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Variation in the Pronominal Clitic System of P'urhépecha-Spanish Bilinguals

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Graduate Program in Hispanic Studies

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Abstract

This dissertation investigates linguistic variation and optionality in the Spanish clitic system of bilingual L1 P’urhépecha speakers from Michoacán, México to determine if interference from L1 features results in non-standard use of accusative and dative pronouns in L2 Spanish. Using the theoretical framework on feature/morphology mapping in bilinguals by Lardiere (2000, 2005, 2009) and Sánchez’s theories of functional interference and convergence (2003), I investigated three phenomena occurring in Spanish and Amerindian contact varieties or amongst bilingual speakers: neutralization of gender (and number) into an invariant accusative clitic lo, omission of anaphoric clitics, and liberal accusative clitic doubling. I also investigated the dative alternation and applicative voice in P’urhépecha to determine if P’urhépecha’s syntax affects bilinguals' representation of Double Object Constructions (DOC) and Prepositional Constructions (PPC) in Spanish, using the definition of the dative alternation and the applicative voice presented by Cuervo (2003a, 2003b, 2007, 2010). Results were obtained using a series of Acceptability Judgement Tasks and Oral Elicitation Tasks targeting specific accusative and dative structures in Spanish. Participants were bilingual individuals (n=23) from two indigenous communities in the region of Lake Pátzcuaro, Michoacán: Santa Fe de la Laguna and San Andrés Tziróndaro. A second group of participants (n=17), speakers of the central Mexican variety that had no personal contact with indigenous languages, were also tested in order to provide a basis for comparison. Results indicate that there is variation in the pronominal clitic system of the bilingual speakers that differs significantly from the monolingual group. Bilinguals both accepted and produced a variety of non-standard constructions that had been previously documented in language contact varieties with Quechua, Maya, Nahuatl, and Guaraní. Observed variation appears to be driven by the historical instability of the Spanish clitic system and the availability of Spanish templates for clitic doubling and omission, as well as by the syntax and featural specification of P’urhépecha. This study contributes to the current corpus of language contact and bilingualism studies by providing an initial description of this new language pairing using the generative framework and aims to increase the visibility of the P’urhépecha language and community as it works to recuperate and maintain its linguistic heritage.
Keywords

Language contact, bilingualism, Spanish, P’urhépecha, accusative clitics, dative clitics, applicative voice, double object constructions, Amerindian languages
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<td>objective</td>
</tr>
<tr>
<td>OBL</td>
<td>oblique</td>
</tr>
<tr>
<td>PFV</td>
<td>perfective</td>
</tr>
<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>POSS</td>
<td>possessive</td>
</tr>
<tr>
<td>PPRT</td>
<td>participle</td>
</tr>
<tr>
<td>PRS</td>
<td>present</td>
</tr>
<tr>
<td>PROG</td>
<td>progressive</td>
</tr>
<tr>
<td>PRON</td>
<td>pronoun</td>
</tr>
</tbody>
</table>
PSR   possessor
PST   past
REF   reflexive
SBJ   subject
SG    singular
-     morpheme boundary
=     clitic boundary
Chapter 1

1 Introduction

The main objective of this dissertation is to investigate the influence of the Amerindian languages in the Spanish of bilinguals and individuals living in zones of contact. Specifically, I focus on the variations observed in the pronominal clitic system in the Spanish of bilingual P’urhépecha-Spanish speakers (Meneses 1998; Villavicencio 2003), analyzing them as instances of linguistic interference that have produced changes in the Spanish grammars of these speakers. Linguistic interference in the grammar of bilinguals has been observed in a wide variety of linguistic studies—simultaneous child bilinguals (Müller 1998; Müller & Hulk 2001; Paradis & Genesee 1996; Paradis & Navarro 2003; among others), sequential L2 acquisition (Bruhn de Garavito & Montrul 1996; Duffield & White 1999; Liceras 1985; Montrul 1999; among others), and steady state bilinguals (Lardiere 1998; Sánchez 2004, 2012; White 2003b; among others)—and is heavily debated within the context of the generativist framework and the minimalist program. In the specific context of language contact between Spanish and Amerindian languages, a wide variety of linguistic variation has been observed both in the grammar of bilinguals as well as monolingual Spanish speakers who live in areas of historic language contact. This variation is often expressed as an optionality, in which two acceptable grammatical structures express the same meaning (Sorace 2000), and one of the options is considered to be non-standard. For instance, participants in the present study optionally neutralize gender in anaphoric clitics, with the same speaker producing both a [-feminine] and [+feminine] pronominal form with a [+feminine] referent in proximate phrases as in (1).

(1) El niño atrapó una mariposa, en el campo con su perrito y lo, encerró en una tacita. De repente dejó la taza sin taparla y cuando menos se acordó ya la mariposa se había escapado porque no la, tapó. Entonces, el niño muy preocupado, muy curioso fue a buscarlo, salió de su casa y fue a buscarlo, en el campo.
‘The boy trapped a butterfly in the field with his doggie and locked it in a little cup. Suddenly, (he) left the cup without covering it and when he remembered the butterfly had escaped because he hadn’t covered it. So, the boy was very worried, very curious, he went to look for it, he left his house and went to look for it in the field.’

In certain cases, the optional, non-standard form can replace the original form, resulting in language change. This has been observed in monolingual Spanish speakers in areas of historic contact. Consider the following example (2) from Quiteño Spanish. Here we see that the dative clitic le in being used to refer to the direct object of the sentence, a phenomenon commonly referred to as leísmo. However, unlike the leísmo observed in the peninsular dialect, which is restricted by constraints of animacy and specificity (Fernández-Ordóñez 1999; Ordóñez 2014), in Quiteño (QS) the dative clitic le replaces third person accusative pronouns in all contexts. Thus, we see that “colloquial QS has carried leísmo to conclusion” (Suñer & Yepéz 1988: 511), resulting in the complete replacement of the standard form by the non-standard variant. These outcomes, however, are difficult to predict, and it is impossible to know when variation and optionality will lead to language change.

(2) \text{Tuve que salvar=le}
\begin{align*}
1-\text{had that to-save=CL3.DAT} \\
\text{‘I had to save her.’} \\
(le = \text{mi amiga ‘my friend (fem.)’})
\end{align*}

(Suñer & Yepéz 1988: 512)

As generativist studies of P’urhépecha are scarce at best, here I follow in the footsteps of linguists that have studied other bilingual language pairings found in the Americas. In particular, this dissertation draws heavily from the theory presented by Liliana Sánchez in her study of steady state adult bilingual Quechua/Spanish speakers—as well as monolingual Spanish speakers and child bilinguals—who asserts that processes of functional convergence and interference occur in bilingual grammars, which result in new mappings of functional features to grammatical forms (Sánchez 2003). I seek to identify similar processes occurring in the Spanish grammar of L1 P’urhépecha speakers.
Furthermore, due precisely to the lack of previous studies, this project serves to gather initial data on the varieties of Spanish spoken in the P’urhépecha-Spanish contact zones, and I hope will serve as a starting point for future investigation.

Like other major languages of Central Mexico—Nahuatl, the Mixtec and Zapotec families, etc.—P’urhépecha and Spanish have been in contact for nearly 500 years, with large populations of speakers of these languages living in close geographical proximity to monolingual Spanish speakers. An initial consequence of this is the heavy integration of Amerindian language lexical items in American dialects of Spanish, as borrowings were used to describe uniquely American things such as plants, animals, and foods. This sort of borrowing is not enough to produce the non-standard variation observed in bilinguals and contact dialects, however, and neither is simple geographic proximity. Instead, many social factors must align to promote the cultural interactions responsible for bilingualism, linguistic interference, variation, optionality, and possibly language change.

Figure 1.1 Map of the P’urhépecha region within Mexico (Dietz 2017:29)

One of the most important factors that drives language change is the emergence of bilingual speakers. As bilinguals acquire language, whether they are simultaneous or sequential bilinguals, multi-directional processes of linguistic interference occur, which
can result in bilinguals acquiring different grammars than monolinguals. These grammars can be passed down through generations and become stable dialects of the language with systematic variations (Palacios 2006a). Because of this, I regard the non-standard varieties that emerge in contact situations to be legitimate varieties of Spanish, not the result of “errors” due to incomplete acquisition.

As noted, there are cases in which these varieties are no longer exclusive to bilingual speakers of indigenous descent. Instead, they become the norm in the monolingual varieties spoken in or near contact zones. For example, in South and Central American dialects in countries with large bilingual communities, such as Ecuador, Guatemala, and Paraguay, the Spanish clitic system has been reduced to a simplified two case system that does not distinguish between gender in accusative clitics—even amongst monolingual Spanish speakers. In the monolinguals of Quito and bilinguals of urban Paraguay, this simplification is even more extreme: case has been eliminated, and le(s) is used in all cases as a catch-all objective marker (Palacios 2006a). Not only have these changes become the norm, they represent the new prestige dialect in these areas despite the cultural heritage of the speaker.

Cases like these, in which the influence of Guarani or Quechua in their respective regional varieties of Spanish has permeated to monolingual Spanish, as well as created a situation of social prestige, are not necessarily the norm. This has happened when social structures and official policies have promoted language maintenance and bilingualism, and both languages are active and functional in society. Throughout much of Latin America, both indigenous languages and the resulting contact dialects of Spanish have been stigmatized. Social and political inequity have placed these languages in a position that is subordinate to dominant Spanish, therefore the outcome for many indigenous communities is a process of language shift in which speakers abandon their L1 in favour of their L2 to integrate themselves in what is often perceived as social and economic progress. Despite the often irreversible consequences of language shift in many communities of indigenous language speakers, there are still many that fight to maintain their language in spite of the lack of official support and social conditions that often favour Spanish.
Such is the case of two P’urhépecha communities in the region of lake Pátzcuaro in Michoacán México: Santa Fe de la Laguna and San Andrés Tziróndaro. Even though 90% of the population is now bilingual with Spanish, the common language of these communities is P’urhépecha. It is used in both private and public contexts—not only is it the language spoken at home, but it is heard on the street, and children use it at play as their language of choice. This situation of language maintenance in which bilingualism is the norm is a prime example of a potential area of language variation. My study investigates the Spanish spoken in these communities by sequential bilinguals, who typically learned Spanish in the public school system.

For this dissertation I investigated three recurring phenomena related to 3rd person accusative clitics that have been consistently documented in different Amerindian contact varieties of Spanish: neutralization into one single clitic lo, omission, and clitic doubling. I also investigated double object constructions in both of these languages, comparing the use of the dative clitic le with the use of the applicative voice in P’urhépecha.

The aim of this study is twofold: 1) to contribute a new language pairing to the corpus of Amerindian language contact research, and thereby provide a basis for comparison that helps researchers in developing the theory of language and bilingualism, as well as serving to further studies related to P’urhépecha-Spanish bilinguals; 2) to provide empirical evidence that this spoken variety is in fact an outcome of language contact and bilingualism and not a deficiency in learning a second language, as it has been widely perceived and misunderstood.

This dissertation is divided into eight chapters. This first chapter presents a broad introduction to the topics discussed in the remainder of the dissertation. I begin by discussing the phenomena of bilingualism and language contact in general, as well as in the context of Amerindian languages. I also provide a basic overview of the indigenous languages and cultures of Mexico, focusing in particular on P’urhépecha. The second chapter provides the relevant theoretical framework for this study, focusing on the acquisition of functional features, processes of linguistic interference during bilingual acquisition, and the mapping of functional features to morphological form in bilingual
grammars. The third chapter outlines relevant linguistic phenomena in both Spanish and P’urhépecha, beginning with a general discussion of the characteristics and syntax of clitics in both standard and non-standard varieties of monolingual Spanish and in contact with Basque. I then provide a brief overview of the acquisition of Spanish clitics in L1, bilingual, and L2 acquisition. Moving on to P’urhépecha, I begin with a general overview of the language, and then discuss object clitics, double object constructions and the applicative voice. Chapter 3 ends by comparing and contrasting relevant phenomena in both languages in order to predict possible outcomes of interference and convergence. The fourth chapter is dedicated to reviewing previous studies that address the linguistic phenomena that occur in the pronominal clitic system—i.e. neutralization, omission, clitic doubling—in the Spanish of Amerindian language speakers of Quechua, Maya, Guarani and Nahuatl, many of which have been performed under the variationist framework. When possible, I review studies that fall under the generative framework of Second Language Acquisition (SLA), in particular those pertaining to acquisition of clitics in bilingual Quechua-Spanish speakers. Finally, I provide a review of the previous studies done on the variety of Spanish spoken by L1 P’urhépecha speakers. Chapter 5 discusses the methodology used in this study, starting with the description of the participants, then the experimental design and rationale of the two tasks implemented—one acceptability judgment task (AJT) and one oral elicitation task (OET). Variations of these tasks were performed for both accusative and dative clitics, therefore the specifics of the experimental design will be presented in Chapters 6 and 7 respectively. Chapter 6 details the experimental design, results, and statistical analysis of the AJT and OET in the context of accusative clitics. Chapter 7 mirrors chapter 6, providing the experimental design and an analysis of results, but in the context of dative clitics and double object constructions. Finally, chapter 8 discusses the results presented in the previous chapters in light of the theoretical proposals outlined in Chapter 2, as well as comparing and contrasting my results with data on standard Spanish, and with non-standard (contact/non-contact) varieties. To conclude, I propose possibilities of further work with P’urhépecha as well as possible contributions to the P’urhépecha community.
1.1 Preliminaries: Language Contact and Bilingualism

This study focuses on individuals who are bilingual as a result of widespread contact between their first language (P’urhépecha), and Spanish, which they learned outside the home, both in informal settings and in public school. Language contact and bilingualism are inextricably related concepts, yet both have different implications and thus deserve somewhat separate treatment. At a societal level, language contact has broad repercussions felt throughout linguistic communities. As an immediate consequence, contact often results in bilingual individuals, though the extent of bilingualism may vary or be imbalanced. At the individual level, bilingualism is a complex phenomenon, and as Schmid notes in the opening of her article, bilinguals “may not use either of their languages in ways which are exactly like that of a monolingual speaker” (2010:2).

Research demonstrates that processes of interlinguistic interference occur in the mind of the bilingual, and this interference can depend on a wide variety of both linguistic and extralinguistic factors. This interplay between linguistic systems in bilingual speakers, and the conditions that enable it, are central to the investigation presented in this dissertation. In order to lay the foundation for the chapters that come, the following paragraphs further explore language contact and bilingualism, and their repercussions at both a societal and individual level.

1.1.1 Language contact and bilingualism in society

Bilinguals are not isolated beings or a rare commodity. Grosjean (1982) points out that half the population of the world is bilingual. While a language in a multilingual society may enjoy varying levels of governmental and institutional support, there is often an imbalance of power or status between languages. In many cases, we can divide languages into what are often referred to as majority and minority languages. As the name implies, majority languages are spoken by the majority of the population (Spanish in our example), while minority languages are spoken by smaller or isolated groups (like P’urhépecha). It is often noted that majority languages receive more governmental/institutional support, and tend to confer more prestige on the speaker, while minority languages occupy a more marginal space (though this is not always the case). In the case
of bilingual speakers, majority and minority languages are also often used in different
contexts, or domains. For example, one language is used at home, while another language
is used at work or school. This sort of domain specific language use creates a situation of
diglossia, a term defined by Ferguson (1972) (cited in Romaine 1995) to refer to “a
specific relationship between two or more varieties of the same language in use in a
speech community in different functions” (p. 232).

Despite this tendency of bilinguals to separate language use by domain, one of the major
outcomes of language contact across societies at large—in both monolingual and
bilingual speakers—is the borrowing of lexical items. This tends to happen mutually,
with both languages borrowing from one another, as is the case with many indigenous
languages in contact with Spanish. However, lexical borrowing tends to be asymmetrical,
as the majority language or the language of prestige tends to lend more than what it
borrows from the minority language (Austin et al. 2015). Furthermore, borrowing can
extend beyond lexical items to include phonetic, morphological, syntactic and pragmatic
elements.

