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Codeswitching in Hiaki Conversational Discourse: An Evaluation of Myers-Scotton's Matrix Language Frame Model

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1. Introduction

Codeswitching is defined by Myers-Scotton (1993) as "the selection by bilinguals or multilinguals of forms from an embedded variety (or varieties) in utterances of a matrix variety during the same conversation" (3). In other words, codeswitching describes the process by which a bilingual or multilingual speaker inserts forms from one language into the framework of another in conversation.

This definition is the basis of the present study, which takes for granted the asymmetrical nature of codeswitching in bilingual discourse. Using Myers-Scotton's (1993) Matrix Language Frame Model, I analyze the constraints she proposes on code switching through the lens of Hiaki-Spanish bilingual discourse. The data I have analyzed belong to a larger Fieldworks Language Explorer (hereafter FLEx) database started by linguists at the University of Arizona and currently used by the Oberlin College Linguistics Lab.

In my corpus of ten interviews, I extracted 578 examples of codeswitching, all of which are listed in Appendix A. This Appendix classifies my findings by adherence to or violation of each of the principles I discuss in turn. See Appendix A for details about classification.

The thesis is structured as follows:

In Section 2 I will offer an overview of the history of cultural and linguistic contact between the Hiaki people, the Spanish, and the Mexican government. This will lead into a discussion of previous studies done about the Hiaki language and a brief description of the relevant features of the Hiaki and Spanish languages to my research. This study is one of the first on Hiaki-Spanish codeswitching and one of the most detailed on naturally occurring speech in Hiaki, as most previous studies have been based on elicitation.

Section 3 summarizes a few key theories in the history of the study of codeswitching in linguistic research. This summary is followed by a detailed explanation of the components of Myers-Scotton's (1993) Matrix Language Frame Model and subsequent 4-M Model (Myers-Scotton and Jake 2000) that I have used to analyze my data.

Section 4 addresses the difference between code switching and lexical borrowing. At the end of that section I explain which forms I chose to leave out of my study because I analyzed them as borrowed forms, versus those which were analyzed as codeswitched forms.

My evaluation of Myers-Scotton's Matrix Language Hypothesis is found in Section 5. In this section, I present data that has adhered to and violated her relevant principles in Hiaki-Spanish code switching. I also discuss the implications of my findings for the morpheme classification system presented by the 4-M Model.

Section 6 addresses a few counterexamples to the Matrix Language Hypothesis, followed by some closing remarks.

Throughout my research, all examples from the Arizona-Oberlin Hiaki Project's Hiaki FLEx Database will be cited in the format (Interview *x*, #*y*), where the *x* stands for the text number, and *y* stands for the example number within that Interview text. All other examples from published sources will be cited accordingly.

2. Background

A confrontation between Spanish conquistador Diego de Guzmán and a Hiaki leader in 1533 marks the beginning of a several-hundred-year-long standoff between the Hiaki people and the Spanish and Mexican governments. After Guzmán presumptuously stepped over a line drawn in the dirt, disobeying the Hiaki's command not to encroach on their territory, battle ensued not just

for a few days but for hundreds of years over natural and human resources, political autonomy, and, ultimately, cultural identity (Spicer 1980: 5).

At the time of the first contact with the Spanish, there were an estimated 30,000 Hiaki people living in settlements in an area of about 900 square miles around the Yaqui (Hiaki) River (Spicer 1980: 5). Although the area is characterized by very light rainfall for most of the year, the riverbed and surrounding desert have always been very fertile, a feature of the land that has spurred much conflict between the Hiaki and the Mexican government.

By the turn of the 17th century, the Hiaki relationship with the Spanish had begun to deepen when a group of Jesuit missionaries settled among the Hiaki in 1617 (Spicer 1980: 10). This was the beginning of a turbulent 150-year-long relationship, although several ethnographers have classified this period as uncharacteristically peaceful for European contact with indigenous peoples of Latin America (Hu-Dehart 1984, Spicer 1980). The Jesuit mission was an attempt to *reduce* the Hiaki or "lead them back" towards the Christian path of allegedly enlightened worship (Folsom 2014: 72). Although this "civilizing mission" was centered around religion, the ultimate interest of the Spanish was to instill in the Hiaki as many Spanish customs as possible. This included but was not exclusive to regal authority and law, the practices of monogamy and official wedding ceremonies, daily labor, the consolidation of the Eight Hiaki Pueblos into a unified Hiaki nation, and, perhaps most importantly, the use of the Spanish language (Dedrick and Casad 1999: 282).

At the time of Jesuit settlement, the Spanish had begun to accumulate allies in other indigenous groups and were prepared to utilize these relationships against the Hiaki. As a result, an alliance between the Hiaki and the itinerant Jesuits proved to be mutually beneficial in defending against the constant uprisings and threats of violence from the Spanish and other

indigenous groups in the region. Folsom (2014) argues that there is evidence that the majority of Hiakis did not want the Jesuits there, and those Hiakis who did welcome the Jesuits cared more about the alliance the Jesuits represented than the doctrines they preached (100).

Nevertheless, the relationship persisted despite the constant threat of a Hiaki uprising against the Jesuits. Notorious among the neighboring societies for being fierce warriors, the Hiakis finally executed a rebellion against the Jesuits in 1740, which was the first of many before the end of the Jesuit period in 1767 (Hu-Dehart 1984: 13). By the end of the Jesuit period, Christianity was widely practiced among the Hiakis, yet the Hiaki form of Christianity was and continues to be as much a reflection of their traditional belief system as it was of the Christianity that the Jesuits imparted to them (Folsom 2014: 107). Ultimately, the Jesuits were expelled from all of Spain's territories in 1767 (Folsom 2014: 116).

Following Jesuit occupation of Hiaki territory, the tumult of unstable government and the eventual independence of Mexico from Spanish rule in 1821 led to a cascade of attempts by the Mexican government to exploit Hiaki land (Spicer 1980: 119). Between Mexican independence and the beginning of the Mexican Revolution in 1910, there were three dynasties that successively attempted to penetrate and exploit Hiaki land: from 1835-1857 there were the Gándaras, from 1857-1875 the Pesqueira family took over, and in 1879 the Torres-Corral dynasty emerged until 1910 (Spicer 1980: 137). All three carried out elaborate and forceful campaigns to build haciendas throughout Hiaki territory in order to mine the area for its plethora of natural resources and arable land.

The beginning of the Porfirio Díaz dictatorship in 1884 marks the transition from the private economic exploitation of the Hiaki to the government's systematic enslavement and ensuing genocide and diaspora that characterized the years of the Mexican Revolution. Rather

than immediately resort to killing indigenous populations, as the Mexican government had done in the past, the Díaz regime instead exploited the Hiaki people for cheap labor. In an effort to gain control of the resources in Sonora and simultaneously quell the emergent guerrilla movement led by a group of Hiakis in the mountains, Díaz ultimately ordered the expulsion of the Hiakis from their land. Over the course of about 5 years, from 1906-1910, an estimated five thousand Hiaki people were captured and sold into slavery for about 65 pesos each (Spicer 1980: 160). Once captured, Hiaki people were detained indefinitely in Guaymas or Hermosillo, eventually put on boats to San Blas, and then made to walk over 200 miles through the mountains to henequen-processing labor camps in the Yucatan.

During the Deportations, Hiaki surnames disappeared and changed to Spanish ones, traditions were performed in secret or abandoned entirely, and Mexican police continually conducted surprise abduction raids on Hiaki villages. During the journey to the labor camps in the Yucatan, families were separated from one another as some grew too weak to continue on foot and simply perished, or others—mostly children—were left to die in prison (Hu-Dehart 1984: 167). In the prisons, men were frequently sorted into three groups, one of which would be killed, another of which would be deported to a plantation, and the last of which would stay in the prison to work for another week (Hu-Dehart 1984: 167). At the plantations, those deemed too weak or incapable for any other reason of working, would be killed. These were mostly women, children, and the elderly (Florez Leyva *forthcoming*: ix).

It was during this time that the Hiaki diaspora into the Southwestern United States accelerated. Escape missions, often carried out in the middle of the night, led many Hiakis to Arizona, California, New Mexico, and Texas (Spicer 1980: 159).

Although the years after the Mexican Revolution saw the return of many Hiaki people to Sonora, the Hiaki River watershed had already been permanently altered. Already in 1910 a dam on the Hiaki River was in the works, and by 1922 construction had begun (Spicer 1980: 261). In 1928, the municipality of Cajeme, named for a Hiaki leader, had been renamed Ciudad Obregón, after a general responsible for many atrocities against the Hiaki in the Mexican Revolution (Spicer 1980: 261). In 1952, the Álvaro Obregón Dam had been completed. The dam has been diverting considerable amounts of water away from Hiaki territory ever since, resulting in the collapse of Hiaki subsistence agriculture and their ensuing forced relationship with Mexican banks for financing the upkeep of their land (Erickson 2008: 7-8). Today, "the Yaqui Zona Indígena," writes Erickson, "is an economically marginal pocket within a state known for its prosperity" (10).

Similarly, although the Hiaki language continues to be spoken, it is forced to compete with Spanish and English for representation in the media, particularly on the Internet. There are currently 18,030 speakers worldwide (Simons and Fennig 2017). It is, nevertheless, an endangered language. Although there is literature in a standardized form that is used by some, its daily use is not sustainable. All Hiaki speakers are bilingual, either in Spanish or English (Estrada Fernández 2009: 827). In Arizona, there are no children learning Hiaki as a first language, which puts it at risk of disappearing within the next generation (Harley et al. 2017).

2.1 History of the Linguistic Study of Hiaki

Due to prolonged contact between the Hiaki and particularly Spanish missionaries, Hiaki is considered the most studied language of Sonora (Estrada Fernández 2009: 823). The first known description of the language is a compilation of texts called *Arte de la lengua Cáhita por*

un Padre from as early as 1533 (Dedrick and Casad 1999: 3). It includes a grammar and a dictionary. While *Arte* was written in the Spanish language by several Spanish men, the earliest body of texts written in Hiaki are the "Bandera letters," composed between 1830 and 1832 (Dedrick and Casad 1993: 4). There are eleven letters in the set, each written to or regarding Hiaki leader Juan de la Bandera, who attempted to lead a coup against the Mexican government.

Modern publications on the Hiaki language have studied both the Arizona (Escalante 1990, Jelinek 1998, Molina et al. 1999) and Sonoran (Dedrick 1977, Dedrick and Casad 1999, Guerrero 2004, Estrada Fernández et al. 2004) varieties of Hiaki (aka Yaqui, Yoeme).

Maria Florez Leyva, the former director of the Pascua (Arizona) Hiaki tribe's language program, has been working with linguists at the University of Arizona in Tucson, Arizona conducting Hiaki language research and revitalization projects since the 1990s. Past and current projects include the compilation of a trilingual (Hiaki, Spanish, and English) dictionary, the translation and morphological analysis of Hiaki folktales, and the creation of Hiaki grammars designed for teachers and learners of the language (e.g. Jelinek et al. 1998, Sanchez et al. *forthcoming*).

Since the Fall of 2014, the Oberlin College Linguistics Lab (OCELOTL) has been working on a Hiaki language research project as a satellite lab of the University of Arizona team. Using Fieldworks Language Explorer (FLEx version 8.2.8), we have been conducting morphemic analysis of Hiaki elicitation sessions, folktales, and interviews. For example, a recent study conducted in the lab has looked at the distribution of allomorphs of the coordinating conjunction *into(k(o))* 'and' (Hay, Koon, and Haugen 2017).

The data I analyze in my thesis comes from a corpus of interview texts from a book edited by Maria Florez Leyva called *Au te waate* (We remember it). Conducted by Florez Leyva

in the 1970s and transcribed in the 2010s, these interviews tell the stories of the persecution of the Hiaki people by the Mexican government during the Mexican Revolution, a time when many Hiaki people first came to the United States and settled in Arizona. The following passage from *Au te waate* discusses how Mexican troops used to kidnap children during their surprise raids.

Luisa: Ta hunuen kava'immet am puateka am nuksahak, am etbwa nuksahak
But that way, they put them on horseback and took them, they stole away with them.
Maria: Ili uusim?
The little kids?
Luisa: Heewi. Katwa'apo, wokimmea am weiya'ane. Familiataim.
Yes. When they were walking, they were walking with them. The wives.
Ili usim bwanau intok am puaktak intok hunuen am hooa.
When the little children were crying they picked them up and did that to them.
Kaa am yumakai. Huna'a ma kaave. Hakunsa…hiva kaa aa teak.
They couldn't carry them. That one is gone. Where…we never found her.
Huna'a aa asoak. Ke'esamtukan.
She was her child. She was the first born.
(from Florez Leyva *forthcoming*)

Of *Au te waate*, Florez Leyva says that it was inspired by her uncle's work towards "securing recognition" for the Hiaki people and she dedicates it to her late uncle and each of the people she interviewed.

Our FLEx database includes 10 interviews from *Au te waate*, all of which have instances of Hiaki-Spanish CS. Across the corpus of interviews, there are 578 utterances that I have analyzed as instances of CS. Refer to Appendix A for a summary of the varieties of CS that will be discussed forthwith.

2.2 Hiaki Language

Hiaki (sometimes *Yaqui*, *Yoeme*, or *Cahita*) is a Uto-Aztecan language spoken in eight towns along the Hiaki River in Sonora, Mexico, as well as in Tucson, Arizona, among other places.

Its phoneme inventory includes five vowels (/a/, /e/, /i/, /o/, and /u/ like Spanish) and fifteen consonants. The consonant inventory of Hiaki primarily differs from Spanish in the absence of the labiodental fricative /f/, the dental plosive /d/, the trill /r/, and the palatalized /ɲ/, and the presence of the labiovelar plosive /b^w/ and the glide /w/ (Estrada Fernández and Guerrero 2007: 420). Figures (1) and (2) contain the Hiaki phonemic inventory.

(1) **The consonants of Hiaki** (Dedrick and Casad 1999: 21)

		Labial	Alveolar	Alveo-palatal	Velar	Glottal
Stops	Voiceless	p	t		k	ʾ
	Voiced	b				
	Voiced labialized	b^w				
Affricates				č [t͡ʃ]		
Fricatives			s			h
Nasals		m				
Semivowels		n		y		
Lateral		w	l			
Flap		r				

(2) **The Vowels of Hiaki** (Dedrick and Casad 1999: 21)

	Front	Central	Back
High	i		u
Mid	e		o
Low		a	

Morphologically, Hiaki is an agglutinating language, meaning it relies heavily on affixes to encode grammatical information. To name a few examples, Hiaki affixes can encode case (accusative -*ta*), aspect (perfective -*k*), nominalization (subject relativizer -*m* or object relativizer –'*u*), and plurality (-*(i)m(me)*). However, unlike Romance languages, affixes are not used in Hiaki to encode subject-verb agreement (verb conjugations). Stems can either receive affixes or undergo suppletion[1] to denote tense.

Gender agreement on Hiaki nouns, adjectives, and determiners is similarly absent. Morphemes do not encode gender in Hiaki. However, nouns and adjectives typically do have to denote number agreement. This can be achieved in two ways: the adjective can either be inflected with plural morphology (-*m*) or reduplicate to illustrate plurality.

Syntactically, Hiaki is a head-final language, which means that sentences display SOV as the unmarked word order. Another effect of the head-finality of Hiaki is its use of postpositions and postpositional phrases in place of prepositions and prepositional phrases. While verbs and postpositions occur after their objects, verbal adjunct phrases, such as temporal adjuncts expressed in postpositional phrases, tend to precede the verb they modify. Adjectives also typically precede the nouns they modify (Dedrick and Casad 1999: 235).

Some features with relevance to the present study include the head finality of Hiaki, particularly with relation to SOV, prepositional phrase, and adjective-noun unmarked word order; noun-adjective number agreement; the absence of indefinite determiners; and the lack of subject-verb agreement encoded in Hiaki verbs. These features will be compared and contrasted with similar or different features of Spanish.

[1] Suppletion is the replacement of a stem form with an entirely different stem form in place of morphological inflection of a bare form (e.g. *go* and *went*). The only kind of subject-verb number agreement that occurs in Hiaki is denoted through suppletion of a verb form. This kind of agreement is, nevertheless, rare in Hiaki. One such example is the suppletion of *vuite* 'run-sg.subj' to *tenne* 'run-pl.subj.'

2.3 Spanish Language

Spanish is an Indo-European Italic language spoken by approximately 530 million people around the world (Simons and Fennig 2017).

Latin American Spanish has a phonemic inventory of 17 consonants and 5 vowels. The significant differences between the phonemic inventory of Spanish and Hiaki have been discussed above. Figures (3) and (4) contain the Spanish phoneme inventory.

(3) **The Consonants of Spanish** (Proctor 2009: 47, adapted from Hualde 2005)

	Bilabial	Labiodental	Dental	Alveolar	Alveopalatal	Palatal	Velar
Stop	p b		t̪ d̪				k g
Nasal	m		n̪			ɲ	
Fricative		f		s		(j)	x
Affricate				tʃ			
Rhotic				r ɾ			
Lateral			l̪				

(4) **The Vowels of Spanish** (Proctor 2009: 47, adapted from Hualde 2005)

	Front	Central	Back
High	i		u
Mid	e		o
Low		a	

Morphologically, Spanish illustrates robust gender and number agreement on determiners, nouns, adjectives, and verbs. While Hiaki nouns encode case and number, Spanish

nouns encode number and gender. Other forms of inflectional morphology encoded in Spanish affixes include conjugation class (*-ar*, *-er*, or *-ir*), tense inflection, aspect, mood, and voice (Zagona 2002: 15). Due to strong subject-verb agreement in Spanish, sentence subjects can often be null (*come la manzana* 'he/she eats the apple' vs. *él*/*ella come la manzana* 'he/she eats the apple').

Syntactically, Spanish is a head-initial language that most frequently displays (S)VO word order, except in the presence of an object clitic. (5a)-(5d) illustrate the difference in verb-object order between a sentence with an overt DP object and an object clitic in Spanish. (6a)-(6d) contrast Spanish word order with Hiaki word order.

(5) a. Ella tiene una manzana.
3.SG.NOM-fem have-3.sg.pres DET-sg.fem apple
'She has an apple.'

b. *Ella una manzana tiene.

The above two examples illustrate that an overt DP object (i.e. *una manzana* 'an apple') must follow the verb (i.e. *tiene* 'has') in Spanish. (5b) is marked as ungrammatical because the overt DP object precedes the verb.

(5) c. Ella la tiene.
She 3.SG.ACC-fem have-3.sg.pres
'She has it.'

d. *Ella tiene la.

These two examples, however, illustrate the opposite word order of the construction above. This is because clitic objects must precede fully inflected verbs[2]. For this reason, (5d) is ungrammatical.

[2] The only instances in which clitic objects follow the verb in Spanish are if the verb is expressed as an infinitive, a gerund, or an imperative (Zagona 2002: 17).

The following examples contrast Spanish verb-object order with that of Hiaki.

(6) a. Uu yoi chuu'u-ta hippue.
DET man dog-ACC have
'The man has a dog.'

b. *Uu yoi hippue chuu'u-ta.

Unlike in Spanish, Hiaki overt DP objects must precede the verb. (6b) is marked ungrammatical because *chuu'u-ta* can only precede the verb. Object clitics in Hiaki, however, also must precede the verb. While the order of Spanish object clitics with relation to the verb opposes that of overt DP objects, the placement in Hiaki of overt DP objects and object clitics with relation to the verb is the same. (6c) and (6d) illustrate this point.

(6) c. Uu yoi aa hippue.
DET man 3.SG.ACC have
'The man has it.'

d. *Uu yoi hippue aa.

Similarly, while most Hiaki adjectives precede the nouns they modify (Dedrick and Casad 1999: 235), most Spanish nominal adjuncts follow the nouns they modify (Zagona 2002: 89-91).

Some features of Spanish with particular relevance to this study include its SVO order; the placement of verbal adjuncts after the verb they modify; the use of prepositions, unlike Hiaki, which uses postpositions; the subject-verb agreement that Spanish verbs illustrate; and the presence of a "that-like" complementizer *que*, which coordinates structures at IP level.

Because many features of Hiaki and Spanish are incongruent, such as the setting of the head directionality parameter and the encoding of grammatical agreement for verbs and gender on nouns, the grammatical constraints of code switching are optimally visible in Hiaki-Spanish

bilingual discourse. Subsequent sections will address how these feature mismatches are reconciled in bilingual speech.

3. Introduction to Code Switching

While early models of code switching framed it as a socially motivated phenomenon (Ferguson 1959, Fishman 1967, Blom and Gumperz 1972), current linguistic research of code switching seeks to understand the grammatical frameworks of and motivations for code switching. In this section I will outline the history of the study of code switching from sociocultural theories in the 1950s and 1960s to current morphosyntactic theories. After discussing Ferguson's (1959) and Fishman's (1967) theories of diglossia, I will outline early theories of constraints on codeswitching (Gumperz 1977, Pfaff 1979, Poplack 1980, Poplack 1981). This overview will lead into a discussion of Myers-Scotton's (1993, 2000, 2002) contributions to the field of codeswitching. Section 3.2 introduces Myers-Scotton's Matrix Language Frame Model and subsequent Morpheme-Order and System Morpheme Principles. Section 3.3 defines and explains the 4-M Model, conceived of by Myers-Scotton and Jake (2000). Sections 3.4-3.6 examine the 4-M Model as it relates to and enhances the Matrix Language Frame Model, particularly regarding the study of grammatical incongruences between the embedded language and matrix language and consequent embedded language islands.

3.1 History of the Study of Code Switching

Before the 1980s, engaging in bilingual speech was considered *diglossia*, a linguistic means by which to separate social spheres (Ferguson, 1959, Fishman 1967). For communities that regularly engaged with multiple languages, each language was thought to serve a particular purpose complementary to the other languages spoken by community members. In that regard, the choice to speak one language versus another was a social choice: for example, the language

used at home was necessarily a different language than the one used in the workplace. The motivation for choosing one language or another could be determined according to the placement of the category of language production along an axis, where one end represented more prestigious or sacred (High) speech and the other inferior or profane (Low) speech (Ferguson 1959: 234). While the language used for sermons, academic and political speech, journalism, or poetry was considered the High language, the one used for "instructions to servants," conversations with peers and family, and "folk literature" was deemed the Low language (Ferguson 1959: 234). Fishman (1967) cites Spanish as the High language and Guarani as the Low language in Paraguay because while Guarani was used "for matters of intimacy and primary group solidarity," Spanish was the designated language for "education, religion, government, high culture, and social distance" (75). Until the 1980s, early models of code switching operated on the principle that the motivations for engaging in bilingual speech production were primarily—if not solely—sociocultural.

A wave of new theories in the late 1970s and early 1980s, however, saw code switching not only as the socially regulated process that sociologists and linguists alike had once thought it to be, but also as a carefully constructed synthesis of languages that reflected the grammars of the languages in question (Gumperz 1977, Pfaff 1979, Poplack 1981). The focus shifted from the social context of code switching to the linguistic frameworks that motivate a switch from one language to another in bilingual speech. While code switching was previously thought to be socioculturally context-dependent, linguists in the 1970s and 1980s like Gumperz, Pfaff, and Poplack began to search for the linguistic contexts that motivate it. Following on the Chomskian model of syntactic constraints, these theories proposed a variety of grammatical rules to narrow the acceptable linguistic contexts for code switching (hereafter CS).

Rather than take for granted bilingual speakers' claims that there was no locational contamination between the languages they spoke, Gumperz (1977) based his studies of patterns in social CS on recorded conversations between bilingual speakers. In an earlier publication, Blom and Gumperz (1972) had defined two types of CS that could be chosen by the speakers engaged in a dialogue: *situational CS* could be used in tandem with a change in conversation topic, and *metaphorical CS* was used to alter the power dynamic between two speakers like a formal register would. The language used in *metaphorical CS* acted as a metaphor for the relationship between interlocutors. Although Gumperz still argued that the choice to engage in CS was primarily a function of social situations, he recognized the possibility of intrasentential CS. By capturing bilingual discourse on a variety of subjects in a variety of settings, Gumperz ruled out the popularized myth about bilingual speech that there was no contextual contamination between languages.

Instead, upon encountering intrasentential CS, Gumperz sought to classify the "forms of linguistic regularity" and "constraints which govern this kind of intrasentential juxtaposition" (1977: 23). In a series of elicitation sessions, Gumperz isolated particular structures that could or could not be substituted into a different language in CS discourse. (7) illustrates an elicited hierarchy of acceptability in codeswitched subject-predicate constructions, where a double star indicates complete unacceptability, a single star marks a questionable item, and no additional marking indicates acceptability.

(7) My uncle Sam *es el más agabachado* [is the most Americanized].
*My uncle [*es el más agabachado*]
*That one [*es el más agabachado*]
**He [*es el más agabachado*] (Gumperz 1977: 24)

From this example, Gumperz concluded that the longer the NP, the "more natural the switch." While *my uncle* and *that one* were acceptable in some other examples not included in

this publication, *he* was unacceptable throughout. While Gumperz considered constituent length the principal inhibitor of CS forms, there was little reference to the part of speech or morpheme type of each constituent in his findings.

Gumperz concluded that "syntactic constraints are in turn motivated by underlying factors which depend more on certain aspects of surface form…than on structural or grammatical characteristics" (26). For Gumperz, however, these "aspects of surface form" spoke not only to the grammatical features of a language but also so-called "stylistic choices" that speakers made consciously to alter the intended meaning of their utterance. For example, Gumperz (1977) refers to the "ethnically specific, minority language" in a conversation as the *'we' code* and the "more formal, stiffer, and less personal" majority language as the *'they' code* (6). He predicts that while the 'we' code can be used to indicate camaraderie, the 'they' code can be used to index social distance between interlocutors.

(8) is an example of situational Spanish-English CS uttered by a mother to her child. While Gumperz predicts that the switch in (8a) will be read as a threat or a warning to the children, (8b) is seen as a personal appeal.

(8) a. Ven acá
Ven acá
Come here, you
b. Come here
Come here
Ven acá (Gumperz 1977: 28)

In the above examples, Gumperz argues that Spanish is the 'we' code and English is the 'they' code. He argues that the first example will be read as a warning, while the second will be read as a personal appeal. However, Gumperz fails to take into account the particular family's view of Spanish and English. He does not indicate whether the family perceives itself primarily

as Spanish-speaking or primarily as English-speaking, and as a result, his conclusion about how each utterance will be read works to reinforce a sociolinguistic hierarchy by assuming that English is the majority language. Although Gumperz was one of the first linguists to embrace the system of constraints for classifying acceptable CS environments, his findings did not adequately predict the full extent of grammatical constraints on CS discourse.

Between 1977 and 1980, the focus of CS research shifted towards the distinction between lexical borrowing and code switching. Over time, the classification of bilingual speakers who engage in code switching shifted from people who have an "imperfect knowledge of the grammatical systems in question" to people who necessarily have a profound understanding of each language (Gumperz 1977: 5). Following on this statement made by Gumperz, Pfaff (1979) classifies borrowing as language mixing that "may occur in the speech of those with monolingual competence, while 'code-switching' implies some degree of competence in two languages" (295). Similarly, Poplack (1981) posits that CS depends on "the bilingual ability or perceived bilingual ability of the speaker and the hearer" (169). Because loanwords and CS forms behave so similarly, theorists in the late 1970s and early 1980s turned towards that subtle distinction to find the precise grammatical contexts of CS.

Pfaff (1977) maintains that bilingual CS discourse is built on a combination of both grammars involved. Relating her various proposed constraints, she argues that "surface structures common to both languages are favored for switches" (314). However, Pfaff's data are primarily comprised of instances of CS in which several-word constituents are switched and therefore fail to account for single-lexeme CS. One of few addressed instances of single-lexeme CS is the doubling of determiners when talking about body parts in Spanish and English: in Spanish, an object of inalienable possession must be paired with a definite article (*la mano* 'the

hand'), while in English, a body part is often paired with a personal pronoun (*my hand*). The CS Pfaff observed in this case involved the doubling of determiners (i.e. *los—los—uh—your muscles a veces react* (308)). Consequently, she argues that in this case, CS need not entail the mental merging of both grammars involved. This is because in the longer strands of bilingual speech, she reasons, the grammars of both languages are satisfied independently of one another (309). Although Pfaff's constraints were based on a data set significantly larger than that of preceding studies, they simply accounted for those particular data and not CS on a larger scale.

By confronting instances of single-lexeme code switching, Poplack (1981) sought to distinguish between CS and lexical borrowing, thereby narrowing existing constraints on CS. Examining Spanish-English CS in a Puerto Rican community in New York City, Poplack specifies that within her data, any English forms that follow phonological, morphological, or syntactic processes of Puerto Rican Spanish were not to be considered CS but lexical borrowing (170).

Using this framework, Poplack proposes the Free Morpheme Constraint and the Equivalence Constraint, replicated below in (9). The Free Morpheme Constraint states that CS may occur at any point in discourse as long as no bound morphemes are stranded (1981: 175).

