
<td>Subordinators</td>
<td>1.1%</td>
<td>7</td>
</tr>
<tr>
<td>Disc. Markers</td>
<td>0.4%</td>
<td>2</td>
</tr>
<tr>
<td>Non-manner Adv.</td>
<td>0.9%</td>
<td>3</td>
</tr>
<tr>
<td>Numerals</td>
<td>1.3%</td>
<td>5</td>
</tr>
<tr>
<td>Pronouns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.1%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

The data show a clear tendency. The number of grammatical borrowings increases gradually as one goes up the scale of bilingualism: from 7.1% in incipient bilinguals to 11.6% in compound bilinguals and 23.3% in coordinate bilinguals. That is, the number of grammatical borrowings in the group of coordinate bilinguals is three times larger than the number of these borrowings in the group of incipient
bilinguals. An analysis of types confirms the increase from incipient bilinguals to compound bilinguals, but not from compound to coordinate bilinguals. In fact, compound bilinguals use a wider variety of grammatical borrowings. Put differently, the use of grammatical borrowings by coordinate bilinguals is more productive while the same use by compound bilinguals is more varied. The same tendency was attested in the analysis of lexical borrowing. In my view, this is explained by the position of compound bilinguals in the scale of bilingualism: compound bilinguals are the speakers who feel the strongest pressure to borrowing from the dominant language by virtue of their sociolinguistic condition of halfway shifters. As a result, compound bilinguals are the most innovative speakers, i.e. those who use a wider variety of grammatical types, often in contexts which are ungrammatical for other bilinguals.

These remarks are necessarily tentative because of the small size of the samples. Moreover, the differences may be not statistically significant as there is much more chance that compound bilinguals produce grammatical borrowings than coordinate bilinguals because the former are more numerous. It is therefore necessary to test the correlation between bilingualism and grammatical borrowing on firmer grounds.

The analysis of borrowings per grammatical class provides an additional insight into bilingual performance. On the one hand, the most frequent class in the three groups are coordinators, whose number increases four times from incipient bilinguals to coordinate bilinguals. On the other hand, subordinators and pronouns are missing in the group of incipient bilinguals but occur in small numbers among compound and coordinate bilinguals. Notice that subordinators and pronouns are precisely the grammatical borrowings which induce major changes in the morphosyntactic matrix of Quichua, for which reason they are associated with more innovative varieties, hence their absence from the speech of incipient bilinguals. Finally, the analysis of types corroborate the profile of compound bilinguals as ‘typical borrowers’: they show more types of grammatical borrowings than coordinate bilinguals in all the categories except non-manner adverbs. Coordinate bilinguals are therefore the less innovative in grammatical borrowing. It is likely that coordinate speakers have reached their highest point possible in the borrowing process after exhausting the borrowing potential of grammatical classes because of the small number of items available.

The analysis shows that productivity does not correspond to innovation in grammatical borrowing, and that speakers with medium levels of bilingualism make use of more grammatical elements. This tendency is confirmed if the tokens and types of grammatical borrowings in Otomí and Guaraní are compared: Otomí speakers borrow many more grammatical elements from Spanish than Guaraní speakers, even if the levels of bilingualism of Otomí speakers are lower. The data suggest that moderate levels of bilingualism are especially sensible to borrowing, and thus compound bilinguals become the main vectors of contact-induced language
change. The distribution of complex borrowings, many of which perform grammatical relations, provides further confirmation of this statement.

**Table 11.7 Percentages of complex borrowings per level of bilingualism**

<table>
<thead>
<tr>
<th></th>
<th>Group I (incipient)</th>
<th>Group 2 (compound)</th>
<th>Group 3 (coordinate)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tokens</td>
<td>Nsp</td>
<td>Types</td>
</tr>
<tr>
<td>Frozen borrowings</td>
<td>1.0%</td>
<td>3</td>
<td>2.2%</td>
</tr>
<tr>
<td>Noun phrases</td>
<td>1.5%</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>Prep. Phrases</td>
<td>0.1%</td>
<td>1</td>
<td>0.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2.6%</td>
<td>4.5%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

The data show the same tendency observed before: a small though steady increase in the number of complex borrowings as one goes up the scale of bilingualism. Thus, the number of complex types is the largest in compound bilinguals and the smallest in coordinate bilinguals. The analysis of grammatical categories shows differences however: noun phrases are the largest category of complex borrowings in the group of incipient bilinguals but the smallest in the group of coordinated bilinguals. This is clearly related to the status of nouns as the most borrowable of all linguistic items, clearly an advantage in situations of incipient bilingualism.

Summing up, the data suggest a correlation between grammatical borrowing and bilingualism such that the more bilingual the speaker, the more he uses grammatical borrowings. This correlation is not attested for types, however. In this case the greatest number concentrates in the group of compound bilinguals. This tendency is explained by the innovative character of compound bilinguals as motivated by a) their halfway position on the scale of bilingualism, and b) the resulting pressure on them to become coordinate bilinguals and complete the shift to the dominant language.

### 11.6 Summary

This chapter analyzed grammatical borrowing from different perspectives: the overall contribution of grammatical borrowings; the classification of grammatical borrowings in half-open and closed classes; the use of grammatical borrowings; the distribution of grammatical borrowings in dialects; and the influence of bilingual performance on the outcomes of grammatical borrowing. The discussion was developed in the theoretical framework of the scales of borrowability presented in section 3.5. The following summary is an overview of findings. For the sake of
clarity, the findings are presented according to the borrowing hypotheses discussed in Chapter 4.

**Borrowing hypotheses from the Principle of Functional Explanation**

H1. Pragmatic elements > Semantic elements > Syntactic-Morphological-Phonological Elements. The data do not confirm the primacy of pragmatic elements (discourse markers) if this is interpreted in terms of frequency instead of precedence in time. Discourse markers make a marginal contribution in the three languages if compared to other word classes, and no cross-linguistic tendency could be drawn from the data. Otomí is the language with the largest number of Spanish discourse markers, followed by Quichua and Guaraní. The contribution of discourse markers to grammatical borrowing differs across dialects. I explained the marginal contribution of Spanish discourse markers by the characteristics of the input (Spanish) in which discourse functions are marked basically by syntactic devices.

**Borrowing hypotheses from the Principle of System Compatibility**

H2. Free morpheme > clitic > bound morpheme. The data confirm this scale of borrowability. Spanish bound morphemes are not borrowed productively in the three languages, except for the occasional occurrence of diminutive and plural endings in frozen borrowings. Spanish clitics are borrowed only in Guaraní in the form of definite articles or pronominal proclitics. Free morphemes, including roots in the case of loan verbs, are borrowed in the three languages. The findings also confirm the prediction from the Principle of System Compatibility, according to which both agglutinating-synthetic languages (Guaraní, Quichua) and analytic languages (Otomí) will borrow independent words and roots, while only agglutinating-synthetic languages (Guaraní, Quichua) will borrow clitics.

**Borrowing hypotheses from the Scales of Borrowability**

H3.1 Open class > half-open class > closed class. The data discussed in Chapters 10 and 11 confirm this scale only partially: lexical borrowings (open classes) are more numerous than grammatical borrowings (half-open classes) in Quichua and Guaraní but not in Otomí. At the same time, the higher frequency of half-open classes in relation to closed classes is not confirmed for all grammatical classes (cf. infra).

H3.2 Adposition > Coordinator > Numeral > Article > Pronoun > Subordinator. Although the data confirm that borrowings from open classes are more numerous than those from half-open and closed classes, they do not confirm that all borrowings from half-open classes are more numerous than borrowings from closed classes. Articles in Guaraní are the clearest counterexample: they are the most frequent grammatical class not only in the Guaraní corpus but in the three corpora as
a whole. A comparison of Muysken’s borrowing scale with the overall frequency of grammatical borrowings gives only one match: coordinators. The same comparison on a language-specific basis gives one match in Guaraní (coordinators); two matches in Quichua (numerals and pronouns); and three matches in Otomí (adpositions, coordinators and pronouns). Therefore, the borrowing scale is confirmed only for certain classes of grammatical items. I interpret this as a result of typological differences in the recipient languages. The role of typology is the most visible in Otomí: this language lacks adpositions but borrows a large number of Spanish prepositions, under the pressure of dominant discourse strategies, with the effect of a more explicit marking of syntactic relations in the phrase and the clause. On the other hand, Guaraní and Quichua are postpositional languages and borrow only a small number of prepositions, most of them in phrasal borrowings and syntactic calque from Spanish.
Chapter 12

Conclusions

The analysis of Spanish borrowing in the last chapters was conducted in the framework of the theory of parts of speech and the scales of borrowability and intended to test a series of borrowing hypotheses. The broader context of analysis was an explanatory model of contact-induced language change that encompasses linguistic and nonlinguistic causes, factors and triggers. This chapter seeks to 1) put together the findings in a comprehensive account of linguistic borrowing; 2) outline the interplay between typological and sociolinguistic factors; 3) discuss the overall hypotheses from linguistic typology in the light of the borrowing data; and 4) outline a research agenda on linguistic borrowing.

12.1 Spanish borrowing in cross-linguistic perspective: similarities and differences

The data confirm the widespread occurrence of Spanish in the three languages of the sample, even if such occurrence does not correspond to a situation of heavy borrowing. On the one hand, the overall percentage of Spanish borrowings is fairly uniform: the difference is less than 5% between the language with the largest number of borrowings (Quichua) and the language with the smallest number (Otomí). Uniformity in the distribution of borrowings in lexical classes is attested in all the dialects. Similar results were found on the type of morphemes borrowed in these languages: all the languages borrow free morphemes and roots but none of them borrow bound morphemes.

Apart from the above similarities, the data show all remarkable differences across languages, as summarized below.

- Differences in the relative proportion of borrowing and codeswitching. The most salient feature in this case is the amount of codeswitching in Guaraní (eight times larger than borrowing) due to the higher degree of bilingualism of Guaraní speakers. The primacy of codeswitching and its coexistence with borrowing have made Paraguayan Guaraní a language different from classical Guaraní, even though both continue to share the same typological features. Given the ongoing contact with Spanish, it is possible that the combination of codeswitching and borrowing eventually lead to the emergence of a mixed variety of Guaraní and Spanish.

- Differences in the contribution of lexical and grammatical borrowing across languages. It was found that lexical borrowing decreases proportionally to grammatical borrowings, so that the language with the largest number of lexical borrowings (Quichua) shows the smallest number of grammatical borrowings,
while the language with the largest number of grammatical borrowings (Otomí) shows the smallest number of lexical borrowings\(^1\). In Guaraní, the contributions of both types of borrowing are less dissimilar, but lexical borrowing continues to be more frequent. Because contact with Spanish is equally characterized in time and intensity for the three contact situations but only Otomí shows an inverse proportion between lexical and grammatical borrowings, I conclude that neither time nor intensity alone determine the primacy of either type of borrowing. More crucial in this respect is how languages accommodate to communicative pressures in diglossic situations within the frame of their structural possibilities, and how speakers react to such pressure according to their sociopolitical position in the mainstream society. For example, the higher frequency of lexical borrowing in Imbabura Quichua and the larger amount of grammatical borrowing in Bolivar Quichua are ultimately determined by the sociolinguistic condition of each dialect: one of maintenance, increasing bilingualism and higher socioeconomic status in Imbabura, which enable speakers to maintain their mother tongue while incorporating the lexicon of the dominant language; and one of increasing bilingualism, language shift and lower socioeconomic status in Bolivar, which accelerate the loss of the native language in a context where Hispanicization is a pre-requisite for social mobility.

- Differences in the contribution of major parts of speech to lexical borrowing. Loan nouns rank first in terms of frequency (tokens) followed by verbs, adjectives and manner adverbs. The outstanding contribution of noun borrowing is explained by the morphological simplicity of (Spanish) nouns and their referential potential which is strategic in situations of intercultural contact. In addition, the data show that each language has its own distribution of loanwords according to lexical class. Quichua stands out for the largest contribution of loan nouns. Otomí stand out for the smallest contribution of loan verbs and loan adjectives. Guaraní stands out for a balanced distribution of loanwords in terms of parts of speech. Relative percentages (major parts of speech in isolation) show similar tendencies (Table 10.11) with one major exception: Otomí privileges the borrowing of nouns to that of other lexical classes. If we assume that predicative and non-predicative borrowings compete for the same semantic space in the recipient language, the data suggest that Guaraní and Quichua prefer predicative loanwords while Otomí privileges referential borrowings. Typologically, this is explained by the existence of a separate class of nouns in Otomí which encourages noun borrowing in this language.

- Differences in the use of lexical borrowings. Loan verbs and loan manner adverbs are used exclusively in their prototypical functions regardless of

\(^1\) Suarez (1983: 135ff) states that Spanish influence is far-reaching on the grammar of Amerindian languages.
language, dialect or level of bilingualism. On the contrary, loan nouns and loan adjectives are used in other syntactic functions apart from their prototypical, both in Guaraní and Quichua, as a result of the adaptation of loanwords to their system of parts of speech. In strict terms, however, only Quichua proved flexibility to a significant degree. The different degrees of flexibility in Quichua and Guaraní are the result of higher levels of bilingualism among Guaraní speakers: the Spanish grammar in the mind of the bilingual speaker inhibits the predicative use of non-predicative items for their ungrammaticality in the frame of the Guaraní grammar. As evidence of this statement, an inverse correlation is attested between bilingualism and flexible use, according to which functional adaptation of loanwords decreases gradually as bilingualism increases. Functional adaptation is confirmed also for Otomí by the rigid use of loan nouns in accordance with the system of parts of speech of this language. In addition to adaptation, the data found evidence for the specialization of loanwords in their original functions in the source language: this is the case of loan adjectives in Guaraní and Otomí. Loan adjectives in Guaraní are used increasingly as referential phrase modifiers only, instead of being used flexibly. Loan adjectives in Otomí are used ever more as referential phrase modifiers instead of noun-noun compounds and stative verbs. As a result, a separate class of (loan) adjectives is taking shape in Guaraní through specialization and in Otomí through lexicalization. Of course, it remains to be seen to what extent this emerging category includes also native items. In broad terms, however, the data show that functional adaptation is more operative than functional specialization in the three languages.