Looking at the long term results of language contact, we see that languages either tend to
shift towards the dominant language, resulting in the “the partial or total abandonment of
a group’s native language in favor of another” (Winford 2003:15), or exist in a state of
equilibrium—language maintenance—which refers simply to the “preservation by a
speech community of its native language from generation to generation” (Winford
2003:11). In the case of many minority languages, including many of the languages
native to the peoples of the Americas, there is a state of tenuous maintenance, in which
the language is still transmitted to children, but oftentimes at a decreasing rate over the
generations. It is difficult to say exactly why a contact situation will result in maintenance
or shift. Factors such as concentration of speakers, socio-economic class, religious and
educational background, settlement patterns, ties with the homeland in the case of
immigrant communities, attitudes towards minority/majority languages, institutional
support (education and language policies), all affect the outcome of a contact situation,
but do not necessarily determine it (Fishman 1991). Fortunately, some minority
languages are seeing resurgences, with people relearning the languages of their ancestors.
These processes are often driven by motivated individuals or small groups of people, despite lack of institutional support or widespread exposure.

Independent of its effect on the status, use, and retention of languages, language contact has the very tangible side effect of producing bilingual individuals, often large groups of bilinguals, that routinely use two (or more) languages. As alluded to in the aforementioned quotation of Schmid, the state of being bilingual has interesting effects on the language of these speakers, evidently due to various interactions, or processes of interference/transfer between languages within the mind of the bilingual. The following section introduces the phenomena of bilingualism at the individual level.

1.1.2 The bilingual individual

There is now consensus in the linguistic community that a bilingual individual is not two monolinguals in one (Grosjean 2008). Being bilingual involves a complex system, there are two autonomous language systems that co-exist and interact—occasionally or frequently—with each other. Furthermore, bilinguals are typically not completely balanced, with one language being more dominant than the other, which can further vary based on domain, as noted above with diglossic situations.

Defining the bilingual experience is no easy task. In their efforts to define what makes a bilingual individual, linguists have proposed definitions ranging from an individual with “native-like control of two languages” (Bloomfield 1933:56) in “all domains of activity” (in Austin et al. 2015:42) all the way to someone who is “fluent in one language but who can produce complete meaningful utterances in the other language” (Haugen 1953:7). It is easy to see how both of these types of extreme definitions have been criticized. The former excludes the majority of individuals who control two or more languages, as well as assuming that natives are homogenous in their command of their own language across all domains. The latter is overly inclusive, as it includes individuals who have memorized phrases in another language yet have not acquired its linguistic system in a meaningful way.
A more reasonable definition of bilingualism was proposed by Grosjean, who asserts that “bilingualism is the regular use of two or more languages (or dialects), and bilinguals are those people who use two or more languages (or dialects) in their everyday lives” (2008:10). Grosjean’s view is useful in that it provides a very concrete definition of bilingualism as the regular use of multiple languages, which implies that bilingualism results from the need for communication in multiple languages. Montrul (2008) provides a somewhat more theoretical view of bilingualism, stating that a bilingual has a steady knowledge and functional control of two or more languages, regardless of the level of knowledge or whether the languages are used on a daily basis. Here, one can assume that functional control of a language applies to the ability to communicate, going beyond repeating a simple phrase, in some sort of meaningful way, and thus differs from Grosjean primarily in its specification of the regularity of language use as part of its criteria. Regardless of this, these authors agree that bilinguals have different degrees of command of both languages. Even balanced bilinguals do not have equal command of the two languages in all domains; there are always asymmetries (Montrul 2013).

These asymmetries are critical to the understanding of how languages interact in the mind of the bilingual. Typically, when considering sequential bilinguals, or individuals who acquired their second language (L2) after acquiring their first language (L1), we can think of asymmetrical interaction between the languages in two directions. Perhaps most commonly we consider language transfer from the L1 to the L2, which occurs when a “speaker assumes that the lexicon and structure of one of his/her languages is similar to that of his/her other language” (Austin et al. 2015:5). This concept is certainly commonsensical, at least on a superficial level, and one can think of all sorts of humorous mistakes made by language students due to precisely these types of assumptions. Less commonly we consider what could be analogous to a reverse of this process, called language attrition. Attrition describes a process of “loss, deterioration or reduced accessibility of knowledge and traffic from the L2 to the L1” (Schmid 2013:94) that can be more generally defined as “a decrease in competence or proficiency in a speaker that no longer uses one language or has less contact with it than before” (Austin et al. 2015:80). Common scenarios for attrition include migrants who have little or no contact with other speakers of their native language, or the children of immigrants, who speak
their parents’ language at home, but were raised in a society where the L2 was the majority language. The latter are often termed heritage speakers and represent a relatively new and prosperous field of linguistic study.

Despite the constant and possibly bidirectional interaction between the L1 and L2 in the mind of the bilingual, research shows that knowledge of the L1 and the L2 are quite robust. As Schmid (2013) points out, early studies in L2 attrition, driven by the desire to measure educational outcomes for high school and university level students, demonstrate that linguistic knowledge is more robust than expected. Later studies focusing on L1 attrition demonstrate that L1 knowledge is extremely stable, and even after decades of little to no use, speakers retain native like competency in their L1 (Schmid 2013). While these studies focus on the language of attriters, the information they provide about the robustness of language appears to apply to bilinguals in general, as studies typically indicate that only certain grammatical areas are vulnerable to processes like interferences, transfer, or attrition (Montrul 2008; Schmid 2010; Schmid & Köpke 2013; among others). Furthermore, it seems that vulnerable areas are typically in areas of typological or grammatical similarity between the two languages, a concept that will be discussed fully in linguistic terms is Chapter 2 of this dissertation. Aside from linguistic similarities, other factors appear to influence how languages interact with one another in the mind of the bilingual. These factors include the age of acquisition, the context of acquisition, and the patterns of language use.

The age of acquisition, and how it affects linguistic development is one of the most discussed topics in the field of second language acquisition. In general, bilinguals are categorized as either early or late bilinguals. Early bilingualism refers to languages acquired during childhood, either in a simultaneous fashion – both starting at birth—or sequentially—one language from birth, the second a couple of years later. Sequential bilingualism is considered a type of child L2 acquisition, and there has been much debate on the precise age in which a child is no longer considered a simultaneous bilingual and has moved into the spectrum of child L2. Many authors consider children who acquire both languages before the age of seven to be simultaneous bilinguals. However, some authors note that children acquiring a second language after the age of four somehow
differ in their acquisition of the target L2 grammar, and it has been proposed that children who acquire the second language between the ages of four and seven should be placed into a separate group, early sequential bilinguals (Meisel 2009). Simultaneous bilinguals are believed to potentially be able to acquire full native proficiency in both languages, while even early bilinguals will display some variation in behavior for certain grammatical categories. In general, the child L2 acquisition period has been theorized to extend until puberty, or the critical period, which implies that even after the age of seven, children can still potentially acquire native like control of their L2. However, according to Schwartz (2004) the limit for child L2 acquisition is actually earlier than puberty, at seven years of age. She bases this on a number of studies that indicate that children who acquire their L2 before the age of seven perform differently than those who acquire it later. This evidence seems to coincide with and support Meisel’s concept of an early child acquisition period between the age of four and seven that is different from either simultaneous, or late child acquisition.

Interestingly, looking at age of acquisition from a perspective of attrition, we see that there is also a critical period for L2 acquisition that tends to influence the level of attrition that can occur with the L1. Studies focusing on child immigrants indicate that children that emigrate before the age of ten experience attrition to the extent that they are no longer considered native, while children who emigrate after the age of 12 are rated as native speakers (see Schmid 2013). The fact that this age coincides with both the onset of puberty, as well as the critical period observed in child L2 acquisition can hardly be thought of as coincidence—it seems that sometime during this period the brain’s knowledge of language becomes less plastic, firmly entrenched in the mind of the speaker.

Closely related to age of acquisition is context of acquisition. Typically, simultaneous bilinguals acquire their languages in a naturalistic setting, like the home, either with multilingual parents or caregivers who interact with the child regularly. On the other hand, early child bilinguals often acquire their L2 in a public school setting. In a typical scenario, the L1 is spoken in the home, or in the child’s community at large, but when beginning public school at the age of five or six, they are exposed to a different language,
most often the majority language of the society in question. One can imagine this happening in a child’s home country, like a child from an indigenous P’urhépecha speaking community in Mexico that attends public school in Spanish, as well as in the context of immigrant communities. In the case of the latter, the acquisition of the L2 can occur even later, after the critical period.

Finally, research indicates that an individual’s language use pattern can also affect the way languages interact in the mind of a bilingual. After acquiring knowledge of two linguistic systems, bilinguals have the ability to control how much and when they use one language over the other, or even if they want to use both at the same time by codeswitching. This ability to activate or suppress a language is what Grosjean has termed the language mode. He defines it as follows: “Language mode is the state of activation of the bilingual’s languages and language processing mechanisms at a given point in time” (Grosjean 1998:3). Language mode can be thought of as a continuum in which bilinguals decided which language to use, often in a completely unconscious fashion. The continuum has two extremes: on one side is the monolingual mode, where speakers only activate one language and suppress the other. This occurs when a bilingual is speaking to a monolingual who has no knowledge of the other language; or when the bilingual is receiving input (e.g. from reading, TV, another interlocutor) in solely one language. On the other extreme is the bilingual mode. This is when a bilingual activates both languages, although one is always more active than the other one. This occurs when a bilingual is speaking to another bilingual who has similar competence in both languages and they feel comfortable codeswitching. Somewhere in the middle is the intermediate mode where a bilingual has one language active and the other one is partly activated. This can occur when a bilingual is talking to another bilingual who might not be as comfortable/proficient in one of the languages. Bilinguals have the ability to move along this continuum at any point and to switch the activated language—i.e., base language—at any point in time.

Taking the concept of language mode into account, the field of attrition studies again provides an interesting example of the importance of language use in bilingual individuals. Several studies indicate that bilinguals who frequently activate both
languages experience larger degrees of interference that can lead to attrition of L1, as well as transfer of features from the L1 to the L2, or vice versa (Schmid & Köpke 2013). Conversely, individuals who suppressed their L1 over long periods of time, were able to recall it with little or no attrition/influence from their L2. These studies tentatively suggest, in the words of Schmid “that active bilingualism might be a factor which is conducive to language change in an attritional setting” (2010: 9). Indeed, it is easy to see how individuals who consistently activate both languages experience more online interference between both languages. In turn, this interference results in instabilities in the L1 grammar, which would not occur if it were not activated, in a sense, laying dormant.

Taking into account the information presented in the previous paragraphs, we can locate the population studied in this dissertation. The participants all come from a language contact situation in which their language is the minority language. Some P’urhépecha communities are currently in a state of maintenance, others are undergoing a process of language shift, as external economic, social, and political pressure encourage the use of Spanish as the prestige language. While the majority of the P’urhépecha community is bilingual, their bilingualism is a form of diglossia in a sense that they speak P’urhépecha at home and in the community, while Spanish is spoken in school, church, and the economic sphere that occurs outside the bounds of the community. Typically, they do not begin to learn Spanish until they begin school, around the age of six, and are therefore considered early child sequential bilinguals for the purpose of this study.

Though isolated, the situation of the P’urhépecha community is seen reflected in many indigenous populations throughout Latin America. Though many communities have already undergone processes of language shift, and thereby lost their native languages, others have maintained their mother tongues despite economic and social pressure. In some cases, indigenous languages of the Americas have official status with Spanish, and are taught alongside it in school. The following section provides a broad introduction to the linguistic communities of the Americas by discussing the field of study centered around language contact with Amerindian languages.
1.2 The study of language contact with Amerindian Languages

Over the last several decades, the study of language contact between Spanish and the Amerindian languages has been a growing field. The primary focus has been on Quechua-Spanish (Escobar 1994, 1997; de Granda 1996a 1996c; Klee 1996; Klee & Caravedo 2005; Palacios 2006b; Sánchez 2003; Valdes-Salas 2002; among others) and Guaraní-Spanish (de Granda 1979,1982; Palacios 2000). However, research on Spanish in contact with Nahuatl (Flores-Farfán 1998, 2008; Ramírez-Trujillo 2006, 2013; Ramírez-Trujillo & Bruhn de Garavito 2015; Zimmermann 2000), and the Mayan languages (García-Tesoro 2002, 2006, 2010) is slowly becoming more extensive. Based on this research, linguists have been able to identify the features that are common to these languages, as well as the features that are particular to each language. Influence from these languages can be found in different aspects of Spanish, and can be seen in lexical and phonological borrowings, non-standard use of morphological markers, and mapping strategies at the syntax/pragmatics interface.

Common patterns have been identified in the contact varieties of Spanish, mainly due to the typological characteristics of Spanish and the Amerindian languages, or to cross-linguistic tendencies in language change (Escobar 2012). There are many examples of influence of phonetic features from indigenous languages into Spanish, for instance: the labialization of /n/ at the end of words pan \[\rightarrow [pam] \] due to the influence of Maya (cited in Klee & Lynch 2009), or the assimilation of /t/ in Andean Spanish \[\text{risa} \rightarrow [\tilde{r} \text{is}a] \] (Escobar 2012). In terms of morphology, there are suffixes from Quechua that have been integrated into the Andean variety of Spanish such as the focus marker \(-ga\) or \(-ka\), the diminutive \(-cha\) e.g. señora-cha ‘miss’, or the nominal plural \(-kuna\) e.g. oveja-kuna ‘sheep-PL’ (Escobar 2012). In terms of non-standard morphology, there are phenomena that occur in various contact varieties of Spanish, such as more use of diminutives, omission of articles, prepositions and object clitics, lack of agreement markers (usually for gender in the DP), lack of agreement markers in subject-verb agreement, regularization of verbal paradigms, overgeneralization of object clitic \(lo\), evidentials,
double use of possessives, the doubling with clitic lo, the neutralization of clitic lo or clitic le, etc. (Escobar 2012; Klee & Lynch 2009; Palacios 2005a).

Although language contact scholars attribute these phenomena to the cross-linguistic influence of the indigenous languages, it is widely debated whether these similarities are actually contact-induced or not. Escobar (2012) summarizes various trends that occur in contact with these languages in Table 1.1. I have added a column for the phenomena that have also been documented in Spanish in contact with P’urhépecha.

Table 1.1 Linguistic characteristics in varieties of Spanish in contact with Amerindian languages (adapted from Escobar 2012:80)

<table>
<thead>
<tr>
<th></th>
<th>Quechua</th>
<th>Maya</th>
<th>Guarani</th>
<th>Nahuatl</th>
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<th>P’urhépecha</th>
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Many of these phenomena have also been documented in the varieties of Spanish spoken by P’urhépecha speakers. Although this type of research is not as extensive as with other languages, there are important studies such as Chavez-Rivadeneyra (2006) on lexical borrowings, Villavicencio (2003, 2006) and Meneses (1998) on phonetic and morphosyntactic phenomena. I will come back to these studies in subsequent sections.
Before this, I provide a general introduction on the indigenous languages of Mexico, in order to establish a context in which to discuss the P’urhépecha language and community.