(9) **Free Morpheme Constraint**: A switch may occur at any point of the discourse at which it is possible to make a surface constituent cut and still retain a free morpheme. (Poplack 1981: 175)

Her subsequent Equivalence Constraint (10) states that CS cannot occur at any point in which the syntax of either language is compromised (1981: 175).

(10) **Equivalence Constraint**: Codes will tend to be switched at points where juxtaposition of [English and Spanish] elements does not violate a syntactic rule of either language; i.e. at points where the surface structures of the languages map onto each other. (Poplack 1981: 175)

Under these constraints, Poplack determines that utterances such as *eat-*iendo* (EAT-ing), *told *le* (TOLD him/her), and **le* told (TOLD him/her) should be ungrammatical (1980, 1981). Because the bound Spanish gerund suffix *–iendo* has been split from the root of a Spanish verb, it does not follow the Free Morpheme Constraint. Similarly, both **told le* and **le told* violate the Equivalence Constraint: **told le* violates Spanish OV order with respect to object clitics, while **le told* violates English VO order.

Several researchers have found the Free Morpheme Constraint to be empirically inadequate. Although this has been particularly true with respect to agglutinative languages like Aleut or Turkish, where several bound morphemes affix themselves to a stem (Hankamer 1989), CS research in a number of non-agglutinative languages has also presented counterexamples to the Free Morpheme Constraint (Bentahila and Davies 1983; Berk-Seligson 1986; Belazi, Rubin, and Toribio 1994). A counterexample from my Hiaki-Spanish corpus can be found below, in (11).

(11) Chuvvatuk im veha kuh-wa tea aman *eskina*-po inen
in.little.while here then loud.emission-PASS quot there corner-LOC like.this
'Later they heard the bugle over tat that corner, like this.' (Interview 3A #380.3)

In the above example, the Free Morpheme Constraint incorrectly predicts that Spanish *eskina* (*esquina* 'corner') cannot take the Hiaki locative marker *–po*.

The Equivalence Constraint has also proven to be insufficient for qualifying much CS data. The constraint has primarily been accused of ignoring the asymmetry inherent in CS by suggesting that the grammars of either language engaging in CS bear equal weight in determining the grammar of the mixed constituent. However, as Joshi (1985) and Myers-Scotton (1993) have pointed out, people engaging in bilingual discourse often agree on which language is the one they are primarily speaking; Joshi (1985) coined the term *matrix language* for the

"primary" one and the term *embedded language* for the other one. Myers-Scotton (1993) defines the matrix language (ML) as the one that "plays a more dominant role" in CS discourse, because "its grammar sets the morphosyntactic frame for two of the three types of constituent contained in sentences showing intrasentential CS" (6). The two types of constituent that will follow ML grammar, according to the Matrix Language Hypothesis, are *ML constituents* and *mixed constituents*.

3.2 Matrix Language Frame Model

In CS discourse, there are three possible combinations of the ML and the EL. ML constituents are constituents entirely formed in the ML, while ML + EL (mixed) constituents include morphemes from both the ML and the EL(s) participating in CS discourse. The third type of constituent, an EL island, is formed entirely in the EL but appears amid ML or mixed language discourse.

Myers-Scotton's Matrix Language Hypothesis in (12) sets the matrix language (ML) apart from the embedded language (EL).

(12) **Matrix Language Hypothesis**: As an early step in constructing ML + EL constituents, the ML provides the morphosyntactic frame of ML + EL constituents.
(Myers-Scotton 1993: 82)

The ML Hypothesis dictates that the grammatical framework of the ML will be the default for ML and mixed constituents. However, EL islands are the only type of constituent in CS discourse not governed by ML grammar. EL islands are phrase-level constituents in the EL that occur as a result of incongruences between ML and EL grammar (Myers-Scotton 2008: 27). EL islands will be further discussed in Section 5.

The Matrix Language Hypothesis is, in turn, supported by two falsifiable hypotheses, which are stated as principles:

(13) **The Morpheme-Order Principle**: In ML + EL constituents consisting of singly-occurring EL lexemes and any number of ML morphemes, surface morpheme order (reflecting surface syntactic relations) will be that of the ML. (Myers-Scotton 1993: 83)

(14) **The System Morpheme Principle**: In ML + EL constituents, all system morphemes which have grammatical relations external to their head constituent (i.e. which participate in the sentence's thematic role grid) will come from the ML. (Myers-Scotton 1993: 83)

Section 3.2.1 will include an overview of the Morpheme-Order Principle, followed by a discussion of the System Morpheme Principle in Section 3.2.2.

3.2.1 The Morpheme-Order Principle

The Morpheme-Order Principle states that the surface order of morphemes in mixed and ML constituents will reflect the word order of the ML. However, ML and mixed constituents are only two of three possible combinations of the ML and EL in CS discourse. As a sub-hypothesis of the ML Hypothesis, the Morpheme-Order Principle suggests that the word order of EL islands will not conform to the ML word order but instead to EL word order. In other words, only when a single EL morpheme is embedded in otherwise ML discourse—a mixed constituent—will the word order adhere to that of the ML. The only case where EL word order is expected is when more than one EL morpheme occurs consecutively in an EL island.[3]

In ML + EL constituents, the Morpheme-Order Principle can be observed with relation to head directionality. The Morpheme-Order Principle predicts that if the settings of the head-directionality parameter of two languages engaged in bilingual discourse are incongruent, a

[3] There is one rare instance where a sequence of EL morphemes can constitute a mixed constituent and therefore follow ML morpheme order. Five examples of this can be found in Myers-Scotton's Nairobi corpus. They each consist of an EL (English) noun and an EL adjective in ML (Nairobi) morpheme order, such as '*timing proper*' (1993: 84).

mixed constituent should always follow the head-directionality specified by the ML. Myers-Scotton's Nairobi corpus is rich with examples of ML (Nairobi) heads with EL (English) modifiers in Nairobi word order. One such example is '*mambo mengi* new,' literally 'many things new' (1993: 84).

Similarly, evidence in Bentahila and Davies' Moroccan Arabic-French corpus demonstrates that codeswitched EL subjects follow ML word order in mixed constituents. Moroccan Arabic (ML) sentences may follow VSO word order, contrary to the word order dictated by French (EL). While in French discourse, the subject must precede the verb, in a mixed constituent where Moroccan Arabic is the ML, the codeswitched French subject may appear after the verb. For example, in 'na:Du *les privés*' (lit. 'arose the private practitioners') the French subject *les privés* follows the Arabic verb (Myers-Scotton 1993: 89). In other words, the language of the verb dictates the placement of its subject. This example illustrates that even the position of an EL subject with respect to an ML verb may follow ML word order.

Although not addressed by Myers-Scotton (1993), another effect of the Morpheme-Order Principle is observed with relation to verb-object order. If the ML is an (S)OV language (like Hiaki) and EL is an (S)VO language (like Spanish), a verb phrase in which the verb is in the ML will prompt proper ML word order but violate EL word order. Like subject-verb order, the language of the verb seems to dictate the placement of the object in the sentence. The contrast between examples (15a) and (15b) below illustrates the constraints on morpheme order in CS discourse.

(15) a. Hunuka *kargo*-ta veha hippue
that.one responsibility-ACC then own
'Now he has that responsibility.' (Interview 2A #172)

In the above example, we can see that Hiaki is the ML because the utterance conforms to Hiaki word order. The Hiaki verb *hippue* 'own' appears in a sentence-final position, although the object *kargo* 'responsibility' is in Spanish.

Although even codeswitched EL objects of ML verbs in mixed constituents follow ML word order, counterexamples prove to be ungrammatical.

(15) b. *Hunuka veha hippue *kargo*-ta

(15a) illustrates grammatical morpheme order for a mixed constituent in Hiaki and Spanish. Hiaki is the ML by volume of morphemes and thus provides the morpheme order of the constituent. As predicted by the Morpheme-Order Principle, (15a) follows Hiaki (S)OV order, even though the object, *kargo*-ta, is in Spanish, an (S)VO language. Example (15b), however, is ungrammatical under the Morpheme-Order Principle because it displays EL morpheme order in a mixed constituent. The Morpheme-Order Principle correctly predicts that such an utterance is ungrammatical. In my corpus of 524 examples, there are 97 examples that display ML verb-object order, and only 1 instance of an EL verb using EL verb-object order in a mixed constituent, which will be addressed later.

For a more detailed discussion of the Morpheme-Order Principle as observed in Hiaki-Spanish CS, refer to Section 5.2.

3.2.2 The System Morpheme Principle

A system morpheme is defined with relation to its counterpart, a content morpheme. While content morphemes (e.g. nouns, verbs, and some prepositions) comprise arguments and predicates, system morphemes (e.g. verb inflections, plural markers, and some other prepositions) encode the relationship between those arguments and predicates (Myers-Scotton and Jake 2000: 1057).

Underlying the System Morpheme Principle is the assumption that if system morphemes are accessed in CS discourse, they will come from the ML. This does not mean that no system morphemes can come from the EL. It does, however, imply that system morphemes that come from the EL may either be doubled by equivalent morphemes in the ML (double morphology) or trigger an EL island. (See Section 3.4 for a discussion of double morphology or Section 5 for a more in-depth discussion of EL islands.)

Since the 1993 publication of Myers-Scotton's *Duelling Languages*, the definition of a system morpheme has been refined. While the distinction of a system morpheme from a content morpheme was previously centered around the feature [+/-Quantification], the current definition, which is the one I use in my analysis, depends on whether the morpheme assigns or receives θ-roles.

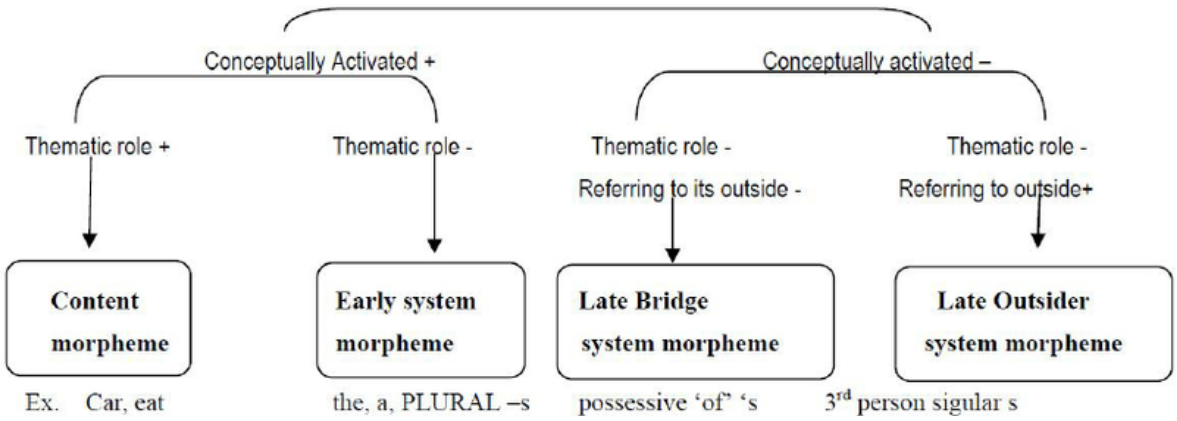
Myers-Scotton and Jake (2000) outline four different types of morpheme in a system called the 4-M model. Based on data from CS discourse, aphasics, and second language acquisition, Myers-Scotton and Jake distinguish between these four types of morpheme according to their point of origin along the mental process of speech production (1055-1057).

3.3 The 4-M Model

The 4-M model complicates the traditional notion that there are only two morpheme categories (*lexical* and *functional*) by dividing the singular classification of system morpheme into three distinct sub-types. In order of level of mental activation, there are *content morphemes*, *early system morphemes*, *late bridge system morphemes*, and *late outsider system morphemes*. A single morpheme may fall into any or all of these categories depending on verbal context. The classification of a particular morpheme in one language will not necessarily be congruent with

the classification of its counterpart in another language. Figure (16) details the features, order of activation, and English examples of each morpheme type.

Figure (16)



(Myers-Scotton 2002:73 adapted by Namba 2004:4)

3.3.1 Content Morphemes

Content morphemes are the earliest morphemes to be accessed from the mental lexicon during speech production. They are selected by the speaker to convey semantic/pragmatic concepts that then couple with system morphemes to produce coherent information (Myers-Scotton and Jake 2000: 1058).

Unlike any type of system morpheme, content morphemes assign or receive θ-roles, which are the roles that arguments play with respect to their predicates (Carnie 2013: 229). The English verb, *give*, for example, has three arguments or θ-roles: the agent (the one who gives), the theme (the thing that is given), and the recipient (the one who receives the theme). Example (17) illustrates the distribution of θ-roles by the English verb *give*.

(17) **[**I]$_{\text{AGENT}}$ <u>give</u> **[**the lemon]$_{\text{THEME}}$ to [Martha]$_{\text{RECIPIENT}}$.

In the above example, *give* (underlined) assigns the θ-roles of agent (*I*), theme (*the lemon*), and recipient (*Martha*). In Myers-Scotton and Jake's analysis, both nouns and verbs are content morphemes.

Although English verbs and nouns are the most typical examples of content morphemes, adjectives can also assign thematic roles, as in 'interested *in*,' which assigns the thematic role of theme to *horticulture* in (18).

(18) Stella is interested in *horticulture*. (Myers-Scotton and Jake 2000: 1058)

3.3.2 Early System Morphemes

Like content morphemes, early system morphemes are conceptually activated. This means that they are activated as abstract mental conceptual forms (lemmas) alongside content morphemes to complete the "bundle of semantic and pragmatic features satisfying the speaker's intentions" (Myers-Scotton and Jake 2000: 1062).

While content morphemes are defined by their ability to assign or receive θ-roles, system morphemes can neither assign nor receive θ-roles. The feature that is shared between content and early system morphemes is that they are [+conceptually activated], meaning that they are accessed to convey concepts. What distinguishes early system morphemes from content morphemes is their inability to assign and receive θ-roles. Content morphemes have the feature [+θ-role] while early system morphemes have the feature [-θ-role].

In English, some examples of early system morphemes can be found in (19) and (20).

(19) I found the book that you lost yesterday.
(20) a. Bora chewed up Lena's toy yesterday.
b. Bora chewed Lena's toy up yesterday.
c. *Bora chewed Lena's toy yesterday up.

(Myers-Scotton and Jake 2000: 1063)

The underlined morphemes in (19) and (20) are conceptually activated because they add meaning to their heads, which have "called" them (1063). In (19), *the* makes *book* definite, and in (20), *up* proves to be semantically bound to *chew* because it cannot occur outside its maximal projection, as in (20c).

Like in English, Spanish determiners (*el*, *la*, *un*, *una*) are also early system morphemes. Although they encode gender and therefore must agree with the nouns that they specify, the gender of a noun can be understood as conceptual, coupled with the semantic-pragmatic "bundle" expressed by the noun. Because definiteness, gender, and number are readily available within the NP, the determiner does not have to look outside its maximal projection to know what to agree with (Myers-Scotton and Jake 2000: 1065). Therefore, Spanish determiners are still early system morphemes.

Hiaki determiners (e.g. *uu* 'the.sg' and *ume* 'the.pl') are also early system morphemes because they make their heads definite like English and Spanish determiners. Although they do not mark gender, Hiaki determiners must mark number. Unlike English and Spanish, however, Hiaki does not have indefinite determiners (*a*/*an* and *un*/*una*).

3.3.3 Late System Morphemes

While content morphemes and early system morphemes convey conceptual information and are accessed earlier in the process of language production, both classes of late system morpheme convey grammatical rather than semantic information and are accessed later (1063). As a result, their function is to link together the fragments of larger constituents to produce grammatical utterances.

There are two classes of late system morpheme: *late bridge morphemes* and *late outsider morphemes*. Both will be discussed below.

3.3.3.1 Late Bridge System Morphemes

Like early system morphemes, late bridge morphemes depend on their heads. While that relationship is semantic for early system morphemes, for late bridge morphemes it is a strictly grammatical relationship (1064). An English example of a late bridge morpheme is the possessive *of* or *–s*. These are late bridge morphemes because they do not rely on grammatically encoded information for agreement, and they are also not conceptual. Instead, morphemes like possessive *of* or *–s* link different structures together without much grammatical connection to either.

With either marker of possession, word order indicates the relationship between the possessed and possessor. Possessive *of* is used in head-complement order, or when the possessed precedes the possessor (21a). However, possessive *–s* is used in complement-head order, when the possessor precedes the head (21b).

(21) a. Razor *of* Occam
b. Occam *'s* Razor

Other examples of late bridge system morphemes include "that-like" complementizers in any language that uses them because they link structures together at the IP level. English *that* (i.e. I told him that I was coming), Spanish *que*, and French *que* are all examples of this kind of complementizer.

3.3.3.2 Late Outsider System Morphemes

The feature that distinguishes late outsider morphemes from late bridge morphemes is [+/-outside], or whether they refer to information outside of their maximal projection. While late bridge morphemes refer only to information within their maximal projection, late outsider morphemes refer to information outside of their maximal projection (1064). An English example

of a late outsider system morpheme is the third person present singular *–s*, which refers specifically to a third person singular subject NP (e.g. *Sally eat-s*, *he smile-s*, *it stink-s*). For the same reason, the affixes that indicate noun-verb agreement in Spanish are also late outsider system morphemes, as in (22c)-(22e).

(22) a. I run

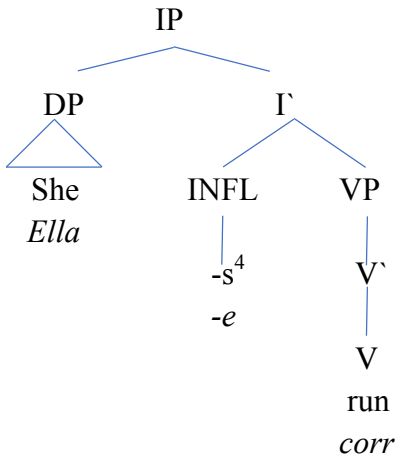
b. She run-s

c. Las niñas corre-n (The girls run)

d. La niña corre

e. Nosotros corre-mos

f.



Examples (22a)-(22e) display grammatical agreement that depends on information outside the maximal projection of the verb (illustrated by the tree in (22f)). Although Spanish verbs have more robust subject-verb agreement than English, examples (22a) and (22b) illustrate the one conjugation in English that does display overt morphological agreement: the third person

[4] Although some posit that the category of INFL is expanded to include an AgrS node, where nominative case would be checked, for the sake of simplicity, I have illustrated subject-verb agreement as taking place at INFL level in this diagram.

present tense singular *-s*. Because verb endings must agree with their subject NPs, they must look outside of their maximal VP projections to INFL in IP to agree with their agent nouns.

3.4 System Morpheme Principle (revised)

The original wording of the System Morpheme Principle is as follows:

> In ML + EL constituents, all system morphemes which have grammatical relations external to their head constituent (i.e. which participate in the sentence's thematic role grid) will come from the ML.
>
> (Myers-Scotton 1993: 83)

"Under the new 4-M model," as Myers-Scotton and Jake (2000) point out, "this class of system morpheme is more explicitly identified as the late outsider system morpheme" (1070). Although this principle allows other types of system morphemes to occur in the EL, system morphemes are much more frequently expressed in the ML. This is due to a subset of hypotheses regarding constraints on EL contributions to CS discourse, all of which will be discussed in the following section.

Underlying the 4-M model's revision of the System Morpheme Principle is also the assumption that each of the four types of morpheme will be more or less likely to occur in the EL in mixed constituents based on the stage at which they are accessed during language production: content morphemes are the most likely, followed by early system morphemes, late bridge system morphemes, and, lastly, late outsider system morphemes (Myers-Scotton and Jake 2000: 1072). Early system morphemes, such as plural markers, are the most frequently switched variety of system morpheme because they are accessed almost simultaneously with their content morpheme heads, an error that Myers-Scotton and Jake (2000) refer to as "mistiming" and Myers-Scotton (1993) refers to as "misfiring." Resulting double morphology occurs when the ML provides a

corresponding early system morpheme. This process yields the Double-Morphology Hypothesis, which is stated in (23).

(23) **Double-Morphology Hypothesis**: In mixed constituents in classic code switching, only embedded-language early system morphemes double system morphemes from the matrix language.

(Myers-Scotton and Jake 2000: 1073)

Example (24), from Amuzu's (1998) Ewe-English corpus, illustrates double plural morphology on a codeswitched English (EL) compound noun. Ewe is the ML.

(24) Nye *younger brother-s*-wó kata wó-*shave*-na
1.SG.POSS younger brother-PL-PL all 3.PL-shave-HAB
'All my younger brothers, they shave…' (Amuzu 1998: 72 as cited in Amuzu 2009: 152)

In this example, the codeswitched EL (English) compound noun *younger brother* is inflected not only with English plural morphology (-*s*) but also with ML (Ewe) plural morphology (-*wó*). Both of these plural markers are early system morphemes because they are called by their content morpheme heads to convey the semantic concept of plurality. This example illustrates the likelihood that EL early system morphemes will be doubled by their ML early system morpheme counterparts due to proximity of activation to their content morpheme heads in the mental lexicon of the speaker.

In this section we have seen that the System Morpheme Principle depends on the definition of system morphemes with respect to their content morpheme counterparts. While content and system morphemes have previously been defined by the feature [+/-Quantification], their current distinction relies on the feature [+/-θ-roles]. Content morphemes, such as nouns and verbs, assign and receive θ-roles, while system morphemes do not. The 4-M Model then classifies system morphemes into an additional three categories based on the level at which they are accessed from the mental lexicon in language production. System morphemes either convey

conceptual information or grammatically link together disparate structures in an utterance. The Double-Morphology Hypothesis predicts that early system morphemes specifically are the only morpheme type allowed to be doubled in the ML if accessed in the EL. This susceptibility to morpheme doubling is due to their near simultaneous activation with their content morpheme heads.

The following section will address what happens when either the System Morpheme Principle or the Morpheme-Order Principle is violated.

3.5 EL Islands and Types of CS Discourse

Although the grammars of two languages are implicated in CS discourse, the grammatical roles of these two languages are inherently asymmetrical. In other words, one language is more heavily represented than the other in bilingual discourse in the number of morphemes it contributes and in the grammatical framework it provides. It has been established that the ML can be understood as the "main" language in CS discourse because it yields its grammar to the majority of utterances in bilingual discourse (ML constituents and mixed constituents). The EL is the "other" language, onto which ML grammar is imposed in mixed constituents to form acceptable bilingual utterances. The ML and EL are both discourse-specific as opposed to speaker-specific. That is, they do not remain the same for every utterance produced by a particular speaker. Instead, they change conversation to conversation or even within a conversation, depending on the extent to which one of them contributes the grammatical framework to bilingual discourse. As will be discussed later, the ML may even change within a single utterance.

On the other hand, because the grammar of monolingual speech comes only from one language, monolingual speakers only need to concern themselves with the well-formedness

requirements of one grammar. This stands in stark contrast to CS, where bilingual speakers must check their speech against the well-formedness requirements of two languages.

Myers-Scotton (2002) proposes a principle to regulate the asymmetricality of CS discourse in order to maximally simplify the bilingual speaker's process for checking the well-formedness requirements of their bilingual discourse. The Uniform Structure Principle can be found in (25).

(25) **Uniform Structure Principle**: A given constituent type in any language has a uniform abstract structure and the requirements of well-formedness for this constituent type must be observed whenever the constituent appears. In bilingual speech, the structures of the Matrix Language (ML) are always preferred. Embedded Language (EL) islands (phrases from other varieties participating in the clause) are allowed if they meet EL well-formedness conditions, as well as also meeting those ML conditions applying to the clause as a whole (e.g., phrase placement). (Myers-Scotton 2002)

As the Uniform Structure Principle suggests, CS discourse approaches the level of maximal grammatical simplicity that monolingual speech exemplifies by establishing the default grammar as only one of the grammars involved. This will be the ML. Although the grammar of CS discourse will never truly be "uniform," the Uniform Structure Principle approximates the uniformity that makes the process of checking the well-formedness requirements of monolingual discourse simple.

3.6 When the default is deemed ungrammatical

In CS discourse, there are three possible combinations of the ML and the EL. ML islands are constituents entirely formed in the ML, while ML + EL (mixed) constituents include morphemes from both the ML and the EL(s) participating in CS discourse. The third type of constituent, an EL island, is formed entirely in the EL. The MLF Model and subsequent Uniform Structure Principle presume that the grammatical framework of the ML will be the default for

ML and mixed constituents. The third type of constituent, an EL island, is the only type of CS constituent not governed by ML grammar.

Three sub-hypotheses to the Matrix Language Hypothesis predict the behavior of EL islands and are intimately tied to the System Morpheme Principle. These are the Blocking Hypothesis, the EL Implicational Hierarchy Hypothesis, and the EL Island Trigger Hypothesis.

According to the Blocking Hypothesis in (26), EL islands are formed when EL morphosyntactic procedures are activated and ML systems are inhibited.

(26) **The Blocking Hypothesis**: In ML + EL constituents, a blocking filter blocks any EL content morpheme which is not congruent with the ML with respect to three levels of abstraction regarding subcategorization. (Myers-Scotton 1993: 120)

The Blocking Hypothesis acts as a bolster to the System Morpheme Principle. It predicts that certain ML content morphemes will be favored over EL content morphemes. These EL content morphemes will be blocked if their ML counterparts are system morphemes, if their ML content morpheme counterparts disagree about thematic role assignment, or if their ML content morpheme counterparts disagree about pragmatics (Myers-Scotton 1993: 121). Furthermore, the Blocking Hypothesis reinforces the System Morpheme Principle in its rejection of EL system morphemes because they are less readily accessible in the mental lexicon than are their ML counterparts. As discussed in Section 3.3.3.2, late outsider system morphemes are particularly unlikely to appear in the EL because they hold together disparate parts of the larger structure in which they are found. In this regard, late outsider system morphemes act as grammatical keystones. When removed, the structure falls apart. Codeswitching late outsider system morphemes is akin to removing them from the structure, particularly if they do not correspond in morpheme type to an ML late outsider. Therefore, this class of morpheme will be particularly resistant to occurring in the EL.

The EL Implicational Hierarchy Hypothesis and the EL Island Trigger Hypothesis outline the kinds of grammatical incongruences between the ML and the EL that prompt EL islands. While the EL Implicational "Hierarchy Hypothesis predicts which [constructions] are *likely* to be islands," the EL Island "Trigger Hypothesis predicts which constructions *must* be islands" (Myers-Scotton 1993: 148).

The **EL Implicational Hierarchy Hypothesis** is expressed in two parts:

1. The more peripheral a constituent is to the theta-grid of the sentence (to its main arguments), the freer it is to appear as an EL island.
2. The more formulaic in structure a constituent is, the more likely it is to appear as an EL island. Stated more strongly, choice of (any) part of an idiomatic expression will result in an EL island.

(Myers-Scotton 1993: 144)

The EL Implicational Hierarchy Hypothesis recognizes that each language has fixed idiomatic expressions and other constituents that are structurally incongruent with other languages. These expressions, if in the EL, will therefore be impossible to reproduce grammatically under ML grammar and will be more likely to appear in the form of EL islands. Based on data from her Nairobi corpus, Myers-Scotton (1993) proposes a hierarchy of such expressions and other constituents that are expected to trigger EL islands.

1. Formulaic expressions and idioms (especially as time and manner PPs but also as VP complements) [e.g. *under the weather* or *the bee's knees*];
2. Other time and manner expressions (NP/PP adjuncts used adverbially) [e.g. *until tomorrow* or *as of Wednesday*];
3. Quantifier expressions (APs and NPs especially as VP complements) [e.g. *every kind* or *none of them*];
4. Non-quantifier, non-time NPs as VP complements (NPs, APs, CPs) [e.g. *I carried <u>the book</u>*];
5. Agent NPs [e.g. *<u>My uncle Bill</u> went to the store*];
6. Thematic role- and case-assigners, i.e. main finite verbs (with full inflections) [e.g. *I <u>soaked up</u> the water* or *She <u>offered</u> me a chocolate-covered raisin*]

(Myers-Scotton 1993:144) [Bracketed examples are my own.]

While the EL Implicational Hierarchy Hypothesis outlines which types of constituents are *likely* to result in EL islands, the EL Island Trigger Hypothesis in (27) determines which types of morphemes *must* trigger EL islands.

(27) **The EL Island Trigger Hypothesis**: Activating any EL lemma or accessing by error any EL morpheme not licensed under the ML or Blocking Hypothesis triggers the processor to inhibit all ML accessing procedures and complete the current constituent as an EL island.
(Myers-Scotton 1993: 139)

The EL Island Trigger Hypothesis predicts that any EL morpheme accessed intentionally or accidentally in a mixed constituent that violates the ML Hypothesis or the Blocking Hypothesis will cause the rest of its constituent to be finished in the EL.

Bearing in mind the Uniform Structure Principle, which favors the maximal simplification of checking well-formedness requirements in bilingual discourse, the EL Island Trigger Hypothesis is only activated if the grammatical framework of the ML would produce an ungrammatical utterance.

