Language Contact in Salasaca:

An Analysis of Lexical Borrowing in a Highland Ecuadorian Bilingual Community

By

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List of Abbreviations

1	First person
2	Second person
3	Third person
ABL	Ablative
ACC	Accusative
ADV	Adverbial(izer)
AFFIRM	Affirmative
AGENT	Agentive
BEN	Beneficiary
CAUS	Causative
CONDIT	Conditional
CS	Code-switching
DAT	Dative
DEM	Demonstrative
DES	Desiderative
DIMIN	Diminutive
FUT	Future
IMPER	Imperative
INFIN	Infinitive
L_R	Recipient Language
L_S	Source Language
LOC	Locative
ML	Media Lengua
NEG	Nagative
NOM	Nominative
PARTIC	Participle
PAST	Past tense
PL	Plural
POL	Polite
POSS	Possible
PRES	Present tense
PROG	Progressive
SING	Singular
SK	Salasaka Kichwa
SUBJ	Subject
SUBORD	Subordinator
TOP	Topicalizer

Abstract

The aim of this dissertation is to explore the degree and nature of lexical borrowing between two typologically unrelated languages in contact in the highland Ecuadorian Kichwa community of Salasaca. This case study analyzes the outcomes of Spanish loanwords in Salasaka Kichwa (SK) at the lexical, morpho-syntactic and phonological levels, with a focus on patterns of borrowing, categorical tendencies across parts of speech, and structural assimilation strategies employed by speakers of the ancestral language.

This study fills a current gap in the literature by focusing on naturalistic rather than elicited speech or written text to form the corpus for study, by doing so in the context of a largely isolated and understudied community in which the pressures exerted by the Spanish language have enjoyed a relatively shallow time depth, and by undertaking preliminary analyses of the potential influence of speaker variables in affecting lexical borrowing outcomes.

The primary objectives of this dissertation are as follows: (1) to describe the pervasiveness of lexical borrowing into SK in what is widely regarded to be one of Ecuador's most isolated and linguistically conservative Kichwa speaking communities, (2) to analyze the nature of observed borrowing patterns in terms of syntactic categories and parts of speech and whether these patterns support proposed scales of borrowability in the literature, (3) to investigate whether speaker variables such as age and sex correlate with particular contact outcomes in the data, suggesting linguistic change in progress in the community, and (4) to explore morphological and phonological integration strategies employed by SK speakers as they assimilate foreign Spanish sounds and lexical roots into their native grammar, calling upon innovative substitutions when necessary.

By analyzing linguistic data from a naturalistic corpus compiled from the speech of twelve consultants, this study shows that even in Ecuador's most isolated Kichwa communities, the social pressure exerted by Spanish is so great that the permeation of lexical items may be considered extensive, averaging 16.3%, and ranging from 8% to 26% across the representative cohort of twelve consultants. This finding serves as evidence that, though geographic and cultural isolation may delay the process of lexical borrowing as a facet of bilingual contexts, the outcome in such intense contact scenarios is an eventuality.

The patterns of lexical categories of the Spanish loanwords found in SK largely follow predictive models advanced in the literature. Even between such typologically distant grammars in contact, the hierarchies of borrowability of lexical categories are largely upheld in the analysis. Morphological and phonological assimilation strategies employed by SK speakers to accommodate loan elements into their native language also surface as predicted by principles of compatibility of linguistic systems, and observed segment-level repairs by SK speakers show tendencies that affirm existing hypotheses about Kichwa phonology.

This dissertation contributes to a small but growing literature on contact linguistics and lexical borrowing between Spanish and Ecuadorian Kichwa. It is innovative in its methodology, relying on sociolinguistic interviews to collect naturalistic speech data rather than via scripted or lexicostatic elicitation methods, and it is the first to focus on the speech of the central highland Salasaka people, one of Ecuador's most culturally and linguistically isolated indigenous speech communities.

In sum, the central objective of this study is to participate in a broader conversation about the social and linguistic factors that shape loanword outcomes when typologically unrelated languages come into contact via prolonged, increasingly intense bilingualism. This work serves

as a point of departure for further linguistic analyses of the influence of Spanish on restructuring of the phonetic inventory of SK, and on cross-linguistic transfer in the morpho-syntactic domain.

Chapter 1: Introduction

This first chapter outlines the guiding research questions of this dissertation. Following this initial orientation to the motivations for the study, the chapter provides a sociocultural and historical profile of the parish of Salasaca, Ecuador, with attention to the development of the unique language contact scenario in the community.

A framework for understanding Salasaca as an ethnolinguistic speech community is arrived at by coupling demographic information with a broader consideration of the history of cultural conflict with Spanish-speaking *mestizo* neighbors in the province.[1] The chapter then retraces briefly the community's history of maintaining its linguistic and cultural identity through intentional, self-imposed isolation.

This introductory chapter concludes by detailing the intensity of contact between the Spanish and Kichwa in the community, with a focus on cultural forces and social factors at play in the process. In doing so the chapter seeks to address the deeper question of individual and societal bilingualism in the parish.

1.1 Research Questions

This dissertation is a case study designed with several areas of focus. It brings to bear an innovative elicitation method and various analytical approaches on the question of how one socially dominant, superstrate language may influence the vocabulary of another at the lexical, morpho-syntactic and phonological levels. The study is limited to a single highland Ecuaorian

[1] Departing from Haboud (1998) and Corr (2000), this study takes *mestizo* to mean the result of a biological or, more importantly, cultural mix or hybridization of white and indigenous ethnic elements following the arrival of the Spaniards in 1532. Haboud notes that in situations of contact in Ecuador, *mestizo* also refers to the socially dominant group and their language, Spanish. Linguistically, she points out, the adjective may also be used to refer to the language itself as functional mix of Kichwa and Spanish, as it is spoken in the Ecuadorian Andes. (30) In the context of inter-ethnic relations in Ecuador, the term *mestizo* is used to refer to Spanish-monolinguals who do not self-identify as indigenous.

indigenous speech community considered to be among Ecuador's most linguistically conservative, isolated communities, one characterized by a relative lack of permeation by the languages and practices of the socially dominant *mestizo* culture of the Ecuadorian Andes (Büttner 1993).

A primary motivator for this investigation is the tendency in existing contact linguistics scholarship in highland Ecuador to conduct research in a limited number of communities in which Spanish has enjoyed a relatively long history of bilinguism with the ancestral language, such as Imbabura Province (Gómez Rendón 2005, Bakker et al. 2008) or the town of Salcedo (Muysken 1987, Shappeck 2011), both of which share a relative proximity to Quito, the nation's capital and second most populous metropolitan area. To date there has been no systematic analysis of lexical borrowing in Salasaka Kichwa.[2]

The first research question addressed in this dissertation is the following: What is the extent and nature of loanword borrowing from Spanish into Salasaka Kichwa (SK) in this previously unstudied indigenous community in Ecuador's central highlands? The study understands lexical borrowing to be the process of replication of linguistic material in the form of lexical items (form-meaning sets) with or without feature modification by members of the recipient language (L_R) speech community (Thomason 2001, Matras 2009, Van Coetsem 1988).

In Chapter 5 of this dissertation I elucidate the proportion and the distribution of Spanish loanwords in SK by part-of-speech category, and examine how these patterns are shaped by the lexical or grammatical nature of the loanwords in question. In so doing I will situate Salasaca on the continuum of highland communities whose Kichwa dialects are permeated by between 10% and 40% loanwords from Spanish (Muysken 1997).

[2] The present study relies on Spanish orthography (Salasaca) when referring to the geo-political entity that is the parish of Salasaca, but defaults to a non-Castilian spelling (Salasaka) with when referring to the ethnic group, the Salasakas.

In the fifth chapter I also address a second research question, which is as follows: How and to what extent are contact outcomes, shaped primarily by semantic and syntactic categorical factors at play in each language, further influenced by speaker variables? This question takes as its point of departure Thomason and Kaufman's (1988) observation that contact outcomes are shaped to an equal or greater degree by language-external factors than by strictly linguistic ones.

As part of my investigation of lexical borrowing I will determine whether universal scales of borrowability (Moravcsik 1978) and implicational clines (Matras 2009) predict loanword outcomes in the case of SK. A general assumption, articulated by Muysken (1981) and Matras (2007), is that open-class lexical items will be more readily borrowed than, or predictably borrowed before, closed-class, function words or affixes. The latter category of lexemes is referred to in this dissertation as grammatical borrowings.

The final major research question addressed in this dissertation is the following: How do SK speakers integrate Spanish roots and their phonological structure into their native language? The contact scenario between Spanish and SK presents a unique opportunity for study of the integration of Spanish roots, because the languages are genetically unrelated and thus typologically distant. According to Field's (2002) Principle of System Compatibility (PSC), words will only be borrowed into a language insofar as they conform to the morphological possibilities of that language. Spanish is a fusional language, whereas SK is characterized by an agglutinative morphology, a distinction that will be described in detail in Chapter 3. This dissertation explores the extent to which Field's PSC is supported in this unique contact scenario.

The latter portion of this final question addresses loan phonology outcomes and segmental and phonotactic repair strategies as SK speakers deal with illicit sounds from Spanish loanwords borrowed into their language. This study affirms the assumption that the phonemic

inventory of Kichwa lacks the Spanish tense, mid vowels /e/ and /o/, and approximants /ß,ð,ɣ/, and the fricative /f/. Further, this final section of the dissertation observes a decrease in vocalic raising frequency as speaker age decreases, suggesting younger generations of SK speakers access a more fully developed Spanish L2 phonological inventory as part of the borrowing process.

1.2 The Language Situation in Salasaca, Ecuador

Salasaca is widely considered to be one of Ecuador's most isolated highland *kichwa llakta*[3], or Kichwa-speaking, indigenous communities, in ethno-cultural as well as geographic terms. The community of approximately 4,900, situated in the central province of Tungurahua (see Appendix A), is recognized as a parish that has successfully maintained its ancestral language as other varieties of Ecuadorian Kichwa continue to be labeled endangered throughout the Andean highlands of the country (King, 2001). The local variety of Kichwa spoken in Salasaca is one of Ecuador's numerous sub-varieties within the broader, pan-Andean Quechua language family. (see Appendix B)

Throughout the twentieth century, and now the twenty-first, the Salasakas have faced increasing pressure from the nation's dominant culture and Spanish language. [4] The introduction of transportation infrastructure, arrival of members of various Spanish-speaking Catholic and Evangelical religious orders, and advancements in telecommunication technologies, in combination with increased enrollment in primary and secondary schools and intensified efforts

[3] The orthographic convention for the spelling *kichwa* is one that intentionally does not subscribe to Hispanic norms, and should be interpreted simply as an alternative spelling to *quichua.*

[4] The orthography represented here reflects the broadly accepted tendency in the community to spell the toponym as Salasaca, according to governmental norms, while claiming a non-Hispanic orthographic norm for the representation of the name of the ethnicity and its people, spelled as Salasaka. Such a favoring of "k" instead of "c" in this context is part of an overarching orthographic convention that eschews the Hispanic convention, but it is not without its critics (Cornejo, 1967:32).

of parents to introduce their infant children to Spanish in the home, have resulted in an observable increase Spanish bilingual competence among the youngest generations.[5] Today Salasakas learn Spanish alongside Kichwa from a progressively younger age and thus speak the socially dominant language with increasing parity to their ancestral, home language.

Such a confluence of cultural changes has led to a unique linguistic scenario in which a half-century of increasingly intense, community-wide contact between highland Ecuadorian Spanish and Salasaka Kichwa (SK) in combination with increasing exposure of Salasakas to the dominant national culture and its language has led to new manifestations of both languages in the speech of bilingual Salasakas.

Today, the Salasakas find themselves wedged between the cultural and linguistic assimilatory goals of the Ecuadorian nation-state on the one hand, and the national discourse of pluri-culturalism and the valorization of ethnic identity on the other. The status of the ancestral language and the ever-present threat of its impending disappearance hang in the balance, presenting a paradox of a self-proclaimed 'pluricultural' state heading toward monolingualism in many indigenous communities of the country's Andean region.

In Salasaca, however, it seems for now that SK is being maintained in the home and in institutional contexts within the parish, despite apparent linguistic encroachment. The question is, with an observable pervasiveness of Spanish language vocabulary in SK, what does the language look like that is being maintained? This question is the central motivator of the present study. I therefore aim to detail the extent to which the Spanish lexicon has been imported into

[5] Here the term *bilingualism* will be taken to mean some level of knowledge of two languages, regardless of level of proficiency in both (Haugen 1953). Describing a person's bilingualism is a complex task, however, and Grosjean's (1982) critique of the use of terms like *fluency* will be taken into account in arriving at an adequate terminology in the present dissertation, as will Fishman's (1971) argument that bilinguals are rarely equally fluent in both languages, given the normally imbalanced and complementary allocation of functions of the languages in question in society (560). Though Grosjean (2008) considers bilingualism to be the *use* of two languages or dialects in daily life, independent of the condition of knowledge, his definition is based on performance rather than knowledge.

SK, and to determine whether this is happening at a greater rate among generations of younger speakers, who are characterized by increasing levels of Spanish language proficiency.

1.3 The Salasakas as a community of study

The Salasakas have received relatively little attention from the linguistics research community despite an overall growth in the field of Andean linguistics and studies of the characteristics of the monolingual and bilingual verieties of Spanish spoken in highland Ecuador. The "pervasive, reciprocal influence" (Bakker, Gómez Rendón and Hekking, 2008:197) that Spanish and Kichwa have exerted on one another has, until now, only been explored in highland Ecuadorian communities in historically more advanced situations of shift from Kichwa to Spanish.

Descriptive approaches to emerging contact varieties of both Kichwa and Spanish in bilingual communities in the central highlands have focused mainly on Otavalo and the Imbabura and Pichincha regions (Moya 1981; Gómez Rendón 2005, 2008b), the southern highlands and the Saraguro community (King 2001), central highlands communities (Muysken 1981, 1989, 1997), and studies of broader geographic scope (Haboud, 1998).

Salasaca has, however, been covered extensively in historical or ethnographic contexts by anthropologists, though typically in an overly simplistic, and, in the case of mid-1900s monographs, Eurocentric light. Such scholarship began to emerge in the latter half of the 20th century with work from Debenais de Valencia (1950) and Scheller (1972), and in more focused studies in the 21st century with contributions from Timura (2011), Wogan (2004), Poeschel Renz (2001), and Corr (2000, 2010). Cultural studies of the Salasakas have been authored by Ecuadorians (Barriga López 1988; Carrasco 1982).

Glimpses into the life and customs of the Salasakas have also been brought to light as sections of larger anthologies or descriptive works of Ecuadorian highland indigenous peoples by such scholars as Benítez and Garcés (1993) and Almeida (2005), and have even originated from within the community itself (Masaquiza Masaquiza 1995; Jerez Caisabanda 2001).

The significant attention dedicated to Salasaca by anthropologists since the late-1900s provides sufficient literature for a classification of the nature of language contact in the community in terms of type, duration and intensity, all of which are fundamental to an analysis of the mutual influence of two languages interacting in a bilingual speech community. Such accounts from the anthropological field add significantly to an effort to situate Salasaca historically, culturally, and socially, and they serve as a foundation for linguistic analyses like those of this dissertation.

To date, the community of Salasaca as an ethnic group and *speech community* has not figured into the literature of Kichwa-Spanish language contact in Ecuador.[6] Fortunately, a significant number of linguistic analyses of other Ecuadorian varieties of these languages have been published, and this study will complement the existing contact linguistics bibliography by

[6] The Salasakas as an ethnic group comprise a *speech community* formed around dense social ties, creating an environment in which a unique contact variety of bilingual Spanish and bilingual Salasaka Kichwa, and the norms for its use, have emerged in relative isolation from other Kichwa-speaking highland communities in Tungurahua province. Gumperz (1972) considers a *linguistic community* to be "a social group which may be either monolingual or multilingual, held together by frequency of social interaction patterns and set off from the surrounding areas by weaknesses in the lines of communication" (463). Gumperz later refines the definition of the speech community as rooted in social norms and group membership: To the extent that speakers share knowledge of the communicative constraints and options governing a significant number of social situations, they can be said to be members of the same speech community (1986:16) .

Fishman notes that members are set off by density of communication and/or symbolic integration with respect to communicative competence, and that there is a shared access by members to the full range of the linguistic repertoire in question, with minimal compartmentalization of use (1972:32-33). Since such shared access depends on intensity of contact and on membership within a communication network, it is expected that a speech community's boundaries will coincide with wider social units (Gumperz 1986:16). In Salasaka, the boundaries of the ethnic community coincide closely with those of the dense social network within the parish, and the isoglosses that delineate Salasaka Kichwa as a language variety align sharply with the political boundaries of the parish itself.

offering an analysis of the Kichwa dialect spoken in this previously ignored bilingual speech community in the Andean highlands of Ecuador.

1.4 Demographic profile

The parish of Salasaca, located 9,000 feet above sea level in the central Ecuadorian highland province of Tungurahua, is home to the most isolated and linguistically conservative of four indigenous communities in the province.[7] The parish, named after the ethnic group of people who inhabit it, is located in the extreme northwestern corner of the canton of Pelileo.

The Salasakas belong to the Kichwa indigenous nationality, one of Ecuador's nine ethnic groups (CONAIE, 2012). They refer to themselves simply as *runa* ('humans, people') in their native language, also referred to as *runa shimi.* Among the highland Kichwa peoples of Ecuador, the Salasakas consider themselves to be a distinct ethnic group (Corr 2000:2). They refer to themselves also as *chay ladu runa* ('the people of this side'), in contrast to the *runa* or indigenous Kichwa populations elsewhere in the highlands.

The physical boundaries of Salasaca delineate an area of approximately 14km^2. Salasaca is bordered by the Pachanlika River and bifurcated by the Ambato-Baños-Puyo section of the Pan-American Highway. The provincial capital, Ambato, is 13km west of the community, and the county seat of Pelileo is 5km to the southeast.

Salasaca is subdivided into eighteen *comunas*, or self-governing political entities, each with its own municipal building and common meeting space. (see Appendix C) The comunas are each led by an elected representative, or *cabecilla*, someone born in and currently residing in the neighborhood. These *cabecillas* report to and attend regular assemblies held by the central governing body, formerly the Unión de Indígenas Salasacas (Union of Indigenous Salasacas),

[7] The three other communities are Quisapincha, Chibuleo, and Pilahuín.

recently renamed the Consejo del Gobierno del Pueblo Salasaka (Government Council of Salasaka), under the official heading of the Gobierno Autónomo Descentralizado (Decentralized Autonomous Government).

The population of Salasaca in 2010 was reported to be 5,886 according to the Instituto Nacional de Estadística y Censos (National Institute of Statistics and Census) (INEC), a figure that contrasts with previous estimates by scholars that ranged from 8,000 to 10,000.[8] Of those living in the parish, however, only 4,450 (76%) indicated they were Salasakas, and thus speakers of Salasaka Kichwa. The remaining inhabitants self-identified simply as *kichwa de la sierra*.[9] The population of Salasaca was thought to be in decline in the mid-1900s, according to Peñaherrera and Costales, who estimated that the cause in decline of the population was a combination of displacement to urban centers following the 1949 earthquake, a low fertiliy index, and high infant mortality (1959:28). It may be said with certainty, fifty years later, that the cultural or ethnic extinction these authors perceived as a threat will not reach fruition any time soon. This certainty is due in no small part to the importance young people play in maintaining cultural and/or linguistic practices.

Salasaca is a relatively young community. The same INEC 2010 census found that 58% of the population is younger than 30 years of age, 30% are between 30 and 59 years of age, and 12% are 60 years of age or older. This might suggest that as of yet there is no exodus of youth from the community, but rather that a critical mass of Salasakas remains in the parish. As these young generations of Salasakas, nearly two-thirds of the current population, remain in the

[8] (INEC 2010) The Salasakas, like most of Ecuador's indigenous populations, are wary of government presence in their community, and census takers are often perceived as having been sent from Quito for tax reporting purposes. Many Salasakas reject the census altogether, and Timura (2007) and others have attested that census workers have been chased out of the community. For this reason, the official INEC numbers remain dubious. The 1990 census was only able to tabulate a population of 2,670 (M. Masaquiza, 2005:95).

[9] Census data from 2010 show that of 5,886 individuals living in Salasaca, 679 identified themselves as *mestizos,* 22 as *blancos,* and 9 as *afroecuatorianos* or *montubios*.

community, they introduce cultural and linguistic elements from outside the parish. It would appear that such a pattern contributes to the overall increase in bilingualism observable in the community.

Büttner (1993) observed that 89% of Salasakas reported having lived their entire lives in the parish. This may suggest that, at that time, a tenth of the population had at one point or another lived for a period of time in another location before returning to the community. The important detail for continued cultural and ethnic vitality is that they returned. Further, 97% of those that Büttner interviewed reported having been born in the community (183). This relative homogeneity of the parish seems to continue to be maintained to a high degree. I observed during my fieldwork a decade and a half after these statistics were reported that Salasaka men who leave the community continue to return to the parish at a high rate, as well.

1.5 Sociohistorical context of language contact

The language situation in Salasaca at the outset of the 21st-century is the result of a unique history that has only since the mid-1900s put members of the community in any sort of sustained contact with the cultural and linguistic practices of the socially dominant *blanco-mestizo* population that surrounds them. Before the second half of the last century, Salasaca, which was of little strategic or economic value to those who governed the territory, had been relegated to the status of a rural, peripheral hamlet and was mostly ignored by private industry with interest in agricultural development or exploitation. This was, in part, due to the limited usefulness of the land on which the parish sits.

The central highland region of Ecuador is one in which the *latifundista* model of large, landed estates was never successful, and in which the autonomous and rather small, individual

land holdings of the *mestizos* has historically contributed to an environment in which indigenous individuals and communities succeeded in maintaining their freedom and autonomy (Peñaherrera and Costales, 1959:11). This is especially the case in Salasaca, where the *encomienda* system largely avoided the dry plateau on which it is situated.

As noted by Peñaherrera and Costales (1959), "Debido exclusivamente a la aridez de la tierra, el Salasaca ha sido siempre propietario autónomo." ("Due exclusively to the aridity of the earth, Salasaca has always been its own autonomous propietor.") (26).[10] More recently, Timura similarly notes that Salasaca is unique in that, unlike most highland indigenous communities in Ecuador, it was never the site of *haciendas* or similar exploitative systems of agriculture and debt patronage (2007:31). The soil conditions in this region of Tungurahua province are such that, since the arrival of the Spaniards in 1532, the area has largely been ignored by profiteering outsiders.

The undesirability of the land they inhabit is not the only factor that has historically contributed to the success the Salasakas have enjoyed in conserving their customs into the 21st-century. The community has also intentionally protected its heritage with a great measure of success against the advance of mainstream culture, earning themselves a reputation as a fiercely tenacious people willing to face adversity, modernization, difficult agricultural conditions and evangelical invasions from outside in the process:

> Tradicionalmente el grupo mantiene su habitat fijo, conservando las costumbres, con un celo admirable, tanto que, por repetidas veces, ante el peligro del avance blanco defendió su encierro con represalias sangrientas. Esta ha sido la razón, por la que el Salasaca pasó a la historia como un pueblo bravo, al que ni la adversidad del medio, ni la aridez de las tierras, incluso ni la abnegación de las misiones religiosas lograron conquistarla plenamente (Peñaherrera and Costales, 1959:16).
>
> Traditionally the group maintains its habitat firmly, conserving its customs with an admirable zeal, such that, in repeated instances, facing the danger of the advance of white

[10] All translations are mine.

> culture, it defended its enclosure with bloody reprisals. This has been the reason for which Salasaca has come to be known in history as a ferocious people, a group which not even the aridity of the land, nor the abnegation of the religious missions were able to to conquer thoroughly.

The Salasakas have always lived, according to Poechel-Renz, "al margen del proceso modernizador" ("on the margin of the modernizing process") (2001:152). Yet such social pressures have been continuous and ever increasing, and cultural and linguistic encroachment from outside the community has effectively created divisions among the Salasakas themselves. In the early 1930s the parish was cleaved in two by the construction of the Ambato-Baños-Puyo highway, a project which the Salasakas firmly opposed. In 1934 the first protestant missionaries arrived in the community (Timura, 2007:30). Approximately ten years later, a Catholic order of Spanish-speaking nuns also set up residence on the central plaza of the community (Maldonado, 1989:169).

Other service groups also made their way to the conmunity in the name of progress, although not permanently, and unfortunately, not without introducing additional conflict. Such has been the case with the Peace Corps, the Ministry of Agriculture, Visión Mundial, Misión Andina, IERAC and Foderuma, all of which represent cultural and economic incursions that failed to truly take into account the unique needs of the community. They were, in fact, forms of imposed assistance according to external criteria that hindered the types of advancement they were there to promote (Maldonado, 1989:170).

Modernizing pressure, both cultural and linguistic, has historically been an inevitable consequence of the Salasakas' reliance on state and church institutions in nearby towns. Until the parish was recognized as autonomous in 1972, the area was considered an ethnic territory on the outskirts of the canton seat of Pelileo, and until that year the provincial government and the Catholic Church required the Salasakas to travel to the town for weddings, birth registrations,

and baptisms (Corr 2000:12). This forced the Salasakas to engage in the culture and language of the socially dominant *blanco-mestizo* society, to learn the language if they wanted to be recognized and accounted for.

Social pressure, welcome or not, also arrived to the community in the form of advances in telecommunications and broadcast technology. In 1981 Salasaca received the governor of Tungurahua to inaugurate the arrival of telephone lines to the parish (Masaquiza Masaquiza, 1995:246). The first television sets began to arrive during the same decade. During the first years of the new milennium the community saw the introduction of various internet cafes along the highway through town, some of them owned by Salasakas themselves.

The introduction of television and other social currents in the community have inevitably informed cultural values among the Salasakas. Carreras (2010) notes:

> The experiences of state and Catholic church-run education (in Spanish with limited bilingual Quichua instruction), increased transportation, television, and migration to the Galapagos Islands...and other places for economic reasons, has challenged Salasacan cultural values with regards to livelihood and material expectations and desires (15).

This apparent erosion of cultural values is also seen in the gradual disappearance of ritual practices and the free and spontaneous expression of spiritual practices closely tied to the geography and nature that surrounds the community (Peñaherrera and Costales, 1959:7). Nonetheless, the arrival of the media and communication technology to Salasaca has not resulted in the wholesale loss or rupture of essential Salasaka cultural identity, nor in a complete embracing of the modernizing processes, at least not yet (Poeschel-Renz, 2001:148).

In fact, radio and television broadcast technology have more recently been utilized for the purpose of maintaining Salasaka cultural practices, tradition, and the Kichwa language. Specifically, a low-frequency broadcast operation, a pirate radio station known as *Radio Haelli*, has been periodically broadcasting out of a home in Salasaca since the mid-1990s, and continues

to do so despite the occasional hiatus to avoid drawing the attention of the regulating agencies of the federal government. The station offers locally-produced programs hosted by leaders in the community, and broadcast entirely in Salasaka Kichwa. The station serves as a clearinghouse for information about local events, news, and other points of interest, and it engages the community in an effort to continue placing the linguistic heritage of the Salasakas in the public domain and encouraging positive attitudes toward the language.

1.6 Cultural isolation and racism

The parish of Salasaca is surrounded on three sides by the *mestizo* towns Benítez, El Rosario, and Totoras. It faces continued pressure of encroachment from these adjacent populations, in part because the Salasakas pay no land tax and thus lack clear land titles (Timura 2007, 32). Relations between the Salasakas and the nearby Spanish-monolingual mestizos who self-identify as non-indigenous are characterized by ethnic tension that at times manifests as racism (Wogan, 2010).

The Salasakas are a community that has aggressively relied on a strategy of voluntary isolation to remain distanced from any sort of domination in the predominantly white and mestizo society (Poeschel-Renz 1985:31). The social practices of the Salasakas, elements of a common past and a collective historic conscience, are at the same time acts of resistance in the fight to survive as an ethnic group, and practices of social cohesiveness. Such isolative practices have ensured that density and frequency of in-group linguistic interaction remain high, ensuring a social network with efficient diffusion of contact-induced linguistic innovation. This resistance and distancing has also been the product of centuries of ethnic discrimination, however, and not simply that of a people unwilling to engage the world outside its boundaries.

The Salasaca economy of self-sufficiency and cooperation has historically permitted community members to limit their interaction with non-SK speaking Ecuadorians. Carrasco observes, "[…] el Salasaca forma una sociedad cerrada con una economía no capitalista y una cosmovisión propia" (…Salasaca forms a closed society with a non-capitalist economy and a unique worldview) (1982:2). Capitalism has since made inroads, and in the 21st century the opening of Salasaka-owned stores and cooperative credit unions have created a business climate that contrasts with the community's earlier character of self-sufficiency and tradition of intra-group reliance for survival.

Cultural and linguistic isolation is also fortified by the continued tendency toward discouraging marriage between Salasakas and people from outside the community, and by the fact that most Salasakas remain in the parish. Historically, marriage outside the community was strictly prohibited, punished with excommunication, since any violation of the norm was traditionally viewed as the loss of a barrier against the blanco-mestizo society (Poeschel-Renz, 1985:59). The fact that exogamy is still relatively rare in the community may be due in part to intergenerational dependence in families and the expectation that unmarried children will remain living with their parents until their death, coupled with the cultural obligation of married children to remain in the community to care for their aging parents (59).

Discrimination and racism toward the Salasakas at the hands of the socially dominant segment of Ecuadorian society has historically been based upon their undeserved reputation as savages (Whitten 1985). The daily expression of such deeply-rooted racism is still felt by Salasakas who speak a minority language in an Ecuadorian society that is historically a stratified one that puts whites (and implicitly their language) at the top and indigenous peoples at the bottom. Such a historically negative set of stereotypes may be due, at least in part, to the

incorrect manner in which the Salasakas have been portrayed, and “las deformes caricaturas que plumas inexpertas en antropología han trazado” (“the deformed caricatures that untrained pens in anthropology have sketched”), an offense committed by inadequately trained scholars in the mid-20th century (Peñaherrera and Costales, 1959:15).

Marginalization extends to Salasaka children who attend public schools in nearby towns. As Masaquiza (2005) observed, the educational environment in predominantly blanco-mestizo towns is one of exclusion and entrenched racism. She further notes that such discrimination threatens efforts to maintain the maternal Kichwa language, and even the negation or suppression of the indigenous identity of the young Salasakas, due to the pressure exerted by a national educational system in which Kichwa is excluded (107).

In light of the situation of discrimination that still flavors the daily interactions of Salasakas with their non-indigenous neighbors, members of the community perservere in maintaining their cultural and linguistic heritage when these symbols of identity are the target of hatred, as noted by Maldonado (1989):

> A lo largo de la conquista y colonización española, al igual que los otros pueblos indios, nuestros derechos fueron pisoteados y fuimos explotados de muchas maneras. Sin embargo, nuestra cultura no ha muerto, nos alimentamos de nuestras tradiciones, conservamos nuestra indumentaria, nuestra lengua... (169).
>
> Throughout the Spanish conquest and colonization, as is the case with other indigenous peoples, our rights were trampled and we were exploited in a veriety of ways. Nonetheless, our culture hasn’t dies, we nurture ourselves with our traditions, we conserve our traditional clothing, our language…

Importantly, Salasaka children in urban primary and secondary schools have continued to exert and value their identity and language despite being addressed with indifference or rejection by non-indigenous professors who form part of an institutionalized system of devalorization and social exclusion toward indigenous students. Masaquiza observes:

> […] los niños y niñas indígenas no han interiorizado la desvalorización de la que han sido objeto, pues su nivel de auto-identificación como indígenas salasacas es alto. Además, el Kichwa lo siguen hablando, lo que los identifica aún más como indígenas (2005:115).
>
> [...] the indigenous children have not interiorized the depreciation to which they have been subjected, in that their level of self-identification as indigenous Salasakas is high. Moreover, they continue speaking Kichwa, something that contributes to their identification as indigenous.

The pride and maintenance of customs within the Salasaka community shape the language contact situation there to a significant degree. As indicated above, SK is being maintained as the language of the home among the youngest parents in the parish. Spanish is recognized in the community as the language of opportunity, however, and its gradual imposition in an increasing number of domains of language use, at least for practical purposes, is apparent.

1.7 The social dominance of Spanish in Salasaca

Cultural pressure is often advanced as the explanation for why members of a socially marginalized speech community who speak a minority language seek to acquire a majority, prestige variety, while the inverse is not the case (Field 2002:4). The gradual adoption of Spanish as a second language in Salasaca, and also the presence of Spanish loanwords in SK as well as any observable borrowing trends among younger generations of SK speakers, can be directly attributed to exactly these social forces, and to what Thomason and Kaufman (1988) characterize as "an asymmetry of social dominance or power...concentrated in a single direction, this is to say, in contexts in which one of the languages is clearly the socially dominant variety" (67-68; cf. Thomason 2001:10-13). This social dynamic between the languages and their speakers inevitably determines the mechanisms of change and ultimately shapes the outcomes in borrowing.

To thoroughly understand the consequences of the language contact situation in Salasaca, the social forces described in previous sections of this chapter must be considered in tandem with the role of Spanish, and the intensity of contact that results from the language's social dominance in the Ecuadorean highlands. According to Thomason and Kaufman (1988), contact outcomes like lexical borrowing are predominantly a function of the intensity of contact between two languages in terms of frequency of use of each within a speech community. Intensity, they argue, is also a function of extensiveness of contact (relative number of bilinguals and possible change in the population), the cultural or political dominance of one group of speakers, and stability of the bilingual situation (duration, whether one is in a state of decline or shift) (276). To arrive at a complete consideration of contact intensity in Salasaca, then, the social function of Spanish in the parish requires attention.

It may be argued that external linguistic pressure in Salasaca began with the arrival of the Pan American highway and the subsequent religious communities in the 1930s and 1940s. Throughout the 20th-century the parish has seen a precipitous drop in monolingualism, due in no small part to increasing social mobility among young generations of Salasakas who have access to *blanco-mestizo* culture and language, and whose community is seeing an increase in traffic from this outside culture.

The pressure to learn Spanish among Salasakas also derives from the importance of the socially dominant language as a tool for economic or educational advancement. Considering the former of these, one factor that has played a role in increasing pressures to learn Spanish among the Salasakas is the community's engagement in the local economy outside the parish. The 20th century saw a major increase in the dependence among Salasakas on purchased commodities, and members of the community therefore have been obligated to interact with their Spanish-

speaking neighbors.[11] Salasaka livelihood has relied increasingly on the cash economy in the province, and material poverty, intergenerational cultural change, and other factors may, as Carreras (2010) observes, have driven a change in livelihood away from indigenous agriculture (3).

Such an increase in dependence on goods purchased outside the community has been attributed to population growth in the parish and changing social relations in the province (Carreras, 2010:53). Agriculture has never been easy in Salasaca, a community perched atop porous, sandy, volcanic soil on a windswept plateau that receives relatively little rainfall. Cultural changes in the latter half of the 20th century, however, are another significant reason agriculture represents the primary livelihood for less than 20% of Salasakan families, and nearly every household in the past two generations has sought a wage income (Carreras, 2010:123).

The pursuit of wage labor among Salasakas has led to a recent and notable increase in men leaving the community in search of seasonal labor, while women remain at home to tend to the parcel and the family (Poeschel-Renz, 1985:51-52). According to Timura (2007:6), as young members of the community seek temporary opportunity elsewhere, the consequence is a sort of disruption of the historical relationships between these adult children and their land-holding elders due to immigration for wage labor and new sources of external wealth that result. It may be argued that this distruption in historical relationships within the parish also affects linguistic ones.

[11] Traditionally, Salasakas have relied on subsistence farming to produce maize, beans, tubers such as potatoes and oca, barley, and squash for their families, in tandem with pastoralism of cows, sheep, donkeys, chickens, rabbits and *cuyes*. Additionally, the seasonal choke cherries (*capulí*) that bloom between February and April of each year provide an opportunity for trade for other foodstuffs, and the women in Salasaca make the trips to Quero or Petate regularly during the season to engage in such exchanges (Corr 2000:3).

Salasaka men may also seek factory or construction jobs in the provincial capital of Ambato, or in the Ecuadorian capital city of Quito. Miller (1998) notes the economic pressure to migrate is strong, and a small but growing number of Salasaka women are also seeking employment outside the community as laundresses or domestic help in nearby towns, since wages may be as high as double in the provincial capital of Ambato (129). Those who travel to Ambato for work may return to the community at the end of each day, but those men who seek the higher construction wages paid in the Galapagos Islands, for example, may be absent from the community for months at a time.