- Differences in grammatical borrowing. Only seven of nine classes of grammatical items occur in the three languages. Spanish articles are present only in Guaraní while auxiliaries are exclusive of Otomí. In terms of frequency there are four outlying classes of grammatical items: articles in Guaraní; adpositions in Otomí; conjuncts in Quichua and Otomí; and discourse markers in Otomí. Non-manner adverbs, numerals and pronouns are distributed rather uniformly in the three languages. Otomí proves the most disparate of the three languages due to the widespread occurrence of grammatical elements. Typological factors appear to model grammatical borrowing in a crucial way, even though sociocultural

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2 An intermediate stage in the process is represented by the use of loan adjectives as heads of predicate phrases and modifiers of referential phrases at the same time, according to which property concepts can be expressed through a separate class of items while retaining their originally predicative character.

3 The frequency of both categories is different, however: articles are the largest category of function words in Guaraní (17%) and the largest of all grammatical classes in the three languages, while auxiliaries occur only marginally in Otomí (0.61%) and rank last with pronouns in the table of frequencies.
factors are the ultimate motivations. Thus, the borrowing of articles in Guaraní is facilitated by their similarity to native deictic particles; the borrowing of prepositions in Otomí is made possible by the absence of phrasal connectors; and the borrowing of conjuncts in Quichua is made easy by the absence of clausal connectives. Under the pressure of the dominant language, the speakers of Guaraní, Otomí and Quichua borrow these grammatical elements with particular frequency in an attempt to bring their speech near to the discourse structure of Spanish. As a result, their languages undergo changes from the replacement of native items (in the case of articles) to the creation of new classes (in the case of prepositions and conjuncts). The effects of grammatical borrowing are multiplied in some cases with the use of borrowings in non-prototypical functions: e.g., articles are used also as pro-forms in Guaraní while prepositions serve to connect clauses in Otomí. Sociolinguistic factors play a double role in the process: bilingualism facilitates the borrowing of grammatical forms to a certain point (compound bilingualism); beyond this point, bilingualism restricts the use of grammatical borrowings to environments not disturbing the grammar of the recipient language, otherwise code switching is preferred. Finally, input structure is a decisive factor in the borrowing of discourse markers, because it determines not only the small number of these items (against the prediction of the principle of functional explanation) but also their types and distribution in each language. In these terms, the lower frequency of discourse markers is modeled by the low frequency of these elements in Spanish, which normally prefers syntactic strategies to convey pragmatic and discourse meanings. By the same token, the higher frequency of discourse markers in Otomí is determined by the higher frequency of these elements in Mexican Spanish as compared to Ecuadorian and Paraguayan Spanish. Finally, input structure also explains why the few borrowed discourse markers are freestanding elements: discourse markers in Spanish are items from other word classes which normally occur in the periphery of clauses and sentences.

- Differences in phrasal borrowing. This type of borrowing is particularly frequent in Quichua, where loan periphrases often replace lexical adverbs. Because adverbial periphrases are typical of colloquial Spanish, their occurrence was expected in Guaraní and Otomí as well, but in these languages the frequency of complex forms is low. In this context, the only possible explanation is that the use of adverbial periphrases are more frequent in Ecuadorian Spanish, just like some discourse markers are more frequent in Mexican Spanish. The hypothesis awaits the results of a corpus-based study that provides empirical evidence of the distribution of adverbial periphrases in Ecuadorian Spanish.
12.2 Social causes and linguistic factors in the modeling of borrowing behavior

The cross-linguistic similarities in the borrowing outcomes are primarily caused by elements in common in the contact situations. These elements include:

- a century-long history of contact with Spanish;
- the pressure of the Spanish-speaking society on the speech communities of the recipient languages;
- the diglossic position of the recipient languages in relation to the source language, and the related Hispanicization as a vehicle for social mobility;
- the lower socioeconomic status of Quichua and Otomí speakers;
- And the introduction of socio-communicative and discourse patterns modeled by the structure of information in the dominant language.

Cross-linguistic similarities in the borrowing outcomes are explained by linguistic factors only for those languages sharing the same morphological type and parts-of-speech system, i.e. Quichua and Guaraní.

The differences in the borrowing behavior of Quichua, Guaraní and Otomí speakers are modeled primarily by their respective levels of bilingualism. Bilingualism is correlated to borrowing behavior in two different ways. On the one hand, there is an inverse correlation between bilingualism and functional adaptation of lexical borrowings to the system of parts of speech of the recipient languages, such that higher levels of bilingualism correspond to lower degrees of functional adaptation. On the other hand, there is a positive correlation between bilingualism and the usage of grammatical borrowings, such that lower levels of bilingualism correspond to a lower frequency of grammatical borrowings. In addition, bilingualism is positively correlated to codeswitching, such that higher levels of bilingualism correspond to a higher frequency of codeswitching.

Typological factors play a secondary role because they cannot account for differences in borrowing behavior by themselves but always in combination with sociolinguistic factors. Quichua typology explains why there is functional flexibility, but it cannot explain why loanwords are used more flexibly in this language than in Guaraní. Bilingualism explains the different degrees of flexibility: Guaraní bilinguals – most of them coordinate bilinguals – prefer to use loan nouns and loan adjectives in their prototypical syntactic position, while Quichua speakers – some of them incipient and compound bilinguals – use the same classes of loanwords more flexibly in accordance with the parts of speech system of their native language. In the same way, Otomí typology alone cannot explain the massive borrowing of Spanish connectives (prepositions and conjuncts) unless discourse strategies on the model of Spanish are invoked. Likewise, Guaraní typology explains the refunctionalization of Spanish articles but cannot explain why they were borrowed at
all: only the higher degree of bilingualism among Guaraní speakers could have led to the borrowing of grammatical items that are deeply rooted in the grammar of the source language.

Further linguistic factors and conditions modeling borrowability concern the type of lexical classes, the frequency of items in the donor language and the peripherality of items in discourse. These factors correspond to those identified by Muysken and van Hout (1994: 60-61) and have proved particularly influential in the borrowing of certain classes: noun borrowing is favored, among other things, by the openness of the noun class (minimum of paradigmaticity); the borrowing of certain discourse markers was promoted by the comparatively higher frequency of such markers in the local varieties of Spanish in contact with the languages analyzed here; and the borrowing of connectives is furthered by their peripheral occurrence in clause boundaries. Therefore, the findings of this study confirm the influence of the factors proposed by Muysken and van Hout, but not their relative degree of influence as suggested by both authors: the foregoing analysis shows that none of the linguistic factors alone model borrowability, but all of them interact at different levels with each other, with sociolinguistic factors (e.g. diglossia, bilingualism), and with sociocultural motivations (e.g. social mobility, education).

Social causes and linguistic factors cannot explain by themselves the outcomes of linguistic borrowing analyzed in this book. Both interplay in various and often intricate ways: social causes represent the ultimate forces of language change and model the scenarios of contact; linguistic factors set the structural conditions for language change, even though they may be overridden by social forces. How far non-linguistic determinants push structural changes in language is therefore a question of degree. In the last section I evaluate the hypotheses from linguistic typology (cf. 4.3.5) in the light of the major findings of this study.

12.3. Language typology and contact-induced change

According to the general hypothesis from language typology (H.8), the longer a typological parameter takes to change without a strong external pressure (e.g. contact with another language), the longer it takes to change with such a pressure. Here I consider two typological parameters deeply ingrained in the structure of languages: the system of parts of speech and the morphological type. The premise is that both parameters are resistant to change insomuch as the reorganization of the lexicon in different word classes and the restructuring of meaning-form units do not occur in non-contact situations and short periods of time. Given the long and intense contact of Quichua, Guaraní and Otomí with Spanish, it is very likely that both parameters are subject to change in these languages.
In relation to the first parameter, the functional adaptation of lexical borrowings in the three languages confirms the resistance of their systems of parts of speech to changes induced by contact. Nevertheless, evidence of incipient changes in Guaraní and Otomí is the restricted flexibility in the former language and the emergence of new word classes in the latter. In relation to the second parameter, a typological analysis shows that Quichua and Guaraní are largely synthetic in their own way while contemporary Otomí shows a mixture of analyticity in the noun phrase and synthesis in the verb phrase. However, a comparison of present-day varieties with pre-contact varieties of these languages shows a number of differences as a result of contact-induced changes. In sum, the system of parts of speech and the morphological type have proven resistant to change in contact situations, but this resistance is rather a matter of degree: clearly the three languages have open the door to incipient changes in their typological profile, and the development of these and other changes is expected in the future given the ongoing contact with the dominant language and the ever increasing bilingualism in the speech communities. Apart from the overall hypothesis about the endurance of core typological parameters in situations of contact, three specific subhypotheses are derived from linguistic typology.

The first subhypothesis (H8.1) holds that loanwords are easier to borrow if their basic syntactic positions in terms of head-modifier relations in the recipient language are similar in the source language. Prepositions and adjectives are good candidates to test this hypothesis for their variety of head-modifier relations across languages. Although loan prepositions are not expected in postpositional languages like Guaraní and Quichua, a number of Spanish prepositions are reported for both languages. The great majority of loan prepositions in Guaraní and Quichua serve as clausal connectives and occur in syntactic calques from Spanish. Nevertheless, the borrowing of prepositions has not made Guaraní and Quichua prepositional languages. The case of Otomí is other: the massive borrowing of prepositions serves to fulfill the lack of phrasal and clausal connectives in this language. The high frequency of prepositions in Otomí demonstrates that head-modifier relations are not an inhibiting factor. In contrast, the low frequency of this class in Guaraní and Quichua demonstrates that head-modifier relations are influential but not enough to hinder borrowing.

As regards head-modifier relations in the referential phrase, it is noteworthy that modification in the three languages is typically pre-nominal (modifier-head) and therefore different from the post-nominal modification (head-modifier) typical of Spanish. Accordingly, the disparity between modification types is supposed to prevent the borrowing of adjectives from Spanish. Needless to say that data disconfirm this prediction blatantly. The rigidity of the modification type is equally disproved as a factor: Quichua has a rigid modification type and the largest number of loan adjectives. Moreover, adjective borrowing has not changed the typical pre-
nominal modification in the recipient languages. These facts demonstrate that head-modifier relations are not as decisive a factor in lexical borrowing as the hierarchy of parts of speech.

The second subhypothesis (H8.2) stipulates that contact-induced changes in basic word order patterns are facilitated if borrowed patterns are among the alternative orders in the recipient language. Being predominantly SVO, Paraguayan Guaraní shares the same pattern with Spanish and is not expected to show visible changes in word order. On the contrary, Quichua and Otomí may change their respective basic word orders to SVO because this is an alternative order in both languages. As syntactic borrowing has not been thoroughly analyzed here, conclusive statements cannot be made on this point. However, preliminary results point to an increasing use of SVO word order in present-day Quichua (Gomez Rendón 2007a) and Otomí (Hekking and Bakker 2007). In both cases SVO word order is associated with Spanish conjuncts replacing postpositions or juxtaposition.

The third subhypothesis (H8.3) predicts a gradual shift to analyticity in agglutinative or inflectional languages in contact with analytic languages. I have shown above that the three languages preserve their morphological type even though differences come up when comparing present-day with pre-contact varieties. Most of these differences are due to contact-induced changes in the direction of analyticity. The changes in the Otomí phrase are perhaps the most illustrative. Traditional Otomí marks argument relations on the verb. However, the introduction of Spanish prepositions is resulting in an ever more analytic predicate phrase, where arguments are linked by means of prepositions (Hekking 1995: 156). The introduction of Spanish prepositions at the level of the referential phrase has resulted not only in the replacement of native forms but also in the explicit marking of relations among constituents. For example, the genitive construction, which marks possession and origin in classical Otomí, is increasingly replaced by the Spanish preposition de ‘of, from’. Notice that this preposition occurs also in syntactic calques and phrasal borrowings in Guaraní. Thus, the evidence points to Spanish connectives prompting analyticity and explicit marking.

Summing up, the available data demonstrate that the basic typological parameters of Quichua, Guaraní and Otomí have proved resistant to contact-induced change but only in so far as major typological changes have not occurred. Still, incipient and moderate changes are well attested: functional specialization of loanwords, lexicalization through borrowing, verb-medial word order, hypotactic constructions and higher degrees of analyticity. As mentioned above, given the ongoing intensity of the contact with Spanish, the changes are expected to develop over time into major typological changes.
12.3 Towards a research program on linguistic borrowing

This study provided empirically based answers to the questions of how linguistic and social constraints influence borrowing and how they interplay with each other to produce specific outcomes. I analyzed the statistical results of a corpus-based investigation of bilingual speech in the framework of a coherent set of theory-driven hypotheses. The analysis answered several questions about the relation between language typology, linguistic borrowing and bilingualism, but left several others without answer. These questions should be included in a research program on language contact whose main goals are to:

- describe the relation between code-switching and borrowing in bilingual speech: can one influence or induce the other?
- describe the role played by phrasal borrowing in bilingual speech and its relation to codeswitching: can phrasal borrowing bridge the gap between borrowing and codeswitching?
- describe the relation between functional adaptation and bilingualism in Guaraní and Otomí (along the same lines followed for Quichua)
- collect further evidence of functional specialization of loanwords in Guaraní by determining to what extent the rigid use of loan adjectives influences the use of native items from the flexible class of non-verbs.
- collect further evidence of functional specialization of loanwords in Otomí by determining to what extent loan adjectives and loan manner adverbs replace non-lexical strategies of modification.
- determine to what extent the flexible use of loanwords is influenced by semantic restrictions or governed by distributional rules of the recipient language.
- explore the co-occurrence of loan forms and native forms in couplets or double-marked constructions: does such co-occurrence represent intermediate stages of a process leading to the full replacement of native forms? Does it respond to discursive needs or fulfill an emblematic function to flag the speaker’s bilingualism in his/her speech community?
- explore the historical record of the three languages in search of borrowings from the initial stages of contact, in order to establish how language typology influences borrowing when bilingualism is minimal or non-existent.
- describe how language loyalty in situations of intense contact inhibits major structural changes when lexical borrowing becomes massive, and how the lack of language loyalty in the same circumstances precipitates rapid structural changes and the eventual demise of the borrowing language.