1. If an EL morpheme implicating non-ML morpheme order in a constituent is accessed as the initial element in a constituent, this triggers processing of the entire constituent in the EL, thereby forming an EL island.
2. If any EL system morpheme, or an EL content morpheme not showing correspondences to an ML content morpheme, is accessed, ML procedures are inhibited, and the entire constituent of which the EL morpheme is a part must be produced as an EL island.
(Myers-Scotton 1993: 139-140)

That is, EL Islands are triggered if the Morpheme-Order Principle or the System Morpheme Principle are violated.

Recall in previous sections the more recent revision of the System Morpheme Principle to accommodate for the addition of the 4-M Model to the study of CS. The newer version of the System Morpheme Principle specifies that the kind of morpheme that should never occur in the EL is a late outsider system morpheme, one that has grammatical relationships outside of its

maximal projection. Now that it has been realized that there are not only two but four discrete types of morpheme that differ in predictable ways depending on their function in a particular structure, it follows that there should be specific incongruences in morpheme types between languages. If there is a particular order in which these morphemes are accessed from the mental lexicon, a hierarchy should emerge whereby certain classes of morphemes are more likely to be codeswitched than others.

The 4-M Model should help to explain why content morphemes are more frequently switched than any of the three classes of system morpheme. Furthermore, it would seem that early system morphemes are more likely to occur frequently in the EL than are late bridge system morphemes, and late bridge system morphemes are more likely to occur in the EL than are late outsider morphemes, which are expected not to occur in the EL at all in mixed constituents.

Now that we have reviewed the basic workings of Myers-Scotton and Jake's 4-M Model as it has informed Myers-Scotton's Matrix Language Frame Model, some questions that have guided my research are as follows:

1. Does such a hierarchy exist for how frequently certain types of morphemes are switched into the EL? That is, are early system morphemes the second most susceptible to being switched after content morphemes, followed by late system morphemes?
2. How often do late bridge system morphemes trigger EL islands? When they do, is there anything structurally significant about the utterance to which they belong?
3. Can violations to either the Morpheme-Order Principle or the System Morpheme Principle avoid triggering EL islands? Why?

The following analysis will explore the grammatical violations that trigger EL islands in Hiaki-Spanish discourse.

4. Methods

Because there is such a fine line between lexical borrowing and grammatical codeswitching, linguists have been grappling with the definition of that line since the 1970s (Gumperz 1977, Pfaff 1979, Poplack 1981).

Poplack (1980) produces a chart that illustrates the levels of integration that a lexical item can have in the recipient language, which is replicated below in Figure (28). The criteria she considers include phonological, morphological, and syntactic integration.

Figure (28). *Identification of code-switching according to type of integration into the base language*

Type	Levels of Integration Into Base Language			CS?	Example
	phon	morph	syn		
1	✓	✓	✓	No	Es posible que te MOGUEEN. (They might mug you.)
2	-	-	✓	Yes	Las palabras HEAVY DUTY, bien grandes, se me han olvidado. (I've forgotten the real big, heavy-duty words.)
3	✓	-	-	Yes	da 'wari se (That's what he said)
4	-	-	-	Yes	No creo que son FIFTY DOLLAR SUEDE ONES. (I don't think they're fifty- dollar suede ones.)

(Poplack 1980: 584 Table 1)

According to Poplack, Type 1 exemplifies lexical borrowing while Types 2-4 all constitute code switching. Poplack's Type 1 displays phonological, morphological, and syntactic integration. In the example of a Type 1 form in Figure 28, Poplack argues that *mogueen* illustrates the phonological integration of the English verb, *to mug*, by assimilating the mid-

central vowel, /ʌ/, into the Spanish back close-mid vowel, /*o*/. Furthermore, we can tell that in its infinitive form, this Spanish verb would take the form, *moguear*. Its conjugation, *mogueen*, displays morphological integration because it has been inflected with a Spanish third person plural subjunctive ending -*en*. Lastly, this verb has presumably been syntactically integrated into Spanish because the object pronoun, *te*, is behaving like a clitic, leaning on the verb to its right.

Poplack's Type 2 only displays syntactic integration and is therefore not defined as lexical borrowing. This syntactic integration refers to the placement of the codeswitched adjective, *heavy duty*, with relation to the noun it is modifying. Although English adjectives typically precede the nouns they modify, and although the adjective in the Type 2 example is in English, it has been syntactically integrated into Spanish because it follows the noun it modifies, *palabras*. It is difficult to tell, however, whether *heavy duty* has been morphologically integrated into Spanish because Spanish adjectives are required to agree with their noun heads. Although *heavy duty* follows Spanish word order, it is left uninflected. Myers-Scotton predicts that certain forms will be left bare to facilitate grammatical congruence between the ML and the EL.

Poplack's Type 3 only displays phonological integration. In the Type 3 example, the target English phrase, *that's what he said*, is integrated into Spanish phonology by replacing some English phonemes with Spanish ones. One such example is the debuccalization of the word-final /d/ of *said* to front close-mid /*e*/. Furthermore, the schwa typical of American English pronunciation of the vowel in the word, *what*, is converted to a Spanish open-front /*a*/.

While Poplack implies that an example with only morphological integration either would not exist or would not constitute codeswitching, Poplack's Type 4 illustrates no integration and is still an example of codeswitching. For Poplack, this is perhaps the most unambiguous type of

codeswitching because it most closely resembles what Myers-Scotton would call the EL and least closely resembles the base language, or the ML.

While the criteria initially proposed by Poplack for distinguishing between CS and lexical borrowing suggest that the integration of forms into the recipient language is unambiguous, subsequent theories have argued that the distinction between CS and lexical borrowing is not necessarily contingent upon integration of any kind. Because the measure of phonological integration can be highly variable, Poplack, Sankoff, and Miller (1988) have proposed a category of words, *nonce borrowings*, that display morphosyntactic integration but may not display phonological integration. Collecting data from a sample of areas in the Ottawa-Hull region in Canada, Poplack, Sankoff, and Miller compared the levels of exposure to English that each participant had. The phenomenon of nonce borrowing is exemplified by the contrast between the francization of the English word "to cope" and the retention of the English vowel in the English loanword, "to fire," as seen in (29).

(29) a. Je serais pas capable de *coper* ([kɔˈpe]) avec.
'I couldn't cope with it.'
b. Il est pas capable de *firer* ([faiˈʁe]) ses curés.
'He can't fire his priests.'

(Poplack, Sankoff, and Miller 1988: 52)

Although the category of nonce borrowings would seem to account for forms that are phonologically ambiguous, Myers-Scotton (1993) has argued that this ambiguity is not resolved by assigning it an arbitrary category (182). Pointing to such examples as the loan from Yiddish to English '*shlep*,' which retains the non-English consonant cluster /ʃl/, Myers-Scotton reasons that "some long-established B[orrowed] forms in many languages show far from complete phonological integration" (1993: 179). Because a form's phonological integration is often ambiguous, it cannot be the primary criterion that determines whether a form is borrowed or not.

Nevertheless, there is still reason to believe that the phonological integration of a lexical item into the recipient language is demonstrative of lexical borrowing rather than CS. One such example is the lenition of word-initial Spanish /d/ to an /l/ in Hiaki due to the absence of /d/ in the Hiaki phoneme inventory. The Hiaki version of the Spanish word for Sunday, *domingo*, will often take the form of *lominko*, with additional devoicing of the /g/ to a /k/. Similarly, Spanish *dios* (god) will often become *lios* or even *lioh* when the /s/ debuccalizes in Hiaki when in coda (syllable-final) position. While the retention of phonological properties of a loanword does not necessarily signify CS, the phonological integration of a form into its recipient language may indicate its status as a loanword and therefore not as a CS form.

By illustrating that CS forms may undergo the same kind of morphological integration as forms that are lexically borrowed, Myers-Scotton (1993) rejects the binary model of integration proposed by Poplack. While B forms do tend to demonstrate more morphological integration into the recipient language than do CS forms, this "seems to be a difference in degree, not in kind" (183). In other words, as evidenced by data from two Bantu languages, while CS forms tend to take the most commonly used affixes in a given language, the range of morphology compatible with B forms may be more extensive. However, as Myers-Scotton points out, this is not always the case. There are a number of borrowed nouns into English that do not comply with English plural morphology, such as *syllabus/syllabi* and *datum/data* (186). Like phonological integration, the morphosyntactic integration of a form into its recipient language can be variable and ambiguous.

However, like with phonological integration, there is evidence that the degree of morphological integration of a lexical item into the recipient language can be indicative of loaning. As Myers-Scotton predicts, while certain morphological processes may be compatible

with CS forms, those compatible with B forms are wider in range. For example, Hiaki reduplication of verbs can illustrate a habitual action, a progressive action, or emphasis (often on an imperative), and reduplication of Hiaki nouns can illustrate plural agreement or possession (Harley and Levya 2009). In Spanish, on the other hand, partial reduplication does not exist as a morphological process.[5] While the Hiaki corpus shows no examples of Spanish CS forms undergoing reduplication, there were two examples of borrowed forms from Spanish that underwent reduplication, both of which will be addressed below.

While the type of morphosyntactic behavior exhibited by CS forms does not differ significantly from that of borrowed forms (hereafter B forms), and their phonological integration is variable, the assumption that CS forms and B forms are inherently distinguishable implies that all B forms serve a uniform purpose: to fill a perceived lexical gap in the recipient language. However, based on bilingual data in Shona/English and Swahili/English, Myers-Scotton calls for a distinction between two types of B forms, *cultural B forms* and *core B forms* (1993: 168-169). While cultural B forms do add new vocabulary to the lexicon of the recipient language (such as Swahili/English *baisikeli* 'bicycle' or Shona/English *bhajeti* 'budget'), core B forms are not borrowed out of need and generally have equivalents in the recipient language (169).

(30) has two examples of cultural borrowed forms from Spanish to Hiaki:

(30) Chikti weye'e-po, *Lominko*-po *misa* ta'a-po, *misa*-ta chupu-k-o,
even go(sg)-RLTVZR Sunday-LOC mass day-LOC mass-ACC finish-PERF-when
nehpo inilen enchim aa eteho-ria.
1.SG.NOM like 2.PL.ACC 3.SG.ACC speak-APPL
'In every way, on the day of Sunday mass, when mass is over, I say these things will forgive me and our Holy Mother, She will forgive me.' (Interview 9A&B #3.229)

[5] However, there is one kind of reduplication that does exist in Spanish, and it is called complete reduplication. Complete reduplication describes the process whereby an entire form is reduplicated, rather only part of a word (e.g. *I <u>really really</u> mean it*).

The two examples of cultural B forms in (30) are *lominko* and *misa*, both of which are intimately tied to the Christian religion imposed on Hiaki people starting in the 16th century. *Lominko*, or *Domingo* in Spanish, refers to Sunday on the seven-day (Gregorian) calendar system. When the Spanish colonized the Americas, they also imported this system, thereby introducing a novel set of cultural concepts to the Hiaki. In this sentence, *misa* (mass) is another such example. Referring specifically to the Christian church service, *misa* is a cultural B-form that has been assimilated into the Hiaki language to describe an aspect of Spanish culture that, at the time, had no equivalent in Hiaki. Because of the prolonged colonial contact between the Hiakis and the Spanish, terms like *lominko* and *misa* have become integrated into the Hiaki language and culture.

(31), on the other hand, is an example of a core B form from Spanish to Hiaki. Unlike *lominko* or *misa*, which fill cultural gaps in the Hiaki lexicon, core B-forms describe borrowed forms that have equivalents in the target language.

(31) Maala hunum Yukatane-o toi-wa-ka *veintisinko*-taka
mother there Yucatan-DIR take-PASS-PPL twenty.five-body
veha partaroa-na tea
then divide-IRR.PASS quot
'When mother was taken to Yucatan, she said that twenty-five [people] would be set aside, she said.' (Interview 2B #298)

Numerals are common examples of core B forms in the Hiaki corpus. The Hiaki number system is based on the groups of five fingers that comprise a hand: *senu* 'finger' indicates one of five on a *mam(ni)* 'hand' (Castro 1989: 196). Likewise, *senu taka* 'twenty' (lit. 'one body') is derived in reference to a body's complete set of four sets of five fingers (Castro 1989: 196). Beyond nineteen, the Hiaki system is vigesimal, in reference to the number of 'one bodies' being

counted: forty is *woi taka* 'two bodies,' fifty is *woi taka ama woh mamni* 'two bodies and two hands (forty and ten),' and so on (Dedrick and Casad 1999: 231).

In addition to cardinal numbers, Figueroa's (2014) research shows that ordinal numbers have also been loaned into Hiaki from Spanish. I have analyzed them as such, with the exception of two examples addressed at the end.

In example (31), *veintisinko* (twenty-five) is not borrowed from Spanish out of necessity—the Hiaki equivalent of twenty-five would be *senu taka ama mamni* (lit. *one body plus hand* 'five'). Estrada (2009) predicts that the motivation for using certain loanwords—particularly numbers—over their equivalents in Hiaki is word economy: they will favor the shortest lexical item over a phrase (830). She illustrates this point with the difference between the words for *fifteen*. While Spanish *kinse* (*quince*) is a single lexical item, Hiaki would express the same number as the phrasal expression, *wo[i] mamni ama mamni*, or 'two hands plus hand' (Estrada 2009: 830).

In example (31), *veintisinko* is representative of twenty-five people, who "would be set aside." While *veintisinko* is a multimorphemic object in Spanish, it nevertheless still adheres to Hiaki word order by preceding the verb, *partaroa-na*.

Further evidence that Spanish numerals are B-forms and not CS forms is found in their ability to reduplicate to convey plural agreement. (32) and (33) illustrate this phenomenon:

(32) Huname veha, kia si'ime weepulai-ka ma-mamni-m, ve-*veinte*-m, di-*dies*-im ,
those.ones then just all one-ACC RED-five-PL RED-twenty-PL RED-ten-PL
nu-nu'u-ka tea uka hente-ta
RED-get-PERF quot that people-ACC
'Those, then all of them took one, five, twenty, ten of the people.' (Interview 2B #220.2)

(33) Ve-*veinte*-taka emo hinu-wa-k ti hiia-ka, kia ori,
RED-twenty-body 3.PL.REFL buy-PASS-PERF quot quot-PERF just [interj]
emo si'ime emo varko-po kima'a-wa-k emo nuksaka'a-wa-k
3.PL.REFL all 3.PL.REFL ship-LOC bring(pl.obj)-PASS-PERF

emo nuksaka'a-wa-k
3.PL.REFL take.away-PASS-PERF
'Twenty of them were bought, they said and were just boarded on the boats, and were taken away…' (Interview 2B #297.3)

The numbers in (32), a mix between Spanish forms and Hiaki forms, and *veinte* in (30), reduplicate to illustrate plural adjective-noun agreement. (33) also illustrates additional grammatical influence from Hiaki on a Spanish loanword. In addition to undergoing reduplication, *veveintetaka* behaves like Hiaki *senutaka* 'one body.' The compounding of a Spanish numeral with a Hiaki word that is specifically used with Hiaki numerals evidences its status as a B form into the Hiaki lexicon.

Although the range of morphology available to B-forms is wider than that of CS forms, most B forms and CS forms may undergo the same morphosyntactic processes in the production of bilingual speech (Myers-Scotton 1993: 206). Myers-Scotton proposes that the most promising distinction between B-forms and CS forms is their frequency over time in the recipient language. While cultural B-forms will exhibit high frequency over time compared to core B forms, core B forms will occur more frequently over time than other CS forms in the EL (207). If B-forms occur more frequently and exhibit a wider range of morphological compatibility with the recipient language, they must be late-stage CS forms that have gradually become loanwords integrated into the mental lexicon (204). If a CS form is used regularly over time, it will enter into the mental lexicon as a B form. However, as long as a form does not recur regularly in bilingual speech, it will remain a CS form.

4.1 Grammatical Borrowing in Hiaki

Although many Spanish loanwords to Hiaki are morphologically bare, there are three common types of inflection that appear on Spanish loanwords that bear mentioning.

There are two types of plural morphology that may occur on nominal Spanish loans to Hiaki. These both involve *semantic bleaching*, or the process whereby an affix becomes semantically null (Estrada and Guerrero 2017: 421).

(34) contains a noun borrowed as a plural from Spanish, marked by the Spanish plural suffix *-s*, that behaves as a singular noun in Hiaki.

(34) U waakas korapo weyek.
The cow corral-LOC walk-PERF
'The cow [was] in the corral.' (Estrada Fernández et al. 2004: 193)

Although it is marked as a Spanish plural, *wakas* 'cow' (Spanish *vaca*) functions as a singular noun in (34). Its singularity is reinforced by its specification by singular definite determiner, *u*. The singularity of *waakas* is further demonstrated by the ability to pluralize it with the Hiaki plural marker, *-(i)m*, as shown in (35).

(35) Ta pos vempo ume *wakas*-im pos huet *rancho*-m-po nunu'e.
but well 3.PL.NOM det.PL cow-PL well there ranch-PL-LOC habit-get
'Well, they used to get the cows on the ranches somewhere.' (Interview 2B #186.3)

In example (35), not only is *wakas* pluralized by the Hiaki plural affix, *-im*; the Hiaki plural definite determiner, *ume*, acts as the specifier of *wakas-im*.

A second type of semantic bleaching also occurs with some Spanish nouns that are loaned into the Hiaki lexicon. This type occurs when a non-plural or non-collective Spanish noun is incorporated into the Hiaki lexicon by adding a semantically null Hiaki plural affix, which has been bleached of its plural meaning. One such example is the word *livrom* 'book,' which acts either as a singular or a plural form based on context (Estrada Fernández 2004: 130). The form cannot take additional plural morphology for disambiguation.

(36) illustrates the ability to render *livrom* plural in the context of a plural definite determiner and reduplicated adjective *bweere* 'big' to illustrate plural agreement.

(36) Ume livrom bwe'ebwere
DET.PL book RED.PL-big
'The books are big' (Molina et al. 1999: 87)

In addition to these two types of nominal inflection on Spanish loanwords to Hiaki, Spanish infinitival forms may also be take a verbalizing suffix, *-oa*, which was a loanword adaptation strategy originally borrowed from speakers of Nahuatl (Estrada and Guerrero 2007: 421). By adding *-oa* to a Spanish infinitive, the form becomes compatible with Hiaki verbal affixes, including the null affixes that indicate the present tense and the infinitive. Examples (37) to (39) illustrate this phenomenon.

(37) Chukula intok katin, segunda-po intuchi *rettrataroa*-ka-me
later and remember second-LOC again portrait-PERF-s.rel
'And later, remember, a second time they were photographed again.'
(Interview 3A #174.5)

(38) *Aver*, *aversi* lutu'uriapo itom, itom intuchi ili *aumentaroa*-ne
let's.see let's.see truth-LOC 1.PL.ACC 1.PL.ACC again little increase-FUT
'Let's see, let's see if it is true that our, our money will be increased.'
(Interview 3A #197.16)

(39) Inim *ehersito*-po ee *kumpliaroa*-k
here military-LOC 2.SG.NOM accomplish-PERF
'You have done your service in the military.' (Interview 3B #15.14)

In all of the above examples, *-oa* is added to a Spanish infinitive to enable it to be marked with Hiaki verbal morphology, such as perfective *–k(a)* as seen in (37) and (39), subject relativizer *-m(e)* as seen in (37), and future *-ne* as seen in (39). Once *-oa* has been added to the Spanish infinitive, these verbs can be inflected in Hiaki.

4.2 CS and B forms in my Hiaki corpus

In my analysis of the Hiaki-Spanish corpus, I have taken into consideration the degree of morphological and syntactic integration and relative frequency of lexical items to determine

which examples are illustrative of CS and which exemplify borrowing. Regularly inflected B-forms, such as Spanish verbs ending in *-oa* and Spanish nouns with bleached plurality, were never counted as CS forms. Certain other known B-forms, such as conjunctions *porque* 'because' and *o* 'or' (Estrada 2009: 837), were analyzed as such in appropriate contexts. If they occurred surrounded by Hiaki, they were taken as B-forms. If, however, they were surrounded by Spanish discourse in the form of an EL island, they were analyzed as Spanish forms. Spanish forms that arose with high frequency across all interviews and were typically surrounded by Hiaki discourse were classified as B-forms as well. The Spanish word for people, *gente*, is one such example. Throughout the Hiaki-Spanish corpus, *gente* (also spelled *hente*) appeared 44 times surrounded by Hiaki discourse, and 4 times surrounded by Spanish discourse. Like borrowed conjunctions, if *gente* appeared surrounded by Spanish discourse, it was taken as a Spanish form.

If forms were phonologically altered to adhere to the phonemic inventory of Hiaki, like *lios* and *lominko*, they were also taken as B-forms. However, if those same forms were left phonologically unaltered, like *dios* and *domingo*, I looked to the extent of their morphological and syntactic integration, as well as their syntactic context, to determine whether they should be treated as CS forms.

Titles including Spanish terms, such as *Señor Presidente* 'Mr. President' or *Heneral Mori* 'General Mori,' were also analyzed as B forms.

Using these criteria to distinguish CS forms from B forms, the following section will examine the contexts in which Hiaki-Spanish bilingual discourse adheres to the Matrix Language Frame Model proposed by Myers-Scotton (1993). Specifically, we will look at examples that adhere to the Morpheme-Order Principle and the System Morpheme Principle, as well as

examples that violate either Principle predictably according to the EL Island Trigger Hypothesis. We will then address examples of fixed expressions from the EL Implicational Hierarchy Hypothesis and a few other examples that do not fit into any of the aforementioned categories.

5. Analysis

5.1 Overview of EL Island Triggers

An EL island is defined as a constituent formed entirely in the EL amid ML or CS discourse that is "produced when ML morphosyntactic procedures are inhibited and EL procedures are activated" (Myers-Scotton 1993: 6). EL islands also "must be composed of at least two lexemes/morphemes in a hierarchical relationship" (138). Because the Uniform Structure Principle favors the maximal simplification of CS grammar to fit into the framework provided by the ML whenever possible, the appearance of EL islands in CS discourse must be constrained.

The EL Island Trigger Hypothesis has two implications: an EL island will occur if either the Morpheme-Order Principle or the System Morpheme Principle is violated.

(40) **The EL Island Trigger Hypothesis**

a. If an EL morpheme implicating non-ML morpheme order in a constituent is accessed as the initial element in a constituent, this triggers processing of the entire constituent in the EL, thereby forming an EL island. (Myers-Scotton 1993: 139)

This predicts that morphemes accessed in constituent-initial position in the EL that violate the surface word order of the ML will trigger EL islands.

b. If any EL system morpheme, or an EL content morpheme not showing correspondences to an ML content morpheme, is accessed, ML procedures are inhibited, and the entire constituent of which the EL morpheme is a part must be produced as an EL island. (Myers-Scotton 1993: 140)

This predicts that if EL content or system morphemes are accessed that require structures that are grammatically incongruent with the ML, particularly due to morphological agreement, these will also trigger EL islands.

While the EL Island Trigger Hypothesis dictates which types of constituents *must* trigger EL islands, the EL Implicational Hierarchy Hypothesis expresses which types of constituents are *likely* found in the EL. The EL Implicational Hierarchy is as follows:

1. Formulaic expressions and idioms (especially as time and manner PPs but also as VP complements) [e.g. *under the weather* or *the bee's knees*];
2. Other time and manner expressions (NP/PP adjuncts used adverbially) [e.g. *until tomorrow* or *as of Wednesday*];
3. Quantifier expressions (APs and NPs especially as VP complements) [e.g. *every kind* or *none of them*];
4. Non-quantifier, non-time NPs as VP complements (NPs, APs, CPs) [e.g. *I carried the book*];
5. Agent NPs [e.g. *My uncle Bill went to the store*];
6. Thematic role- and case-assigners, i.e. main finite verbs (with full inflections) [e.g. *I soaked up the water* or *She offered me a chocolate-covered raisin*]

(Myers-Scotton 1993:144)

The EL Implicational Hierarchy Hypothesis predicts that the more formulaic in structure a constituent is and the farther it is from the main arguments of a sentence, the more likely it is to occur as an EL island and the less likely it is to be switched into the EL at all.

Section 5.2 will examine data from the Hiaki corpus in which the Morpheme-Order Principle correctly predicts the surface word order of constituents. Section 5.2.1 will then examine cases in which violations of the Morpheme-Order Principle result in EL islands.

Section 5.3 will examine cases in which the System Morpheme Principle correctly predicts which classes of morphemes the EL can contribute to CS discourse. Section 5.3.1 will then discuss violations of the System Morpheme Principle that trigger EL islands.

Section 5.4 will examine cases in which the EL Implicational Hierarchy Hypothesis correctly predicts which types of fixed constituents (usually expressions) appear in the EL.

5.2 Morpheme-Order Principle

The Morpheme-Order Principle, reproduced in (41), predicts that mixed constituents should adhere to the word order of the ML:

(41) **The Morpheme-Order Principle**: In ML+ EL constituents consisting of singly-occurring EL lexemes and any number of ML morphemes, surface morpheme order (reflecting surface syntactic relations) will be that of the ML. (Myers-Scotton 1993: 83)

The Morpheme-Order Principle can be observed with relation to verb-object order in Hiaki-Spanish CS. It has been established that while Hiaki is a head-final language, Spanish is a strongly head-initial language. This difference is manifest in their respective verb-object orders. While Hiaki is a strictly (S)OV language, Spanish most typically demonstrates (S)VO word order when the object is an overt DP and not a clitic. However, the Morpheme-Order Principle dictates that regardless of incongruences in word order between the ML and the EL in CS discourse, the surface word order should always reflect that of the ML.

Example (42) illustrates the Morpheme-Order Principle as it applies to an utterance in Hiaki and Spanish. Hiaki is the ML, and Spanish is the EL.

(42) Inika *traision*-ta ame-u hoo-su-k.
this.one betrayal-ACC 3.PL.ACC-DIR do-COMPL-PERF
'This is how they were betrayed,'
lit. 'This is how (they) did betrayal to them.' (Interview 8A&B #20.157)

In (42) we can tell that Hiaki is the ML, first of all, because of the volume of morphemes in Hiaki as compared to those in Spanish. Structurally, Hiaki contributes all the system morphemes in this utterance: *-ta* (ACC), *-u* (DIR), *-su* (COMPL), and *-k* (PERF). (See Sections 3.2.2 to 3.4 for a more detailed discussion of the System Morpheme Principle.) However, this

utterance also adheres entirely to Hiaki morpheme order, even though Spanish word order would dictate that the verb should always precede its overt DP object. Although the object, *traision* (sic), is in Spanish, it precedes the Hiaki verb, *hoo-su-k*, as predicted by the Morpheme-Order Principle.

Not only does a Spanish object precede a Hiaki verb here; the indirect object, *ame-u*, also precedes the verb, which is also predicted by Hiaki word order. (42) exemplifies the prototypical "singly-occurring [EL] lexeme" in a mixed constituent that exhibits ML morpheme order.

(43) similarly illustrates Hiaki morpheme order with a Spanish object preceding a Hiaki verb. Unlike example (42), there is no indirect object in (43).

(43) A'apo *Dios* aa hippue uka *poder*-ta
3.SG.NOM god 3.SG.ACC own that power-ACC
'He, God, has that power,'
lit. 'He, God, has it, that power.' (Interview 9A&B #3.87)

Like in example (42), in this example Hiaki is the ML and Spanish is the EL because the majority of morphemes in this utterance, including all system morphemes, come from Hiaki: definite determiner *uka* and accusative marker *–ta*. Spanish, however, only contributes a content morpheme (*Dios*). Also like example (42), the utterance in (43) follows Hiaki word order with respect to verb-object placement. Unlike the previous example, however, the Spanish direct object undergoes right dislocation[6], or the process by which the direct object is replaced by a pronominal placeholder and moved after the verb. In this example, the 3rd person singular

[6] Right dislocation can also be observed in utterances entirely formed in Hiaki, like in the difference between (a) and (b).
(a) hu hamut a= vicha-k hu-ka o'ou-ta
DEF woman 3.SG.ACC= see-PERF DEF-ACC man-ACC
'The woman saw him, the man.' (Rude 1996: 501)
(b) hu hamut hu-ka o'ou-ta vicha-k
DEF woman DEF-ACC man-ACC see-PERF
'The woman saw the man.'

accusative *aa*, which does precede the Hiaki verb, stands for the object. The object is later clarified in Spanish to be 'that power.'

In both of the above examples, the Morpheme-Order Principle correctly predicts the word order for mixed constituents, regardless of incongruences in the settings of the head-directionality parameter between the two languages engaged in CS.

Hiaki-Spanish data also support the Morpheme-Order Principle as it applies to adjective-noun order. Unlike Hiaki, in which the adjective precedes the noun (Dedrick and Casad 1999: 235), Spanish nominal adjuncts (including adjectives) are most typically post-nominal (Zagona 2002: 89-91). Example (44) illustrates proper Hiaki word order:

(44) Si bweere *plaatano*-m
very big banana-PL
'Very big bananas' (Interview 3B #212)

Although the noun is in Spanish and the Hiaki adjective is modified by an adverb, (44) still follows Hiaki surface word order. While Spanish word order dictates that adjectives will most likely follow the nouns they modify[7], the Hiaki adjective phrase *si bweere* 'very big' precedes the noun it modifies, *plaatanom* 'bananas.'