### 1.3 Indigenous languages of Mexico

It is estimated that by 1518—before the arrival of the Europeans to the Mexican territory—the population of central Mexico was of about 25.2 million people (Borah & Cook 1963). After the arrival of the Europeans, this population declined rapidly. By the beginning of the 17\textsuperscript{th} century, this population decreased to 1.3 million due to war, sickness, and forced labor (Zimmermann 2004). As the indigenous population decreased, the mestizo population increased, by 1810 mestizos made up 40\% of the population, and by 1910 it had increased to 87\% (Hidalgo 1996). This rapid demographic shift had drastic effects on the native languages of Mexico, many of which are now extinct or in danger of extinction. It is estimated that there were about 120 different language groups in the pre-Hispanic territory of what is now Mexico. There is not a consensus on the exact amount of indigenous languages spoken today in Mexico, but as a reliable source the Instituto Nacional de Lenguas Indígenas (INALI) ‘National Institute of Indigenous Languages’ documented a total of 11 linguistic families with 68 language groups and 364 linguistic varieties in its 2008 catalogue. Based on this, approximately half of the original languages of Mexico have already disappeared. It may be that even fewer languages still exist, as many had small, aging linguistic communities. For example, according to Manrique Castañeda’s 1988 Atlas cultural de México, of the 77 languages documented at the time, 32 of them were in danger of extinction. According to Zimmermann (2004), by 2000 most of these languages did not have speakers anymore.

In the 2015 census, the Instituto Nacional de Estadística y Geografía (INEGI) ‘National Institute of Statistics and Geography’, calculated the population of Mexicans aged 3+ years to be a total of 112 849 706 people. Of these, 93.5\% (105,457,921) do not speak an indigenous language. Of the 6.5\% that do, 87.3\% (6,244,316) are bilingual with Spanish and 12.7\% (909,356) are monolingual indigenous language speakers. There are a number of languages that have a representative number of speakers. Nahuatl tops the list with 1 725 6200 speakers, followed by the Mayan Languages with 859 607 speakers, then
Tseltal (556 720), Mixteco (517 665), Tsosil (487 898), Zapoteco (479 474), Otomí (307 928) among other languages (Luna & Freyermuth 2017).

Although on the surface these languages seem to have large numbers of speakers, most of them do not belong to cohesive communities. For instance, Nahuatl speakers are spread out in various states of Mexico like Puebla, Guerrero, Hidalgo, etc., and the communities often times constitute small isolated pockets of people surrounded by the Spanish dominant mestizo community. Furthermore, the socio-political environment does not support the way of living of these communities—let alone promote the maintenance of their languages. Therefore, though it may seem like these groups have large numbers of speakers, they are still in danger of extinction.

1.3.1 Bilingualism in Mexico

As mentioned above, 87.3% of indigenous language speakers in Mexico are bilingual with Spanish. However, as Montrul (2013) points out, this type of bilingualism is asymmetric. Typically, only indigenous people have to learn Spanish in order to advance in many socio-economic areas, whereas the Spanish speaking majority have no need that motivates them to learn the indigenous languages. This asymmetry is primarily historical in origin. The colonial times were characterized by multilingualism, even though the Spanish crown imposed the Spanish language and the Catholic religion. In some instances, bilingualism occurred bi-directionally, as many religious people began to learn the indigenous languages, both for evangelization purposes and in order to teach Spanish to the indigenous Mexican elite. Regardless, the majority of the indigenous population spoke their native language, while mestizos typically spoke only Spanish. Throughout the early colonial period the indigenous languages were slowly being displaced, and in the 17th century the Spanish crown declared Spanish the only language of education and religion (Montrul 2013). The 200 years that followed are characterized by many failed attempts to “spanishize” the indigenous masses. By the end of the colonial period only 35% of the population spoke Spanish and only 0.5% were literate (Hidalgo 1996).

After the Mexican independence at the beginning of the 19th century and the emergence of the Republic of Mexico, a strong linguistic assimilation policy was implemented in
order to unite the country by integrating the indigenous population with the *mestizo* national identity under one language. This promotion of monolingualism resulted in fewer speakers of indigenous languages and resulted in the extinction of many languages that were already in danger (Zimmerman 2004). It is estimated in the census of 1895, 83% of Mexicans were already speakers of Spanish and only 16.6% were speakers of an indigenous language (Hidalgo 1996). The situation worsened after the Mexican revolution of 1910, when many politicians tried to prohibit the use of the indigenous languages in order to homogenize the country by implementing an only Spanish school system. The consequences of this were not only increased bilingualism and language shift, but also the loss of many indigenous values and languages in the face of the hegemony of the dominant culture and language.

It wasn’t until the 1930’s that bilingual literacy programs started to emerge under the direction of President Cárdenas, which corresponded to the implementation of government agencies in charge of indigenous affairs. During the 1930’s and 1940’s many indigenous movements arose within both the academic and intellectual communities interested in *indigenism*. In the 1960’s bilingual programs were integrated into the national public school system in which indigenous children were taught to read and write in both their native language and Spanish; however, these programs only ran to the 5th or 6th grade and then subsequent education was solely in Spanish (Escobar 2012). In 1992, the Mexican constitution was amended, declaring Mexico a pluricultural nation, with laws to protect and promote the development of indigenous languages and cultures (Zimmerman 2004).

Finally, in 2003 the indigenous languages were declared national languages together with Spanish (Ley General de Derechos Lingüísticos de los Pueblos Indígenas, Artículo 4). The rise of the EZLN *The Zapatista Army of National Liberation* and other indigenous movements over the last 30 years has served to increase awareness in the national and international community of the need for rights and protection of indigenous cultures, languages and people. Many academic institutions have focused on documenting and describing the languages in order to be able to provide materials for literacy and language revitalization. There is also a growing interest from the indigenous youth to learn the
language of their ancestors, and community driven programs promoting language maintenance and revitalization. Furthermore, increased awareness has resulted in increased tolerance/acceptance of the bilingual varieties of Spanish (Escobar 2012) that were once considered inferior to standard Spanish.

1.4 The P’urhépecha

The P’urhépecha people are mostly located in the northeastern part of the state of Michoacán (Figure 1.1) concentrated in a territory of 3,500 km² known as P’urhépecherhu, or land of the P’urhépecha. This territory is divided into four main regions (Figure 1.2) consisting of hundreds of communities (Argueta 2008):

1) Japondarhu or lake region: region around Lake Patzcuaro and Lake Zirahuén in the southeastern part of the territory.
2) Eraxamani or Cañada de los Once pueblos (valley of 11 towns): region located in the northern part of the territory.
3) Juatarhu or Meseta: the large central-west region.
4) Tsirontarhu or Ciénega de Zacapu (swamp region of Zacapu): region located in the northeast of the territory.

Figure 1.2 Map of the four P’urhépecha regions in Michoacán Mexico (Argueta 2008:28)
The P’urhépecha are the descendants of the P’urhépecha kingdom or empire, one of the Mesoamerican civilizations who settled in its current territory by the end of the 12th century (Argueta 2008). Although their original territory and population have been drastically reduced over the last 400 years (Rico-Lemus 2015) the P’urhépecha still maintain many of their ancestral customs, social structure, language and economic activity. In terms of economic activity, they have been sustained by agriculture, fishing, hunting, and gathering as primary sources of economy. They also produce handmade crafts and are involved in commerce between the different regions in their territory (Argueta 2008) and throughout Mexico. Their social structure is based on an annual cycle linked to the natural cycles of agriculture and cultivation, wood, and fishing, as well as their celebrations and traditions (Amézcua Luna & Sánchez Díaz 2015).

The P’urhépecha (or P’orhepecha) language is the only member of the Tarascan language family, and thus considered a language isolate. It is an agglutinative language (exclusively suffixing) with nominative-accusative alignment. In contrast to many Mesoamerican languages, P’urhépecha has a morphological case system and no noun incorporation (Capistrán 2015). Although there have been attempts to link it to other Amerindian languages like Aymara, Quechua, Totonac, and Maya, these theories have been discredited thus far (Argueta 2008). It is believed that at the arrival of the Spaniards the P’urhépecha territory had about 1.5 million inhabitants (Chamoreau 2009). According to the 2010 census by the INEGI, there is now a population that totals 125,480 speakers nationwide, with 92% residing in the state of Michoacán. Of the total number of speakers 8.9% (11 214) are monolinguals and 91.1% (114 266) are bilingual with Spanish. Of the monolinguals, 62.5% are women and 37.5% are men; 32% are between the ages of 5 and 9, 14.3% are between the ages of 10 and 14, and 17.9% are more than 50 years old. Of the bilingual population 50.2% are men and 49.8% are women, which is consistent across age groups. It is important to point out that 33 out of 100 children between the age of 5 to 9 are monolingual, as opposed to 9.3% of children who were raised bilingual. Therefore, we see that the majority of children in the P’urhépecha region who do speak P’urhépecha (opposed to the ~58% who are monolingual Spanish speakers), grow up speaking P’urhépecha only. The number of bilinguals increases consistently between the age group of 10-14 and 15-19. In terms of literacy, in the
population of 15+ years 73.4% of bilinguals are literate and 26.5% are illiterate. Of the total of monolinguals aged 15 and older, 20.9% are literate and 79.1% are illiterate. In terms of regional distribution, the majority of the P’urhépecha speakers are located in the Meseta (59%), followed by the Lake region with 18%, then the Ciénaga with 12% and finally the Cañada, which is mostly Spanish speaking (Chamoreau 2009).

Figure 1.3 Map of the Lake Pátzcuaro region (Google, n.d.)

My study was carried out in two communities in the northern part of the Lake Pátzcuaro region, where the P’urhépecha language still has a strong presence: Santa Fe de la Laguna and San Andrés Tziróndaro, both in the municipality of Quiroga. During colonial times, the region of Lake Pátzcuaro was settled by Spanish speakers in 4 main cities: Quiroga, Tzintzuntzan, Pátzcuaro and Erongaricuaro. It is documented that by 1750 the percentage of P’urhépecha speakers in these 4 communities was between 25% and 49% in Pátzcuaro and Quiroga, and between 50% and 74% in Erongaricuaro and Tzintzuntzan. The rest of the lake territory was 100% P’urhépecha speaking. By the 20th century, the linguistic panorama had changed drastically in this area. Rico-Lemus (2015) did a detailed study on the demographic patterns of language shift and noticed that by 1940 P’urhépecha was gone in most of the communities in the southern part of the lake, as well as in Quiroga, and pretty much gone in Tzintzuntzan and Erongaricuaro, but was still strong in the rest of the lake communities (89% of the population). He compared this to
the census of 2010, where data indicates that out of 24 P’urhépecha communities, P’urhépecha had weakened drastically in 10, and was only spoken in 8 by more than half the population of ages 5+. Currently there are 39 communities in the lake region. Of these only 24 still maintain the P’urhépecha language, but in many cases, processes of attrition and language shift are already occurring. The two communities investigated in this study, Santa Fe de Laguna and San Andrés Tziróndaro, are both examples of communities with a strong P’urhépecha linguistic presence in a maintenance situation.

Santa Fe de la Laguna was founded in 1533 by friar Vasco de Quiroga and the local people who established the hospital-pueblo, which performed the dual function of hospital and refuge for children and women who had been orphaned and widowed during the conquest. Furthermore, the town provided a forum to spread the Christian doctrine, as well as a place where individuals could learn artisanal trades (Rico-Lemus 2015). Hence, this town has a long tradition of producing pottery, and it is still one of the primary economic activities of many families in the area. There is also a variety of agricultural activity in the surrounding areas, producing crops that are primarily for self-consumption (Rico-Lemus 2015). The census of 2010 shows a total population of 4,879, with 99.5% reporting to be from an indigenous household. Here, 97.5% of the population aged 5 or older is L1 P’urhépecha, and 88.3% are bilingual with Spanish.

San Andrés Tziróndaro is located 11.3km west of Santa Fe de la Laguna and east of Erongarícúaro in the municipality of Quiroga. This town shares a similar history with the other lake communities; however, San Andrés has not been as widely investigated as San Jerónimo and Santa Fe. San Andrés is also known for the economic activity of producing crafts—here artisans weave tule into rugs and other decorative items. Other economic activities include agriculture and fishing, but like Santa Fe, this is mainly for self-consumption. Compared to a community like Santa Fe, San Andrés has had a lot of migration since the 1970s to other major cities, as well as to the USA, and thus its population has decreased in recent years (Rico-Lemus 2015). The 2010 census reports a total population of 2,302 with 99.1% individuals participating in indigenous households. 96% of the population aged 5 or more is L1 P’urhépecha, and 91.7% are bilingual with Spanish.
1.4.1 Varieties of P’urhépecha

Based on the general classification done by various governmental (INALI) and academic institutions (CIESAS: *Centro de Investigaciones y Estudios Superiores en Antropología Social*), there is one cohesive language P’urhépecha that is somewhat mutually intelligible amongst all speakers. That said, dialectal variation in the P’urhépecha region is complex and is still under investigation. There have been two investigations on the dialects of P’urhépecha that attempt to define the different P’urhépecha varieties and the regions to which they belong. The pioneering work was done by linguist Paul Friedrich (1971) in order to define dialectal variation in P’urhépecha phonology. He did fieldwork in 26 towns –14 were in the Sierra (Meseta), three in the Ciénega, two in the Cañada, and eight in the lake region. Friedrich’s results lead him to conclude that there were two major dialectal areas: the Inner Sierra and the non-Sierra. He further divided these regions into 14 dialectal areas based on a combination of similar features, but he found that there is overlap of geographical areas, as well as shared linguistic features in towns that are quite remote from one another. Therefore, he concluded that it is impossible to define dialectal regions, and instead he described P’urhépecha dialectology as *dialectogía de pueblos*, meaning that each town has its own particularities and features. As he states: “we understand each other, although sometimes barely; every Tarascan village has its own words, its own way of speaking.” (Friedrich 1971:164).

The second attempt to define P’urhépecha dialectal regions was undertaken by Chávez-Rivadeneyra (2004), who studied the language in ten different towns in the four geographical regions: four in the Lake region, three in the Sierra, two in the Cañada and one in the Ciénega. His corpus went beyond phonetic and phonological features and included morphological, syntactic and lexical features. Although Chávez refutes Friedrich’s idea that there are two main regional dialects (i.e. Sierra and non-Sierra), he agrees that rather than defining regions, dialects should be defined by the unique features of specific towns. Furthermore, he found variation within communities depending on gender, age, education, and bilingual competency (Chamoreau 2005), which complicates the classification of varieties even further.
In a subsequent study, Chamoreau (2005) approached this issue with a variationist framework that observes variation both through a synchronic and diachronic study, as well as through a typological approach to dialectology. Her corpus consists of data gathered over a span of nine years from 18 different towns distributed throughout the whole P’urhépecha territory. She first analyzed specific words containing phonemes that have been documented in different forms in texts from the 17th to the 19th century in order to establish diachronic variation. She then compared the terms to her corpus. She defines P’urhépecha in broad terms as heterogeneous and multiple, and not uniform. That is, despite multiple variation within regions, towns and even speakers, the varieties of the language are known to be mutually intelligible. There are not identifiably defined geographical areas that correspond to specific linguistic areas. Furthermore, there is no particular variety that could be considered the standard or even a central variety from which other varieties digress. She concludes that there has yet to be a successful attempt to define geographical linguistic areas, and questions whether or not they exist (Chamoreau 2009).

1.4.2 The case of language maintenance in Santa Fe de la Laguna

As described above, language contact between the indigenous languages and Spanish has had a tumultuous past. Overall there is a pattern of language shift in favour of Spanish and the number of speakers of indigenous languages has decreased immensely. The P’urhépecha community is no exception. Many of the communities in the P’urhépecha territory have already undergone processes of attrition and language shift. For example, 60 years ago, the community of San Jerónimo in the lake region was primarily P’urhépecha speaking. Today, only the older generation speaks the language, and most individuals in the community speak Spanish. However, other communities have been able to resist societal pressure and maintain the language of their ancestors. Santa Fe de la Laguna is one of these communities.