May the current study be the first step in this ambitious research program, the accomplishment of which will allow us to answer the question about the way
languages and speakers influence each other, and understand why language is one of the most interesting and complex of all adaptive mechanisms of the homo sapiens: a cultural artifact that is not only a most transparent window to the human mind but also the arena of sociopolitical battles for enjoying the right to speak and imposing the duty to be silent.
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APPENDICES
Annotated samples

Paraguayan Guaraní
Sample I

Name: Mirta
Age: 30
Sex: Femenine
Education: Tertiary
Work: Teacher
Place: Tobatí
Spanish level: compound bilingual

Che-ńgo che-reńoi-va’ekue tava Atyra-pe, tava Atyrā-pe,
1S-EMPH 1S-be.born-PST town Atyra-LOC lugar Atyra-LOC
‘Well, I was born in Atyra town, the town of Atyra’

ha upēi a-ju-ma a-ñe-malcria la tava Tobatī-me,
and then 1S-come-already 1S-REFL-grow DET town Tobatí-LOC
‘and came to this town of Tobati to grow up and’

a-guereko trentitrēs ary, ha upēi a-studia ūpyrū-va’ekue
1S-have thirty-three year and then 1S-study begin-PST
‘I am thirty-three years old, and I began to study’

escuela P.J.C.-pe, che a-ju cinco año a-guerekō-rō-guare
School P.J.C.-LOC 1S 3-come five year 1S-have-COND-when
‘in School P.J.C., I came (to Tobati) when I was five’

a-juma-va’ekue la Tobatī-me, ha a-ñe-peryū-mba-ite la a-studia
1S-come-already-PST DET Tobati-LOC and 1S-begin-CMP-SUP DEM 1S-study
‘I came to Tobati already and I begin to study’

ko tava, tava Tobatī-me ha uperire a-ha kuri avei
DEM town town Tobati-LOC and after 1S-go RECPST also
‘in this town and afterwards I also went’

mbo’ehaō P.J.C.-pe, upēi kuri a-ha a-je-tavy’o la ūnanе
school P.J.C.-LOC then RECPST 1S-go 1S-REFL-learn DET 1PL.POSS
‘to P.J.C. high school, then I studied’
ñe’e guaraní-me, ajépa, upérô a-je-abri kuri
language Guaraní-LOC right:INT then IS-REFL-abrir RECPST
“Guaraní, right? then It was the time”

la [Ateneo de Lengua y Cultura Guaraní] [Colegio Nacional D.M.-pe
DET [Institute of Guaraní language and culture] [National highschool D.M.-LOC
“that Ateneo de Lengua y Cultura Guaraní opened the National High School D.M.”

ha upépe oi-ko raka’e la Ateneo upépe o-funciona kuri
and there 3-ser REMPST DET Ateneo there 3-operate RECPST
‘Ateneo was there, and there it was open’

pyharekue, ha upépe ore ro-ho kuri [todos los días]
all.night.long and there 1PL.EXCL 1PL.EXCL-go RECPST [everyday]
‘all the night long, and there we went everyday’

la ro-studia upé-pe, ñane ñe’e guaraní
DET 1PL.EXCL-study there 1PL.POSS language Guaraní
“there we studied our Guaraní language”

[por tres años]
[for three years]
“for three years”

ha re-mohu’a upéa?
and 2S-finish PRO.DEM
“And did you finish?”

si, a-mohu’a péa, a-mohu’a, ndai-katu-i-nte
yes 1S-finish PRO.DEM 1S-finish NEG-3-be.able-NEG-only
‘Yes I finished it up, it is just that I could not’

la ko’ága-ité-peve hasy-eterëi la rubro ñe-consegui la
DET now-only-until hard-SUP DEM post PASS-get DET
“until now get a teaching post for it is difficult”

ña-mbo’e haguã ko’ága a-ha-mi-mi a-poro-rremplaza-ha ba’e,
1PL-teach for now 1S-go-MIT-MIT 1S-PRO.ACC-replace-NMLZ at.least
‘Now I am replacing a teacher at least’
Appendices

upéva la a-japo-va-jepi.
PRO.DEM DET 1S-make-NMLZ-often
‘there, that is what I often do’

ha upéi… re-menda?
and then 2S-get.married
‘And then did you get married?’

hē, ha a-menda-va che a-menda-rire-ma-voi kuri
yes and 1S-marry-NMLZ.PRS 1S 1S-marry-after-already-then RECPST
‘Yes, I got married, and after I got married’

la a-ha a-studia la guaraní, a-menda-rire-ma,
DET 1S-go 1S-study DET Guaraní 1S-marry-after-already
‘I studied Guaraní, after I got married’

a-guerekó-ma mokōi mitā, peteĩ kuimba’e ha peteĩ mita-kuña,
1S-have-already two child one boy and one girl-PL
‘I got two children, one boy and two girls’

ha péicha hīna a-ha, ha ko’āga che róga-pe-nte
and so 1S.PROG 1S-go and now 1S.POSS house-LOC-just
‘and so I am now, now just at home’

a-pyta hīna, a-je-dedika a-reko peteĩ boliche-‘i,
1S-stay 1S.PROG 1S-REFL-devote 1S-have one store-DIM
‘I stay, I have a small store’

ha upéva-pe a-mba’apo hīna ko’āga, peicha-ite…
and PRO.DEM-LOC 1S-work 1S.PROG now so-only
‘and I work for it now’

ha mamo avei re-ñemoarandu ambue mba’epé?
and where also 2S-learn other thing-LOC
‘And where else did you study?’

ha, che-ngo a-ha-va’ekue táva Pedro Juan Caballero-pe, pépe
and 1S-EMPH 1S-go-PST town Pedro Juan Caballero-LOC there
‘and I went to Pedro Juan Caballero, there’
ja-jo-topá-va’ekue ne-mandu’á-pa upépe a-há-va’ekue ha upéi a-ha
1PL-RECP-find-PST 2S-remember-INT there 1S-go-PST and then 1S-go
‘we met, do you remember?, there I went and then I went’

avei kuri Caacupé-pe pete curso a-japo avei kuri [por 6 meses]
also RECPST Caacupé-LOC one course 1S-do also RECPST [for 6 months]
‘there I went and also to Caacupe to do a course for six months’

Pedro Juan-pe piko mba’e reho re-japo ra’e?
Pedro Juan-LOC INT thing 2S-go 2S-do PRF
‘To Pedro Juan, what did you go for?’

Pedro Juan-pe [sobre bilinguismo] kuri ha upéi a-ha a-conoce
Pedro Juan-LOC [on bilingualism] PRF and then 1S-go 1S-know
‘To Pedro Juan, bilingualism, afterwards I visited’

avei [la ciudad] upépe nde nde-reñói ra’e, ajépa?
also [DET city] there 2S 2S-be.born PRF right?
‘the city, you were born there, right?’

che upépe che-reñói, Pedro Juan Caballero-pe, upeicha-ite
1S there 1S-be.born Pedro Juan Caballero-LOC so-EMP
‘there I was born, in Pedro Juan Caballero, that is right’

ha ro-ho avei kuri ro-aprende heta-mba’e
and 1PL.EXCL-go also RECPST 1PL.EXCL-go-learn many-thing
‘and we went to learn many things’

upépe, ro-hecha heta-mba’e avei de-paso
there 1PL.EXCL-see many-thing also in.passing
‘there, we saw lots of things, and in passing’

ha upei-ngo, a-surí-mi-mi siempre la capacitasió-há-rupi,
and DET-EMPH 1S-look.for-MIT-MIT always DET training-REL-around
‘to get some traning as well, always about training’

ramoite avei kuri a-ha kuri avei
recently also RECPST 1S-go RECPST also
‘recently I went also’
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pe villa-артесанал-пe oiko avei kuri [la capacitación sobre teatro],
DET village-artisan-LOC 3-be also RECPST [theater training]
‘to the artisan village, where there was a training course on theater’

péa o-incIui avei pue la ñande materia,
PRO.DEM 3-include also well DET IPL.POSS subject.matter
‘that includes our subject matter’

ha upépe ro-ho kuri avei ro-je-capasita,
y there 1PL.EXCL-go RECPST also IPL.EXCL-REFL-train
‘and we go to have a training on it’

nde re-mohu’ã kuri pe ñemoarandu Guaraní-rehegua ajépa?
2S 2S-finish RECPST DET study Guaraní-ADJR right:INT
‘you finish your Guaraní studies, right?’

re-mohu’a upé-va pe ñemoaranda?
2S-finish PRO.DEM DEM study
‘did you finish your studies?’

sí che a-mohu’ã ha oi-ko che-hegui mbo’ehara
yes 1S 1S-finish and 3-be 1S-ABL teacher
‘yes, I finished and became Guaraní teacher’

Guaraní-me-gua ha upei ne-re-mbo’e-i raka’e uperire
Guaraní-LOC-ABL and then NEG-2-teach-NEG PST afterwards
‘And afterwards did you not teach?’

No, na-mbo’e-i solamente peicha a-ha a-poro-remplaza,
not NEG-teach-NEG only so 1S-go 1S-PRO.ACC-replace
‘no, I don’t teach, I just go to replace’

alguno i-memby ra’ype ha mba’e [por tres meses]
some 3-son male-LOC and thing [for three months]
‘for some of my boys, and then only for three months’

upeicharo a-ha kuri colegio D.M-pe
then:if 1S-go RECPST high.school D.M-pe
‘then I went to the high school’
ha avey o-nê-koteve-rô che-rehe a-je-hecha avey ha a-ha.
and also 3-REFL-need-if 1S-for 1S-REFL-see also and 1S-go
‘if they need me and look for me, I go’

ha J.R. oï-ramo upepe [de director] na-nde-gueraha-i raka’e
and J.R. 3-if there [of director] NEG-2-take-NEG PST
‘but if J.R. was there as director, why did he not take you in?’

No, porque che-ngo upéro a-studia-ramo colegio-pe,
not because 1S-EMPH then 1S-study-if high.school-LOC
‘no, because at that time I was still going to the highschool’

ne’îra-gueteri, ha’ê-ngo che mbo’e-hara-kue no tanto…
NEG-yet 3-EMPH 1S teacher-NMLZ-PST not much
‘I was not a teacher yet?’

[Quiero que me cuentes toda la experiencia que tienes como profesora…]
[I want you to tell me about your experience as a teacher…]

[Poco, porque no estoy ejerciendo]
[Just a bit, because I am not teaching now]

[Pero de lo que has ejercido, algo ejerciste]
[But about your past teaching, you taught something]

[Si, ejercí por dos meses]
[Yes I taught for two months]

[Qué experiencia tuviste de eso?]
[What is your experience from it?]

che-ngo a-ha voi kuri la che colegio-kue-pe
1S-EMPH 1S-go recent RECPST DET 1S high.school-PST-LOC
‘I just went to my former high school’

ha a-vy’a-iterei-voi kuri la a-je-hechá-ramo-guare
and 1S-happy-SUP-EMPH RECPST DET 1S-REFL-see-if-when
‘and I was very happy when I was welcome’

la a-ha haguã la a-remplaza pe mbo’êhára
DET 1S-go for DEM 1S-replace DEM teacher
“I went to replace a teacher”
Guaraní-me-guá-pe ha a-vy’a-iterie kuri
of Guaraní and I was very happy

porque che-rayhu-eterie la che remimbo’e-kuera,
because 1S-love-SUP DET 1S student-PL

‘because my students loved me’

ha upéa kuri che la a-logra chugui-kuéra,
and PRO DEM RECPST 1S DET 1S get 3.ABL-PL

‘and I got that from them’

hasta o-juan-re che-rehe hikuai la director-pe kuri
up.to 3-ask.for 1S-for 3.PROG DET director-DAT RECPST

‘they asked the director for me’

la a-pytá haguá porque he’i cheve hikuai aje
DET 1S-stay for because 3.say 1S.OBJ 3.PROG right:INT

‘so that I could stay because they told me, right?’

de-que la a-mbo’e porá-iterie chupe-kuéra ha que
of-that DET 1S-teach good-SUP 3.OBJ-PL and that

‘that I teach them good and that’

che-paciencia ha hese-kuerá nda-ha’-é i por lo-que la
1S-patience and 3.with-PL NEG-3.ser-NEG for that-which DET

‘I am patient with them, and that is because’

na-mbo’e-vai-gui aje,
NEG-teach-bad-because right:INT

‘I do not teach badly, right?’

che igual-nte la a-mbo’e-ramo
1S equal-only DET 1S-teach-if

‘When I teach all of them’

upéicha-nne avei che-paciencia-ta hese-kuerá igual
so-only also 1S-patience-FUT 3.with-PL equal

‘I am also patient with all of them’
Paraguayan Guaraní
Sample II

Name: Eduardo
Age: 49
Sex: Masculine
Education: Tertiary
Work: Teacher
Place: Tobati
Spanish level: coordinate bilingual

Eduardo, mba’éicha nde re-jahu ko ñe’ê Guaraní?
Eduardo, how 2S 2S-find DEM language Guaraní
‘Eduardo, how do you find the Guaraní language?’

mbo’ehaó-pe ha ñande róga-py-pe?
school-LOC and 1PL.POSS house-inside-LOC
‘In schools and at home?’