This migratory labor to the Galapagos Islands offers an additional explanation for the observable increase in bilingualism in Salasaca. A diasporic community of Salasakas has been established in the Galapagos, the result of the transplantation in recent years of families seeking to move together and establish themselves on the archipelago without the intention of returning to the parish. Typically the men seek employment in the booming construction industry on the islands, and if their wives and sisters accompany them, work may be found in hotels and restaurants on the island. These families then raise a generation of children born in the islands who only periodically return to Salasaca to visit, and who in many cases bring with them a linguistic repertoire that includes only a passive competence in the indigenous language spoken between their parents and grandparents.

Beyond economic opportunity, the Salasakas are facing social change at an accelerating rate, change in which they themselves are the agents. With modernizing pressures and changing relations with neighboring *blanco-mestizo* Ecuadorians come changes in language use patterns, language attitudes among young generations, influenced to no small extent by access to the internet and preference for Spanish (the only language in which they received formal literacy

training) in social media domains. The result has been an emergent situation of bilingualism among the community's teenagers and young adults at the outset of the 21st century, with each language operating in unique domains and according to unique functions or interlocutor groups.

1.8 Bilingualism and language pressure in Salasaca

Salasaca has long been considered among the most linguistically conservative Kichwa speaking communities in Ecuador's highlands. Fifteen years ago it was reported that 98% indicated that Kichwa was the preferred language of the home (Büttner 1993:182). This figure falls to 68% when the inquiry was made about Kichwa as the preferred language of general community functions and contexts outside the family setting (187). Since then, no similar study has been conducted, and the literature currently lacks a longitudinal perspective on the language situation.

The language situation in the parish, however, seems to be evolving from one of societal monolingualism to one in which bilingualism is becoming the norm. Today Salasaca is characterized by a high level of *societal bilingualism*, a situation of languages brought into contact not due to immigration or invasion, but rather an increasing motivation among the population to learn the socially dominant language. Salasaca represents a speech community experiencing what Matras (2009) calls *unidirectional* bilingualism (59). Trends in bilingualism in the parish are characterized by an asymmetry in acquisition that favors Spanish in formal, educational settings.

Levels of bilingualism in Salasaca clearly vary according to social factors like sex and age. Timura (2011) estimates that women over the age of 50 in the community are today likely to be monolingual Kichwa speakers, and there is a tendency among women who do have some

degree of proficiency in Spanish to feel a certain amount of linguistic shame or self-consciousness in speaking it.

Attitudes toward the Spanish language and its place in the community by the end of the 20th century seemed to favor bilingualism. Büttner (1993) found that 92% of Salasakas interviewed desired bilingual education for their children, with only 8% opting for Spanish monolingual education. It may be inferred from this that at the time, the community members understood the importance of Salasaka Kichwa as a continued linguistic heritage, but with concomitant acknowledgement of the utility of the socially dominant Spanish language for social mobility and advancement in Ecuador, and a desire for children to learn it.

Such a disposition toward the acquisition of both languages among Salasakas has led to a recent trend I personally observed among parents who attempt to pass along to their young children whatever Spanish they know. Even parents with limited profiency in the second language may attempt to use it in the home, often code-switched with Kichwa. This has created an environment in which during the first few years of a young Salasaka's childhood, the infant or toddler begins acquiring the interlanguage of the parents, this is to say, the variety spoken by the parents and characterized, in many cases, by features typical of an incompletely acquired contact variety of bilingual Spanish.

Salasaca's educational institutions have played a fundamental role in the changing language situation in the parish. Since the opening of the Catholic primary school Escuela Fray Bartolomé on Salasaca's central plaza in the 1940s, the community has experienced an increasing level of access to free, public, Spanish-language education provided initially by the church and later by the federal government. The curriculum delivered in Salasaca is the same national, Spanish-language platform that is offered throughout Ecuador. The parish has two

secondary schools and nine primary schools. The majority of teachers come from other cities in Ecuador, and few have any level of competence in the Kichwa language. It is common for Salasaca families to send their children to high school in nearby Pelileo or the provincial capital of Ambato, where the quality of education is considered to be higher.

Today more than ever, young members of the community are completing their Spanish-language, secondary education requirements. In 1993, though approximately 63% reported partial or complete primary education (27% and 36%, respectively), only 5% reported having received some secondary education, and approximately 3% reported having completed their secondary education (Buttner 1993:389). Seventeen years later, the national census shows 35% of Salasakas reported having completed primary schooling, 13% completed basic education, 21% finished their secondary education, and 5% had completed an undergraduate or graduate degree (INEC 2010). The relevance of this to the language situation in Salasaca is apparent since any formal schooling is conducted in Spanish. The increase in education at all levels suggests a commensurate increase in exposure to, and use of, Spanish in domains outside the home.

The linguistic formation of children in the parish clearly begins in the home, but pre-kindergarten centers are now part of the educational landscape in the community, and parents are obligated to send their children to these pre-K centers before the children may enter primary school. There are ten Centros Integrales del Buen Vivir (CIBV) (Integral Centers of Healthy Living) in Salasaca, and they are staffed predominantly by indigenous teachers from Salasaca, but also to a lesser extent by mestizo teachers from other regions of the country. The CIBVs tend to enroll up to two dozen children, ages two to five years, and as many as half of the enrollees are mestizos from outside the community whose parents own local businesses in the parish. The

young children spend eight hours in the center, participating in Spanish-language activities such as games, songs, rhyming, poetry, tongue twisters, and beginning literacy.

Bilingual schools are a recent phenomenon in the community, and in Salasaca three of the nine schools offer some degree of Kichwa-language curriculum.[12] Two of the three bilingual schools are entirely reliant on government support and offer national curriculum to which they add four to eight hours per week of Kichwa-language class time spent teaching Unified Ecuadorian Kichwa and with the language as the topic of study, rather than the vehicle for learning other subjects.[13]

Contributing to the situation of apparent language maintenance in Salasaca is the fact that Kichwa still enjoys a place, though not a prominent one, in local and provincial television and radio. Regular, regional media broadcasts contribute to legitimizing the language, though not entirely based on the SK variety.[14] Although not specifically conducted in the Salasaka variety of Ecuadorian Kichwa, these platforms have played a critical role in fomenting a continued solidarity and cultural and linguistic vitality in the central highland region.

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[12] The three schools are Escuela/Colegio Red Manzanapamba, Escuela San Buenaventura in Wamanloma, and Escuela Katitawa in Kuchapamba. The latter is an independent school founded in 1997 by members of the Salasaka community, and based on the Montessori model for primary education. The school offers children classes in Kichwa, and also in English and Spanish.

[13] Unified Ecuadorian Kichwa (UEK) represents a supradialectal variety of Ecuadorian Kichwa around which a lexicography and various pedagogical tools have been developed with the aim of increasing literacy in the ancestral language while promoting a unified orthography and, ultimately, the use and maintenance of the language. This proves problematic in Salasaca because SK exhibits several dialect features at the phonological level that are not recognized by UEK. Among these are the SK preference for /u/ where UEK prescribes /a/ in affixes such as the partitive {-mun} (prescribed as [man] by UEK), and the voicing of plosives /p, t, k/ in instances such as the locative case marker {-pi} realized in Salasaca as [bi].

[14] Radio Minga Educativa FM93.7, for example, airs Saturday evenings for two hours, and covers the central highland provinces of Tungurahua, Cotopaxi, Chimborazo, Bolivia and Pastaza. It explores themes such as ancestral medicine, artists of the Kichwa community, historical themes of the highland indigenous peoples, and educational guidance. Of the program's three hosts, two conduct their announcements in Unified Ecuadorian Kichwa.[14] The program, a conduit for public service announcements for the bilingual education arm of the Ecuadorian government known (until its dissolution in 2011) as Dirección Nacional de Educación Intecultural Bilingüe (DINEIB), reminds listeners of the importance of the use and maintenance of the nation's "lenguas ancestrales."

Television also serves as a vital platform for kichwa-language programming, which reaches Salasaca seven days a week. TV MICC Canal 47 out of the neighboring city of Latacunga, the capital of Cotopaxi province, offers regular morning news broadcasts in Unified Ecuadorian Kichwa. The station was created in 2008 by the political arm of Confederación de Nacionalidades Indígenas del Ecuador (CONAIE) called *Pachak Kuti*.

To conclude, the socio-cultural and linguistic landscape of Salasaca has been shaped since the mid-1900s by the transition of the parish from a relatively isolated ethnic community to one in which increasingly mobile generations of Salasaka Kichwa speakers are seeking higher levels of Spanish-language education, economic opportunity outside the community for extended periods of time, and new ways to interface with Ecuadorians from outside the community via the arrival and advancement of technology in the parish. At the same time, some amount of radio and television programming continues to validate the ancestral language in the central highlands.

1.9 Summary

This chapter provides an overview of the parish of Salasaca in terms of its people, the social dynamic it shares with neighboring cultures, the changing language situation within the community, and the defining characteristics that allow it to be viewed and studied as a linguistic community.

As I have discussed, the contact situation in Salasaca may be typified, according to the literature (Büttner 1993), as one of asymmetrical bilingualism since the early-1900s, the result of intensifying cultural pressure from the Spanish-speaking *blanco-mestizo* facet of Ecuadorian society. Economic pressures have led Salasakas, especially men, to seek wage labor in Spanish-speaking markets. Additionally, a Spanish-language curriculum is standard in all schools within the parish. These factors have exerted significant linguistic pressure and shaped the language situation in Salasaca.

These pressures have been tempered to some degree by the self-imposed cultural isolation and maintenance of community and linguistic practices within the *comunas* of the parish. Linguistic isolation in Salasaca has been bolstered by the reality that the natural resources

in the area have historically been viewed as undesirable by the *blanco-mestizo latifundio* bosses seeking to exploit fertile regions while simultaneously imposing the social dominance of Spanish in Ecuador.

Now that I have presented the socio-cultural and historical context of Salasaca, Ecuador, the site of this dissertation study, in Chapter 2 I will provide an introduction to the literature and theory of language contact and linguistic borrowing, laying the groundwork for a brief typological comparison of the major structural characteristics of Spanish and SK which follows in Chapter 3. These two chapters will establish the necessary criteria for predicting and explaining the findings in the remaining chapters of the study.

Chapter 2: Loanwords and Lexical Borrowing

The present analysis of the nature of lexical borrowing from Spanish into Salasaka Kichwa must depart from an adequate conceptualization of this contact-induced outcome (Campbell 1993:91). Arriving at a unified definition of borrowing in the literature is elusive, however, and theories of borrowing in situations of language contact has yet to offer a singular

understanding of the underlying mechanisms and processes that result in this type of bilingual innovation at the lexical level.

Competing definitions of borrowing are likely due in part to the diverse and varied sub-disciplines from which the phenomenon of borrowing is approached, and the diversity of approaches leads to differences also in modeling borrowing outcomes, explaining the constraints that govern them, and differentiating borrowing from similar phenomena such as bilingual code-switching at the single-item level.

It is widely held that lexical borrowing, essentially the exchange of linguistic material between two languages, is the most common of contact-induced outcomes.[15] Yet given the pervasive nature of this contact-induced innovation, what has emerged in lieu of a concise terminology and unified model of borrowing is instead a proliferation of metaphors, some less apt than others. This section will attempt a synthesis of the endeavors of the linguistics community in defining lexical borrowing in order to establish a contextually appropriate analytical framework for the data analysis to follow.

2.1 Lexical Borrowing

It is generally agreed that contact-induced language change arises in situations characterized by some degree of community bilingualism, and that the nature of contact outcomes is determined by the stability and duration of language contact at the level of the individual speakers. This is to say, the speaker, not the speech community, is the locus of language contact. How quickly and to what degree of proficiency the individuals in the

[15] (Gómez Rendón 2008b:65)

community become bilingual ultimately determine the nature of the interaction between the two linguistic systems in question. Contact-induced language change may, for example, occur when a population of speakers suddenly shifts from one language to another within one or two generations, abandoning their original language for a socioculturally dominant one. In this case, innovations may occur at the structural level more readily than at the lexical level, and it is the target language, not the language away from which the population of speakers is shifting, that undergoes the innovation (Thomason and Kaufman 1988).

The prototypical situation of language shift (and imminent language loss) is one in which a population of speakers, in seeking to acquire a second, target language, imparts upon the grammar of the target language certain innovations that tend to be structural and which may be attributed to the incomplete or imperfect learning of the language in question (cf. Thomason and Kaufman 1988; Appel and Muysken 1987:38). In situations of structural interference due to shift, the recipient language is the target language being acquired, whereas in situations of language maintenance, it is the native language of the speakers doing the borrowing that is the recipient language (Van Coetsem 1988).

Rapid language loss does not appear to be occurring in the community of Salasaca. The language situation among the Salasakas typifies another common context in which contact-induced language change may occur: that in which the original language appears to have been maintained in a situation of prolonged contact characterized by resistance to change. This scenario commonly results in what has been labeled linguistic borrowing. Borrowing between languages in prolonged contact has been widely studied at the lexical level, but the phenomenon may extend to structural features as well. In situations of intense contact coupled with social factors that favor borrowing from a majority language, as is the case when a socially dominant

language becomes a tool for economic mobility, borrowing at the structural level may entail typological change in the phonology and morphosyntax of the borrowing language.[16]

The present analysis is concerned with borrowing at the lexical level by speakers of Salasaka Kichwa (SK) as they incorporate words from Spanish into their native language. In arriving at an appropriate label and descriptively adequate definition of the phenomenon in question, this study will rely on the metaphor of borrowing as the most appropriate, if not the most widely accepted.[17] The metaphor allows for the conceptualization of the phenomenon as the incorporation of foreign features into a group's native language by speakers of that language (Thomason and Kaufman 1988:37).

A subsequent and useful refinement to this definition by Thomason (2001), one from which the present study will depart, holds that borrowing is the replication or reproduction of linguistic material, features, or patterns from a source language (L_S) as additions or replacements in the structure of the recipient language (L_R)[18] (60).

The idea of reproduction of linguistic patterns was articulated by Haugen (1972), who used the term *patterns* to refer not to structural features but to loanwords (75). He argued that loanwords may take the form of faithfully reproduced importations from the L_S, or as substitutions that show perceptible differences between the borrowed and native material[19] (Haugen 1950:212). The examples given in (1) illustrate how borrowed forms from Spanish into

[16] (Thomason 2001:70-71)
[17] It has been argued that the borrowing metaphor is not ideal since the borrowing may not be temporary and the recipient language likely has no intention of returning the item (Haugen 1950:211; Matras 2009).
[18] The idea that linguistic material is being reproduced is echoed in Field's (2002:8) argument that a more appropriate analogy is that of copying, rather than borrowing or stealing. Literature on borrowing commonly treats the L_S as the "donor" or "model" language, while the L_R has been called the "borrowing" language, again conjuring metaphors only slightly less appropriate than those elected for the present analysis (cf. Wichmann & Hill 2009). Further, calling the source language a "donor" language implies the L_S speakers fulfill an agentive role in the process, which per Van Coetsem (1988) is not the case with lexical borrowing.
[19] Thomason also considers borrowings to be direct importations of morphemes with or without structural modification of features (2001:62).

Salasaka Kichwa have undergone structural integration according to the phonotactic constraints and phonological grammar of the L_R.

(1)

Spanish		Salasaka Kichwa
cochino [ko.'ʧi.no]	'pig'	*kuchi* ['ku.ʧi]
fiesta ['fjes.ta]	'celebration'	*pishta* ['piʃ.ta]

The effects of lexical borrowing on a word extend not just to the phonetic shape of the item but also to its meaning. Matras (2009) made salient the idea that the loanword, or linguistic material as he preferred to call it, being reproduced through borrowing is basically a form-meaning set, and that both form and meaning are vulnerable to change. Matras considers borrowing to be the replication or sharing of word-forms in a new, extended set of contexts and negotiated in the L_R (146). He argues that the linguistic matter in question is essentially phonetic substance paired with semantic value. This distinction between the phonetic and morphological shape of a word and its meaning is seen elsewhere in the literature, and fundamental to the present analysis.[20]

In this context, labeling loan items as linguistic matter may be seen as preferable to patterns, in that *matter* best describes the morphological material and phonological shape of the borrowed elements. Patterns, as argued by Sakel (2007), may refer to the organization, distribution and mapping of grammatical or semantic meaning, without the borrowing of the form itself (15). Following Matras (2009) and Sakel (2007), the present analysis will use the term *lexical patterns* as Haugen conceived of them to be synonymous with *lexical matter*, or rather, *form-meaning sets*.

The term *lexical interference* has also been employed to describe use of words from another language accidentally during a bilingual conversation (Van Hout and Muysken,

[20] (cf. Heine & Kuteva 2005; Winford 2010)

1994:40). The present study will not refer to borrowing outcomes as interference, in order both to avoid possible negative connotations associated with the term, and to minimize confusion with those structural innovations in a target language in situations of language shift, a phenomenon outside the scope of this analysis.

One final label that has been applied to borrowing between languages in contact is that of *lexical transference*, and it has been argued that borrowing is, in fact, nothing more than the direct transfer of lexemes, morphemes, and even grammatical relations between two languages (Weinreich 1953:30-31). Clyne (2003:76) prefers this term, conjuring an image of a transplantation of lexical material. These approaches to labeling the phenomenon are potentially confusing, as they have been used to refer to structural first language interference during the acquisition of a second language, with other contact outcomes at the structural level, and thus will not be used in the present analysis.[21]

Following Matras (2009) and Thomason (2001), then, the present study understands the process of lexical borrowing to be *the replication or reproduction of linguistic matter in the form of lexical items (form-meaning sets that entail both phonetic shape and semantic substance, with or without a degree of feature modification, from the L_S into the L_R by speakers of the L_R.*

Van Coetsem (1988) drew attention to the role of the L_R speakers in the borrowing process and its importance in defining or modeling linguistic borrowing. Speaker agentivity is fundamental, Van Coetsem argues, to contrasting lexical borrowing with what he calls loanword imposition. This latter phenomenon is one in which linguistic matter is replicated into the L_R, but via the agentivity of the L_S speakers.[22] Borrowing, he claims, necessarily entails the active

[21] Odlin (1989), for example, uses the term *transfer* to refer to cross-linguistic L1 influence at the pragmatic, semantic, syntactic and phonological levels in contexts of language acquisition.
[22] Conversely, Haugen (1972) argued that the sheer frequency of use of loans may cause them to "impose" themselves within a speech community. His argument disregards the role of L_R and L_S speakers altogether.

participation of the L_R speakers, who are responsible for the incorporation of loanwords via total or partial adaptation of the forms in question (21). In the context of Salasaca, the agents of the linguistic innovation under investigation are the speakers of SK themselves.

2.1.1 Grammatical borrowing

Studies in language contact generally agree that both lexical and grammatical morphemes may be borrowed, so long as both languages are morphologically compatible and are characterized by equivalent categories of word types (i.e., lexical classes). Arriving at an acceptable distinction between lexical and grammatical categories for the sake of analysis remains, however, a somewhat problematic endeavor. The categorization of adverbs and even some classes of adjectives is still debated, since it is not uncommon for these to form a small closed class in some languages (Muysken 2000:157).

This study will rely on the traditional approach to the distinction based on external criteria: lexical items are auto-semantic elements, characterized by a concrete, extra-linguistic referent. These pertain to open-class categories of forms: nouns, verbs, adjectives, and adverbs of manner. Grammatical words are those closed-class function words whose meaning is abstract and context-dependent: articles, possessive pronouns, demonstrative pronouns, prepositions, personal pronouns, conjunctions, quantifiers (cardinal numerals), adverbs and intensifiers. Bound morphemes will also be treated as functional elements (Muysken 2000:157-8).

As a point of terminological clarification, lexical borrowing refers to the borrowing of open-class, content lexemes, while grammatical borrowing refers to the borrowing of both function words (closed-class lexemes) and grammatical morphemes. Within the field of contact linguistics, the term grammatical borrowing has also been employed when dealing with the

borrowing of structural or syntactic features, but since such analysis is beyond the scope of the present study, the term will be reserved for cases of borrowed function words or affixes.

To summarize, this analysis will use the term *borrowing* in the broadest sense to denote the replication of all types of linguistic matter including content and function words, grammatical structure, meaning, and phonological and prosodic features from the L_S into the L_R. This follows the observation of Clyne (2003), who notes the borrowing of structural elements, semantics, syntactic rules, phonological elements and even prosodic and pragmatic norms may be part of the contact scenario in situations of stable, community-wide bilingualism (76ff). The term lexical borrowing will be used in the broad sense to contrast the borrowing of words with other types of morpho-syntactic or phonological borrowing at the structural level.[23]

Departing from Gómez Rendón (2008b:65), the terms *lexical* borrowing and *grammatical* borrowing will be used in a more strict set of contexts to differentiate the borrowing of open-class, content items with that of closed-class, function words and affixes, respectively. Since structural borrowing at the level of syntax and phonology are beyond the scope of the present study, the term grammatical borrowing should not be taken here to refer to structural borrowing, but rather to the borrowing of lexical items with grammatical function.[24]

2.1.2 Code-Switching and Complex Borrowings

A central issue in analyzing lexical borrowing is determining how to best distinguish those loanwords that over time have become fully integrated in the L_R and adopted among

[23] In the literature dealing with lexical borrowing from Spanish into other, typically Amerindian, languages an alternative terminology has embraced "hispanization" to refer to the phenomenon (Hill & Hill 1980; Stolz et al. 2008; Shappeck 2011). The incorporation of hispanisms into Salasaka Kichwa in the present analysis will simply be referred to as lexical borrowing.

[24] A differentiation is needed here between this use of the term *grammatical borrowing* in opposition to lexical borrowing in the present study, and that espoused in the work of Campbell (1993) who takes the term more broadly to mean borrowing of any word or affix from a source language.

monolinguals from those lexical items taken spontaneously from another language during bilingual discourse. The latter, some scholars argue, is a case not of borrowing but of lexical interference in the form of a word that may or may not be structurally integrated into the L_R and is likely not to occur again, since it has not been propagated in the speech community[25] (Van Hout and Muysken 1994:40; Poplack et al. 1988). This phenomenon has at times been treated as a type of bilingual code-switching (CS), though limited to the level of the single lexical item. It is argued that what results are not true loanwords or borrowings, attested across a speech community, but rather nonce borrowings limited to the speech performance of individuals.[26]

Differentiating between lexical borrowing and spontaneous CS or nonce borrowing at the level of a single lexical item has been ascribed varying degrees of import in the field in recent decades, and remains the subject of debate. This is to be expected, as bilingualism is assumed to be a necessary precursor to borrowing in contact situations, and since widespread or even limited CS is seen as the primary mechanism underlying the eventual adoption of loanwords.[27] This diachronic relationship sees new word-forms increase in frequency of use as they begin to enter into the collective lexicon and are adopted by monolinguals (Myers-Scotton 1993:182ff).

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[25] In contexts of code-switching, Myers-Scotton's (1993) Matrix Language Framework (MLF) allows for a concise analysis of cases in which a lexical root occurs with L_R affixation. The MLF refers to the L_R as the Matrix Language (ML), which in this case functions as the supplier of the grammatical structure of the sentence. Insertions of a single word, then, constitute code-switched items representing the Embedded Language (EL), which functions as the supplier of the lexicon (cf. Matras 2009:130).

[26] The idea of *nonce* loanword originated with Poplack et al. (1990), who in attempting to explain how languages fit together in situations of code-switching noted that this context of switching is constrained differently than that of borrowing. In seeking universal constraints on code-switching, Poplack had to deal with lone items uniquely. For this reason she termed as "nonce" those incidental items that were likely to occur only once. Scipione (2011) defines nonce borrowing as "used by bilingual individuals rather than society at large. Alternatively, these items also share common characteristics with attested loanwords; they are often fully adapted phonetically and are always one word, rather than a sentence or phrase" (26).

[27] Myers-Scotton argues that, although CS may play a role in the borrowing of both cultural and core loanwords, it is an obvious mechanism in the transfer of core forms since cultural loans fill a lexical vacuum and require only a "slender bond" with the process of code-switching, potentially entering the L_R vocabulary "without further impetus" (1992:34).

Since the present study seeks to consider every instance of intrasentential replication of lexical material at the word or morpheme level, degree of phonological assimilation and diffusion in the monolingual lexicon are secondary considerations. Every instance of the use of a L_S word provides potential substance for analysis and thus will not be excluded. In line with Field (2002:16), forcing distinctions among terms like "nonce", "innovation", "lexical interference", "single-item code-switch", etc. does not significantly affect the course of the discussion here.

Further support for this position is proffered by Van Hout and Muysken (1994:40) and by Muysken (2000), who claims "the phenomena of borrowing, nonce borrowing and constituent insertion all fall within the same general class and are subject to the same conditions (60). For these reasons, this analysis will consider all replicated lexical matter (individual form-meaning sets) from Spanish into SK to be instances of lexical borrowing.

Also of interest to this dissertation are instances in which lexicalized chunks that function as lexical units arise from the combination of two or more original, source lexemes. Gómez Rendón (2008b) calls this form of borrowed matter *complex phrasal borrowings*, which surface as lexicalized combinations of free morphemes. Two criteria he uses to identify this class of borrowing and differentiate instances of phrasal borrowings from cases of phrase-level code-switching are stress assignment and the potential for suffixation at the phrasal level (276). The first criterion implies that a lexicalized unit will act as a single word and thus reflect Kichwa's tendency for penultimate stress rather than treating each word as a single lexical item following the stress assignment rules at the word-by-word level.

The second criterion, illustrated in (2a-b) as illustrated by Gómez Rendón (2008b), allows for the identification of phrasal borrowings according to the manner in which the

constituent as a whole receives a single affix. This is to say the Kichwa ablative affix {-man} in (2b) does not apply only to the phrase-final Spanish word *colegio* but rather to the phrase *primer año de colegio*, which acts as a lexicalized chunk.

(2)	Complex Borrowing	Phonetic Shape
	a. *masuminus* (*más o menos* 'more or less')	[ma.su.'mi.nus]
	diusulupagui (*Dios se lo pague* 'May God pay you')	[dju.su.lu.'pa.gi]
	b. *[primer año de colegio]man* ('to the first year of school')	

The SK corpus for the present study includes such lexicalized phrases comprised of two or three distinct lexemes. These particles are considered to be theoretically relevant not only in staying consistent with other studies of Ecuadorian Kichwa in contact with Spanish, but also because their behavior as lexemic units gives a fuller picture of borrowing outcomes in SK, though in subsequent analysis this category is not included among parts of speech in assessing proposed clines of borrowability. The criteria proposed by Gómez Rendón will be employed in identifying these complex borrowings and differentiating them from instances of CS when the replicated material behaves as a single constituent.

2.2 Non-linguistic Factors that Influence Borrowing

An adequate explanation of borrowing outcomes in contact settings must consider those factors that influence the nature of the phenomenon not from within the L_R and L_S but from within the communities of their speakers. A purely linguistic account for why and how particular morphemes or lexemes are borrowed into a L_R will not offer a complete understanding of these questions. Considerations of the social predictors of lexical borrowing and the motivations

behind this type of contact-induced innovation provide a more thorough understanding of the phenomenon and add to the explanatory value of a case study such as this one.

2.2.1 Social and Structural Predictors of Borrowing

It has been argued that strictly linguistic criteria that impose absolute constraints on borrowing are unlikely.[28] This idea that social factors may come into play in contact situations in such a way as to override purely linguistic constraints was the central thesis of Thomason and Kaufman (1988), who stated that substantial lexical borrowing and even unrestricted structural borrowing, are possible in situations of intense contact characterized by extensive bilingualism among recipient language speakers and speaker attitudes that favor borrowing.

With the necessary sociocultural stress or motive in place, notes Thomason, "the range of deliberate contact-induced changes is great enough to suggest that speakers can (and occasionally do) make changes in any area of structure that they are aware of" (2001:151). Under conditions of only casual contact, she observes, only non-basic vocabulary gets borrowed, whereas commensurate with an increase in intensity of contact, the kinds of borrowed features increase. The eventuality is that every aspect of a language's structure is susceptible to borrowing (69).

It is these very social forces, we may assume, that lead to an increase in the tendency to borrow categories farther to the right extreme on scales of borrowability (these are detailed in Section 2.3.1) and allow for some degree of predictability of outcomes. In situations of intense,

[28] The essence of this position is that there are no purely typological impediments to borrowing between languages in contact, and that any linguistic feature is borrowable, structural or lexical, given the appropriate sociocultural pressures exerted on the contact situation (Thomason & Kaufman 1988; Thomason 2001:63). Other non-linguistic factors that restrict the nature of borrowing include speaker attitudes, ideologies, identities and linguistic loyalties. (Winford 2010:177; Thomason 2001:77).

prolonged bilingualism, it is to be expected that borrowing will affect basic as well as non-basic vocabulary, including function words and other closed-class items.

Structurally, the recipient language may experience phonological or prosodic effects, including the adjustment or loss of native phonemes in the L_R, the addition of new phonemes to the L_R inventory, new prosodic features, and even morphophonemic rules. Syntactic characteristics of the L_R like word order and subordination or coordination may be modified due to borrowing. In terms of morphology, inflectional affixes may be borrowed, especially if they fit well with the L_R's existing patterns (Thomason 2001:70).

2.2.2 Motivating Factors of Borrowing

While a characterization of the setting in which language contact takes place allows for some predictability in terms of the degree of borrowing and the extent to which the phenomenon affects not only lexical but also grammatical lexemes and morphemes, considerations of what motivations underlie the process of borrowing from a foreign lexicon to complement a L_R vocabulary allow for a more robust interpretation of a given borrowing outcome. It is useful to first grasp, from a theoretical perspective at least, how lexical borrowing occurs.

The eventual adoption of a loanword as part of the collective lexicon of a community of speakers has its genesis in the innovative use of the word by a subset of bilinguals, who at one point regularized these second language insertions as part of the expansion of their verbal repertoire (Matras 2009:147). This deliberate manipulation of language is the very mechanism by which lexical borrowing ultimately takes place, according to Thomason (2001:149). The assumption is that a bilingual speaker introduces a new loanword in phonetic form as near the model language as she can, and if there is occasion for the innovation to be repeated, other

speakers begin using it. At this point further substitution of native elements takes place, and if recipient language monolinguals learn it, a total or practically total substitution will eventually have been made (Haugen 1953:393).

Field (2002) recapitulates this point, explaining that for extensive lexical borrowing to take place there must be a subset of L_R speakers who are also proficient to some degree in the L_S, and who may act as conduits for the diffusion of features from the latter into the former (3). It is important to note, however, that some degree of borrowing may take place in the absence of community-wide bilingualism (Thomason 2001:72). And yet, it is the bilingual group that borrows first, in making full use of their linguistic repertoire by, according to Matras, "dismantling the mental demarcation" between competing languages (2007:68).

Why, then, do bilinguals with access to two distinct linguistic repertoires choose to import lexical matter from a source language into a recipient one? Weinreich (1953) concluded that the four primary reasons for borrowing are to address the designative inadequacy of a vocabulary in naming new things (see section 2.3.2), to resolve potential issues of homonymy as a single lexeme comes to have multiple meanings, to repair a lexicon when certain words lose their expressive voice and require a synonym, and to offer replacements in cases in which low-frequency words in the recipient lexicon fall into disuse (56).

Weinreich adds that the bilingual speaker may perceive an insufficient differentiation in the semantic fields of the recipient language and so seek a loanword from the source language. Additionally, a bilingual may be inclined to borrow if the source language is symbolic of particular social value (1953:58-9).

A traditional approach to explaining motivations behind lexical borrowing has favored the bipartite schema that differentiates between cultural borrowings, or what Haspelmath (2009)

calls loanwords by necessity, and core borrowings, basic vocabulary that stands for concepts or objects already encoded in the L_R (Myers-Scotton 1992:34). The core versus cultural vocabulary dichotomy aligns with the argument that the most compelling reasons for borrowing are need, in the case of cultural loans, and social prestige, to which the impulse behind the borrowing of basic, core vocabulary for which no lexical gap exists is often attributed[29] (Winford 2010:177).

Delineations between cultural and core loanwords are not always clear. That is, not all languages share the same lexical meanings requiring expression in the lexicon (Haspelmath 2009:48). Haspelmath proposes using the term insertion to refer to new additions to L_R vocabulary, and replacements for those new lexical items in the L_R that either supplant earlier words with the same meaning that have fallen out of use or changed in meaning, or that may coexist with the recipient language word with the same meaning[30] (48).

2.2.3 Cultural and Core Loanwords

In order for speakers to deal with concepts foreign to the cultural reality of L_R speakers, new words may be created and enter the recipient language lexicon as neologisms. Borrowing, however, provides an easier and more convenient manner in which to extend the referential function of a language, barring the presence of cultural attitudes toward linguistic purism as a possible impediment to borrowing in the speech community (Appel and Muysken 1987:171).

Loanwords have historically been categorized according to whether they fill a lexical gap, or whether the motivation behind the particular borrowing was not strictly linguistic in

[29] The importance of these criteria is debated. Matras (2009) claims these are not primary but rather only indirectly involved in impelling the borrowing process (68).

[30] This use of the term insertion should not be confused with a bilingual strategy of the same name originated by Muysken (2000) to refer to the insertion of source language constituents or material into the recipient language structure. Muysken's use of the term does not take into account the semantics of the inserted material.

nature. The former group of loans has come to be regarded as "cultural" or necessary loans, whereas the latter are commonly referred to as "core" or luxury borrowings for which an approximate semantic equivalent already exists in the L_R. Though not unproblematic due to its puristic underpinnings, and the idea that "necessary" loans are not truly necessary given the myriad resources available to the L_R speaker wishing to refer to a novel idea or object, the dichotomy has remained in place to this day[31] (Onysko and Winter-Froemel 2011:1551-2).

Cultural borrowings have also been called complementary loans.[32] This type of loanword is one that "cannot be easily avoided, because it refers to a cultural item or concept that did not exist in the native culture" (Albó 1970:257). These cultural loans are more easily adopted than core loans, according to Matras (2009), because they accompany new concepts or objects for which an existing word does not exist or suffice in the L_R lexicon.

Core loanwords, instead of addressing lexical gaps, replace basic, fundamental vocabulary in the L_R. Motivations behind core borrowings have historically been associated with social prestige. The most widely accepted explanation for the borrowing of basic vocabulary holds that speakers of the L_R imitate features, including linguistic ones, of a socially dominant community for conversational effect, in order to gain social status or approval. For this reason core loanwords are also referred to in the literature as *prestige* loans (Matras 2009:150). Prestige loans are tied closely with notions of social identity and the impression the speaker desires to make (Haspelmath 2009:48). Albó notes that frequencies of this type of loan may reflect attitudinal aspects of the speakers not shown by cultural loans since core borrowing options are

[31] To address this controversy, scholars such as Onysko and Winter-Froemel (2011) have reframed the dichotomy in linguistically-neutral terms by proposing an alternative classification: necessary or cultural loanwords are *catechrestic*, and non-necessary, core loans are *non-catechrestic.*

[32] (Albó 1970:257) This type of loanword has also been referred to in the literature as a *gap* loan (Matras 2009:151), and as *lexical acculturation* (Scipione 2011).

closer to the levels of awareness of speakers, and so they are more likely to be exploited if prestige is at stake (1970:258).

Prestige is not the only motivating factor behind the borrowing of replacements for core vocabulary, however. It may be the case that basic vocabulary is replaced to avoid potential ambiguity in situations of homophony clash, to resolve a constant need for synonyms for affective words that have lost expressive force, to offer clarity when new semantic distinctions arise in the L_R, or simply due to the unconscious introduction of a word through extensive bilingualism (Appel and Muysken 1987:165ff). Along with disambiguation as a motivation for lexical borrowing, another that is similar in purpose is borrowing to avoid taboo, in cultures with strict word taboo rules that may need replacements for forbidden lexemes (Haspelmath 2009:50).

It has long been held, however, that basic vocabulary is generally more resistant to borrowing than cultural vocabulary, though in theory any lexical item might become a loanword (Greenberg 1957:39). Greenberg's assertion is that core vocabulary is a sort of proof or safeguard against massive lexical borrowing.