Santa Fe is also in the lake region, and is a mere 8 kilometers away from San Jerónimo. Despite this geographic proximity, the two communities find themselves in much different situations in terms of language use. What, then, has allowed Santa Fe to resist
the pressure to assimilate to the Spanish language and undergo a process of language shift? In his 2010 MA thesis, Rico-Lemus approaches this question in order to shed light on the factors that allow this community to keep its language alive and productive. He hypothesizes that in order for language maintenance to be possible, the language must be preserved as the primary means of communication between different generations in the home domain. To test this, he implemented two data collection methods: a sociolinguistic questionnaire that focused on the degree of vitality of both languages in the community; and an interview designed to help him determine the factors that promote vitality of the P’urhépecha language in this community. Rico-Lemus sought to obtain a 10% sample of the population, and collected 458 samples (based on a population of 4,041 inhabitants).

Rico-Lemus’ data lead him to the idea that the general use of the language in the community strengthens the community institutions that support the use of the language, which in turn strengthens the acquisition of P’urhépecha. Consequently, the language maintains a high social prestige in all domains of language use: everyday use, cultural activities, religious traditions, as well as governmental issues internal to the community. He attributes the maintenance success to the intergenerational transmission of the language in the home domain in a two-fold manner. First, it positively affects the acquisition of P’urhépecha as an L1 in all the children in the community. Second, since it is the language of communication for the majority of children in the community, it promotes communication both among children and between adults and children. This is opposed to situations in which children acquire the dominant language, and thus other speakers must resort to speaking that language to communicate with children. This creates constant communication among all community members in P’urhépecha and the language is maintained in all other domains. In sum, Rico-Lemus identifies the home as the key area for language maintenance, because transmission can happen here in an area that is not “colonized” by Spanish.

Finally, he discusses how the language attitudes of the people of Santa Fe reflect a positive disposition towards Spanish as well as towards P’urhépecha—they take an egalitarian perspective that recognizes the need to speak Spanish, but defining their identity and community (in part) through language use. Interestingly, this seems to
promote a balanced acquisition of these languages, as his results also show that there is no correlation between level of education, nor occupation and in the knowledge of both languages. Both languages are fully acquired by participants without schooling as well as participants with a university degree, and by individuals who perform diverse occupations—from artisans to professionals to business owners. They all use P’urhépecha at home, and Spanish to communicate with the non-P’urhépecha speaking society that surrounds them.

### 1.4.3 Language contact between P’urhépecha and Spanish

Similarly to the other Amerindian languages discussed in section 1.2, nearly 500 years of contact between P’urhépecha and Spanish have resulted in a certain amount of cross-linguistic influence. Many studies (Aymara: Briggs 1981; Guaraní: Gómez-Rendon 2007b; Mayan: Brody 1987, 1989; Law 2017; Nahuatl: Canger & Jensen 2007; Hill & Hill 1986; Quechua: Gómez-Rendón 2007a; among others) have documented the permeability of the indigenous languages to Spanish influence. P’urhépecha also exhibits the influence of Spanish, which has been documented by Chamoreau (2007) in phonological, morphological and syntactic domains and Chávez-Rivadeneyra (2006) in the lexical domain. Less studied, however, is the influence of P’urhépecha on Spanish, although authors such as Villavicencio (2003, 2006) and Ragone & Marr (2006) have made observations about the grammatical and phonological domains, and lexical items respectively.

Regarding the influence of Spanish on P’urhépecha, Chávez-Rivadeneyra did extensive field work in two important regions that still maintain P’urhépecha as the primary language of communication. He collected speech samples from the sierra region in the town of Comachuen and in the lake regions in the towns of San Andrés Tzirónndaro and Santa Fe de la Laguna. In his corpus he found many Spanish borrowings in the P’urhépecha language—both for items new to the P’urhépecha culture, such as clothing or religious concepts, and for words that are in competition with the original P’urhépecha word. For example, *ermanu* (from *hermano* ‘brother’) oftentimes displaces the P’urhépecha equivalent *erachi*. He found a total 237 lexical words and only 6 function words, and 6 discourse markers. Many of these Spanish integrated words are being used
with P’urhépecha morphology such as the locative case marker—rhu *escuela-rhu* ‘at school’ or the plural marker—cha *parienti-cha* ‘relatives’.

Chamoreau (2007) provides an overview of the most salient influences of Spanish in P’urhépecha that she has found over 15 years of data collection. In terms of phonology (see §3.5 for a general overview of the language) she found that the contrastive opposition between the retroflex /ɾ/ and the flap /ɾ/ is being lost. Also, the characteristic central vowel /i/ is also being lost, thus reducing the 6 vowel P’urhépecha system into the 5 vowel system of Spanish. With regard to morphology, P’urhépecha is developing new analytic-periphrastic constructions such as passives, as well as incorporating some Spanish morphology like the diminutive –*ito* or –*itu* on nouns, adjectives and classifiers. The semantic opposition of *ser/estar* ‘to be’ found in Spanish is now visible in the P’urhépecha opposition of xinte/xa. Finally, the author finds borrowing of the indefinite pronoun *siempre* ‘always’; connectors *o* ‘or’ and *pero* ‘but’; conjunction *que* ‘that’; temporal adverbializers *hasta* ‘until’, *desde* ‘for/since’, *apenas* ‘as soon as’, *luego* ‘after’, *entonces* ‘then’; prepositions *para* and *por* ‘for/by’; adverb *ya* ‘already’; and discourse markers *ya, pues, bueno* and *este*.

The influence of P’urhépecha has been found in Spanish as well, though to a lesser extent. The aforementioned study, Chávez-Rivadeneyra (2006), was bidirectional, and also finds words that have permeated Spanish, similar to so many word of Nahuatl origins that have become part of both the standard Spanish (*chocolate* or *tomate*) and Mexican dialects (*cacle* ‘shoe’ or *escuincle* ‘kid’), albeit to a much lesser extent. He identifies about a dozen words, such as *huarache* ‘sandal’, which are mostly limited to local varieties of Spanish spoken in Michoacán.

Extending this investigation to the Spanish spoken by bilingual P’urhépecha-Spanish speakers, Meneses (1998) and Villavicencio (2003) have documented both phonological and morphological variation. For example, these speakers have been demonstrated to use the velar /x/ instead of the voiceless labiodental fricative /ʃ/, as P’urhépecha lacks this sound. In terms of morphology, multiple phenomena have been observed: the lack of gender agreement in the DP, lack of agreement between the subject and the verb, lack of
definite articles, the use of demonstratives with proper nouns, overgeneralization of 3rd person verbal forms for 1st and 2nd person forms, omission of object clitics, object clitic doubling, omission of relative complementizers to introduce a subordinate clause, omission of copular verbs *ser/estar*, and omission of prepositions.

### 1.5 General research questions and hypotheses

Finally, based on the material presented above, I would like to present the overarching research questions that guide my investigation. Note that each of my experiments presented in chapters 6 and 7 presents a list of more specific questions that inform my methodology and analysis.

1. Does the Spanish grammar of P’urhépecha-Spanish bilinguals show evidence of cross-linguistic influence?
2. If so, how is this manifested in the grammar of steady state P’urhépecha-Spanish bilinguals?
3. Is there an emergent variety of Spanish spoken by P’urhépecha-Spanish bilinguals? If so, how does this variety differ from other varieties of Spanish both in contact and non-contact situations?

I hypothesize that the Spanish grammar of P’urhépecha-Spanish bilinguals will show evidence of cross-linguistic influence expressed as variation and non-standard use of accusative and dative clitics. Based on the already unstable Spanish clitic system as well as characteristics of P’urhépecha, I expect to see a variety of phenomena previously documented in contact varieties across the Americas, including liberal clitic doubling, the loss of gender marking on accusative clitics, and clitic omission. Furthermore, I believe that these non-standard structures will be optionally available to bilinguals, even though they will coexist with the standard forms. In this sense, a change in which a non-standard structure becomes standard has not (yet) occurred.

To lay the groundwork needed to answer these questions and support my hypothesis, the following chapters define the relevant theoretical perspectives and linguistic phenomena as they relate to both Spanish and P’urhépecha.
Chapter 2

2 Theoretical Framework

The theoretical framework adopted in this dissertation draws primarily from the work of Liliana Sáñchez, based on her studies carried out with Peruvian Spanish/Quechua speakers in the context of bilingualism and language contact. Fundamentally, Sáñchez’s analysis of the morphosyntax of these speakers led her to posit the emergence of new mappings of syntactic features onto morphology (Sáñchez 2015). Building on the idea that certain syntactic functional features, which exist as abstractions in the mind of the speaker, are spelled out phonologically and thus associated with a morphological marker, Sáñchez’s statement asserts that this association (mapping) can be reoriented in the mind of the bilingual, producing feature/morpheme mappings different from those of the monolingual. As an underlying assumption, Sáñchez relies on the work of linguists such as Lardiere (2005), who have asserted that functional features are dissociated from their corresponding morphological forms, and therefore mappings must be acquired by language learners. In the case of L2 learners (or sequential bilinguals), the association between L1 and L2 features may result in non-standard grammars as well as non-standard mapping of functional features onto L2 morphology (Sáñchez 2015).

On this basis, Sáñchez hypothesizes (2003:13,15) two processes taking place in the mind of the bilingual:

1. Functional Interference Hypothesis
   Functional interference in bilinguals, i.e. the activation of functional features in one language triggered by input in the other language, generates syntactic changes in the bilingual grammars. Interference in lexical entries (n-insertion, v-insertion) does not generate such changes.

2. Functional Convergence Hypothesis
   Convergence, the specification of a common set of features shared by the equivalent functional categories in the two languages spoken by a bilingual individual, takes place when a set of features that is not activated in language A is frequently activated
by input in language B in the bilingual mind. Convergence may be the result of the fusion of features associated with a functional category in language A with other features associated with that category in language B or, in certain cases, it may be the result of the emergence of a new functional category in one of the languages that is not present in the syntactic representation of monolingual speakers of that language.

In practice, we find that these hypotheses apply to the observed effects of non-standard morphology production in bilinguals in a very naturalistic manner. Perhaps in simpler terms we could say that functional interference occurs when a feature from language A is transferred to language B and expressed in overt morphology with a non-standard distribution. Functional convergence could be expressed as the process of homogenization of features in two languages across parallel functional categories that creates a common set of features expressed as a non-standard morphological distribution. The result of these processes determines the grammatical and dialectal variation observed in bilingual speakers living in situations of language contact.

The following sections delve more into the theory behind bilingualism and contact variety linguistic studies. They first present a brief analysis of the work in language acquisition underlying Sánchez’s theories, as well as providing a more in-depth look at Sánchez’s theoretical work. Finally, I provide a brief sample of how this theory is applied in the context of the Spanish-P’urhépecha language pairing. Note: the linguistic phenomena studied in this dissertation are presented in chapter 3, along with syntactic analysis of relevant phrase structure in Spanish; a review of relevant empirical studies is presented in chapter 4.

2.1 Acquisition of features and morphology

2.1.1 Functional Categories and Features

Central to Sánchez’s theory, and indeed to minimalist syntax, are the concepts of functional vs. lexical categories and the functional features associated with the latter. As opposed to lexical categories, such as Verb and Noun, functional categories convey grammatical information. For example, the functional category Tense can carry
information such as [tense], [person], or the functional category Determiner can carry other types of information, such as [definite], [gender], [number]. The grammatical information thus conveyed by these categories is referred to as bundles of features, in which each piece of information (e.g. tense, definiteness) is a functional feature. While the set of available functional categories/features in human grammar is assumed to be consistent, it is of note that all languages do not necessarily realize all possible functional categories (White 2003a). Furthermore, parallel functional categories across languages display variation with respect to their bundles of features. For example, Spanish has grammatical gender, while English and P’urhépecha do not. Differences like these in the specification of functional features are considered to be the locus of interlinguistic variation.

In generativism, features are typically associated with a strength, meaning that any feature, or bundle of features, can be considered strong or weak. It has been noted that feature strength often correlates with rich paradigms of inflection (Chomsky 1995 in Lardiere 2000) that create overt morphology associated with functional categories, which allows us to determine feature strength based on our knowledge of a language. For example, we can get the idea that T is strong in Spanish, based on the rich paradigms for verb inflection. Interestingly, strong features are believed to drive syntactic movement operations, raising items in the derivation in order for feature checking to be performed in corresponding functional projections, which results in changes in word order. This may sound complex, but the proposed operation is really quite simple. Consider the following example based on White (2003a:14):

(1) a. The red blouse
    b. La blusa roja
   the blouse red

This example demonstrates the difference in word order between English, in which the adjective is realized before the noun, and Spanish, which (typically) realizes the adjective after the noun. Assuming that the bundle of features associated with D in English is relatively weak due to lack of grammatical gender and a limited paradigm for number
agreement, whereas the features associated with D (gender, number) are strong, we can account for the variation in word order.

(2)

As illustrated in (2), nouns in English do not raise for feature checking and there is no movement hence the word order is derived directly from the merge position of morphemes into the syntactic structure. In Spanish, we see that the noun is raised to the [spec D] position for feature checking, resulting in the D-N-A word order.

Until this point, our discussion of features has been primarily abstract in the sense that it discusses the application of functional categories/features in a primarily typological fashion, as well as providing a simple example of how feature strength has been associated with syntactic movement responsible for observed word order. To move forward towards laying the foundations for Sánchez’s work with functional interference/convergence, the following section takes a more concrete approach to understanding functional categories by discussing how abstract functional features are mapped to overt morphological forms, particularly in the context of language acquisition.

2.1.2 Acquisition of Features: The relationship between Form and Feature

Studies in child language acquisition demonstrate that in early phases of acquisition learners often display non-standard variation/omission of morphological forms that are associated with functional categories. For example, López Ornat (1994) notices lack of
agreement between the clitic and DP in the speech data of a Spanish monolingual child at the age of 1;11 as in (3).

(3) Apága=lo la tele (cf. apágala, la tele)
    turn-off-it-CL3.ACC.M the.F TV
    ‘Turn the TV off.’

Taking into account the Separation Hypothesis (Beard 1995), which informs us that abstract grammatical features are distinct from their phonological spell-out, the above example (3) beg the question: are the “errors” made by language learners due to a deficit in the abstract specification of functional features, or due to a deficit in morphological knowledge? This line of questioning becomes more complex when the relationship between feature and form is considered. In the case that the learner already has the appropriate featural knowledge to generate phrases, this knowledge has not yet been mapped onto overt morphology and may indicate that the relevant morphology has not yet been acquired. On the other hand, if the speaker does not have the necessary featural knowledge, why not? Is the featural knowledge dependent on the acquisition of certain morphological paradigms? These questions have been extensively studied and, in varied forms, are highly visible throughout the literature of both first and second language acquisition.

In her article “Mapping Features to Forms in Second Language Acquisition”, Donna Lardiere (2000) presents a concise definition of the above line of inquiry that merits citation here (p.103):

A central question for both native and non-native language acquisition, then, is how a learner manages to associate the particular featural specification of the target language—that is, a syntactic representation—with their overt realization in the input. With respect to morphology in particular, we may ask about its association with syntax: Do language learners derive syntactic representations of functional categories solely from exposure to the relevant morphological forms of their particular target language, such that acquiring the morphology is a prerequisite condition for projecting an associated category? Or rather do they
already have some featural knowledge which gives them some idea of what
they’re looking for – that is, of what they’re trying to match up with the forms
they hear in the input?

Essentially, Lardiere wants to know how the mind of the language learner interacts with
the linguistic input they receive, and the implications to her line of questioning are broad.
If functional categories are derived in the mind of the learner through exposure to
morphological forms, the relationship between morphology and functional features is
direct and implies that a learner cannot acquire a functional feature specification without
acquiring the appropriate morphological forms. However, in the case that featural
knowledge is preexisting, then the relationship between functional features and
morphology is truly one of disassociation – it relies solely on a process of mapping from
form to feature during language acquisition.