The Morpheme-Order Principle can also be observed in Hiaki-Spanish CS with relation to the morpheme order of post- and prepositional phrases. Unlike Spanish prepositions, which must precede their objects, Hiaki has postpositions, which follow their objects.

The Morpheme-Order Principle as it applies to postpositional phrases correctly predicts the behavior of example (45):

[7] Spanish adjectives most typically follow the nouns they modify. However, there are some that may precede the nouns they modify, some of which change meaning when they appear prenominally. *Gran* (derived from *grande*) 'great' is one of them. When placed after a noun, *grande* means big. When placed before a noun, however, *gran* means great as in (*Fue un gran hombre* 'He was a great man').

(45) Mik-wa, *cada quince dia*-po.
give-PASS each fifteen day-LOC
'[It was given] every fifteen days.' (Interview 2A #179.2)

The ML in example (45) is Hiaki because it contributes two late bridge system morphemes (passive *-wa* and locative *-po*), and the utterance follows Hiaki word order. A closer translation might be 'on every fifteenth day,' where *cada quince dia* is the object of locative *-po* 'on.' Spanish is the EL because it contributes only content morphemes and adheres to the word order of the ML. Although the object of the postposition, *cada quince dia*, is in the EL, the utterance as a whole maintains ML word order.

The constituent that is contributed by Spanish in this utterance is what Myers-Scotton refers to as a time adverbial (1993: 144). Time adverbials also happen to be among the types of constituents that are likely to occur in the form of EL islands.

Example (46) shows the same kind of morpheme order as in example (45):

(46) Humaku'u, *veinti dos*-po haku'u, hunum haku'u.
maybe twenty two-LOC where there where
'Perhaps since 1922, around then, sometime then.' (Interview 2A #185.2)

The adherence to the Morpheme-Order Principle is better illustrated in example (46) because the postpositional phrase proves not to trigger an EL island in the discourse that follows. The EL Island Trigger Hypothesis (see Section 5.1) predicts that violations of the Morpheme-Order Principle will result in EL islands. Unlike example (45), example (46) continues after the postpositional phrase in the ML (Hiaki). Although Spanish numbers contributed to mixed Hiaki-Spanish constituents are often B forms, the retention of the word-final /s/ on *dos* 'two' does not show word-final debuccalization of /s/ to /h/ expected of B forms in Hiaki. For this reason, *veinti dos* has been treated as a CS form in this example. Because we can see that the utterance has

been completed in Hiaki, the Spanish object of the postposition, *veinti dos*, has not violated the Morpheme-Order Principle.

When the ML grammatical framework is activated in a mixed constituent, the constituent adheres to the Morpheme-Order Principle. This is particularly well-illustrated by examples such as (45) and (46) because otherwise they would follow opposing head-directionality parameter settings and could not be judged as grammatical in either language. As long as the Morpheme-Order Principle is active, the constituent only has to check for grammaticality against the framework of the ML, thus also adhering to the Uniform Structure Principle.

However, mixed constituents in CS do not always automatically adhere to the Morpheme-Order Principle. The EL Island Trigger Hypothesis predicts that when the Morpheme-Order Principle is violated by an EL contribution to a mixed constituent, ML parameters should thereafter be inhibited. Section 5.2.1 will discuss violations of the Morpheme-Order Principle and ensuing EL islands.

5.2.1 Morpheme-Order Principle Violations

As the EL Island Trigger Hypothesis predicts, violations of the Morpheme-Order Principle should trigger EL islands. These violations, often caused by what Myers-Scotton refers to as "misfiring," occur when a morpheme that violates the Morpheme-Order Principle is prematurely accessed in the EL and consequently causes the ML grammatical framework to be inhibited while the EL grammar takes over the constituent (1993: 139).

As previously discussed, the Morpheme-Order Principle is most clearly illustrated in CS between languages like Hiaki and Spanish, where the settings of the head-directionality

parameter are incongruent. This also means that the Morpheme-Order Principle is easily violated when speakers "misfire," accessing EL morphemes "prematurely" according to ML structure.

Example (47) illustrates the violation of the Morpheme-Order Principle when a Spanish verb is accessed before the object of the verb. This is one of 4 such examples in my Hiaki corpus.

(47) I'an empo *tienes el, que, el mando en tus mano-s*
now 2.SG.NOM have-2.sg.PRES the what the power in 2.PL.ACC hand-PL
'Now you have the, what, the power in your hands.' (Interview 5A&B #442.3)

Like the examples in the previous section, in this one Hiaki is the ML and Spanish is the EL. Recall that Spanish tends to follow (S)VO unmarked word order while Hiaki follows (S)OV word order. Example (47) illustrates what happens when an EL (Spanish) verb is accessed before its object when the ML requires (S)OV order. This violates ML word order and therefore the Morpheme-Order Principle. When *tienes* 'have' is accessed, ML procedures must then be inhibited and the rest of the constituent must be formed in Spanish. Furthermore, while *tienes el mando* 'you have the power' forms a complete verb phrase constituent that adheres to Spanish word order, the rest of the utterance is completed in Spanish as well. This is because the preposition *en* 'in' triggers a second EL island due to incongruence in preposition/postposition-object word order between Hiaki and Spanish. Because *en*, a Spanish preposition, must precede its object, while Hiaki postpositions follow their objects, a constituent started with a Spanish preposition must be finished in Spanish with Spanish word order. Note, however, that the Hiaki 2.SG.NOM subject pronoun agrees with the Spanish 2.SG.PRES conjugation of *tienes*. Although the subject and the verb are in different languages, and although Hiaki verbs do not need to illustrate agreement with their subjects, *empo* and *tienes* nevertheless agree in person and number.

(48) also illustrates a violation of the Morpheme-Order Principle, but with relation to adjective-noun order. This is one of two adjective order violations in my Hiaki corpus. (44) [here listed as (49)] from Section 5.2 is reproduced below for comparison.

(48) *Plaatano macho*-m chea bweere
banana male-PL more big
'Male bananas are larger.' (Interview 3B #213)

(49) Si bweere *plaatano*-m
very big banana-PL
'Very big bananas' (Interview 3B #212)

While example (49) from Section 5.2 adheres to the word order of the ML (Hiaki), (48) illustrates a violation of the Morpheme-Order Principle by misfiring. In (49), the adjective phrase precedes the noun it modifies, while in Spanish such a phrase would follow the noun. (48), however, illustrates that once the Spanish noun has been accessed before its modifier, the constituent must be completed in Spanish.

Similarly, (50) illustrates an example of a violation of the Morpheme-Order Principle when a Spanish word is accessed too early. However, unlike example (48), the violation in (50) stems from misfiring a Spanish preposition. In my Hiaki corpus, 21 EL islands resulted from misfiring Spanish prepositions.

(50) *Es que* uu yoi pos kaa archivaroa, porque
is-3.PRES that the Mexican well NEG "archive" because
para el es una verguenza
for 3.SG.ACC is-3.PRES INDEF-FEM embarrassment
'It is because the Mexicans did not want to record this, because for them it is something to be ashamed of.' (Interview 2A #87)

In the above example, although it seems the utterance is bookended by EL islands, *es que* 'it is because' is a fixed expression in Spanish and occurs in Spanish due to the EL Implicational

Hierarchy Hypothesis. (See Section 5.4 for a discussion of the EL Implicational Hierarchy Hypothesis as it applies to Spanish-Hiaki discourse.) The Spanish preposition that triggers the EL island in the latter half of the utterance is *para*. While Spanish prepositions behave as free morphemes that precede their objects, Hiaki postpositions are bound to their objects and must follow them. Like examples (47) and (48), the utterance started in the ML in example (50) must be completed in the EL because a word (*para*) was accessed in the EL that violated the Morpheme-Order Principle. Furthermore, while *para el* 'for him' forms a complete EL island, an additional violation of the Morpheme-Order Principle triggers another EL island immediately following the prepositional phrase constituent.

Although the string of Spanish at the end of this utterance seems to be a single, long EL island, this would imply that *para el* was somehow not a complete constituent or that *el* (*él* 'he') continues to trigger the rest of the EL island. However, neither of these theories can be the case because there is nothing incomplete about *para el* 'for him' as a constituent, and for *el* to trigger an EL island by the current framing of the EL Island Trigger Hypothesis, it would either have to violate the Morpheme-Order Principle or the System Morpheme Principle. It cannot violate the Morpheme-Order Principle because *para* has already done so due to preposition word order, meaning that the object of the preposition does not need to violate surface word order. It also, however, does not violate the System Morpheme Principle because it is a content morpheme (it has been assigned a θ-role). In example (50), the second violation that triggers an EL island is accessing *es* 'it is' before its predicate, *una verguenza* 'an embarrassment.' This could also be due to the fact that Hiaki does not have a copular 'be' verb like *es* 'is' in Spanish.

Furthermore, *para* also triggers EL islands when its object is a verb. The closest English translation to this sense of *para* is *to* or *in order to*. Example (51) demonstrates this type of violation of the Morpheme-Order Principle.

(51) Hunaka, hunuka veha hooka *para venir-se* *desert-ado-s*
then that then sit.down.PL to come-REFL abandon-PTCP-PL
'Then that, that is what they did to come as deserters.' (Interview 3A #161.1)

Once again, *para* triggers an EL island in example (51). The difference between this example and the previous example in which *para* triggered an EL island is that in this case, the object of *para* is a verb phrase. This demonstrates that even when the object of a Spanish preposition is a verb, if a Spanish preposition is accessed before its object in a mixed constituent, such a construction violates the Morpheme-Order Principle and must result in an EL island.

While *para* alone triggers EL islands, expressions involving *para*—such as *para que*—do not always do so because they are fixed phrases. See Section 5.4 for a discussion of the EL Implicational Hierarchy Hypothesis.

Example (52) illustrates a different preposition violating the Morpheme-Order Principle. The ML is Hiaki because the verb phrase follows Hiaki word order, and the EL is Spanish.

(52) Kia…*entre* *ellos* *mismos*, pos emo omta.
Just among 3.PL.ACC REFL-PL well 3.PL.REFL hate
'Just…among one another, well they do not get along.' (Interview 2A #134.1)

Like preposition *para*, *entre* 'between' or 'among' also triggers an EL island in Hiaki-Spanish CS because it is accessed before its object, *ellos mismos* 'one another.'

In this section, we have seen that the Morpheme-Order Principle has proven to correctly account for the surface structure of many utterances in Hiaki-Spanish discourse when the ML and the EL disagree about word order and the settings of the head-directionality parameter. The examples in this section have illustrated the incongruence in head-directionality between Hiaki

and Spanish with respect to verb-object order and pre- or postpositional phrase order. The EL Island Trigger Hypothesis also correctly predicts which violations of the Morpheme-Order Principle will trigger EL islands in CS discourse.

5.3 System Morpheme Principle

The System Morpheme Principle, reproduced in (53), predicts that in mixed constituents, no late outsider system morphemes should come from the EL:

(53) **System Morpheme Principle**: In ML + EL constituents, all system morphemes which have grammatical relations external to their head constituent (i.e. which participate in the sentence's thematic role grid) will come from the ML.
(Myers-Scotton 1993: 83)

Although the System Morpheme Principle predicts that late outsider system morphemes should not come from the EL in mixed constituents, it does not prohibit the contribution of any other type of morpheme from the EL in mixed constituents. It does, however, imply that the later in the process of language production that the morpheme is accessed, the less likely it is to come from the EL**.** In other words, content morphemes (e.g. *cat*, *give*) are the type of morpheme that is most likely to come from the EL, followed by early system morphemes (e.g. plural markers or determiners)—which are often accessed with their content morpheme heads—and, lastly, by late bridge system morphemes (e.g. English possessive -*'s*) and late outsider system morphemes (e.g. English present 3.SG.NOM -*s*). The accuracy of this prediction will be addressed later.

Content morphemes[8] are the most frequently switched type of morpheme in the Hiaki corpus and the least likely to trigger EL islands. After content morphemes, early system morphemes should be almost just as likely to come from the EL and therefore the second-least likely to trigger EL islands.

[8] (Specifically nouns because fully-inflected Spanish verbs act as late outsiders and are very likely to trigger EL islands)

Because early system morphemes are so easily accessed with their content morpheme heads, these system morphemes are predicted to occur most frequently in the EL after content morphemes. As a result, early system morphemes may be found in both languages, due to a process called morpheme doubling. The Double-Morphology Hypothesis (54) dictates that early system morphemes are the only kind of morpheme allowed to double in mixed constituents:

(54) **Double-Morphology Hypothesis**: In mixed constituents in classic code switching, only embedded-language early system morphemes double system morphemes from the matrix language. (Myers-Scotton and Jake 2000: 1073)

Early system morphemes most typically include determiners (e.g. English *the* or *a/n*, Spanish *el/la*, Hiaki *uu/ume*) and plural markers (Spanish *-s*, Hiaki *-(i)m(me)*).

The Double-Morphology Hypothesis can be observed in Hiaki-Spanish CS discourse in example (55):

(55) *Mismo pariente*[9]*-s*-im
same relative-PL-PL
'Even those who are related' (Interview 1B #70.3)

Although the volume of Spanish morphemes in this example would seem to suggest its role as the ML, Hiaki must be the ML because of its contribution of an otherwise gratuitous early system morpheme. Although most Spanish adjectives follow the nouns they modify, *mismo* 'same' precedes the noun it modifies, which results in the same surface word order in Hiaki and Spanish. *Mismo parientes* may not be an EL island, at all, but instead a parallel structure between Spanish and Hiaki that does not violate Hiaki word order. The double morphology on *pariente*

[9] As we have seen, many Spanish forms are loaned into Hiaki by semantically bleaching the plural *-s* on a Spanish word, such as *waakas* 'cow' from Spanish *vaca*. In order to eliminate the possibility that *parientes* was functioning as a singular Spanish B form into Hiaki, I consulted two dictionaries and the wider Oberlin Linguistics Lab Hiaki database from which I gathered my data. *Parientes* is in neither dictionary and only occurs once (in the above example) in the Hiaki corpus. For that reason, I analyze it here as a CS form.

illustrates the possibility that an EL content morpheme will be accessed with its EL early system morpheme as well as a corresponding ML early system morpheme.

Late bridge system morphemes are the second latest morpheme type accessed in the process of speech production. For that reason, the System Morpheme Principle, when interpreted alongside the 4-M Model, suggests that the later in language production a morpheme is accessed, the more likely it is to trigger an EL island.

Late outsider morphemes are, therefore, the morpheme type that is the most likely to violate the System Morpheme Principle and trigger an EL island.

A CS utterance adheres to the System Morpheme Principle unless a late outsider morpheme, specifically, is accessed. EL early system morphemes may be accessed with their EL content morpheme heads due to near simultaneous accessing during language production. However, these EL DPs are not considered violations of the System Morpheme Principle.

In this section, we have discussed the manifestations of the System Morpheme Principle in CS discourse and seen the Double Morphology Hypothesis as illustrated by Hiaki-Spanish CS. The following section will address violations of the System Morpheme Principle that trigger EL islands in Hiaki-Spanish CS discourse.

5.3.1 System Morpheme Principle Violations

Although the System Morpheme Principle dictates that late outsider system morphemes should never occur in the EL in mixed constituents, this does not mean that the EL never contributes late outsider system morphemes to CS discourse. There is one type of constituent in CS discourse in which an EL late outsider system morpheme can occur: an EL island.

The EL Island Trigger Hypothesis predicts that violations of the System Morpheme Principle will trigger EL islands. Like violations of the Morpheme-Order Principle, violations of the System Morpheme Principle can be caused by misfiring, or the "misfiring" of EL morphemes that violate either Principle—in the case of the System Morpheme Principle, these are most commonly EL late outsider system morphemes.

Example (56) illustrates a violation of the System Morpheme Principle in Hiaki-Spanish discourse. Hiaki is the ML because it contributes all extra-EL island early system morphemes, such as plural markers (*-(i)m*) and determiners (*wate*).

(56) *Komo* im Papawe-m intok wate nasion-im, triivu-m,
like here Papago-PL and some nation-PL tribe-PL
si'ime *son* *dominio-s* *de, de los* *Amerikaano-s*.
all are-3.PL territory-PL of of the American-PL
'Like here some nations, tribes, all are under control of the, of the Americans.'
(Interview 9A&B #3.499)

The morpheme that triggers an EL island in (56) is the late outsider, *son* '(they) are'. Although *son* is no longer multimorphemic in the same way that most regular Spanish verb conjugations are, in that its stem and third person plural present tense ending are no longer transparent or discrete, the conjugation still functions as a late outsider because it must agree with its subject. Spanish illustrates robust person and number agreement between subject and finite verb. Because the function of late outsider system morphemes is to execute this kind of agreement, they are effectively spread between disparate pieces of an utterance, making them the grammatical glue that holds an utterance together. As a result, verbs that display this kind of agreement morphology can be thought of as outsiders, themselves. This illustrates what Myers-Scotton calls the "drag down" principle, which can be found in (57).

(57) **Drag-down Principle**: Any multi-morphemic unit containing an outsider SM shows distribution patterns as if it contained solely an outsider SM. (Myers-Scotton 2008: 33)

In other words, any multimorphemic unit onto which a late outsider system morpheme attaches itself behaves as a (late) outsider because it cannot be produced as a unit until the late outsider is affixed to it. Another example of the "drag down" principle as it behaves with EL verbs in Hiaki-Spanish discourse can be found in example (58) below.

In addition, Hiaki does not have a copular verb like English (*to be*) or Spanish (*ser/estar*). While *son* (the present tense third person plural conjugation of *ser*) does behave like an outsider due to the drag-down principle, it is also grammatically incongruent with the ML. For both of these reasons, the EL Island Trigger Hypothesis correctly predicts that *son* will trigger an EL (Spanish) island.

Example (58) also demonstrates the drag-down principle and subsequent violation of the System Morpheme Principle:

(58) Ta pos si ho
but well very interj
sab-e *Dios* *que* haksa humak si'ime-ta sua-wa-u-la.
know-3.pres god that where maybe all-ACC smart-PASS-obj.rvzr-adj.ppl
'Well, see…Creator knows where they gained all this knowledge.'
(Interview 2A 68.2)

The morpheme that triggers an EL island in this utterance is *sabe*, the third person singular present tense conjugation of *saber* 'to know.' The EL island that *sabe* triggers is not due to a violation of the Morpheme-Order Principle because *Dios* 'god' is not the object of *sabe* but the subject[10]. Although *saber* follows a less predictable conjugation pattern than regularly conjugated verbs do in Spanish, *sabe* is more multimorphemically transparent than *son* in example (56). It therefore drags the *sab-* root with it down to the level of the formulator because

[10] Post-verbal subjects occur frequently in Spanish, although native speakers' grammaticality judgments vary on precisely when they are permitted (Zagona 2002: 27).

sabe in its entirety could not be uttered without the third person ending. In this process, *sabe* triggers an EL island because it must refer to its subject, *Dios*.

Although previous examples have shown that Hiaki subjects can agree with Spanish verbs when the subject precedes the verb, this example supports the hypothesis that EL verbs must dictate the placement of their subjects. Bentahila and Davies' (1983) Moroccan Arabic-French corpus also supports this hypothesis (see Section 3.2.1). In the above example, because *sabe* 'knows' violates the System Morpheme Principle before the subject has been accessed, it triggers an EL island that must contain a Spanish subject. A counterexample would contain a Hiaki subject, as in *sabe lioh que*, but no such examples were found in my data.

Although *que* 'that' also occurs in the EL, it is not part of the EL island formed by *sabe Dios*. Late bridge morphemes like *que* function as complementizers, which are more susceptible to being switched than are late outsiders (Myers-Scotton 2008: 32). This is because of their role as structural connections rather than grammatical "glue." While late outsiders rely on information from disparate levels of language production in the brain in order to be produced, themselves, late bridges simply link distinct structures together. In this example, *que* is a complementizer that links a Spanish IP to an independent Hiaki IP at the level of CP.

This example and the following examples seem to suggest that if "that-like" complementizers can be so easily switched without triggering EL islands, perhaps these complementizers function as grammatical "refresh buttons" that allow the ML to switch at a new IP introduced by "that-like" complementizer C. Further evidence for this argument is that of all 61 /ke/s (46 *que*, 4 *ke*, and 11 *kee*) found in my data, 60 are unquestionably coordinating Spanish IPs to Hiaki IPs. The only one that is ambiguous does not coordinate two Hiaki structures but simply introduces an IP in sentence-initial position (*Aa, ke peronim inieni* 'Ah, these [what] bald

ones…[Interview 5A&B #254.2]). No examples in my data show /ke/ coordinating two Hiaki IPs, as in ?*Ti hiia que* '(S)he said that…'. Estrada Fernández (2009), in an evaluation of common discourse particles loaned into Hiaki, notes that in her data *ke* only occurs in the discourse of one speaker (837). Example (59) illustrates similar IP-level coordination with conditional *si* 'if'.

(59) *Ay no se si, si* Mansania-u kom tohi-wa-k
interj NEG know-3.pres.sg if if Manzanilla-DIR down bring-PASS-PERF
o Masaklan-po hakun.
or Mazatlan-LOC where
'I don't know if we were taken down to Manzanilla or to Mazatlan somewhere.'
(Interview 3A #107.4)

In this example, the Spanish IP being coordinated is *(Ay) no se* '(Ay), I don't know.' The Hiaki IP is all of what follows late bridge *si* 'if': *Mansaniau kom tohiwak o Masaklanpo hakun* 'we were taken down to Manzanilla or to Mazatlan somewhere.' Although under the MLF Model it would be possible to argue that the ML for the entire utterance is Hiaki and that *no se* violates the System Morpheme Principle as *sabe Dios* does in the previous example, the sentence-initial position of *no se* makes it impossible to tell whether the utterance started out with Hiaki as the ML. However, what is evident in this example is that a non-"that-like" complementizer is being accessed in a different language from what follows. Regardless of whether Spanish is the EL, *si* is not part of the Spanish constituent that precedes it, nor is it in Hiaki. This example illustrates yet another instance of a late bridge system morpheme not triggering an EL island.

Nevertheless, while Myers-Scotton's prediction about "that-like" complementizers frames them as the exception to the rule that late bridges will most likely trigger EL islands, my data show that other types of late bridges do not, in fact, tend to trigger EL islands, either.

(60) Si ori, hunuen kawi-po ane'e-tek intok kaita ama ayu-k-o,
very umm thus mountain-LOC do-SBJV and nothing there did-PERF-if
komo huya-m o hitasa , *como mat-ita-s* *o arbol-es asi*,
like tree-PL or what like bush-DIM-PL or tree-PL like.so
hunak veha hitaa bwa'a-ne ?
then then what eat-FUT
'If when you are in the mountains and there is nothing there, like plants/bushes or something, like little plants or trees like that, then what will you eat?'
(Interview 4A&B #319)

While one late bridge *komo* 'like' does not trigger an EL island in (60), the same late bridge *como* 'like' does trigger an EL island later in the utterance.

Like "that-like" complementizers, other types of late bridge morphemes (such as *como* 'like') behave as links between disparate parts of an utterance. Unlike late outsiders, however, late bridges are not concerned with agreement of any kind. This feature may help to explain why they are not as susceptible to triggering EL islands as are their late outsider counterparts. Nevertheless, this feature does not explain why these morphemes sometimes do trigger EL islands, as in (60). Although these two instances of /komo/ are identical in phonology, their orthography may differ because the first *komo* is the B form that has been integrated into the Hiaki mental lexicon, while the second *como* is a Spanish CS form. The first *komo* acts as a specifier for *huyam o hitasa* 'trees or something,' and the second specifies *matitas o arboles* 'little bushes or trees like that.' If *komo* is, in fact, a Hiaki B form and *como* is a Spanish CS form, this might help to explain why the Hiaki form does not trigger an EL island while the Spanish form does. However, unlike other examples where orthography implicates a change in phonology, the difference in orthography in this case is not enough to classify one form as a B form into Hiaki and the other a Spanish CS form. There is also not a significant enough

difference in the syntactic environments of these two /komo/s to illuminate the motivation for switching one of them into Spanish.

The absence of late bridge *de* 'of' in (61) and (62) may signal a strategic omission to avoid triggering an EL island.

(61) Hunaa veha bwa'ahapte-k veha kia hunaa tahkai-m *lugar*-po ume ili
that.one then eat-start-PERF then just that.one tortilla PL place LOC DET.PL little
pedaaso kamoote-m, kama-m , hunaka bwa'e-ka ama ho'ak huname'e si'ime .
piece sweet potato-PL squash-PL then eat-PPL there live those(ones) all
'When they start to eat that, in place of the tortillas a piece of yam, squash, that's what they eat and live there, all of them.' (Interview 3A #29.3)

In this example, late bridge *de* 'of' is missing from the partitive structure *pedaaso kamotem* 'piece [of] sweet potato.' Because the specifier *pedaaso* 'piece' is in Spanish, according to the Morpheme-Order Principle, what is expected to follow is the rest of the Spanish construction *pedazo de x*. The omission of late bridge *de* may indicate that its inclusion would have caused an EL island. However, because no examples of partitive or possessive *de* exist in the Hiaki corpus outside of an extant EL island, it is impossible to tell what the motivation is for omitting it in this example. Similarly, (62) is also missing late bridge *de* from a partitive construction.

(62) Intok wepul ili *piesa* paan-im emo mak-wa-k ti hiia .
and one little piece bread-PL 3.PL.REFL give-PASS-PERF quot quot
'And they were given a small piece of bread, they said.' (Interview 5A&B #372.2)

In this example, late bridge *de* 'of' is also missing from *piesa paanim* 'piece [of] bread.' Like the previous example, this is a partitive construction specified by a Spanish word meaning 'piece.' Both of these examples suggest that there may be a motivation related to the triggering of EL islands for omitting late bridges, but neither of them give sufficient evidence to prove that late bridges such as partitive *de* 'of' trigger EL islands.

While EL late outsider system morphemes are most likely to trigger EL islands and late bridge complementizers may either be freely switched into the EL or omitted entirely, EL early system morphemes can also have the effect of triggering small EL islands. This has more to do with the timing of when they are accessed from the mental lexicon in the process of language production, which makes them likely to be accessed alongside their content morpheme heads.

Examples like (63) demonstrate the "misfiring" of an EL early system morpheme, followed by its EL content morpheme head.

(63) Hunum uu… kaita uu *politica*
there DET nothing DET politics
una *Guerra tremenda*, che'ewasu, che'ewasu
DET-fem war great-fem more.and.more more.and.more
'There, the…politics, [a] great war is not there [more and more].' (Interview 1B #70.1)

Example (63) does not outwardly violate the System Morpheme Principle. However, it does demonstrate that late outsider morphemes are not the only morphemes that, when accessed in the EL, may result in small EL islands. The Spanish feminine indefinite article, *una*, is not a late outsider system morpheme but an early system morpheme. This is expected, however, because early system morphemes are accessed from the mental lexicon so close in the process of language production to content morphemes. For this reason, the determiner-noun pair is frequently accessed together even in the EL.

Another element at play in example (63) is that Hiaki lacks indefinite articles (e.g. English *a/an*, Spanish *un/una*). Like the EL island trigger in example (56), which could be due to the lack of a copular *be* verb in Hiaki, (63) illustrates another example of a grammatical incongruence between the ML (Hiaki) and the EL (Spanish). Spanish indefinite determiner *una* 'a' fills a grammatical role that no morpheme fills in Hiaki. However, unlike instances of singly-

occurring EL lexemes (i.e. content morphemes), early system morphemes are "called" by their heads in a grammatically binding relationship (Myers-Scotton and Jake 2000: 1063). In other words, early system morphemes depend on their content morpheme heads. For that reason, EL early system morphemes are more likely to occur with their EL content morpheme heads.

Furthermore, Hiaki nouns and determiners do not encode gender like their Spanish counterparts do. This may suggest that Spanish determiners, which inherently encode either masculine or feminine gender, cannot specify Hiaki nouns. This is evidenced by the fact that no examples exist in my Hiaki corpus of Spanish determiners specifying Hiaki nouns. However, 36 Hiaki determiners specify Spanish nouns throughout the corpus.

(64) is another example of an EL early system morpheme calling its EL content morpheme head:

(64) Hitasa intok ori hunuen uka gente-ta, am ore-k,
what and umm thus that people-ACC 3.PL.ACC what's.it-PERF
am huha-k-o, hunaa, o *esa persona* veha ori,
3.PL.ACC sting-PERF-when that.one or that person then umm
si elesikia veha ae-t voote-ne tea, hunuen ume sa'awa-m
very itch then 3.SG.ACC-on lie.down.SG-FUT quot thus DET.PL sore-PL
chikti ae-t yeu kat-ne
all 3.SG.ACC-on out go.PL-FUT
'And what was it that bit the people, that the person would feel very itchy all over the body, and eventually they would have open sores all over their body?'
(Interview 1B #38)

The EL determiner in example (64) that "calls" its Spanish content morpheme noun is *esa* 'that.' Although Hiaki does have definite determiners similar to *esa* (e.g. *uu* 'the,' *hunu'u* 'that'), this example illustrates that whenever any kind of early system morpheme determiner is accessed in the EL, it is likely that the noun it specifies will be accessed in the EL, as well.