2.3 Modeling Borrowability and its Constraints

The borrowing outcomes between languages in contact are limited by the features of each language involved. The morphological typology of the L_S and L_R, the inherent structure of each language's lexicon, and the contexts in which certain words may occur within the sentence structure of each language, impose linguistic constraints that determine the nature and extent of lexical borrowing into the L_R. The constraints are observable, in part, in that certain categories of

words tend to be borrowed more frequently than others, if not more easily (Van Hout and Muysken 1994:41).

Generalizations of borrowability seeking to articulate these constraints have been proposed in the form of scales or hierarchies that attempt to illustrate universals in the form of implicational relationships or interdependencies between the borrowing of individual categories of words, in which the borrowing of one category is seen as a precondition for the borrowing of another (cf. Moravcsik 1978; Matras 2007). The predictive value of such hierarchies of borrowability, when coupled with considerations of typological distance between two languages in contact, allows for hypotheses to be advanced and tested in yet unexplored situations of contact. The present case study of lexical borrowing from Spanish into SK will allow for the observation of such linguistic constraints in action and will contribute to a fuller understanding of the ways a language's structure constrains lexical borrowing into a L_R from another L_S in which it is considered to be in contact.

2.3.1 Scales of Borrowability

Studies of lexical borrowing across language families have, in recent decades, contributed to the development of a set of generalizations in the form of universal scales of probable outcomes, articulated in terms of parts of speech or morpheme types. The major contribution of such an approach to borrowing outcomes is its predictive value and what it tells us about permeability of languages and the manner in which each class of lexical or grammatical morpheme lends itself to the process or remains resistant to it. Such generalizations are not without their shortcomings, namely that they have historically been the result of casual observation rather than systematic sampling, and they have tended to focus on a particular

language pair (Matras 2009:154). Nonetheless, scales of borrowability have contributed to a deeper understanding of probable outcomes in situations of lexical borrowing.

A distinction should be made between what have come to be known in the literature as scales of borrowability and implicational hierarchies. The former seek to model the relative frequency with which lexical and grammatical items will be reproduced by languages in contact. Implicational hierarchies offer instead the suggestion that contact-induced change follows a predictable pathway, and that the borrowing of certain categories of words must necessarily precede that of other categories.[33] Both types, however, contribute to an understanding of both the quantitative tendencies and the qualitative nature of the path of change in the borrowing process (Gómez Rendón 2008:59). Such scales, it has been argued, might better be interpreted as a matter of probabilities (Thomason 2001:71).

Another shortcoming of scales of borrowability is that these synchronic snapshots are somewhat limited in scope, since they only deal with major lexical classes of words, and that they have tended to be impressionistic in nature and often based on corpora derived from a specific language pair, limiting applicability as universals (Gómez Rendón 2008b:60-63).
In contrast, implicational hierarchies allow for a diachronic interpretation of the borrowing process (Gómez Rendón 2008b:59ff). It may be inferred from such hierarchies that if a recipient language shows borrowed items from one of the categories on the cline, then the language will have already borrowed other categories of words to the left of that category in the hierarchy. Both borrowability scales and implicational clines favor a unidirectional continuum approach and are valuable in understanding probable outcomes of linguistic borrowing across a range of potential outcomes in a contact situation.

[33] One critique of the frequency approach to scales of borrowability argues that what they actually observe is frequency of usage, not frequency of borrowing, of a particular lexical class, and that the two tendencies are often difficult to differentiate (Matras 2009:154).

Oft cited is the classic scale of borrowability originally published by Whitney (1881) as a late-19th century attempt to use such a scale as a means of capturing the parameters that govern borrowing or transfer of linguistic material. Whitney's scale is shown in (3). The scale grew out his observations of borrowing outcomes in the historical development of various European, Middle Eastern and Asian languages. Whitney's borrowing continuum includes both lexical and grammatical categories, acknowledging the universally-accepted axiom that nouns are the most easily transferred elements from one language to another (19).

(3) nouns > adjectives > verbs > adverbs > prepositions > conjunctions > pronouns > derivational affixes > inflectional affixes

Whitney's findings reflect a widely held assumption in borrowing: open-class lexical items are the most readily transferred between languages in contact, and basically all categories of content words are borrowed more easily than, and earlier in the process than, grammatical words. Nouns, verbs and other content words are expected to be more widely borrowed than closed class items in contact situations characterized by stable, long-term bilingualism because the result is the extension of the denotational capacity of the recipient language, and because open-class items are most salient and semantically transparent (Gómez Rendón 2008b:65).

Based on the speech of Norwegian and Swedish immigrants in the United States, Haugen (1950) proposed a similar scale of what he termed lexical *adoptability*, limiting his consideration of grammatical words to prepositions and interjections, which he grouped with adverbs (224). It was Haugen's position that function words are seldom borrowed (1956:67). He argued that these lexical classes offer more structural resistance to being borrowed, and proposed the scale given in (4).

(4) nouns > verbs > adjectives > adverbs, prepositions, interjections

In that same decade Weinreich also raised the question of whether the relatively freer morphemes in a language are more amenable to transfer, noting that the more integrated the morpheme, the less likelihood of its being borrowed (1953: 34-36). He observed that, barring any selective resistance from the L_R, words with simpler grammatical functions, such as nouns, are more likely to be borrowed by a bilingual than, say, adverbs or conjunctions. He noted that the relative boundedness of morphemes in both the source and recipient languages acts to encourage or inhibit what he considers to be lexical interference between the languages (29-30).

A more detailed scale of borrowability was put forth by Muysken (1981), who proposed the hierarchy of borrowability shown in (5). This hierarchy is based on his corpus of Spanish loanwords and borrowed lexical roots in Ecuadorian Kichwa.

(5) nouns > adjectives > verbs > prepositions > coordinating conjunctions > quantifiers > determiners > free pronouns > clitic pronouns > subordinating conjunctions

Muysken's scale contrasts with that proposed by Haugen in that verbs are considered to be less readily borrowed than adjectives. Note that the two clines are similar in that they both fail to account for grammatical affixes.

The most widely cited scales of borrowability tend to be limited in that they each reflect a specific contact situation. They show striking similarity, however, in that they reinforce a tendency observed by Comrie (1989) that populations of speakers of a socio-culturally subordinated language (the L_R) tend to borrow from the dominant language variety (the L_S) open-class lexical items more frequently than grammatical items, and grammatical words more frequently than inflectional affixes (209ff).

A more recent and complete scale that proposes universal tendencies derived from several language pairs is offered by Matras (2007:61) and is shown in (6). Matras's scale is not implicational in nature but rather is based on relative frequency of borrowing of parts of speech. The scale is also the only one forwarded to date that incorporates grammatical morphemes as well as content and function words.

(6) nouns, conjunctions > verbs > discourse markers > adjectives > interjections > adverbs > other particles > numerals > pronouns > derivational affixes > inflectional affixes

Matras's scale is noteworthy in that, though it does reinforce the canonical view that nouns appear at the left extreme of the continuum, followed by unbound grammatical items, bound grammatical morphemes, and then derivational items outranking inflectional ones, it also suggests that certain categories of function words may be more readily borrowed than some categories of content words, and in doing so stands in contrast to Muysken's (1981) cline.

Scholarship on grammatical borrowing in Amerindian languages in contact with Spanish shows that the hierarchical outcomes mentioned above do emerge, and there is remarkable consistency between the patterns of borrowed function words that surface as loans in unrelated indigenous languages in the Americas.

For example, Stolz (1996) looks at lexical isoglosses on both sides of the Pacific, in contact situations involving structurally dissimilar languages, and he finds a common set of twelve conjunctions, prepositions and discourse particles shared between the isoglosses. Stolz notes the particular prominence of *antes* ('before'), *o* ('or'), *pero* ('but'), and *porque* ('because') as the top four borrowed function words that figure among the dozen most widely borrowed grammatical loans from Spanish into the Amerindian and Austonesian languages in contact with it (1996:12). Additionally, he finds *pero* in 24 of the 26 indigenous American languages in

contact with Spanish, and *porque* in 17 of them. Additionally, *o* is present in 17 of the languages, and *como* (‘as’) in 7 of them. Stolz seeks to elucidate universal hispanisms, and the value in understanding that, although it is not the most widely borrowed word class, it reflects common tendencies within the class.

Makihari (2001) finds Spanish coordinating conjunctions and discourse elements in modern Rapanui: *pero, sino* (‘but rather’) and the negating adverb *nunca* (‘never’) (210ff). The Rapanui data also show discourse particles *y, o sea* (‘or rather’), *entonces* (‘then, so’) and *bueno* (‘good’), which create a site for code-switching or constituted single-item switches in themselves (215).

Stolz (1996:14) argues that the implicational cline in (7) will adequately predict the borrowing of the four most common Spanish conjunctions in Amerindian languages:

(7) If a L_R has borrowed *porque* and *antes*, then it always has borrowed *pero* and *o* as well. Furthermore, if a L_R has borrowed more than two of the aforementioned conjunctions, then *pero* will be among them.

The scales illustrated thus far fail to account for the morphological typologies of the languages in the contact situation, holding as a basic assumption that the L_R morphology will be receptive to every type of morpheme from the L_S. One linguist who accounts for potential differences between these typologies in the context of borrowability scales is Field (2002:38), whose cline, shown in (8), evaluates probabilistic borrowing outcomes between typologically distinct languages.

(8) content item > function word > agglutinating suffix > fusional affix

Field states this cline is truly implicational in nature in that it deviates from the predominantly qualitative paradigm on which most borrowability scales rely and instead makes

quantitative claims as well as temporal predictions. Its predictive information is quantitative in the sense that it may be assumed the L_R will borrow from the L_S a greater number of content items than grammatical words. Its inherent temporal claim states that if the L_R has already borrowed an item from a particular category, then it will have already borrowed items from all categories to the left of it on the cline (38-39).

An implicational orientation to modeling borrowability in language contact situations was also proferred by Moravcsik (1978), whose set of claims reflects a cline similar to those above, but which argues for implicational outcomes rather than probabilistic ones. It is her claim, for example, that if non-lexical or grammatical properties have been borrowed into the L_R, then lexical items must also have been borrowed. Though Moravcsik's proposed set of hierarchies also takes into account the borrowing of structural features and rules, what follows in (9) is a description of the subset of her proposed implicational relations most relevant to the present analysis. (cf. Matras 2009:155)

(9) Constraints on Borrowing (Moravcsik 1978)
   a. If bound morphemes have been borrowed, then free morphemes must also have been borrowed
   b. If non-nouns are borrowed, then nouns must already have been borrowed
   c. If inflectional morphology has been borrowed, then derivational morphology must already have been borrowed

Moravcsik's hierarchy and the scales illustrated in (9) demonstrate how, as observed by Matras (2009), the referential transparency and morphosyntactic autonomy of a word both play a significant role in determining the degree to which they are candidates for borrowing into another language.

Cross-linguistic evidence from contact scenarios between various language families and types provides ample support for the borrowability hierarchies in the literature. One such source is the comparative Loanword Typology Project (LTP), presented by Tadmor (2009:59-61). The

LTP provides a comparison of borrowing outcomes across forty-one languages pairs representing the world's major language families.

Tadmor found that 24.2% of the 57,500 words in the sample were loanwords, and of these, 96% were content words. The open-class loanwords were further subdivided as follows: 31.2% were nouns, 14% were verbs, and 15.2% were a combination of adjectives and adverbs. Only two of the forty-one languages exhibited fewer borrowed nouns than verbs.

In summary, the type of words that may be borrowed into a L_R is constrained by the morphological profile of that language. The underlying principles of compatibility of the two systems in contact limit the nature and extent of borrowing between the two languages. The typological distance between languages in contact antecedes scales of borrowability in establishing the general rules for predicting borrowing outcomes, while the implicational clines and borrowability scales allow for predictions to be made about categories of lexical and grammatical items, adhering to limitations set by the distance between morphological typologies of the L_S and L_R. The following section will address the role typological distance plays in shaping borrowing outcomes between two languages.

2.3.2 Morphological Typology as a Linguistic Constraint

The extent to which the patterns reflected in the scales of borrowability above may be generalized to a particular contact situation is governed to some degree by the typologies of the languages involved in the borrowing context (Gómez Rendón 2008b: 65). Specifically, the morphological typology of the L_R functions as a linguistic constraint that informs not only which elements will be borrowed from the L_S, but which will be borrowed more frequently.

Any predictive value that may come from such a typological assessment in a language pair assumes a degree of correspondence between parts of speech in the two languages. In the case of typologically different languages, difficulty in the functional adaptation of borrowed elements may arise if the L_S part of speech system is not fully understood by the L_R speakers (65).

2.3.2.1 System Compatibility

More recently, Field (2002) formalized an approach to predicting the extent of borrowing outcomes between languages based on a classification of languages by morphological typology.[34] Field's Principle of System Compatibility (PSC) and its complement, the Principle of System Incompatibility (PSI), argue that any form-meaning set may be borrowed from the L_S so long as it conforms to the possibilities of the L_R with regard to morphological structure (40).

To illustrate how languages may differ typologically, and how the principles of PSC and PSI allow for outcomes to be predicted between typologically distinct languages, a comparison may be drawn between Spanish and SK. Kichwa is classified as an agglutinative language with a robust and regular morphology of inflectional and derivational suffixes[35] (Gómez Rendón

[34] Field classifies languages as isolating-analytic, agglutinating-synthetic, or fusional-synthetic, departing from Comrie (1989). Muysken (2000) prefers the labels *isolating/analytic*, *fusional*, *agglutinative*, and *polysynthetic*, respectively, to refer to Comrie's taxonomy (46ff).

[35] Canonically there are four morphological types of languages: *isolating (analytic)*, *agglutinating*, *fusional (synthetic)* and *polysynthetic* (Comrie 1989:42). This taxonomy is based on how a language forms words, taking into account the quantity of lexical or grammatical information that may be represented in a single morpheme, and the degree of correlation between morpheme and word in the language (Field 2002:27ff). Agglutinative languages contrast with isolating and fusional languages in that their morpheme boundaries are always clear cut, and a given morpheme has "at least a reasonably invariant shape" (Comrie 1989:43). Agglutinating and polysynthetic languages like Kichwa permit the affixation of a morpheme or sequence of discrete morphemes to denote semantic and syntactic relationships, rather than relying on a system of cases or prepositions to achieve this. Fusional languages like Spanish are characterized by less clear boundaries between morphemes, which may have fused to represent a number of grammatical categories, and the manner in which the forms of the words themselves change based on how they relate to the other elements in the sentence. Fusional languages do not necessarily allow for morphemes to be easily distinguished from the root or among themselves, and the root itself may reflect internal phonological changes that reflect the morphology of the item (Field 2002: 28).

2008b:185-7). Matras (2007) has argued that, instead of agglutinating, Kichwa is actually better categorized as polysynthetic, since it allows for a large number of agglutinative morphemes to be combined with a single lexical morpheme, often serving as an entire sentence or phrase.

An example of Ecuadorian Kichwa's agglutinative morphology is seen in (11) from Gómez Rendón 2008b:187).

(10) Kichwa Agglutinative Morphology

wasi-ka
House-NOM
'the house'

wasi-pi
house-LOC
'in the house'

wasi-kuna-manta
house-PL-ABL
'from the houses'

As an agglutinating language, Salasaka Kichwa counts independent words, roots, and agglutinating affixes among its form-meaning units. Spanish, however, is categorized as a fusional language, and it includes fusional affixes among its morphological unit categories, in addition to those affiliated with agglutinating languages.[36] Field states that if the L_R is agglutinating, then fusional affixes from the L_S are incompatible, but not impossible, according to the PSC. In order for affixes to be borrowed from a fusional L_S into an agglutinative L_R, they must be reanalyzed in combination with the lexical root as independent words (2002:44). Following Field's hypothesis, it is expected that the data in the present study will reflect the borrowing of lexical roots and derivational affixes from Spanish, but with no borrowing of Spanish fusional affixes.

[36] (Gómez Rendón 2008b:79) The morphological typology of Ecuadorian Spanish and Salasaka Kichwa will be explained in more detail in Chapter 3.

According to Gómez Rendón (2008b), for speakers to borrow words from another language, they must perceive a categorical equivalence between the recipient language constituent or word category and its counterpart in the source language, whether the element is lexical in nature or deals at the level of phonemes, phrase structure, or morphosyntactic features (56).

2.4 Summary

This chapter is concerned with laying the theoretical groundwork for this dissertation study by the providing a unified definition of linguistic borrowing and differentiating it from similar bilingual phenomena. Though consensus has been elusive in arriving at a definition of lexical borrowing, despite more than a century of scholarship in the field, the present study understands the phenomenon to be an innovative contact-induced outcome in contact scenarios characterized by a degree of stable bilingualism that results in the replication of linguistic matter at the lexical level, and in which the L_R speakers play a primary agentive role.

This replication of linguistic matter may entail the transfer of phonetic shape and semantic substance, and potential feature modification of borrowed open-class and closed-class words in the L_R. Further, lexical and grammatical borrowings are identified as structurally assimilated, frequent forms that have been entered into the L_R lexicon in a speech community.

The analyses presented in the final four chapters of this dissertation seek to elucidate not just the degree and nature of lexical borrowing in SK, but the extent to which outcomes across syntactic categories and parts of speech are predicted according to implicational hierarchies of borrowability advanced in the literature. This chapter provided an overview of various models of

predicting borrowing outcomes so the results of the present study may be situated and interpreted accordingly.

What follows in Chapter 3 is a structural overview of both Spanish and SK with the aim of facilitating a more complete understanding of how the purely language-internal variables such as lexical structure, morphological typology and phonological system of each of the linguistic systems in contact in highland Ecuador may influence the other or otherwise impart constraints upon the predicted contact outcomes.

Chapter 3: Spanish and Kichwa in Contact

This chapter provides a broad overview of the morpho-syntax and phonology of Spanish and Salasaka Kichwa (SK), and of existing research on the contact situation in Ecuador. The objective is twofold: first, to briefly orient the reader to existing literature on the subject and in so doing situate this study and the nature of its contribution, and second, to compare the two languages structurally in terms of their sound systems and the manner in which words are bestowed with inflectional and derivational meaning via two distinct processes, fusion in the case of Spanish, and agglutination in the case of SK.

Following a presentation of how each language creates lexemic content and fits it within a greater syntactic framework, observations about system compatibility and loan phonology will then be made with a focus on contact outcomes that result from lexical borrowing from Spanish into SK.

3.1 Introduction

The hispanicization of highland Ecuadorian Kichwa is widely acknowledged by Kichwa speakers themselves.[37] The historical pervasiveness of loanwords from Spanish in the oral folk traditions of the indigenous language is attested in the documents of anthropologists who observe the phenomenon in popular poems and in the lyrics of songs passed down inter-generationally, in some cases for centuries (cf. Harrison, 1989). Given the five centuries of contact between Spanish and Kichwa in highland Ecuador, loanwords in the latter of these two languages have become part of a linguistic landscape in which all who speak it participate, knowingly or otherwise.

It is not uncommon to hear highland Kichwa referred to by its speakers as *chawpi chawpi* ('half and half'), denoting the awareness that a combination of the two languages has indeed taken place, and continues to do so. Significantly hispanicized varieties of highland Ecuadorian Kichwa have also been referred to by scholars such as King (2001) as *chawpi lengua* (SK 'half, middle' + Sp. 'language') and Gómez Rendón (2005) *chapu shimi* (SK 'mixed speak').[38] Recent studies of lexical borrowing in highland Ecuadorian Kichwa demonstrate the true extent of this

[37] Shappeck (2011) prefers the term *hispanicization* to refer to varieties of Kichwa that have experienced heavy lexical borrowing from Spanish in particular. The alternate version, *hispanization*, has been embraced by Stolz et al. (2008), who refer to loanwords from Spanish as 'hispanisms.'

[38] *Chaupi lengua* (or *chawpi lingua*) may also be translated as 'half language', reflecting a novel mixture from each language involved, with the first word originating from Kichwa and the second from Spanish. *Chapu shimi* is derived from the Kichwa verb *chapuy* ('to mix'), and *shimi* is the Kichwa word for 'language', rendering an entirely Kichwa utterance translated approximately as 'mix(ed) language.'

'mixing' in northern communities of the country. The following section provides a summary of extant research to date on the nature and extent of loanword permeation in highland Kichwa.

3.2 Spanish Loanwords in Ecuadorian Kichwa

Studies of lexical borrowing from Spanish into Ecuadorian Kichwa began to surface in the late-20th century. Prior to this, any mention of the hispanized vocabulary of Kichwa was limited to a brief paragraph or footnote in broader approaches to the study of the indigenous language in the country. One instance of this is illustrated by the work of Montaluisa (1980), who noted almost parenthetically and without data to substantiate the claim, "Partimos de la realidad actual de nuestro quichua, esto es de la presencia de entre el 10 y el 20 por ciento de términos españoles en el habla común de un quichua-hablante..." ("We begin with the actual state of our Quichua, that is, one of the presence of between ten and twenty percent Spanish words in the popular speech of a Quichua speaker…") (99).

Observations of borrowing from Spanish were included as ancillary detail in the more recent work of ethnographers such as King (2001), whose research included hispanization as one facet to support larger claims about the changing culture of Kichwa communities like Saraguro, in the southern province of Azuay. Such anecdotal accounts of borrowing were given of the Kichwa of the Salasakas, as well. "Like other Quechuan languages, Salasaca Quichua has incorporated and is still incorporating a large number of Spanish words into its lexicon" (Waskosky 1990:5). Though such accounts lend a sense of import to the understanding of the consequences of borrowing between the languages in question, these researchers' approaches to problem are marginal in nature, and their claims are based on anecdotal evidence.

Linguistic analyses of borrowing in the context of Spanish-Kichwa contact in Ecuador such as those of Muysken (1981, 1997), however, used empirical data to successfully draw attention to the extent of lexical borrowing that characterized specific dialects of the language. Though Muysken's early studies focus on the Salcedo dialect of Kichwa and argue that a process of relexification transformed the local dialect into a bilingual mixed language known as *Media Lengua*, he was among the first to speak credibly to lexical borrowing in Kichwa, and he did so within the framework of a strictly linguistic study. He notes that the Kichwa dialects throughout the highlands of Ecuador at the end of the 20th century were characterized by vocabularies that consisted of between 10% and 40% hispanisms.

In the first decade of the 21st century a series of publications by Gómez Rendón (2005, 2008a, 2008b; cf. Bakker et al. 2008) shed detailed light on the nature of lexical borrowing in the northern dialect of Imbabura Kichwa. Based on a sample of 25 informants and a corpus of approximately 80,000 Kichwa words, he found the influence of Spanish on the Imbabura Kichwa lexicon to be approximately 20%, ranging by individual speaker from 4% to 49% (as cited by Bakker et al. 2008: 204).

To date there has been no systematic analysis of lexical borrowing in Salasaka Kichwa. In fact, the highland dialect of Ecuadorian Kichwa has been largely ignored by linguists; however, Waskosky's (1992) analysis of the affixes and, particularly, the derivational morphology of Salasaka Kichwa provides a glimpse at the nature and pervasiveness of Spanish loanwords in the spoken language at the end of the twentieth-century. The analysis was based on transcriptions of brief stories told by six individuals from Salasaca, three men and three women, between the ages of 20 and 50 years old. The transcription shows 70 lexical borrowings. Of

these, 41 are nouns (59%), 11 are verbs (16%), 6 are adjectives (9%), 8 are adverbs (11%), and 4 arereanalyzed, two- or three-word complex phrasal borrowings (5%).

This unintended contribution made by Waskosky's work lies in the manner in which it affirms the hierarchies of relative borrowability detailed in Chapter 2, and parallels closely the parts-of-speech percentages encountered in this dissertation and explained in Chapter 5.

3.3 Typological Comparison

The bilingual scenario in highland Ecuador is characterized by contact between two genetically unrelated, typologically distant languages. Though the grammars of both Spanish and Kichwa recognize categories of nouns, verbs, adjectives and adverbs, beyond this the languages do not have contiguous systems of parts of speech (Gómez Rendón 2008a:105). What follows is a sketch of the two linguistic systems in contact, with emphasis on the morphology and phonology of each language.

3.3.1 Spanish

This section relies on a standardized conceptualization of Spanish in profiling the morphological typology of the language, but it refers to Ecuadorian Spanish during the discussion of phonological systems. Below I will address Ecuadorian highland Spanish as a dialect, rather than a standard, when outlining the phonology of the language.

3.3.1.1 Spanish Morphology

The verbal morphology of Spanish is strictly fusional, one in which "multiple inflectional concepts are semantically and phonologically fused together into single, un-segmentable forms"

leading to the formation of verbal paradigms (Field 2002:132ff). Spanish morphology also tends to be far more analytical than that of SK, showing a diminished tendency toward lengthy, multi-morphemic words that typify polysynthetic languages when compared to SK.

Spanish may in fact be considered a somewhat typical example of a fusional language (Gómez Rendón 2008b, 161). Though Spanish words usually contain more than one morpheme, the identification of morphological segments is often unfeasible due to the fusion of features in a single morph (162). As a fusional language, Spanish employs fewer inflectional suffixes than does the agglutinating Kichwa. To express grammatical meaning, the latter relies on a relatively more robust, highly regular system of affixes. This is to say, a single morpheme in Spanish may convey various pieces of grammatical information, whereas a Kichwa morpheme is assigned a single meaning.[39]

Examples (1a-c) below illustrate the distinction between the fusional morphology of Spanish and the highly regular agglutinative morphology of Kichwa. The Spanish irregular *vengo* and the inflectional morpheme {-imos} in (a-b) convey information about subject, aspect, mood, tense person and number, all within the single morpheme. The examples in (1c) in Kichwa reflect the fact that only one grammatical meaning (person, tense, number) is expressed with each affix.

(1) a. Spanish:

(Yo) *vengo* *de* *Otavalo.*
I-SUBJ come-1.SING from Otavalo.
'I come from Otavalo.'

b. Ecuadorian Spanish:

Papa-s *comimos.*
Potatoes-PL eat-PAST-1.PL
'We ate potatoes.' (Shappeck 2011:12)

[39] To illustrate this, Shappeck (2011) gives the example of Spanish conjugated verb form *miro,* a form which carries a single inflectional affix *-o* denoting indicative mood, simple present tense, first person, and singular (11).

c. Kichwa:

Otavalo-manta shamu-ni
Otavalo-ABL come-1.SING
'I come from Otavalo.'

Papa-kuna-ta miku-ra-n-chu
Potato-PL-ACC eat-PAST-1.PL
'We ate potatoes.' (Shappeck 2011:12)

The examples in (1) demonstrate that the verbal morphology of Spanish is based entirely on suffixation in which a stem or root form accommodates additional bound forms. In fact, the inflectional morphology of Spanish is made up entirely of suffixation, with noun phrases lacking morphological case and therefore showing less morphological fusion than verb phrases, which call upon the language's rich verbal morphology.

According to the Principle of System Compatibility (see Section 2.3.2.1), an agglutinative language such as Kichwa will borrow from Spanish only certain types of items, subject to restrictions of morphological compatibility. Since agglutinating languages may borrow independent words, roots, and single-meaning affixes, it is expected that the corpus of Spanish loanwords in SK will consist entirely of these three classes of items.

3.3.1.2 Spanish Phonology

The phonology of the Ecuadorian variety of Andean Spanish is subject to some variation, even between communities separated by a single province. This variation is limited to the consonant inventory in particular, and is most evident in the fricative nature of the multiple vibrant [r], the presence or absence of the palatal lateral [ʎ], and the sporadic occurrence of the voiceless bilabial fricative [ɸ].

The vowel inventory of Ecuadorian Spanish, however, varies little from that of Standard Spanish. (Toscano 1953:49ff) It reflects a five-vowel paradigm comprised of tense high, mid, and low vowels as in (2).

(2) Ecuadorian Highland Spanish vowel inventory

i				u
	e		o	
		a		

In the Spanish of the central highlands of Ecuador there is a tendency for unstressed vowels to be strongly reduced, devoiced, and shortened in length nearly to the point of disappearing, particularly in rapid speech, and especially in contact with /s/. (Lipski 1994:248) An example of this is given in (3).

(3) *estudiantes* [es.tu.'djan.ts]
nosotros [no.'so.tř̥s]

The principal consonant sounds present in the highland variety of Ecuadorian Spanish are shown in (4) (cf. Hualde 2005:52-4).

(4) Ecuadorian Highland Spanish consonant inventory

	p	t		k	
	b	d		g	
	ß	ð		ɣ	
		ʧ			h
f (ɸ)	s				
	z	ʒ			
m	n	ɲ	(ŋ)		
	l	ʎ			
	ɾ/r (ř)				
w		j			

As noted by Canfield (1981), in highland Ecuadorian Spanish the palatal lateral /ʎ/ is realized commonly as [ʒ].[40] (48-9) The trilled rhotic, or multiple vibrant /r/, is also widely pronounced as a voiced sibilant in this region, more specifically as a palate-alveolar fricative with a subtle retroflex character [ř] (Lipski 1994:248; Toscano 1953:94). Finally, the labiodental fricative /f/ in popular Ecuadorian Spanish is commonly realized as a bilabial [ɸ] (Toscano 1953:83).

3.3.2 Ecuadorian Kichwa

Ecuadorian Kichwa belongs to the Quechua IIB family of Quechua languages, also referred to as the Chinchay-Norteño group (Torero 1974:31). This northern variety covers an extensive area that includes the Ecuadorian highlands and Amazonian lowlands (Oriente), the southern Colombian highland dialects, and the dialects spoken in various departments of Peru, including San Martin and Amazonas.

Within the Quechua IIB family, Carpenter (1982) divides Ecuadorian Kichwa into fourteen dialects and two major subgroups. SK is counted among seven dialects in the highland variety of the central subgroup[41] (42).

In general terms, SK and related highland varieties of Ecuadorian Kichwa are considered to be verb-nonverb languages[42] (Bakker et al. 2008:199ff). In verb-nonverb languages, verbal lexemes occupy the syntactic slot assigned to predicate phrase heads, while non-verbal lexemes occupy the other three slots (199). Such a typology ignores any distinction between nouns, adjectives and manner adverbs and allows for significant flexibility in the function of members

[4040] The symbol preferred by Canfield for the voiced groove fricative is [ž].
[41] According to Carpenter, this highland grouping of seven dialects includes those of Pichincha, Cotopaxi, Bolivar, Northern Chimborazo, Salasaca, Platillos and Chibuleos (1982:42).

of the latter class. The result is that nominal forms may freely act as adjectives, as in (5) (taken from Bakker et al. (2008:199)), in which the loanword *alkalde* (‘mayor’) is used as a head noun (5a) and as a nominal modifier (5b).

(5) a. *rika-sha-ka* ***alkalde****-ta*
see-PAST-1.SING mayor-ACC
‘I saw the mayor.’

b. *chay* ***alkalde*** *runa*
DEM mayor man
‘That man who is mayor.’

The flexibility demonstrated in the verb-nonverb typology of SK allows borrowing of open class lexical items without restrictions imposed by any apparent lack of congruence between L_R and L_S morphological structure.

3.3.2.1 Kichwa Morphology

This section provides a brief overview of the agglutinative morphology of Ecuadorian Kichwa. This variety reflects general characteristics across the larger Quechua family reflecting predominantly (S)OV word order tendencies and a grammar characterized by a robust and very regular morphology based primarily on derivational and inflectional suffixes.[43] This regularity is

[43] The unique exception to this generalization is the prefix *la-* to denote an in-law familiar relation, though this affix does not occur in all Ecuadorian varieties of Kichwa (Gomez Rendon 2008a:187). Case suffixes in Kichwa are considered by some linguists to be true postpositions (187).

due, at least in part, to various simplification processes that have not occurred in Peruvian varieties to the south (c.f. Cole 1982:6 note).[44]

Agglutinative word structure in Kichwa consists of nominal and verb roots that can take a relatively large number of morphemes, each denoting a specific piece of grammatical information. An example of Kichwa word structure is given in (6).

(6) *Shuk panga-kuna-ta maki-munda llugshi-chishka*
some leaf-PL-ACC hand-ABL take-CAUS-SD
'He took some leaves from his hands

jatun mama-mun puni-chi-nga-bu
big mother-to put-CAUS-NOM-BEN
and put them on grandmother.' (Shappeck, 2011:11)

3.3.2.1.1 Derivational and Inflectional Morphology in Ecuadorian Kichwa

Ecuadorian Kichwa relies on four basic root classes, determined by the types of suffixes they may take. These are substantive, verbal, ambivalent and particle roots (Carpenter 1982:200). SK morphology is elucidated by Waskosky (1992), who provides a study of the derivational and inflectional suffix inventory of this particular dialect of highland Kichwa. The author catalogs the inventory of derivational SK affixes according to their function as verbalizers or nominalizers, working from the base consisting of a nominal or verb root, respectively (10).

Ecuadorian Kichwa does not have morphological gender markers, nor does it have definiteness markers such as articles. The grammatical system does not distinguish between concrete objects and attributes of these objects (Waskosky 1992:36). In fact, Kichwa is a

[44] An example of simplification, which has had the effect of encouraging a tendency in Ecuadorian Kichwa toward higher levels of analyticity, is the loss of possessive nominal suffixes in lieu of preposed subject marked by a genitive suffix (Gómez Rendón 2008a:186).

language that does not distinguish between nouns, adjectives, and adverbs. Thus, the noun/adjective distinction is not useful in describing Kichwa morpho-syntax.

Rather, departing from Weber (1983), a more useful analysis is to describe four syntactic environments or contexts in which both 'nouns' and 'adjectives' must be relied upon. According to Waskosky (1992: 37), these syntactic environments are 1) as a major sentence constituent marked by case, 2) as a prenominal modifier, 3) as a predicate complement to the copulative verb, and 4) followed by a verbalizer (examples of verbalizers are given in (7) and (8)).

This derivational morphology is added nearest the root in SK, followed by inflectional suffixes. To remain consistent with previous SK research, the suffixes in (7a-b) below are taken from Waskosky (1992:13ff), who cites Parker's (1969) bipartite schema of affixes according to whether their products are derived verbs or nouns.

(7) a. Denominative verbalizers (DNV)

-ya	BECOME
-chi	CAUSATIVE
-naya	DESIDERATIVE
-lli	DUBITATIVE
-qui[45]	AT/NEARBY

b. Deverbative nominalizers (DVN)

-ri	EMPHATIC
-nucu	RECIPROCAL
-gu	PROGRESSIVE
-mu	CONDITIONAL
-ba	POLITE
-gri	INCEPTIVE
-lla	JUST/ONLY
-jichi	CLOSE/FOLLOW CLOSELY

[45] The orthographic conventions used by Waskosky are reiterated in this list of affixes. This spelling does not reflect the standard orthography of Unified Kichwa, but rather it adheres to a Castilianized spelling in which, for example, we see *-qui* in lieu of *-ki*, and *-gu* where Unified Kichwa would prescribe orthographic *-ku*. This latter spelling preference surfaces also in recognition of a voicing rule in SK /k/ → [g] in particular onset environments following a voiced coda.

Inflectional morphology of SK verbs includes two aspect/mood suffixes, *-shka* for perfective aspect and *-mu* as the conditional mood (Waskosky 1992, 29ff). The dialect has one imperative suffix *-i.* SK verbal tense is defined for 1st and 2nd person singular and plural across present, past and future tenses (as in (8)), but there is no overt suffix for the 3rd person. The past tense is formed by preceding the present tense derivational suffix with *-(r)ga*.

(8)

Present: *-n*	1st SING	*-ni*
	2nd SING	*-ngui*
	3rd SING (implicit)	*-n*
	1st PL	*-nchi(g/j)*
	3rd PL	*-guna*
Future: *-sha*	1st SING	*-sha*
	2nd SING	*-ngui*
	3rd SING	*-nga*
	1st PL	*-shun*
Past: *-(r)ga*		

Nominal derivational morphology of SK may be best categorized according to the role played by the affix in the formation of the nominal stem (Waskosky 1992:37ff). Suffixes used to create nouns from verbs are seen in (9a), following which a number of denominative nominalizers may be affixed to further change the meaning of the stem, as in (9b).

(9) a. Deverbative Nominalizers

-na	INFIN
-i	IMPER
-shca	PARTIC
-g/j	AGENT

b. Denominative Nominalizers (DNN)

-laya, -shina	LIKE
-gu, -hua, -rucu, -sapa, -siqu i	SIZE
-yuj, -nai	HAS/FEEL

-guna, -pura	PLURAL
-lla	JUST, ONLY

The inflectional morphology of SK may be seen in (10a), with semantic equivalents as defined by Waskosky (1992). Case marking affixes are given in (10b). A complete itemization of SK suffixes may be found in Appendix D.