In answering her questions, Lardiere engages in a lengthy discussion of the relationship
between strong Agr and overt verb raising; in doing so she presents arguments for both
preexisting functional categories and the role of morphology as a prerequisite for
syntactic derivation; however, she does make several observations that are highly
relevant to the study at hand:

i. Perhaps morphology and syntactic knowledge about functional features develop
simultaneously, informing each other, but not necessarily contingent upon one
another, at least symmetrically. In L1 speakers, this creates a mapping of form to
feature based on input and the learner’s innate knowledge of functional categories,
and always results in acquisition of the target grammar.

ii. Observation 1 does not hold true in the case of L2 acquisition. Acquiring a target
grammar mapping of morphology to feature is not a prerequisite for a second
language learner’s development of a syntactic representation of a functional
feature/bundle of features. This results in the “mapping problems” observed in
experimental data, in which features are mapped to morphology in non-standard
ways.
Though the relationship between form and feature may be hard to tease apart in the case of child acquisition, the apparent disassociation of form and feature in L2 acquisition represents a productive line of inquiry. As an L2 speaker will have already acquired a series of functional categories and features, as well as the mapping of these features in their L1, one must assume that the previous knowledge of featural specification influences the acquisition of similar features in the learner’s L2. Furthermore, acquired features must be mapped to L2 morphology, which does not always result in a target grammar mapping of feature to morphology. The following section further explores the concept of L2 acquisition as it relates to the acquisition of functional features and their mapping to morphological forms.

2.1.3 Acquisition of features in Second Language Acquisition

It is generally agreed that bilinguals have access to two distinct grammatical (syntactic) systems that develop and function in an autonomous fashion (Meisel 1986, 1994; Paradis & Genesee 1996, 1997; and others). This has been demonstrated both with simultaneous child bilinguals, and with sequential bilinguals (Müller 1998; Müller & Hulk 2001; and others). Despite the autonomous nature of the mental representation of syntax, studies often indicate that bilinguals produce target deviant structures, both temporarily during different phases of acquisition (Müller & Hulk 2001), as well as in the spoken dialects of steady state adult bilinguals (Sánchez 2003, 2004). The obvious question posed when considering these observations concerns the source of the target deviant structures. If, as assumed, there are two autonomous grammars acting independently in a bilingual mind, shouldn’t language acquisition and development occur in a similar way to how it does with monolinguals? The answer to this question is both yes and no. As noted by Müller and Hulk (2001) in their studies of simultaneous child bilinguals, the target deviant constructions produced by bilingual children are the same as those produced by monolinguals, but the latter produce them considerably less frequently. To account for this, they state that “(both languages) are in contact and may have some influence on each other” (Müller & Hulk 2001:1). This influence, or interference, they claim, occurs in the same areas that are problematic for monolinguals, particularly if “language A allows for more than one grammatical analysis [...] and language B contains a lot of positive
evidence for one of those possible analyses” (Müller & Hulk 2001:2). Furthermore, they postulate that interference typically occurs at the interface of syntax with other linguistic systems, such as discourse, semantics, and morphology (see Sorace 2005, 2006; Sorace & Filiaci 2006), a concept that figures prominently into the research of Sánchez on bilingual Quechua-Spanish speakers and will be further discussed in the following section. Finally, it is of note that Müller and Hulk observe that interference is multi-directional in simultaneous bilinguals, and does not necessarily correspond to a “dominant” language. This multi-directionality of influence is also observed with adult steady state bilinguals (Sánchez 2015), and is central to Sánchez’s hypothesis of functional convergence.

As previously discussed, functional features are the driving force of linguistic variation, and moreover, they are central to modern generativist linguistic theory, and thus their study is central to language acquisition (Travis 2008). Indeed, Lardiere asserts that functional features are the key to understanding the interference observed in bilingual grammars. In the context of L2 acquisition, the learner brings a full set of already assembled features to the learning task, and one must assume that these features are somehow different from those of the L2. Because of this, Lardiere asserts that the learner encountered three feature related challenges:

1. With which functional categories are the selected features associated in the syntax, and how might this distribution differ from the feature matrices of functional categories in the L1?
2. In which lexical items of the L2 are the selected features expressed, clustered in combination with what other features?
3. Are certain forms optional or obligatory, and what constitutes an obligatory context? More specifically, what are the particular factors that condition the realization of a certain form (such as an inflection), and are these phonological, morphosyntactic, semantic, or discoursed linked?

(Lardiere 2009:175)

Therefore, the learners must determine what the features of the L2 are, how they are combined together and linked to morphological forms, and what are the conditions of the
realization of relevant forms. These tasks result in a process of feature reassembly, which requires the learner to take features already present in their L1 grammar, and bundle and map them to L2 morphological forms. According to Lardiere, the common strategy employed by L2 learners is to look for corresponding morpholexical items, based either on meaning or grammatical function, in order to produce mappings of feature to form in the L2. Herein lies the difficulty of L2 acquisition (according to Lardiere), and may well be the source of target deviant constructions, as well as varieties and dialects that emerge in language contact situations.

In the above sections, we have discussed the role of functional categories and features in phrase derivation and the acquisition in the context of both L1 and L2 language learning. Furthermore, we have discussed the process of creating mappings between form and feature, and how these processes may (or may not) differ in monolinguals and bilinguals. The following section builds on these concepts by presenting a more detailed look at Sánchez’s concept of functional interference and convergence in light of the theoretical proposals outlined above.

### 2.2 Functional interference and functional convergence

Taking into account the above concepts, we are able to analyze Sánchez’ hypotheses as they relate to current theoretical approaches to language acquisition and the relationship between functional features and morphology. As we will see, her proposals are predicated on the notions of dissociation of form and feature, language interference, and the reassembly of features in L2 acquisition. The paragraphs that follow discuss each of her hypotheses in the context of the theoretical work done by linguists such as Lardiere, White, and Müller.

Looking first at the Functional Interference Hypotheses, which states that interference occurs when “the activation of functional features in one language, triggered by input in the other language, generates syntactic changes in the bilingual grammars” (Sánchez 2015:25), we can immediately formulate a series of connections to the aforementioned theoretical approaches. First, we note that the concept of syntactic change in bilingual grammars hinges on the “activation of functional features”, which have been identified as
the locus of linguistic variation. However, as such this statement is somewhat vague, and deserves to be further considered. We can interpret her statement as follows. When language A has functional features that are 1) not present in language B, 2) associated with a different functional category than in language B, 3) bundled with other functional features than in language B, or 4) any combination of 1, 2, and 3; linguistic input related to the features in Language A drives a process of interference that results in the configuration of these features as specified in language A being mapped to language B. This mapping is then expressed in the realization of target deviant structures in the language B. In order for this type of process to occur, we find that morphology is necessarily disassociated from functional features, because if it were not, the interference of language A would not be able to manifest as a morphological mapping (target deviant structures) in language B. In essence, Sánchez is referring to a process of feature reassembly as outlined by Lardiere. Accepting Lardiere’s assumption that the L2 learner will attempt to initiate reassembly and mapping using similar morpholexical items in the L2, we can reasonably posit that functional interference occurs due to feature reassembly mappings in parallel functional categories, or at least in semantically or grammatically similar structures. When the learner fails to overcome one of the three challenges outlined above, target deviant structures occur as the result of non-standard mappings of features to morphology. This reconfigured mapping leads to the observed differences in the contact varieties studied by Sánchez and her contemporaries.

In many ways, Sánchez’s hypothesis of functional convergence rests upon the same foundation as functional interference, but the result is different enough that it merits separate discussion. She defines functional convergence as “the specification of a common set of features shared by the equivalent functional categories in the two languages spoken by a bilingual” (Sánchez 2015:25). The key distinction here is that functional convergence—as opposed to interference—results in a unique set of features associated with a functional category that differs in specification from one or both grammars in its monolingual representation. She goes on to assert that this process may even be a “result of the emergence of a new functional category in one of the languages that is not present in the syntactic representation of monolingual speakers” (Sánchez 2003:15), which implies that parallel functional categories are not necessarily a
requirement for functional convergence – indeed, the process can result in a new category. The implications of this hypothesis are interesting in the sense that they predict that bilinguals may display a common respecification of features in both languages, which in turn would be evident in the production of bilinguals in both languages. Functional interference, on the other hand, seems to be more of a one-directional process, albeit with similar mechanics.

It is interesting to note that these two processes are in many ways very similar, and they seem to be difficult to tease apart. In the context of contact linguistics in the Americas, the researcher is often faced with the extra challenge of comparing a well-documented language (or a language they speak fluently) like Spanish, to a relatively undocumented language like P’urhépecha, with which the researcher may have varying levels of familiarity. In these cases, it seems that a process like functional convergence could easily be interpreted as functional interference, simply because it is more visible. For example, non-standard mappings in the Spanish clitic systems could be very salient to the researcher, allowing them to intuit potential areas of interference; however, similar mappings are considerably harder to isolate in the language of comparison, even in the case that the researcher has relatively extensive knowledge of the language, due to lack of documentation of dialectal variation, access to historical samples, etc. Sánchez’s work with Quechua speakers in Peru benefits from a longer and more widespread tradition of linguistic investigation, which is quite helpful when trying to identify structures that emerge as the result of language contact, but is inevitably biased towards the analysis of Spanish. Regardless, she is able to identify both of her hypotheses at work in both Spanish and Quechua, and although sometimes she fails to tease apart which is the dominant process (interference vs. convergence) at work, she provides compelling examples that support her hypothesis. The following paragraphs provide an example of how she applies her hypothesis of functional interference to production data obtained from Quechua-Spanish bilinguals.

Perhaps Sánchez’s most classic example of functional interference comes from a collaborative study (Camacho, Paredes, & Sánchez 1995). Here the authors propose the emergence of a possessor clitic in the L2 Spanish of Quechua speakers in Peru, stating
that it results from the mapping of L1 genitive features onto an L2 clitic. To demonstrate this, the authors present the following example (4), asserting that the accusative clitic is not co-referenced with the full DP argument, but with the genitive expression that uses the preposition *de*:

(4) \[ \text{Loi amarran su pata [del condor].} \]
\[ \text{CL3.ACC.M.SG tie his leg of-the condor} \]
\[ \text{como si estuvieran montando} \]
\[ \text{as if was riding} \]
\[ \text{‘They tie the condor’s leg as if it was riding’} \]
\[ \text{(Camacho et al. 1995:135)} \]

They demonstrate the association of *lo* with *del condor* by means of the *wh*-extraction, which indicates that *lo* can coexist with the extraction of the possessed constituent as in (5):

(5) \[ ¿Qué loj amarran ti [del condor]? \]
\[ \text{What CL3.ACC.M.SG tie ti [of-the condor]} \]
\[ \text{‘What part of the condor do they tie?’} \]
\[ \text{(Camacho et al. 1995:136)} \]

While it does not reflect standard monolingual clitic use, this phrase is consistent with L2 clitic doubling varieties found in the region. The non-standard association of the accusative clitic *lo* and a genitive expression indicates that a process of reconfiguration has occurred, in which L1 features are assembled on L2 morphology. According to Sánchez (2015), the new mapping is available due to the fact that Spanish allows for clitic doubling with oblique objects introduced with the preposition *a* that are incorporated in the theta grid of the verb as demonstrated by the following example (6) from the work of Kalt (2012) cited in Sánchez (2015:32).

(6) \[ \text{María lei robó el dinero a Juan} \]
\[ \text{Maria CL3.DAT.SG stole the money to Juan} \]
\[ \text{‘Maria stole the money from Juan.’} \]
\[ \text{(Kalt 2012:174)} \]
However, a similar construction with the preposition *de* is ungrammatical (7), as *de* assigns structural case to the complement:

(7) * María *le$_i$ robó el dinero *de* Juan$_i$

Maria CL3$_{DAT,SG}$ stole the money of Juan

‘Maria stole Juan’s money.’

(Kalt 2012:174)

Therefore, a phrase such as (4) depends on a reassembly of features, which begins with a mapping of the Quechua case marking suffix -*pa* (8) onto the Spanish preposition *de*. This reassembly deprives the preposition *de* of its case assigning features; instead it is a spellout of genitive features. The genitive case features are in turn mapped onto the non-argument clitic *lo*.

(8) Kuntur-*pa* chaki-*n*

condor-*GEN* leg-*3,SG*

‘The condor’s leg.’

(Sánchez 2015:33)

Analyzing this example from the perspective of functional interference and the context of L2 language acquisition, we can say that the activation of genitive features from input in Quechua have driven syntactic change in the minds of these bilinguals. It appears that because genitive case is marked by affixation in Quechua, as opposed to being assigned structurally like in Spanish constructions with the preposition *de*, L2 learners try to map genitive features onto the morpholexically similar accusative clitic in Spanish. Due to the fact that clitics can be doubled in the case of certain oblique objects, the L2 learners identify this grammatical similarity as a mapping site for genitive features. While the exact mechanics of this sort of interference may be contentious, or at the very least, hard to tease apart, the logic of the analysis appears sound based on previous theoretical work.

Sánchez applies this sort of analysis to phenomena that she identifies in both Spanish and Quechua, noting that the phenomena typically occur as the interface of syntax with other linguistic systems. For example, the syntax/semantics interface requires that the syntax of
a phrase be mapped onto its semantics, or the syntax/phonology interface requires that the syntax of a phrase be mapped onto its phonology (White 2011). In L2 acquisition studies, data suggests that learners often have difficulty at these interfaces, though not necessarily in a uniform way (White 2011). It stands to reason that because generating mappings at interfaces tends to be difficult, they are a prime location for linguistic variation, which, as we have seen, is due to varied featural specification. Indeed, the majority of the discussion presented in this chapter somehow relates to the syntax-morphology interface i.e., mapping feature to form. Taking into account the importance of identifying interfaces as linguistic domains that are vulnerable to non-standard mappings and thus linguistic variation, the following section briefly outlines how we apply the above theoretical framework to this dissertation.

2.3 This Study

This study aims to look for evidence of functional interference/convergence in the grammar of bilingual P’urhépecha-Spanish speakers. We focus on Spanish object clitics; First, direct object clitics which have been identified as “morphological markers at the interfaces of syntax, phonology, morphology, and information structure” (Mayer & Sánchez 2016:545). Second, we analyze indirect object clitics, which have been analyzed as low applicative heads that relate an indirect object to a direct object in a possessor or benefactive type relations (Cuervo 2003b, 2007, 2010), thus existing at the interface of syntax and semantics. Clitics are generally considered a vulnerable area of the Spanish grammar that is subject to variation –even within monolingual speakers in non-contact contexts— and hence are an area of variation and potential linguistic change. Taking this into account, we look for non-standard mappings of feature to form in the clitic system of bilingual P’urhépecha-Spanish speakers. We then compare these mappings with what we know about P’urhépecha’s featural specification, particularly the use of objective case marking, the production of null objects in anaphoric constructions, and the applicative voice, in order to understand the source of the observed non-standard morphological forms in L2 Spanish i.e., the functional interference.
Chapter 3

3 Linguistic Phenomena

3.1 Introduction

This chapter is dedicated to providing a basic overview of the linguistic phenomenon relevant to this study. In general, the content can be divided into six sections: clitics and affixes, the Spanish pronominal system, non-standard Spanish pronominal systems, the acquisition of clitics in Spanish, the linguistics of P’urhépecha, and a comparison of Spanish and P’urhépecha pronominal systems. The first section lays the foundation for the rest of the content by defining clitics and contrasting them with affixes. Following this, the second section presents the relevant information needed to understand the standard use of pronominal clitics in Spanish. To provide a basis for later comparisons between standard Spanish and Spanish in contact with Amerindian languages, section three contrasts standard Spanish with non-standard varieties prevalent in Spain and Argentina (Spanish in contact with Amerindian languages will be discussed in Chapter 4). The fourth section provides a brief overview of the literature relating to the acquisition of clitics in Spanish, in order to demonstrate the similarity of clitic acquisition processes whether the speaker be a monolingual, a bilingual, or an adult L2 learner. I then shift focus toward relevant phenomenon in P’urhépecha (§3.5), which lays the groundwork for a comparison of Spanish and P’urhépecha. The final section provides a basic comparison of the pronominal system of Spanish and P’urhépecha, thereby introducing the phenomenon I will analyze in the experimental study detailed in Chapters 5, 6, 7, and 8 of this dissertation.