ñande ñe’ê guaraní ningo ajépa jai-kuaa háicha
1PL.POSS language Guaraní EMPH right:INT 1PL-know like
‘our Guaraní language, right, as we know’.

yma ñande voi na-ña-ñe’ê-i-va’ekue, che ai-ko-va’ekue Pedro Juan-pe
before 1PL self NEG-1PL-speak-NEG-PST 1S 1S-live-PST Pedro Juan-LOC
‘in the past we did not speak the language ourselves, I lived here in Pedro Juan’

veinticuatro año a-guereko’akue ko’ače ai-ko ha
twenty-four years 1S-have-PST here 1S-be and
‘until I was twenty-four years I lived and’

na-ñe’ê-i-va’ekue che familia apyté-pe Guaraní, o-sea-que
NEG-speak-NEG-PST 1S family inside-LOC Guaraní, that.is
‘I did not speak Guaraní at home, I mean’

na-ñe’ê-gausu-i pe Guaraní sa’i-voi a-ñe’ê pe Guaraní
NEG-speak-big-NEG DEM Guaraní few-AFF 1S-speak DEM Guaraní
‘I did not speak much Guaraní, just a bit’
porque o-je-prohibi-voi-va’ekue ñande época-pe, ore
because 3-REFL-forbid-AFF-PST 1PL.POSS age-LOC 1PL.EXCL
‘because in our times it was forbidden to talk in Guaraní’

epoca-pe pe Guaraní ña-ñemongue-ta, ha upéi a-sê
age-LOC DEM Guaraní IPL-talk-FUT and then 1S-leave
‘but we talked in Guaraní anyway, hen I left’
a-ha ko’á-gui, a-sê a-ha pe ñande Paraguái
1S-go here-ABL 1S-leave 1S-go DEM 1PL.POSS Paraguay
‘from here I left for Paraguay’

ryepy-pe, ryepy-re ha’é-va hîna peteî táva Santani
inside-LOC, inside-by 3.be-NMLZ 3.PROG one town Santani
‘the hinterland of it, a town named Santani’

San Estanislao o-pytá-va hîna [departamento de San Pedro]
San Estanislao 3-stay-NMLZ 3.PROG [District of San Pedro]
‘San Estanislao which is located in the district of San Pedro’

ha upépe a-ñeyrû-va’ekue mil novecientos noventidos-pe
and there 1S-begin-PST thousand nine.hundred ninety :two-LOC
‘and there I began in 1992’

ai-ke pe educacion-pe ha uperô ne’îra
1S-enter DEM education-LOC and then NEG:there.be
‘I entered the field of education, by then there was no’

pe reforma-educativa oî pe educacion ryepy-pe
DEM education.reform 3:be DEM education inside-LOC
‘reform inside the education’

este oî-va gueteri pe programa ymaguare ja’e chupe
this 3:be-NMLZ still DEM program past 1PL:say 3:OBJ
‘there was still the the so-called old program’

ha ai-ke’akue a-mbo’e pe campáña-re umi campesino
and 1S-enter-PST 1S-teach DEM countryside-by DEM peasant
‘I began to teach peasants in the countryside’
in their towns and I remember I went there.

mothers and fathers came

‘fathers came to talk with me’

I talked to them in Spanish but they spoke to me.

‘and why? Because I came from Pedro Juan’

‘and I brought a different culture, so to say’

‘why? because men have to talk to women in Spanish’
porque ṽuna ñande recha-rō, ñande rendu-rō
because women 1PL see-if 1PL listen.to-if
‘because if they see us speaking’

guaraní ña-ñe’ê, ñande rechaza hikuái ajéa,
Guaraní 1PL-speak 1PL reject 3.PROG right:INT
‘Guaraní, they reject us, right’

ha péa-re che sy-kuéra-pe a-ñe’ê castellano-pe,
and PRO.DEM-for 1S mother-PL-ACC 1S-speak Spanish-LOC
‘that is why I spoke to the mothers in Spanish’

ha upéi-katu ko a-guapy peteĩ ára-pe
and then-EMPH DEM 1S-sit.down one day-LOC
‘And then one day I sat down’

ha a-je-py’a-mongueta, pero mba’ai-ko che la a-japó-va,
and 1S-REFL-inside-speak but what-INT 1S DET 1S-do-NMLZ
‘and thought to myself ‘what on earth am I doing?’

marã-piko che péicha a-ñe’ê hendivekuéra
for.what-INT 1S so 1S-speak 3:with-PL
‘What do I talk to them in this way for?’

che ningo nairi Pedro-Juán-pe, che ningo ai-mé ápe,
1S EMPH NEG.be Pedro-Juan-LOC 1S EMPH 1S-be here
‘I am not in Pedro Juan, but I am here’

[Compañía 25 de Diciembre] péa ha’e-kuéra la i-realidad,
[Compañía 25 de Diciembre] PRO.DEM 3-PL DET 3.POSS-reality
‘in Compañía 25 de Diciembre, that is their reality’

marã che a-gueru-se peteĩ realidad nda-ha’ê-i-va i-mba’e-kuéra
why 1S 1S-bring-want one reality NEG-3.be-NEG-NMLZ 3.POSS-thing-PL
‘why do I want to bring them a reality that is not theirs?’

ha upépe che a-je-hecha-kuua
and there 1S 1S-REFL-see-know
‘then I realized’
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_de-que_ peteĩ mba’e vai ningo raka’e pe Guaraní ja-kyhyje
of-that one cosa ugly AFF REMPST DET Guaraní 1PL-fear
‘that it was something bad that we are afraid’

ña-ñe’e haguã, vai ningo pe Guaraníña-gueroĩ
1PL-speak for ugly EMPH DEM Guaraní 1PL-be.ashamed
‘of speaking in Guaraní, that we are ashamed of speaking Guaraní’

ha upêi a-ŋepyriŋ noventidos-pe a-ŋepyriŋ-’akue
and after 1S-begin ninety-two-LOC 1S-begin-PST
‘and then I began in year ninety-two’

avei a-je-tavy-”o ja’e chupe pe Guaraní-me ha a-aprende
also 1S-REFL-study 1PL:say 3.OBJ DEM Guaraní-LOC and 1S-learn
‘to study Guaraní and learned’

pe Guaraní i-porà-va avei pe amo-gotyo lado
DEM Guaraní 3-good-NMLZ also DEM there-side side
‘that it is nice to speak Guaraní also in other places’

ai-ke mbo’ehaó-pe Ateneo-pe ai-ke a-aprende pe mba’i’eicha-pa
1S-enter school-LOC Ateneo-LOC 1S-enter 1S-learn DEM how-INT
‘I entered Instituto Ateneo to learn how’

ña-mbo’e-va’erä pe Guaraní ajepa, ha upéicha
1PL-teach-OBLG DEM Guaraní right:INT and so
‘to teach Guaraní, right, and in this way’

mbegekataûpe oi-ke avei pe reforma-educativa,
little.by.little 3-enter also DEM education-reform
‘little by little the Education Reform started’

[mil novecientos noventicuatro] oi-ke pe reforma-educativa
[thousand nine.hundred ninety-four] 3-enter DEM reform-educative
‘the Education Reform began in 1994’

ha che escuela che ai-me-hagué-pe,
and 1S school 1S 1S-be-NMLZ.PST-LOC
‘and the school where I taught’
pe mbo’ehao che ai-me-hague-pe o-je-poravo i-katu-haguã-icha  
DEM school 1S 1S-be-NMLZ.PST-LOC 3-PASS-choose 3-be.able-for-so  
‘that school I was teaching was chosen somehow’

[modalidad Guaraní hablante] o-ñe-implementa upépe ha che  
[Guaraní-speaking system] 3-REFL-implement there and 1S  
‘for the implementation of the Guaraní-speaking system, and there I was’

la primer mbo’ehara upépe a-implementa-’akue Guaraní-hablante  
DET first teacher there 1S-implement-PST Guaraní-speaking  
‘the first teacher who implemented the Guaraní-speaking system there’

che a-ha ko’á-gui na-ñe’ê-guasu-i-’akue Guaraní  
1S 1S-go here-ABL NEG-speak-big-NEG-PST Guaraní  
‘when I left from here, I did not speak Guaraní’

a-ha a-je-recibi amo-ite [profesor-de-Guaraní] noventaicuatro  
1S-go 1S-REFL-graduate there-very [Guaraní of teacher] ninety-four  
‘I went there and graduated as a Guaraní teacher, in ninety-four’

o-je-elegi la che escuela [para modalidad Guaraní hablante]  
3-REFL-choose DET 1S school [for the Guaraní-speaking system]  
‘my school was chosen for the Guaraní-speaking system’

ha che la a-encabeza-va [la enseñanza de Guaraní hablante]  
and 1S DEM 1S-head-NMLZ [the Guaraní-speaking education]  
‘and I was leading the Guaraní-speaking education’

oi-ke-pa-ite-voi ko de-unite-pe ajea  
3-enter-CMP-very-well DEM of-one-very-LOC right:INT  
‘everybody entered at the same time, right’

ha a-ñepryru a-mbo’e, a-mbo’e la mitã-nguéra-pe  
and 3-begin 1S-teach 1S-teach DEM child-PL-ACC  
‘and I began to teach, to teach children’

ou hikuái pe hóga-gui guarani-me o-ñe’ê,  
3:come 3:PROG DEM house-ABL Guaraní-LOC 3-speak  
‘who came from home as monolingual Guaraní speakers’
ha mba’éicha-voi piko re-mbo’e-ta chupe-kuéra castellano-pe mba’e and how-well INT 2S-teach-FUT 3.OBJ-PL Spanish-LOC what ‘and how could I teach in Spanish or something’

hóga-gui ou Guaraní ha re-mbo’e chupe-kuéra Guaraní jey house-ABL 3:come Guaraní and 2S-teach 3.OBJ-PL Guaraní again ‘If they speak Guaraní at home and you teach them Guaraní again’

o-veve-pango hikuai o-aprende porā hikuai
3-fly-CMP-EMPH 3.PROG 3-learn good 3.PROG ‘they learn fast and very good’

ha mbeguekatúpe pe castellano re-moïngue re-ho-vo and little.by.little DEM Spanish 2-introduce 2-go-when ‘and little by little you introduce Spanish’

nda-ha’e-i ku de-un-golpe e-j-agarra re-moïngue-se NEG-3.be-NEG DEM of-one-blow 2.IMP-EUPH-catch 2-introduce-want ‘it is not overnight that you introduce’

peteí lengua nda-ha’é-i-va i-mba’è-kaéra ha o-pyta one language NEG-3.be.NEG-NMLZ 3.POSS-thing-PL and 3-stay ‘a language that is not theirs and if so’

hikuai ndo-aprende-ri mba’eve, sin-embargo nde re-mbo’e-ramo 3.PROG NEG-3-learn-NEG nothing however 2 2-teach-if ‘they do not learn anything, however, if you teach them’

chupe-kuéra-voi pe i-lengua-materna pe i-lengua-matérna-pei 3.OBJ-PL-AFF DEM 3.POSS-tongue-mother DEM 3.POSS-tongue-mother-LOC ‘in their own language, in their mother tongue’

re-mbo’e hína re-ho-vo ha mbeguekatu re-moïngue chupe-kuéra 2S-teach 3.PROG 2S-go-when and little.by.little 2-introduce 3.OBJ-PL ‘and little by little you go introducing to the’

peteí segunda-lengua upépe o-aprende porāve o-aprende porā one second.language there 3-learn better 3-learn good ‘a second language, then they learn better, they learn well’
pe segunda lengua ha avei oi-pytyvō o-aprende porāve
DET second-language and also 3-help 3-learn better
‘a second language, and it also helps them learn better’

haguā pe i-primerá-lengua avei ha upēicha a-mbo’e
for DEM 3.POSS-first-language also and thus 1S-teach
‘their first language as well and so I taught’

upépe [seis años] avei upépe a-mba’apo-mi umi mbo’ehara-kuéra-ndi
there [six years] also there 1S-work-MIT DEM teacher-PL-with
‘for six years, I worked with several teachers’

ro-hecha mba’ēicha-pa i-porā añete pe [enseñanza de Guaraní]
1PL.EXCL-see how-INT 3-good certainly DEM [Guaraní teaching]
‘and we see that teaching in Guaraní is really good’

este péa peteĩ [modalida Guaraní hablante] o-guereko-‘akue,
this PRO.DEM one [Guaraní-speaking system] 3-have-PST
‘that was the Guaraní-speaking modality’

pero o-guereko i-ñ-inconveniente ajea,
but 3-have 3.POSS-EUPH-trouble right:INT
‘but it has its own troubles, right’

o-reko la inconveniente o-reko la tropiezo [es por varios factores]
3-have DEM trouble 3-have DEM stumble [because of many factors]
‘it has difficulties, it has stumbles, for many reasons’

porque la [un ejemplo] a-moi-ta peē-me ko’āga, ko’āga
because DEM [one ejemplo] 1S-put-FUT 2PL.ACC now now
‘because, let’s say, you, now, at this moment’

pe ñande educacion ape Paraguay-pe [es inclusiva] he’i mba’e
DEM 1PL.POSS education here Paraguay-LOC [is inclusive] 3:say what
‘our education in Paraguay is, they say, inclusive, something like that’

he’i-se péa [de que en cualquier escuela] i-katu-ma oi-ke
say-want PRO.DEM [that in any school] 3-be.able-already 3-enter
‘what does this mean? It means that you can enter any school’

ya sea sordo, mudo, ciego como un alumno regular normal sin distinción
“be it deaf and dumb, blind, as a regular, normal student, without distinction”
Ecuadorian Quichua
Sample 1