In this section, we have seen that late outsider system morphemes are most likely to trigger EL islands if accessed in the EL in mixed constituents. Common outsider triggers in

Hiaki-Spanish CS are fully inflected verbs, which act as outsider units along with their inflections due to the drag-down principle.

Additionally, certain types of late bridge system morphemes, such as "that-like" complementizers and conditional 'if' may be codeswitched into the EL without triggering EL islands. For this reason, the prediction that the later a morpheme is accessed in language production the less likely it is to be switched may not hold water. Such a prediction implies that late bridge system morphemes would be less frequently switched—and more certainly trigger EL islands when accessed in the EL—than early system morphemes. However, this has proven not to be the case because late bridge system morphemes that act as complementizers (e.g. *que* 'that,' *cuando* 'when') may be switched without triggering EL islands, and partitive *de* may be omitted entirely, perhaps to avoid triggering an EL island.

Furthermore, the likelihood that late bridge complementizers will be used in CS discourse to coordinate structures in two different languages suggests that the ML is permitted to change at IP level even within the same utterance.

Lastly, we have observed the co-accessing of early system morphemes with their content morpheme heads. This is manifest in the Double Morphology Hypothesis, by which early system morphemes accessed in the EL may be doubled by their ML counterparts. This is particularly plausible with plural morphology.

While the previous two sections have explored violations of the Morpheme-Order Principle and the System Morpheme Principle that *must* be followed by EL islands, Section 5.4 will discuss the EL Implicational Hierarchy Hypothesis, which predicts which types of EL constituents are *likely* to occur as islands.

5.4 EL Implicational Hierarchy Hypothesis

While single prepositions and verbs can trigger EL islands by violating either the Morpheme-Order Principle or the System Morpheme Principle, the EL Implicational Hierarchy Hypothesis recognizes that certain multimorphemic or even multi-word expressions are likely to be entirely in the EL. Effectively, the EL Implicational Hierarchy Hypothesis establishes a category for EL contributions to CS discourse other than EL islands and singly-occurring lexemes. By recognizing that several-word-long expressions may occur in the EL regardless of whether they seem to violate the System Morpheme or Morpheme-Order Principles, the EL Implicational Hierarchy Hypothesis explains much data that would otherwise be unaccounted for.

The EL Implicational Hierarchy is as follows in Figure (65). As previously noted, bracketed examples are my insertions.

(65) **The EL Implicational Hierarchy**

1. Formulaic expressions and idioms (especially as time and manner PPs but also as VP complements) [e.g. *under the weather* or *wait in line*];
2. Other time and manner expressions (NP/PP adjuncts used adverbially) [e.g. *until tomorrow* or *as of Wednesday*];
3. Quantifier expressions (APs and NPs especially as VP complements) [e.g. *every kind* or *none of them*];
4. Non-quantifier, non-time NPs as VP complements (NPs, APs, CPs) [e.g. *I carried the book*];
5. Agent NPs [e.g. *My uncle Bill* went to the store];
6. Thematic role- and case-assigners, i.e. main finite verbs (with full inflections) [e.g. I *soaked up* the water or She offered me a *chocolate-covered raisin*]

(Myers-Scotton 1993:144)

Of these six classes of constituents that may trigger EL islands, only the first two are relevant to my data. Formulaic expressions and time and manner expressions vary in type, but the only Spanish quantifier that appears in my data is *cada* 'every,' which behaves like a B form

except for the three times when it triggers EL islands. All of these appear in time adverbial expressions and will be addressed below.

Figure (66) quantifies every type of constituent from the EL Implicational Hierarchy found in Hiaki-Spanish CS in my database. Their respective frequencies are calculated with respect to the total number of EL islands. Note that many of these Spanish expressions contain "that-like" complementizer *que* and are used 80 times to coordinate Spanish and Hiaki IPs or occur in a sentence-initial position.

Figure (66)

Constituent Type	Frequency in #	Examples	
Formulaic expressions and idioms	80	*Hasta que* 'until'	9
		Por eso (que) 'that's why'	8
		Para que 'so that'	5
		Ya ves (que) 'you see'	5
		Mas de que ('only'?)	5
		A ver (si) 'let's see if'	4
		Como (que) si 'as if'	3
		A de cuenta que 'it seems as if'	3
		Es (de) que 'that's because'	3
		Es cierto 'it's true'	3
		Ojala que 'let's hope that'	2
		Por tal de que 'as long as'	2
		Necesito (de) que 'I need'	2
		Por casualidad 'perchance'	2
		Ni modo que 'no way that'	1
		Yo que se (*Yo que voy a saber*) 'what do I know'	1
		Con ganas de que 'feeling like doing *x*'	1
		Asi como 'just like'	1
		De modo que 'so that'	1
		(Mal) de cuentos que 'the bad thing is that'	1
		Al cabo que 'anyway']	1

		Mas o menos (que) 'more or less'	1
		Tiene que 'have to'	1
		Siendo que 'seeing as'	1
		Gracias a Dios 'thank god'	1
		Ay Dios 'oh god'	1
		Solamente que 'only'	1
		A veces 'sometimes'	1
		Que barbaro 'how barbaric'	1
		Mas que nada 'more than anything'	1
		Desde que 'since'	1
		Despues de que 'after'	1
		En vez de que 'instead of'	1
		A lo contrario 'on the other hand'	1
		Mientras que 'while'	1
		Por fuerza (de) ('by force'?)	1
		Que va 'get out' or 'no way'	1
Time and manner expressions	11	*Cada* 'every'	8
		Siempre 'always'	1
		Casi 'almost'	1
		Hasta 'until'	1

5.4.1 Formulaic Expressions and Idioms

Out of 161 examples with EL islands in the Hiaki corpus, 80 come from what I analyze as fixed expressions in the EL.

Following on the previous discussion of *para* as a singly-occurring EL (Spanish) preposition that often triggers EL islands in mixed constituents, there are five instances in which multi-word expressions involving the word *para* do not trigger EL islands. All five of these examples entail the expression, *para que*, or *so that*.

(67) is illustrative of this phenomenon:

(67) *Para que*, vempo *mismo* nau omte-ka, nau nahsua-ka…
so that 1.PL.NOM REFL together be.angry-PPL together fight-PPL…
'So that there will be turmoil against them, they will fight amongst themselves…'
(Interview 2A #142.2)

According to the EL Implicational Hierarchy Hypothesis, fixed expressions such as *para que*, meaning *so that*, are likely to occur entirely in the EL. This is likely because fixed expressions are processed as one conceptual constituent rather than the individual grammatical units that build them. In this sense, expressions behave like single content morphemes in CS discourse: they are permitted to occur in the EL without triggering a subsequent EL island.

(68) illustrates the same phenomenon with *para que* occurring in the EL:

(68) Ta peronim hunuen itom ya'aka, bwan,
but bald-PL thus 1.PL.ACC do-PPL well
para que nehpo ket hiva ket mik-na tea ti hiia-n uu *peron*.
so that 1.SG.NOM also always also give-IMPF quot quot quot-IMPF DET bald
'But that's what the bald ones did to us, well, so that I would also receive something said the bald one.' (Interview 3A #176.2)

Once again, *para que* occurs as a sort of EL unit that does not affect the overall grammaticality of the mixed constituent. Surrounded by otherwise ML discourse, this type of EL expression occurs 80 times in the Hiaki corpus, 5 of which are examples that contain *para que*.

(69) is an example of a different expression occurring as a unit in the EL. The expression in question is *es que*, or *it is (such) that*. A closer English approximation would be the expression, *the thing is* or *it is because*.

(69) *Es que* huname'e, tua huname'e aa pasaroa-ka-me,
is-3.pres that those truly those 3.SG.ACC happen-PPL-s.rel
uka Hiak bwia-ta nahsua-ria-ka-me, huname pos im haivu kaave.
that Hiaki land-ACC fight-APPL-PPL-s.rel those well here already no.one
'It is because, those, those who truly experienced it, who fought to defend the Hiaki land, well they are no longer here.' (Interview 2A #97)

Es que in this example has the same effect as *para que* in previous examples: it serves to convey a specific semantic "bundle" unique to Spanish and therefore does not further inhibit ML procedures. There are 3 examples in my Hiaki corpus that use *es (de) que*. This must be considered in contrast to examples like (56) in Section 5.3.1, which are EL triggers because the copular *be* verb is not part of an expression. Although *es* independently functions as an outsider, it is not an independent lexeme in this example, but part of a fixed expression. In that sense, it is semantically bound to *que* in order to form the idiom, *it is because*.

The idiom, *con ganas de que* 'feeling like' in example (70), although longer than *para que* or *es que*, similarly does not trigger an EL island in the rest of the utterance. This is the only example of this expression used in my Hiaki corpus.

(70) Ime Hiaki-m intok pos *con gana-s de que* itom lisensia-ne
these Hiaki-PL and well with want-PL of which 1.PL.ACC permission-FUT
And the Hiakis were hoping that they would be allowed to leave. (Interview 3B 7.4)

Example (70) illustrates a longer idiom particular to the Spanish language, *con ganas de que*. A rough translation of this idiom is *being in the mood to* or *feeling like [doing something]*. This idiom illustrates the adherence to the EL Implicational Hierarchy particularly well because it contains four words, which constitute 2 prepositional phrases, *con ganas* 'with desire' and *de que* 'of which.' Unlike examples in Section 5.2.1 that trigger EL islands because of independent prepositions in the EL, the preposition, *con*, in example (70) is part of a larger constituent and therefore does not act alone. Because *con ganas de que* acts as its own insular functional unit within a larger mixed constituent, it does not trigger a further EL island.

5.4.2 Time and Manner Adverbials

Another type of expression likely to occur in the EL in mixed constituents is a time (or manner) adverbial. These expressions are short pre- or postpositional phrases like *since yesterday*, *every Thursday*, or *twice a month*. A few of these examples have already been discussed in previous sections. Examples involving *que* as in *desde que* 'since' and *hasta que* 'until' were counted as fixed expressions.

Example (71) illustrates that EL time and manner adverbials, like fixed expressions and idioms, can act as contained units that do not contaminate the ML grammatical framework of the larger utterance. However, examples (72)-(74) illustrate that, as predicted by the EL Implicational Hierarchy Hypothesis, they also can violate the grammatical framework of the larger utterance and trigger EL islands. Like late bridge system morphemes, this variation in triggering EL islands could depend on whether the time adverbial is accessed in Spanish or Hiaki.

(71) *Kada* mamni ta'a-po aa mamakwa.
every five day-LOC 3.SG.ACC hand-POSS-PASS
'It was given every give days.' (Interview 3A #174.1)

In example (71), *kada* is the time adverbial that acts as the specifier of *mamni ta'apo* 'on five day' or 'on fifth day.' Like previous examples of late bridge system morphemes that may but do not consistently trigger EL islands, *kada* may not trigger an EL island in the above example because it has been accessed in its Hiaki form.

Example (72), on the other hand, illustrates that *kada* can also trigger EL islands. This is probably because when *kada* acts like a B form it does not affect the grammar of the larger utterance, but when it is a CS form, it triggers EL islands.

(72) *Kada seis mes-es pasa-n revista komo que si* ketuni sontao-m.
every six month-PL pass-3.pres.pl review like CTZR if still soldier-PL

‘Every six months they are reviewed as if they were still soldiers.’
(Interview 4A&B #141.2)

As a time adverbial, *kada* appears in my Hiaki corpus 8 times. This is one of two examples that clearly trigger EL islands. Another probable EL island will be discussed below. In this example, we can tell that what follows *kada* (*seis meses* ‘six months’) are Spanish forms and not loaned forms into Hiaki because /s/ codas are retained and the Spanish plural morphology on *mes* is retained. While *kada mamni ta’apo* in (71) above most likely does not trigger an EL island because *kada* is accessed as a B form, *kada* in this example probably triggers an EL island because it is a CS form.

Cada similarly triggers an EL island in (73):

(73) Hunaa *tarheta*, *cada ves que le dan el dinero*
that.one card every time that 3.SG.ACC give-3.pres.pl DET-masc money
le cheecan.
3.SG.ACC check
‘That card, everytime they are given money, they check it off.’ (Interview 3A #169.5)

Like the previous example, *cada* triggers an EL island, *cada ves* ‘every time.’ The subsequent EL island in this example is triggered by accessing late outsider system morpheme, *le* ‘to him/her.’

Example (74) is the last one in my corpus in which *cada* triggers an EL island as a time adverbial. Unlike previous examples, however, the EL island is at the end of the utterance, which makes its status as an EL island ambiguous.

(74) Kaa, kaa empo *sueldo*-ta aa= nu'e ti hiia, *cada quince dia*?
NEG NEG 2.SG.NOM salary-ACC 3.SG.ACC acquire quot say each fifteen day
Didn’t you say that he was receiving a salary every fifteen days? (Interview 2A #186)

Unlike (45) in Section 5.2, which also contains the phrase, *cada quince dia*, this example is not followed by Hiaki locative postposition *-po*. This could be illustrative of the "categorical limbo" that EL Implicational Hierarchy expressions are in—they are not quite EL islands, but they permit several-word-long constituents from the EL that seem to follow EL surface word order. Furthermore, *quince* 'fifteen' could be acting as a B form, which would negate the possibility that *cada quince dia* could be an EL island. Nevertheless, the absence of *-po* and the fact that the constituent specified by *cada* is completed in Spanish suggest that in this instance, *cada* has been accessed as a Spanish form. This is one of three instances in which *cada* triggers EL islands in time adverbial phrases in my Hiaki corpus.

All other instances of time adverbials (*siempre* 'always,' *hasta* 'until,' *casi* 'almost') trigger EL islands in my corpus.

This section has illustrated that while time adverbials are likely to—and do—occur as EL islands in Hiaki-Spanish CS discourse, they do not need to be expressed as islands all the time.

5.4.3 Quantifiers

As a time adverbial, *cada* has been thoroughly addressed above. Of the 7 times it appears as a quantifier in my data, *cada* behaves as a B form in 6 of them. Other quantifiers, such as *pocos* 'few' or *muchos* 'many' do not appear in my data at all. This could be because such quantifiers must agree in number with their content morpheme heads in Spanish discourse.

Example (75) illustrates *cada* as an EL island trigger. Like previous *cada* examples that trigger EL islands, this instance of *cada* probably triggers an EL island because it is accessed in Spanish.

(75) Woi tomi tea *cada persona*
two money quot each person

'Each person cost 25 cents.' (Interview 2B #300.2)

In this example, the entire quantifier constituent is *cada persona*, or *every person*. Rather than switch back to Hiaki to express *yoeme* 'person,' *cada* requires that the constituent be finished in Spanish. However, this is the only one of 7 examples (excluding the 8 time adverbial *cada*s) in which *cada* triggers an EL island as a quantifier.

Although there is only one kind of quantifier that appears in my data, this section has shown that quantifiers, such as *cada*, may trigger EL islands but neither need to nor do so most of the time.

5.4.4 Agent Noun Phrases

In addition to fixed expressions, time and manner adverbials, and quantifiers, Myers-Scotton (1993) also predicts that agent NPs, although rarely, may occur as EL constituents (144). There is one such example in the Hiaki corpus. Example (76) illustrates an agent NP accessed in the EL in a mixed constituent. In this example, Spanish is the ML and Hiaki is the EL.

(76) *En aquel entonces, la gente mayor*, tua ume Hiaki yo'owe,
in that then DET-fem people older truly DET.pl Hiaki elder
entonces ten-ian idea-s buena-s, y esa-s idea-s,
then had-3.PL.IMPF idea-PL good-PL and those-fem idea-PL
pues di-eron bueno-s resultado-s
well give-3.PL.IMPF good-PL result-PL
'In those days, the elders, the Hiaki ancestors, had some good ideas, good ones, and these ideas gave good results.' (Interview 8A&B #12.43)

In example (76), the Hiaki DP *tua ume Hiaki yo'owe* 'truly the Hiaki elder' is a reiteration of the agent NP in the EL. As Myers-Scotton (1993) predicts, the more semantically or functionally peripheral the constituent is to the utterance, the more likely it is that it will appear as an EL island (146). Although the Hiaki reiteration of the agent NP in utterance (76)

does not occupy the subject position, it nevertheless is semantically central to the utterance. Furthermore, the topic of this example is particularly well expressed in Hiaki because it refers to the Hiaki ancestors.

5.5 Quotative EL Islands

Another type of EL constituent in Hiaki-Spanish discourse is quoted speech. There are four such examples in my corpus, two of which are replicated below. Although this may be more semantically motivated than grammatically motivated, there are several examples of quoted speech in the EL in the Hiaki corpus. Examples (77) and (78) illustrate this phenomenon:

(77) "*Ay qué feo Mari*" ti hiia
interj how ugly Mari quot say
"Ay it was so awful Mari," he said. (Interview 3A #364.14)

(78) Ti hiia tea uu papaa, "*Hasta aquí*"
quot say quot DET father until here
"He said, my father, 'Up to here.'" (Interview 3A #376.8)

Although the constituents being quoted in the above examples would not necessarily trigger EL islands on the grounds of Morpheme-Order or System Morpheme Principle violations or EL Implicational Hierarchy expressions, they both occur in Spanish. This points to the retention of the language in which these direct quotes were originally spoken in. It also signals that quoted speech may form its own non-grammatical type of constituent that can be entirely formed in the EL without compromising the grammar of the ML in mixed constituents.

5.6 Miscellaneous examples

The following examples are the only two examples of including multimorphemic EL constituents acting as a compound nouns in ML discourse in the Hiaki corpus. In both examples, the ML is Hiaki and the EL is Spanish.

(79) Hunum teopo-po wahiwa veha kia *vanko de arma*-ta ama yecha'i
there church-LOC inside then just bank of arm-ACC there put(sg.obj)
There in the church they had their storage of weapons.
(Interview 8A&B #20.165)

In this example, *vanko* does not violate the Morpheme-Order Principle nor the System Morpheme Principle. It also does not signal a fixed expression that must be expressed in Spanish, either. Instead, *vanko de arma* acts as a compound noun phrase to express 'bank of arms' or 'arsenal.' The utterance also adheres to the Morpheme-Order Principle because the entire compound is marked with the accusative -*ta* and functions as the object of the verb *yecha'i* 'put' and precedes it as dictates Hiaki (ML) word order. This example illustrates that multimorphemic constituents in the EL do not need to function as EL islands and do not need to be triggered by the violation of any principle, as long as they function as compound nouns or verbs like this one.

Example (80) presents another case of the same phenomenon. In this example, the EL (Spanish) compound noun is *seguro de vida*.

(80) *Ya veh kee* a'apo chea hunuka *seguro de vida*-ta huni kaa vehe'etua-k
already see-2.sg.pres 3.SG.NOM more that *security of life*-ACC even NEG pay-PERF
'You see that the life insurance, he didn't pay for it.' (Interview 3B #22.5)

In both of the above examples, three-word NP objects have been contributed by the EL, neither of which have proven to trigger further EL islands. Both examples are inflected with Hiaki accusative morphology (-*ta*), illustrating their syntactic integration into the larger

utterance. Unlike previous examples that have omitted late bridge *de* when coordinating Spanish and Hiaki structures, these two examples retain *de*, perhaps because the two nouns being coordinated are both in Spanish.

The following section will summarize my analysis before moving on to some ambiguous examples in my corpus.

5.7 Summary

In this section, I have analyzed the ways in which CS utterances in Hiaki and Spanish conform to and violate both the Morpheme-Order Principle and the System Morpheme Principle. I have evaluated the prediction that the earlier a morpheme is accessed in the process of language production, the less susceptible it is to triggering EL islands and found this prediction to be false. While content morphemes and early system morphemes are least likely to trigger EL islands, and late outsider system morphemes are very likely to trigger EL islands, late bridge morphemes (such as "that-like" or partitive *de*) either tend not to trigger EL islands or may be omitted altogether. Examples in my data that contain these EL "that-like" complementizers seem to suggest that the ML may not only change from utterance to utterance, but also within an utterance with the introduction of a new IP.

We have also seen that fixed expressions and time adverbial phrases may be switched into the EL without compromising the grammar of the larger utterance. While fixed expressions that occur in the EL never trigger further EL islands in my corpus, time adverbials and quantifier *cada* 'every' do so far more frequently. This is probably due to the fact that certain time adverbials and certain instances of *cada* are accessed in Spanish rather than Hiaki. When this happens, they are more likely to trigger EL islands.

Lastly, directly quoted speech can also appear in the EL surrounded by otherwise ML discourse. This could also be due to the introduction of a new IP within the quoted speech. On that subject, it is also important to note that there are no instances of Spanish complementizer *que* 'that' coordinating two Hiaki structures. An example of this phenomenon would be the introduction of quoted speech in Hiaki with the phrase, ?*ti hiia que* '[3.SG.NOM] said that…' However, no such examples appear in my corpus.

The following section will summarize my findings and address some ambiguous examples.

6. Discussion

The most central aspect of codeswitching in Myers-Scotton's Matrix Language Frame Model is asymmetricality. This refers to the differential grammatical role that each language participating in bilingual discourse plays. While the ML contributes its grammatical framework to CS discourse, structures from the EL can either be inserted into mixed constituents that adhere to ML grammar or create EL islands that conform to the grammatical constraints of the EL. The two sub-hypotheses of the Matrix Language Hypothesis, the Morpheme-Order Principle and the System Morpheme Principle, predict exactly which types of contributions are permitted from the EL in mixed constituents. The Morpheme-Order Principle predicts specifically that the surface word order of mixed constituents will come from the ML, and the System Morpheme Principle predicts that a particular type of system morpheme, identified later by the 4-M Model as the late outsider system morpheme, is only allowed to come from the ML. The Hiaki corpus is rich with examples of utterances that adhere to these principles.

We have also explored the consequences of violations of ML grammar, as predicted by the EL Island Trigger Hypothesis. If a morpheme is accessed in the EL that violates either the Morpheme-Order Principle or the System Morpheme Principle, the rest of that constituent must be completed in the EL as an EL island. The EL Implicational Hierarchy Hypothesis has also proven to accurately predict which classes of EL constituents will appear as islands. While violations of the Morpheme-Order Principle and System Morpheme Principle, likely caused by "misfiring," are *required* to result in EL islands, the classes of fixed expressions outlined by the EL Implicational Hierarchy Hypothesis are simply *likely* to occur as EL islands.

In Hiaki-Spanish CS, prematurely accessed EL verbs commonly violate the Morpheme-Order Principle due to incongruence in the settings of the head-directionality parameter between Hiaki and Spanish (e.g. *I'an empo <u>tienes</u> el, que, el mando en tus manos* 'Now you have the power in your hands' [Interview 5A&B #442.3]). Prepositions and postpositions behave similarly (e.g. *Hunaka, hunuka veha hooka <u>para</u> venirse desertados* 'Then that, that is what they did to come as deserters' [Interview 3A #161.1]). Common violations of the System Morpheme Principle when Hiaki is the ML also include accessing EL (Spanish) verbs, because fully inflected verbs act as outsiders by the drag-down principle (e.g. *<u>Es</u> mejor, pos ume heneralim taawa* 'It is better, well the generals stayed' [Interview 3A #382.15]).

Although not a violation of the System Morpheme Principle, early system morphemes such as plural markers may be doubled in the ML and the EL (e.g. *Mismo parientes<u>im</u>* [Interview 1B #70.3]). This is due to the Double-Morphology Hypothesis, which permits doubling of early system morphemes if accessed in the EL and duplicated in the ML.

The following section will address some ambiguous examples in my corpus that illuminate directions for further research of the Matrix Language Hypothesis.

6.1 Ambiguous Examples

Although the data in the Hiaki corpus seem to strongly uphold most of Myers-Scotton's MLF Model and sub-hypotheses, a few counterexamples in the data point to potential weaknesses of the MLF Model that have yet to be addressed.

Auer and Muhamedova (2005) argue that the distinction between the ML and the EL is not always clear. Citing examples from Muhamedova's Russian-Kazakh CS corpus, they propose a cline of adherence to ML grammar across CS discourse instead of the binary model proposed by Myers-Scotton.

Although my data mostly seem to uphold the ML Hypothesis, the (relatively) few examples that point to potential ambiguities in determining the ML suggest that a gradient of adherence to ML grammar across CS discourse could be a broader-reaching method for qualifying CS data. This section will evaluate some ambiguous examples and propose new directions for CS research on the topic of EL islands and their triggers.

On a surface level, Myers-Scotton's frequency criteria are not always completely reliable in distinguishing which language is the ML. For example, the ML and EL of example (81) seem to be ambiguous.

(81) Heewi, una caj-ita
yes DET box-DIM.fem
'Yes, a box.' (Interview 1B #63)

The ML of the above example could either be Spanish or Hiaki. In terms of the number of morphemes, Spanish contributes more to this utterance than Hiaki does. However, not only are there no system morphemes to check the ML in this example, there is also no verb. The lack of a verb makes it difficult to determine which language is the ML for a few reasons. First of all, verbs are thematic role- and case-assigners, both of which implicate the number of system

morphemes in an utterance. Without a verb, not only is an utterance missing a crucial content morpheme, the absence of this crucial content morpheme also detracts system morphemes from the utterance. Second, if there are fewer or no system morphemes in an utterance, it becomes impossible to tell which language contributes more. If we are unable to tell which language contributes more system morphemes to an utterance, we cannot tell if the utterance adheres to the System Morpheme Principle—or, for that matter, whether or not it violates the System Morpheme Principle predictably.

If we disregard the absence of a verb in this utterance, it could still appear that Spanish was the ML because of its contribution of a DP constituent as opposed to the interjection contributed by Hiaki. However, we have seen that early system morphemes are likely accessed along with their content morpheme heads, regardless of whether they are in the ML or in the EL. For that reason, the ML of this utterance could just as easily be Hiaki, while the Spanish DP is accessed by "misfiring."

This example illustrates the difficulty of determining the ML of an utterance that is missing a verb. This is not to say that utterances missing verbs do not have an ML. They very well might, but the present limits of CS analysis seem to be inadequate for determining such information.

Because the Hiaki corpus is comprised of transcribed spoken interviews, there are also several fragments or one-word responses. Most of these responses are clearly in only one language or the other, but (82) illustrates a one-word answer that is a multimorphemic CS form.

(82) *Plaatano*-m
banana-PL
'Bananas' (Interview 3B #211.2)

Although we can surmise that the ML of (82) is Hiaki because it contributes the one system morpheme (plural *-m*) in this utterance, while Spanish only contributes a content morpheme (*plaatano* 'banana') this plural *-m* is not sufficient evidence to determine whether the ML is, in fact, Hiaki. Although utterances like this one may have designated an ML at some level within their deep mental structure, this is undetectable by current methods of CS analysis.

Similarly, the ML of example (83) also seems ambiguous, yet this utterance is not missing a verb.

(83) *Pa que me voy a decir que* nee tomi-ne
for what 1.SG.REFL going to say.INF that 1.SG.NOM money-FUT
'Why should I say that we [will] have money?' (Interview 2A #161.4)

First, if we are to assume that the ML of an utterance is based on morpheme quantity, the ML in (83) should be Spanish because Spanish contributes more than twice the number of morphemes that Hiaki contributes in this utterance. However, if the supporting criteria for determining the ML are which language supplies the system morphemes and the word order, the data is ambiguous. Spanish contributes one more system morpheme than Hiaki: *a* (a late bridge system morpheme from Spanish) and *que* (another late "that-like" bridge morpheme) as opposed to *-ne* (an early system morpheme from Hiaki). While *pa* (*para*), *me, decir, nee,* and *tomi* are all content morphemes because they either assign or receive theta-roles—and *voy* is also a content morpheme, although it has been inflected with first person singular (late system) morphology and therefore acts as a late outsider—*a*, *que*, and *-ne* are the only system morphemes in this utterance.

While *a* is a late bridge morpheme because it completes the Spanish prospective construction of *ir* + *a*, and *que* acts as a "that-like" bridge complementizer, *-ne* is an early system morpheme in Hiaki because it encodes the concept of tense without looking outside its maximal

projection for agreement like Spanish verb inflections do. Verb inflections in Spanish tend to be late outsider system morphemes because they must agree with their agent DPs in number. Hiaki, however, is generally not concerned with verbal number agreement. Therefore, verb inflections in Hiaki are only [+conceptually activated] because they convey the concept of tense. Although Spanish contributes more system morphemes to this utterance, it seems to be impossible to call one language the ML over the other.

Furthermore, if we take the higher number of system morphemes as well as higher overall volume of morphemes in Spanish as evidence that the ML is Spanish, there needs to be motivation to trigger the EL island that occurs in Hiaki. However, neither *nee* nor *tomine* are late outsiders nor bridge morphemes, so *nee* cannot possibly be a violation of the System Morpheme Principle. The order of *nee tomine* does not violate the Morpheme-Order Principle, either, because SV word order is acceptable for both Hiaki and Spanish.