3.1.1 Defining clitics

Much debate has been centered around the differences between clitics and affixes (Zwicky & Pullum 1983). According to Spencer and Luis (2012) “a clitic is best characterized in canonical terms, as an element that has the distribution of a function word and the phonological properties of an affix” (p.328). In other words, they have
properties of both function words and affixes, but they are not one or the other, and therefore they need to be treated differently than either of these categories.

There is a consensus in the literature that clitics have the following general properties:

i. Clitics are generally unstressed (cannot be given stress and thus cannot have focus)

ii. Clitics require a host to attach to

iii. Clitics attach promiscuously, they do not select words of a particular class

iv. Clitics often have different syntax from fully fledged words

Furthermore, clitics can be divided in terms of their function: verbal, clausal, nominal, and argument. Here I will be concentrating on clitics with argument function, or pronominal clitics. Pronominal clitics exhibit the following properties: they are unstressed, cannot be modified, cannot be coordinated, cannot occur in isolation (they occur with verbs), and their syntax is different from full words.

3.1.2 Clitics vs. Affixes

In order to characterize clitics in terms of function, it is important to compare their properties with affixes. The seminal work of Zwicky and Pullum (1983) establishes a series of criteria to differentiate clitics from affixes. The following is a summary (cited in Spencer & Luis 2012:108):

i. Host selectivity: Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems.

ii. Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups.

iii. Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups.

iv. Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups.

v. Lexical integrity: Syntactic rules can affect words, but cannot affect clitic groups.
vi. Clitic-affix ordering: Clitics can attach to material already containing clitics, but affixes cannot.

According to Spencer and Luis (2012), these criteria indicate that affixes are primarily associated with words, whereas clitics are associated with phrases. Therefore, affixes tend to be subject to the same idiosyncrasies found with words, while clitics behave in a more regular fashion expected of syntax. This is not to say that clitics (or syntax) are completely regular, but as a general rule they are less subject to exceptionality than words.

3.2 Pronominal Clitics in Spanish

Spanish has a system of strong and weak personal pronouns. Subjects in Spanish only have strong overt pronominal forms, also known as stressed pronouns, and take nominative case. In terms of object function there is a set of both strong (prepositional) and weak pronouns (accusative/dative) as shown in Table 3.1. There are clear distinctions between strong and weak pronouns—strong pronouns can be coordinated (1a), modified (2a), emphasized (3a) and appear in isolation (4a), whereas weak pronouns cannot (1b-4b).

Table 3.1 Spanish pronoun system

<table>
<thead>
<tr>
<th>Person</th>
<th>Nominative (strong)</th>
<th>Prepositional (strong)</th>
<th>Accusative (clitic/weak)</th>
<th>Dative (clitic/weak)</th>
<th>Reflexive (clitic/weak)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>yo</td>
<td>a mí</td>
<td>me</td>
<td>me</td>
<td>me</td>
</tr>
<tr>
<td>2sg</td>
<td>tú</td>
<td>a ti</td>
<td>te</td>
<td>te</td>
<td>te</td>
</tr>
<tr>
<td>3sg</td>
<td>él/ella</td>
<td>a él/ella</td>
<td>lo/la</td>
<td>le</td>
<td>se</td>
</tr>
<tr>
<td>1 pl</td>
<td>nosotros/as</td>
<td>a nosotros/as</td>
<td>nos</td>
<td>nos</td>
<td>nos</td>
</tr>
<tr>
<td>2 pl</td>
<td>vosotros/ustedes</td>
<td>a vosotros/uds.</td>
<td>os/los/las</td>
<td>os/les</td>
<td>os/se</td>
</tr>
<tr>
<td>3 pl</td>
<td>ellos/ellas</td>
<td>a ellos/ellas</td>
<td>los/las</td>
<td>les</td>
<td>se</td>
</tr>
</tbody>
</table>

(1)  

a. Ella y él salieron tarde.

She and he left late

b. *La y lo vi.

CL3.ACC.F and CL3.ACC.M saw
Furthermore, we need to distinguish weak pronouns from affixes based on the previous criteria, but using examples specific to Spanish. Like clitics, Spanish affixes cannot be coordinated, be modified, or appear in isolation (Ordóñez 2014). However, unlike clitics, affixes have a rigid position within the word (as opposed to clitics, which display some optionality and will be discussed below). Moreover, clitics in Spanish have a restricted function which is specific to pronouns whereas affixes do not. The following Table 3.2 summarizes the shared properties of strong and weak pronouns and affixes.

Table 3.2 Comparison of features of Spanish tonic pronouns, clitics, and affixes

<table>
<thead>
<tr>
<th></th>
<th>Tonic Pronouns</th>
<th>Clitics</th>
<th>Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Modified</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Isolation</td>
<td>+</td>
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<td>-</td>
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<tr>
<td>Emphasized/focalized</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rigid position</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Pronominal</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>
In Spanish (and Romance) pronominal clitics differ from other types of clitics (in other languages) in that they have to be attached to either an auxiliary (5a) or a lexical verb (5b). Furthermore, these clitics exhibit agreement markers that are co-referential to the argument with which they co-occur, expressing person, number, gender and case features. In terms of case, there is a distinction between accusative case (6a) and dative case (6b); however, this distinction is only overt in the 3rd persons. In first and second person clitics, we observe a high degree of syncretism, as show in Table 3.1. The accusative has both gender and number features for the 3rd person and the dative has only number features for 3rd person. The distribution of the etymological Spanish clitic system is shown in Table 3.3 below.

(5)  a. Lo he comprado  
    CL3.ACC have bought  
    ‘I have bought it’  

    b. Lo compré  
    CL3.ACC bought  
    ‘I bought it’

(6)  a. Juan lo quiere comprar [un libro]  
    Juan CL3.ACC wants to-buy [a book]  
    ‘Juan wants to buy it’

    b. Juan le quiere comprar un libro [a su hermano]  
    Juan CL3.DAT wants to buy a book [for his brother]  
    ‘Juan wants to buy [him] a book.’

Table 3.3 Etymological Spanish clitic system

<table>
<thead>
<tr>
<th>Person</th>
<th>Accusative</th>
<th>Dative</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Singular</td>
<td>Plural</td>
</tr>
<tr>
<td>1</td>
<td>me</td>
<td>nos</td>
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<td>2</td>
<td>te</td>
<td>os/los/las</td>
</tr>
<tr>
<td>3</td>
<td>lo/la</td>
<td>los/las</td>
</tr>
</tbody>
</table>
3.2.1 The syntax of Spanish clitics

Spanish clitics are independent words or constituents; however, they depend phonologically on a stressed host. This host is always a verb—they never occur with other grammatical categories (Zagona 2002). Depending on the finiteness of the verb, clitic position can vary: before the verb (proclisis), or after the verb (enclisis). Accusative and dative clitics can form clusters which have a very rigid word order (me lo das/ * lo me das) forming a morphological unit that cannot be interrupted (*lo puede darme) (Fernández Soriano 1999). Furthermore, “a clitic is required for a pronominal or anaphoric direct object; clitics co-occur with indirect objects even when the object is non-pronominal, non-anaphoric” (Zagona 2002:17), meaning that dative clitics do not necessarily replace an overt argument that was previously introduced, but accusative clitics typically do. The following sections further discuss the syntactic properties of Spanish clitics that are relevant to this study: the origin and movement of accusative clitics, clitic position, accusative clitic doubling, accusative clitic omission, double object constructions and the applicative voice, and also providing a brief introduction to the theoretical perspectives addressing Spanish clitics. Clitic clusters will not be discussed.

3.2.1.1 The origin and movement of accusative clitics

In generative syntax there is a wide debate on the origin of clitics in general. Earlier proposals, such as the movement approach (Borer 1984; Kayne 1975; Rivas 1977; Strozer 1976), assume that the clitic originates in the object position—the complement DP—and moves up in the derivation in order to attach to a verbal host, on which it is phonologically dependent. This analysis is problematic when considering the phenomenon of accusative clitic doubling, which occurs with strong pronouns and clitic left dislocations, a phenomenon that is discussed below. Later analyses overcome this limitation by analyzing them as functional heads that are related to D or V. Under this approach, the clitic either heads a functional category (AgrO) in the tense phrase where it instantiates agreement, or it originates in the spec D position and is then raised for feature checking to AgrO as shown in (7).
The determiner phrase origin theory seems perhaps the most robust, especially due to the similarity between third person clitics and determiners and their historic relation to demonstratives. As Uriagereka notes in his influential (1995) article: “3rd person clitics and determiners are synchronically as well as diachronically related” (p.81), meaning that the historical processes that resulted in the modern systems of clitic and determiners can be currently observed in their syntactic relationship, as shown in (8). Uriagereka further asserts that in Spanish, the clitic is raised to F to check referential features, which exists somewhere in the CP above AgrS.

On the other hand, if we assume that the clitic originates as the head of AgrO, the clitic must be interpreted as a spell out of AgrO, not a pronominal form. The analysis of the accusative clitic as an agreement marker follows the work of Suñer (1988), and is motivated by the observation that many American Spanish dialects are more permissive
with regards to clitic doubling. Whether this would be due to syntactic change driven by linguistic contact, or is generally applicable to Spanish syntax remains unclear.

Under either proposal, the analysis of the accusative clitic as a functional head that engages in processes of feature checking and agreement is important for our analysis. Moving forward, we need only assume that the underlying syntactic structure of Spanish allows for accusative clitic doubling in a variety of contexts, regardless of its origin or the exact mechanics of its movement.

### 3.2.1.2 Proclitics and enclitics

There are two possible positions for clitics in Spanish: before the verb—*proclisis*—or after the verb—*enclisis*. Proclitics occur with finite verbs and negative imperatives as in (9), whereas enclitics occur with positive imperatives, gerunds and infinitives as in (10). Clitics cannot follow compound forms such as past (12) or passive participles as in (13) (Zagona 2002). Furthermore, in periphrastic constructions such as progressives and non-finite, clitics can occur either in proclisis or enclisis as in (11).

i. **Proclitic position:**

(9)  

a. *María lo saluda*  

   Mary CL3.ACC greets  

   ‘Mary greets him’

b. *No lo mandes*  

   No CL3.ACC send  

   ‘Do not send it’

ii. **Enclitic position:**

(10) a. *Manda=la*  

   send-CL3.ACC  

   ‘Send it’
b. *Mandándolo =lo
   sending-CL3.ACC
   ‘sending it’

c. Mandarlo =lo
   to-send-CL3.ACC
   ‘(Aux) to send it’

iii. Both positions:

(11) a. La voy a comprar
   going to buy
   ‘(I’m) going to buy it’

b. Voy a comprar =lo
   Going to buy-CL3.ACC
   ‘(I’m) going to buy it’

c. La estoy mirando
   is-seeing
   ‘(I’m) seeing her’

d. Estoy mirando =lo
   is-seeing-CL3.ACC
   ‘(I’m) seeing her’

iv. With past participles:

(12) a. María ya lo había preparado
   Maria already CL3.ACC have prepare-PPRT
   ‘Maria had already prepared it’

b. *María ya había preparado =lo
   Maria already have prepare-PPRT-CL3.ACC
v. With passives:

(13) a. La carta ya te fue mandada
   the letter already CL2.DAT was send-PPRT
   ‘The letter has already been sent to you’

b.* La carta ya fue mandáda=te
   the letter already was send-PPRT-CL2.DAT

(Zagona 2002:18)

3.2.2 Accusative clitics

3.2.2.1 Accusative clitic doubling

In Spanish, accusative clitics typically occur as anaphoras that replace [+definite] [+specific] direct object DPs. In certain cases, accusative clitics appear in clitic doubling structures i.e., together with the complement in canonical object position (Fernández-Soriano 1999). This occurs in particular contexts that seem to trigger or require an agreement morpheme (Aisin & Fernández-Rubiera 2017). In standard Spanish, accusative clitic doubling has very defined restrictions:

i. When the canonical object is a pronoun doubling is obligatory.

(14) a. Mei ha visto a mí.
   (S/he) CL1.ACC has seen me.
   ‘S/he has seen me’

b.* Ha visto a mí
   has seen to me

(Fernández-Soriano 1999:1248)

ii. In dislocation structures

(15) La_i vio ayer, a Marfá_i (CLRD)
   CL3.ACC see yesterday, DOM Maria
   ‘(S/he) saw her yesterday Maria’
(16) a. Las flores compró ella (CLLD)
   the flowers CL3.ACC bought she
   ‘She bought the flowers’
   b. *las flores compró ella
      the flowers bought her

iii. When the objects are not pronominal, direct objects do not usually duplicate in the
standard variety (17). There are a few exceptions to the previous generalization such as
doubling with neutrals (18), emphatic adverbials such as ya (19), and when preceded by
quantifiers such as todo (20) or the combination of <art + numeral> (21) (Fernández-
Soriano 1999).

(17) a. Vi a Juan
   saw DOM Juan
   ‘I saw Juan’
   b. ?Lo vi a Juan
   CL3.ACC.M saw DOM Juan

(18) Lo sé que te sientes mal
   CL3.ACC know that you feel unwell
   ‘I know that you feel unwell’

(19) Ya lo creo que vendrá
   already CL3.ACC believe that will-come
   ‘I do believe that s/he will come’

(20) Lo sé todo
    CL3.ACC know everything
    ‘I know it all

(21) Los conozco a los tres
    CL3.ACC know all three
    ‘I know all three of them’ (Fernández-Soriano 1999:1249)
Some dialects of Spanish, notably Rioplatense (Argentine), as well as many dialects in contact with Amerindian languages, are considerably more permissive than standard Spanish with respect to accusative clitic doubling. The relatively widespread nature of clitic doubling dialects has led researchers to posit that accusative clitics are simply the spell out of the AgrO projection (Suñer 1988), as mentioned in the previous section. These dialects are discussed more extensively in §3.3.3 (Rioplatense) and in Chapter 4 (contact varieties).

3.2.2.2 Direct object elision

In standard Spanish, direct object omission is possible under very strict restrictions. Campos (1986) states that only indefinite object NPs without an article can be elided in standard Spanish (22a), but if the direct object is definite, then it must be replaced with an accusative clitic (22b). According to Palacios (2013), there are further syntactic restrictions—objects cannot be elided “if the noun is part of an embedded complement sentence, a subject clause, an adverbial clause, or partial interrogation in which the interrogative is not the direct object” (p.180).

(22) a. ¿Compraste café?
    Did you buy coffee?
    - sí, compré e
    yes, (I) bought
    b. ¿Compraste el café?
    Did you buy the coffee?
    -sí, *(lo) compré
    yes, (I) CL3.ACC.M bought
    ‘Yes, I bought it’

The analysis provided by Campos states that the direct object moves out of its canonical position into a topic position, leaving a trace, or empty category. If the topic can be recovered from context, it can then be dropped (Bruhn de Garavito & Guijarro-Fuentes 2002). Assuming that indefinite objects are NPs, while definite objects are DPs, object
drop rules can be generalized so that NPs can be dropped, while DPs cannot (Bruhn de Garavito & Guijarro-Fuentes 2002).