(10) a. Inflectional SK Morphology

-buj	POSSESSIVE
-qui	AT
-ladu	SIDE
-n	WITH
-ndij	JOIN
-nij	NEAR
-shuj	ONE

b. Case markers

-bi	LOC
-da	ACC
-mu(n)	DAT
-munda	ABL
-gama	LIMITATIVE

3.3.2.2 Kichwa Phonology

The phonological inventory of what has emerged in Ecuador as a standard, Unified Kichwa is characterized by a tripartite vowel inventory, which differentiates this northern variety from its Peruvian counterpart and its inventory of five vowels. The consonant inventory of Ecuadorian Kichwa continues to be the subject of debate, and it has been postulated that certain dialects have up to thirty consonant phonemes (Carpenter 1982:33). It is argued by scholars of Ecuadorian Kichwa, especially those with an interest in promulgating a standard variety, that the

language has sixteen consonant phonemes. Disagreement arises among linguists, however, as to the status of a few sounds in particular.[46]

Waskosky (1990:7) proposes that the phonemic inventory of the SK dialect consists of 26 total phonemes, which includes the tripartite set of tense Ecuadorian Kichwa vowels (high front, high back and low middle) as in (11).

(11) SK vowel inventory

i u

a

Chango Masaquiza and Marlett (2006) agree with Waskosky's proposed SK phonemic inventory, illustrated in (12). This inventory is substantially different than that argued to form the basis of Unified Ecuadorian Kichwa phonology in part due to the inclusion of voiceless, aspirated stops /pʰ, tʰ, kʰ/, voiced stops /b, d, g/, and voiced slit fricative /z/ in the SK inventory.[47]

(12) SK consonant inventory

pʰ	tʰ	kʰ
p	t	k
b	d	g

[46] The sixteen consonants that form the basis of this argument are /p/, /t/, /k/, /ts/, /tʃ/ (also represented as /č/), /ʃ/ (also represented as/š/), /ʒ/ (also represented as /ž/), /s/, /x/, /m/, /n/, /l/, /r/, a fricativized /r/ (/ř/), /w/, and /j/ (Gómez Rendón 2008a: 185). Moreno Cárdenas holds that/ts/ is not a phoneme, and palatal /ɲ/ is to be included in the inventory. (2009:13) Cole (1982) postulates that the set of rhotics are, in fact, allophonic variants of a single phoneme /r/ (199ff).

[47] Cole (1982) believes /z/ and /b, d, g/ to be borrowings from Spanish. (199) However, others maintain /b, d, g/ are truly phonemic in SK and not due to borrowing (Landerman 1991:105).

	(ts)[48]	ʧ	x
	s	ʃ	
	z	ʒ	
m	n	ɲ	
	l		
	ɾ		
w		j	

This view embraces the idea that SK relies on phonemic contrast between aspirated stops, with a glottal characteristic not found in northern varieties of Ecuadorian Kichwa such as that spoken in Imbabura, and non-aspirated stops (Cole 1982). The contrastive status of [pʰ] continues to be the subject of debate, however. It has been argued that the aspirated voiceless occlusive is, in fact, allophonic in Ecuadorian Kichwa (Moya 1981, Moreno Cárdenas 2009).

3.4 Summary

The literature on borrowing outcomes in Kichwa as a result of centuries of prolonged contact in scenarios of bilingualism in highland Ecuador has, until the latter few decades of the 20th century, treated the topic as a secondary one. As linguistic analyses of loanword phenomena in Kichwa have begun to surface, they remain limited in the extent to which they address morpho-phonological outcomes that may elucidate the constraints that operate on the structure and grammar of each language.

With this in mind, the overview of Spanish and SK sound systems and respective morphological typologies laid out in the present chapter provides a point of departure from which an investigation of contact outcomes in SK may be undertaken. The following chapters will undertake an analysis of relative borrowability of lexical classes from Spanish into SK, the

[48] Waskosky (1990) notes that this alveolar affricate is found in such words as [tsala] *thin*, and [tsangana] *grind by hand*. Chango Masaquiza and Marlett (2006) agree with the phonemic status of this segment. Moreno Cárdenas ascribes this sound to words of Proto-Quichua origin (2009:13).

effects of system compatibility on borrowing, and the assimilation strategies exploited by SK speakers as they bring loanwords into alignment with their native grammar.

Chapter 4: Methodology

The corpus of spoken Salasaka Kichwa for the present case study was compiled in the form of recorded interviews during preliminary fieldwork in Salasaca in the summer of 2010, and again in June and July of 2011.[49] During my initial visit in 2010 I became acquainted with a Salasaka man who was a respected member of the community, and who would ultimately become a participant in the study as consultant 40_M. He invited me to live with his family during my subsequent two-month visit in 2011, during which time I collected the majority of the data for analysis. His input and suggestions would prove invaluable to the success of this project.

My integration, or at least acceptance, into the Salasaka community was gradual and never more than marginal, but by residing with a local family and sharing in their daily meals and activities, I was able to foster acquaintanceships with their extended kinship and friend networks despite my appearance and reputation as a foreigner. The connections I was able to make with locals were based on trust earned over the course of my stay. This trust was further bolstered by several generous members of the community who were willing to assist in explaining the purpose of my stay and lend their vote of confidence to the rumors of my purpose that seemed to have spread quickly through the community.

The geographic site of the fieldwork for this study corresponded with the parish of Salasaca, chosen for both linguistic and sociolinguistic reasons. Salasaka Kichwa (SK) is recognized as a unique dialect of Ecuadorian Kichwa (see Section 3.3.2). This dialect shows a number of lexical and morphosyntactic differences from other varieties of Ecuadorian Kichwa, though it is mutually intelligible with all of them. SK and its speakers have remained relatively isolated from linguistic and cultural incursion from the *mestizo* culture and Spanish language

[49] The human subjects research methodology for this investigation was approved by the University of Wisconsin Institutional Review Board (IRB) correpondong to protocol number SE-2011-0334-CR003.

when compared to most *Kichwa llakta* (Kichwa-speaking villages) in the country's Andean highlands, and so they provide a unique opportunity for the study of language contact outcomes at the lexical level in what is considered one of the most isolated and strongly maintained varieties of Kichwa in the country (Büttner 1993).

4.1 Consultants

The process of selecting interviewees for this study relied principally on the snowball method, and more often than not the consultants approached me to volunteer as participants. I did not anticipate having individuals contact me of their own accord, and I learned it was the result of word-of-mouth communication about how, after each interview, I would show my gratitude with a small gift of ornamental glass beads, popular among Salasaka women. This served as an unexpected incentive that reduced the challenge of finding consultants and earning their trust.

The loanword corpus for this study was extracted from interviews with twelve consultants, six females and six males. The speakers ranged in age from 20 to 88 years, with an average of two interviewees representing each ten-year age interval (see Table 4.1).

Though the present study is not strictly sociolinguistic in nature and does not pursue a variationist approach to borrowing in SK, an effort was made to record a sample of representative speech from consultants across both sexes and a range of age groups. It happens that in Salasaca, the variables of gender and age correspond closely with two other factors of interest, degree of formal education and level of Spanish language competence. Level of education is taken in this research to mean the number of years interviewees spent in one of the community's religious or state-run schools, in which curriculum is delivered entirely in Spanish.

The Spanish-language proficiency of each interviewee was established based on a combination of their individual language history, self-reported language use patterns, and an impressionistic evaluation of the Spanish portion of each interview by the investigator and another independent rater.[50] All of the consultants reported SK to be their native and first language, but the degree of proficiency in Spanish as a second language among the interviewees varied substantially. According to Sánchez Parga's (1992) original taxonomy, the bilingual speakers in the study all demonstrated varying levels of this *ethnic bilingualism*.[51] Even the monolingual participants showed some level of receptive competence in Spanish, but they had little to no productive ability.

Bilingual ability was categorized according to Haboud's (1998) three levels of bilingual communicative competence as follows: SK monolingualism, Spanish monolingualism, and what she terms *bilingüismo de cuna* ('bilingualism from the cradle'), referring to bilinguals who began acquiring both languages at a young age. Native SK speakers were further categorized as SK/S_1 (beginner), SK/S_2 (intermediate), or SK/S_3 (advanced) bilinguals, reflecting increasing degrees of competence in Spanish as a second language along a continuum of what Haboud calls *bilinguismo étnico*, or ethnic bilingualism (232ff).

For each consultant, level of SK communicative competence was assessed impressionistically by the research assistant, a respected Salasaka woman whose native language is SK who is also fluently bilingual. This approach was combined with an acknowledgement of the reality that even the youngest Salasakas were still learning the ancestral language as their

[50] Reliable assessment here was attempted by pairing my own evaluation of each speaker's Spanish language ability based on the data with an evaluation provided by a doctoral candidate from outside the field of linguistics for whom Spanish is her native language.

[51] Haboud paraphrases Sánchez Parga in noting that the criteria used to delineate this categorization are ethno-cultural, not linguistic. Whereas *mestizo bilingualism* denotes the characterization of a bilingual population for whom the first language is Spanish (spoken by the majority), *ethnic bilingualism* specifies a linguistic repertoire in which the indigenous language (spoken by the minority) is the native language of the speakers in question (1998: 52).

primary language. SK is used at home and nearly exclusively in the domain of interactions with parents and grandparents.

Consultant selection for the present study was not designed to include representatives of all levels of Spanish language competence. However, Spanish competence correlates loosely with age, which was one of the selection criteria. In Salasaca, the youngest generations are characterized by relatively symmetrical competence in Kichwa and Spanish, the result of formal education in the latter beginning at the age of 5 or 6. Speakers in their 60s and beyond demonstrate a notable asymmetry in Spanish ability, and those in their 70s and 80s, especially the Salasaka women, tend toward SK monolingualism.

Care was taken to record demographic data immediately following each interview. Speaker biographic information included full name, date of recording, sex, age, level of education, current occupation, place of birth, *comuna* (neighborhood) of current residence, birthplace of parents, language background and level, if any, exposure to formal education in Unified Kichwa, history of having resided outside the community, and nature of acquisition of Salasaka Kichwa. This information was recorded for each participant and kept in a field notebook for later reference.

The purpose in collecting these details of each individual's life was to place her or him in relation to the rest of the speech community of Salasakas. I also inquired about metalinguistic topics such as personal language use preferences based on context, addressee, and interaction setting. This task was designed to elucidate the diglossic nature of the bilingual community and to explore intergenerational patterns of use that might hint at changes in each domain of language behavior.

Table 4.1
Consultant Metadata

Consultant	Sex	Age	Formal Education	Bilingual Competence
M_88	Male	88	None	SK Monolingual
F_82	Female	82	None	SK Monolingual
F_81	Female	81	None	SK Monolingual
M_72	Male	72	None	SK/S_1 (Beginner)
M_71	Male	71	None	SK/S_1 (Beginner)
F_65	Female	65	None	SK Monolingual
F_64	Female	64	Primary through grade 3	SK/S_1 (Beginner)
M_50	Male	50	Primary through grade 4	SK/S_2 (Intermediate)
M_40	Male	40	Primary through grade 6	SK/S_2 (Intermediate)
F_28	Female	28	Primary through grade 6	SK/S_3 (Near balanced)
F_22	Female	22	Attending university	SK/S_3 (Near balanced)
M_20	Male	20	Completing secondary	SK/S_3 (Near balanced)

4.2 Data Collection

The task of accessing completely spontaneous speech of Salasakas in informal contexts was improbable given my status as an outsider. Capturing relatively casual speech, however, was possible by following a semi-structured sociolinguistic interview format. By following a minimally scripted protocol, facilitated in some cases by a native speaker and member of the speech community, a context was created in which speech that was relatively spontaneous and unguarded could occur, despite what is widely acknowledged to be a diminished degree of informality in the moment (Labov 1977). This format was also selected as the most appropriate since the particular linguistic variables of interest were yet undetermined at the time of the interviews, and unguarded speech would readily allow features of interest to surface in the data (79).

The sociolinguistic interviews that provided the data for this corpus-based case study were conducted in a manner that elicited, as naturally as possible, spontaneous speech in both Spanish and SK. The interview protocol approximated a sociolinguistic approach that allowed

the interviewer to select among a set of possible prompts while optimizing the naturalness of the conversation between interviewer and consultant.

The interview protocol was designed in such a way that the elicitation of dual-purpose questions could isolate variables of interest while also getting at language attitudes, subjective evaluations and use patterns without betraying the true purpose of the study. This methodological detail was included given Labov's (1966: 87) observation that conscious discussion of a study's variables of interest tends to contaminate the evidence in speech performance.

Interviews were initiated by the researcher in Spanish, a language which even the oldest and least proficient Salasakas have little problem understanding. A locally respected and trusted woman from the community was present to act as research assistant and facilitator during interviews with the five oldest consultants, who responded entirely in Kichwa. Interviews with the oldest participants were scheduled and facilitated by the research assistant primarily for reasons of confidence, but also for clarity of communication. These individuals were essentially SK monolinguals representing a generation of Salasakas whose trust of outsiders had been repeatedly diminished by cultural and governmental incursions since the early-20th century.

The remaining seven consultants were already familiar with the researcher, and they had volunteered as participants. Matters of trust did not constitute an obstacle in these contexts, and these interviewees were also characterized by a greater comprehension of spoken Spanish. The question of whether the use of two different languages to collect data across the speaker sample, and the potential for interviews conducted in Spanish with younger consultants to prime a higher rate of loanword use in SK is an important one. In conducting the interviews, I made it clear to each consultant that I understood what they were saying in SK, to alleviate any impulse on their part to employ Spanish vocabulary for my sake or at a greater degree than they normally would.

My use of Spanish in seven of the interviews could have inflated the strength of negative correlations between age and borrowing rates found below, a possibility that needs to be acknowledged as part of the challenge of collecting data for this study.

Interviews ranged in duration from fifteen minutes to just over an hour. During the first portion of the inteview consultants were asked to respond only in Spanish to questions asked by the researcher. Recorded conversations were then marked by a clear switch to the Kichwa language portion of the interview. At this time consultants were asked to answer only in SK, although follow-up questions from the researcher continued to be asked in Spanish.[52] Each interview rendered a total of between 400 and 1,000 words in SK.

Conversation topic in sociolinguistic interviews can be a problematic variable to control for, and it does not necessarily need to be consistent across consultants when the variables of interest are phonetic or morphosyntactic. Nonetheless, possible interview prompts and topics of discussion remained as consistent as possible across the twelve consultants. For the SK portion of the interviews from which the loanword corpus for this study was extracted, consultants were asked to respond in Kichwa to questions about the cultural or spiritual importance of particular Salasaka festivals and geographical points of interest or sacred landscapes.This section of the protocol was derived from the methodology and findings of recent anthropological scholarship conducted in the community (Corr 2010).

Interview questions also touched on how the behavior and dress of the younger generations of Salasakas reflect influence from the *mestizo* culture. These questions led to broader inquiries about how the community is evolving under cultural pressure from outside its borders. Finally, consultants were asked to recall their most salient memories of family, customs,

[52] The researcher, after completing two years of coursework in Ecuadorian Kichwa, had achieved a receptive level of competence in the language that allowed him to comprehend SK responses. He signaled his understanding by offering nonverbal cues that let the interviewees know they were understood and could thus continue talking freely.

or important events in the community's history. The detailed interview protocol for the present study is provided in Appendix E.

Some variability in response topics was inevitable, despite the interview guidelines outlined above. It was assumed that some variablity in interview topic or prompt would have little effect on the predictive value of the hierarchies of borrowability outlined in Section 2.3.1, since the particular semantic field of any given loanword carries no direct relation to its part-of-speech category, which is the foundation of these hierarchies (Moravcsik, 1978).

The majority of the interviews were conducted in the homes of the consultants. This decision was motivated by the desire to minimize attention to language use and reduce any atmosphere of self-consciousness in an unfamiliar setting, though this never completely dissipated. The familiar environment may have reduced the observer paradox to some degree. I also made an effort to invite family members and friends of the consultant to remain in the room with us, especially when that family member or friend had introduced me to the interviewee. These home environments created spontaneous moments of casual speech between the interviewee and other attendees, and lent an air of informality to the task.

Interviews were recorded with a Zoom H2 digital recording device. The device was wrapped in a handkerchief of the type commonly used by Salasaka women to compress bundles of combed sheep's wool as it is spun for later use in weavings. Since the recorder was a novelty to nearly all of the consultants over the age of 50, and was an object that provoked curiosity and even mistrust among the oldest consultants, the presence of the familiar handkerchief dressing seemed to allow consultants to either forget about or otherwise ignore the device. To further diminish any anxiety caused by the recorder, a brief sample recording of each consultant's voice

was taken and subsequently played back to them at the outset, in order to better explain technology which, to the interviewees in their 70s and 80s, was quite alien.[53]

4.3 Loanword Corpus

This study analyzes a data set of 776 unique Spanish loanword types extracted from approximately two hours of recorded SK speech from interview sessions with twelve consultants. Analysis of loanwords in the speech samples took into account isolated lexical and function words, morphologically integrated Spanish roots accepting SK agglutinative suffixes, and complex borrowings that represent fossilized lexical units not exceeding three words.

The size of the corpus was designed in such a way as to address methodological problems faced by previous studies of lexical borrowability, namely, that they have been based largely on small corpora, an over-reliance on dictionaries, and the employment of *ad hoc* samples drawn from anecdotal or observational evidence of the researcher without a clear explanation of the origin of the data (Zenner and Kristiansen 2014:5).

Of the 8,697 words that comprise the speech data, 1,419 total tokens of Spanish origin reflecting varying degrees of morpho-phonological integration were extracted to form the corpus for analysis. Taking into account that this count of total tokens did not distinguish between reiterations of a single loan item within the speech of each interviewee, unique loans were identified for each individual consultant and categorized according to type. Spanish toponyms (e.g., *Ramosloma, Otavalo, Nitón, Centro, Pelileo, Ambato*) were excluded from the corpus since they are not loanwords but rather constitute a universal referent shared by both the L_S and L_R.

[53] Sociolinguistic researchers are generally resigned to assuming a foreign recording machine will inevitably be a constant, if slight, interference with the spontaneity of the proceeding (Labov 1966: 90).

4.4 Coding

All interviews were transferred as a *.wav* file onto an external hard drive for storage and subsequent analysis. The sound files were processed using ExpressScribe transcription software, which allows variable speed playback of each sound file in cases of nearly unintelligible or fast speech. Isolated speech samples were extracted when necessary using Audacity, a free audio editing software program, and the phonetic shape of these loanwords was analyzed using Praat acoustic analysis software (Boersma and Weenink, 2014). Praat was utilized primarily to analyse particular instances of medial vowel raising such as /e/→[i], and of potential repairs of Spanish initial /f-/ (or [ɸ]) to labial stops when impressionistic evaluation was not sufficient.

Instances of lexical borrowing in the corpus were identified, labeled, and morphologically parsed. Each loanword was assigned to a lexical class in Spanish according to its canonical usage as specified by the *Diccionario de la Lengua Española* (Real Academia Española 2001). Lexical borrowings were categorized as nouns, verbs, adjectives, or adverbs. Grammatical borrowings were identified as conjunctions, prepositions, pronouns, discourse markers, articles and quantifiers**.**

When the phonetic shape of a loanword showed deviation from the expected standard Spanish or highland Ecuadorian Spanish pronunciation, the word's articulation was transcribed according to the International Phonetic Alphabet. The semantic treatment of each lexical borrowing and its SK part-of-speech categorization was also noted when it deviated from that of the source language.

To ensure accuracy in transcription and coding, the corpus was verified by a Salasaca native who, by coincidence, lives in the same city as the researcher and participated in the study as a research assistant.

Instances of sentence level code-switching were not included in the corpus for analysis. However, as indicated above, fossilized complex borrowings consisting of two or three Spanish words were included in the analysis, as in examples (1) and (2).

(1) *Puñusha* ***sueño*** *na kan...* ***a ver****, yakupi armankusha* ***sueño*** *kan.*
sleep dream-NOM not be-3.SING to see water-LOC bathe-PROG dream be
[My] dreams aren't... let's see, [my] dreams are of bathing in water.

(2) ***En cambio*** *kutin ñukachik ña* ***tiempo*** *illay kikin ña*
in change again PRON-1PL already time lack propio/mismo already
But rather, once again lacking time,

na…na away ***pudin****chik.*
NEG weave-INFIN *be able to-1.PL*
we were unable to weave.

As noted by Van Hout and Muysken (1994), any analysis of lexical borrowing comes with its own set of methodological problems of delineation. The question of how to deal with complex phrasal borrowings, essentially lexicalized combinations of free Spanish morphemes such as the common SK utterance *diusulupay* (Sp., Dios se lo pague), is really a question of how to deal with faithfulness to the mental representations of these loans in the mind of the speaker. This dissertation does not analyze complex borrowings in quantitative terms as a unique category, but rather unpacks the phrasal chunks and treats them as a series of component lexemes.

4.5 Summary

The loanword corpus extracted from sociolinguistic interviews of the twelve Salasaka consultants will be analyzed in the following two chapters for patterns of loanword borrowing across parts-of-speech categories, and according to speaker strategies of morpho-phonological integration within the structural framework of SK, respectively.

The objective of Chapter 5 is to elucidate patterns of borrowing in the data that contribute to a broader understanding of such contact outcomes at the lexical level. Of primary interest is the degree to which lexical and grammatical categories are borrowed or otherwise embody the notion of "borrowability" presented in the literature, and whether constraints in SK reflect those found in other contact scenarios. Chapter 6 explores the various strategies employed by SK speakers as they integrate Spanish loanwords into the morphological and phonological systems of their native language.

Chapter 5: Borrowing Patterns in Salasaka Kichwa

5.1 Introduction

Whenever attempts are made to explain borrowing, a number of assumptions come into play. Matras (2009) articulates these in the following manner. First, the degree of borrowing in a recipient language (L_R) is assumed to correlate with the extent of exposure, or intensity of contact, between the languages in question. Second, contact outcomes are the product of varying degrees of structural congruence or increased similarity (or diminished dissimilarity) between the languages in contact. Third, the extent to which words lend themselves to linguistic borrowing is conditioned by the semantic-pragmatic and structural properties of a particular word and the lexical category to which it belongs (153).

The first of these assumptions was explored in Chapter 1, through sociocultural and historical considerations of the contact scenario in Salasaca. The second assumption was addressed in Section 3.2, wherein a typological comparison of Spanish and SK was presented. This chapter analyzes corpus data in considering the third assumption, that a particular word lends itself to the borrowing process to the extent that its structural properties, meaning, and discourse functions allow it to.

The primary questions guiding this chapter are, 1) what are the distributions of loanwords in SK by part-of-speech category, and, 2) how is this shaped by the lexical or grammatical nature of the loanwords in question? Such inquiries aim to elucidate breadth of borrowing by accounting for both total borrowed tokens and also unique loanword types in the L_R. The question is also addressed along complementary lines by observing the hierarchies of borrowing based on open-class and closed-class lexical categories.

A secondary objective of this chapter is to examine the extent to and manners in which contact outcomes, shaped primarily by semantic and syntactic categorical factors at play in each language, may be further influenced by speaker variables. Assuming that language-external factors shape contact-induced language change to an equal or greater degree than purely structural ones (Thomason and Kaufman 1988), emerging patterns of borrowing by speakers grouped according to a particular variable may offer evidence from which answers to these questions may be inferred. Speaker age, sex, and bilingual competence are the primary variables that will be analyzed to determine whether these have bearing on observable tendencies in the distribution of loanwords across lexical and grammatical categories in the naturalistic SK speech of the consultants.

5.2 Patterns of Borrowing

This section compares the distribution of lexical and grammatical borrowings from Spanish into SK, focusing on the major parts of speech and classes of function words being borrowed. These outcomes are compared to predictive hierarchies that have been advanced in the literature, and some general observations are made about the tendency for particular parts of speech to be borrowed in this particular situation of language contact.[54] Additionally, the above-mentioned speaker-internal variables are addressed. Together, these analytical approaches to the SK corpus allow for observations to be made regarding the overall degree and nature of

[54] Relying strictly on corpus-internal frequency counts in a L_R to attempt to measure borrowability of elements from the L_S must be done with caution, as noted by Van Hout & Muysken (1994). To make statements with confidence, linguists must also rely on an understanding of the frequency of usage of the borrowed items in question in the L_S (42-3). For this reason, descriptive statistics are considered to be more reliable when coupled with implicational hierarchies and other analytic approaches that, in tandem, give a fuller understanding of the phenomenon when such source language relative frequency data is not available.

borrowing from Spanish into the ancestral language in one of Ecuador's most isolated Kichwa speech communities.

5.2.1 Distribution of Borrowings in the Corpus

This section presents a descriptive sketch of the extent of borrowing from Spanish in the lexicon of SK to assess the concentration of loanwords in the speech corpus. For the purpose of the following analysis no distinction is made between independent words imported as such without accepting SK affixes, and Spanish lexical roots that form the basis of agglutinated forms taking derivational and inflectional SK morphology.

5.2.1.1 Types and Tokens

Of the total SK words in the corpus, 16.3% were identified as established loanwords of Spanish etymological origin. This figure serves as clear evidence of the extent to which the socially dominant *mestizo* language that borders the linguistically conservative indigenous community on all sides has exerted social and linguistic pressure on this variety of Ecuadorian highland Kichwa. This concentration of hispanisms in SK is testament to the influence of Spanish even in areas where the language has not gained nearly the same level of traction as it has in regions to the north of Tungurahua Province.[55]

Such descriptive statistics provide a general idea as to the degree of lexical borrowing across generations of SK speakers in the community. However, the percentage of total tokens does not account for whether the speaker repeats the same word ten times during the

[55] Investigations in Pichincha, north of Quito, found lexical borrowing from Spanish into Ecuadorian Kichwa in rural communities to be above 20% (Gómez Rendón 2008a). Muysken (1981) noted that some varieties of the indigenous language in the Ecuadorian highlands were characterized by borrowing levels of 10%-40%. The three decades of time depth since the publication of Muysken's figures may account for the discrepancy between his most conservative estimate, and that actually found in the present study in one of Ecuador's most isolated communities.

conversation, thus the calculation does not offer a true metric to infer the particular characteristics of the borrowing of Spanish loanwords into the SK lexicon.

An assessment of the unique loanword types in the speech data of each consultant offers a clearer picture, than a simple tally of total attested loans as to the actual nature of borrowing tendencies in SK, and thus contributes to a more accurate understanding of how much of each speaker's individual lexicon is of Spanish etymological origin. Table 5.1 indicates the prevalence of both total loanwords and unique loans in the corpus.

Table 5.1
Total Loanword Types and Tokens in the Corpus

	Occurrences	Percentage of total SK words
Tokens	1419	16.3%
Types	776	8.9%

The Token-Type Ratio (TTR) in the corpus was found to be 1.83, suggesting a relatively robust scope of borrowing across lexical classes and with little repetition of each unique borrowing. [56] Though this approach offers no insight into commonalities between types across the sample from the twelve participants, it suggests a low repetition rate in the speech sample of any single consultant. Put another way, it controls for possible discursive effects in the sample, accounting for repetition or usage tendencies conditioned by the nature of the conversation topic (Gómez Rendón 2015).

[56] For purposes of comparison, Gómez Rendón (2008a) found the TTR in his corpus to be 2.2 tokens for every unique loan type.

5.2.1.2 Lexical Borrowings

Of the total unique Spanish loanwords in the SK corpus, 86.4% were open-class lexical items: nouns, verbs, adjectives and adverbs. The remaining 13.8% of loanwords extracted from the data are classified as function words: conjunctions, numerals, prepositions, pronouns, discourse markers, and quantifiers. The breakdown between content and function loanwords is given in Table 5.2.

Table 5.2
Distribution of Borrowings[57]

	Occurrences	Percentage of total SK words
Lexical	669	86.2%
Grammatical	107	13.8%
Total	**776**	

In his study of Imbabura Kichwa, Gómez Rendón (2008a) found a ratio of content words to function words of 4.6. The present study found the ratio to be slightly higher, approximately 6.3 following the same criteria. The SK data show a greater proportion of open-class lexical borrowings to grammatical borrowings in Salasaca. Such a discrepancy may also be attributed to some degree to the methodological preference in the present study to account for adverbs of time, place, frequency, comparison, probability and degree as open-class, in addition to those of manner.[58]

Bakker, Gómez Rendón and Hekking's (2008) study of the varieties of Ecuadorian Kichwa spoken in Imbabura and Bolivar provinces found that of Spanish borrowings in these

[57] The analyses in this and subsequent sections take into account only unique loan types. The tallies in the tables and figures below reflect the counts of unique borrowings in the data, rather than total tokens.
[58] Gómez Rendón (2008a) only included adverbs of manner in his investigation.

varieties of Kichwa, 83% were open-class words, and 17% pertained to categories of function words such as conjunctions, interjections, numerals, discourse markers and prepositions. These findings show a close alignment with the results found in the present study, affirming a common tendency for lexical borrowing from Spanish in Ecuador's varieties of Kichwa to favor open-class items.

The manner in which lexical and grammatical loanword categories emerge in the present study, illustrated in Table 5.3, confirms expectations that approximately half of the attested loanwords would be nominal in function, and approximately one of every five borrowed items would be a verb or verb stem. [59]

Table 5.3
Categorical Distribution of Total Unique Borrowings

	Unique occurrences	Percentage of total unique loans
Nouns	404	52.1%
Verbs	158	20.3%
Adjectives	56	7.2%
Adverbs	51	6.6%
Grammatical	107	13.8%
Total	**776**	

The distribution of the loanwords in the SK corpus reflect universal tendencies in borrowing across the categories of nouns, verbs, adjectives and adverbs as predicted by the hierarchies outlined in Section 2.3.1. Table 5.4 presents the distribution of the 669 unique open-class borrowings in the corpus. The data reflect that these word classes are the most frequently

[59] Gómez Rendón (2008b:294ff) found in his Salcedo corpus that nouns comprised 54.4% of borrowings from Spanish into Ecuadorian Kichwa. Verbs in his speech sample amounted to 17.7%, adjectives comprised 8.5% of lexical borrowings, and adverbs of manner, place and time were found to be 3.4%.

and extensively imported, as their members encounter little impediment for their morphological insertion into the L_R.

Table 5.4
Distribution of Open-Class Borrowings in the SK Corpus

	Unique occurrences	Percentage of open-class borrowings
Nouns	404	60.3%
Verbs	158	23.7%
Adjectives	56	8.4%
Adverbs	51	7.6%
Total	**669**	

These findings corroborate universally held predictions about the nature of lexical borrowing, namely that nouns and verbs will be more readily and frequently borrowed than other parts of speech, with the nouns and verbs typically comprising more than half of the attested lexical borrowings in a particular corpus.

This pattern, which confirms expectations based on previous scholarship in the field of language contact (see Section 2.3.1), may be observed also in the data extracted from the speech of each of the twelve consultants. Individual borrowing outcomes are illustrated in Table 5.5 below. The table itemizes borrowings by part of speech category for each interviewee, and will be revisited in section 5.2.4. Moreover, Table 5.5 suggests that frequency outcomes in each part-of-speech category bear out categorically with little apparent influence exerted by individual speaker variables.

Table 5.5
Lexical Borrowing Patterns by Consultant

	Nouns	Verbs	Adjectives	Adverbs	Grammatical borrowings	Total types
M_20	28	15	5	11	12	70
F_22	56	31	7	5	9	106
F_28	19	11	4	3	7	44
M_40	45	17	7	8	12	89
M_50	25	8	4	5	6	48
F_64	41	21	5	3	14	84
F_65	33	9	3	2	4	51
M_71	72	13	7	5	14	113
M_72	21	9	0	1	6	37
F_81	37	14	4	3	8	64
F_82	14	5	7	3	4	33
M_88	15	5	3	2	11	37
	404	**158**	**56**	**51**	**107**	**776**

Borrowed adjectives, the third most readily borrowed lexical class category in the corpus, surfaced nearly categorically as singular, masculine forms. A number of borrowed adjectives were attested in the speech of two or more consultants. Among these are *soltero* (‘single’), *cada* (‘each’), *mal* (‘bad’), *bueno* (‘good’), *parejo* (‘similar, identical’), and *libre* (‘free’).[60]

As shown above in Table 5.3, adverbs accounted for 7.6% of open-class borrowings in the SK corpus. This category of borrowings is significantly more robust than the 3.4% found to by Gómez Rendón (2008b:294). However, the difference between the findings may be explained in terms of my consideration of additional categories of adverbs beyond those of manner, place, and time.

Though adverbs represent the open-class category from which the least amount of

[60] Interestingly, the borrowed adjective *libre* appears to have undergone semantic change and is used instead to embody the idea of ‘all’ or ‘every’ in SK.

borrowing occurs, they merit close study since they are relatively unburdened by semantic tendencies determined by topic of conversation, behaving independently of interview variables such as context. Their presence in the speech of multiple interviewees gives a reliable measure of the degree to which these open-class words are borrowed generally into SK from Spanish.

Generally the presence and patterns of borrowed Spanish adverbs in the SK corpus reflect implicational clines recently posited in the field of lexical borrowing. Matras (2007:56) found that adverbs such as indefinite (e.g., 'always') and deictic (e.g., 'then') expressions of time are subject to the following hierarchies, as are phasal adverbs (e.g., 'anymore'), as illustrated in (1a-c).[61]

(1) a. always > never > now, then
b. yet, already > still > no longer
c. only > too > even

The data show a robust allocation of adverbs across the categories of time and manner. Adverbs of degree, comparison and probability were also attested. Borrowed adverbs of time in the speech of the twelve consultants largely corroborates Matras's findings. Of the borrowed adverbs in SK, a number surfaced various times in the speech of one consultant, or in the speech of more than one interviewee. Adverbial forms most frequently attested in the data are shown in (2a-e).

(2) a. Borrowed adverbs of time
primero ('first'), *siempre* ('always'), *ya* ('already'), *últimamente* ('lately'), *nunca* ('never'), *antes* ('before'), *jamás* ('never, no longer')

b. Borrowed adverbs of manner
solo ('only'), *también* ('also'), *bien* ('well'), *como* ('as'), *aparte* ('separately')

[61] I included phasal adverbs among my adverbial category of manner, place, and time.

c. Borrowed adverbs of degree
casi (‘almost’), *bastante* (‘sufficiently’), *tanto* (‘so much’)

d. Borrowed adverbs of comparison
menos (‘less’), *mejor* (‘better’), *más* (‘more’)

e. Borrowed adverbs of probability or doubt
quizás (‘perhaps, possibly’), *tal vez* (‘perhaps, possibly’)[62]

Spanish loan adverbs of negation and affirmation (*no, sí*) were also attested in the SK speech of various consultants, with occurrences of the former limited to fixed expressions *no sé* (‘I don’t know’) and *no vale* (‘No good; It’s not worth it’). It appears from the data that the negative adverb as an isolated form does not lend itself to borrowing, since this function is easily accomplished with the Kichwa form *na* as an abbreviation of *mana* (‘not, no’), a particle governed by the same antepositional rule as its counterpart in Spanish.

Table 5.6 shows the frequency with which the most frequently occurring Spanish adverbs occurred in the corpus. The table reflects only those adverbs that appeared in the speech of more than one consultant.[63] A high-frequency borrowing like *primero* (‘first’), then, was encountered as a unique borrowing in the speech of eight different consultants, suggesting that it is a prevalent borrowing in SK not just in the speech of a few select individuals, but that it is pervasive in SK in general.[64]

[62] Three complex adverbial forms were attested in the data. The forms *tal vez* (‘perhaps, possibly’), *de repente* (‘suddenly’), and *de verdad* (‘really, truthfully’), each occur twice as unique loans in the corpus, the first in the speech of F_28 and F_82, the latter two in the recorded data from F_81 and M_72. Each reflects substantial phonological assimilation and prosodic adaptation, leading to their treatment in this analysis as complex, fossilized loans. In remaining consistent with the methodology employed for accounting for other classes of phrasal borrowings, each was considered for its component parts.
[63] The frequency of total adverb loan tokens in the speech data of each individual varied significantly. For example, during the 20-minute Kichwa section of the interview with the 64-year-old female participant, *primero* (‘first’) was attested four different times, and *solo* (‘only’) five times.
[64] The adverb *primero* was also rendered in the corpus twice as *primeramente.*

Table 5.6
Distribution of Borrowed Adverbs

Loan adverb	Unique occurrences	Percentage of total unique adverbs
primero	8	15.6%
solo	7	13.7%
no	6	11.8%
nunca	3	5.9%
más	3	
siempre	3	
casi	2	3.8%
como	2	
antes	2	
ya	2	

The relative frequency of occurrence of *siempre* (‘always’) and *nunca* (‘never’) corroborate the predictive hierarchy of Matras (2009), as in (1a). The cline in (1c) is affirmed by the observation that *solo* (‘only’) is the only adverb of the three to be attested in the corpus.