Name: Rafael
Age: 53
Sex: Masculine
Education: Elementary
Work: Peasant
Place: Casco Valenzuela (Imbabura)
Spanish level: compound bilingual

ñuca ca-ni Rafael ñuca Casco Valenzuela-manda ca-ni.
1S be-1S Rafael 1S Casco Valenzuela-ABL be-1S
‘My name is Rafael, I am from Casco Valenzuela’

ñuca chari-ni sincuintires añus-ta cai pascuhua-ta pacta-ni.
1S have-1S fifty-three years-ACC DEM.PROX Easter-PROL reach-1S
‘I will be fifty-three years old in the coming Easter’

trabajá-ni cai empresa-pi-lla-ta mutu-huan masuminos
work-1S DEM.PROX company-LOC-LIM power.saw-INST more.or.less
‘I have been working with the power saw in this company approximately’

ochu huata-ta mutu-huan.
eight year-PROL power.saw-INST
‘for eight years with the power saw.’

masuminos socio-cuna ca-shpa baju-lla gana-naju-rca-nchi
more.or.less member-PL be-GER low-LIM earn-PL-PST-1PL
“as members, we earn relatively few”

pero cunun-ga ya jornal-gu-ta aumenta-shpa cati-n
but now-TOP already wage-DIM-ACC increase-GER continue-3
‘but now the wages are going up’

shina trabaju-shpa cati-naju-pa-nchi
so work-GER continue-PL-HON-1PL
‘so we keep working’
Chapa-huan presidente caura ñuca-pash trabajando cati-rcani
Chapa-INST president when 1S-ADIT work-GER continue-PST-1
‘When C. was president, I was working for him’

chaipa cati-rcani Miguel cati-rcani chay-ura-ca chay-ura
DEM continue-PST Miguel be-PST DEM-hour-TOP DEM-time
‘Miguel came after him, at that time’

nishca-ca ochumil moto-huan-ga docimil-gu gana-c
say-TOP eight.thousand power.saw-INST-TOP twelve.thousand-DIM earn-HAB
‘I earned twelve thousand, working with the power saw’

c-arca-nchi Chapa-huan ca-shpa
be-PST-1PL Chapa-INST be-GER
‘during C’s term’

huarmi-cuna-pa ochumil ca-rca shina ashata puri-naju-rcana
woman-PL-BEN eight.thousand be-PST so few walk-PL-PST
‘women earned eight thousand, that little, we went’

tanda-naju-shpa-imanca-rca-nchi trabajando c-arca-nchi
gather-RECP-GER-INDEF or by line-INDEF work-HAB be-PST-1P
‘collecting money, or we worked per piece of land’

trabajando callari-rca-nchilentejas pamba-pi
work-INF begin-PST-1PL lentil:PL cultivated.field-LOC
‘we began to work in a piece of land cultivated with lentils’

mutu-cuna-imaprestamu llucshi-shpa
power.saw-PL-INDEF loan go.out-GER
‘after we got a loan, we bought several power saws’

empresa-man postecuna-taintriga-ngapac
company-DAT log-PL-ACC deliver-PURP
‘to deliver logs to the company’

chai cullqui-cuna-huan mutu-cuna-imarandi-shpa
DEM money-PL-INST power.saw-PL-INDEF buy-GER
‘we bought several power saws with the money’
we began to work and delivered logs’

we continued to pay these debts’

‘the debts were paid off’

‘when Alberto was appointed’

‘once they fired Alberto, they appointed Gringo’

‘so I used to work with the power saw in the past’

‘afterwards I was working in this landholding’

‘afterwards I went to work in the company’

‘now we keep meeting in the cultivated fields’

‘some of us used to work in pieces of land of different sizes’
before president-PL-INST-TOP [that which line reaches] product-PL-ACC-ADIT
‘with the former presidents, we worked per piece of land, also per product’

‘Two members of the family working in several pieces of land’

‘in the pieces of land they have, as for products, we did not work for sure’

‘we hardly gather one pound, two pounds’

‘and we had to stand really bad times’

‘some had permanent work’

‘like their own piece of land they live on’

‘then, when the last president was appointed, the groupd were finally formed’

‘the pieces of land were divided equally’
‘we agreed all with that’

‘if they were uneven, we did not agree’

‘we have got along well with Casco and Topo in particular’

‘we continued to have problems with Angla’

‘we argue about the divisions, if there is some issue’

‘there are claims, and we still have problems’

‘because this president formed the groups properly’

‘the groups have not been dissolved’

‘the collective work has not stopped’

‘today, the lots of land some people’
usha-c tarpu-shca [con trigu] cebada-ima huaquin vicia-cuna-ima
be.able-AG sow-PRF [with wheat] barley-some some peas-PL-some
‘cultivate them with wheat, barley, some cultivate them with peas’

ultimamente cuan-chi Cascu lado kida-naju-chi proyecto-huan
lately be-1PL Casco lado remain-RECP-1PL project-INST
‘lately we from Casco keep on working for the project’

trabaja-shpa riku-gru-nchi cai huata-gu-cuna imashin-mi cati-nchi
work-GER see-INCH-1PL DEM year-DIM-PL as-FOC continue-1PL
‘we are going to see how to continue with the project in the following years’

proyecto-huan proyecto-huan tarpu-shca-nchi asha vicia, cebada trigu
project-INST project-INST sow-PRF-1PL few vetch barley wheat
‘for the project we have cultivated a bit of peas, barley, and wheat’

shuc lote siri-ju-n papa-pac alfalfa-cuna risto cuyera-gu-cuna-pash,
one lot be-PROG-3 potatoe-GEN lucerne-PL rest cuyera-DIM-PL-ADIT
‘one lot has potatoe and lucerne and the rest is guinea-pig rearing’

planta nativa-cuna ashtahuan mirachi-ngapac plantacion cati-ngapac
plant native-PL more produce-PURP plantación begin-PURP
‘native plants grow better, they are better for cultivation’

shina catina-ju-nchi bosqui-pi division-ia [no-se]
as begin-DUR-1PL forest-LOC division-ACC [I don’t know]
‘so we keep cultivating them, about the division of the forest, I don’t know’

Casco lado y Topo na diacuerdo ca-nchi-sha-lia-yaarin
Casco lado and Topo NEG de.acuerdo be-1PL.FUT.LIM-EMPH
‘people from Casco and Topo do not agree with them’

divienda rura-shpa ashta llaquica-gru-nchi
division do-GER much suffer-INCH-1PL
‘if we divide, we are going to have many problems’

huaquin parti-cuna-ca planada
some part-PL-TOP plain
‘some parts are plain’
some part-PL-TOP hillside rock-PL-some seem-3
'other parts are hillsides, they look rocky'

DEM-PL-LOC much problem drag-INCH-1PL-EMPH Intj DEM-ACC
'in those cases we will certainly have problems'

be-1PL engineer-PL-INST once.and.for.all NEG divide-GER
'we agree with the engineers, if we do not divide now'

so forest-ACC-TOP sell-GER maintain-GER money-FOC gather-GER
'we keep the forest to sell it afterwards and we save money'

effort-ACC do-GER-DUB good-ALL say-PL-PRF-1P divide-GER
'if we make an effort, then the arguments will be for good'

now divide-1PL-FUT say-PL-3 division-TOP NEG much good feel-3
'if we divide now, the division will not be good for all'

forest hillside-PL rock-PL hillside-PL
'the wood hillsides, the rocky sides'

as-INT peel.off-FUT NEG safe have-1PL income-PL be.missing-1PL
'how will they be cleared, we will not have a warranty, an income will be missing’

so-ACC-FOC problem-ACC see-PL-1PL-still
‘thus problems will remain’

DEM plain pasture-LOC much problema-LIM be-3-TOP
‘this plain pasture land is a big problem’
because wood material board-ACC do-PURP-TOP 'because the wood to make boards'

'it turned out useless'

'now we make little logs to sell'

'but the material do no go out'

'cars do not come this far because the roads are spoiled by the rains, right?'

'and the material piles up'

'because cars do not come and the produce cannot go out'

'of course there is more work for people'

'but suppose the material cannot go out'

'then money seems to be missing and we have problems'
Name: Norma
Age: 24
Sex: Femenine
Education: Tertiary
Work: Development worker
Place: Gradas Chico (Bolivar)
Spanish level: coordinate bilingual

Cai ñuca causa-na comunidad Gradas Chico-manta-ca
DEM 1S live-INF community Gradas Chico-ABL-TOP
‘This community of Gradas Chico where I live’

historia-ta mana yacha-pa-ni-chu sino comunidad Gradas ca-shca-manta
history-ACC not know-HON-1S-NEG but community Gradas be-PTCP-ABL
‘I don’t know its history but the history of the Gradas community’

ñuca yuya-ni punda ñuca ñaupa-cuna abuelito-cuna
1S think-1S old 1S.POSS before-PL grandparent-PL
‘I think, in the past our forebears, our grandparents’

parla-shpa chai Gradas urani huaiçu huichi-cuna-mi Gradas
talk-GER DEM Gradas down rift hill-PL-FOC Gradas
‘they used to tell that Gradas was located down on the slope of the ravine’

Grada-cuna ca-shca nin,
Grada-PL be-PRF EVID
‘and there was steps, they say’

chai-manta comunidad Gradas-ta shuti-chi-shca
DEM-ABL community Gradas-ACC name-CAUS-PRF
‘hence they named the community Gradas’

pero comunidad Gradas Chico ima-manta ca-shca-ta
but community Gradas Chico what-ABL be-PRF-ACC
‘but where Gradas Chico came’
I do not know, I think, maybe, for the same reason.

They named the community Gradas Chico, I think.

In the past people used to tell, our fathers.

and grandparents used to tell that Gradas

was a neighbor to the nearby community.

of Gradas Grande, the community up the hill.

down this side, there was like a community boundary.

hence the community we live now in.

is the community of Gradas Chico, I think.

How were the first years of your life?
‘well, my early years, I was born in this community’

‘Gradas Chico, and in this community’

‘I grew up afterwards’

‘I have preserved my way of life, my Indian culture’

‘since I was a child’

‘and my language, my way of speaking’

‘I live speaking in Quichua’

‘does your parents live?’

‘I have living parents, I have a mother’

‘and I have a father, I have one sister’
ishcai churi-ta chari-ni.
two son-ACC have-1S
‘I have two sons’

Canca yacha-shca-ngui-chu huahuahuasi-man
top know-PRF-2-INT nursery-ALL
yachanawasi-cuna-man ri-shca-chu
school-PL-ALL go-PRF-INT
‘Did you go to kindergarten and school?’

Bueno ñuca yachanahuasi-man ri-shca-ni comunidad Gradas Grande-pi
well 1S school-ALL go-PRF-1S community Gradas Grande-LOC
‘Yes, I went to school, in the community of Gradas Grande’

escuela-ta tucuchi-shca-ni y chashna-lla-tac colegio-ta
school-ACC finish-PRF-1S and so-LIM-EMP high.school-ACC
‘I finished school, and the highschool’

tucuchi-shca-ni Guaranda Colegio Instituto Técnico Guaranda-pi
finish-PRF-1S Guaranda highschool Instituto Técnico Guaranda-LOC
‘I finished in Guaranda, at the Instituto Técnico of Guaranda’

y chashna-lla-tac cunan caipi estudia-cu-ni
and so-LIM-EMP today here study-PROG-1S
‘and thus now I am studying here’

Universidad Estatal de Bolivar ultimo huata-pi ca-ni.
State University of Bolivar last year-LOC be-1S
‘at Universidad Estatal de Bolivar, I am in the last year’

Shina-shpa-ca chai yacha-shca-huan-ca ima-ta yuya-ngui
so-GER-TOP DEM know-PTCP-INST-TOP what-INT thing-2S
‘With that knowledge, what do you think?’

mai-pi-tac llanca-ngui chai yuyai-cuna-huan pactari-shpa?
where-LOC-INT work-2S DEM thought-PL-INST get-GER
‘where can you get a job with that knowledge?’

bueno ñuca-ca cai yachai-cuna-huan-ca
well 1S-TOP DEM knowledge-PL-TOP
‘well, I with this knowledge’
Appendices

"Punta mamita-cuna. Mana ashca preparación-ta. Yacha-shca-manta. "older mother. DIM(Sp)-PL. Not much education-ACC. Know-PTCP-ABL. 'because women did not have much education in the past'."

"Huarmi-cuna cashpapish. Woman-PL. Although."

"Mana shuc abuelo-ta chari-shca ñaupa mamita-cuna. Not one grandfather-ACC. Have-PTCP before mother. DIM(Sp). 'They did not have parents who care for them'"

"Ñucañchic cunun ya chai-cuna-huan-ca. 1PL. Today. Already. DEM-PL-INST-TOP. 'today, with that knowledge'."