3.2.3 Dative clitics

3.2.3.1 Double object constructions and the applicative voice

It has long been noted that dative clitics occur frequently in clitic doubled structures in a wide variety of contexts. In the case of verbs with ditransitive predicates, the clitic doubling structure is apparently optional (Ordóñez 2014), producing two parallel phrases that are identical except for the presence of the dative clitic le (23). In all other cases of dative arguments, the doubled clitic is considered obligatory (Cuervo 2003b), as we see in examples (24a) with Psych predicates, (24b) with se-unaccusatives, (24c) with two-argument unergatives, (24d) with possessor datives, and (24e) with benefactive datives.

(23) a. Le regalé las flores a María.  
   CL3.DAT gave  the flowers to Maria  
   ‘I gave flowers to Mary’

   b. Regalé las flores a María.  
   gave  the flowers to Maria  
   ‘I gave flowers to Mary’

(Ordóñez 2014:441)

(24) a. A Laura *(le) gustan las empanadas  
   Laura.DAT CL.DAT like  the empanadas  
   ‘Laura likes empanadas’

   b. Al libro se *(le) salieron las tapas  
   The book.DAT se CL.DAT came-out the covers.NOM  
   ‘The covers of the book came off’

   c. Andrea *(le) gritó a Frodo  
   Andrea.NOM CL.DAT shouted Frodo.DAT  
   ‘Andrea shouted at Frodo’
d. Hugo *(le) lavó el babero a Juana  Possessor datives
    Hugo\textsubscript{NOM} CL\textsubscript{DAT} washed the bib Juana\textsubscript{DAT}
    ‘Hugo washed Juana’s bib.’

Benefactive datives with transitive predicates

e. Carlos *(les) construyó una casa a los suegros
   Carlos\textsubscript{NOM} CL\textsubscript{DAT} built a house to parents-in-law\textsubscript{DAT}
   ‘Carlos built his parents-in-law a house’

   (Cuervo 2003b:120-121)

Furthermore, we see that contexts that require accusative doubling such as with strong pronouns as in (25a) and CLLD as in (26a), also require dative doubling (25b, 26b).

(25) a. Juan *(la) vio a ella
    Juan CL3\textsubscript{ACC} saw to her
    ‘Juan saw her’

    b. Juan *(les) entregó un libro a ellos
    Juan CL\textsubscript{DAT} gave\textsubscript{3SG} a book to them
    ‘Juan gave a book to them’

(26) a. A Marta, Juan *(la) vio
    to Marta Juan CL3\textsubscript{ACC saw}\textsubscript{3SG}
    ‘Marta, Juan saw her’

    b. A las balas yo no *(les) tengo miedo
    to the bullets I not CL\textsubscript{DAT} have\textsubscript{1SG} fear
    ‘Bullets, I am not scared of them’

   (Ausín & Fernández-Rubiera 2017: 106-107)

If, as the above evidence seems to suggest, doubling is typically required with a dative argument, the source of the optionality of clitic doubling with verbs like dar ‘to give’, prestar ‘to lend/borrow’, etc. (Masullo 1992) comes into question. Various scholars assert that the availability of doubling seen in phrases such as (24) is not optional
(Cuervo 2003b; Demonte 1995; Masullo 1992). Instead, they believe that these phrases represent two different structures that constitute an instance of dative alternation, which occurs in languages such as English (27).

(27) a. Mary gave the book to John \textbf{PPC}
    b. Mary gave John the book \textbf{DOC}

As shown above, there is an alternation between a prepositional construction (PPC) and a double object construction (DOC). In Spanish, Cuervo (2003b, 2007) asserts that a similar alternation exists—phrases with dative clitic doubling are DOCs, while those without doubling are PPCs. In the case of the PPC, the phrase beginning with \textit{a} is a PP, with \textit{a} acting as a preposition (28a); however, in the DOC the particle \textit{a} is not a true preposition (28b), instead is a spell out of the dative case (Cuervo 2007). The stance is supported, according to Cuervo, by dative structure that can be expressed using a DOC or a PPC (a dative alternation involving the preposition \textit{para}) as in (29).

(28) a. Pedro dio flores a María \textbf{PPC}
    Pedro gave flowers to Maria
    ‘Pedro gave flowers to Maria’

    b. Pedro \textit{le} dio flores a María \textbf{DOC}
    Pedro CL$_3$.DAT gave flowers María$_{DAT}$
    ‘Pedro gave Maria flowers’

(29) a. Pedro (*le) compró un libro para María. \textbf{PPC}
    Pedro CL$_3$.DAT bought a book for María
    ‘Pedro bought a book for Maria’

    b. Pedro \textit{le} compró un libro a María. \textbf{DOC}
    Pedro CL$_3$.DAT bought a book María$_{DAT}$
    ‘Pedro bought Carlos a Maria’

Examples in (28) and (29) demonstrate that \textit{a} can appear in a clitic doubled phrase, because \textit{María} is a true dative object, but is replaced by a preposition when the clitic is
absent. In light of this evidence, we see that a dative alternation occurs in Spanish with a variety of prepositions *a* “to” *para* “for” *en* “in/into” *de* “from/of” (Cuervo 2007). The wider range (when compared to English) of prepositional forms observed in Spanish dative alternations results from the wider variety of relationships the Spanish DOC can indicate—the dative as both the recipient/source of the theme, or the possessor of the theme.

Based on the available relationships in DOCs, we see that semantics can limit the availability of either alternation (DOC or PPC). For example, in case of pure locative goals, the DOC is not available in (30).

(30) *Emilio le envió el informe a Barcelona*  
  Emilio CL3,DAT sent the report Barcelona.LOC  
  *‘Emilio sent Barcelona the report’*  
  (Cuervo 2007: 588)

This type of semantic variation proposes problems for syntactic analysis. While many linguists have argued that the alternations are derivationally related, this is problematic due to the fact that a variety of ad hoc semantics-before-syntax rules would be needed to account for experimental data. Cuervo (2003b) overcomes these limitations by proposing that alternating DOCs and PPCs have different base structure, specifically that DOCs are instances of Pykkkanen’s low applicatives.

The low applicative establishes a syntactic and semantic relationship between two participants e.g., theme/recipient, by licensing an applied argument (dative) and relating it to the theme DP. The recipient (dative in our case) merges at spec Appl, while the applicative head serves in a prepositional faculty, relating the applied argument to the theme as in (31).
Applying this analysis to Spanish, we see that in (32) (before verb and clitic movement) the dative ApplP merges below the VP (hence the low applicative) with the dative argument a Andreína in the Spec Appl position. The applicative head is spelled out as the clitic le.

Based on Cuervo’s analysis, we analyze the following example phrases as instances of dative alternation, regardless of the preposition used in the PPC alternate (a, de, para, etc.). A DOC construction with the pseudo-prepositional dative marker a that does not employ doubling of the dative clitic le is considered ungrammatical in most varieties of American Spanish as in (34c) and (35c).
Dative Alternation with the preposition *a*

(33) a. Le\textsubscript{i} prestó el dinero a Juan\textsubscript{i} \\
\quad CL\textsubscript{DAT} lend the money Juan\textsubscript{DAT} \\
\quad ‘(s/he) lend Juan money’

b. Prestó el dinero a Juan \\
\quad lend the money to Juan \\
\quad ‘(s/he) lend money to Juan’

Dative Alternation with the preposition *para*

(34) a. Le\textsubscript{i} compró un regalo a María\textsubscript{i} \\
\quad CL\textsubscript{DAT} bought a gift María\textsubscript{DAT} \\
\quad ‘(s/he) bought Maria a gift’

b. Compró un regalo para María \\
\quad bought a gift for María \\
\quad ‘(s/he) bought a gift for Maria’

c. *Compró un regalo a María \\
\quad bought a gift María\textsubscript{DAT}

Dative Alternation with the preposition *de*

(35) a. Le\textsubscript{i} quitó el juguete a Juan\textsubscript{i} \\
\quad CL\textsubscript{DAT} took the toy Juan\textsubscript{DAT} \\
\quad ‘(s/he) took Juan’s toy’

b. ?Quitó el juguete de Juan \\
\quad took the toy of Juan \\
\quad ‘(s/he) took Juan’s toy’

c. *Quitó el juguete a Juan \\
\quad took the toy Juan\textsubscript{DAT}

Example (33) simply demonstrates the most salient type of dative alternation. As the preposition *a* is homophonous with the dative marker *a*, the only apparent difference is
the presence of le, which gives the impression that doubling is optional. Example (34) presents a dative alternation with para, similar to the example used by Cuervo above (29). Extending her analysis, we assert that the grammatical PPC alternate uses para, whereas the a phrase in the DOC is simply a dative marker. This results in the ungrammaticality of *Compró un regalo a María—assuming that the a phrase here is not prepositional, we would expect to see the doubled dative clitic le. A similar analysis can be applied to example (35), which addresses the so-called possessor dative. In the DOC we again see both the spell out of the applicative head le in the doubled dative clitic as in (35a) and the dative marker a. Although the PPC alternate of this phrase is of questionable grammaticality (35b), or at the very least atypical, we see that the prepositional relationship between Juan and el juguete requires the preposition de. Therefore, the ungrammatical version of this phrase *Quitó el juguete a Juan presents an instance of the pseudo-prepositional dative marker a, which, according to Cuervo’s analysis, requires the doubled dative clitic.

Aside from informing this study, Cuervo’s analysis of the dative alternation and the low applicative in DOCs lays the groundwork for the proposal that the Spanish dative clitic is composed of two morphemes: an applicative morpheme and an optional agreement morpheme. This analysis is presented in the context of the phenomenon known as “le-for-les”.

3.2.3.2 Number Agreement and the Applicative voice in Dative Clitics

In clitic doubling constructions involving the dative clitic, it is taken for granted that the clitic agrees with the DP in terms of person and number. However, it has been noted that the third person clitic does not always agree with the DP in terms of number—plural dative DPs can be doubled by the singular clitic le. This phenomenon is known as “le-for-les” and has been consistently noticed by linguists for more than 100 years—it even appeared in the RAE as in (36) as cited in Ausín & Fernández-Rubiera (2017:104).
Based on the lack of agreement, it has been argued that in this case the non-agreeing *le* is not a pronominal form, instead it is simply the “materialization of the applicative morpheme” (Ausín & Fernández-Rubiera 2017:105) described by Cuervo (2003b, 2007, 2010). The optional morpheme –s, according to Ausín and Fernández-Rubiera, is an agreement morpheme that can be combined with the applicative morpheme in cases in which agreement is syntactically required. The authors provide evidence for this assertion by demonstrating that the agreement morpheme –s is required in the same context that an accusative clitic is required, which they analyze as an expression of AgrO. These situations are identified as follows:

i. When the overt DP is a strong pronoun:

(37) a. Juan *(la) vio a ella
   Juan CL3.ACC saw to her
   ‘Juan saw her’

b. Juan {les/*le} entregó un libro a ellos
   Juan CL.DAT gave.3SG a. book to them
   ‘Juan gave a book to them’

ii. In the context of a left dislocated object:

(38) A las balas yo no {*le/les} tengo miedo
tax to the bullets I not CL.DAT have.1SG fear
   ‘Bullets, I am not scared of them’

iii. In the context of covert objects:

(39) Aquí hay dos caballeros que desean ver al señorito
    Here are two gentlemen that wish3PL see to-the master
¿Qué {les/*le} digo pro_{PL}? What CL.\text{DAT.PL/SG} say.\text{ISG} pro

Here are two gentlemen who wish to see the master. What should I tell them?’

(Ausín & Fernández-Rubiera 2017:106-107)

These observations are particularly interesting because they illustrate that certain syntactic conditions force the expression of agreement morphology, while others do not. Thinking back to our discussion of accusative clitic doubling, we see that the above conditions i. (strong pronoun) and ii. (left dislocation) are the same conditions that drive doubling with accusative clitics. Recall that certain dialects allow accusative object doubling in a wider variety of contexts, which can be interpreted as a form of agreement extended to a wider variety of contexts. This agreement requirement could be extended to dative objects as well, thus further restricting the contexts in which the “le-for-les” substitution is acceptable.

3.3 Non-standard varieties

Some dialects of Spanish present micro-variation in their clitic systems, resulting in certain differences from the standard described above. Three specific dialects that are not in contact with Amerindian languages are well documented in linguistic literature: the Central Peninsular dialect, the Basque leísta dialect, and the Argentine Rioplatense dialect. The Central Peninsular and the Rioplatense dialects are not attributed to contact situations, but the leísmo from the Basque region is attributed to contact with Basque. In the following sections, I provide a brief description of each of these varieties, which will be later compared with dialects in contact with Amerindian languages.

3.3.1 Central Peninsular

Variation in the 3rd person unstressed pronominal system has occurred for centuries, and was first documented in medieval texts (Palacios 2013). Currently, there are two main systems in Peninsular Spanish: 1) the standard etymological system (described above), which mainly occurs in peripheral areas and, 2) the Central Peninsular referential systems known also as leísmo, leísmo, and loísmo. Here we focus on the latter, non-standard dialects.
Leismo refers to the use of clitic le instead of lo (sometimes la) as a pronoun to refer to a direct object complement (40), instead of its canonical dative use.

(40) a. ¿Conoces a Juan? Sí le conozco hace tiempo.
   Do you know Juan? Yes, CL3.DAT I-know for a while
   “Do you know Juan? Yes, I have known him for a while.

   b. A María, hace tiempo que no le veo.
      Mary for a while that not CL3.DAT seen
      ‘Mary, I have not seen for a while’

      (Fernández-Ordónez 1999:1319)

According to Fernández-Ordónez (1999), there are four types of leismo:
   i.  lo → le in direct object animates; and lo for accusative masculine [-animate] and la for accusative feminine [-animate].
   ii. lo → le in direct object masculine animate.
   iii. los → les in direct objects, mostly animates but sometimes inanimate.
   iv. la → le in direct object feminine animates, usually singulars but also in plurals.

The first one is known as the pure leísta dialect; the second one is considered the most common system; the third and fourth are the least common but have been documented as part of the leísta variety (Ordóñez 2014). According to Ordóñez, what the leísta systems do is to mark the difference between animate and inanimate objects, –le is used to refer to any animate complement regardless of gender or case. Therefore, in this system the distinction between accusative and dative case is neutralized, and animacy becomes the relevant feature of distinction.

Laísmo is characterized by the use of la instead of le for a dative pronoun with a feminine referent (41). According to Fernández-Ordóñez (1999), this phenomenon can occur in various situations. Although it is typically observed with dative feminine animates, it has also been registered with both singular and plural inanimate referents.
Loísmo is defined as the use of lo instead of le for masculine or neutral datives (42). According to Fernández-Ordóñez (1999), loísmo most commonly occurs with a dative masculine plural animate referent (42a). Less frequently, it is observed with inanimate referents (42b). The tendency of loísmo is to be used with plurals, however, it has also been registered with singular referents. In this case, it typically occurs with inanimate referents rather than animates, although it has been registered with both.

(42) a. Cuando recojo a los niños del colegio, lo llevo la merienda
   When I-pickup the kids from school, CL3.ACC.M.SG take the supper.
   ‘When I pickup the kids from school, I take them supper.’

b. Cuando el arroz está cocido, lo echas la sal.
   When the rice is cooked, CL3.ACC.M.SG throw-in the salt
   ‘When the rice is cooked, thrown in the salt.’

In general, we see that the most sensitive aspect of these variations is animacy, they typically occur with animate referents. In certain cases, number features are also important, as seen with loísmo. Regardless, the common thread is the neutralization of case in certain situations, either generalized le for accusatives, or lo/la for datives. It is important to note that gender is always maintained in a way that corresponds to standard Spanish—for example, they will never use lo to refer to a feminine referent. This is not the case in non-standard contact varieties, as we will see in the following chapter.