The only difference between the Hiaki and the Spanish expression of *I will have money* lies in the number of morphemes required for either expression. However, the EL Island Trigger Hypothesis does not presently predict that such a difference would trigger an EL island. Unlike Hiaki, Spanish has a verb for *to have* that is used frequently (*tener*). Although Hiaki does have a verb, *hippue*, that means *own* or *possess*, it is usually reserved for alienable possessions (Haugen 2004). While *hippue* is usually reserved for alienable possessions, possessive *-k* tends to—but is not reserved for—*in*alienable possessions. Typically, the expression of kinship terms prefers the possessive denominal verb construction, where verbal inflection is added directly to a noun to indicate 'have *noun*' (Haugen 2004: 232). This is illustrated in (84).

(84) Hunuu bwan aa= papa-k
that indeed 3.SG.ACC= father-POSS
'He was that one's father.' (Interview 3A #25.4)

The literal translation of such a construction would be closer to a noun-incorporated reading, *[he] father-had*. It is also possible to form such a construction in a different tense. As stated above, although inalienable possessions are usually illustrated with possessive *-k*, this construction can also be used for alienable possessions. (83) above, for example, illustrates future ownership (of money) without the use of the verb, *hippue*.

While Hiaki typically uses the object + tense inflection construction to signify ownership, Spanish has a specific verb that expresses ownership. As a result, a Hiaki ownership construction would have one fewer component: such an utterance in Spanish would have [S], O, and V, while the corresponding construction in Hiaki would have [S] and either O or V, depending on whether the utterance was read with an implied verb (*he obtained a father*) or as an example of noun-incorporation (*he father-had*). Nevertheless, the current framing of the EL Island Trigger Hypothesis does not account for such an example, and consequently leaves the distinction of the ML and the EL ambiguous in examples like (81)-(83).

In addition to the ambiguity of distinguishing between the ML and the EL in a mixed constituent, there are two counterexamples in the Hiaki corpus to the Double-Morphology Hypothesis. Like the previous ambiguous example, the Double-Morphology Hypothesis indicates that neither the Morpheme-Order Principle nor the System Morpheme Principle need to be violated. This hypothesis predicts that only early system morphemes are allowed to be doubled in the ML, as is most frequently observed with double plurality.

However, example (85) illustrates doubling of late bridge system morphemes. Hiaki is the ML and Spanish is the EL.

(85) <u>*Como*</u> *contratista*-ta <u>venasi</u> ama…enchim-vetchi'ivo veha kaita eecha
like contractor-ACC like there 2.PL.ACC-for then nothing plant
Like contractors there…But for you they are not planting anything.

(Interview 1B #70.7)

(85) illustrates double morphology that is not on early system morphemes. *Como* 'like' and *venasi* 'like' are both late bridge system morphemes because of their role as grammatical links between two structures. They do not assign or receive θ-roles, they are [-conceptually activated], and they also do not rely on information outside of their maximal projection to encode agreement. As predicted by the updated 4-M version of the System Morpheme Principle, *como* does trigger an EL island (*como contratista*). One potential explanation for why this particular instance of double morphology is permitted could lie in the difference between Hiaki and Spanish word orders: while *como* precedes the noun it modifies in Spanish, *venasi* follows the noun it modifies in Hiaki. This, however, does not explain the motivation for the double morphology. This example illustrates that the present wording of the Double Morphology Hypothesis seems not to fully account for all CS data.

There are also two examples of data that unnecessarily violate both ML and EL word order, and therefore also the Morpheme-Order Principle.

Although the majority of Spanish adjectives follow the noun they modify, and the majority of Hiaki nouns precede the noun they modify, there is a class of Spanish adjectives that precede the nouns that they modify. One such class includes words such as *primero* 'first' and *ultimo* 'last' either as ordinal numbers or as components of time adverbial expressions. The difference between (86a) and (86b) illustrates grammaticality differences in word order between such expressions in monolingual Spanish discourse.

(86) a. El ultimo día
'The last day'

b. * El día ultimo
*'The last day'

Such a construction would also prove impossible in Hiaki because Hiaki adjectives precede the nouns they modify.

Example (87), however, violates both Hiaki (ML) and Spanish (EL) word order, even though in this instance they are congruent.

(87) Hunaka hiva *cada dia primero*-po nee aa=nu'e
then always each day first-LOC 1.SG.NOM 3.SG.ACC=acquire
'That is all on the first (of the month) [that we receive a small pension].'
(Interview 2A #161.7)

A grammatical version of the EL Implicational Hierarchy time adverbial expression in (87) would be phrased *cada primer dia*. Although most ordinals used in Hiaki are Spanish B forms (Figueroa 2014: 7), it is not certain that *primero* acts as a B form in this example because it illustrates masculine gender agreement with *día* in this example, which it would encode differently if it appeared before *día* (i.e. *primer día*). However, not only is that word order unusual for Spanish modifiers, when used it does not violate Hiaki word order. There is one instance, replicated below, where *primer* used in proper Spanish word order triggers an EL island. In this example, *primer* illustrates gender agreement with the word that follows, *parte* 'part.'

(88) Uu *primer-a parte*
DET first-fem part
'The first part' (Interview 3B #15.11)

In the above example, it is difficult to tell which language is the ML because Spanish and Hiaki each contribute one system morpheme (Hiaki definite determiner *uu* 'the' and Spanish feminine agreement marker -*a*). However, if we take the sentence-initial *uu* as indication that the utterance started with Hiaki as the ML, *primera* could have been accessed by "misfiring." The late outsider feminine marker encoded in *primera* could have triggered the EL island ending with

parte to satisfy the late outsider agreement at NP-internal AGR (Zagona 2002: 115). This example is the only one in which *primer(a)*, accessed before the noun it modifies, triggers an EL island.

Nevertheless, example (87) above not only shows gender agreement between modifiers and nouns, but it also violates both Hiaki and Spanish word orders for reasons that Myers-Scotton's MLF Model seems not to explain.

(89) is illustrative of the same kind of seemingly unnecessary violation.

(89) *Mas de que dia ultimo*-po hiva a'avo yeepsa, *dia primero*-po…
more of that day last-LOC only there arrive.sg day first-LOC
'[Aside from the last], only on the first, he comes here, on the first…'
(Interview 2A #226.5)

The only difference between this example and (87) is that this one is opened with a Spanish (EL) Implicational expression, *mas de que* 'only'. However, as we have seen in Section 5.4.1, EL Implicational expressions do not tend to affect the overall grammaticality of the rest of an utterance, regardless of whether the expression itself forms a constituent. Like previous examples, *primero* 'first' and *ultimo* 'last' may be CS forms because they display agreement with *día*. The word order of *dia ultimo* and *dia primero* violate both Hiaki and Spanish word order for reasons that are not explained by Myers-Scotton's MLF Model.

A final example that seems it should violate the Morpheme-Order Principle but does not can be found in (90).

(90) …huname intok pos ket wokim-mea, *con* kanyon, *con* metrayadoora-m.
those(ones) and well also leg-INST(pl) with cannon with machine.gun-PL
'…and those were also on foot, with cannons, machine guns.' (Interview 3A #372.3)

In this example, *con* should trigger two EL islands but does not trigger either for different reasons. Both times, *con* 'with' violates the Morpheme-Order Principle because it is a preposition that precedes its object in Spanish but should follow its object in Hiaki. The

corresponding postposition in Hiaki would be suffix *–mak* 'with.PL'. The first time *con* is accessed, the constituent of which it is a part, *con kanyon* 'with cannons,' almost forms an EL island but does not because *kanyon* is a bare form. Although *kanyon* 'cannon' is glossed as plural, it does not illustrate plural morphology. Bare forms like *kanyon* are not permitted to be in EL islands because they violate the definition of an EL island, which dictates that EL islands must adhere to EL grammar. Once a bare form appears in an EL island, the constituent is no longer well-formed according to EL grammar (Myers-Scotton 1993: 150).

The second time, however, *con* does not trigger an EL island because the object of *con*, *metrayadooram* 'machine guns,' is not a CS form but a B form. We can tell that *metrayadooram* is a B form because it has been altered to better adhere to Hiaki phonology. The Spanish word for machine gun is *metrallador* (Spanish ll is pronounced like English/Hiaki y), but if we remove the plural *-m* from *metrayadooram*, we see that the Hiaki form is *metrayadoora*. An EL island must be formed strictly by CS forms accessed in the EL. Since *metrayadoora* is a B form, the constituent of which it is a part is not an EL island. Like the previous examples, this one illustrates a case in which a violation of the Morpheme-Order Principle does not trigger an EL island as predicted.

There is also one example in my Hiaki corpus of an EL (Spanish) verb following ML (Hiaki) word order in such a way that does not compromise Spanish word order. In this example, the Spanish verb does not violate the Morpheme-Order Principle, but it may illustrate that the language of the verb does not always dictate the surface word order of the utterance. (91) is replicated below.

(91) Papa pos humak a'avo *visita-n* ta hunum vicha veevia-k
father well maybe there visit-3.pl.pres but there toward (send?)-PERF
'Father was probably visiting there, but they were sent over there.' (Interview 3B #118.3)

Although Hiaki locational adverb *a'avo* 'there' precedes the verb it modifies, *visitan* '[they] visit,' this placement adheres to both ML (Hiaki) word order and Spanish (EL) word order. This example therefore does not violate the Morpheme-Order Principle. In Spanish, adverbs of place may only precede the verb if they have scope over the entire event (Zagona 2002: 169), which is true in this case: *a'avo* 'there' describes the location of the subject *papa* 'father' and the location of the action *visitan* 'visit,' and implies that the subject was in that location while performing the action of visiting. Because *a'avo* has scope over the entire event in the first clause of this utterance, its word order does not violate Spanish or Hiaki grammar and therefore does not violate the Morpheme-Order Principle.

However, the third person plural conjugation of *visitar* does not agree with its third person singular subject, *papa* 'father.' Regardless of whether *papa* is read as a B form or the Spanish CS form, neither the System Morpheme Principle nor the Morpheme-Order Principle explain this incongruity in agreement. Nevertheless, the 4-M Model may help to explain why it is so difficult to coordinate subject-verb agreement across languages. If *visita(n)* is accessed so late because it has to wait for its subject to be produced with the proper inflections, and *papa* is accessed from a different mental lexicon entirely, the probability that these two forms will communicate successfully across the process of language production is slim. Despite this grammatical miscommunication, this example illustrates that EL verbs may follow ML word order without violating the Morpheme-Order Principle.

The System Morpheme Principle also incorrectly predicts the behavior of a few examples in the Hiaki corpus. According to the hierarchy of grammatically switched morpheme types implied by the 4-M Model, late bridge system morphemes should trigger EL islands due to the late stage at which they are accessed from the mental lexicon. However, as we have seen in

Section 5.3.1, late bridge "that-like" complementizers do not trigger EL islands and are easily switched into the EL. We have also seen in (61) and (62) in Section 5.3.1 that late bridge *de* can be omitted entirely from partitive constructions. These examples and the following one seem to suggest that the ML of an utterance is permitted to switch at IP level. This would explain why coordinating conjunctions (see (92) below) and "that-like" complementizers may be so easily switched into the EL.

(92) below should violate both the Morpheme-Order Principle and the System Morpheme Principle but does not trigger an EL island on either account.

(92) "Aa, kee peron-im ineni …" *Pero no saben* hitaa-vetchi'ivo hunaman
interj what bald-PL like.this but NEG know-3.pres.pl what-for there
tohi-wa-ka-m-me.
bring-PASS-PERF-s.rel-PL
'"Ah, these bald ones…" But they do not know why they were taken over there.'
(Interview 5A&B #254.2)

In the above example, *saben* 'know' should trigger an EL island both because of the drag-down principle and because it violates Hiaki surface word order, yet the constituent of which *saben* is a part is not finished in Spanish. First, *saben* violates the Morpheme-Order Principle because it precedes its object, *hitaa-vetchi'ivo* 'what for.' In previous examples, Spanish verbs that have been accessed before their objects have triggered EL islands, which typically consist of the verb and its object. However, in this example, the object of *saben* is permitted to occur in Hiaki.

If the ML were allowed to switch at IP level, this could help explain why *pero* seems to trigger an EL island and why that island ends with Spanish *saben*. The EL island that seems to be triggered by *pero* could simply be a new IP introduced in Spanish. Although *saben* is accessed before its object, *hitaavetchi'ivo* 'what-for' also introduces a new IP that seems to be in Hiaki.

Nevertheless, *saben* also violates the System-Morpheme Principle because Spanish third person present tense suffix *-en* is a late outsider system morpheme that must agree with its subject NP outside of its maximal projection. Although this example violates both the Morpheme-Order Principle and the System Morpheme Principle, it does not seem to trigger an EL island.

7. Conclusion

We have seen that the Hiaki corpus is rich with examples that adhere both to the Morpheme-Order Principle and the System Morpheme Principle. Of 578 examples in the Hiaki-Spanish corpus: 174 overtly conform to ML grammar in order to adhere to the Morpheme-Order Principle; all examples adhere to the System Morpheme Principle (except for the examples addressed in previous sections and similar examples highlighted in red in Appendix A); 31 predictably violate the Morpheme-Order Principle and trigger EL islands; 35 predictably violate the System Morpheme Principle and result in EL islands (including the misfiring of EL early system morphemes with their EL content morpheme heads); and 90 examples include fixed expressions or time adverbials that do not alter ML surface word order. All other examples behave predictably without violating or conforming their word order or grammar to that of the ML to adhere to the Morpheme-Order Principle or the System Morpheme.

Nevertheless, my analysis has illustrated that further research is needed on the subject of EL islands and their triggers, particularly with regard to the category of the late bridge system morpheme. Specifically, should "that-like" complementizers be considered late bridge system morphemes, or do complementizers constitute their own category? If they do not fit the category, does the category of the late bridge outsider, itself, need to be reimagined? Do other data show

that the ML can switch at the IP level? With regard to complementizers, do other data show that EL complementizers can be used to coordinate structures in two different MLs?

The existence of counterexamples to the Morpheme-Order Principle and System Morpheme Principle demonstrates that the wording of these principles may need to be refined to account for a broader set of data. Similarly, the paucity of late bridge system morphemes behaving as CS forms—or EL island triggers—in my data is counterintuitive to the hierarchy established by the 4-M Model. If content morphemes are the most frequently accessed type of morpheme and least susceptible to triggering EL islands because they are accessed so early, and if late outsider system morphemes are the least frequently accessed but the most susceptible to triggering EL islands because they are accessed so late in language production, it should follow that early system morphemes should be the second-most frequently switched, and that late bridge system morphemes should be the second-least frequently switched morpheme type.

However, my data shows and Myers-Scotton argues that "that-like" complementizers, including other complementizers such as Spanish *cuando* 'when' (Appendix A: 77) and *entonces* 'so' (Appendix A: 7, 206, 376) are easily switched and do not always trigger EL islands. Similarly, the only other type of EL late bridge that should appear in my data is partitive *de* 'of,' which is omitted entirely from two utterances. Both examples have been addressed above.

Although late bridge system morphemes do not behave as expected in my data, the environments in which they occur in my data suggest that the ML of an utterance is permitted to change at IP level. If the ML of an utterance can change with the introduction of a new IP, "that-like" complementizers do not need to trigger EL islands because they introduce IPs and therefore act as ML "refresh buttons."

In sum, my research has shown that Myers-Scotton's (1993) Matrix Language Hypothesis accounts for most Hiaki-Spanish conversational discourse. My data generally uphold the Morpheme-Order Principle and the System Morpheme Principle, and when these Principles are violated, most examples result in EL islands where expected. Of 578 examples, only 3 included EL islands that were not well-formed by EL grammar, 2 included EL verbs that should have violated either the System Morpheme Principle or the Morpheme-Order Principle but did not trigger EL islands, and 1 included an EL preposition that should have violated the Morpheme-Order Principle but did not trigger an EL island.

The EL Implicational Hierarchy also seemed to accurately predict the likelihood that certain types of constituents would trigger EL islands over others. My corpus contains 80 examples using fixed EL (Spanish) expressions; 11 time and manner expressions; and only 7 instances of Spanish quantifiers, all of which contain the word *cada* 'every,' and only 1 of which triggers an EL island.

Matters awaiting further research include whether every utterance, particularly those without verbs, have MLs, and whether it is possible to tell what they are; whether other data show that late bridge system morphemes are susceptible to triggering EL islands; the role of "that-like" complementizers as "ML reset buttons;" and whether such complementizers can consistently reset the ML at IP level.

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Appendix A				
		SMP violation by a verb		
		early system morpheme trigger		
		adherence to the MOP		
		fixed expression		
		MOP violation by a verb accessed before its object		
		MOP violation by a preposition		
		time adverbial phrase		
		quotative phrase		
		ambiguous examples		
		relevant numbers (not counted as CS)		
INTERVIEW	**#**	**INSTANCE**	**ML**	**SPEAKER**
1B	1.6	**Pues** te kaachin ama anmachi	Hiaki	JJ
1B	1.7	Ahta i'an veha wai wasuktiachi, wai wasuktiat veha uu yoeme veha vempo **mismo** ket hiva hiva veha ori **Principal**ta hiovekavenasi vempo **mismo** hioveka tanto itotana wemta veha kovanao ya'ak	Hiaki	JJ
1B	5.2	Locario intok uu uu **secretario** aman nau sahaka veha 10000ta ee makva'awa aa firmaroa inika **contrato**ta	Hiaki	
1B	5.4	**Necesito de que** nee wohnaiki **pueblo**ta, uka **pueblo**ta yumaisi uka im h'akamta amak etehok	Hiaki	JJ
1B	9.3	Uu tropa intok **pues** aa ivaktak uka kovanaota.	Hiaki	JJ
1B	9.6	**Pues** hiva, hiva huni kaachin am ya'amachi, pos im naawak uu **pueblo** yoowe.	Hiaki	JJ

1B	13.1	Intuchi senu **coronel** intuchi yepsak.	Hiaki	JJ
1B	13.2	Hiva hunaka lutu'uriata au toosiikan uu **general**.	Hiaki	JJ
1B	13.3	Entonces uu itotana weeme uka **ley**ta huni kaa hikhaka uka Huan Kastiota lutu'uria weiya kechia	Hiaki	JJ
1B	15.4	**Pues** haisa humak, pos vempo yoi noka heewi, waa **escuela**la	Hiaki	JJ
1B	17.3	Hoo, **pues** hunuka utteata am u'uraka veha **plebesito** intok a'awak Mehikowi	Hiaki	JJ
1B	17.4	Uu **plebesito** veha yepsak	Hiaki	JJ
1B	17.5	**Pues** te am koovak		JJ
1B	27.2	I'an ume yoimmak luturiakan iibwan uu gobierno, uu Kastio **general**tamake intok **comisaario**mmake hunume veha yoimak iibwan itou torokoyoimtuk	Hiaki	JJ
1B	27.3-27.4	Ta hunu'uvotana.…**para matar a los animales**	?	JJ
1B	32.1	Ta katin ili **kaha**mpo **aeroplan** ha'ani, aman ori, weaman tea	Hiaki	JJ
1B	38	Hitasa intok ori hunuen uka genteta, am orek, am huhako, hunaa, **o esa persona** veha ori, si elesikia veha aet vootene tea, hunuen ume sa'awam chikti aet yeu katne	Hiaki	Maria
1B	40.2	(Am)...**Daño**ta ya'a vaevetchi'ivo...**persona**ta, gente.	Hiaki	Maria
1B	62	Hunuka...**como para comprovante** ori **una (cajita) partida aunque sea…**	Spanish	JJ
1B	63	Heewi, **una cajita.**	?	Maria

1B	64	**Principal...**hunuka wootita...iani...**pudiera pasar**	?	JJ
1B	65	Heewi...**eso es lo que nos están haciendo**.	Spanish	Maria
1B	68.2	Ta hunu'u nahsuawame cha'atuk Hiakra…ala **politica** hunu veha chewasu …	Hiaki	JJ
1B	70.1	Hunum uu…kaita uu **politica una Guerra tremenda**, che'ewasu, che'ewasu	Hiaki	JJ
1B	70.3	**Mismo parientes**im**.**	Hiaki	JJ
1B	70.4	Uu **politica**...	?	JJ
1B	70.7	**Como contratista**ta venasi ama... enchimvetchi'ivo veha kaita eecha.	Hiaki	JJ
1B	70.8	**Mismo** vem achaimmeu, vem aemmeu.	Hiaki	JJ
1B	72.1	**Como contratisti**ta venasi ama nooka.	Hiaki	JJ
1B	72.14	**Pues** inim tusonpo te kartata bwiseka		JJ
1B	72.16	A'avo im yaaha...**pero no era nada**.	Hiaki	JJ
1B	74.2	**Pues** haivu human saka'asuk	Hiaki	JJ
2A	3.6	Huname vetuk veha te hoone yukeo **como si** hak bweerem kakarekame venasi.	Hiaki	Luisa
2A	9.6	**Manta** kaa hihikia	Hiaki	Luisa
2A	68.2	Ta pos si ho…**sabe Dios que** haksa humak si'imeta suawaula.	Hiaki	Luisa
2A	87	Kaita tua...**Es que** uu yoi pos kaa aa archivaroa, **porque por el es una verguenza**	Hiaki	Maria
2A	94.2	**Es de que** hunuen haksa suawa, hain chu'um venasi suawa.	Hiaki	Luisa

2A	94.5	**Hasta que** inim weeka veha hunule venasi weye, ho.	Hiaki	Luisa
2A	96.2	**Hasta que** inim weeka inien itom tosaa kovak veha hunuen weye, ho.	Hiaki	Luisa
2A	97	**Es que** huname'e, tua huname'e aa pasaroakame, uka Hiak bwiata nahsuariakame, huname pos im haivu kaave.	Hiaki	Maria
2A	119.8	**Mas de que** i'an ume usim hiva ama tawala.	Hiaki	Luisa
2A	122	Porque i'an ume yo'owem lu'utek **istoria** ket lu'utine.	Hiaki	Maria
2A	125.3	**Asi como…**hunuen katin ii Hiaki hiva kaa au nenenkaka, veha katin, katin si'ime aa nokria tea i'i yoira, **por**… bweituk hakwo huni kaa haksa yoita venasi goviernota **parke**ta wikiria tea.	Hiaki	Luisa
2A	132	Intok **mismo** uu yoi, ori **politika**, **politika**tamake hunuen am hippue, ume yoemem.	Hiaki	Maria
2A	134.1	Kia...**entre ellos mismos**, pos emo omta	Hiaki	Maria
2A	142.2	**Para que**, vempo **mismo** nau omteka, nau nahsuaka, itepo veha aman kiimuka veha te vensiaroane.	Hiaki	Maria
2A	153.3	**Ya vez que** im sosiom, yu'in tomita mavveta, likidaroawa intok kaita karim haksa tutu'im hooa huni'i, ho.	Hiaki	Luisa
2A	153.4	**Lo que es la vida,** heewi?	Spanish?	Luisa
2A	156	Bweere karim **asi**…	Hiaki	Maria
2A	161.4	**Pa que me voy a decir que** nee tomine	Spanish?	Luisa

2A	161.7	Hunaka hiva **cada dia primero**po nee aa nu'e.	Hiaki	Luisa
2A	165.9	Hunum **estakamento** kateka hunum **retiro** au yepsak; intuchi hunum Tetaviektipo **mismo**po, um Gomeztau ranchopo tekipanoataitek.	Hiaki	Luisa
2A	171	Hunuka **ganadera**ta mavetwak naatekai te aman hooka, ho.	Hiaki	Luisa
2A	172	Hunuka **kargo**ta veha hippue	Hiaki	Maria
2A	174.2	Haisa i'an kia **gratis**po...tekilta hoone	Hiaki	Maria
2A	179.1	**Mas de que** uu **sueldo** aa kova'u; ili aa tekipanoaka aa kova'u hiva makna.	Hiaki	Luisa
2A	179.2	Mikwa, **cada quince dia**po	Hiaki	Luisa
2A	185.2	Humaku'u, **veinti dos**po haku'u, hunum haku'u.	Hiaki	Luisa
2A	185.4	Inika **ganadera**ta mavetwak naatekai, kaita, kaita mimikwa, bwan ume voto'im.	Hiaki	Luisa
2A	186	Kaa, kaa empo **sueldo**ta aa nu'e ti hiia, **cada quince dia**?	Hiaki	Maria
2A	189.3	**Quince dia**po vehe'etuawa	Hiaki	Luisa
2A	197	**Provision**tavetchi'ivo	Hiaki	Maria
2A	202	**Nesesita que** senu ili tomek im waim veha aa hinutevok...	Hiaki	Luisa
2A	204.3	Muunim, **diez kilo, quince kilo**		Luisa
2A	204.4	Hunu'u veha ili au yuma'ane **quince dia**mmeu, ho	Hiaki	Luisa
2A	210.5	Hunum yeu sik intok hunaman ito wanna'avo veha **ultimo** rancho, Martimiano tea huna'a.	Hiaki	Luisa
2A	212.1	Ket hiva **mismo** huna'a	Hiaki	Luisa
2A	225.2	**Al kabo que** huevena ume **sintam**	Hiaki	Maria

2A	226.5	**Mas de que dia ultimo**po hiva a'avo yeepsa, **dia primero**po o amak **treintauno**tuk o veha tua **treintauno**po tomi'une.	Hiaki	Luisa
2A	226.6	Kaa **treintaiuno**tuko intok kia **treinta**po tomine'u	Hiaki	Luisa
2A	244.2	**Mismo** yoeme?	?	Maria
2A	252	Ori, ume yoeme, inen kawipo ane'eteko, ori o hunak aman anekai, **cuando** waehmata hunuen, hunum tiempopo veha, kia veha aa pasaroane, hewi, kaa, kaita, hita hoone?	Hiaki	Maria
2A	257	Si'ime pueplo, **kada** pueplo nah kateme vem, vem **kampamento** yecha'iku im Loloriaten.	Hiaki	Luisa
2A	259.2	**Primer** Vienehpo aa hoa…Miekolehtuk naposa'uwau, sep im naposa'une.	Hiaki	Luisa
2A	266	...uka **relihion**ta	?	Maria
2A	273.1	Lominko, **es igual**	?	Luisa
2A	288.2	**Que bonito** hewi?	?	Maria
2A	300	**En vez de que** nau tu'ika, nau tekipanoaka, veha wame aman, ime'e intok imi'i.	Hiaki	Maria
2A	306	**Siendo que** huevenak nau tohak to'oven, aman.	Hiaki	Maria
2A	313	Pos **si**	?	Luisa
2A	321.1	Hunak **veinte**tuk inim yeu yahiwak ya'awakan, hunu'u… naatewak intok hiva kaa chupuk.	Hiaki	Luisa
2A	321.4	Intuchi uu Nacho maehtotukau **secretario**tukan	Hiaki	Luisa
2A	323.7	Hunak kaita **kamion**imtukan kechia imi'i Vikampo.	Hiaki	Luisa
2A	341.2	Kia sesenu **mil**ta huni nau wootatek aa ya'a'e'an uka teopota.	Hiaki	Luisa

2A	345.1	Kia hiva uu **techo** hiva si'ime ore'ela	Hiaki	Luisa
2A	346	I'an veha kia muumum intok **paloma**n ama ho'ak.	Hiaki	Maria
2A	352.2	**Paloma**m chikti ama ho'ak i'ani		Maria
2B	3	Si'ime **dose**, **grado dose**u (sic)	Hiaki	Background voice
2B	20.2	Ta yoeme, **mismo** yoeme hunen am ya'ak.	Hiaki	Luisa
2B	33.6	**No se si** yoi o merikaano	Hiaki	Maria
2B	72.2	I'an huyau wattiwak, katin **veinte**tuk, **veintisiete**po yeu yahiwak.	Hiaki	Luisa
2B	72.4	Hunai si'imekut **kampamento**ta hohhoa ume yoeme.	Hiaki	Luisa
2B	77	Komo **de aqui aa**...hunaman pueblou	Spanish?	Maria
2B	82.3	**Primer** vehpo kuse'etek veha haivu matchune, hewi?	Hiaki	Luisa
2B	84.2	**Kampamento**u yevihne haivu	Hiaki	Luisa
2B	98.3	Lamina **kaaro**m	Hiaki	Luisa
2B	105	Kaita **kanaal**im	Hiaki	Maria
2B	107.2	Huname veha ori…**kosina**ta weetuane o si ket ama anne, ket o'owimmak tekipanoane?	Hiaki	Maria
2B	110	Ta komo o'owim toisuwak, veha komo o'owim…komo i'an maasu pos sosiom, hewi, ta **vale**m hipu'une.	Hiaki	Luisa
2B	112.1	Bwa'amta **kuenta**po yeu wo'otane.	Hiaki	Luisa
2B	112.5	Hunaka **kuenta**ta veha ume haamuchim vehe'etua'ii'aawa.	Hiaki	Luisa