5.2.1.3 Grammatical borrowings

As indicated in Table 5.2 above, 13.8% of the 776 unique loanword types in the SK corpus were found to be closed-class function words. Table 5.7 shows the distribution of Spanish grammatical borrowings across function word categories.

Table 5.7
Distribution of Grammatical Borrowings in the Corpus

	Unique occurrences	Percentage of total unique grammatical borrowings
Conjunctions	41	38.6%
Numerals	27	25.4%
Prepositions	17	15.9%
Pronouns	10	9.5%
Discourse Markers	6	5.9%
Articles	4	3.8%
Quantifiers	1	0.9%
Total	**107**	

Grammatical borrowing in highland Ecuadorian Kichwa was analyzed in detail by Gómez Rendón (2008b), who finds occurrences of unique grammatical borrowings in the corpus to comprise 15.4% of his corpus. A discrepancy of less than 2% in variation of rate of grammatical borrowing between the two studies seems to affirm the minority status of this group of loans in the lexicon of the indigenous L_R, and suggests a universal tendency in language contact scenarios in Ecuador.

Syntactic and typological factors appear to work in tandem in conditioning this borrowing dynamic between open- and closed-class items. First, function words are significantly limited in that they are abstract in nature and context-dependent two characteristics that exert significant limitation on their utility in cross-linguistic transfer (cf. Section 2.1.2). Second, the morphological structure of SK does not easily accommodate Spanish function words, since the L_R is characterized by an agglutinative grammar that largely accomplishes the function of Spanish closed-class words via affixation (cf. Section 2.3.2.1).

The present analysis corroborates the findings of Gómez Rendón, namely that conjunctions are the most widely borrowed grammatical loanword category from Spanish, and that articles and auxiliaries are rare as targets of lexical borrowing.[65] Additionally, borrowed Spanish articles categorically precede borrowed noun forms, a similar outcome to that of borrowed numerals.

Numerals surfaced at a relativelyhigher rate in the present study than in that of Gómez Rendón, who reports them as 7.8% of total grammatical loan types, likely due to the inflation of the number when SK complex borrowings are parsed for their component parts in the present analysis.

It is important to acknowledge the role complex borrowings play in the prevalence of borrowed function words in the data, particularly prepositions. The majority of borrowed prepositions in the corpus, for example, were found to be a component of fixed adverbial and other expressions such as *a veces* ('sometimes'), *de repente* ('suddenly'), and *por ejemplo* ('for example'). Several borrowed conjunctions were found to be part of adapted, phrasal chunks such as *más o menos* ('more or less') and the discourse marker *o sea* ('or rather'). Coordinating conjunctions also surfaced frequently as part of compound numerals such as *treinta y uno* ('thirty one') and *ochenta y ocho* ('eighty eight').[66]

Pronouns were also most often found to be part of a complex borrowing, such as *diusulupay* ('thank you'), an evolved form from the originally Spanish salutation of gratitude *Dios se lo pague* translated literally as 'May God pay (it to) you', but with more colloquial

[65] The categorical breakdown offered by Gómez Rendón as proportions of the total data set of unique types is as follows: 8.5% coordinators, 2.9% "other" adverbs (not manner, time, place), 1.3% subordinators, 1.2% numerals, .6% adpositions, .3% discourse markers, .1% pronouns, and a notable absence of articles or auxiliaries.

[66] Following Martin Zorraquino et al. (1999:4052), certain borrowings such as *entonces* and *pues* (in the data from consultant M_50) are treated as discourse markers rather than as conjunctions in order to better elucidate their role as borrowings in the discourse.

meaning of ‘God bless’ or ‘May God reward you.’ Borrowed articles and quantifiers from Spanish were found to be limited to cases of multiple-item insertions, as in *cuatro de la tarde* (M_71), and *poco cuenta* (F_81).

5.2.2 Range of Borrowing and Speaker Variables

A general assessment of the maximum and minimum rates of individual loanword usage in SK shows a range of approximately 17.5% between the lowest and highest observed percentages. This value is calculated based upon total loans, or tokens, attested in the naturalistic speech of each participant, rather than unique types. The lowest borrowing frequencies were exhibited by the two oldest female consultants (F_81, F_82), with 9.3% and 8% respectively.

The maximum rate of borrowing ranged from 24.4% in the speech of the 22-year-old female, and 25.8% in the speech of the 64-year-old female.[67] Table 5.8 illustrates the distribution of loan types and tokens across the twelve consultants.[68]

[67] This female consultant appears to be an outlier, however, as her speech showed significantly higher frequency of borrowing than that of even the two youngest interviewees. This may be explained by her regular verbal interactions with *meztizos* and Spanish-speaking tourists as a manner of earning a living.

[68] Bakker et al. (2008) found a range of 4%-49% borrowings from Spanish per speaker in the Kichwa of Imbabura and Bolivar provinces.

Table 5.8
Range of Types and Tokens by Consultant

Consultant	Total SK words	Unique loan types	Total loan tokens	% Tokens
M_20	551	70	123	22.3%
F_22	761	106	186	24.4%
F_28	424	44	73	17.2%
M_40	812	88	144	17.7%
M_50	423	48	77	18.2%
F_64	751	84	194	25.8%
F_65	585	51	105	17.9%
M_71	998	112	199	19.9%
M_72	602	35	53	8.8%
F_81	1496	64	140	9.3%
F_82	736	33	59	8.0%
M_88	558	37	66	11.8%

The analysis variation and language-external factors in this section is based on assessments of bilingual competence paired with self-reported age, level of education, and Spanish language proficiency of the consultants, as detailed in Section 4.1.[69]

Salasaca has come to be characterized in recent decades by varied levels of bilingual competence among speakers. Table 5.8 above shows that borrowing rates increase steadily as speaker age does, while the variable of speaker sex seems to exert little influence on the borrowing percentage for each consultant.

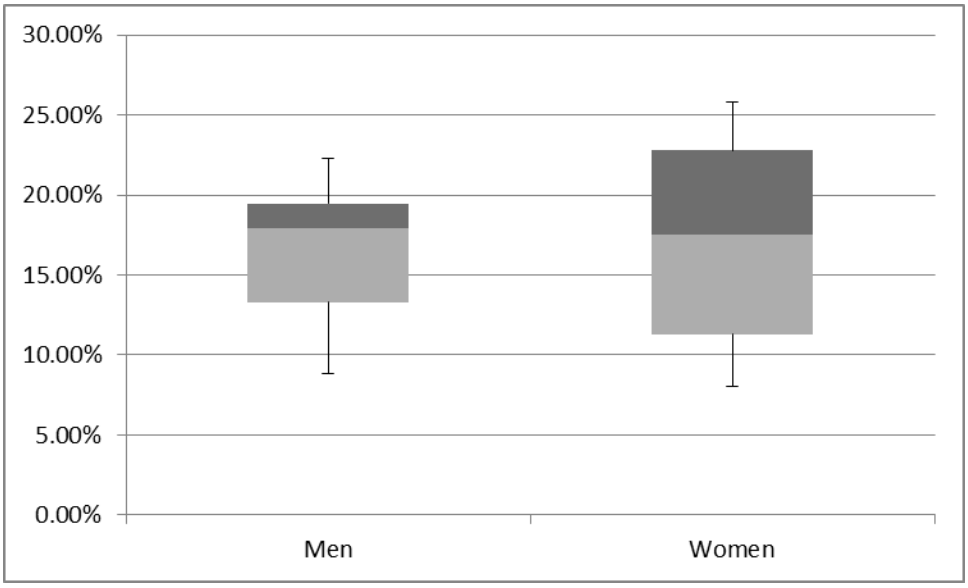
[69] The present study relies on a five-point scale between SK monolingualism and relatively balanced competence in both SK and Spanish. Recall from Chapter 4 that the Spanish language rating of S_1 indicates the lowest of three degrees of proficiency whereas a rating of S_3 means the speaker demonstrates the greatest degree of competence in the second language that may still be considered recessive rather than balanced.

5.2.2.1 Borrowing Percentages by Sex

To gain a sense of the patterns of borrowing among men and among women, as well as the range of borrowing across all speakers within each group, a whisker and boxplot illustrates between-group variation in the overall sample of speakers.

In the box plot diagrams shown in Figure 5.1, the lower extreme of the whisker signals the minimum percentage of borrowing for the cohort, and the top of the upper whisker indicates the maximum percentage. The lower line of the box indicates the first quartile, the middle line the median, and the top of the box marks the third quartile. Notice that there is a nearly identical median percentage of borrowing between male and female SK speakers.

Figure 5.1: Percentage Borrowing Range by Sex



The ranges and quartile values in Figure 5.1 show that the women in the sample demonstrate a slightly larger range of borrowing rates than the men. The nearly identical median values for borrowing rate between men and women in the study suggest comparable rates of of borrowing between the two sexes across the six consultants representing each sex. The

relationship between speaker sex and borrowing rate appears to be one in which the former exerts little influence upon the latter.

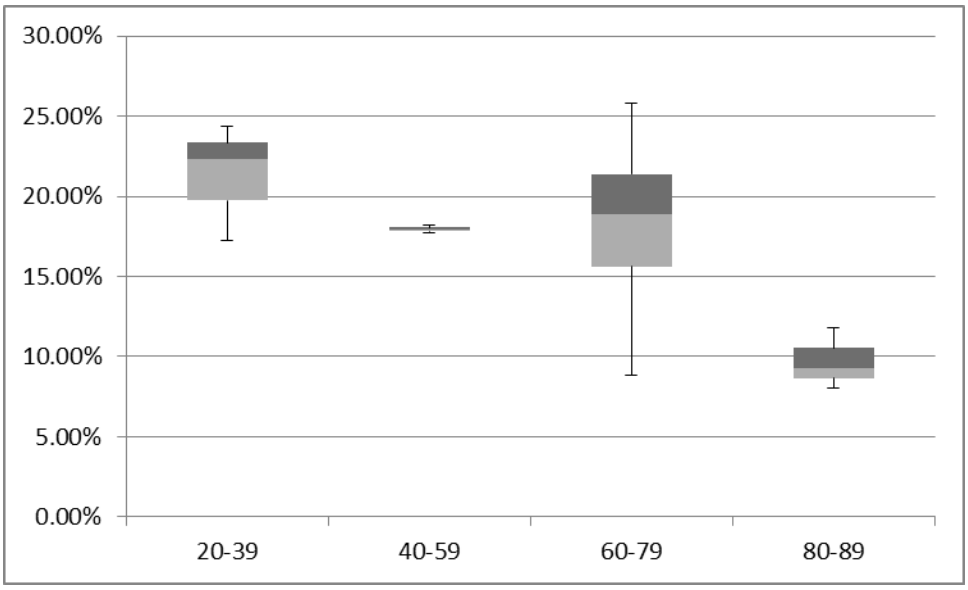
5.2.2.2 Borrowing Percentages by Age

As Figure 5.2 illustrates, as the age of the speaker decreases, the rate of borrowing generally increases, suggesting a tendency among younger speakers to borrow to a greater degree than members of their parents' and grandparents' generations. Despite the small size of the informant group (n=12), the relatively conservative Pearson's rho test yielded a correlation coefficient of -.671 between the variables of speaker age and total rate of borrowing.[70] This coefficient is statistically significant at $p < .05$, and indicates a moderately strong inverse relationshipbetween the two variables of interest, and that in Salasaka there is a regular increase in borrowing rates commensurate with a decrease in speaker age as generational shift takes place.

There are exceptions to this general trend, and in fact the maximum percentage of borrowing occurred in the 60-79 range, in this case in the speech of the 64-year-old female. The 25.8% borrowing rate attested in her speech data skews relatively higher than is expected, given her limited level of education and Spanish recessive linguistic repertoire. As speculated above, the higher rate may be due to this particular woman's vocation as a seller of handwoven tapestries to *mestizo* and international tourists in the center of the *comuna*, along the Pan-American highway. Such an occupation has required her to utilize her limited Spanish repertoire to carry out her job, possibly exerting influence upon the extent to which she uses the L_S vocabulary in her own SK idiolect.

[70] The Pearson's rho test was favored since it is a non-parametric test, preferred when the data of interest does not show a regular, even distribution across the sample to be analyzed.

Figure 5.2: Percentage borrowing range by age



It bears repeating that, in Salasaca, individual age is a variable that generally reflects an inverse relationship with level of formal schooling and, as a result, level of Spanish competence. The youngest two interviewees, both of whom completed secondary education in the community, self-reported as being balanced bilinguals. The next three youngest consultants, between 28 and 50 years of age, all completed between four and six years of primary education. Each demonstrated near-balanced bilingualism (SK/S_3).

The Kichwa-Spanish consultants who reported their bilingual competence as balanced borrow with greater frequency and demonstrate a tendency toward a more liberal use of code-switching and use of two- and three-item lexicalized chunks of borrowed vocabulary. It may be postulated that this is, in part, evidence of their taking advantage of access to a broader Spanish lexicon than monolinguals or near-monolinguals, which itself may have stylistic or other extra-linguistic motivations.

5.2.2.3 Grammatical Borrowing by Speaker

The potential interplay of individual speaker variables and the degree of borrowing of either Spanish open-class or function words in SK may be assessed by comparing the extent to which unique loans in the data from each consultant may are categorized as either lexical or grammatical. The findings presented in Table 5.9 show a robust level of variability between interviewees and the percentage of grammatical borrowings present in their speech sample relative to their total borrowings. A statistical analysis using Pearson's rho to evaluate possible correlations between speaker age and rate of grammatical borrowing in SK rendered results that were not statistically significant.

Table 5.9
Grammatical Borrowing by Speaker

	Unique lexical borrowings	Unique grammatical borrowings	Total Types	Grammatical borrowing as % of total types
M_88	30	11	41	18.9%
F_82	29	4	33	12.1%
F_81	59	8	67	6.2%
M_72	31	4	35	11.4%
M_71	105	14	119	3.5%
F_65	47	4	51	7.8%
F_64	74	14	88	11.9%
M_50	42	6	48	12.5%
M_40	79	12	91	10.2%
F_28	37	7	44	15.9%
F_22	100	9	109	7.6%
M_20	60	12	72	14.2%
	669	**107**	**776**	

As the table shows, grammatical borrowings comprised between 3.5% and 18.9% of total borrowings among consultants, but this figure fluctuated across age and sex categories to such an extent that no clear pattern emerges, suggesting little or no influence of language-external variables on this particular category of borrowing.

5.2.3 Loanword Density

Hill and Hill (1980) applied an innovative analysis to understanding the pervasiveness of lexical borrowing from Spanish in modern Nahuatl. In their study of linguistic acculturation they argued that by tracking first occurrences of loanword types per transcribed page of L_R data, rather than as a percentage of total uttered words in the data set, a clearer idea of the concentration of loans in the L_R may be arrived at, as well as variety of borrowings across the entire speech sample as a complement to simple accounts of frequency.

Albó (1970) prefers the metaphorical term "density" as another manner of referring to this pervasiveness or saturation of loanwords in a recipient language. The term may be understood as the rate or probability of lexical borrowing in the speech of a L_R speaker.

Such a methodology allows for the observation of consistency of loan concentration over a broader sample of speech and the identification of acute moments of disproportionate increase in density that may otherwise skew the borrowing rate across the entire speech sample of an individual.[71]

For the present study the index innovated by Hill and Hill was modified slightly. A tally of first occurrences of Spanish lexical borrowings was made for each hundred transcribed words, rather than per page of written transcription. I decided that this approach would be more accurate

[71] The authors correlate this variable with speaker age, sex, and socio-economic status to elucidate the relation between such language-external factors and loan concentration or density, finding that young men borrowed at the greatest rate, and women across most generations borrowed to a significantly lesser degree.

than Hill and Hill's convention of counting types per transcribed page, in that it overcomes potential problems of variation from one transcribed page to the next attributable to word length, transcribed non-lexical utterances, and instances of code switching at the sentence or discourse level.

Table 5.10 provides the resulting average unique loan types per hundred SK words for each of the twelve speakers. Findings suggest that unique loan types per hundred SK words increases as the age of the speaker decreases, a trend that parallels the overall token borrowing rates of the twelve interviewees (see Table 5.7). Loan density does not show any clear difference by sex of the speaker.

Table 5.10
Average Unique Loan Types Per 100

	Average unique loans per 100 SK words
M_20	13.0
F_22	13.9
F_28	11.3
M_40	11.0
M_50	12.3
F_64	14.8
F_65	9.4
M_71	12.3
M_72	5.7
F_81	5.3
F_82	5.3
M_88	6.2

These findings align with the trend observed in Section 5.2.2.2 toward the influence exerted by the variable of speaker age (and, thus, education and bilingual competence) and frequency of borrowing.

Appendix F offers a breakdown of loan density per 100 words for the twelve consultants across their first 800 words. The data show that, as the interview proceeds, the concentration of unique loans in the speech of any given individual does not decrease, suggesting eithera consistent variation of conversation topic that allows for the introduction of a new subset of borrowed vocabulary or that the L_S lexicon is simply broad enough that first occurrences (loan types) in an individual's repertoire will not be exhausted in the first minutes of speech. Further, the data suggest younger speakers are not only borrowing more frequently, but also that the rate of use of loanwords covers a broader array of semantic contexts and topics.

5.2.4 Implicational Hierarchies

This section seeks to complement the descriptive approaches above and elucidate implicational universals posited by scholars such as Moravcsik (1978), who focused on the relative borrowability of particular classes or types of words as outlined in Section 2.3.1.

In this section I provide observations of borrowing rates within particular categories of lexical class in order to propose implicational clines of parts of speech derived from the SK corpus and that have bearing on proposed universals of borrowing. The guiding question here is whether the hierarchies of borrowability posited in existing literature are supported by the SK data.

It is evident from the data that the broadest hierarchies across lexical classes are upheld in the data in the SK corpus. Hierarchical findings dealing predominantly with lexical items are typified by studies like Dikker (2008), whose analysis of the Ecuadorian mixed language *Media Lengua* affirmed the expectation that open class items would be borrowed before grammatical ones, and that nouns would be borrowed before verbs given the relatively few constraints placed

upon the frame of their inherent argument structure.[72] Moreover, nouns lend themselves readily to borrowing as they are the most differentiated inventory of labels for concepts, practices, artifacts, products, human agents, etc. The referential nature of nouns is what makes them so prone to transfer, rather than structural features like ease of integration (Matras 2009:172ff).

Table 5.3 shows that in the speech of each of the twelve consultants, nouns were indeed borrowed more frequently than verbs. Nouns comprised 52% of total loans across all parts of speech. This finding is nearly identical to that of the 55.5% found in Imbabura Kichwa (Gómez Rendón 2008a:111).

In the speech of all but one of the participants, borrowed verbs occurred with a greater frequency than borrowed adjectives. Following the conclusions of scholars such as Whitney (1881), Haugen (1950) and Weinreich (1953), the outcomes in the SK corpus are thus far to be expected. As outlined in Section 2.3.1, all three of these scholars posited implicational hierarchies claim diachronic primacy in the borrowing of nouns before verbs and verbs before adjectives.

The SK data supports the claim that verbs are the second most widely borrowed category of open-class items. The proportion of borrowed verbs found in the current study aligns closely with the 16.9% borrowed verbs in Imbabura Kichwa (Gómez Rendón 2008a:111). The present findings stand in contrast with Muysken (1981), however, who found adjectives to be more readily borrowed than verbs in his Salcedo data.

[72] Counter-examples of these hierarchies have been found in particular contact scenarios, such as the situation of Spanish-Q'eqchi in Guatemala investigated by Wichmann and Hull (2009). The researchers found that Q'eqchi speakers borrowed Spanish adjectives more frequently than verbs. The researchers also noted that their consultants borrowed grammatical, function words more frequently than adverbs (882).

5.2.5 Analysis of Grammatical Borrowings

The present analysis found that 107 of the 776 unique loanwords from Spanish in SK, or 13.8%, pertained to the category of closed-class function words. Appendix G provides an itemized list of grammatical borrowings in the corpus by speaker. This proportion of function word borrowings is notably lower than Gómez Rendón's (2008a:111) findings that 17.8% of borrowings were grammatical, but it should be noted that he included in this "other" class all types of adverbs that weren't strictly of manner.

Though function words tend to comprise a minority of borrowings in any language in contact with Spanish, within the category of closed-class borrowings patterns emerge that suggest grammatical borrowing is subject to the same hierarchical outcomes as open-class words, as outlined in Section 2.3.1.

Table 5.11 illustrates the distribution of borrowed Spanish conjunctions in SK as unique types in this category. A conjunction was tallied if it occurred at least once in the speech of the consultant. These reflect Matras's (2007:54) observation that conjunctions are the category of function words most susceptible to borrowing, conforming to the widely held universal assumption.

The Salasaca corpus data reflect this preferential status of *pero,* which comprised 24% of the borrowed conjunctions in the corpus. Notably, *porque* was borrowed more frequently than *o.* The present study treats *antes* as an adverb, thus removing it from consideration in this section.

Table 5.11
Proportional Occurrence of Spanish Conjunctions in SK

pero (‘but’)	10	24.4%
y (‘and’)	9	22.0%
porque (‘because’)	6	14.6%
o (‘or’)	4	9.8%
que (‘that’)	4	9.8%
ni (ni…ni) (‘neither (nor)’)	3	7.3%
como (‘as, like’)	3	7.3%
sino (‘but rather’)	1	2.4%
entonces (‘then’)	1	2.4%

Stolz (2012) postulated an implicational cline according to which *but* will be borrowed more frequently than *or*, and *or* more frequently than *and*; this cline is not upheld in its entirety by the SK data given that the coordinating conjunction *y* (‘and’) was more prevalent in SK speech than *o* (‘or’).[73]

Of particular interest is the borrowing of cardinal numerals for their value in supporting various proposed implicational hierarchies. The SK data on borrowed numeral adjectives support the position advanced by Matras (2007) and others that borrowing of isolated numerals favors higher numbers over lower ones. Though the data in Table 5.12 appears to challenge this hierarchy, the hypothesis bears out with the additional consideration that these smaller numbers occurred entirely within the context of phrasal, complex borrowings in which they preceded a borrowed noun. In contrast, the borrowed forms *mil* and *millón* occurred as isolated forms.

[73] In the Mayan languages of Guatemala, Peñalosa (1990) found borrowed particles *o, como, pero, porque,* and *y* in a corpus that reflected only 5.2% borrowing from Spanish. These were the only conjunctions in the data.

Table 5.12
Borrowed Spanish Cardinal Numerals in SK

uno (‘one’)	*doce* (‘twelve’)	*treinta* (‘thirty’)
dos (‘two’)	*quince* (‘fifteen’)	*treinta y uno* (‘thirty one’)
cuatro (‘four’)	*diecinueve* (‘nineteen’)	*cuarenta* (‘forty’)
cinco (‘five’)		*cincuenta* (‘fifty’)
siete (‘seven’)	*veinte* (‘twenty’)	*setenta* (‘seventy’)
ocho (‘eight’)	*veintidos* (‘twenty two’)	
	veinticinco (‘twenty five’)	
		mil (‘one thousand’)
		millón (‘one million’)

The numerals between twenty and thirty-one are attested exclusively in the context of calendar dates. The occurrence of *doce* twice in the corpus is limited to reference to the noon hour. The numerals *cuarenta*, *cincuenta* and *setenta* were preposed modifiers of units of time (typically years) or monetary value.

In his study of Spanish loanwords in published narrative texts in the O’anjob’alano family of Mayan languages spoken in Guatemala, Peñalosa (1990) finds borrowed numerals modifying L_R nouns; however, only one example is attested in the SK data, given in (3a). Apart from this example, smaller Spanish cardinal numerals formed part of lexicalized chunks such as those given in examples (3b-e).[74]

In contrast with this tendency of small cardinal numerals to occur in complex borrowings, larger borrowed cardinal numerals tend to stand alone, fulfilling an adjectival function for a previously-mentioned, and thus implicit, referent. An example of this is given in (3f).

(3) a. ***siete***… *chunku chuska wata* (F_64)
seven ten four year
‘Seven…fourteen years.’

[74] The lack of Spanish inflectional morphology in examples such as *ocho año* appears to support the idea that these are indeed fossilized sorts of borrowed sequences rather than cases of code switching.

b. ***doce*** *del día* (F_81)
twelve day
'Twelve o'clock noon.'

c. *Agostotaka* ***shuk*** *fechata* *charinchik*
August-ACC-SUBJ one date-ACC have-3.PL

treinta *de agostotami.* (F_22)
thirty of August-ACC-AFFIRM

d. ***ocho*** *año* (M_88)
eight year

e. *y* ***un*** *semanata* (F_28)
and one week-ACC

f. *shuk* ***vinti*** *mancha* *tukunpa* (F_81)
some twenty approximately all-POL
'Más o menos veinte (años) va a ser'

The widely supported argument that large numbers favor borrowing is strongly supported in the speech of one particular interviewee in the present study, that of a 71-year-old male. In the course of ten minutes of natural SK speech he uses the numerals *mil* ('thousand'), *millón* ('million'), *veinticinco* ('twenty-five'), *veintidos* (twenty-two), *cincuenta* ('fifty'), *ochenta y ocho* ('eighty-eight'), and the complex borrowings *ocho año, deicinueve año, treinta año.* In one instance this consultant also says *uno*, but this appears to form part of a lexicalized chunk "*uno solo*", with the adverb accepting SK agglutinative suffixes as shown in (4).

(4) *Golpe* *shuk* ***uno*** *solotaka*
Strike/hit one/a one only-ACC-TOP
'(Just) one hit.'

Borrowed Spanish ordinal numerals are attested in the SK corpus three times, the forms being *primer* ('first'), *segundo* ('second'), and *tercer* ('third'). No other ordinal numerals were present, supporting the hierarchy in (1c) above.

Beyond conjunctions and numerals, of particular interest are such particles as articles and prepositions, for which it has been hypothesized by scholars such as Bakker, Gómez Rendón and Hekking (2008) that "…Spanish borrowings in Ecuadorian Kichwa will not include prepositions and articles as there is no syntactic position for them in the language" (203). This hypothesis considers articles and prepositions in their occurrence as isolated words outside the context of fossilized, complex borrowings.

The present analysis reveals that SK speakers, especially younger members of the community and those with higher levels of Spanish bilingual competence, do sporadically borrow prepositions in isolation, with the two tokens from the corpus given in (5a-b), but aside from these two exceptions, Spanish prepositions are encountered in the SK data within contexts of complex borrowings, as in (5c).

(5) a. ***sin*** *punchu purin* (F_28)
Without poncho go/walk-PRES-3.PL
'They walk around without ponchos'

b. *ñuka nacirirkani* ***de…de*** *ishkay chunka pichka wata* (F_64)
I be born-PAST-1.SING (of…of) sixty four year
'I was born (some…some) sixty four years (ago)'

c. *kay churarka* ***con máscaras*** *ña chaykunan* (M_50)
that dress-PAST-3.SING with mask-PL already there-PL
'they already dressed up with masks, those (there)'

The observation that borrowed Spanish prepositions in SK occur predominantly as embedded elements of multiple item utterances is congruent with the view held by Field (2002) and others that system compatibility is a strong language-internal factor that acts as a constraint on borrowing. That is to say, any borrowed word must conform to the possibilities of morphological structure in the L_R. Spanish is a fusional language, but with more inclination

toward an analytic language than the prototypically synthetic, agglutinating Kichwa. Perceived categorical equivalence is called into question here, but rendered irrelevant if the preposition is embedded in a fossilized borrowing, likely an adverbial or nominal phrase.

Less prevalent still in the data are borrowed pronouns. The accusative clitic *lo* is attested in the speech of two consultants, and both use it as part of the fossilized form *diusulupay* (from Spanish 'Dios se lo pague')*;* the indirect object clitic *se* from this context as well; the neuter pronoun in *lo mismo;* the interrogative pronoun in *qué tal*; the indefinite *nadie*; and the relative pronoun *cual* in *cada cual*.

The data partially support the early proposals from linguists like Whitney (1881). Returning to his hierarchy shown in (6) and outlined above in Section 2.3.1, it is predicted that prepositions are borrowed more frequently than pronouns. The SK corpus is problematic for this cline, however, in that Spanish conjunctions are borrowed into SK at a higher rate than both prepositions and pronouns.

(6) Nouns > adjectives > verbs > adverbs > prepositions > conjunctions > pronouns > derivational affixes > inflectional affixes

Matras (2007) observes that there is an overwhelming universal tendency toward the borrowing of discourse markers, often higher on the implicational scale than other types of particles and even some categories of lexical items. This may be attributed primarily to the fact that, as noted in Section 2.2.1, social factors such as the need for mutual understanding between interlocutors form the basis for language contact. These relatively independent, pragmatically outstanding, elements play a fundamental role in the successful maintenance of communication, and so they lend themselves readily to borrowing (Bakker et al. 2008:176-8). Table 5.13 shows the distribution of discourse markers in the SK data.

Table 5.13
Occurrence of Spanish Discourse Markers in SK

o sea	2
bueno	1
a ver	1
entonces	1
digamos	1

The notable infrequency of borrowing of discourse markers in the SK corpus compared to other categories of grammatical borrowing, and to the substantial borrowing rates in SK in general, is perhaps suggestive of the influence of higher levels of Spanish competence on this category. These forms, predominantly compound forms and inserted Spanish verbal morphology, are limited to the speech data of the two youngest two consultants. For SK monolinguals and Spanish recessive bilinguals, contexts that may elicit a borrowed Spanish discourse marker like *digamos* or *o sea* is easily filled with Kichwa particles such as *ña* (‘yet, already’) as a discursive placeholder, for example.

The literature on Spanish in contact with Amerindian languages has explored the borrowing of conjunctions and discourse markers quite extensively. A synthesis of the findings of six different studies that include analysis of these borrowed particles is given in Appendix H. The patterns of borrowing of these elements in SK appear quite similar to tendencies in other Amerindian languages in sustained situations of contact and bilingualism with Spanish in the Western Hemisphere. The loanwords *o, pues, pero, entonces, porque, y, como,* and *sino* are attested in at least one of these studies, in addition to the SK corpus, demonstrating the facility with which these elements work their way into a L_R given the relative syntactic independence they enjoy compared to other grammatical borrowings

Though the overt marking of definiteness and indefiniteness in noun phrases plays a prominent role in noun phrases in both Spanish and in SK, thus allowing for a perception among speakers of categorical equivalence, the corpus data exhibited few cases of borrowed definite or indefinite Spanish articles.[75] All four cases of borrowing of definite and indefinite articles in the data were found in inserted noun or prepositional phrases comprised of the article and its referent: *una semana* (F_28), *unas treinta personas* (M_88), *doce del día* (F_81), *de la tarde* (M_71). Borrowed Spanish articles do not appear in isolation, freely combining with SK nouns, but rather they show a preference for Spanish etyma and occur in bound or fixed expressions and idioms.[76]

Returning to Matras's cline from Section 2.3.1, the SK corpus affirms expectations that conjunctions will be the most frequently borrowed category of function words, though the relative prominence of this category and of discourse markers in his hierarchy was not born out in the data for this study.[77] To the contrary, borrowed discourse markers in SK comprised only 5.8% of all unique grammatical loans, and arose in the corpus at a rate substantially less than that of numerals, prepositions and pronouns. This inversion may be attributable, at least in part, to the

[75] SK marks for both definiteness and indefiniteness with the word *shuk*, which is also the cardinal numeral 'one', as in (1). Plural definite articles are formed in SK with the addition of the plural suffix *-kuna* to *shuk*.

(1) *Agostotaka* *shuk* *fechata* *charinchik* *treinta* *de* *agostotami.* (F_22)
August-TOP-ACC a date-ACC to have-3.PL thirty of August-AFFIRM
'We have an August date, on the thirtieth of August.'

[76] Stolz (2012) found this to be the case with Spanish *un* in Chamorro, though he observes that the Austronesian language does exhibit the use of *un* outside of set phrases and fixed idiomatic expressions. "The apparent preference for combinations with Spanish etyma is the incidental effect of the high number of Spanish loan nouns in Chamorro" (177).

[77] The implicational hierarchy he offers is repeated in (2) below:

(2) nouns, conjunctions > verbs > discourse markers > adjectives > interjections > adverbs > other particles, adpositions > numerals > pronouns > derivational affixes > inflectional affixes

abundance of complex borrowings in the SK speech sample in which prepositions and pronouns formed an inextricable part.

5.3 Complex Borrowings

This section seeks to elucidate borrowing phenomena that are not easily catalogued as single words, but which nonetheless play an important role in arriving at a complete understanding of borrowing in SK. What follows is a brief, qualitative analysis of poly-morphemic, complex borrowings imported into SK from Spanish as fossilized units or bound collocations, referred to commonly as phrasal or frozen borrowings (Gómez Rendón 2008a; Silva-Corvalán 1994:170).

Such complex borrowings, typically representative of nominal, verbal or prepositional phrases, instantiate either a root with bound morphemes from the L_S (frozen borrowings) or free morphemes forming a single lexical unit (phrasal borrowings). Complex borrowings in the SK corpus largely took the form of bound collocations, reduplication, and innovative combinations that comprise an SK etymon paired with a Spanish loanword.

Complex borrowing in the form of verbal and nominal reduplication was attested to a limited degree in the data. One notable case is that of *correcorre* (‘run, run’), typically directed at dogs underfoot. This interjection was attested in two interviews in the corpus, but anecdotally this is found to be quite a common utterance in the community.

Another structure that appears three times, once in the data from each of three consultants, is *ratorato,* attested in the speech of three interviewees. This construction of temporal reference fulfills an emphatic function or, intensifying the semantically shifted *rato* (‘moment’, though in SK it has inherited a deictic value of ‘this moment’ or ‘right now’). Finally, in the speech data of the 71-year-old male interviewee, three instances of the verbal form

ganigani (from Sp. *ganar,* 'to earn'), arose in the context of his discussion about his daily wage when he was a young migrant worker, perhaps with the pragmatic effect of emphasizing how far in the past this particular era was for him.

An innovative complex borrowing in the speech of the 81-year-old female consultant entails a combination of a L_R demonstrative with a L_S copulative verb, rendering the form *chayser* [ʧaj.seř]. In SK, the demonstrative *chay* translates as 'that' or 'those', used in tandem with the Spanish infinitive *ser* to give a translation of approximately *siendo así* 'that being (the case)', as in (6).

(6) *kununka* *tukuy* *chay**ser*** *marakunaka* (F_81)
now, today-TOP all that- *be* child-PL-TOP
'Today all the kids are like that'

The speech samples of the 81-year-old female and the 72-year-old male consultants rendered various uses of adverbial constructions *de verdad* [di.'bir̆.da.] and *de repente (dirripinti)* ['di.ři.pin.ti], the latter having undergone semantic shift from its original, etymological meaning of 'suddenly' to a sense of indefiniteness in past reference, synonymous with 'one time').

Finally, the classic and widely acknowledged expression of gratitude, *diusulupay* [dju.su.'lu.paj] (or occasionally [dju.su.lu.'paj]) offers another example of the diverse and innovative manner in which SK speakers have historically imported linguistic material from Spanish, even when the borrowing consists of various lexemes operating together, and the manner in which some forms retain their fossilized phonetic shape even when learned by younger generations of SK speakers whose bilingual repertoires would otherwise allow them to realize the loan faithfully in accordance with Spanish phonological rules.

These findings, along with recent scholarship in highland language contact from other regions of Ecuador, demonstrate the resourcefulness of L_R speakers as they borrow unique form-meaning sets from a L_S and bring them into phonological alignment with the segmental and prosodic rules operating on their own native language. This topic will be explored thoroughly in Chapter 6.

5.4 Summary

The present chapter is concerned with exploring the manner in which the structural and semantic properties of words, i.e. their parts of speech categorizations and grammatical characteristics, condition their borrowability. An analysis of naturalistic speech data from the SK corpus was conducted to ascertain the nature and degree of borrowing of loanwords from Spanish into SK with attention to categories of lexical and function words.