"Huarmi-cuna-pish ashtahuan ñaupac-man rima-shca-manta. Woman-PL-ADIT. More. Front-ALL. Speak-PTCP-ABL. 'women too can make progress, as they say'"

"Ñuca-ca cai asha yachai-cuna-ta. 1S-TOP. DEM. Few. Knowledge-PL-ACC. 'I do not know much'"

"Ñuca shuctac compañeras-cuna-wan comparti-na yuyai-ta muna-shca-ni. 1S. One-EMPH. Partners-PL-INST. Share-INF. Thought-ACC. Want-PRF-1S. 'I wanted to share my thought with my fellow women'"

"Ñuca pudi-shca-ta sociedad sirvi-na yuyai-ta chari-pash ca-ni. 1S. Able-PTCP-ACC. Society. Serve-INF. Thought-ACC. Have-ADIT. Be-1S. 'It is also my idea to serve the society in what I can'"

"Y chashna ayuda-shpa catina-ta muna-pa-ni. And. So. Help-GER. Follow-ACC. Want-HON-1S. 'and thus I want to continue helping'"

"Ñuca chai-ta muna-pa-ni tucui tucui-cuna-huan pacta. 1S. DEM-ACC. Want-HON-1S. All. All-PL-INST. Equally. 'I want it that way, everybody'"
tandanacu-shpa ima tandanacui-cuna-pi organización-cuna-pi
gather-GER what meeting-PL-LOC organization-PL-LOC
‘gathering from meetings and organizations’

trabaja-shpa tucui tanda-lla ashtahuan ſaupac-man ri-na ca-nchic
work-GER all bread-LIM more front-ALL go-INF be-1PL
‘to work together, and all of us make progress’

ñucanchic pueblos-indígenas-cuna-pish ashtahuan fuerza-ta
1PL.POSS peoples-indigenous-PL-ADIT more strength-ACC
‘our Indian peoples too may become stronger’

api-shca ſaupac-man tucui-cuna rina-ta chai-ta,
get-PRF front-ALL all-PL go-INF-PROL DEM-ACC
‘and make progress, all of us’

chai yayai-huan chai-ta muna-shpa puri-ni, yupai-cha-ni
DEM thought-INST DEM-ACC want-GER walk-1S think-DUB-1S
‘I continue with this idea in mind’

Cai aillu llacta-pac-ca ima-tac ca-ngui?
DEM family community-BEN-TOP what-INT be-2S
‘what is your role in this community?’

Ñuca cai aillu llacta-pi-ca grupo-de-mujeres ni-shca-ta
1S DEM family community-LOC-TOP women’s.group say-PTCP-ACC
‘In this community, the so-called grupo de mujeres’

chai grupo-ta apa-ni, shina-lla-tac huahua-cuna-pac
DEM group-ACC lead-1S so-LIM-EMPH child-PL-BEN
‘this group I lead, also for children’

chai [centro educativo] ni-shca-ta apa-rca-ni
DEM [education center] say-PTCP-ACC lead-PST-1S
‘I used to led the so-called education center’

y chai-huan caica-man-ca jati-cu-shca-nchic
and DEM-INST DEM-ALL-TOP follow-PROG-PRF-1PL
‘and we continued with this center until now’
ashtahuan ñaupac-man jatina-ta
more front-ALL follow-PROL
‘making progress’

cai grupo-de-mujeres-cuna-huan-pish muna-shca-ni
DEM women’s group-PL-INST-ADIT want-PRF-1S
‘I want to do the same with the grupo de mujeres’

actualmente ñuca cargu-pi trabaja-cu-shca-ni
presently 1S post-LOC work-DUR-PRF-1S
‘at present I work in my post’

[como vicepresidenta de junta parroquial]
[as vicepresident of the parish council]

[en representación] ñuca parroquia-manta ri-shca-ni,
[as a representative] 1S parish-ABL go-PRF-1S
‘I am the representative of my parish’

chaimanta chai-cuna-huan
therefore DEM-PL-INST
‘therefore, with them’

[siete comunidades pertenecientes a la parroquia San Simon] tandari-shpa
[seven communities belonging to the Parish of San Simon] gather-GER
‘gathering the seven communities belonging to the parish of San Simon’

cunan asha presupuesto-cuna chari-shca-manta
today few budget-PL-ACC have-PTCP-ABL
‘as now we have only a small budget’

asha obra-cuna-ta rura-shpa chai comunidad-cuna-huan trabaja-cu-shca-ni
few work-PL-ACC do-GER DEM community-PL-INST work-PRG-PRF-1S
‘we only make few works with these communities’

chashna-lla-tac cai parroquia-pi-ca
so-LIM-EMPH DEM parish-LOC-TOP
‘nevertheless, in this parish’
mestizos y indígena-cuna ca-shca-manta
mestizo:PL(Sp) and Indian-PL be-PTCP-ABL
‘because mestizos and Indians live here’

chai ishecai grupos-cuna-huan tandanacu-shpa trabajah-shpa
DEM two group-PL-INST gather-GER work-GER
‘gathering these two groups and working together

ashca ñaupac-man jaticu-shca-nchic.
much-ACC front-ALL follow-PRF-1PL
‘we have made a lot of progress.’
Name: Pedro
Age: 53
Sex: Masculine
Education: Elementary
Work: peasant
Place: Santiago Mezquititlán
Spanish level: incipient bilingual

Before LOC 3, IMPF build DEF.PL tepetate DEF.PL people and 3, IMPF
‘In the past people build their houses with tepetate and’

Knead DEF.S mud 3, IMPF put DEF.PL tepetate 3, IMPF make-alone DIM house
‘mixed mud, put tepetate and so they built their own houses’

Those who made tiles, kneaded mud
‘baked it, and then wove and wove’

Put DEF.PL wood DEF.PL rolling stone and DEF.PL band and be
‘put wood, rolling stones and bands, and there’

Put the tiles to cover their houses’

Nowadays, people buy blocks’

Buy DEF.PL lime make DEF.S mixture and make DEF.S wall
‘buy lime, make a mixture and build walls’
gem’bya ne da ya da kwadi ne da gas-ar
then and 3.FUT DEF.PL 3.FUT finish and 3.FUT set-DEF.S
‘and then finish the work and set’

da ṣet’ya nu-ya kastiyo ja ya ts’āt’i
3.FUT burry-DEF.PL DEM-PROX.PL tower be DEF.PL corner
‘bury the towers in each corner’

ne da kola ko-r semento
and 3.FUT glue with-DEF.S cement
‘and glue them with cement’

the bariya gem’bya da gau ‘nar trabe
carry rod then 3.FUT set INDEF.S crossbeam
‘carry rods, put a crossbeam above’

gem’bya ja da gom’-ña nu-ya tsī laminā,
then be 3.FUT cover:3.EMPH DEM-PROX.PL DIM sheet
‘then cover with small sheets’

laminā-de-adbesto nu-ya t’axu laminā mās-byen.
sheet.of.asbestos DEM-PROX.PL white sheet rather
‘sheets of asbestos, rather white sheets’

(...)

Ar dāngo t’g’-wa ja-r lmini ar kinse,
DEF.S festival celebrate-LOC.PROX be-DEF.S community DEF.S fifteen
‘The festival we celebrate in the community on the fifteenth’

kinse ar māyo ar dāngo Nsansidro di embu-he,
fifteen DEF.S May DEF.S festival San.Isidro PRS call-PL.EXCL
‘the fifteenth of May, call it the Festival of San Isidro’

jaw-ar dāngo tso ya nxint’i nxint’i nuya nxint’i
inside-DEF.S festival come DEF.PL game game DEM.PROX.PL game
‘there come the games, these games’
nu-’u unga-r bwelta nuya txi fani,
DEM-3.DIST.PL give-DEF.S turn DEM.PROX-PL DIM horse
ya rweda-de-fortunä
DEF.PL wheel.of.fortune
‘those with little horses turning around, the wheels of fortune’

ya dätä nxint’i ge tso-’u huts’i xingu bäsı
DEF.PL be.big game that come-3.DIST.PL sit.on many child
‘the big games in which children come and sit on’

nä’ä ’nar jgya bi ’wagi bí ts’g
which INDEF.S year 3.PST fall 3.PST break
nä-r rweda-de-fortunä
DEM-DEF.S wheel.of.fortune
‘one year the wheel of fortune fell and broke’

nu-r nuya ho mi nxint’u nuya txi kahayo
LOC-DEF.S DEM.PROX-PL kill 3.IMPF game DEM.PROX-PL DIM horse
‘then the game killed the little horses’

bí da ya txi bäsı, pe hinti
3.PST fall DEF.PL DIM child but nothing
bi him-bi du
3.PST NEG-3.PST dead
‘the children fell down but nobody was killed’

hinti bi du hondu ’nar txi pale
nothing 3.PST dead only INDEF.S DIM godfather
‘nobody died, just a dear godfather’

zä bí du’hya ndi emfhe m-ar txi Pantxo,
maybe 3.PST already 1.PRS name 3.IMPF-DEF.S DIM Pancho
‘who probably is dead by now and whom I call Panchi to

bí ze kwu ’nar txi nsa’ng.
3.PST cut.off INDEF.S DIM finger
‘he got his finger broken’

(...)
'Nar pa xi t'otu ar te te?
INDEF.S day 3.PRF make DEF.S sorcery
‘Has someone ever done sorcery to you?’

Dige-ku-ga hinti t'otu-ga ar te te,
about-1.OBJ-1.EMPH nothing make-1.EMPH DEF.S sorcery
‘As for that, nobody has ever done any sorcery to me’

hinti ja-ku-ga, xi-ku-ga,
nothing make-1.OBJ-1.EMPH tell-1.OBJ-1.EMPH
‘they have done nothing to me’

'ra ya txi jwädä 'meg'o-'bu,
INDEF.PL DIM brother before-LOC
‘some dear brothers before’

txi ermâno 'meg'o-'bu enä
DIM brother before-LOC say
mi 'bui xingu ya txi jâ'i
3.IMPF be many DEF.PL DIM people
‘some brothers told me that in the past there were many people’

mi ho yâ txi ñohu zä mi ngo zä mi 'bui
3.IMPF kill 3.POSS.PL DIM friend maybe 3.IMPF as maybe 3.IMPF be
‘who killed their friends perhaps there was something like that in the past’

pe nu'bya hinti ngo hinti di nu-he-'bya
but now nothing as nothing 1.PRS see-PL.EXCL-ACT
‘but nowadays we don’t see anything like that’

hinti di hinti di handu-he-'bya,
nothing 1.PRS nothing 1.PRS see-PL.EXCL-ACT
‘nothing, nothing like that is seen nowadays’

ho mä enä 'bui enä ya zönä,
only DEM-3.DIST.PL say be say DEF.PL vampire
‘it’s just that they say there are vampires’

ts'ü'-ya txi bâsi,
suck-DEF.PL DIM child
“who suck little children”
they go out in the night, but they say they are our friends’

“it is because they are different people”

“it is like if the suckers had two hearts”

“therefore, they suck blood”

‘from the little children’

‘Can you tell me something about the disease’

‘of the cattle in the year nineteen’

‘forty-seven and and why the authorities’

‘deceived people?’
In forty-seven the mestizo came

and killed the cattle

when Miguel Alemán became president

an slaughterer who killed

who ordered that the cattle be killed

and they paid for the cattle and they buried them

they dug a hole and then the machines came

dug holes and bury them [the cattle]

they say they gave one big bull

ten people cut off [the bull], everything, his legs, his skin
_appendices

all-DEF.S trunk all 3.IMPF bury only pure meat DEF.S 'his trunk, all they buried, only pure meat'

meat clean 3.IMPF bring 3.IMPF cut.off ten DEF.PL DIM person 'they brought just meat, it was ten people who cut it off'

they gave and 3.IMPF pay NEG know-1.EMPH how.much 'they gave and paid, I do not know how much'

3.IMPF give and 3.IMPF pay NEG know-1.EMPH how.much 'they gave and paid, I do not know how much'

how.much they paid at that time, how much they buried'

but always now 3.IMPF bury or NEG-EMPH God-knows 'but always, now, only God knows if they buried or not'

DEM-TEMP forty-seven when DEF.S Alemán 'that was in the forty-seven when Alemán was president'

he killed the cattle, he ordered that'
Appendices

Queretaro Otomí
Sample II

Name: María
Age: 18
Sex: Femenine
Education: secondary
Work: services
Place: Toliman
Spanish level: compound bilingual

Hó, nuga dá pōdį ge nō Tilya Rey bi dingi bojō
yes PRO.1S 1.PST know that DEM Tilya Reyes 3.PST find money
‘Yes, I know that Tilya Reyes found money’

'na bi dingi 'na tsi surru
INDEF 3.PST find some DIM hide-bag
nō mi oxi ar jōdo
DEM 3.IMPF lie.on DEF.S fence
‘someone found a hide bag on a fence’

lwego bi nexthi ba xipa-bi Tyofi Rey 'na
then 3.PST run 3.PST say-BEN Tyofi Rey INDEF
a bi ‘ñem-babi
and 3.PST leave-BEN
‘he run and told Tyofi Reyes and he left it with him’

a hin-go rá meği ha nō bi 'ñenō ge hō
and NEG-COP 3.POSS money and DEM 3.PST say that yes
‘and that the money was not his and he said yes’

'na lwego bi hōm-babi a nu’bya nō tsi jō'i
INDEF then 3.PST take.away-BEN and now DEM DIM person
‘and then he took it away from him and now the person’

bi go sin-nada a hinte bi um-bi nixi
3.PST remain without-nothing and NEG 3.PST give-BEN not.even
‘remained without a penny, he did not even give him’
'nar kut'a a nu-ya tsi jö'i todabya 'buı
INDEF.S fifty.cent.coin and DEM.PROX-PL DIM person still live
'a fifty-cent coin, those people are still alive'

nö Tyofi Rey ko Tilya Rey.
DEM Tyofi Reyes with Tilya Reyes.
'Tyofi Reyes and Tilya Reyes'

Esté es-ke nuwa gelni to ya nxutsi
uh it.is.that here there REL DEF.PL girl
'Uh, it is like, here, there, as for girls, their parents come'

bi e rá dada ra nönö
3.PRS come 3.POSS father 3.POSS mother
pa a nö nxutsi asta hña-ki
for ask DEM girl until 3.times
'their parents come to ask the girl in marriage up to three times'

pa da t'em-bi hä a lwego dege bya da este
for FUT say-BEN yes and then just now 3.FUT uh
'for 'yes' to be said and at that moment'

da gö ya thuhme nöö metsi
3.FUT make DEF.PL bread DEM.S boy
ko rá dada ko rá nönö
with 3.POSS father with 3.POSS mother
'the boy makes bread with his father and mother'

da t'um-bi nö nxutsi, lwego ya da t'umbi 'na
3.FUT give-BEN DEM girl then already FUT give-BEN INDEF
'and he gives to the girl some'

tsí plaso, da t'umbi nö plazo,
DIM deadline 3.FUT give-BEN DEM deadline
‘deadline, he gives her the deadline’

lwego da nhöti nö tsi nö nxutsi
then 3.FUT marry DEM DIM DIM girl
ko nö metsi
with DEM boy
‘and then the girl marry with the boy’
ya lwego da ma pa da 'mg-wi rá dada
already then 3.FUT go for 3.FUT live-DUAL 3.POSS father
‘then she goes to live with her husband’s father’

nö rá rá tsa rá ka,
DEM 3.POSS 3.POSS mother.in.law 3.POSS father.in.law
ko rá döme
with 3.POSS husband
‘and her husband’s mother, her father, and her husband’

da 'mg-wi gatho 'mgyi nat'us nö ha rá ngú.
FUT live-DUAL all live together DEM in 3.POSS house
‘all of them live together at home’

(...)