2B	114.3	**Mas de kee** kia ili munim etbwaka hunuka hiva nuksik hiva, aa weiyane, hunaka hiva ili bwa'ane.	Hiaki	Luisa
2B	126.9	Yoim ama ho'akame susua, porque hunum **asienda**mpo wam vicha, kaave peronim hohoye.	Hiaki	Luisa
2B	130.1	Katin ume yoim, yoimpo ori, ho'akame, katin ume yoim, bwe uu **govierno**, hewi?	Hiaki	Luisa
2B	134.2	Hu yoi veha, **govierno** veha kam tu'ure, hewi	Hiaki	Luisa
2B	143	Empo veha hunu…**mil nueve sientos diez**tuk veha Presiopo emo yeu siika ti hiia?	Hiaki	Maria
2B	152.3	Hunum, ori, **poso**m hunum hak manek tea.	Hiaki	Luisa
2B	152.5	Hunaman hi'irokaka kaate, ta aman yahiwa'apo, veha kaita ume **pooso**m, wechia, kaa vaa'ak.	Hiaki	Luisa
2B	160.1	Wakas… inen ili **hardin** ama katek.	Hiaki	Luisa
2B	171	**Mismo** uu yoi sontao veha hiva hunaka'a…	Hiaki	Maria
2B	174.1	**Mismo** vempo ibwan	Hiaki	Luisa
2B	174.2	**Parte** am suak veha huiwam am u'ura, wiko'im am u'ura.	Hiaki	Luisa
2B	182.1	Ta vempo **mismo** hiva ama hunuen am nenka.	Hiaki	Luisa
2B	182.4	Vempo **mismo** hiva.	Hiaki	Luisa
2B	184.1	Nau hunuen **dilihensia**	Hiaki	Luisa
2B	184.5	Vempo **mismo** hiva	Hiaki	Luisa
2B	186.4	Intok imin ori, San Paasiskou vicha, **dispens**au vicha, hunuet veha bweere **rancho**m hokaa, bwan.	Hiaki	Luisa

2B	194.3	Ameu **kampanya** haptek ume'e **govierno**.	Hiaki	Luisa
2B	195	Ume Hiak sontaom, **bueno**, ume yoimmak cha'akame, huname pos haivu ama ket hu'unea, hewi?	Hiaki	Maria
2B	199	Hiak **traidoor**im	Hiaki	Maria
2B	219	**Esklavo**m		Maria
2B	220.2	Huname veha, kia si'ime weepulaika mamamnim, ve**veinte**m, di**dies**im, nunu'uka tea uka henteta.	Hiaki	Luisa
2B	220.3	Hunama veha uu yoeme pos famialaka weyeka, veha hunaa hamut veha taabwi **lugar**eu vittuana?	Hiaki	Maria
2B	229.2	Kiala mukuk hiva sep **parte**m ya'asauna, porque kaa tu'i, tea ti hiia... ume marineom	Hiaki	Luisa
2B	236	Yumhuevaetek veha kia hunama o haksa ili **lugar** ama aayuk hunuevetchi'ivo?	Hiaki	Maria
2B	247.2	Hunaa **ultimo viahe**ta ya'aka, veha Veracruzpo taawak.	Hiaki	Luisa
2B	254	Ta, hunaa, intok, Progreeso havesa humaku'u, hunum katin Waimampo kia aman yeu am tohaka si'ime henteta yeu viaktaka veha haksa orapo, o si heeka o kia a'apo wohokteka **le entro el agua y se fue de** piiki, hunum Waimampo.	Hiaki	Maria Hesus
2B	256	Porque **mil nuevesientos veinte**tuk hunum yeu yahak	Hiaki	Maria Hesus
2B	258.3	**Sesenta y kuatro vatayon**tukan, huna'a		Maria Hesus
2B	260	...**de Yukatan, asta, asta aqui, asta** (sic) Waimas	?	Maria Hesus

2B	287.2	Porque ume tu'i va'am, kaa **kanal** va'am.	Hiaki	Maria Hesus
2B	297.3	Veveintetaka emo hinuwak ti hiiaka, kia ori, emo si'ime emo varkopo kima'awaka emo nuksaka'awak ti hiia, ma hunuu Akotukau poloove.	Hiaki	Luisa
2B	298	Maala hunum Yukataneo toiwaka veintisinko**taka** veha partaroana tea.	Hiaki	Maria Hesus
2B	300.2	Woi tomi tea **cada persona**.	Hiaki	Maria Hesus
2B	340	Ta **rapido** porque...	?	Maria Hesus
2B	341.2	**Aversi** hakwo… hunaman au noitine.	Hiaki	Maria
3A	7.2	Intok kia inen **isla**po ho'ara.	Hiaki	Luisa
3A	7.3	Kia inen hakun, intok kia ili **isla**mpo hooneete hunum hak ta'apo chochopo'oku.	Hiaki	Luisa
3A	27.5	Hunaa veha tahkaim **lugar**po bwa'awa.	Hiaki	Luisa
3A	29.3	Hunaa veha bwa'ahapteak veha kia hunaa tahkaim **lugar**po ume ili **pedaaso kamoote**m, kamam, hunaka bwa'eka ama ho'ak huname'e si'ime.	Hiaki	Luisa
3A	63.12	**Veras** eu…polesiam enchi nuksaka'ane.	Hiaki	Luisa
3A	85.2	**Asta kee** i'an veha hunuen kaa intok nottivavaek, hewi?	Hiaki	Luisa
3A	86	**Mal agradecidos**, hewi?	?	Maria
3A	88	**Pues si**, heewi	**?**	Maria
3A	89	Bweituk i'an aa mukiatuk huni'i, waa **firma** si'imekut to'oka ketunia, i'an tahtia, ho.	Hiaki	Luisa

3A	107.4	Ay **no se** si, si Mansaniau kom tohiwak o Masaklanpo hakun.	Hiaki	MJ
3A	110.3	Pos si **primeera**m intok ter… **segunda**m intok terseum.	Hiaki	Luisa
3A	112	Hunume Samawakapo si'ime nu'uwakame si'ime **primeera**mtukan.	Hiaki	Luisa
3A	114.1	Chukula intok ume huet si'ime nau toiwakame, hunume veha **segunda**mtuk.	Hiaki	Luisa
3A	114.2	Intuchi **ultimo**po hunum veha kahonpo Gloriapo nau toiwakame hunume veha terseamtuk.	Hiaki	Luisa
	117.1	Ta nee kaa hunea hitaa mechatsu hunum veha te aman toiwak o haiki **semaana** o haiki meecha; veha kia nee veha hiapsa.	Hiaki	
3A	121.1	**Siete**mmeu kivakla kechia.	Hiaki	MJ
3A	123	Hunum veha, hunum o empo aman ket noitek, katin **konvento**po tohiwak.	Hiaki	MJ
3A	127.1	Hunama **konvento**po (sic) veha te tohiwak.	Hiaki	MJ
3A	127.3	**No se si semana o dos dias**, hunum veha nee…	?	MJ
3A	135.8	O si te ama **semaana**k o ama woi mechak, hunum veha nee tua kaa hunea, bwan.	Hiaki	MJ
3A	141.4	Hunum veha nee kaa hunea, o si **de dia o de** noochi hunum **havoneera**u vicha	Hiaki	MJ
3A	141.7	Hunuu ti **havoneera**	Hiaki	MJ
3A	145.1	Ta hunama **havon**, hita, savum ha'ani pohpohtiawan tea hunama'a.	Hiaki	MJ
3A	149.1	**Ni modo que kon muebles**, kia… Hunaman te tohiwak.	Hiaki?	MJ

3A	156.1	Bwe'u **patio**tukan inen katinia?	Hiaki	Luisa
3A	156.2	**Pader [sic: pared]** ilevena, korak sami korak	Hiaki	Luisa
3A	161.1	Hunaka, hunuka veha hooka **para venirse desertados**	Hiaki	MJ
3A	161.3	Hunama, hunama **havoneera**, **havoneera**po veha ume haamuchim veha rettrataroa **para darles la, la, la tarheta donde van a pagar**	Hiaki	MJ
3A	161.4	**No se,** haiki humak mamakwa, komae?	Hiaki	MJ
3A	165.2	Hunaka, empo uka **tarheta**ta kaa nu'ubwa?	Hiaki	MJ
3A	167	Nee ala aa nunu'ubwa, malata **tarheeta**.	Hiaki	MJ
3A	169.4	Hunaa veha seeyok, ho, **donde esta firmado.**	Hiaki	MJ
3A	169.5	Hunaa **tarheta**, **cada ves que le dan el dinero le cheecan.**	?	MJ
3A	174.1	**Kada** mamni ta'apo aa mamakwa.	Hiaki	Luisa
3A	174.5	Chukula intok katin, **segunda**po intuchi rettrataroakame…	Hiaki	MJ
3A	176.2	Ta peronim hunuen itom ya'aka, bwan, **para que** nehpo ket hiva ket mikna tea ti hiian uu peron.	Hiaki	MJ
3A	197.8	Aa **pues**, **yo que voy a saber de quien es**, o hita, katin haisa maachi ume ili uusim.	Hiaki	MJ
3A	197.16	**Aver, aversi** lutu'uriapo itom, itom intuchi ili aumentaroane	Hiaki	MJ
3A	197.18	**Ya ves** ume haamuchim hunuen bwan nau rehteteko katin wate ket si vasiloonim.	Hiaki	MJ
3A	199.3	**Ohala kee** itom intuchi itom aumentaroae'an.	Hiaki	MJ

3A	200.9	Pos hunak naateka nee tua malata ilitchisi huni nee kaa apela hakun aa…porque nee kaa aa **vino** hi'i'ii'aa, ho.	Hiaki	MJ
3A	202.1	Hunuen nee aa hohoan uka malata…**por tal de que no se emborachara**.	Hiaki > Spanish?	MJ
3A	202.2	Pos chukula ume haamuchim **con aumento, sin aumento** pos **se emborachaban**, ho.	Hiaki > Spanish?	MJ
3A	202.3	Haisamaisi hunum **havoneera**po kom hohoanwan ume hamut nakooriam…	Hiaki	MJ
3A	206.1	Hunaman kia kom am hohoan ume peronim **por tal de que no anduvieron en la calle borrachas**.	Hiaki > Spanish?	MJ
3A	206.3	Ta pos **haboneera**po kom am hohoan.	Hiaki	MJ
3A	210	**Veras** ime'e	?	MJ
3A	214	Huname, hunama, hunama **havoneera**po intok haiki metpo, o **semaana**po te ama hookan?	Hiaki	MJ
3A	217.2	Yoemem im, im waim **paas**ta makwau tahti te ama hooka.	Hiaki	Luisa
3A	222.2	Pos hunuen veha nee kaa…**bueno** pos… maala huni bwan, reeve pues humak kaa pensasaroan, kaita haksa bwan, pos o inen ta'apo te im yeu sahak… kaita.	Hiaki	MJ
3A	225.3	**Estasion**po	?	Luisa
3A	225.7	Hunama hahapte ume **kamion**im	Hiaki	Luisa
3A	226	**Asi de modo que de, de, de** Toluuka **a** Mehiko, ili mekka?	Spanish ? Hiaki?	MJ
3A	232.1	Pos hunum veha nee tua… hunum veha, ay si, si **se sierra el mundo**.	Hiaki > Spanish?	MJ

3A	242.1	Pos imin katekan uu maala **de tras de un…de la barda**.	Hiaki	MJ
3A	245.6	Senu ta'apo, sietetaka, ochotaka ma'awa; nuevetaka, diestakai.	Hiaki	Luisa
3A	249.4	Uu heneral Mori veha nattemaiwaka veha hunen veha te... Hunum veha tu'i **lugar** ti hiia tea Peroteu vicha.	Hiaki	Luisa
3A	275.1	Hunuu **hefe** ama weyen, ori kompae Antonio Aniatuka'u.	Hiaki	Luisa
3A	279.3	**Para que** hunak veha hunamemak, huname yahak veha si'ime nau saka'ane ti hiupo.	Hiaki	Luisa
3A	279.4	Ta kia veha **politika**po… Hunuen hiuwaka veha huname a'avo nu'ukan.	Hiaki	Luisa
3A	287.6	Intok wa, Poori, yoeme Pori Soso'oki tea katin ket **kavayeria**tukan im Vikampo.	Hiaki	Luisa
3A	320.2	Nee, nee veha im **parte**po kia reeve bwan inen bwan au wauwaate.	Hiaki	MJ
3A	338	**Por eso** nee Mariatau hunen hihiia i'an…	Hiaki	MJ
3A	346.3	Hunuka, hunuka Lasarota huni hitaa **bien**ta itou ya'alataka ume yoemem,	Hiaki	MJ
3A	354.1	Pos hunum veha nee veha in **parte**po ii papaa veha im vicha vittuawak con la hente de...**Mal de cuentos que**, nee kaa tua hu'unea, **pero tenia un ocho y un seis, ochenta y seis**, hewi?	Hiaki > Spanish?	MJ
3A	354.2	Hunaka veha im nunu'ubwa uu papaa, henompo, **ochenta y seis rehimiento**	Hiaki	MJ
3A	354.4	Chukla intok **rehional** tea	Hiaki	MJ

3A	354.6	**Con el veintinueve** hunum rehte **en el estado de** Michoakan	Hiaki	MJ
3A	356.1	**Cuando la "Revuelta de Escobar"** hunum veha, ho, **Dios** kaa aa waata uka papaata	Spanish > Hiaki?	MJ
3A	356.9	Hitaa, haisa teak ume'e **un, un, un como un arroyo sin salia, como encajenado**	Hiaki > Spanish?	MJ
3A	356.12	"Pos tua hunum nee pa'akun vicha yeu vuiteo intok hunuu teniente Vaayes **"Correle Hoan!,**	Hiaki	MJ
3A	356.13	**correle Hoan, ay vienen!"**	Hiaki	MJ
3A	356.18	Pos hakun yeu yahaka veha papaa veha **"Aa Hoan nos salvamos"**	Hiaki	MJ
3A	356.2o	Pos vatte emo suawak **en la Revuelta de Escobar**	Hiaki	MJ
3A	363.1	**Ya ves que** kia hunuen nau kuutek kia wiko'i puntammake emo ore'ine.	Hiaki	Luisa
3A	364.8	Haisa humak nau auka emo kuutaka bwan ume peronim, **Rehional con los Escobaristas.**	Hiaki	MJ
3A	364.12	Hunaman hakun veha Michoakanpo, haksa **lugar**po, haisa humak aa teuwa.	Hiaki	MJ
3A	364.14	**"Ay que feo Mari"** ti hiia	Hiaki	MJ
3A	364.16	**Miralos kapotes en los mesquites, en los postes,** ume **kapote**m ketun ama kokowe	Spanish > Hiaki?	MJ
3A	368.1	Hunaa intok, hunaa intok ama veha ume, ume peronim, o si ivotana o wanna'avotana **en los postes de la luz,** hunama kia, kia husamoyo weyek ume **kartucha**m.	Hiaki	MJ

3A	372.3	Pos hunama, huname wattek, **va el, va el segundo tapador** huname intok pos ket wokimmea, **con kanyon, con** metrayadooram.	Hiaki	MJ
3A	374.14	"Pos ume kattee am vicha, **estaran tapados**."	Hiaki	MJ
3A	376.8	ti hiia tea uu papaa, "**Hasta aqui**"	Hiaki	MJ
3A	376.11	Pos hunaa yoi ti hiia, **pues** nee huni maai ti hiia tea	Hiaki	MJ
3A	378.8	**Siempre le habla a la Virgen de Guadalupe**ka aman kivakek	Spanish > Hiaki?	MJ
3A	380.3	Chuvvatuk im veha kuhwa tea aman **eskina**po inen	Hiaki	MJ
3A	382.12	Pos ii, ii veha **rehimiento** papaata vetana veha am bwisek tea huname'e.	Hiaki	MJ
3A	382.15	**Es mejor**, pos ume **heneral**im taawa.	Hiaki	MJ
3A	392.1	Hunaman yahaka veha **numero** nakuliawak, 24 rehimiento, hunuu papaa.	Hiaki	MJ
3A	396.1	…**pero** kaa hu'unea o si hunama taawak o ketuni ket kaate.	Hiaki	MJ
3A	404	**Ya se habia**...ta, haivu...uu **numero** nakuliari	Hiaki	MJ
3A	406.1	Hunaa veha, imin yepsaka veha uu, uu **mensaje** aman vittuawak Mehikowi.	Hiaki	MJ
3A	408	Hunaman orden yepsaka veha ii veha **heneral**tuk, Miguel Badiyo.	Hiaki	MJ
3A	412.1	**Por los indios** pos kaa kiimuk.	Hiaki	MJ
3A	412.3	Hunuen veha, bwe si am naken hunaa **heneral**…	Hiaki	MJ
3B	1.5	Nama veha **veinti nueve, veinti nueve**tuk hunama si'ime yeu yahak,	Hiaki	MJ

3B	1.6	Huna’a veha katin **rekorte** ya’awak?	Hiaki	MJ
3B	5.4	Tren veha ama katek **estasion**po, vagonim	Hiaki	MJ
3B	7.1	Hunamn kiimuk **con cual quier cosita de dinero**	Hiaki	MJ
3B	7.4	Ime Hiakim intok pos **con ganas de que** itom lisensiane	Hiaki	MJ
3B	7.1o	Hunama yeu sahaka veha ume vem **amigo**m, vem wawaim sahak.	Hiaki	MJ
3B	7.18	**Primer remesa veinte**taka yeu sahak	Hiaki	MJ
3B	7.19	**Veintetaka sahak**	Hiaki	MJ
3B	7.33	Ho, kia ili aa mansotek intuchi **veinte**taka yeu saka’ane.	Hiaki	MJ
3B	9.3	**Barda** wanna'avotana katek	Hiaki	MJ
3B	9.15	“Ho, wiko’ita ama su’utohaka aman hak **kurva**po kom chepte” ti au hiune papatawi.	Hiaki	MJ
3B	11.5	**Pues** papa veha, papa hiva hoara… i’an veha kia apela ama taawak.	Hiaki	MJ
3B	14.1o	**Asta ke** kaave ama taawak	Hiaki	MJ
3B	14.2o	**“Oye** Huan, te saka’ane itom bwiarau vicha.”	Hiaki	MJ
3B	14.32	**Asta ultimo**po veha nee hunuen au hiak	Hiaki	MJ
3B	14.41	**Asta ke** hunuen aa ya'ak	Hiaki	MJ
3B	15.11	Uu **primera parte**	Hiaki	MJ
3B	15.13	**Diez y nueve** wasuktiapo inim ee nah siika	Hiaki	MJ
3B	15.14	Inim **ehersito**po ee kumpliaroak.	Hiaki	MJ
3B	15.15	Ah, juname **diez y nueve** wasuktiam premiaruava’awa’e Huan.	Hiaki	MJ

3B	15.4	Chuvala nee vooviicha porque **como** itepo hakwo naatekai inim ite yoimmak kaate, tiia.	Hiaki	MJ
3B	19.4	Maytorena, o hitasa humak…ta, **bueno** hunum karta vittuawak.	Hiaki	MJ
3B	19.9	"Haisa kaa au waate uu **govierno**?		MJ
3B	19.24	**Mil nueve sientos kuarentai sinko**po veha yepsak chikti **voleto**mmake.	Hiaki	MJ
3B	19.42	Kia **traision**po aman am suutohak ume am nuksahakame.	Hiaki	MJ
3B	20.1	I'an intok pos, **por eso** hunen nee au hiune papatawi.	Hiaki	
3B	20.22	Hiva, hiva ee pensionaroana, **kon otro dinero mas alto.**	Hiaki	
3B	20.24	Pos kaa aawe bwan, kaa ito venasi bwan, **con este papel lo voy a alsar.**	Hiaki	
3B	21.1	Kaita **interes**ta amet hippun sontao hiosiammechi.	Hiaki	Luisa
3B	22.1	Kaita, kaita **interes**ta hippu'usuk	Hiaki	MJ
3B	22.5	**Ya veh kee** a'apo chea hunuka **Seguro de vida**ta huni kaa vehe'etuak.	Hiaki	MJ
3B	22.11	I'an kaa **ya ves que** hunuka Nehtota hunam kaa vo'oka?	Hiaki	MJ
3B	22.15	**Trienta sinko**tuk mukuk tea.		MJ
3B	23.5	"**Mehor** ama au tawa'ean."	Hiaki	Luisa
3B	27.1	Si'ime hunuen utteapo sontau ya'ari, hakwo kaa… i'an **veinte**tuk im hoowak ket kumui Ilaario im **kavayeria**mpo weaman kechia, papatam sae yo'owe.	Hiaki	Luisa
3B	35.2	**Para que** emo mahtane, emo am hohooriane.	Hiaki	MJ

3B	36.1	Ii Tio Chemata papa haisa teakan, tio Chema, heewi ,mariata **suegro**suka'u?		MJ
3B	38.2	**Por eso** nee Mariata...	Hiaki	MJ
3B	67.11	Tua **pistola**i, im kia kova pehti aa veevak Hunak veha itom, itom hoarau yeu wechekan, komae Ramonatukautawi.	Hiaki	Luisa
3B	118.3	Papa pos humak a'avo **visitan** ta hunum vicha veeviak.	Hiaki	MJ
3B	124.7	**A de cuenta que** nee kotne	Hiaki (?)	MJ
3B	125	Kaita **kafe**	?	Luisa
3B	137.4	Huntuen, hunum, hunum Samawakapo bwihwakai, inim haksa **lugar** humaku'u peronim veha **para avansar** pos **de nosotros**, **aver** hitasa te weiya.	Hiaki	MJ
3B	137.11	**"Cosas asi pues, no se puede…"** Nee intok repam yecha'ariak, ti hiia.	Hiaki	MJ
3B	137.21	**Pues** nee nee ama katek ili, ili vepa supem inien nee ya'ariak hikau vicha.	Hiaki	MJ
3B	138.8	**Pa cabalar [acabar?]** hunaman hakun haamichim	Hiaki	Luisa
3B	140.16	**"Demonio**, ala'akun, kia kaa nee, neu enchi entregaroak."	Hiaki	MJ
3B	140.19	Hunaman haksa im kaupo haksa **lugar**po ika au waataka bwe aemak hiia tea uu peron.	Hiaki	MJ
3B	142.2	Hunaka'a veha si tapuni ume **gayeta**m nunu'ubwa tea bwan.	Hiaki	MJ
3B	142.3	Kia **polvo**	?	MJ
3B	142.4	Hunak veha, "**Tasa**ta neu bwiise empo maala."	Hiaki	MJ
3B	142.6	"Bwe **gayeta**m nee enchi mikvae."	Hiaki	MJ

3B	142.15	Hunak veha **tasa**ta au bwisek.	Hiaki	MJ
3B	142.16	Senu **tasa**m aa mikak tea.	Hiaki	MJ
3B	181.4	Hunam hak, kia huet haku'u, **rancho**mpo pocho'oku, va'apo, **isla**po hoara.	Hiaki	Luisa
3B	183.2	Ta kaita **kamion**im.	Hiaki?	Luisa
3B	190	Haksa **parte**po hiva?	Hiaki	Reynaldo
3B	193.3	Hunum **parte**po si vu'u porque hunum si vinwa hookan.	Hiaki	Luisa
3B	208.1	Hakunsa intok ume bweere **platano**m kaa bwabwa'awa?	Hiaki	MJ
3B	211.2	**Plaatano**m	**?**	Reynaldo
3B	212	Si bweere **plaatano**m	Hiaki	MJ
3B	213	**Plaatano macho**m chea bweere	Hiaki	Reynaldo
3B	215	Ta hunum vicha **plaatano macho**m si vu'u o'oven, ta kaa vehe'e, ta gente am bwa'e, ta kaave amea koko'okoe.	Hiaki	Luisa
3B	222.2	Potampo, **bueno**, itepo amea weriakan, malatatuka'uta vetana.	Hiaki	Reynaldo
3B	224.4	**Por eso**, mala hunuen e'etehon.	Hiaki	Reynaldo
3B	233.2	**Por eso que** imi, imin, imin veha Potata lisensiak.	Hiaki	Reynaldo
3B	247	Hunama intok senu havesa **kantora**, Sewam teame, huname ama hoho'an tea.	Hiaki	Reynaldo
3B	249.4	**Bueno**, entonces ini, ini'i malataim, hiva inim ho'aka huni'i hunuen neu aa e'etehon.	Hiaki	Reynaldo
3B	259.2	Huna'a ume **rettrato**m hippuen ibwan.	Hiaki	Reynaldo
4A&B	12.2	Empo ori kaa intok etehovaetek, huni **cuando lo quieres cortar…**	Hiaki > Spanish?	Maria
4A&B	19	…nee veha **punto**ta enchi maksimne.	Hiaki	Andres

4A&B	20.3	**Es Vakatete Grande** intok Vakateeve Ilitchi.	Spanish > Hiaki?	Luisa
4A&B	22	Oo, uu **gravadora**?	?	Maria
4A&B	72.1	**Es como fruta, pero** hente, pos, kaita.	?	Luisa
4A&B	82.1	Apoko hum kaa aa hippue uu **tarheta**?	Hiaki	Luisa
4A&B	89.1	Uka bwe'u **tarheta** kaa hippue?	Hiaki	Andres
4A&B	92	**Mas o menos como** hakwo, hitaa wasuktia.	Hiaki	Maria
4A&B	103	Huname intok im haku'u, ket im yeu yoemtukan im haksa **lugar**impo?	Hiaki	Maria
4A&B	106.2	Huntuan **kuarentai nueve**po muukuk in ae, imi'i.	Hiaki	Andres
4A&B	118.2	Ika **tarheeta**ta makna.	Hiaki	Andres
4A&B	121	Apoko uka **rehistro**ta empo kaa hippue?	Hiaki	Luisa
4A&B	123	Hunum **ehersito**po veha komo utteapo ama kivachana?	Hiaki	Maria
4A&B	124.2	Ite ori, ite ori, i'an ori **ultimo**po veha ite heneral Moritukautamak imin vittuawak Mehikowi.	Hiaki	Andres
4A&B	129.2	Kinse **dia**po ti itou hiia uu heneral, ori haisa teak, Yukupiisio.	Hiaki	Andres
4A&B	131	Bwe ii kaa ama… ii chea nee ae **revista**vae matchuko.	Hiaki	Andres
4A&B	137	Ime ili **kuadro**mpo veha seyom hoana ineni.	Hiaki	
4A&B	139	Hunuen veha kia **revista**ta ya'awak veha ori komo, eme aman ori **sentavo**m mamakwa o…	Hiaki	Maria
4A&B	140	**Kada kinse dia**po	?	Andres
4A&B	141.1	**Kada** vusam metpo	?	Luisa

4A&B	141.2	**Kada seis meses pasan revista komo que si** ketuni sontaom	Spanish > Hiaki?	Luisa
4A&B	142	Naiki metpo te **revista**.	Hiaki	Andres
4A&B	143.2	Porque…hunuen veha im veha kaa, kaa **revista**k, hunuat veeki ta'apo kaa **revista**k, **revista**po faltaroak intuchi vemelasi aa ya'atevone.	Hiaki	Luisa
4A&B	147	Haivu kaa tomi yo'one kaa **revista**ko.	Hiaki	Luisa
4A&B	148.2	Hunuen veha **tiene kee** aman kumpliaroane.	Hiaki	Maria
4A&B	161.2	Kinse **dia**po tahti hiva aman anne, ti hiia.	Hiaki	Andres
4A&B	161.5	Hunak veha ori **pas**ta intok ama firmaroane tea ti hiia.	Hiaki	Andres
4A&B	163.1	Ii **sako rasion**ta intok koksimne, hunama intok **lonche**ka weene.	Hiaki	Andres
4A&B	163.3	Huntuan i'an, i'an im yepsakai veha **treinta** wasuktiam kumpliaroak **goviernot**a serviaroakai.	Hiaki	Andres
4A&B	165.2	Hunak te veha ori hunum yahaka veha ori **kuarentai sinko**po te veha im yahak, Mehikopo.	Hiaki	Andres
4A&B	165.3	**Kuarentai seis**po intok vinavicha te sahak.	Hiaki	Andres
4A&B	170.2	**Uno kuarenta**ta koovan, si'ime hunako.	Hiaki	Andres
4A&B	176.1	Kaa…**varaato** bwan taho'ori.	Hiaki	Andres
4A&B	190	**Kada** pueplompo yeu saka'awak, yeu wikwaka'a bwan.	Hiaki	Andres
4A&B	198.1	**Pues** hunuen, hunuen te aayuk itepo.	Hiaki	Andres
4A&B	198.4	Ika intok im **kareteera**ta vo'okamta hunuka intok te si'imeta tu'utetuawak.	Hiaki	Andres