An analysis of the distribution of borrowings in the data shows that the syntactic function of particular categories of loanwords affects the extent to which they will be borrowed, as detailed in Section 2.3.1. Such language-internal factors have led scholars to posit clines of borrowability, and findings in the present chapter largely support these hierarchies, with some variability allowed for in consideration of divergent conventions of categorization of particular subclasses of function words between the current and similar studies. The primary instance of this allowance is evident in how this study considers adverbs of degree and probability to be open-class items, for example, where Gómez Rendón (2008b) allocated them in a miscellaneous grammatical category, resulting in a 3% discrepancy between rates of adverbial borrowing between the studies.

Findings also suggest that language-external factors play a role in the extent of borrowing from Spanish into SK. There is a general trend for younger SK speakers to borrow at higher frequencies than older speakers; factors such as sex appear to play less of a conditioning role in borrowing, especially among younger consultants. The speech of female interviewees exhibited a greater overall range in borrowing percentage, but the median value was nearly identical for male and female speakers.

Data suggest that variables of age and sex have negligible influence on the proportion of grammatical borrowing, though further study is merited. Additionally, the measure of loan density based on new, unique loan types per hundred SK words in the data demonstrates that the two youngest speakers used more than twice as many new loans per hundred words as did the two oldest consultants.

An important conclusion that may be drawn based on the findings presented in this chapter is that Salasaka Kichwa, a variety of the ancestral language spoken in what is considered to be one of highland Ecuador's most culturally and linguistically isolated speech communities, reflects a significant level of loanword saturation. Borrowing rates among study participants were observed to be as high as 25%, and the speech of even the most conservative SK speaker, an 82-year-old female, showed a borrowing rate of 8%.

The findings in this chapter point to the relatively safe assumption that no indigenous speech community in Ecuador is exempt from similar borrowing outcomes. Further, neither an individual's monolingualism in an ancestral language, nor a community's relative sociocultural isolation, seem to provide a dependable measure of hindrance to the diachronic process, one that has been underway in Salasaca for generations. Furthermore, as bilingualism in Salasaca continues to increase, it seems likely that borrowing from Spanish into this evolving variety of

Kichwa will continue to pervade the speech of this community as younger generations continue to exploit two linguistic repertoires simultaneously.

Chapter 6 – Morpho-phonological Integration of Loanwords

6.1 Introduction

This chapter pursues two objectives. The first is to explore how borrowed Spanish words have been integrated morpho-syntactically into Kichwa, with special attention paid to the structural assimilation of open-class lexical items. The second is to investigate the phonological adaptation strategies employed by SK speakers as they accommodate segmental and supra-segmental information from Spanish loanwords and deal with illicit sounds in their SK grammar, and to examine how particular outcomes contribute to an understanding of nativization processes at the level of the individual speaker. These objectives serve the broader purpose of arriving at a more complete understanding of the constraints and rules forming the basis for SK grammar at the phonological and morphological levels.

An analysis of morpho-syntactic integration contributes to the broader conversation dealing with how two typologically distinct and genetically unrelated languages with different morphologies may nonetheless overcome particular restrictions and otherwise exploit combinatory possibilities as SK speakers borrow lexemes and particles from Spanish. The present analysis seeks to contribute to existing literature about notions of system compatibility (Field 2002) as it constrains borrowing between languages in contact.

The second major section of this chapter addresses the borrowing and modification of Spanish sounds and their respective feature sets, and more specifically, how SK speakers adapt imported phonological and phonetic structure. An analysis of the approximation strategies employed by SK speakers in making Spanish etyma conform to the SK grammar elucidates the underlying constraints operating upon the phonology of the L_R.

6.2 Morphological Integration of Loanwords in SK

This section analyzes borrowing from Spanish into SK at the lexemic level with the objective of exploring how borrowed Spanish open-class words, principally nouns and verbs, are manipulated to comply with the restrictions acting upon morphological and syntactic structure in SK. An analysis of noun and verb integration renders a far more robust variety of integration strategies at the morphemic level, whereas adjectives, adverbs and closed-class function words are categorically borrowed in their entirety and do not accept Kichwa agglutination.

Similar to results found by Shappeck (2011), in the SK corpus Spanish lexemes are "plugged into the morpho-syntactic frame of Kichwa" (85). Similar outcomes were attested also in work by Albó (1970), who recognized that Spanish loans could occur to a significant extent as a lexical stem with a Quechua suffix attached. Dikker (2008) also observed the robust and relatively easy nature of Spanish lexical root integration into Ecuadorian Kichwa morphology, noting, "...the agglutinating nature of Quichua allows for a staightforward incorporation of Spanish lexical roots into Quichua slots..." (136).

Equivalence of shape is a central language-internal factor that determines outcomes of integration within the framework of the recipient language grammar. This assumption follows Matras's (1999) proposed linguistic universal that contact-induced language change may only take place in those modules of syntax where the interacting languages are structurally compatible, and with a compulsory enforcement of L_R well-formedness conditions upon the imported form.

Returning briefly to the potential for borrowing between typologically distant languages in a contact scenario, Field's (2002) Principle of System Compatibility (see Section 2.3.2.1) establishes that an agglutinative language such as Kichwa will borrow only certain classes of

items from a fusional L_S like Spanish. This process is subject to restrictions in morphological compatibility in terms of both structure and morpheme types, as described in Section 2.3.2. Field specifies that agglutinating languages may borrow independent words, roots, and single-meaning affixes; thus, it is expected that the corpus of Spanish loanwords in SK will consist entirely of these three classes of items, since they conform to the morphological possibilities of the L_R.

The SK corpus of Spanish loanwords demonstrates exactly such an outcome, with borrowed inflectional morphology from Spanish limited to the diminutive suffix and the plural marker, and offering very few examples even of these. The corpus shows a robust borrowing of Spanish noun and verb lexical roots, derived in such a way as to satisfy well-formedness restrictions in the L_R while conserving L_S elements such as thematic vowels in verb forms.

6.2.1 Nouns

Borrowing languages have a limited number of options for the morphological integration of nominal elements. Borrowed nouns may be treated as native nouns and integrated into L_R inflectional patterns, as in (1a). They may also be integrated with their original inflection, including grammatical markers such as pluralization, an example of which is given in (1b). Further, nominal forms may be reanalyzed or incorporated into fossilized forms, as in (1c). Finally, a borrowing language may simply avoid integration and maintain a simplified representation of this class of loans, shown in (1d). When none of these proves adequate in the accommodation of borrowed nouns, a special integration strategy may need to be employed to mark the class of loans as nouns (Matras 2009:172-4).

(1) a. ***Iglesia****mun rishun.* F_28
Church- go-FUT.1.PL
'We will go to the church.'

b. *Chay* ***figurito****.* F_65
That figure-DIMIN
'That small figure (figurine).'

c. ***Ñawpa timpu*** *kullkita* M_71
Old time money-ACC
'The money (from) back then.'

d. *Libre chinkun kay* ***escuela****.* M_88
All/Everything lose-PRES.1.SING that school
'That school loses everything.'

Although the field of contact linguistics has arrived at a well-developed understanding of these four noun integration strategies, with ample scholarship demonstrating by example the nature of the processes within recipient languages or language families, little work has been done to investigate general tendencies across these outcomes in particular contact scenarios. Such analysis would be accomplished by distributional analysis of a corpus of borrowed nouns, and it would allow for generalizations to be made based on empirical rather than impressionistic data. This section offers an initial approximation to this problem by accounting for these strategies in the SK corpus.

As shown in Table 6.1, borrowed Spanish nouns in the corpus were categorically assimilated with SK inflection with no need for radical modification in order to be fully productive in the recipient lexicon. Borrowed grammatical markers from Spanish were rare, and limited to the plural {-s} and the diminutive {-ito}. SK does not call upon simplification or marking strategies to accommodate Spanish nouns. These findings affirm Matras' observation that languages that mark for case, possessive inflection and other forms of nominal inflection will likely apply them to borrowed nouns to the same degree (2009: 173).

Table 6.1
Integration of Borrowed Nouns in SK Corpus

	SK Morph	Simple	Span Morph	Total
Borrowed Nouns	178	215	11	404
Percentage of Total	44.0%	53.2%	2.8%	

The SK Morph column accounts for instances in which Spanish nouns receive SK suffixation in the corpus, whereas the Simple category includes borrowed nouns without SK suffixation. The Span Morph column includes all cases in which a borrowed nominal form is imported with Spanish derivational or inflectional morphology.

The borrowing of Spanish nouns into SK is straightforward. Excluding the 11 nouns that were borrowed with Spanish morphology, the remaining 393 loans take the form of Spanish etyma either as isolated forms or accepting necessary Kichwa suffixation with no modification to the root form. Table 6.2 provides the distribution of SK nominal affixes across the unique borrowed nouns that called for such agglutination. The most prominent category in the data is that of case markers, followed by the denominative pluralizer {-kuna}, and several categories not included in Waskosky's (1992) taxonomy including topicalizer {-ga} and marker of certainty, {-ma}. The percentages were calculated based on unique loan nouns, this is to say, first occurrences of each noun in the transcript of individual consultants.

Table 6.2
Distribution of SK Nominal Suffixes

	Case Markers				**DNN**				**DVN**
	ACC {-ta}	LOC {-pi}	DAT {-mun}	ABL {-munda}	PLUR {-kuna}	LIKE {-laya}	JUST {-lla}	POSS {-yuk}	INFIN {-na}
Number of occurrences	50	20	13	8	49	4	2	1	1
Percentage of total SK nominal affixes	22.5%	8.9%	5.9%	3.6%	21.9%	1.8%	.9%	.4%	.4%

The abbreviates DNN and DVN represent Denonimative Nominalizers and deverbative nominalizers, as outlines in Section 3.3.2.1.1 above.

	Independent and Inflectional Suffixes					
	TOP {-ga}	CERT {-ma}	AFFIRM {-mi}	ALSO {-(pi)sh}	POSS {-puk}	**Total**
Number of occurrences	33	28	7	5	2	**223**
Percentage of total SK nominal affixes	14.8%	12.6%	3.1%	2.3%	.9%	

In the analysis of the 178 borrowed Spanish nouns that took SK morphology, there were 37 cases of compound affixation entailing two suffixes. Additionally, eight of the borrowed Spanish nouns carried three SK suffixes. This accounts for the quantitative discrepancy between the total borrowings in the corpus that carried SK agglutination and the significantly higher number of total suffixes attested in the data.

The analysis rendered no occurrences in the Deverbative Nominalizer (DVN) category of the nominalizer {-i(y)}, the participle {-shka}, or the agentive marker {-g/-j}.[78] Also absent among the case markers was the limitative {-kama}, meaning 'until.' In the category of DNNs, eight of the twelve affixes were not attested in the data. Nouns that comprised part of fossilized borrowings such as *tal vez* or *por ejemplo* were found to occur exclusively without SK affixation.

This analytical approach to understanding the extent to which borrowed Spanish nouns in SK is perhaps more valuable for what it may elucidate about the relative occurrence of nominal suffixation in SK regardless of the etymological origin of the root. There were no apparent morphological or typological obstacles to Spanish loans accepting SK agglutination in terms of the structure of each suffix or category of suffixes. Absent any such intervening factor, the data suggest the accusative {-ta}, topicalizer {-ga} and plural {-kuna} suffixes are higher-frequency suffixes in SK in general, and don't reflect a trend unique to borrowed nouns. Though not every SK candidate suffix was attested in the corpus of borrowed Spanish nouns, the robust allocation of observed nominal agglutination across case marker, nominalizer and independent suffix categories seems to indicate all SK nominal suffixes may be affixed to borrowed Spanish nouns with equal possibility as they are to nouns of SK origin.

Borrowed Spanish inflectional morphology accompanies loan forms in two particular cases, as I mentioned above. The plural {-s/-es} may be considered to be of limited productivity in SK, as in the present analysis the borrowed morpheme was attested in the speech of just five

[78] The categories of derivational SK morphology that include DNN, DVN, DNV and DVV are outlined in Section 3.3.2.1.1 above. Revisiting for a moment Waskosky's use of terminology originated by Quechua scholar Gary Parker (1969), the function of deverbative nominalizers (DVN) is to change a verb stem into a nominal one, while denominative nominalizers (DNN) simply augment the meaning of the noun stem without changing its category. This taxonomy also applies to verbalizers. To summarize, DVN suffixes include the infinitive marker {-na}, the nominalizer {-i}, the participle {-shka}, and the agentive {-j/-g} meaning 'one who X.' The broader category of DNN affixes includes twelve markers: {-laya} 'like', {-shina} 'similar', {-gu} 'diminutive' and the more common {-wa} 'diminutive', {-ruku} 'deprecative, {-sapa} 'much', {-siki} 'base', {-yuk} 'has', {-nai} 'feel', {-kuna} 'plural', {-pura} 'among', and {-lla} 'just'.

consultants.[79] Two examples (both from consultant F_64) of such borrowings are given in (2a-b). Notably, the SK plural suffix *-kuna* co-occurs with the Spanish plural morpheme as a redundant marker in both (2a) and (2b), but due to their isolated nature, the redundancy is likely an idiosyncratic feature of this individual's repertoire. The listed items given in (3) show all uses of the Spanish nominal morphology in the corpus.

(2) a. *Kay asha parte-**s** mercaderia-**s**-kuna-ta Otavalo-munda.*
These few part-**PL** merchandise-**PL**-**PL**-ACC Otavalo-ABL
'These few pieces of merchandise are from Otavalo.'

b. *Ari... kay jovene-**s**-kuna-ta cambiarin-mi... estudia-sha.*
Yes these youth-**PL**-**PL**-ACC change-3.SING-TOP study-FUT.1.SING
'Yes...these young people (are changing)...(I) will study (in order to go to school).'[80]

(3) a. *caballos* (F_65)
remedios aromáticos
mercaderías (F_64)
partes
máscaras (M_50)
plantas medicinales (F_22)
amigos (M_20)
conciertos
productores
b. *figurito* (F_65)
primerito (F_65, F_28)

It may be posited that consultant F_64's use of the Spanish plural {-s} in (2a-b) are due to her adoption as reanalyzed chunks of these high-frequency words commonly used in the

[79] Findings here support the widely accepted universal of borrowing that, as paraphrased by Campbell (1993), that "free-standing grammatical forms are more easily borrowed than bound morphemes" (99). Nonetheless, Gómez Rendón (2005) found in the Media Lengua of Imbabura that a small number of Spanish morphemes were indeed borrowed, among them the diminutive {-*itu*}, the plural suffix {-*s*}, the gerundive marker {-*ndu*}, and the indirect object clitic {-*li*}. (50) Spanish plural and diminutive suffixes are particularly susceptible to borrowing into Quechua of Bolivia, as noted by Appel and Muysken (1987: 172-3).

[80] The context of this conversation makes clear the interviewee is describing how the younger generations of Salasakas are studying in order to advance in their education and attend the university. Her apparently ungrammatical use of the first-person singular of the borrowed verb *cambiarina* and later her use of the first-person reference with the simple future SK suffix {-sha}, while in both cases speaking of a plural, third-person referent, reflect a level of variation typical in the SK variety of highland Kichwa.

indigenous handicraft market. As such, she may not have conscious awareness of the function of {-s}, thus explaining her redundant use of the SK plural marker {-kuna}. This account is further supported by the fact that, apart from the two examples above, this consultant relied exclusively on the SK affix {-kuna} to mark plurals. It should be noted the researcher prompted the response that included the item *joveneskuna* with a question that included the plural form of this same Spanish etymon. It might be argued the result is simply a case of priming, a fault of the methodology and interview protocol that could unintentionally prompt consultants with particular lexical items.

The specific tokens of the Spanish plural marker found in the data are listed in (3a). The occasional occurrences of the Spanish plural morpheme took the form of a simple pluralization of the Spanish noun or adjective in question, as elements in complex borrowings such as *plantas medicinales* (‘medicinal plants’) or *remedios aromáticos* (‘aromatic remedies’) observing the plural agreement rule in Spanish. The retention of the Spanish diminutive is also attested in the data, though to a much more limited extent, as illustrated by the two unique loans exemplifying this from the corpus given in (3b).[81]

It has been argued that both of the categories of borrowed L_S nominal morphology exemplified in (3a-b) are cases of frozen forms and arrive into the host language matrix as fossilized units, rather than the reflection of the application of source language morphology to a borrowed noun (Gómez Rendón 2008b:274ff). This argument is convincing in the case of the Spanish diminutive, given the limited distribution of the form in the data, and the unmarked nature of the borrowed form for gender and number.

[81] Interestingly, a singular case of the use of the Spanish diminutive {-ito/-ico} with an SK lexical root is attested in the speech data of consultant F_65, who uttered the word *tayticu* (< SK *tayta* ‘father’) in referring informally and warmly to the researcher. This example reflects a semantic innovation unique to Ecuadorian varieties of Spanish, and Kichwa as a derivation of the suffix {-ku}, in which the meaning of this diminutive suffix has expanded to include softening or attenuation in favor asking, and also positive affect toward a trusted interlocutor.

It is widely accepted that the plural morpheme {-s}, though universally rare in contact situations and generally not productive in the L_R, is nonetheless the most frequently borrowed of inflectional morphemes, and is frequently doubled with the L_R plural marker in contact scenarios (Matras 2009:174). The SK data do not present a convincing case that the intensity of contact between the languages in question has created a broader level of awareness of the role of this particular imported Spanish suffix among SK speakers of limited Spanish competence to such a degree that they know to produce the form in lieu of the SK pluralizer {-kuna} when they enlist a borrowed Spanish lexeme. The corpus shows 49 instances of borrowed nouns marked with the SK plural {-kuna}, countering any claim that Spanish {-s} is becoming productive in the SK of the community. To this point, absent from the corpus are tokens showing SK stems marked with the Spanish plural {-s}.

Since SK doesn't inflect inanimate objects for gender, which accounts for the observation that this particular semantic attribute of Spanish is neutralized as it is borrowed into SK. The definiteness or indefiniteness of Spanish borrowed nouns is retained, however, given that both languages encode definiteness. The outcome is often a noun form inserted directly into a L_R noun phrase that includes the SK definite article *shuk*, as in (4a), or as an isolated element without any marker of definiteness, as in (4b).

(4) a. *kay shuk* ***pishta*** (21_M_50)
that one/a celebration
'That (one) party'

b. ***tragu*** *upishka* (22_F_65)
shot (of liquor) drink-PARTIC
'a finished/drunk shot (of liquor)'

As demonstrated above in Table 6.2, the SK corpus of borrowed nouns shows a robust distribution across derivational and inflectional SK suffix categories. Specifically, suffixes from the DNN category and the five case markers catalogued by Waskosky (1992) and detailed in Section 3.2.2.1 are attested in the corpus, with examples from the SK corpus offered in (5a-c).

Example (5a) exhibits the manner in which SK abandons the L_S infinitive marker {-r}, replacing it with the L_R's equivalent {-na} to create an infinitive variant. Example (5b) shows the typical employment of a plural marker, which accommodates the L_S form with little obstacle; this form surfaces consistently following both vowel-final and consonant-final Spanish nominal forms. The examples in (5c) show typical manners in which the SK accusative, locative, ablative and dative case markers are used with Spanish nominal roots.

(5) a. Deverbative Nominalizers

*parla**na***
Speak-INFIN

b. Denominative Nominalizers

*vizinu**kuna***
neighbor-PL
'neighbors'

*Acompañante**lla** kan.*
companion-JUST be-3.SING
'(He) is just my companion.'

c. Case markers

*misa**pi***
table-LOC
'on the table'

*ñawpa timpu**da**ga*
Long ago time-ACC-TOP
'Back during that time'

*junta**mun***
gathering-DAT
'to (toward) the assembly'

*trabajo**munda**ga*
work-ABL-TOP
'from work'

6.2.2 Verbs

A distributional analysis of loanverbs in the SK corpus contributes to the subfield of morphological integration studies, one that still suffers from a dearth of language-specific, empirical data. We are reminded by Wohlgemuth (2009) that if generalizations are to be made about verb borrowability, grammatical compatibility between languages, and the accommodation strategy preferences of speakers of any particular language or language family, data must necessarily be the point of departure. It is the objective of this section to contribute to this broader goal, while elucidating the particular case of SK.

A typology of loanverbs advanced by Wohlgemuth specifies that outcomes may take the form of direct insertions (DI), indirect insertions (IndI), paradigm insertions, light verb strategies, and insertions across word classes. While DI in the present study entails the borrowing of an uninflected Spanish verb form, as in example (6a), IndI occurs when a root or infinitive-like stem from Spanish is accompanied by affixation from SK, as in (6b). Paradigm insertion refers to the borrowing of a Spanish verb form with Spanish inflection, as opposed to DI, which lacks source language morphology. An example of paradigm insertion from the SK corpus is given in (6c).

(6) a. *Chay**ser**.* (F_81)
That be-INFIN
'That being the case.'

b. ***Divertin**kunami.* (F_22)
Have fun-PRES-3.PL-AFFIRM
'They have fun.'

c. ***Corre corre!*** (M_88)
Run-IMPER
'Run, run!'

Light verb strategies surface as a reliance on L_R auxiliary verbs (such as "do" or "make" in English) accompanying a borrowed nominal form, and insertion across word classes results primarily in denominal verbalization (*vuiltarina* 'to return' < Sp. vuelta 'trip, turn') as in (7), but may entail the conversion of another part-of-speech category.

(7) ***Builta****rikunimi.* (F_81)
Return-REFL-PROG-PRES-1.SING-AFFIRM
'I am returning.'

Table 6.3 shows the outcomes as a proportion of total unique borrowed verb forms in the SK data. DIs were limited to fossilized forms that did not surface also as stems accepting SK agglutinating suffixes. Only one instance of insertion across word class is attested in the data, resulting in a derived form *vuiltarina* from Spanish noun *vuelta* ('trip, return').[82]

Table 6.3
Frequency by Insertion Type of Borrowed Verbs in SK Corpus

Insertion Type	IndI	L_S Paradigm	DI	Word Class	Light V[83]	Total
Frequency	134	20	3	1	0	158
Percentage of Total	84.8%	12.8%	1.8%	.6%	0.0%	

[82] Despite the apparently infrequent reliance on this strategy among SK monolinguals, the process is productive, though minimally so, in other varieties of highland Kichwa. Gómez Rendón and Adelaar (2009) record the form *kaballuna* (< Sp. *caballo* 'horse') as having taken the meaning of 'to ride (a horse)' in Imbabura Kichwa (960).
[83]The corpus rendered no cases of the employment of light verbs, which in SK would be expected to surface as the transitive verb *rurana* ('make, do') as a preposed, auxiliary form.

The distributional analysis shows a strong preference in SK for IndI as the primary loanverb accommodation strategy. It appears SK structural features impose little restriction on the reinterpretation of Spanish verb stems to accommodate SK affixation, as has been observed in other highland Kichwa varieties in Ecuador (Gómez Rendón and Adelaar 2009:960).

These findings offer an interesting complement to Wohlgemuth's (2009:147ff) observations, derived from analysis of his Loanverb Database (LVDB) of 357 recipient languages from around the world, that accommodation strategies may co-occur within a language or occur exclusively, and that direct and indirect insertion strategies are the two most frequently observed strategies across languages. Wohlgemuth did not look at individual languages to analyze the distribution of insertion strategies within languages; rather, his study explored how many of the 357 languages rely on each particular strategy. The LVDB project found DI to occur in 207 of the languages, IndI in 86 of the languages, light verb strategy in 104 of the languages, and paradigm insertion in 3 of them. Such an approach is valuable in assessing the availability of each loanverb strategy across languages, but it does not reveal tendencies within any particular language.

It stands to reason, as noted in Table 6.3, that IndI would be a common strategy among SK speakers since monolinguals deal with potentially problematic or cumbersome morphological complexity by exploiting a pattern of regularization of the partial overlap in the formation of verbs in the two languages. Both Spanish and SK terminate infinitive verb forms with a thematic vowel followed by a consonant.[84] The result is a relatively easy interface between the borrowed

[84] An example of this may be seen in the Spanish and SK verbs 'to work.' The Spanish infinitive form of the verb *trabajar* and the semantic equivalent in Kichwa, *rurana*, both show a thematic low mid vowel, causing little impediment to the incorporation of such -AR verbs into SK verbal morphology (*trabajas**sha*** 'I will work', *trabaja**ni*** 'I work', *trabaja**rkan*** 'S/he worked', etc.)

Spanish verb root and SK agglutinative suffixes, all of which are compatible with the thematic vowel in both languages and require little adaptation of the stem.

Borrowed Spanish verb forms appear to readily accept the schema of SK inflectional and derivational affixes advanced by Waskosky (1992) and outlined in Section 3.2.2.1. Examples of the nature of assimilation of Spanish verbal roots are given in (8a-b).

(8) a. Verb tense

*ñukanchik familiakunata invita**sha***
we-POSS family-PL-ACC invite-1.SING-FUT
'I will invite our family'

*cazar**irka**munda*
to marry-PAST.3.SING-ABL
'Because (she) married'

b. Deverbative verbalizers

*chulu shimi ña parla**ri**n*
cholo language already speak-REFL-3.SING
'S/he already speaks Spanish'

An analysis of the 134 examples of IndI in the data shows that, without exception, SK inflectional agglutination expressing tense, aspect, person and number faces little impediment to accommodating borrowed Spanish verbal roots. This also appears to be the case with SK derivational morphemes, though only 5 of 14 candidate DVV morphemes are attested in the corpus, alongside a lack of DNV affixes altogether. Table 6.4 shows the distribution of tense, person and number markers across borrowed Spanish verbs taking SK verbal agglutination. Table 6.4 shows the number of occurrences of derivational suffixes that co-occurred with inflectional morphemes.

Table 6.4
Distribution of SK Verbal Suffixes: Inflectional Morphemes

	PRES					**PARTIC**	**IMPER**
	1SING {-ni}	2SING {-nki}	3SING {-n}	1PL {-chik}	3PL {-kuna}	{-shka}	{-i(y)}
Number of occurrences	10	4	49	11	2	6	1

	Inflectional morphology					
	FUT			**PAST**	**CONDIT**	**SUBORD**
	1SING {-sha}	3SING {-nka}	1PL {-shun}	{-rka-}	{-mun}	{-shpa}
Number of occurrences	25	3	1	10	1	1

Table 6.5
Distribution of SK verbal suffixes: Derivational morphemes

	DVV				
	REFL {-ri}	PROG {-ku}	HERE {-mu}	JUST {-lla}	CAUS {-chi}
Number of occurrences	9	4	1	2	3

Calculating relative category percentages in this case does not necessarily elucidate tendencies in borrowing in clear terms, since categories are not mutually exclusive in all contexts. This is in part because affixes like the past tense {-rka}, and all of the derivational infixes are not encoded for person and number and must therefore also rely on the additional present tense category suffix. When this is the case, however, the inflectional agglutination from the PRES category does not mark for tense, but rather for person and number.

Spanish loanverbs in SK show a general retention of the L_S thematic vowel so that Spanish {-*ar*} verbs are borrowed as bare forms maintaining the low, mid vowel, as in (9a). Spanish {-*er*} and {-*ir*} verbs are categorically interpreted as SK forms taking the {-*ina*} infinitive form as in (9b). SK lacks medial front and back vowels (/e/ and /o/), so its two infinitive affixes are {-*ana*} and {-*ina*}. Whenever the thematic vowel in question forms part of a diphthong, the sequence is commonly monophthongized, often in favor of the semivowel that initiates the rising tautosyllabic sequence. Example (9c) illustrates the monophthongization process, in this case [ja] → [i], that occurs during the borrowing of diphthongized Spanish infinitives (cf. Section 6.3.1.1 below).

(9)

	Spanish	SK	
a.	*danz**ar***	*danzana*	(‘dance’)
	pasar	*pasana*	(‘pass’)
	faltar	*faltana*	(‘lack’)
b.	*val**er***	*balina*	(‘be worth’)
	poder	*pudina*	(‘be able to’)
	*escrib**ir***	*escribina*	(‘write’)
c.	*cambiar*	*cambina*	(‘change’)
d.	*pagar*	*pagina*	(‘pay’)

The borrowing of Spanish verbal stems with minimal adaptation, excepting the case of the thematic vowel in Spanish’s 2nd conjugation paradigm being raised /e/ → [i] in Ecuadorian Kichwa, is a phenomenon attested in all varieties of the highland Quechua family, including those spoken in the Peruvian Andes. (Muysken 2000:187-91) There are exceptions, however, as forms sporadically surface with adapted or modified stems that depart from the Spanish thematic vowel, as in (9d). No explanation for such rare, anomalous modifications to a perfectly borrowable thematic vowel has been advanced in the literature, and the dearth of additional

examples in the SK corpus does not aid in arriving at an adequate hypothesis, since potential cases of analogy or other conditioning factors are lacking in the present data set.

As mentioned above, a clear – albeit isolated – example of insertion across word classes in the data is that of the Spanish noun *vuelta* (‘return, turn, trip’), integrated into SK as the infinitive form *vuiltarina* as shown in (10a). Another interesting loanverb phenomenon in SK that appears to be the outcome of insertion across word classes is the borrowing of a verb that has fossilized as a conjugated form. Example (10b) shows an instance of this borrowing, which has resulted in the SK verb *dalina*. This particular loanverb is a form of indirect insertion taking as its root not an infinitive stem but rather a fossilized informal imperative form *dale* (‘give it to him, hit him’), from the Spanish verb *dar* with the third-person singular dative clitic *le*.

(10) a. *Chaypi* ***vuilta****rirkankuna.* (F_81)
There-LOC return-REFL-PAST-3.PL
‘(They) returned there.’

b. *Ñukanchik imata rurukin? Ña* ***dalin****...* (F_28)
We/us what-ACC do-PAST-3.SING then hit-PRES-1.SING
‘What did (he) used to do to us? (Back) then he hits...’

The examples in (10a-b) reflect a process Muysken (1997) calls verbal regularization, a contact outcome affecting particular verbal roots (rather than inflectional paradigms) he encountered in the Media Lengua of Salcedo. Examples he gives include the innovation *bamuchi* (‘let’s go’), a verbal root that reflects borrowing of the inflected Spanish imperative *vámonos,* and *dali-* (‘to hit’), again from the Spanish command *dale*. This adaptation strategy clearly derives new SK verbs from both nouns and inflected Spanish verb forms, similar to SK outcomes in the corpus of the present study. This suggests borrowing processes in SK, insofar as loanverbs

are concerned, are not limited to the adoption exclusively of infinitive roots that retain thematic vowels.

Rather, it appears the process has historically relied upon the assimilation by SK monolinguals of Spanish utterances they recognize as verbal in function, irrespective of the form's faithfulness to its root, since borrowing is inherently a process fed by spoken input and subject to influence by repeated occurrences of particularly frequent words, frequencies conditioned by socio-historical and other extra-linguistic factors.

Instances of insertion with retention of the Spanish verbal paradigm surfaced infrequently as the imperative *corre* ('run'), a command often directed at dogs underfoot and attested in the speech data of three different interviewees. Borrowed Spanish inflection also occurred in complex borrowings such as *no sé* ('I don't know'), attested in the speech of two interviewees, and in complex borrowings such as the compound particles *dizque* (< Sp. dice que, Eng. 'apparently, seemingly, it looks as if') (M_88) and *diusulupay* (< Sp. Dios se lo pague, Eng. 'thank you, may God pay you'). Paradigm insertion also surfaced in fossilized discourse particles *o sea* ('or rather') and *a ver* ('let's see'), each of which is attested in the speech of two SK speakers.

These findings align with those of previous research on varieties of highland varieties of Ecuadorian Kichwa in their suggestion that the nature of language contact in the area has allowed for the borrowing by monolinguals not just of single words, but also of utterances comprising two or three words, inserted into SK as reanalyzed forms, often undergoing prosodic adjustment as part of their assimilation into the grammar of SK.

6.2.3 Reduplication

Assuming L_R grammatical restrictions are satisfied or otherwise pose no hindrance to loanword integration at the morpho-syntactic level, borrowing speakers also apply simplification strategies and native pragmatic function to borrowings as an additional approach to adaptation. Muysken (1997:55) encountered an additional type of lexical adaptation taking place: reduplication. Data from the SK corpus shows this type of doubling across borrowed Spanish nouns and verbs to a limited degree. The two examples from the SK corpus are given in (11a-b).

(11) a. *Allku!* ***correcorre!*** (F_64)
Dog Run-IMPER
'Dog! Run (get out of here)!'

b. *Ña muzu-ta tuku-sha ña* ***ganigani*** *ña sucrita…* (F_71)
Then young man-ACC become-ADV then earn then sucre-ACC
'Then as a young man I earned (way back then) sucres.'

The doubled verb form in (12a) reflects a common fossilization of the informal imperative form of the Spanish verb *correr* ('run'), embedded with a pragmatic function of communicating a degree of annoyance or haste on the part of the speaker. Though attested as a reduplicative construction in the data of only two interviewees, it is clear from secondary, impressionistic data the utterance is commonplace in the speech community.

Example (11b) demonstrates the fossilized construction *gani gani* ('I earned') in the speech of consultant F_71 which fulfilled the function of a past temporal reference with a first-person subject. Such doubling in this case does not appear to be obligatory but rather employed for its emphatic value, drawing attention to the distant nature of the past event as recalled by a man in his early-seventies. Such emphasis may also explain his use of *ña* twice in the utterance, though the fact that it does not surface as a doubled form may also be explained by this form's

high frequency occurrence as a pragmatic crutch, bleached of temporal reference in its employment to simply ensure continued discourse. Doubling of this nature is not a surprising finding, given its employment in a variety of pragmatic contexts in Kichwa beyond that of emphasis or intensification, to say nothing of this strategy's more general prominence as a universal tendency across languages. The various functions of reduplication in Ecuadorian Kichwa was brought to my attention by Armando Muyolema during one of various consultations about this section.

To summarize, it is apparent SK speakers encounter few structural or systemic impediments to integrating borrowed Spanish nominal and verbal lexemes and roots into their speech repertoire via several types of insertion and reduplication processes. The general compatibility between Spanish and SK grammars at the lexical and morphemic levels is not enjoyed at the level of the intermingling phonologies, however. Whereas Spanish morphemes and lexemes readily occupy slots in the SK matrix, the phonemic makeup of borrowed words requires adaptation where there is not a direct overlap of two sound systems. The gaps between phonemic inventories of the two languages in contact provide a rich opportunity to explore the underlying set of restrictions operating within SK phonology. In the next section I examine how SK speakers integrate Spanish loanwords into their native phonological system.

6.3 Loanword phonology

The phonological outcomes of language contact may be categorized as either the modification of illicit segments in the L_R, the introduction of new phones or phonotactic sequences into the L_R, and the occasional creation of innovative contrasts or loss of existing ones

in the phonological grammar of the L_R (Winford 2003:54-5). It is the first of these that is most prominent in the SK corpus data, and which will be the focus of this section.

The outcomes of phonological adaptation of Spanish loanwords into SK may be categorized as operating at both the segmental and prosodic levels, and some adaptations are the result not just of restrictions at the level of the individual segment, but of constraints at the combinatory, phonotactic level of neighboring sounds as well.

In this section segmental repairs will be explored first, followed by prosodic adjustments. Some outcomes are more categorical in nature, while others such as intonation or emphasis appear to vary according to speakers' pragmatic objectives and discursive goals. Further, it should be noted that these outcomes are subject to individual speaker variables. As is to be expected, the following repairs are more regular and predictable among older speakers whose linguistic repertoire is characterized by SK monolingualism or incipient bilingualism in Spanish (see Section 4.1).

The results of this section contribute to an area of study which has historically suffered from a paucity of data and methodological rigor in Ecuadorian Kichwa. One recent and relatively more rigorous approach to the question is offered by Gómez Rendón and Adelaar (2009), who observe various segmental and syllable-level repairs taking place in Spanish borrowings into a northern variety of Ecuadorian Kichwa. These authors, some of the earliest to offer an attempt at a complete and thorough profile of phonological and phonotactic contact outcomes in highland Ecuador, observe the following assimilatory strategies: raising of medial vowels /e, o/ in atonic position adjacent to stressed syllables (12a), velarization of voiceless labiodental fricative /f/ in initial position (13b), voicing of intervocalic alveolar fricative /s/, and diphthong simplification (12c), syllable deletion and metathesis (12d), and collapse of hiatus (12e).