Este ja tsi ndunthi ya fyesta pero kasi tsi t'ulo,
uh EXT DIM many DEF.PL festival but almost DIM small
‘Uh, there are many festivals, but almost all of them are small’

porke lwego no mös ar döta ge nö rá rá
because then only DEF.S great COP DEM 3.POSS 3.POSS
‘because the greatest of all’

mgti tsi dada 'Ñenxe,
property DIM father Saint.Michael
porke nö di füti desde
because DEM 3.PRS begin since
‘it is property of Saint Michael, because that festival begins since’

desde julyo ne este ya nei ne lwego nö ya ndö
since July and uh DEF.S dancer and then DEM DEF.PL sponsor
‘since July and eh there are dancers and then the sponsors’

xa di ungi di ja ya dejü,
EMPH 3.PRS give 3.PRS EXT DEF.PL chocolate
ya hñuni, ya garbanso
DEF.PL food DEF.PL chick-pea
‘give chocolate, food, chick-peas’
‘chocolate, bread and after that’

‘until the twelfth, the second day of October’

‘there are flowers given by more sponsors’

‘for the current year, and they will give more’

‘and there are more dancers’

‘Yes, there are up to six teams [of dancers], boys and girls’

‘six principal dancers from San Miguel’

‘then people are sent from Molino, Higueras’
Higueras, me Loma,
Higueras native Loma
‘Higueras, Loma’

a nupya ya jö'i-wa ngu xa ti anima
and now DEF.PL people-here as.if EMPH 3.PRS cheer up
‘and people from here, it’s like there is spirit’

ngu xa ke ja ya johya entre-mös
as.if EMPH that EXT DEF.PL happy between-more
‘it’s like there is happiness among everybody’

ngu xa ke ja ya nts’i,
as if EMPH that EXT DEF.PL food
‘it is like there is food’

ya bolunta xa ti pongi tat’i jeya ja ya mponi,
DEF.PL contribution EMPH 3.PRS exchange each year EXT DEF.PL exchange
‘people exchange their contributions every year, there are exchanges’

mi dura mi dura kat’a goho njeya a nupya hi’na
3.IMPF last 3.IMPF last five four year and now NEG
‘in the past it lasted five or four months a year, but not now’

tat’i jeya di mpongi tsi nei.
each year 3.PRS exchange DIM dancer
‘every year dancers change’

(...)

Hö, ‘naki bi fox-kagi ‘raya sösi
yes once 3.PST grow-1.OBJ INDEF.PL pimple
‘Yes, once I got some pimples and’

ne dá ma ha doktor pe nixi te bi ja-kagi
and 1.PST go to doctor but not which 3.PST cure-1.OBJ
‘and I went to the doctor but he did not cure me’

a mejor dá tsöho dá ma ’na a ’na tsi jö'i
and better 1.PST arrive 1.PST go one and one DIM people
‘and I rather decided to go to someone’
pa bi thu bi du-gagi bi xa pi du-gagi
for 3.PST clean 3.PST clean-1.OBJ 3.PST bathe 3.PST clean-1.OBJ
‘to have a cleanse, and he cleansed me, he bathed me, he cleaned me’

ko tsi xöça ne bi ‘ñen-gagi ga pengi xudi,
with DIM enebro and PST tell-1.OBJ 1.FUT return tomorrow
‘with enebro and he told me to come back the next morning’

a dá pengi a ya lwego ya tsi ‘ramats’u dá hogi.
and 1.PST return and already then already DIM little.by.little 1.PST recover
‘and I came back and then already little by little I got better.’
## Speakers

### Ecuadorian Quichua

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Age Groups: 1 = 0-12; 2 = 13-18; 3 = 19-30; 4 = 31-50; 5 = 51

Education level: 1 = 0 years; 2 = 1-3 years; 3 = 3-6 years; 4 = 7-10 years; 5 = 10 years

Bilingualism level: 1=Incipient Q/Sp; 2=Incipient Sp/Q; 3=Compound I Q/Sp; 4=Compound I Sp/Q; 5=Compound II Q/Sp; 6=Compound II Sp/Q; 7=Coordinate
### Paraguayan Guaraní

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Age Groups: 1 = 0-12; 2 = 13-18; 3 = 19-30; 4 = 31-50; 5 = 51

Education level: 1 = 0 years; 2 = 1-3 years; 3 = 3-6 years; 4 = 7-10 years; 5 = 10 years

Bilingualism level: 1=Incipient Q/Sp; 2=Incipient Sp/Q; 3=Compound I Q/Sp; 4=Compound I Sp/Q; 5=Compound II Q/Sp; 6=Compound II Sp/Q; 7=Coordinate

The calculation of the level of bilingualism is not based on the analysis of Spanish texts produced by the speakers but on their answers to the sociolinguistic questionnaire applied by Hekking (1995: 215-219). Each answer was assigned a discrete value and the results were tabulated according to the parameters on the last column. When no data were available for this calculation, n.a. is given.
## CHI-SQUARE TABLES

### TABLE 10.23: GENERAL DISTRIBUTION OF CODESWITCHING PER DIALECT OR SOCIOLECT

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Factors: 0.139 0.028 0.532 0.196 0.027 0.078

degrees of freedom 5

Chi2

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SIGNIFICANT at the 0.5 % level

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TABLE 10.24: DISTRIBUTION OF PARTS OF SPEECH PER DIALECT OR SOCIOLECT

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Factors 0.307 0.031 0.201 0.110 0.193 0.158

degrees of freedom 15

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### TABLE 10.26 DISTRIBUTION OF SPANISH BORROWINGS PER LEVEL OF BILINGUALISM

(tokens)

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Factors: 0.297, 0.275, 0.427

degrees of freedom 2

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Chi2: Source 18.2%, 22.5%, 20.1%, 26.8%, 30.7%, 42.5%; Target 81.8%, 77.5%, 79.9%, 30.5%, 26.7%, 42.8%; AV.WGT 0.82, 0.78, 0.80
TABLE 10.26 DISTRIBUTION OF SPANISH BORROWINGS PER LEVEL OF BILINGUALISM (types)

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Factors 0.359 0.304 0.337

degrees of freedom 2

Chi2

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<th>TOTAL</th>
</tr>
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<tbody>
<tr>
<td>SOURCE</td>
<td>49.78</td>
<td>160.57</td>
<td>373.46</td>
<td>583.80</td>
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<tr>
<td>TARGET</td>
<td>8.60</td>
<td>27.75</td>
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<td>TOTAL</td>
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<td>188.32</td>
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SIGNIFICANT at the 0.5 % level

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### TABLE 10.27: GENERAL DISTRIBUTION OF CODESWITCHING PER LEVEL OF BILINGUALISM

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<tr>
<td>SWITCHES</td>
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<td>97</td>
<td>249</td>
<td>416</td>
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<tr>
<td>TOKENS</td>
<td>249</td>
<td>373</td>
<td>727</td>
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<td>TOTAL</td>
<td>319</td>
<td>470</td>
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<td>1765</td>
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Factors 0.181 0.266 0.553

Degrees of freedom 2

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</thead>
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<tr>
<td>TOKENS</td>
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<td>0.53</td>
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<td>2.24</td>
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Not significant at the 0.5 % level

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</tr>
</thead>
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<td>25.5%</td>
</tr>
<tr>
<td>TOKENS</td>
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<td>23.3%</td>
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</tr>
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<td>AV.WGT</td>
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AV.WGT 0.78 0.79 0.74
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<td>150</td>
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<td>1816</td>
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Factors    0.692  0.207  0.092  0.009

degrees of freedom 6

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SIGNIFICANT at the 0.5 % level
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<th>MADV</th>
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</thead>
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<tr>
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</tr>
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<td>74.9%</td>
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<tr>
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<tr>
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<td>21.4%</td>
<td>8.8%</td>
</tr>
<tr>
<td>COORDINATE</td>
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<td>41.6%</td>
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<tr>
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<td>64.6%</td>
<td>23.9%</td>
<td>10.1%</td>
</tr>
<tr>
<td>AV. WGT</td>
<td>1.00</td>
<td>1.17</td>
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</table>
### TABLE 10.28: LOANWORDS PER PARTS OF SPEECH AND LEVEL OF BILINGUALISM (types)

<table>
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<td>390</td>
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Factors: 0.657 0.188 0.142 0.013

Significant at the 0.5 % level

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<td>4.51</td>
<td>9.13</td>
<td>39.46</td>
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</table>

Significant at the 0.5% level
<table>
<thead>
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<th>MADV</th>
</tr>
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<tr>
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<td>24.3%</td>
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<td>8.3%</td>
</tr>
<tr>
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<td>0.3%</td>
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<tr>
<td>COMPOUND</td>
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<td>41.0%</td>
<td>44.4%</td>
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<tr>
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<td>16.1%</td>
<td>1.6%</td>
</tr>
<tr>
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</tr>
<tr>
<td>AV. WGT</td>
<td>0.96</td>
<td>1.16</td>
<td>1.04</td>
<td>1.39</td>
</tr>
</tbody>
</table>
Summary

The present study deals with linguistic borrowing in Latin America from the perspective of typology and sociolinguistics. It is based on an extensive corpus of spontaneous speech collected in Ecuador, Paraguay and Mexico. The goal of this study is to identify cross-linguistic regularities in borrowing. The recipient languages selected for analysis are Ecuadorian Quechua, Paraguayan Guaraní and Mexican Otomí. They are all different in their typological profile but similar in their contact with Spanish, the donor language. Accordingly, differences in the outcomes of borrowing are ascribed to typological differences while similarities in the outcomes are explained by means of analogous contact situations. The assumption is that the comparison of borrowing tendencies in typologically different languages sheds light on how linguistic structure influences the outcomes of contact and the extent of such influence vis-à-vis nonlinguistic factors.

The book consists of three parts. The first part is theoretical as it deals with the conceptual foundations for the analysis of linguistic borrowing and develops a causation model of contact-induced language change, with linguistic and nonlinguistic causes interacting with each other at different levels. The first part provides an ample discussion of parts of speech, borrowability and morphological typology and presents the research program of the investigation.

The second part is descriptive in nature as it accounts for the donor language and the recipient languages in terms of their historical development, sociolinguistic status, dialectal variation and typology. It deals with the intensity and duration of contact in each situation and the expected degree of influence between the languages involved. The sociolinguistic characterization of the recipient languages in terms of their diglossic position and the societal levels of bilingualism is an indication of the pressure exerted by the donor language on the recipient languages. Finally, the classification of the languages in terms of parts of speech, morphological type, dialectal variation and other linguistic features is the point of departure for the analysis of borrowing types. The description of the languages in the second part results in specific predictions about the borrowing behavior of each language.

The third part represents the analytic core of the book. It elaborates on the findings from the analysis of corpora and compares these findings to the predictions for each language so as to test the validity of the borrowing hypotheses. Lexical and grammatical borrowings are addressed separately in terms of their contribution to overall borrowing, their morpho-phonological adaptation to the recipient language, and the use of Spanish borrowings. The use of borrowings is tested for dialects and sociolects in order to determine the influence of dialectal variation and bilingualism as factors modeling the borrowing behavior of languages. The findings of lexical and grammatical borrowing are evaluated in terms of the changes they have led to in the typology of the borrowing languages.
The investigation points out the interplay of linguistic and nonlinguistic factors in the modeling of borrowing. The distribution of borrowings in any given language cannot be explained by either type of factor. The interplay of factors at different levels is shown by the dynamic nature of the causation model proposed for the explanation of contact-induced changes. On the other hand, while linguistic constraints can be overridden by nonlinguistic factors, the outcomes of borrowing are determined in principle by the structure of the participating languages. Not everything goes in linguistic borrowing: structural restrictions in the form of basic typological parameters set the limits of language mixing. In general, these parameters are resistant to change in normal and contact situations, and they have been largely preserved in the recipient languages under scrutiny after hundreds of years of contact with Spanish, even though changes are attested in less crucial typological features.