4A&B	199	Ume, uu **viiya** intok hiva ama vo'oka?	Hiaki	Maria
4A&B	211	Porque kuta **karboon**im hunume'e	Hiaki	Luisa
4A&B	243.2	**Mochila**ta ae suma'ine.	Hiaki	Andres
4A&B	287	Haisa intok eme'e hu'unene hitaa… **que se puede comer y que no se puede comer**?	Hiaki > Spanish?	Maria
4A&B	290	Porque katin wate hita hunuen ori aa **es venenoso.**	Hiaki	Maria
4A&B	304	**Kafe**ta intok hiva weiyaane?	Hiaki	Maria
4A&B	305.2	**Kafe**ta haksa aa teune?	Hiaki	Andres
4A&B	305.3	Kaupo kaita **kafe**.	Hiaki	Andres
4A&B	306.1	Kaita **kafe**.	Hiaki	Luisa
4A&B	306.2	**Kafe**ta kaa hi'ine.	Hiaki	Luisa
4A&B	311.3	...taewai ama medio, si nee...	Hiaki	Andres
4A&B	316	**Mil novesientos dies**po hunuen a'anen.	Hiaki	Andres
4A&B	319	Si ori, hunuen kawipo ane'etek intok kaita ama ayuko, komo huyam o hitasa, **como matitas o arboles asi**, hunak veha hitaa bwa'ane?	Hiaki	Maria
4A&B	330	Senu **historia**po ket, ori, i'an ori, uu lu'utekame, yo'owe, Chema, bwe Tosari tea.	Hiaki	Maria
4A&B	365	Haksa tua yoim **enemigo**ta kaa mekka aneu pos kaa nu'uvaetek veha pos am sussua, am hiavih sussua.	Hiaki	Luisa
4A&B	384	Hiva wokimmea, **oo que va**?	Hiaki	Maria
4A&B	388	Uu, si vinwatune, **kasi el año, que no**?	Hiaki	Maria
4A&B	393.3	**Mismo** ume peronim itou aa totoha.	Hiaki	Andres
4A&B	399	**Mismo** ume peronim.	Hiaki	Andres
4A&B	438.4	**No ves kee** uu kava'i sukane, uu manteka hiva yee a'awiria.	Hiaki	Andres

4A&B	459	Intok kia hak huni, hunuen veha hakun bweere kawimmet hikat **kampamento**ta yechak veha hunaman si'ime uchi nau yahine **familia**.	Hiaki	Luisa
4A&B	528.1	Porque hunum **oficina** katek, Tataa Va'ampo.	Hiaki	Luisa
4A&B	529.2	**Kada** ranchompo chea wepul vakeo hiva hooka.	Hiaki	Andres
4A&B	558	...human kasi **mil**taka suari		Luisa
4A&B	568	**Sorpresa**po am bwisek?	Hiaki	Maria
4A&B	571.1	…kaa hu'unean hewi, porque ket ini'i Hesus Raahu teame ket **kampanya**n imin hakuni hitasa hariwa.	Hiaki	Luisa
4A&B	571.5	Ta pos **konfiansa**, bwan.	Hiaki	Luisa
4A&B	582.1	Hiakim ibwan ama hookan, ta ume ili tutu'i si'ime **kampanya**n, hakun hita haiwan, hi'ibwa haiwan.	Hiaki	Luisa
4A&B	592.1	Ii chea **kada** ori, tahtiwak hiva yoim aa bwi'ibwise.	Hiaki	Andres
4A&B	596	Ii intok **kada** kawiu wattiwak haivu hunumun, haivu bwihritune.	Hiaki	Andres
4A&B	598	Aa, **kada** kawiu… inii intok haivu hakun tohiritune.	Hiaki	Andres
4A&B	614.3	**Ya ves kee**, alian veha kia kutanaat tu'isi aa pittane, kia pusim yeu ruktek hunak veha aa suutoine.	Hiaki	Andres
4A&B	629.7	Kia **ventaha**ta bwise.	Hiaki	Andres
4A&B	633.7	Nee intok kia kaa **konfiansa**k.	Hiaki	Andres
4A&B	644	**Plaaya** ama katek tea.	Hiaki	Maria
5A&B	62.1	**Siquiera** i'an ili mimikwa.	Hiaki	Maria J

5A&B	65.3	**No se** si mamni metpo te ama hookan, haisa humaku'u, ta hunum intok ume yoeme sosotane teaka intok ori, listapo kima'awak, ume uusim… hunume kima'awak.	Hiaki (Spanish > Hiaki?)	Reyno
5A&B	87	…uka **sementeria**ta kateka'apo, wanna, hunum ori…	Hiaki	Reyno
5A&B	115	Hita, **kafe**ta, hita aman nunu'en, viivam.	Hiaki	Reyno
5A&B	129.2	Ta huname intok…haivu, haivu kia **eskorta**m ama anne.	Hiaki	Reyno
5A&B	137.1	… ume yoeme veha inika **paas**ta firmaroane'e teakai ti nuksaka'awak.	Hiaki	Reyno
5A&B	158	Aa, kia vempo **voluntario**m?	Hiaki	Maria J
5A&B	163.1	Katin, kia ori veinte **dia**…	Hiaki	Reyno
5A&B	165	...**renovasion**ta weyeo.	Hiaki	Reyno
5A&B	167	Ta hunak vempo **mismo** nau nahsuan ume...	Hiaki	Reyno
5A&B	191	Ta hunak tu'ulisi nau **union**tukan, heewi?	Hiaki	Luisa
5A&B	213	**No ves kee** veha vette.	Hiaki	Reyno
5A&B	226.1	**Gracias a Dios** ket aa ania.	Hiaki	Maria J
5A&B	226.4	Kaa aman… o, o humak **sabe** haisa ibwan e'e'ak uu heneral, o si… bwiapo hokame veha yeu kaate, yeu kaate, hunuen yeu sahak.	Hiaki	Maria J
5A&B	232.6	"Haisa, **por casualidad**, ume itom o'olam hunum hak yeu katne, kaa tu'ika a'avo toina.	Hiaki	Maria J
5A&B	232.7	**Estasion**eu vicha te tennine.	Hiaki	Maria J
5A&B	239.6	Karay, vagonnimpo te hiune…**Ay Dios**!	Hiaki	Maria J
5A&B	239.15	Poloovemme, kia haisa te'inine **ultimo revuelta**po nu'upawakame.	Hiaki	Maria J

5A&B	239.18	**Era el fin de la hente en esos años**, i'an ti nee e'e'an.	Hiaki (Spanish > Hiaki?)	Maria J
5A&B	243.4	Ume **vala**m am hamtala ume wokim.	Hiaki	Maria J
5A&B	243.8	Hunaman intok ume **enfermero**m kaa ameu yuma'ane; haisa am hittone?	Hiaki	Maria J
5A&B	243.11	**Cada** woi, vahi ta'apo aman te yaaha.	**Hiaki**	Maria J
5A&B	243.16	"**Aver si por casualidad**, in kuuna o ili sinkota neu vittuak."	Hiaki	Maria J
5A&B	243.19	"**Pues** nee kartam weiya."	Hiaki	Maria J
5A&B	247.27	Nee **plancha**ta weiya.	Hiaki	Maria J
5A&B	247.32	Nee ala kaa nunnu'ubwan uu maala, porque mekka intok kaa **seguro**.	Hiaki	Maria J
5A&B	247.36	Hunaman hakun veha haksa ili tiikomvetchi'ivo **la plancha**.	Hiaki	Maria J
5A&B	249.5	Pos kia bwanaka huni kia senu ili **tasa** tiikom am mikne.	Hiaki	Maria J
5A&B	249.8	Chea wam he'ela veha mala veha puato ama vi'ine **por un poquito de frijol**.	Hiaki	Maria J
5A&B	249.11	Aa, aa hunaa **revolusion** hiva weye, hiva weye.	Hiaki	Maria J
5A&B	249.12	Haiki **semana**, o meecha hunama te hooka.	Hiaki	Maria J
5A&B	251.1	**Por eso** nee inen hiune.	Hiaki	Maria J
5A&B	251.6	Kaa haksa itepo **sentaditos esperando, no**.	Hiaki	Maria J
5A&B	252	Pos uu sontau familia chea im huni **doble**po aa pasaaroak.	Hiaki	Luisa

5A&B	254.2	Ime'e intok…"Aa, kee peronim ineni…" **Pero no saben** hitaavetchi'ivo hunaman tohiwakamme.	Hiaki	Maria J
5A&B	260	Kaa uu bwe'u **palacio** i'ani?	Hiaki	Maria J
5A&B	271.7	Hitasa **kulpa**ka; inime haamuchim, ili yo'otulim inime veha tohiri.	Hiaki	Maria J
5A&B	280.3	**Dies o quinse**taka wepu'ulai uhteam nau hippu'une.	Hiaki	Maria J
5A&B	280.7	Hunume veha **veinte**taka emo nau tohak tea.	Hiaki	Maria J
5A&B	282	**Pues** mala veha Florespo taawak.	Hiaki	Maria J
5A&B	288.2	**Tarheta** hunum katek, uu maala hunumun Mehikowi.	Hiaki	Maria J
5A&B	290.2	**"Dies**taka, **veinte**taka emo nau tohine.	Hiaki	Maria J
5A&B	298.2	**Por eso** hunuen hiune maala.	Hiaki	Maria J
5A&B	304.2	Ta ket hiva ameu heela te ameu nokne o **"Vente paka o no..."**	Hiaki	Maria J
5A&B	308.2	**"Si el indio no se aregla entre dos, tres años…**hunume bwiam itepo am nu'une, ho."	Spanish > Hiaki?	Maria J
5A&B	310.2	"**No le hace que estos**, ume yoim, ume Hiakim, itepo ume bwiam te am nu'une.	Spanish > Hiaki?	Maria J
5A&B	311.2	**Solamente que** waa vato'i kaa **Dios**tat… kaa…	Hiaki	Maria J
5A&B	317.2	Kaa hunuen e'ateko, **es porque** kaa hunuen eene.	Hiaki	Maria J
5A&B	318.1	**Aveces** nee hunen hiune.	Hiaki	Maria J
5A&B	318.3	Ini'i Hiaki, uuu, **mil nove**… **mil ocho cientos noventa**tuk naateka hunak hunumun tohitaitewak, Yukataneu.	Hiaki	Maria J

5A&B	318.4	Mala **mil novecientos dos o tres**tuk hunumun vichaa nuksaka'awak.	Hiaki	Maria J
5A&B	331.2	Hunuen, hunama…kia bwan chu'umvenasia, **a de cuenta que** animaalim…que aman hoarau te aa hi'ine, hi'ine o aa he'eka…o… pos ume hahawaa bwan.	Hiaki	Maria J
5A&B	333.8	Kecha'awak weene tea, bwan ta kaita **movimiento** kaa hippue.	Hiaki	Maria J
5A&B	333.11	**Kee barbaro** ti kia nee e'ene.	Hiaki	Maria J
5A&B	335.3	Ta uu yoi bwan hunuen kaa tu'im aa mamak ti hiiaka, aa ko'okoe ti hiiaka hunum veha aa su'utohak **en el ospital de Nayarit**…Tepik, Nayarit.	Hiaki	Maria J
5A&B	339.3	ti hiia tea ume **enfermeera**m.	Hiaki	Maria J
5A&B	344.2	In mala **grande**ta intok ume woi hamut yo'owe.	Hiaki	Maria J
5A&B	348.3	"Haisa itepo am hoone, **esos indios alsados**."	Hiaki	Maria J
5A&B	348.4	Ti hiia tea uu **enfermeera**.	Hiaki	Maria J
5A&B	348.5	Hunaa hamut hunuen hiia, ave Wadalahaarao yahiwau veha aman ameu tohiwak tea, peronim aa **eskorta** tea uka hamutta.	Hiaki	Maria J
5A&B	358.7	**Una persona veintisinko** ti hiia uu maala.	Hiaki	Maria J
5A&B	370.2	Aa, intuchi senu **perol** intok uu kanela.	Hiaki	Maria J
5A&B	372.2	Intok wepul ili **piesa paan**im emo makwak ti hiia.	Hiaki	Maria J
5A&B	381.1	"Nee veha inim **lugar**po em nee vicha'apo, dies wasuktiapo nee inim katek."	Hiaki	Maria J
5A&B	386.3	"**Testigo** humaku'u."	Hiaki	Maria J

5A&B	394.4	**A de cuenta que** kia si'ime…ameu kikkivake tea chukui munimmeo.	Hiaki	Maria J
5A&B	406.18	"**Ohala kee** nee bwa'a'ean."	Hiaki	Maria J
5A&B	408.2	Uu, **pues** hunama veha ave au me'a ti hiia uu maala.	Hiaki	Maria J
5A&B	425.3	**Por eso, por eso** hunuu hente, hunaman hakun hoosukame, hunaman yo'otukame, wate aman yeu tomtek, kaa vem e'apo.	Hiaki	Maria J
5A&B	427.4	**Asta mil novesientos dies**tuk, enchim hunum hiokot aneu, vempo intok hunaman peron ya'awak ume yoeme.	Hiaki	Maria J
5A&B	432.2	Hunaa hunum Mehikopo au **enfermera**tukan, ti hiia…	Hiaki	Maria J
5A&B	436.2	Hunaa **revolusion** hiva weye.	Hiaki	Maria J
5A&B	436.4	Hunama veha, hunama veha a'apo veha, kaita gazam auk tea intok ume **alkol** huni kaita tea ume ko'okoeme hittovaekai.	Hiaki	Maria J
5A&B	436.11	"**Problema** si bwe'uka inim auk, **señor presidente."**	Hiaki	Maria J
5A&B	442.3	"I'an empo **tienes el, que, el mando en tus manos.**	Hiaki	Maria J
6B	5.2	Vem teekia makri, haiki ocho **manoho**ta veha makritune, aa teekia maktune, tea.	Hiaki	Luisa
6B	13.3	Ta hunu'u veha intuchi uu **mismo** Madero veha hunum veha aman nau am tohak uchi, um Yukataneo nau am tohak, tea huet Meridapo.	Hiaki	Luisa
6B	13.4	Huet si'imen nau tohaka veha uchi ume **vatayoon**im pa'akun yeu am tohak tea.	Hiaki	Luisa

6B	51.6	**No ves que** ilikkani hewi kau kaahon kovi'ikun vicha.	Hiaki	Luisa
6B	58	**Mismo** yoemem am suak?	Hiaki	Heera
6B	59.2	**Mismo** yoeme ibwan am suak.	Hiaki	Luisa
6B	65.1	Heewi, chea vatnaataka, **alsamiento**ta naateo.	Hiaki	Luisa
6B	77.2	Hu'ubwa **alsamiento**ta naateo, itou aa… ii tren voo'o kaitatukan tea.	Hiaki	Luisa
8A&B	1.1	Hunuu veha oripo, hm, **en mil novecientos, mil, mil ocho cientos, que?**	Hiaki	Rosario
8A&B	5	Pos uu **revolución mil sete sientos diez**tuk naatek.	Hiaki	Maria L
8A&B	7.3	Empo **kafe** hooa?	Hiaki	Maria L
8A&B	12.2	Pos, **mas que nada**, Dios enchim aniavu.	Hiaki	Rosario
8A&B	12.43	En aquel entonces, la gente mayor, **tua ume Hiak yo'owe**, entonces tenian ideas, buenas, y esas ideas, pues dieron buenos resultados.	Spanish	Rosario
8A&B	16.4o	Entonces **pues**, hunum tahti hiva nee emou ili aa etehok, i'an lautipo.	Hiaki	Rosario
8A&B	20.7	Waa **enemiigo** amet cha'aka nah kwakteme tua kaa, kaa ameu rukten bweituko waa huya tua kaa kikimuriata hippueka vo'okan.	Hiaki	Rosario
8A&B	20.9	Inien weesime, weesime **asta kee** mil nuevesiento onsepo, Noviemre mechachi wa'a Señor Francisco Madero hunak tiempopo presidentetaka nah kwaktek.	Hiaki	Rosario

8A&B	20.1o	Hunaatuka'u wame wawatekai itom yoyo'owam komo vem aa ta'asuka'apo amani inien veha ket waka **enemigo**ta veah haptevaekai intok a'apoik vem am aniane ti hiiakai vempo ket aa aniaka haptek.	Hiaki	Rosario
8A&B	20.11	Huntuksan waka'a **enemigo**ta vetana ket vempo aa hihha'ariasaka.	Hiaki	Rosario
8A&B	20.21	Ta veha waka **lugar**im hokame ta'avaekai.	Hiaki	Rosario
8A&B	20.26	Inienpo aman vempo tua waka'a **enemigo**ta tua kaa aa mahaika au haptesuk.	Hiaki	Rosario
8A&B	20.3o	Bweituk wa **mal gobierno** hunumun huyau vichaa am viaktak.	Hiaki	Rosario
8A&B	20.45	Wa woh naiki pueplo, achai leim, pueplom ya'ura, waa yoemia **kada** pueplo ve'ekatana aa hippue waka'a vem masa utte'ewa intok wame maalam, anhelitom, ama nah kwakte.	Hiaki	Rosario
8A&B	20.51	Bweituko vempo kaa hak nuklaka ama aa pasaa-roak waka'a **sufrimiento**ta, kaa ine'emachik, kaa pasaaroamachik, kaa vitmachik im ama vichak.	Hiaki	Rosario
8A&B	20.61	Yo'owem teuwaka'u, itom papaam, itom achai yo'owem, **sufrimiento**, vem teuwaka'u, vem etehoka'u hivasu tua te au waate.	Hiaki	Rosario

8A&B	20.85	Wawateka intok waka'a animalta hoyokamta nau tohaka aa suasaka, hunaka waka'a huiwata vem ae hittone'u, hunaka veha hooa, **veneeno**ta.	Hiaki	Rosario
8A&B	20.91	**Enemiigo**ta ameu rukte'epo, huyapo hokaa veha kaa wotti am mumuine.	Hiaki	Rosario
8A&B	20.109	Ime intok **vihia**m hunaman veha aa voovitne waka **enemiigo**ta.	Hiaki	Rosario
8A&B	20.126	Huntuksan inieni waka **enemigo**ta bwiseko, huyapo haksa am kimulapo ameu kimuko waa Hiaki vem kuta wiko'immea siusiuti am mumuisuk.	Hiaki	Rosario
8A&B	20.127	Wattekamme, wiko'o puasuka, **parke**ta si'imeta am u'urak, **mismo** vem wiko'immea vempo veha am nanama haptek.	Hiaki	Rosario
8A&B	20.139	Waka kartata, **mensahe**ta ameu vittuak hunuen hiamta.	Hiaki	Rosario
8A&B	20.141	“Inii humak kia **traision**takai.	Hiaki	Rosario
8A&B	20.143	Inen veha aa teuwa wame yoem **heneraal**im.	Hiaki	Rosario
8A&B	20.148	“Itom pueplom veekatana te yeu yahaka itom **gusto**po itom hoarampo nah kwaktipea.”	Hiaki	Rosario
8A&B	20.151	Wa goviernotat kaita te tua **konfiansa**ta aet hippu'une inen hiuwa'apo veha hiva wa naiki pueplo hunum Pitayapo nau hooka.	Hiaki	Rosario
8A&B	20.157	Inika **traision**ta ameu hoosuk.	Hiaki	Rosario
8A&B	20.165	Hunum teopopo wahiwa veha kia **vanko de arma**ta ama yecha'i.	Hiaki	Rosario
8A&B	20.174	**Asta kee** im veha ameu kiimuk, ama yeu am hahasek.	Hiaki	Rosario

8A&B	20.175	Huevenam ama suak **kada** vem hoka'apo.	Hiaki	Rosario
8A&B	20.187	I'an tomti kateme vanseka aa hikkahakai, aa mammattene, aa pensaroane waka **mal goviernot**a haisa waka vato'orata aa hoosuka'u.	Hiaki	Rosario
8A&B	20.189	Maasu i'an huevenakai wame **estudio**ta hippueme nah kaate.	Hiaki	Rosario
8A&B	20.192	Waka yoita **enemiigo**ta humak aniavaekai vempo veha **estudio**ta hippue.	Hiaki	Rosario
8A&B	20.199	O aet hinilekai, o haksa **kompromiso**m emo maklatakai aet hininle.	Hiaki	Rosario
9A&B	3.6	Intuchi bwiatuk, hivapovenasi, bweituk wa **espiritu** lu'utek, aa nu'uka Itom Achai.	Hiaki	Rosario
9A&B	3.3o	Bweituk vempo, komo i'an orapo, inime wasuktiampo, vichau, vicha waka **eskuela**ta hippue, **edukasion**ta emo maka.	Hiaki	Jose Maria
9A&B	3.52	au cha'atune'epo vetana intok kaita haksa pasaroane'epo aman, veha si'ime…A'apo aa hiapsi aa bwaniane intok aa netanriane, waka tu'i tiempota, tu'i **lugar**ta, bweituk a'apo aa yoemiane, aa yoemiakame, itepo am yoemiak, kaa have… aewai, malawai nakwa, aa yo'ore, inileni.	Hiaki	Jose Maria

9A&B	3.6o	Kaa tu'ik, hiapsita wiutawa'apo, hiapsita ta'aruwa'apo nah kuaktek, ta vea **Dios**ta e'apo, **Dios**ta utteampo, Itom Aye utteampo tua kaita hitasavenak neu pasaaroak, kaita hitasa wa ko'okosi maachi, **bueno**, wa **Dios**ta kahtiwo ana aa pasaaroak, kane kaita tua pasaaroak, ta nee aa vehe'ek, aa ko'oko ta'ak.	Hiaki	Jose Maria
9A&B	3.61	Ta vesa wa'a in **espiritu** kaa yeu siika intok kaa…bweituk kaa hunuen chupia.	Hiaki	Jose Maria
9A&B	3.72	Intok kaaveta nottane **kuando** waka aneme **Dios**ta aa wawatako, **Dios**ta waka orata yuma'u, **Dios**ta hunaktei, waka itom destino tea'u.	Hiaki	Jose Maria
9A&B	3.85	Ta posi itepo kaa aa hippue uka **poder**ta, uka itom ito ae hiokoene'u.	Hiaki	Jose Maria
9A&B	3.87	A'apo **Dios** aa hippue uka **poder**ta.	Hiaki	Jose Maria
9A&B	3.106	Inim bwiapo vem nah kate'epo, ketuni waka **espiritu**ta, **espiritu**ta aa hiopo… hiapsipo hippueteko.	Hiaki	Jose Maria
9A&B	3.107	Bweituk A'apo, Itom Achaiwa, wa **espiritu**, wa aet hu'unaktela intok hunaka kaa yeu aa wikne **asta ke** kaa aa… uka kahtiwota yumau.	Hiaki	Jose Maria
9A&B	3.109	Hunak veha aa u'ane waka **espiritu**ta o hunaksan vea mukne, tia itepo, mukne.	Hiaki	Jose Maria
9A&B	3.11o	Ta e'e, kaa mukne wa **espiritu**.	Hiaki	Jose Maria
9A&B	3.111	Wa takawa tawane, **espiritu** intok kaa mukne.	Hiaki	Jose Maria

9A&B	3.112	Yeu simne, bweituk A'apo aa nu'une, uchi vichaa, waka **espiritu**ta.	Hiaki	Jose Maria
9A&B	3.118	Hunaa wa **pulmon**, hunaa, huna'a.	Hiaki	Jose Maria
9A&B	3.122	Kia kocheka huni tekipanoa, hunaa, wame **pulmoon**im, huname tekipanoa.	Hiaki	Jose Maria
9A&B	3.123	Kialikun vea, kia kocheka huni chuyu, chuyukti anne porque hunama katek uu **espiritu**.	Hiaki	Jose Maria
9A&B	3.126	Ta vea **espiritu** huna'a aa atteak, hunaa aa weetua.	Hiaki	Jose Maria
9A&B	3.144	Hunulen weye wa itom **espiritu**.	Hiaki	Jose Maria
9A&B	3.149	Katte tomi chupiam **mas de kee**, kee itom tekillea te ito ania.	Hiaki	Jose Maria
9A&B	3.175	Kaa huevena nokta waatane; woi, vahi **palavra** tua sopaaroa.	Hiaki	Jose Maria
9A&B	3.221	Nehpo humak aet penaruane wa in ora **muerte**, **huisio**ta yuma'apo nehpo aet penaruane.	Hiaki	Jose Maria
9A&B	3.227	Huntuksan inika kaa neu aunevetchi'ivo waka tu'i ora **muerta huisio**ta in atteanevetchi'ivo pos inika enchim lutu'uria maka.	Hiaki	Jose Maria
9A&B	3.244	Wa Hiak vatwe, Hiak bwia ti aewame, haksa tiempopo, **Dios**ta, **Dios**tuka'apo naatekai, wa **Dios** hunen aa hu'unaktek, **Dios** itou aa hu'unaktek.	Hiaki	Jose Maria
9A&B	3.251	A'apo **Senor**, **desde kee** inim kom aa yumaka'apo naateka hunulen itou aa hu'unaktek.	Hiaki	Jose Maria
9A&B	3.296	Inim intok itepo kaita **lugar**ta hippue bweituk te waka itom ae ito aniane katte aa hippue.	Hiaki	Jose Maria

9A&B	3.314	**Despues de kee** hunaman itom tataveka intok hunaman intok itou kikkimu.	Hiaki	Jose Maria
9A&B	3.317	Pa'akuni, **lugar**ta tu'iku te ameu kom sahaka hunaman am nannanke.	Hiaki	Jose Maria
9A&B	3.325	Hunai **mismo** vem huiwai hunai te vea intuchi vea am mavetchasaka, chukula kateme.	Hiaki	Jose Maria
9A&B	3.335	Iiyika, iiyika weetua, a'apo **mismo** govierno, ya'ura, itovenasi yoemem itou vivittua.	Hiaki	Jose Maria
9A&B	3.343	Waka **munision**ta, si'imeta nu'e, aa tovokta.	Hiaki	Jose Maria
9A&B	3.345	**Mettraya**m am u'ura, chikti vem **parke**mak.	Hiaki	Jose Maria
9A&B	3.369	**Asta kee** yeu am wikne hak am hoka'apo, am hahane.	Hiaki	Jose Maria
9A&B	3.372	Ume intok voovitchakane Hiakim, hak tu'i **lugar**po vea hote'ene.	Hiaki	Jose Maria
9A&B	3.423	Vempo **mismo** kaa aa komprendiaroa uu wovierno.	Hiaki	Jose Maria
9A&B	3.424	A'apo **mismo** am ania.	Hiaki	Jose Maria
9A&B	3.435	**Es sierto**, aet aa pasaaroak, huevena hiapsi ama taawak ta kaa vempoim venasia.	Hiaki	Jose Maria
9A&B	3.444	Emo kom aa toine, aa **kontrato**la nunu'e **heneraal**im.	Hiaki	Jose Maria
9A&B	3.449	Vahi metpo, noventa **dia**po am **kontrato** nu'uka hunu senu **heneral**.	Hiaki	Jose Maria
9A&B	3.451	Noventa **dia**po au kom am toine tia, hiapsame, am choilakai ti hiia, ho.	Hiaki	Jose Maria

9A&B	3.453	Kia hakwo huni kaa ya'ak, **a lo kontrario** vempo ama mumui.. suawak.	Hiaki	Jose Maria
9A&B	3.467	**Es sierto**, pos si kia wiwikiaka ameu tennek tea hunama Kapo Va'ampo.	Hiaki	Jose Maria
9A&B	3.474	Wa **kontrato**wa vea a'apoik koovak.	Hiaki	Jose Maria
9A&B	3.49o	Hiakim kaa vempoim venasi pueplopo ho'ak **parake** am kovaavetchi'ivo intok kaa kovaa chupia uu Hiaki, kia hakwo huni'i.	Hiaki	Jose Maria
9A&B	3.492	**Mientras kee** Hiakita, Hiak tahtia kaachin aa ya'ane.	Hiaki	Jose Maria
9A&B	3.495	**No son dominios de,** ori wikoo puntai, vayoneetai, kaa hunuen dominaroarim ume Hiakim.	Spanish > Hiaki?	Jose Maria
9A&B	3.499	**Komo** im Papawem intok wate nasionim, triivum, si'ime **son dominios de, de los Amerikanos.**	Hiaki	Jose Maria
9A&B	3.5oo	Hunuen vea reservaroarim, por kee **dominio**m, intok am ania.	Hiaki	Jose Maria
9A&B	3.505	Mehiko kaita hunuka **garantia**ta am maka.	Hiaki	Jose Maria
9A&B	3.506	Am kova'ala, **es sierto** am kova'ala.	Hiaki	Jose Maria
9A&B	3.508	Hiaki inien tawala, **asta la fecha** Hiakita kaa kova'ala uu yoi.	Hiaki	Jose Maria
9A&B	3.509	Intok **no por fuersa de,** woviernota utteampo nahsuak.	Hiaki	Jose Maria
9A&B	3.514	Asta **mismo** a'apo woviernota huni nahsuariak, **pusieron la frente,** woviernotavetchi'ivo **pecho**ta nenkak ume Hiakim.	Hiaki	Jose Maria
9A&B	3.517	Mehiko **kapital**eo tahtia.	Hiaki	Jose Maria

9A&B	3.519	Hunume si'ime yau…bwe ya'uchimtuk intok si'imeta uka **korporasion** Yakita hippuek.	Hiaki	Jose Maria