(12)	a.	/'pe.ɾo/	→ ['pi.ɾu]	'but'
	b.	/'ʃje.ro/	→ ['xi.řu]	'iron'
	c.	/'hwi.sjo/	→ ['xwi.zu]	'judgment'
	d.	/tem.po.'ɾa.da/	→ [tim.'pu.ɾa]	'season'
	e.	/sa.na.'o.ɾja/	→ [sa.'ɲu.ɾa]	'carrot'

Gómez Rendón and Adelaar's findings demonstrate that SK phonology readily brings prohibited Spanish segments into alignment with the language's rules via sound substitution. The SK data from the present study render a set of additional vocalic and consonant repairs, explored below.

6.3.1 Segmental repairs

A number of assimilatory changes occur at the segmental level, resulting frequently in a sound substitution affected by the shifting of one or more binary values in the feature set of a problematic segment. Many of the phonological outcomes found in the SK corpus are attested in the literature about highland Ecuadorian Kichwa in general, and elucidate the role of the L_R phonological grammar in loanword adaptation while confirming expected outcomes as regional varieties of the language show commonality in adaptation strategies.

6.3.1.1 Vowels

This section examines unstressed medial vowels in SK to compare patterns of vowel raising in Spanish loanwords in other varieties of Ecuadorian Kichwa. Vowel raising may be considered the primary sound adjustment affecting Spanish borrowings into the Kichwa language family (Gómez Rendón 2008a:106). This systematic treatment of medial vowels in SK borrowings is one facet of a broader situation of vocalic instability characteristic not only of

Spanish borrowings in Kichwa, but also of the monolingual variety of Andean Spanish in general, and it is a prominent characteristic of highland Spanish in Ecuador and Peru.

Given the relatively reduced vocalic inventory of SK in comparison with Spanish, medial vowels show a tendency toward raising in accordance with their feature [back], retaining this position during closure, as in the frequent examples from the SK corpus in (13).[85]

(13) /sol.'te.ra/ → [sul.'ti.ra] 'single woman, bachelorette'
/po.'bre.sa/ → [pu.'bri.za] 'poverty'

This process of vowel raising, though prominent in the data, is not categorical, and is subject to a degree of variation. Additionally, partial assimilation in polysyllabic loans is attested in the SK corpus, and should come as no surprise given several possible conditioning factors such as lexical frequency effects, speakers' level of Spanish competence, prosodic factors like rate of speech, and the phonological environment within which each vowel occurs. Regarding frequency effects, Gómez Rendón (2008a) points out that less frequently used words show a tendency to surface as less assimilated to Kichwa phonology. He notes, moreover, the same lexical item may surface in a speech community with several pronunciations (106-7).

Table 6.6 shows the rate at which medial vowels in unstressed syllables are raised in the speech data of the SK interviewees.[86] The corpus for this section comprised 295 instances of front mid vowel /e/ and 314 instances of back mid vowel /o/, for a total of 609 unique occurrences of medial vowels in atonic positions, making them candidates for raising. Each

[85] This chapter follows the SPE framework of ordered, binary distinctive features that define segments proposed by Chomsky and Halle (1968) in describing and formalizing repair outcomes with specific reference to each segment's unique set of major class, manner and place of articulation features and the particular feature set affected by the consonant or vowel integration strategy in question.

[86] For this analysis, unique types were again of interest, and Praat spectrogram software (Boersma & Weenink 2014) was employed where impressionistic evaluations were insufficient. Conditioning factors like open versus closed syllables were not taken into account. Syllable tonicity was established based on the realization of each word by the speaker, rather than departing from Spanish stress assignment rules. Further, this analysis does not account for variables such as rate of speech, which has been shown to affect unstressed vowel weakening (Hundley 1986).

speaker rendered between 9 and 55 cases of unstressed, medial vowels, complicating the task of arriving at dependable inferences about any particular consultant or the nature of the correlation between their speech patterns and the social variables they embody. Ignoring for a moment the variation in number of tokens between speakers, across the twelve interviewees a number of trends emerge that merit attention.

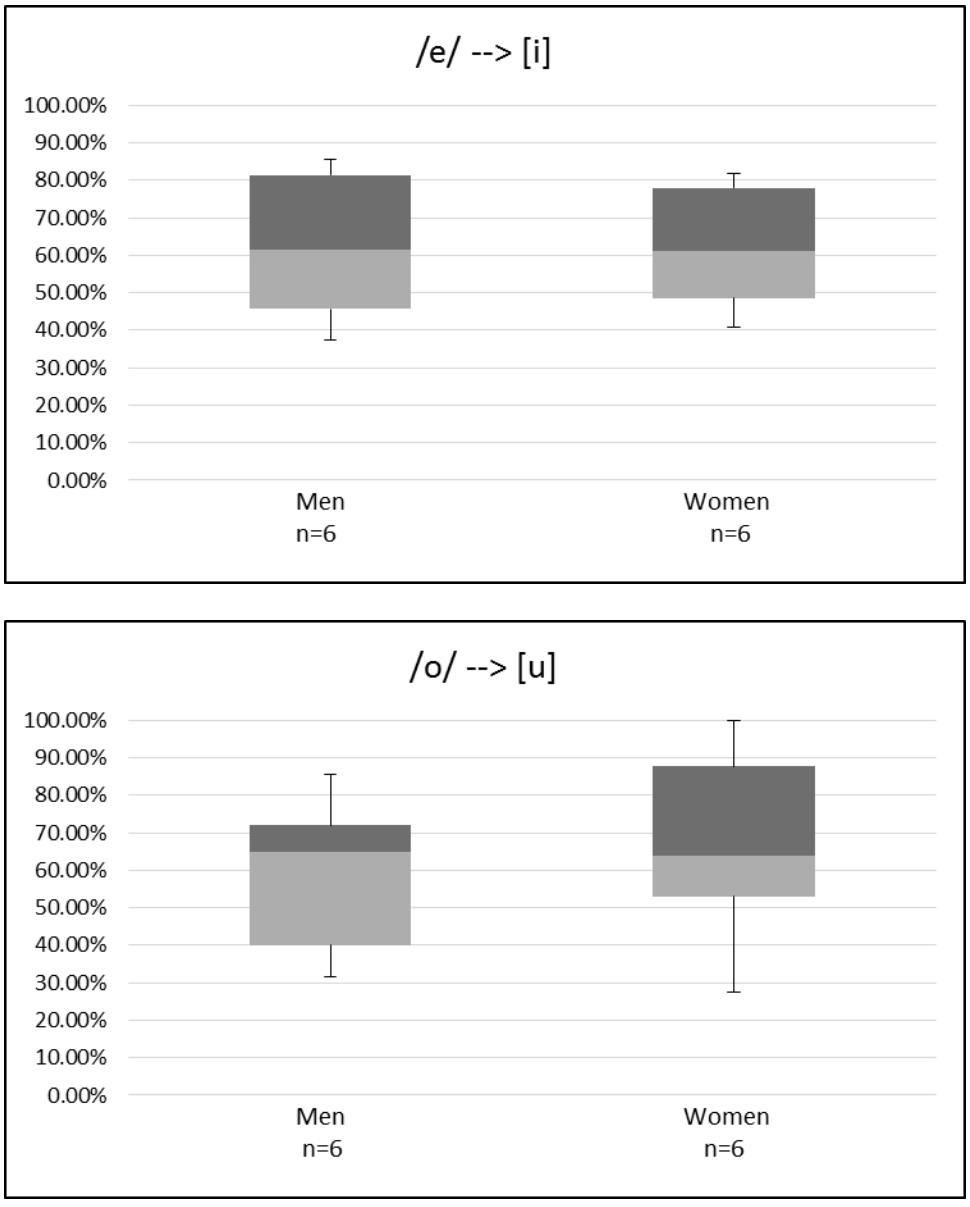
Table 6.6
Frequency of Unstressed Vowel Raising

	Percentage of raised /e/ → [i]		Percentage of raised /o/ → [u]	
F_22	40.8%	(20/49)	27.5%	(11/40)
F_28	44.4%	(4/9)	50%	(6/12)
F_64	66.6%	(28/42)	75.8%	(25/33)
F_65	61.5%	(8/13)	61.9%	(13/21)
F_81	85.7%	(18/21)	91.6%	(22/24)
F_82	81.8%	(9/11)	100%	(11/11)
M_20	37.5%	(9/24)	44.4%	(12/27)
M_40	39%	(16/41)	38.6%	(17/44)
M_50	68.2%	(15/22)	31.6%	(6/19)
M_71	65.6%	(21/32)	74.5%	(41/55)
M_72	88.2%	(15/17)	64.3%	(9/14)
M_88	85.7%	(12/14)	85.7%	(12/14)

The influence of the reduced SK vowel inventory on the manners in which interviewees integrated /e/ and /o/ in Spanish loanwords is robust. Even the youngest four consultants, two of whom demonstrate near-native Spanish competence, reflect a rate of raising of between 30% and 50%. The data shows neither vowel to be more susceptible to raising than the other.

Impressionistically, it seems that the sex of the speaker is a factor that exerts minimal influence on medial vowel raising. Figure 6.1 offers a comparison of the rate of vowel raising between the six male and six female consultants for both /e/ and /o/.

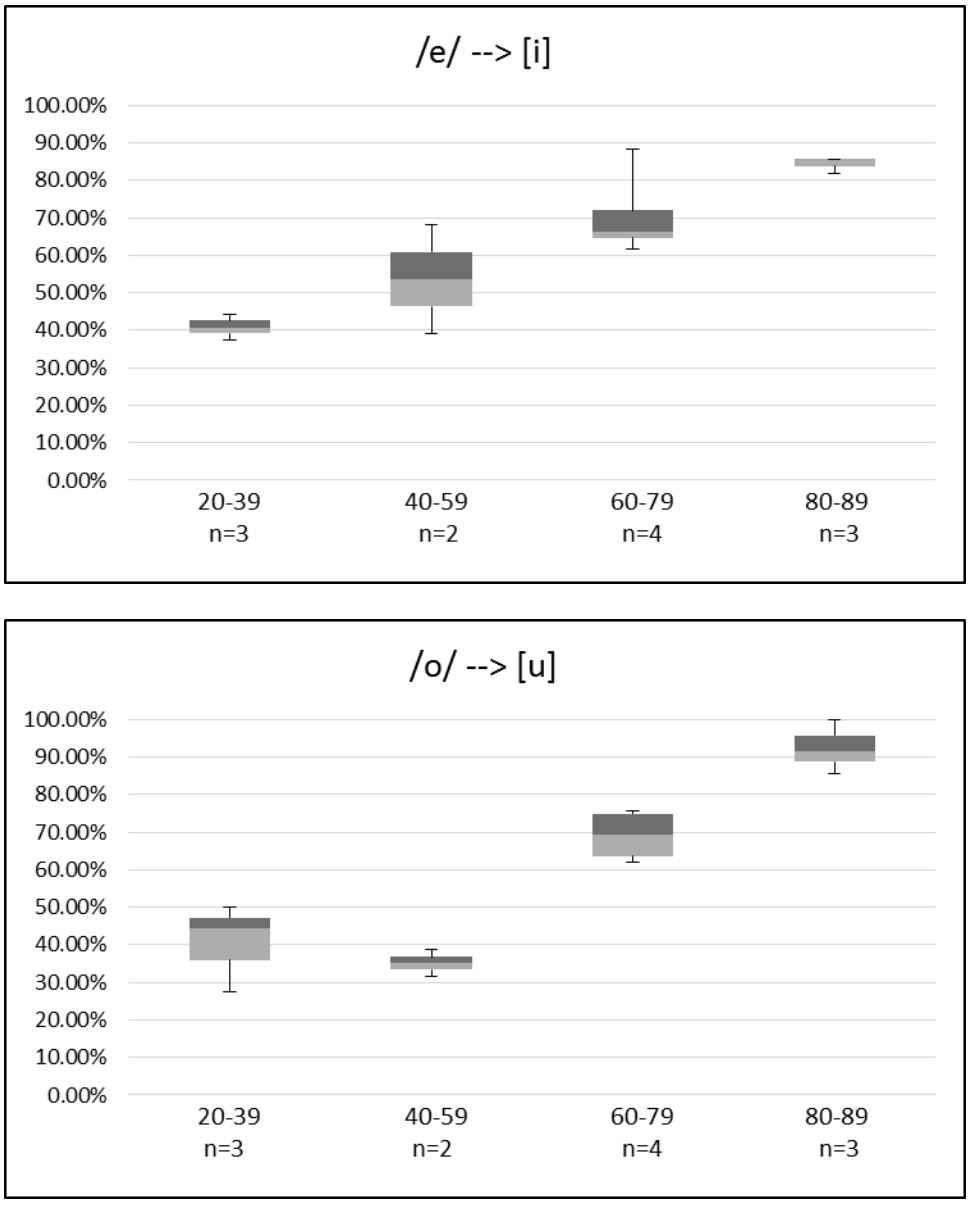
Figure 6.1
Percentage Unstressed Medial Vowel Raising by Sex



The overall range of raising of /e/ is slightly greater for the men in the study than for the women, but the opposite is true of /o/. However, the median raising rate for both vowels is nearly the same for men and women.

Age appears to correlate more closely than speaker sex with the rate of medial vowel raising in the SK corpus. It is important to recall that the age of participants is not a social variable that may be considered in isolation in this speech community, since it carries with it implications about level of education and level of Spanish competence (see Table 4.1). The data shows a range of /e/→[i] raising of 37.5% to 85.7% per speaker, and /o/→[u] shows a range of 27.5% to 100% raising per speaker. The rate of vowel raising by age group across both vowels is shown in Figure 6.2.

Figure 6.2
Percentage Unstressed Medial Vowel Raising by Age



As Figure 6.2 illustrates, as speaker age increases, so does medial vowel raising in unstressed syllables. A Pearson's rho test yielded statistically significant correlation coefficient of .862 for /e/ raising, and .846 for /o/ raising (p <.001 in both cases).

The exception to this trend is raising of /o/ in the age stratum of 40-59 years. An explanation for this outcome may be found in the nature of age groupings for this study. The 40-59 age group is comprised of just two male speakers, resulting in less-than-ideal representativeness. Further, the speech of M_50 showed the second lowest raising rate of the entire group of consultants, with the lowest rate from F_22, creating an outlier of sorts. Biographic details about this individual's background offer little information that might help account for this outlier in /o/ raising percentages.

Even in the speech of the youngest Salasakas with the most hightly developed bilingual repertoires, it is apparent that loans considered by scholars to have been borrowed into Ecuadorian Kichwa as cultural loans early on in the contact scenario and thus having undergone a significant degree of evolution such as *pishta* (<Sp, fiesta, 'celebration'), *paji* (<Sp. page, 'page, noble servant'), *wagra* (<Sp. vaca, 'cow') and *pridicana* (<Sp. predicar, 'to preach'), categorically conserve the raised vowel when between 50% and 70% of the remaining unstressed medial vowels /e/ and /o/ in their borrowed lexicon retain the original medial vowel.

The occurrence of phonetically-adapted forms such as these among young Salasakas seems to reflect the intergenerational transmission of forms learned by SK monolinguals and subject to substantial degrees of initial assimilation at the segmental level, where other complex borrowings such as *de repente* might more adequately be discussed within the context of borrowings which, while phonetically adapted in the speech of older monolinguals, undergo fewer repairs in the bilingual speech of younger members of the community who may have access to their L2 phonemic inventory.

6.3.1.2 Consonants

Among the most salient SK assimilation strategies at the segmental level is that of the word initial voiceless labiodental fricative phoneme /f-/, a sound that is historically unattested in the phonemic inventory of SK. This consonant coexists in free variation with the allophone [ɸ] in the monolingual Spanish of highland Ecuador (Toscano 1953), and the latter is perhaps a more appropriate or authentic point of departure when assessing assimilation strategies of the otherwise standard, though not entirely consistent underlying phoneme /f-/.

Since Kichwa lacks any version of the voiceless labial fricative of Spanish, those speakers of limited bilingualism without access to [ɸ] render the sound as an aspirated or unaspirated bilabial stop, as in (14a-b), or less frequently as a velar fricative with a co-articulated rounding, shown in (14c).[87]

The outcome in (14b) demonstrates an absence of articulatory aspiration, conditioned by the Kichwa phonological rule inhibiting aspiration of /p, t, k/ in complex onset environments.

(14) a. /fa.'mi.lja/ → [pʰa.'mi.lja] 'family'
b. /fran.'sis.ka/ → [praŋ.'sis.ka] 'Francisca'
c. /fal.'ta.na/ → [xʷal.'ta.na] 'to lack'

Both of the assimilation strategies attested in the data demonstrate the reliance of the SK speakers upon what may be considered the nearest available phonemes to fill the gap in comparative inventories. The repair to [pʰ] retains the labial place feature while sacrificing the

[87] Evaluation of these outcomes via spectrogram formant analysis was aided by the use of Praat. Since the articulation of [xʷ] in the SK data occurred only once out of 47 unique loan types with initial or syllable onset /f-/ (or its allophonic variant, [ɸ]), in the speech of F_65, its occurrence may be dismissed as idiosyncratic or as a random mispronunciation. Counterevidence of this may be found in lexicographical work from Stark and Muysken (1977:55ff) in which they survey and report regional pronunciations across the Kichwa lexicon including established Spanish loanwords, and in which realizations of /f/ are widely documented as [xw] or [hw].

continuant manner of articulation. This adaptation renders the strong closure of a plosive, observing the phonological aspiration rule in SK that is imposed upon word-initial voiceless occlusive consonants /p, t, k/. The assimilation to fricative [x^w] reflects a degree of faithfulness to the voiceless and fricative qualities of the Spanish voiceless labial fricative.

The corpus exhibits some variation in the pronunciation of Spanish borrowed /f/ and [ɸ] across 92 tokens, as shown in Table 6.7. A more detailed itemization of the findings is given in Appendix J. Assimilations to [p^h], and to a far lesser degree [x^w], represent reliance on the only two options available from an SK phonemic inventory that has historically lacked labial fricative consonants.

More than half of the tokens that include the borrowed phoneme /f/ surface as a voiceless bilabial fricative [ɸ]. The frequency of [ɸ] in the loanword data appears to be evidence of an SK phonemic inventory that has expanded to include the voiceless bilabial fricative via a process of convergence with highland Ecuadorian Spanish, rather than indicative of rates of borrowing of this sound as a result of code-switching, since the strategy is prominent even in the data of the oldest, monolingual consultants.

Table 6.7
Frequency of Spanish Voiceless Labial Fricative Repairs in SK

	Occurrences	Percentage of Total Repairs
[p]/[p^h]	38	41.3%
[x^w]	1	1.1%
[ɸ]	49	53.3%
[f]	4	4.3%
Total	**92**	

Assimilation of Spanish /f/ or [ɸ] in SK does not appear to be conditioned by phonotactic considerations such as whether the sound occurs in a consonant cluster. Of the 7 tokens containing borrowed /f/ in a complex onset, the segment is adapted to unaspirated [p] as well as bilabial fricative [ɸ] and [f]. Table 6.8 demonstrates the distribution of these repairs in the data.

Table 6.8
Spanish Voiceless Labial Fricative Repairs in SK Complex Onsets

	Occurrences	Orthographic Representation	Phonetic Shape
[pɾ]	1	fruta	['pɾu.ta]
[ɸɾ]	5	frente, sufrir, disfrazado	['ɸɾen.te], [su.'ɸɾiɾ], [dis.ɸɾa.'sa.du]
[fɾ]	1	fruta	['fɾu.ta]
Total	**7**		

(15) a. /'mi.sa/ → ['mi.za][88] 'catholic mass'
b. /'me.sa/ → ['mi.sa] 'table'
c. /ka.'sar/ → [ka.za.'ri.na] 'to marry'[89]
d. /po.'bre.sa/ → [pu.'bri.za] 'poverty'
e. /'ka.si/ → ['ka.zi] 'nearly, almost'

This adaptation, observed also by Stark and Muysken (1977) in various dialects of Ecuadorian Kichwa, appears not to be conditioned by language internal factors.[90] Of the 69 unique cases of intervocalic /s/ in the SK data, 20 showed voicing to [z]. Among these were the occurrence of *cazarina* ('to marry') in the speech of four consultants, two attestations of *vizinu* ('neighbor'), two of *misa* ('holy mass'), two of *camisa* ('shirt'), and two of *iglesia* ('church'). In the case of loans like *camisa*, it appears the voicing phenomenon was originally imposed upon the loanword arbitrarily and, though the data are not robust enough to make observations about the categorical nature of this phenomenon, the speech data of the older consultants suggests /s/ → [z] is more than sporadic.

Data supporting other possible explanations for what appears to be a strategy to respect phonemic contrast in SK loanwords did not surface, either in the loanword corpus or even in situations of homophony between Spanish loans and SK etyma. The role of speaker awareness

[88] In SK the Spanish borrowings *mesa* and *misa* run the risk of entering into homophony clash after the former undergoes medial vowel raising. In this particular case the voicing of Spanish /s/ may perhaps provide a distinction between the two, since *misa* remains ['mi.sa]. Wichmann and Hull (2009) note this pronunciation of *mesa* as ['mi.za] might also be a vestige of Old Spanish pre-1600s voiced /s/. Gómez Rendón and Adelaar (2009:958) argue they have witnessed both articulations ['mi.sa] and ['mi.za] for *mesa*. Waskosky (1990) argues that /s/ and /z/ are contrastive phonemes in SK, but among his data showing the presence of both phones in SK there is noticeable lack of minimal pairs to reinforce his argument (10).

[89] This particular case does not appear to be an instance of repair of homophony clash, as the verb 'to hunt' in SK is *hapina*, not a Spanish borrowing.

[90] Stark and Muysken (1977) have documented the voicing of intervocalic /s/ in loanwords from Spanish in Ecuadorian Kichwa across the major highland varieties in the country. Included in their lexicography are variousexamples from SK: *danzana* (Sp. danzar [dan.'sar] 'to dance'), *jazinda* (Sp. hacienda), *muzu* (Sp. soltero'bachelor'< mozo ['mo.so]), *calzun* (Sp. calzón [kal.'son] 'pants'), *cazarina* (Sp. casarse 'to marry'), *cruzana* (Sp. cruzar [kru.sar'] 'to cross'), *cuzichana* (Sp. cosechar 'to harvest').

in this particular case may prove insightful in proposing an explanation for the voicing outcome, and may be a fruitful line of inquiry for future investigation.

Arguments as to the influence of orthography in such cases as *modernización,* attested in the corpus once as [mo.der.ni.za.'sjoŋ], are likely unfounded, since the only interviewees with any significant level of literacy also embody a level of Spanish competence that renders any consideration of spelling in pronunciation moot.

It appears that other loans from Spanish resist voicing assimilation of /s/. High frequency items *reboso* ('shawl'), *pasana* ('to pass'), *mozo* ('young single man'), and *música* ('music'), surface consistently with voiceless sibilants in the data. *Pasana* is attested in the speech of five consultants, *mozo* in the speech of three SK consultants, and the remaining items in the speech of two interviewees each. It is not uncommon for borrowed lexical items that surface as homophones in Kichwa as in (18a-b) to be differentiated in the lexicon by the voicing of /s/[91] (Gómez Rendón 2008a:107).

It has been observed that a similar voicing effect takes place in Ecuadorian highland Spanish (Toscano 1953). A key difference between the sporadic voicing of /s/ in monolingual Ecuadorian Spanish and in loanwords in SK is that, in the former context, the occurrence of /s/ → [s] most frequently occurs at word and morpheme boundaries (Chappell, 2011). In SK the voicing phenomenon in loanwords appears to be much more stable than it does in Ecuadorian Spanish.

A strengthening of Spanish allophonic voiced fricative [ð], the result of lenition in the L_S, to an articulation of total occlusion [d] is a categorical outcome in the data, examples of which

[91] Cole (1982) claims [z] in Imbabura Kichwa is the result of extensive borrowing from Spanish, and that the voiced sibilant did not originate in the indigenous language. This observation suggests convergence of phonemic inventories and the possibility that extensive lexical borrowing may lead to segmental borrowing from the L_S.

are given in (16).[92] This process of fortition, a recuperation of the occlusive feature of the dental plosive consonant in question, effectively reverses the lenition process operative in Spanish to remain faithful to the absence of such a lenition rule in SK phonology. This adjustment is predictable, as [-cont] is a relatively close repair that does not compromise place of articulation, nor such manner features as [voice]. The example in (16b) also shows a simultaneous shift in syllable stress to accommodate the paroxytonic preference in SK.

(16) a. /'gra.da/ (['gra.ða]) → ['gra.da] 'step, stair'
b. /de.ber.'dad/ ([de.ßer.'ðað]) → [di.'bir̆.dad] 'truly, truthfully'

Finally, a consistent segmental adaptation affecting the coda consonants of simple noun borrowings without L_R affixation is the velarization of word final /n/ in coda or prepausal position, or preceding sibilant /s/, as in (17a). This outcome takes place in the absence of any regressive assimilatory influence from subsequent vowels, or labial or dental consonants, as in (20b). This is observed categorically across each of 22 contexts within the corpus in which it is expected.

Marlett (2001) observes this backing of place of articulation of Spanish alveolar nasals to be the result of an existing phonological rule in SK, resulting in loanword outcomes like that given in (17), and the rule appears to override expected assimilatory outcomes due to the influence of alveolar articulations such as /s/.[93]

[92] It appears to be the case that [ß] and [ɣ] avail themselves to monolingual SK speakers, and these phones are not problematic in borrowings from Spanish that are subject to lenition in the L_S. This process in SK is evident in the robust occurrence of agglutinative suffixes such as the accusative marker *-ka* and the locative *-pi*, habitually realized in the community as [ɣa] and [ßi], respectively. This is not a rule in the borrowing data, however, as certain loanwords do occasionally surface in SK without retaining the form showing lenition, as in /re.bo.so/ [re.'ßo.so] → [ři.'bu.zu] 'shawl'.

[93] This rule is regularly attested in /-n/ forms in SK, such as those taking the dative suffix {-mun}.

(17) a. /fran.'sis.ka/ → [fraŋ.'sis.ka] ‘Francisca’
/'ho.ßen/ → [ho.'beŋ] ‘youth’
b. /mon.'ton/ → [mon.'toŋ] ‘mountain’

The segmental repairs attested in the SK data and explained above are accompanied by several suprasegmental assimilatory outcomes, which are detailed in the following section.

6.3.2 Prosodic and Phonotactic Repairs

A number of assimilatory outcomes in the SK corpus operate at the prosodic level. Among these is the relatively consistent, though not categorical shift of Spanish lexical stress pattern from oxytonic or proparoxytonic, with stress falling on the final or antepenultimate syllable respectively, to a paroxytonic one in which the penultimate syllable carries the spoken stress. The grammar of Ecuadorian Kichwa specifies for poly-syllabic words to be paroxytonic. Examples of such shifts, attested in 312 tokens of 356 where it would be expected across the SK corpus, are given in (18).

(18) /tam.'bor/ → ['tam.buɾ̌] ‘drum’
/kal.'son/ → ['kal.sun] ‘underwear’
/de.beɾ.'dad/ → [di.'biʃ.da] ‘truly’

Also evident at the syllabic level are repairs in the form of the simplification of the complex hetero-syllabic cluster /mbr/ to [m] to achieve a simple onset and an open CV.CV syllable structure favored by SK. Examples from the 13 tokens in the corpus are given in (19a) and show a total obliteration of [mbr], and the transfer of [m] to the following syllable. Another simplification strategy is observed in SK speakers’ treatment of the cluster [pr], which in the four

attested tokens resulted in the creation of a simple onset through the loss of a rhotic as shown in (19b).

(19) a. /som.'bre.ro/ → [su.'mi.ru] ‘hat’
b. /pri.'me.ro/ → [pi.'mi. ru] ‘first’

These two assimilatory outcomes reflect tendencies in SK to accommodate foreign consonant clusters and stress assignment patterns from Spanish to reflect tendencies in the L_R. Stress shift to the penultimate syllable and the simplification of consonant groups to create open syllable structure demonstrate adaptation at the supra-segmental level and reinforce the notion that substitutions are not made only at the phonemic level.

6.3.3 Phonemic Innovation and Convergence

Given sufficient social pressure between groups of speakers of two languages in situations of increasing or stable bilingualism, contact outcomes may extend beyond the borrowing of lexemes to the level of the phoneme, evidenced in the introduction of new phones or phonotactic sequences into the existing inventory of the L_R. Such innovations have not surfaced in the SK corpus to any observable degree. The SK inventory is not being reshaped or modified by the pressure exerted by the Spanish language sound system, which has historically reflected an almost complete overlap with that of SK.

An exception to this may be the emergence of the breathy, voiceless bilabial fricative [ɸ] in SK borrowings from Spanish /f/ and as a variable realization of Kichwa /pʰ/, as shown above in Table 6.8. The origin of this innovation in Spanish and Kichwa has not been convincingly argued in the literature, but it does appear to be a reasonable evolution of both the Spanish /f/

and Kichwa /pʰ/, an equidistant repair that entails the substitution of a single feature to achieve [ɸ].[94]

The data suggest that this phonemic innovation is occurring in SK due to prolonged and intense contact and increasing Spanish-Kichwa bilingualism. Among younger bilinguals in the speech community whose competence in Spanish is as advanced as that in their native SK, borrowed /f-/ is rendered as a breathy bilabial fricative, and this articulation is heard sporadically among speakers a generation older and generally less proficient in Spanish. Since a bilabial fricative is attested in monolingual highland Ecuadorian Spanish as well, this presents a potentially compelling case for mutual influence between languages, and perhaps for convergence, though rigorous study of this particular case has yet to emerge to permit a strong argument to be made for contact-induced innovation in the phonemic inventory of SK.

In summary, the primary objective of this section was to offer a sketch of the phonological adaptation outcomes of Spanish loanwords in SK. The constraints operating upon SK grammar have led to various sound substitutions, prosodic adjustments and phonotactic repairs of Spanish loans. At the segmental level, vocalic assimilation is attested in the regular but not categorical raising of medial vowels in unstressed syllables, and the sporadic reduction of unstressed vowels in fast speech. This latter repair reveals a tendency in both SK and Andean Spanish in general, and does not entail the repair of an illegal segment.

Consonant adjustments include the velarization of syllable final /n/, competing nativization outcomes of Spanish /f-/ as either a rounded velar fricative [xʷ], bilabial plosive

[94] Toscano (1953) also notes the sporadic variant in monolingual Ecuadorian Spanish of /f/ →[pʰ], giving the example of *fósforo* as ['pʰos.pʰo.ɾo].

[pʰ], or bilabial fricative [ɸ], and the selective voicing of intervocalic slit fricative /s/. The last of these takes on a function of lexical disambiguation in certain cases. Phonotactic restrictions in SK led to the consistent reduction of complex onsets, primarily in /br/ and /pr/. Finally, at the supra-segemental level, repairs include a categorical paroxytonic stress assignment to bring syllable stress patterns into alignment with prosodic rules of SK.

Taken as a whole, the set of phonological assimilation strategies suggests SK speakers, and borrowing speakers in any contact scenario, will take full advantage of their native phonemic inventories and phonotactic rule sets to bring prohibited segments or sequences from the L_S into alignment with their native phonological grammar. Further, this reliance on native sound substitutions will entail the minimum number of segmental deletions or feature replacement, and the repair will generally prioritize major class features while sacrificing a less critical one to arrive at the closest repair to a native L_R phoneme. The exception to this, of course, is observed in scenarios of intense, prolonged contact in which phonemic innovations may be introduced in the L_R. This is the case the presence of bilabial fricative [ɸ] in SK as a realization of Spanish /f/.

6.4 Summary

This chapter explores the morpho-syntactic and phonological integration strategies employed by SK speakers as they incorporate Spanish morphemes and phonemes into the framework of SK grammar. The underlying purpose here is to achieve a broader understanding of the structural restrictions and rules active in the SK grammar, and of the nature of the loanword adaptation process at the level of sound substitutions and feature replacement.

The corpus exhibits diverse integration and adaptation strategies called upon by speakers of SK as they make the structure inherent in borrowed Spanish lexemes fit into the matrix of their agglutinating grammar without violating constraints operating in SK, and in accordance

with the Principle of System Compatibility (Field 2002). It was expected, according to this hypothesis, that the agglutinating morphology of SK would accommodate only words and lexical roots from the fusional system of Spanish, with little to no transfer of L_S morphology. This was affirmed in the analysis, as borrowing of Spanish suffixes was rare, and limited to the diminutive {-ito}/{-ico} and the plural marker {-s}. Despite the fact that Spanish and SK are typologically distinct and genetically unrelated, the agglutinating structure of SK allowed for the straightforward integration of borrowed Spanish lexical roots without obstruction.

Focusing on the integration of borrowed nouns and loanverbs, I found that, with little exception, the alignment of the L_S and L_R syntactic slots and equivalence of shape led to uninhibited marriage of these loan forms with derivational and inflectional SK morphology. Spanish noun forms were borrowed in their entirety and accepted all classes of SK affixation. Loanverbs were integrated into the L_R as stems with a nearly categorical retention of the Spanish thematic vowel with the addition of SK verbal paradigms or various categories of derivational and inflectional suffixation.

Segmental and prosodic adaptation of Spanish loanwords was most evident in the raising of medial Spanish vowels, the collapse of diphthongs, voicing of intervocalic /s/, velarization of coda /n/, the repair of /f–/ to [xʷ], [pʰ], and [ɸ], opening of syllables via simplification of heterosyllabic groups such as /mbɾ/, and stress shift to the penultimate syllable in the case of borrowed Spanish lexemes characterized by a proparoxytonic or oxytonic stress pattern.

These phonological assimilatory outcomes provide an initial glimpse at a set of underlying restrictions in SK phonology, namely the preference for the velarization of coda /n/, a default to open syllables with simple onsets, and a rule establishing penultimate syllabic stress. The data in the corpus also elucidate additional strategies exploited by SK monolinguals as they

accommodate borrowed lexical items structurally and semantically. Primary among these is the voicing of intervocalic /s/ to avoid homophony clash.

Chapter 7 – Discussion, Limitations, and Conclusion

Situations of language contact between Spanish and Amerindian languages have long provided a fruitful context for the study of contact-induced outcomes, given the breadth of regions and language families involved, the significant time depth of contact in the region, and the typological distance and lack of genetic relation between the languages in question. Bilingual areas in the Americas are fertile ground for questions to be explored regarding tendencies and universals of language contact, and the role of speakers in shaping these outcomes.

This dissertation contributes to the growing body of scholarship addressing language contact in the Americas by focusing on loanword phenomena in the unique variety of Kichwa spoken in the central highland Ecuadorian parish of Salasaca. This variety of Kichwa is one that has to date escaped analytical scrutiny as researchers have focused on neighboring varieties spoken to the north, such as those of Salcedo and the department of Pichincha near the capitol of Quito.

7.1 Salasaca's Importance as a Linguistic Community

I made the decision to focus on Salasaca for this dissertation following a brief stay in the community in 2010. I had learned of the Salasakas from colleagues who were from there or who had worked with Kichwa communities in Ecuador, and I came to understand that the parish was widely regarded as one of Ecuador's most isolated, and unjustly marginalized *Kichwa llakta*, or Kichwa communities. It became clear to me in subsequent visits to the community, and during my two months of fieldwork living in the parish, that such reputations were grossly inaccurate.

In light of these observations I felt compelled to develop a project that would allow me to work closely with members of the community, people for whom I quickly developed a great

respect, and to whom I still owe an immeasurable debt of gratitude for their collaboration. It wasn't just the warmth of the Salasakas that inspired this study, however.

During my first brief stay in Salasaca, I asked my host, a well-respected hostel owner in his early 40s, to recount to me some of the mythologies of the community. As he spoke of the sacred places in the mountains surrounding the parish, I was distracted at certain moments from the cadence of his Kichwa by his occasional use of isolated Spanish words. The rate at which his Kichwa revealed borrowed Spanish etyma seemed to be more than occasional, and my curiosity had been piqued.

Further, my observations of language attitudes among Salasakas toward their own loanword-laden Kichwa dialect, which some referred to humorously as *chawpi lingua* ('mixed language'), confirmed that borrowing was not only prevalent in the local variety of the language, but that it was at the level of metalinguistic awareness. The same individuals who noted the mixed nature of their Kichwa with Spanish words also made sure to mention that the Kichwa of the youngest Salasakas seemed to be influenced by Spanish vocabulary at a higher rate than that of their elders.

This common anecdote was accompanied by favorable attitudes expressed toward the use and maintenance of Kichwa in the community, however, and so a unique scenario of language maintenance began to reveal itself, but within the context of what appeared to be increasing levels of Spanish fluency among the youngest generations of Salasakas, and what appeared to be an increasing rate of borrowing, and borrowing from Spanish word categories that would suggest intense language contact at play. At this point I felt compelled to understand what was really happening to Salasaka Kichwa (SK) as it accommodated loanwords from Spanish, and to what extent the outcomes were different in the speech of different groups of speakers in the parish.