Nonlinguistic and linguistic causes interplay in such a way that the pressure exerted by the donor language on account of the hegemonic position of its speakers may induce structural changes in the recipient language, but these changes are co-determined by the latter’s linguistic system, the level of societal and individual bilingualism, and the attitude of speakers towards language mixing. In any case, linguistic borrowing is an adaptation to discursive and communicative needs imposed by the dominant language, particularly in multicultural and multilingual contexts. In this perspective, the Amerindian languages studied here are survivors of a long history of intense contact because they have been flexible enough to adapt to the new socio-communicative settings of the Spanish-speaking colonial society.

The findings of this study also demonstrate that scales of borrowing or hierarchies of borrowability are not cross-linguistically valid. Typological, sociolinguistic and historical considerations are necessary to refine their predictive capacity. For example, the often assumed predominance of lexical over grammatical borrowing can be reversed in a context of rapid language shift and increasing levels of bilingualism, provided grammatical borrowings accommodate to the structure of the recipient language.

The study necessarily leaves several questions unanswered. Some of them concern the relation between code switching and borrowing, the relation between phrasal borrowing and code switching, the influence of semantic restrictions or distributional rules on the use of loanwords, the influence of language loyalty on language mixing in situations of diglossia and intense contact, and the diachronic study of borrowing on the basis of historical records. These and other questions make up an agenda for future research in the field of language contact.
Resumen

Al creciente interés en el contacto lingüístico subyace el reconocimiento de que las lenguas no se desarrollan independientemente unas de otras y que los resultados del contacto provienen de respuestas adaptativas del sistema de la lengua a las circunstancias comunicativas. La lingüística de contacto nos ofrece la oportunidad de estudiar la interacción de factores sociales y lingüísticos en el proceso de cambio lingüístico y averiguar cómo las fuerzas sociales y culturales modelan el lenguaje humano dentro de los límites de su estructura. No obstante, la mayor falencia de los estudios sobre contacto lingüístico es la falta de un enfoque teórico conjugado con una sólida base empírica, lo cual reduce el alcance y fiabilidad de los resultados.

La presente obra trata del contacto de lenguas desde la perspectiva de los préstamos lingüísticos. Su base empírica es un extenso corpus de habla espontánea recogido en trabajo de campo. Su marco teórico es la teoría de las partes de la oración y la tipología del contacto. Como el objetivo es identificar regularidades estructurales en los préstamos, las lenguas receptoras analizadas diferencen en su tipología pero coinciden en el contacto con una lengua donante. De esta forma se puede explicar diferencias en los préstamos a partir de diferencias en la tipología, y atribuir similitudes en los préstamos a similitudes en las situaciones de contacto. Comparar tendencias de préstamo en lenguas tipológicamente diferentes muestra la forma y la magnitud con que las estructuras lingüísticas influyen en los resultados del contacto. Las lenguas receptoras escogidas son el Quichua, el Guaraní y el Otomí. La lengua en contacto con ellas es el castellano.

La primera parte del libro se ocupa de los conceptos fundamentales para el análisis del préstamo lingüístico. Dichos conceptos se agrupan en un modelo de causalidad del cambio lingüístico inducido por contacto, donde causas lingüísticas y no-lingüísticas interactúan a diferentes niveles. Las partes de la oración, la prestabilidad de elementos léxicos y gramaticales y la tipología morfológica son factores que modelan el préstamo. Los elementos teóricos se reúnen al final en el programa de la presente investigación.

La segunda parte describe la lengua donante y las lenguas receptoras en su desarrollo histórico, estatus sociolingüístico, tipología y variación dialectal. El desarrollo histórico de cada lengua caracteriza la intensidad y la duración del contacto y el grado esperado de influencia de la lengua donante. La posición diglósica de las lenguas receptoras y los niveles sociales de bilingüismo determinan la presión de la lengua dominante sobre las lenguas receptoras y el grado de préstamo lingüístico. La clasificación de las lenguas según sus partes de la oración, tipo morfológico, variación dialectal y otros rasgos ofrece un marco de referencia para rastrear cambios inducidos por contacto en las lenguas receptoras. Esta parte concluye con predicciones específicas de préstamo para cada lengua.
La tercera parte se ocupa del análisis del corpus y coteja los resultados con las predicciones de préstamo para cada lengua. Los préstamos léxicos y gramaticales son tratados por separado según su contribución general al corpus, su adaptación fono-morfológica a la lengua receptora, y los usos que tienen en ésta. Se examina el uso de los préstamos por dialectos y sociolectos para determinar el grado de influencia de la variación dialectal y el bilingüismo en el proceso de préstamo.

Las conclusiones del presente estudio revelan la interacción de factores lingüísticos y no-lingüísticos en el proceso de préstamo. La distribución de los préstamos en una lengua no puede explicarse por uno u otro tipo de factores exclusivamente. La interacción de factores en distintos niveles se refleja en la naturaleza dinámica del modelo de causalidad propuesto para explicar los cambios inducidos por contacto. Los resultados confirman que aun si los factores no-lingüísticos priman sobre los de carácter lingüístico, los resultados del préstamo están determinados por la estructura de las lenguas participantes. En suma, no todo es válido en el préstamo lingüístico. La tipología sigue siendo un factor decisivo cuando se traspasan los límites de la estructura porque los parámetros básicos de toda lengua se resisten al cambio en cualquier situación.

La presión ejercida por la lengua donante debido a la posición hegemónica de sus hablantes puede inducir grandes cambios estructurales en la lengua receptora, pero éstos están modelados por los límites estructurales del sistema lingüístico, el nivel de bilingüismo social e individual, y la actitud de los hablantes hacia la mezcla. El préstamo es una respuesta de la lengua a las necesidades discursivas y comunicativas impuestas por la lengua dominante, sobre todo en contextos multiculturales y multilingües. Las lenguas indígenas actuales son sobrevivientes de una larga historia de contacto porque han sido lo suficientemente flexibles para adaptarse a las condiciones socio-comunicativas de la sociedad colonial.

La presente investigación muestra además que las escalas de préstamo y las jerarquías de prestabilidad no son válidas para todas lenguas sin distinción. Se requieren consideraciones tipológicas, sociolingüísticas e históricas para refinar su capacidad predictiva. Por ejemplo, el predominio a menudo asumido del préstamo léxico sobre el gramatical puede verse invertido en contextos de desplazamiento lingüístico acelerado por crecientes niveles de bilingüismo siempre y cuando los préstamos se acomoden a la estructura de la lengua receptora. Se precisa evaluar las escalas de préstamo y las jerarquías de prestabilidad para cada lengua considerando factores lingüísticos y no-lingüísticos en un modelo dinámico de causalidad.

Al mismo tiempo, algunas interrogantes quedan sin resolver, como las que tienen que ver con el vínculo entre cambio de código y préstamo frasal, la influencia de restricciones semánticas o reglas de distribución en el uso de los préstamos, la influencia de la lealtad lingüística en la mezcla en situaciones de diglosia, y el estudio diacrónico del préstamo en base a registros históricos. Estos temas son parte de una agenda de investigación que esperamos retomar en el futuro.
Sammenvatting

Deze studie behandelt taalkundige ontleningen in Latijnsamerika vanuit een typologisch en sociolinguïstisch perspectief. Het onderzoek is gebaseerd op een uitgebreid corpus van spontane spraak, gecompileerd in Ecuador, Paraguay en Mexico. Het doel van deze studie is om taalconfinkelijke principes van ontlening te ontwikkelen. De voor dit doel gekozen talen zijn het Quechua van Ecuador, het Guaraní van Paraguay en het Otomí van Mexico. Deze talen verschillen van elkaar in typologisch opzicht, maar ze zijn vergelijkbaar met betrekking tot hun contact met het Spaans, de donortaal. Dienovereenkomstig worden de verschillen in het ontleningspatroon tussen deze talen toegeschreven aan de typologische eigenschappen van elk van de drie talen, terwijl de overeenkomsten verklaard worden door de vergelijkbare contactsituatie. Het idee hierachter is dat de vergelijking van ontleningstendensen in typologisch verschillende talen een antwoord kan geven op de vraag hoe bepalend taalstructuur is voor de uitkomst van taalcontact in verhouding tot niet-linguïstische factoren.

Het boek bestaat uit drie delen. Het eerste deel behandelt het theoretische kader ten behoeve van de analyse van taalkundige ontlening. Hierbij wordt een model van contact-gerelateerde taalverandering ontwikkeld, waarin talige en niet-talige oorzaken op verschillende niveaus met elkaar interageren. Dit deel, waarin theoretische concepten als woordsoorten, ontleenbaarheid en morfologische typologie uitgebreid aan de orde worden gesteld, mondt uit in de presentatie van de centrale onderzoeksvragen voor deze studie.

Het tweede deel is descriptief van aard. In dit deel worden de historische ontwikkeling, de sociolinguïstische status, dialect variatie en de typologische eigenschappen van de donortaal en de ontvangende talen behandeld. Hierbij wordt per geval de intensiteit en de duur van het contact en de verwachte graad van beïnvloeding beschreven. De sociolinguïstische eigenschappen van de ontvangende talen met betrekking hun diglossische positie en de graad van maatschappelijke tweetaligheid is een indicatie van de mate van pressie die door de donortaal wordt uitgeoefend op de ontvangende talen. De classificatie van elke taal in termen van woordsoorten, morfologisch type, dialect variatie en andere linguïstische eigenschappen dient als uitgangspunt voor de analyse van de typen van ontlening. Uitgaand van de beschrijving van de talen in het tweede deel worden specifieke voorspellingen gedaan met betrekking tot het ontleningsgedrag van elke taal.

Het derde deel van het boek bevat het centrale onderzoek. In dit deel worden de resultaten van de corpusanalyse uitgewerkt en worden deze vergeleken met de voorspellingen voor elke taal om de validiteit van de ontlenings-hypothesen te testen. Lexicale en grammaticale ontleningen worden elk apart geanalyseerd met betrekking tot hun bijdrage aan de totale omvang van ontlening, hun morfofonologische aanpassing aan de ontvangende taal, alsmede het gebruik van de
ontleende items. Dit laatste wordt getest in verschillende dialecten en sociolecten om vast te stellen welke rol de factoren dialectvariatie en tweetaligheid in een model van taalkundig ontleningsgedrag spelen. De resultaten van de lexicale en grammaticale ontleningen worden geëvalueerd in termen van de typologische verandering die ze bij de ontvangende talen teweeg hebben gebracht.

Het onderzoek toont aan dat er bij ontlening een interactie plaatsvindt tussen talige en buitentalige factoren. De distributie van ontleningen in elke gegeven taal kan niet door één van deze twee factoren alleen worden verklaard. Het samenspel van factoren op verschillende niveaus wordt weergegeven in de dynamische aard van het voorgestelde causale model ter verklaring van contact-gerelateerde taalverandering. Het blijkt dat, hoewel linguïstische restricties kunnen worden geschonden door niet-linguïstische factoren, de resultaten van ontlening in principe door de structuur van de betrokken talen worden bepaald. Het is dus niet het geval dat alles mogelijk is bij taalkundige ontlening: taalstructuur-specifieke restricties in de vorm van fundamentele typologische parameters stellen de grenzen aan de mogelijke taalvermenging. Deze parameters zijn in principe resistent tegen verandering binnen en buiten contactsituaties: in de ontvangende talen die in deze studie zijn onderzocht zijn ze grotendeels intact gebleven na eeuwenlang contact met het Spaans, hoewel veranderingen zijn geattesteerd op het gebied van minder centrale typologische kenmerken.

De druk die op grond van de maatschappelijke dominantie van de sprekers van de donortaal wordt uitgeoefend kan tot ingrijpende verandering in de ontvangende taal leiden, maar deze worden mede bepaald door de linguïstische structuur van de ontvangende taal, de aard en omvang van de maatschappelijke en individuele tweetaligheid en de attitudes van de sprekers ten opzichte van taalvermenging. Ontlening is een vorm van aanpassing aan de discursive en communicatieve behoeften van de sprekers van de dominante taal, in het bijzondere in multiculturele en meeretalige contexten. Vanuit dit perspectief gezien hebben de hier onderzochte Amerindische talen het eeuwenlange intensieve contact overleefd omdat ze voldoende flexibel zijn geweest om zich aan de nieuwe sociale en communicatieve situatie van de Spaanstalige koloniale maatschappij aan te passen.

Dit onderzoek toont tevens aan dat schalen van ontlening of ontleenbaarheids-hiërarchieën niet taalonafhankelijk geldig zijn. De voorspellende waarde hiervan moet worden verfijnd door tevens de specifieke typologische, sociolinguïstische en historische aspecten beschouwing te nemen. Een voorbeeld hiervan is het volgende: algemeen wordt aangenomen dat lexicale ontlening primair is ten opzichte van grammaticale ontlening, maar in situaties van snelle overgang naar de dominante taal gepaard gaande met grootschalige tweetaligheid, kan het voorkomen dat lexicale ontlening een minder belangrijke rol speelt dan grammaticale ontlening - mits uiteraard de ontleende structuren compatibel zijn met de grammatica van de ontvangende taal.
Noodzakelijkerwijs laat deze studie verschillende vragen onbeantwoord. Deze betreffen onder andere de relatie tussen codewisseling en de ontteling van lexemen en frases, de invloed van semantische en distributionele restricties op het gebruik van leenwoorden, de invloed van taalloyaliteit op taalvermenging in situaties van diglossie en intensief contact en tenslotte de diachronische ontwikkeling van ontteling, te bestuderen aan de hand van historische documenten. Deze en andere vragen kunnen als uitgangspunt dienen voor toekomstig onderzoek op het gebied van taalcontact.