7.2 Motivating Questions

This dissertation fills a gap in the literature on lexical borrowing by exploring the prevalence and patterns of Spanish loanwords in SK and in doing so examines what it means for the ancestral language of a relatively isolated community to evolve within a state of 'maintenance' accompanied by increasing levels of asymmetrical bilingualism. This question reflects a broader curiosity about *what* exactly is being maintained when a minority language is successfully transmitted intergenerationally, but with a lexicon that is increasingly permeated by loanwords.

In designing this study I sought to address three primary research questions. The first question was, what is the nature and degree of lexical borrowing in SK, and how does it compare to the sparse data that is available from other contact scenarios in Ecuador? The second guiding question asked how speaker variables such as age and sex correlate with particular borrowing outcomes in the data. The third asked what Spanish loanwords are adopted, how they do or do not conform to SK morphology and phonology, and what nativization strategies SK speakers employ as they assimilate illicit Spanish sounds and foreign lexical roots into their native grammar.

7.3 Findings

In seeking to answer to my research question regarding the extent and distribution of borrowing from Spanish into SK, the data showed an average borrowing rate of 16.3%. This rate falls within the range of 10-40% attested in previous studies of highland Ecuadorian varieties of the ancestral language. This finding also situates the Salasakas as more conservative in their

borrowing than even the most rural communities of the northern department of Imbabura, where Gómez Rendón (2008a) found the average rate of borrowing to be approximately 20%.

From this I conclude that SK is still among the varieties of Ecuadorian Kichwa that are least affected by contact-induced lexical borrowing, a likely consequence of the Salasakas' sense that their language is an inseparable piece of their collective identity, and their efforts to resist cultural and linguistic incursion into the parish throughout the twentieth century. It is noteworthy that the sociolinguistic reality in the speech communities of interest studied by Gómez Rendón (2005), Bakker et al. (2008) and Muysken (1981), has historically been one in which the link between language maintenance and the cultural identity of the core population of speakers has diminished substantially, and well before the end of the twentieth century.

At the same time, however, my findings suggest that, though relative geographic and cultural isolation may delay the process of lexical borrowing as a facet of stable or asymmetrical scenarios of bilingualism, the outcome in such intense contact scenarios is an eventuality.

The data show more specifically that open-class lexical borrowings constitute 86.4% of the unique loans in the SK corpus. This corroborates the findings of Bakker et al. (2008), who encountered a presence of 83% open-class words in their data. Of all borrowings in SK, 52.1% are nouns, 20.3% are loanverbs, 7.3% are adjectives and 6.7% are adverbs. These open-class percentages confirm expectations based on previous scholarship in the field of language contact, given the universal facility with which nouns lend themselves to borrowing due to their innate semantic characteristics.

This dissertation offers confirmation, though tentative, of Gómez Rendón's (2008b) assertion that contact scenarios between Ecuadorian varieties of Kichwa and Spanish are

sufficiently intense so as to allow for the borrowing of function words. This support must be viewed as tentative not only because of the small sample size in this dissertation, but because methodological approaches in the two analyses do not entirely overlap in their treatment of grammatical borrowings, and so absolute comparisons must take this into account. Conjunctions, discourse markers, prepositions, numerals, pronouns and articles were attested in the SK corpus. This dissertation found the majority of the latter four categories to be part of complex borrowings. Gómez Rendón briefly mentions tallying function words found in merged, complex forms in his study, it occurs far less than in the present dissertation.

Without knowing whether these elements were associated with complex phrasal borrowings in the work of Gómez Rendón (2008) and of Bakker et al. (2008), it is impossible to say more about potential parallels between the studies. If it were the case that these researchers excluded any consideration of closed-class borrowings in cases of phrasal borrowings, and if the present study were also to take this approach in subsequent work, it is expected that the resulting percentages would diverge substantially from those cited above.

It was expected that this category of relatively abstract, context-dependent function words will represent a minority in any corpus of loanwords, and this was found to be the case in the work of Gómez Rendón (2008b), who observed a rate of 15.4% grammatical borrowing, and in the present study, which found the rate to be 13.6% in SK.

As reported in Chapter 5, the four categories of content words are borrowed at relative rates long attested in scholarship in contact linguistics. In the SK speech data, nouns comprise half of all borrowings, with verbs, adjectives and adverbs borrowed at increasingly lower rates. The fact that borrowed verbs in the SK corpus comprise 20.3% of all loanword types in the

speech data aligns closely with the 16.9% borrowed verbs found in the Kichwa of Imbabura (Gómez Rendón 2008a).

It has been argued that Spanish borrowings in Ecuadorian Kichwa will not include prepositions and articles as there is no syntactic position for them in the language. (Bakker et al. 2008) Yet the data in this dissertation reveal that SK speakers, especially younger members of the community and those with higher levels of Spanish bilingual competence, do very sporadically borrow prepositions in isolation, and not simply as elements in two- or three-word fossilizations. This would suggest that categorical equivalence between languages in contact is not paramount, but simply one of various contributing factors that limit or permit the borrowing of particular categories of closed-class loanwords, and that if contact is sufficiently intense, nearly any element may be borrowed (Thomason and Kaufman 1988).

In answer to my research question regarding the role of speaker variables such as age and sex in shaping particular borrowing patterns, the SK corpus exhibits a range of individual borrowing per speaker of 8-26% accompanied by a marked increase in borrowing rate as the age of the consultant decreases. This difference of 18% between the lowest and highest observed rates appears to be more constricted than ranges observed intergenerationally in other provinces to the north, such as Imbabura, where Bakker et al. (2008) found a range of 4%-49% borrowings across their sample. Statistical analysis of this possible correlation rendered a Pearson's rho coefficient of -.671 between age and total borrowing rate per speaker, statistically significant at .017. This reflects a moderately strong correlation between the variables in question, allowing the inference to be made that overall individual borrowing will increase commensurate with generational shift.

In Salasaca, loan density as a function of unique loans per 100 also shows a correlation with age. The youngest interviewees averaged nearly twice as many unique loanwords per hundred as the oldest tier of consultants, suggesting younger speakers are not only borrowing more frequently, but also that the rate of use of loanwords covers a broader array of semantic contexts and topics. This may be explained in part as the consequence of an increased level of exposure to school curriculum in Spanish at younger ages, and increasingly favorable attitudes of parents toward passing along the socially dominant language to their children alongside SK.

The variable of speaker sex did not seem to influence loanword prevalence in the speech data. The male speakers in the case study demonstrated rates from 8.8% to 22.3%, while the female participants borrowed at rates from 8.0% to 25.8%, with comparable medians between the two sexes. This may be accounted for by considering gender roles in the community. While men tend to pursue opportunities for wage labor outside the community in larger, predominantly mestizo urban areas, Salasaka women also interact with the Spanish-speaking population frequently, especially as their responsibilities to the family take them into cities for buying and selling, and as younger women pursue education outside of the parish with increasing parity to men.

In answer to my third research question, the data by and large confirm Field's (2002) Principle of System Compatibility (PSC), namely that an agglutinating language like SK will only borrow words, lexical roots and single-meaning affixes. While the data showed that 53% of borrowed Spanish nouns were imported as simple forms without SK affixation, 44% were noun roots that accepted SK agglutination such as case markers and inflectional morphology. Borrowed Spanish nominal morphology accompanied only 2.8% of loan nouns.

While 12.8% of the borrowed verbs in the data included imported Spanish morphology to some degree, primarily in the form of imperatives, 84.8% of borrowed Spanish verbs took the form of indirectly inserted roots or infinitive-like stems, predominantly retaining the Spanish thematic vowel and taking both SK derivational and inflectional affixation. Since the majority of the cases of borrowed Spanish verbal inflection surface in the form of fossilized loans such as the imperative *correcorre* ('run'), it is clear that truly productive L_S verbal morphology is a far less likely candidate for borrowing than these lexicalized forms.

At the phonological level, contact-induced sound substitutions to accommodate novel Spanish segments in SK were expected to surface as either the modification of illicit segments in SK, the introduction of new phones or phonotactic sequences into SK as the result of sustained social pressure and increasing bilingualism with Spanish, or the creation of innovative contrasts or loss of existing ones in the phonological grammar of SK. It was only the first of these outcomes that was attested to any significant extent in this study.

At the segmental and prosodic levels, repair strategies employed by SK speakers to manage the transfer of phonetic shapes not present in their native inventory took the form of substitution of one or two binary distinctive features, or the deletion of segments altogether. One salient repair strategy was found in the treatment of borrowed Spanish medial vowels. SK lacks /e/ and /o/, and the primary repair affecting these segments was the repair to the high corresponding vowel, rendering repairs /e/ → [i] and /o/ → [u].

This was not a categorical outcome, however. The treatment of vowels is subject to significant variability within the community, and appears not to present a major obstacle in the importation of this category of phones. Importantly, this dissertation reveals an observable decrease in overall reliance on this raising strategy among younger speakers. Pearson's rho tests

revealed statistically significant, strong positive correlations (.862 for /e/→[i], and .846 for /o/→[u]) for the variables of age and raising rate. It would seem from this tendency that the younger bilingual speakers, whose age corresponds closely with regular exposure to Spanish language curriculum in schools, are exploiting their access to the L_S phonological grammar, which they likely began acquiring at the age of 5 or 6.

Among the more regular strategies for assimilating problematic Spanish consonants into SK are the strengthening of Spanish allophonic voiced fricative [ð] in items such as ['ɡra.ða] (/'ɡra.da/ 'step, stair') → ['ɡra.da], velarization of syllable final alveolar nasal /n/ in such cases as /fran.'sis.ka/ → [fraŋ.'sis.ka], and the sporadic voicing of word-internal, intervocalic slit fricative /s/ in Spanish loans in SK for disambiguation or arbitrary purposes, such as in the case of ['mi.za] ('mass') and [mi.sa] (←['me.sa] 'table').

This outcome appears not to be conditioned by strictly language-internal factors, as made clear by examples such as [pu.'bri.za] (← [po.'bre.sa] 'poverty'). This phenomenon is also attested in the monolingual variety of highland Ecuadorian Spanish (Toscano 1953). These repairs appear to point to underlying constraints in SK that disallow fricativization of the plosive /d/ and that favor a velar nasal in coda position.

One particularly salient repair that stands to contribute to the current debate on loan phonology and raise questions for future research is the divergent treatment in SK of the Spanish voiceless labiodental fricative /f-/ (or its labial counterpart [ɸ]), occurring primarily in syllable initial position. The voiceless labial fricative, whether dental or bilabial, is lacking in the SK phonemic inventory. Of the 92 occurrences in which this borrowed Spanish fricative occurred in the corpus, 41% surfaced as repairs to an aspirated, voiceless bilabial plosive [pʰ]. 53% of the

Spanish borrowings featuring underlying /f–/ were realized as a breathy labial approximant [ɸ]. It is important to note that this particular segment is also absent from the SK phonemic inventory, suggesting convergent effects between the sound systems of the two languages in Ecuador over time. It is widely agreed that monolingual Spanish /f/ in the Ecuadorian highlands is also realized as a breathy [ɸ], and so the question arises as to whether this is a consequence of influence from the minority Kichwa language, following which the modified segment is emerging in varieties of Kichwa as a contact-induced innovation as well.

Among repairs of /f/ in the SK data, a singular but important case (comprising approximately 1% of the tokens) of a repair to a rounded velar fricative [xʷ] raises questions about the process of loan assimilation and whether nativization is influenced by L_R phonology and underlying representations, or perception of salient features and the repair of these features to the nearest available L_R phoneme based on purely acoustic signals without regard to native phonology in producing the repair. A repair of /f/ → [xʷ] stands in contrast to that of [pʰ] and each suggests that a different process is at play in determining the assimilatory outcome. This is a question of interest for future investigation.

7.4 Methodological Limitations

The research methodology for this case study faced a number of challenges, among them the inevitability of the observer paradox (Labov 1966). The presence of a community outsider during the interview process likely inhibited truly unmonitored speech, though attempts were made to distract consultants from the presence of a digital recording device. Among the older interviewees, the presence of a trusted member of the community in the role of facilitator was valuable for moderating this limitation.

To some degree the study is also limited in the extent to which conversation topics may have influenced the occurrence (or non-occurrence) of a broad range of semantic categories and, therefore, open-class word categories. The concern here may be that, though grammatical borrowings may surface independently of conversation topic, by offering the same prompts to initiate interviews with all of the consultants, only a particular facet of nouns and other lexical items were observable.

Finally, it must be acknowledged that this study relies on a consultant sample size that is perhaps less robust than ideal (n=12). Generalizations based on the SK corpus mustbe made with caution in light of this, though the findings point to a number of tendencies that invite an exploration of the research questions based on a larger group of speakers.

7.5 Future Research

This dissertation was designed with subsequent research in mind. It provides useful points of departure for further analysis of the language situation in Salasaca and in areas of highland Ecuador in which the ancestral Kichwa language still coexists in public and private domains with Spanish. This work can be extended to address additional research questions and complementary methodological approaches to existing and new lines of inquiry.

One particularly appealing question concerns the role of semantic value of open-class Spanish loanwords, especially nouns and verbs, in determining their distribution and relative prevalence in Kichwa. A fruitful next step would be to look more closely at the notions of core and cultural loanwords (Haspelmath 2009), and inferences that may be made about the presence of core vocabulary items, as well as the semantic fields to which they pertain. Exploring questions like these would be served by eliciting data by means of lexicostatic lists such as those

outlined by Tadmor (2009) in the Loanword Typology Project. Such lists, most prominent among them the Swadesh list, are comprised of the English equivalent of concepts considered to be universally fundamental to human existence and culture, and therefore representative of core loans most resistant to importation from an L_S.

Moreover, our current understanding of lexical or structural interference between Spanish and Kichwa would benefit from additional study relying on spontaneous recordings between Kichwa-speaking interlocutors. Truly naturalistic data can only be achieved when speakers feel free to use their language without the suspicion they are being observed. By obtaining ethnographic-type recordings of typical language use in the home, across pragmatic and other functions, truly authentic and uninhibited linguistic practices may be captured.

Finally, a more rigorous sociolinguistic analysis based on the existing data set may substantiate claims about change in progress that in this dissertation is only hinted at. What is truly called for is a covariate analysis that isolates various phonological repair strategies or other characteristics of the SK spoken across the age strata used in this analysis, and a more rigorous operationalization of bilingual competence. Further, descriptive case studies like the present work that seek to understand contact-induced innovation in progress will be enhanced by a longitudinal design in which speech data are collected from the youngest generations such as those who at the time of my 2011 fieldwork were not yet able to participate as adults.

7.6 Concluding Thoughts

Salasaka Kichwa, like other varieties of the language spoken in Ecuador, has not existed free of influence from the Spanish language. In an ethno-linguistic community whose past has been defined by marginalization, racism, and increasing socio-cultural pressure from the *blanco-*

mestizo society that surrounds it, the youngest members of the community are nonetheless continuing to preserve the legacy of their maternal language in the home and in many private and public domains outside of it. The story of the Salasakas and their language, to which the results from this case study add a chapter, gives plenty of reason to be optimistic.

The modality being maintained, however, continues to change due to its contact with the socially dominant Spanish language. At its essence the language, even among the youngest Salasakas, is Kichwa. And, importantly, its speakers still perceive it as such. The lexicon of SK is undergoing a gradual process of evolution, however. Nearly one of every five words uttered in Kichwa in the speech of Salasakas in their twenties and younger is predictably of Spanish origin. Moreover, SK speakers have imported from all categories of Spanish lexemes, including grammatical borrowings, even in cases where there is no direct categorical equivalence between the syntax of the two languages in contact.

As indicated above, the intersection of language attitudes and observable, intergenerational language change shaping modern SK is still one of optimism. On the street, there still seems to be little sense of linguistic shame or concern betrayed in the shrug and utterance of phrases like *chawpi lingua* (mixed language) when community elders are asked about the state of their language and its relationship with the socially dominant Spanish. Moreover, younger generations of SK speakers seem equally unconcerned by what they recognize to be a variety of their ancestral language somewhat distinct from that of their grandfathers, their *hatun tayta*. I left the community in 2011 convinced that the spirit behind continued language maintenance efforts such as pirate radio station *Radio Haelli* and evening literacy programs are part of a perpetuated and shared sense that the language of the Salasakas will always be theirs, irrespective of the extent to which Spanish may influence a fraction of its

vocabulary (part of a language which, to many, is not the essence of their linguistic heritage anyhow).

The intensity of contact in this increasingly bilingual, but historically self-isolated, speech community is clearly sufficient to cause levels of borrowing of linguistic matter beyond a few necessary nouns or verbs, cultural loanwords meant to fill gaps and facilitate communication. The linguistic analysis of these contact-induced innovations and the pressures that cause them in the bilingual communities of the Ecuadorian highlands is a subfield that is gaining traction and beginning to give a fuller picture of the situation in communities in which the ancestral language may or may not be losing ground to Spanish.

This dissertation elucidates the language situation in Salasaca and expands our understanding of Ecuadorian Kichwa dialects in contact with Spanish by documenting borrowing outcomes in SK. Through an analysis of speech samples taken from conversational contexts from speakers representing a demographic cross-section of the community, is has become clear Spanish loanwords in SK are becoming increasingly pervasive. However, we now have a deeper understanding of how speakers assimilate the sounds and structures of the Spanish grammar in making these words their own in a Kichwa variety that, happily, remains vibrant in Salasaca.

Appendices

Appendix A: The Ecuadorian Province of Tungurahua

Appendix B: Salasaka Kichwa among Ecuadorian Kichwa varieties

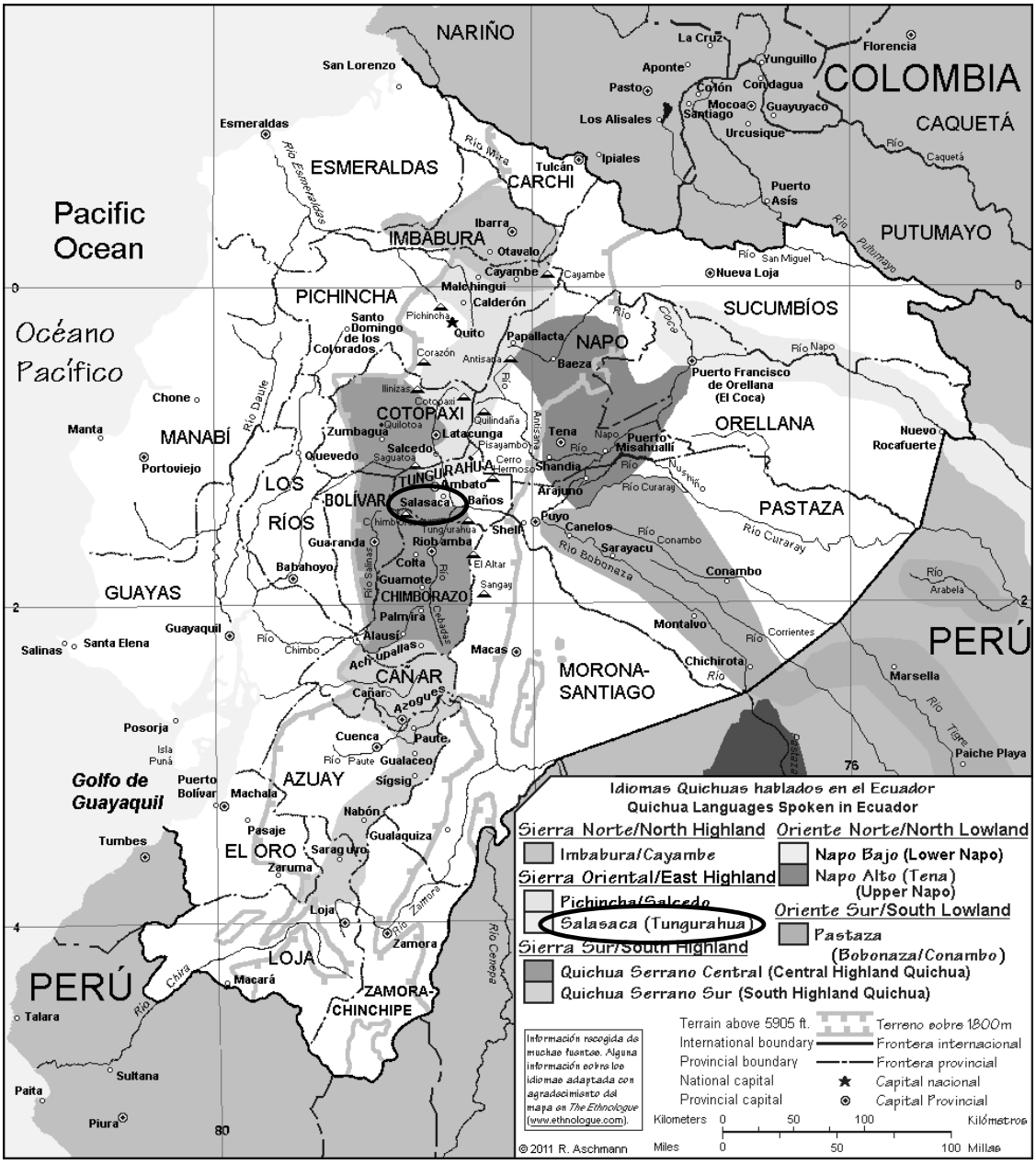
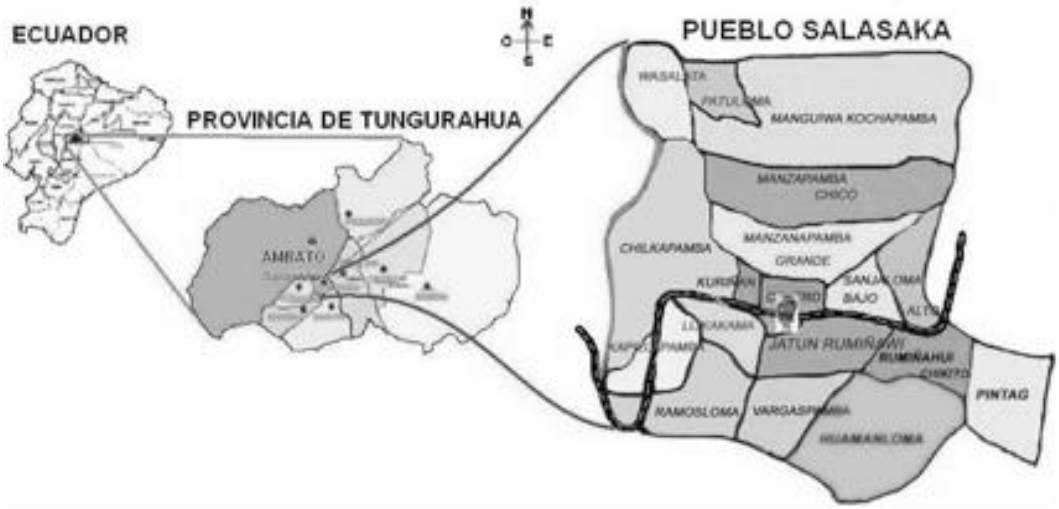


Image courtesy of FEDEPI © R. Aschmann 2006
http://quichua.net/Q/Ec/Ecuador/E-espanol.html

Appendix C: The *Comunas* of Salasaca



Appendix D: Salasaka Kichwa Agglutinative Suffixes (from Waskosky 1992)[95]

1	1st person	*-ni*
2	2nd person	*-ngui*
3	3rd person	*-Ø*[96]
3PL	3rd person plural	*-guna*
ABL	ablative	*-munda*
ACC	accusative	*-da*
ADVDS	adverbializer (diff subject)	*-qui*
ADVSS	adverbializer (same subject)	*-sha*
AFFIR	affirmation	*-mi*
AG	agentive	*-j/g*
AMONG	among	*-pura*
AT	nearby, at	*-qui*
BASE	base/fundamental quality	*-siqui*
BEC	become	*-ya*
CAU	causative (N)	*-chi*
CAUS	causative (V)	*-chi*
CERT	certain	*-ma*
CLOSE	follow behind closely	*-jichi*
CON	conditional	*-mu*
DAT	dative	*-mun*
DEP	deprecative	*-r(u)cu*
DES	desiderative	*-naya*
DIM	diminutive	*-hua*
DM	diminutive	*-cu/gu*
DRS	dress (clothing)	*-lli*
DUB	dubitative	*-chari*
EMPH	emphatic	*-ri*
EXCL	exclusive	*-dij*
FEEL	feeling	*-(n)ai*
FUT1	future 1st person	*-sha*
FUT2	future 2nd person	*-ngui*
FUT3	future 3rd person	*-nga*
FUT1PL	future 1st person plural	*-shun*
HAS	possesses ("has")	*-yuj/g*
HERE	motion to here	*-mu(n)*[97]
IMP	imperative	*-i*

[95] Note these are not necessarily the morphosyntactic categorical abbreviation s used in the present study. See the preface for a list of abbreviations used in this analysis. Additionally, this orthography reflects Spanish conventions departing from the cited study.

[96] Here the etymological *-n* is omitted in Waskosky's analysis. It is commonly acknowledged that the 3rd person singular affix for the present tense is, in fact, *-n*, though Waskosky argues this to be the present tense suffix to which person suffixes are subsequently attached.

[97] I have amended this from Waskosky's observation that the suffix is *-mu* in order to better reflect the Unified Kichwa *-mun* and based on my own empirical experience in the Salasaka community. The final /-n/ at times is elided, but this is not conditioned but rather is sporadic in nature.

INC	inceptive	*-gri*
INF	infinitive	*-na*
JOIN	joined	*-ndi*
JUST	just, only	*-lla*
LIKE	similar, like	*-laya*
LOC	locative	*-bi*
MUCH	much	*-sapa*
NEAR	nearby	*-nij*
NEG	negative	*-chu*
NOI	noise	*-qui*
NOM	nominalizer	*-i*
ONE	one	*-shuj*
PERF	perfect aspect	*-shca*
PLUR	plural (nominal)	*-guna*
PLV	plural (verbal)	*-chi*
POL	polite	*-ba*
POSS	possessive	*-(bu)g*
PRES	present tense	*-n*
PROG	progressive (durative)	*-gu*
PST	past tense	*-(r)ga*
PTCPL	participle	*-shca*
PURDS	purpose (different subject)	*-chun*
PURSS	purpose (same subject)	*-ngabuj*
RCPR	reciprocal	*-nucu*
REFL	reflexive	*-ri*
SIDE	side	*-ladu*[98]
SIM	similar	*-shina*
SUR	surprise	*-la*
TIL	until (limitative by others)	*-gama*
TOO	too, also	*-(bi)sh*
TOP	topic	*-ga*
WITH	with, accompaniment	*-n*
WON	wonder	*-shi*

[98] It should be noted that this suffix is actually a Spanish borrowing, from Sp. *lado*. In this case Waskosky's orthography exhibits the raised /o/ → /u/ to reflect the three-vowel system of Ecuadorian Kichwa.

Appendix E: Interview Protocol

The following questions were asked by the researcher in Spanish unless receptive Spanish competence of the interviewee inhibited comprehension. In these cases the interview questions were asked by a research assistant who is a native SK speaker, the same individual who arranged and facilitated the meeting in each case.

Biographic data

1. Name
2. Age
3. Level of schooling achieved
4. Name and *comuna* of primary school (if attended)
5. Occupation
6. Birthplace
7. *Comuna* of current residence
8. Birthplace of parents
9. Duration and location of residence outside of Salasaca, if any

Spontaneous elicitation guidelines (Semi-structured)

1. What are the major *fiestas* that take place in Salasaca each year?
2. What is the cultural or spiritual importance of the celebration of Inti Raymi?
3. What is the role and importance of Teligote (sacred mountain) in the community?
4. What major *wakas,* sacred natural objects or places, are celebrated in the *parroquia*?
5. How is the community of Salasaca changing? How has it changed in the past 20 years?
6. What changes do you observe among the youngest generations?
7. What are relations like with mestizos from neighboring *parroquias*?
8. What memories do you have of major events that changed the community?
9. Could you share a memories you have of older customs or practices in the community?

Metalinguistic Data

1. How did you learn Kichwa?
2. Have you studied Unified Kichwa at any point in your education?
3. How did you learn Spanish?
4. In what contexts in the community do you speak Spanish, if at all?

Appendix F: Unique Loans per 100

	1st 100	2nd 100	3rd 100	4th 100	5th 100	6th 100	7th 100	8th 100
M_20	14	18	10	10	13			
F_22	14	20	13	16	7	10	17	
F_28	17	8	15	5				
M_40	10	17	11	11	10	8	8	13
M_50	16	14	9	10				
F_64	20	16	14	9				
F_65	17	7	8	4	11			
M_71	16	11	8	11	18	10		
M_72	8	10	7	5	1	3		
F_81	6	6	6	5	6	7	3	4
F_82	6	5	4	4	9	5	4	
M_88	17	6	1	0	7			

Appendix G**:** Grammatical Borrowings in SK

	Conjunctions	Prepositions	Pronouns	Disc. Markers	Articles	Quantifiers
M_20	*que* *como* *y* *pero* *o (o sea, más o menos)*	*a (poco a poco)*	*mi* *nadie*	*bueno*		
F_22	*pero* *y* *porque*	*a (a veces, a ver)* *de (dos de octubre)* *por (por ejemplo)*	*qué*	*a ver*		
F_28	*y* *pero* *ni* *porque* *que*	*sin*			*un*	
M_40	*sino* *pero* *y* *entonces* *o* *porque*	*sin* *de (de primera)*	*cual (cada cual)*			
M_50	*y* *pero*	*con (con máscaras)*	*nuestro*	*entonces* *pues*		
F_64	*pero* *y* *ni* *o (o sea)* *porque*	*de* *en (en cambio)* *por (por ejemplo)* *a (a ver)*		*digamos* *o sea*		
F_65	*y* *o* *pero*	*de (rama de)*				
M_71	*ni…ni* *y (ochenta y ocho)*	*de (cuatro de la tarde)*			*la*	
M_72		*de (de repente, de verdad)*	*se (diusulupay)* *lo (diusulupay)*			
F_81	*pero*	*de (de repente, de verdad)* *del (doce del día)*	*lo (lo mismo)*		*del*	*poco (poco cuenta)*
F_82	*pero* *o* *como (o sea como)* *porque*					

M_88	*y (caldo de treinta y uno)*	*se (diusulupay)*
	de	*lo (diusulupay)*
	pero	
	que (dizque)	

Appendix H: Grammatical Borrowing from Spanish in Amerindian Languages

	o	*pues*	*pero*	*que*	*entonces*	*y*	*talvez*	*porque*
Hill and Hill (1976)	x	x	x		x			x
Hill and Hill (1980)								
Peñalosa (1990)					x			x
Stolz (1996)	x		x					x
Makihari (2001)			x		x	x		
Gómez Rendón (2008)	x							
SK CORPUS	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**

	como	*siempre*	*cuando*	*hasta*	*sino*	*para que*	*además*
Hill and Hill (1976)						x	
Hill and Hill (1980)			x	x			
Peñalosa (1990)	x	x					
Stolz (1996)	x						
Makihari (2001)					x		x
Gómez Rendón (2008)		x					
SK CORPUS	**x**	**x**			**x**		

Appendix I: Spanish /f/ Repairs in the SK Corpus

Consultant ***Token***	**Interval**	**[f]**	**[pʰ]**	**[ɸ]**	**[hʷ]**	**Subtotal**
M_72						**2**
favor	2:25			['ɸa.ßuɾ]		
	2:28			['ɸa.ßuɾ]		
M_71						**14**
fiesta	2:30		['pʰiʃ.ta]			
	11:07		['pʰiʃ.ta]			
	11:39		['pʰiʃ.ta]			
	11:40		['pʰiʃ.ta]			
	11:43		['pʰiʃ.ta]			
	12:10		['pʰiʃ.ta]			
huérfano	3:10			['weɾ.ɸa.no]		
fruta	6:32	['fru.ta]				
finca	7:55			['ɸiŋ.ka]		
cafeteria	8:04		[ka.pʰi.'te.rju]			
café	11:10			[ka.'ɸe]		
	11:13			['ka.ɸe]		
foto	21:11			['ɸo.to]		
frente	24:43			['ɸrin.ti]		
22_F_65						**5**
faltana	20:11				['hʷal.taŋ]	
figurito	20:23			['ɸi.gu.ɾi.tus]		
funda	21:00		['pʰun.da]			
			['pʰun.da]			
			['pʰun.da]			
F_64						**17**
sufrir	11:38			[so.ɸɾi.'gaŋ.chik]		
		11:49		[so.ɸɾi.'ga.ni]		
profesor	14:27			[pɾo.ɸe.'soɾ]		
	14:45		[pɾo.pʰe.'soɾ]			
	14:56			[pɾo.ɸe.'soɾ]		
	15:10		[pɾo.pʰe.'soɾ]			
	15:11		[pɾo.pʰe.'soɾ]			
fiesta	15:26		['pʰiʃ.ta]			
	15:29		['pʰiʃ.ta]			
	15:31		['pʰiʃ.ta]			
teléfono	17:24			[te.le'.ɸo.no]		
	18:08			[te.le'.ɸo.no]		
café	21:28			[ka. 'ɸi.da]		
futuro	25:27		[pʰu.'tu.ru.bi.ga]			
	25:47			[ɸu.'tu. ɾu]		
alfabetizacion	28:15			[al.ɸa.be.ti.sa.'sjon.bi]		
	28:22			[al.ɸa.be.ti.sa.'sjoŋ]		

M_50					**15**
fiesta	11:38		['pʰiʃ.ta]		
	11:39	['fjes.ta]			
	12:04	['fjes.ta]			
	13:05			['ɸjes.ta]	
	13:53			['ɸjes.ta]	
diferente	12:21			[de.ɸe.'ɾen.te]	
	13:59			[de.ɸe.'ɾen.te]	
	14:12			[de.ɸe.'ɾen.te]	
festina	13:20			[ɸis.ti.'gaŋ.ʧik]	
disfrazado	14:02			[dis.ɸr.'sa.du]	
	14:08			[dis.ɸr.'sa.du]	
café	15:25			['ka.ɸe]	
	15:25			['ka.ɸe]	
	15:25			['ka.ɸe]	
feria	16:26			['ɸe.ɾja]	
M_40					**4**
teléfono	46:04			['te.le.ɸu.nu]	
familia	48:17			[ɸa.'mi.lja]	
	51:55			[ɸa.'mi.lja]	
sacrificio	50:41			[.kɾi.'ɸ.sju]	
F_28					**12**
feliz	:58		['pʰe.lis]		
familia	10:04			[ɸa.'mi.lja]	
	11:10		[pʰa.mi.jla]		
fiesta	10:20		['pʰiʃ.ta]		
	10:24	['fjes.ta]			
	11:05		['pʰiʃ.ta]		
	11:07		['pʰiʃ.ta]		
	11:59		[pʰiʃ.'ta.muŋ]		
faltina	10:34		['pʰal.tin]		
	10:37			[ɸal.'ti.na]	
	13:39			['ɸal.'ta]	
fruta	18:49		[pʰɾu.ta.gu.na]		
F_22					**21**
febrero	41:02			[ɸe.'bɾe.ɾu.ga]	
	41:07			[ɸe.'bɾe.ɾu]	
	41:41			[ɸe.'bɾe.ɾu.ga]	
	41:49			[ɸe.'bɾe.ɾu]	
fiesta	40:50		['pʰiʃ.ta]		
	40:57		['pʰiʃ.ta]		
	41:40		['pʰiʃ.ta]		
	41:43		['pʰiʃ.ta]		
	41:45		['pʰiʃ.ta]		
	41:46		['pʰiʃ.ta]		
	42:07		['pʰiʃ.ta]		
	42:09		['pʰiʃ.ta]		

	42:13	['pʰiʃ.ta]		
	42:46	['pʰiʃ.ta]		
	42:55	['pʰiʃ.ta]		
	43:58	['pʰiʃ.ta]		
fecha	41:26		['ɸi.ʧa]	
	45:40		['ɸi.ʧa.ga]	
específico	43:22		[es.pe.'si.ɸi.ku]	
futbol	46:10		['ɸut.bol]	
	46:32		['ɸut.bol]	
M_20				**2**
faltar	23:15		['ɸal.taŋ]	
	23:17		['ɸal.taŋ]	
TOTAL TOKENS				**92**

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