3.3.2 Basque leísta dialect

In the north of Spain, Spanish and Basque have been in contact for hundreds of years. Unlike the other co-official languages of Spain, which are all Romances, Basque is a language isolate that has unique linguistic characteristics. The coexistence of Spanish and
Basque has resulted in a variety of contact phenomena, which have been widely investigated. With respect to clitics, researchers have observed *leísmo*, direct object clitic omission, and direct object clitic doubling (Diez 2009; Fernández-Ordóñez 1994; Landa 1995; Urrutia 2003). Fernández-Ordóñez (1999) states that these phenomena occur with both monolingual speakers of Spanish living in the Basque Country and with Spanish-Basque bilinguals. She attributes these changes to the agglutinative nature and non-gender features of Basque.

The Spanish dialect in the Basque Country differs from standard Spanish in that it splits 3rd person DO clitics into *lo(s)/la(s)* for inanimate and *le(s)* for animates (Ormaizabal & Romero 2013). However, the dative clitics remain the same as the etymological system as summarized in Table 3.4. Furthermore, non-human 3rd person clitics tend to be omitted (43). According to Landa (1995) this occurs when the referent has been previously mentioned or introduced. There is also DO clitic doubling when the referent is [+human, +definite], even though *leísmo* is being used as in (44) and the DO is in its canonical position.

(43)  *El carrito, ¿cuándo Ói perdiste?*

      *The cart, when Ó you-lose?*

      ‘The stroller, when did you lose it?’

(44)  *Y yo decía ¿la hija le3 va a dejar a la madre?*

      *And I said, the daughter CL3.DAT is-going to abandon DOM her mother.*

      ‘And I used say, is the daughter going to leave the mother?’

      (Fernández-Ordóñez 1999:1351-1352)

Table 3.4 Clitic system of Spanish in contact with Basque (adapted from Fernández-Ordóñez 1999:1350)

<table>
<thead>
<tr>
<th></th>
<th>Accusatives</th>
<th>Datives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animate</td>
<td>--</td>
<td>le(s)</td>
</tr>
<tr>
<td>Masculine</td>
<td>Ø / lo(s)</td>
<td>le(s)</td>
</tr>
<tr>
<td>Feminine</td>
<td>Ø / la(s)</td>
<td></td>
</tr>
<tr>
<td>Neuter</td>
<td>Ø / lo</td>
<td>le</td>
</tr>
<tr>
<td>Inanimate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.3.3 *Rioplatense* Spanish

In the region of Río de la Plata in South America a non-standard variety of clitic doubling has been documented (Suñer 1988; Ormazabal & Romero 2013). This variety allows direct object clitic doubling (*lo/la*) when the canonical object is specific as in (45).

(45) a. Lo\(_{i}\) vimos a Juan\(_{i}\)  
    \[CL3.ACC\  saw\  DOM\ Juan\]  
    ‘We saw Juan.’

    b. La\(_{i}\) encontré a mi hija\(_{i}\)  
    \[CL3.ACC\  found\  DOM\ my\ daughter\]  
    ‘I found my daughter.’

(46) Yo lo\(_{i}\) voy a comprar el diario\(_{i}\) justo antes de subir  
    \[CL3.ACC\  going\  to\  buy\  the\  diary\  just\  before\  coming-up\]  
    ‘I am going to buy (it) the newspaper just before coming up’

(Suñer 1988:400)

Although this is typically documented with animate direct objects with DOM \(a\), it has also been noticed with inanimate objects as long as they are [+specific] (46). Indeed, Suñer (1988) concludes that this doubling is more attributable to specificity constraints rather than animacy constraints. Therefore [+specific] DPs can be doubled regardless of animacy, while non-specific DPs cannot, even if they are animate as in (47).

(47) (*La) buscaban a alguien que los ayudara  
    \[CL3.ACC\  searched-for\  someone\  that\  them\  could-help\]  
    ‘They were looking for somebody who could help them’

(Suñer 1988: 396)

Clitic object omission has also been documented in Rioplatense Spanish (Masullo 2003; Schwenter 2006; Suñer 1988). In line with the etymological system, this variety does not allow definite objects to be elided (see §3.2.2.2). However, this variety is less restrictive than the etymological system in that it also allows object elision in two more contexts: 1)
elision is permitted with three participants (48); and 2) with verbs of knowledge such as 
conocer and saber (49) (Palacios 2013). These changes have not been not attributable to 
contact, but rather to factors internal to the language.

(48) Si le digo que le Ø dijiste, es capaz de no volver.
‘If I tell him that you told him [that] Ø, he’s capable of not coming back.’

(49) Las cataratas de Iguazú son sorprendentes,
‘The waterfalls of Iguazú are amazing,
¿Ø conocés? No, no Ø conozco.
do you know [them] Ø? No, I don’t know [them] Ø.’

(Palacios 2013:181)

3.4 The acquisition of Spanish object clitics

3.4.1 L1 acquisition

Various studies have investigated the acquisition of Spanish clitics in monolingual 
children (Dominguez 2003; Lopez-Ornat et al.1994; Reglero & Ticio 2003; Torrens & 
Wexler 1996, 2000) using spontaneous data from the CHILDES database (MacWhinney & Snow 1985). During this period of acquisition, children go through different stages 
that reflect non-adult uses of clitics—null objects and null clitics, gender errors, and 
problems with clitic doubling and referentiality. These studies show that clitics start to 
emerge in monolingual children as early as the age of 1;07, but are not fully acquired 
until the age of 3;00 (Lopez-Ornat 1990).

All clitics are acquired completely; however, data consistently has shown that mastery of 
reflexive clitics and 1st and 2nd person clitics me, te, and se emerges earlier than mastery 
of 3rd person clitics. Much debate has been centered around explaining this asymmetry. 
Some proposals, like Dominguez (2003), suggest that observed errors in 3rd person clitics 
are due to the morphological complexity and feature specification associated with 3rd 
person clitics (gender/number), and thus children resort to the default form ‘lo’. 
Regardless of this complexity, it is also worth questioning whether or not these should be 
considered mistakes, as they conform to a possible adult grammar, as seen in Andean
Spanish (Montrul 2004). It has also been proposed that this is due to lack of knowledge of the referentiality of clitics, particularly in clitic doubling constructions. However, studies such as Torrens and Wexler (1996) show that children have robust knowledge of clitics (referentiality, doubling, placement, and person/gender/number agreement) and therefore any errors of gender and number are simply production instances of unspecified gender features.

Studies also observe the phenomenon of object drop or null object production in early speech. Fujino and Sano (2002) suggest that this is object drop resulting from grammatical errors (as opposed to processing overload). Interestingly, it has been noted that null object incidence decreases in two stages, with incidence dropping to 13% in stage two—the period that corresponds to clitic acquisition. Following this, authors such as Reglero and Ticio (2003) argue that this is not object drop, but instead an incidence of null clitic. Regardless, it is still unclear why this object drop/null clitic production occurs, and, as Montrul (2004) notes, it is a topic that deserves further investigation.

Finally, it has been demonstrated that children learn clitic placement early on (before age 2;00) and they do not have issues with this component. Studies like Baauw (1999) have shown that children acquiring Spanish do not have binding problems (principle B), as opposed to English speaking children. They also show evidence of distinction between animate and inanimate objects since they use the personal a with animate direct objects correctly. In sum, children acquiring Spanish as an L1 have robust syntactic knowledge of clitics very early on and according to Montrul (2004) the morphosyntactic problems that they may have are due to a natural progression through developmental stages.

### 3.4.2 In Bilingual children

Studies on bilingual language acquisition suggest that language development in bilingual children is very similar to that of monolinguals. For example, in Ezeizabarrena’s 1997 study on simultaneous Basque-Spanish bilingual children we see that both monolinguals and bilinguals acquire object clitics and agreement later than subject agreement. Once clitics start emerging, both groups always place them in the correct contexts. As with the
monolinguals discussed above, children do make a few morphological errors, namely gender and number mismatches that are defaulted to clitic lo.

Yet, some differences are observed in bilingual children. Basque children tend to produce more instances of clitic drop, which is normal in the Spanish Basque variety (see §3.3.2), since Basque has null clitics in the third person. Larrañaga and Guijarro-Fuentes (2012) further investigate the phenomenon of clitic drop in Basque Spanish children. They compare clitic drop in two bilingual children to the monolinguals in Fujino & Sano (2002) and conclude that bilingual Basque Spanish children drop clitics more frequently than monolingual children, probably due to cross-linguistic influence from Basque.

Another study, Pérez-Leroux, Cuza and Thomas (2011) investigates clitic placement in Spanish-English bilinguals in cases in which word order does not affect pragmatics or semantic value. Results indicate that bilingual children exhibit a diminished preference for clitic climbing and proclisis when compared to monolingual children, again due to influence from cross linguistic structures. Despite these differences, overall acquisition in bilingual children is parallel to that of monolinguals, resulting in an acceptable grammar for the dialect of Spanish spoken in the child’s community.

3.4.3 In L2 adult acquisition

Studies show that even adult L2 learners do eventually acquire clitics with a high degree of success, even if their L1 does not have clitics. Regardless, this process tends to be more difficult than it is for L1 learners or simultaneous bilinguals, and there are certain differences observed in L2 learners’ assessment and production of clitic placement, accusative and dative clitic doubling, and null objects.

Early studies such as Liceras (1985) note that while L2 learners generally are able to interpret and produce properly placed clitics, they do make errors, such as placing clitics after finite verbs, as was possible in old Spanish. Later studies, like Bruhn de Garavito and Montrul’s (1996) investigation of clitic placement with French/Spanish bilinguals again demonstrate that L2 learners were able to acquire clitics, as well as place them correctly after infinitives and before tensed verbs; however, they note certain issues L2
learners experience with clitic climbing. Despite having the ability to identify correct clitic placement, further studies show that L2 learners often have different tendencies than L1 learners. Looking at the distribution of proclisis and enclisis we see that monolingual Spanish speakers tend to favour a proclitic position, while in L1 English learners of Spanish this tendency is reduced, possibly due to the cross linguistic influence of English word order (Perez-Leroux, Cuza, & Thomas 2011).

L2 learners are typically able to acquire clitic doubling structures related to dative constructions. While dative clitic doubling is optional in many contexts, oblique phrases are prohibitive to doubling, resulting in subtle differences that L2 learners must acquire. Bruhn de Garavito (2006) notes that overall L2 learners are able to acquire this type of knowledge of clitic doubling; however, certain late learners only accepted clitic doubling with [+human] referents. Whether this results from instructional practices, or transfer of English double object structures, is unclear.

Spanish does permit indefinite argument drop, but, as Bruhn de Garavito and Guijarro-Fuentes (2002) note, this is often not explicitly taught to L2 learners. Regardless, L2 learners have been shown to acquire a sensitivity to this structure, whether their L1 permits object drop (Portuguese), or not (English), and are able to identify both grammatical and ungrammatical sentences reliably (Bruhn de Garavito & Guijarro-Fuentes 2002). However, further studies indicate that early vs. late L2 learners perform differently in grammaticality judgment tasks, suggesting that early learners try to use semantic strategies for language evaluation, while late learners are more sensitive to the syntax of Spanish (Zyzik 2008).

### 3.5 Overview of the P’urhépecha language

P’urhépecha is spoken in the southwest of Mexico, primarily in the state of Michoacán. There are approximately 110,000 speakers of whom only 10% are monolingual. It is classified as a language isolate and is an agglutinative and synthetic language with nominative-accusative alignment. Word order has been a matter of discussion. Documents surviving from the 16th century attest that it is a SOV language, and it also demonstrates traits of SOV languages such as: TAM markers following the verb,
postpositions, only suffixes and enclitics, case markers, and main verbs preceding inflected auxiliaries (Chamoreau 2014). However, probably due to the influence of Spanish, Chamoreau (2009) argues that P’urhépecha exhibits SVO order when it is pragmatically unmarked. It is a suffixing language where nominals have number and case suffixes and verbs take TAM suffixes. It has subject and object enclitics as well as independent object and subject strong pronouns. P’urhépecha does not exhibit marking for grammatical gender. In the following section I will briefly describe the phonological system, the verbal system, the case system, the pronominal system, and the transitive and ditransitive constructions in P’urhépecha as described in Chamoreau’s (2009) grammar. Unless otherwise cited, all examples in this section have been taken from Chamoreau (2009).

3.5.1 The phonological system

P’urhépecha has a system of 23 consonants and 6 vowels (Chamoreau 2009). The consonant system is characterized by having four stops /p, t, k, kʷ/ and four aspirated stops /pʰ, tʰ, kʰ, kʷʰ/; two affricates /ts, tʃ/ and two aspirated affricates /tsʰ, tʃʰ/; three fricatives /s, ʃ, x/; three nasals /m, n, ŋ/; three liquids /r, ɽ, l/; and two approximants /w, y/ (Table 3.5). From a romance perspective, several of these sounds are quite interesting, as they do not appear in the Spanish phonological inventory. In particular, P’urhépecha has a labiovelar stop /kʷ/, which can be both aspirated and not aspirated, as well the aspirated versions of the affricates /ts/, /tʃ/ (/tsʰ/ and /tʃʰ/ respectively). In written P’urhépecha, these affricates are represented as <ts> and <ch>, and their corresponding aspirated phonemes are represented with an apostrophe (i.e. <ts’> and <ch’>). The palatal fricative /ʃ/ is represented as <x> and the velar fricative /x/ is represented as <j> like in Spanish. P’urhépecha also has a trill /r/ and a retroflex /ɾ/ represented as <rh> orthographically, these phonemes only occur word medially. The retroflex has been a matter of discussion, since not all speakers use this phoneme and tend to alternate with lateral /l/ or with the trill /ɾ/. Chamoreau (2009) believes that in some areas the retroflex has been replaced by the lateral, but in other towns it has been replaced by the trill. However, there is no clear consensus on this matter yet.
Table 3.5 P′urhépecha consonant system (adapted from Chamoreau 2009: 40)

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Apico-dental</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Labiovelar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirated</td>
<td>pʰ</td>
<td>tʰ</td>
<td>tsʰ</td>
<td>tʃʰ</td>
<td>kʰ</td>
<td>kʰw</td>
</tr>
<tr>
<td>Non-aspirated</td>
<td>p</td>
<td>t</td>
<td>ts</td>
<td>tʃ</td>
<td>k</td>
<td>kʷ</td>
</tr>
<tr>
<td>Fricative</td>
<td>s</td>
<td>ʃ</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trill</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retroflex</td>
<td>ŋ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>w</td>
<td>y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The vowel system is shown in Table 3.6. P′urhépecha has 6 vowels, 5 of which are shared with the Spanish vowel inventory /i,e,a,o,u/. In addition to this, P′urhépecha has central vowel /ɨ/ represented in writing as < ï >. All vowels can occur word medial or word final, with the exception of the central vowel /ɨ/ that can only occur after phonemes /s/, /ts/, /tsʰ/, and /ʃ / (Chamoreau 2009). All words in P′urhépecha end in vowels, however, in many varieties they are elided (Hernández Domínguez 2015).

Table 3.6 P′urhépecha vowel system (adapted from Chamoreau 2009: 42)

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>i</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td></td>
<td>a</td>
</tr>
</tbody>
</table>

3.5.2 The verbal system

P′urhépecha has a complex verbal system in which TAM morphemes have a fixed position. The root of the verb is the head of the VP, which is followed by aspect, then
tense, and finally mood as in (51). The mood is always obligatory, and the assertive/indicative mood is the most common (there is also subjunctive, imperative and interrogative mood). There are two morphemes for this mood, each agreeing in person with the subject: -ka- for 1st and 2nd person singular (52) and plural, and -ti- for singular (51) and plural 3rd persons. There are basically two tenses, the present (non-past) and the past. The future marker exists; however, it is considered an irrealis and therefore functions differently than the present and the past, such that the future only requires the mood morpheme and no aspect morpheme, whereas both the past and the present tenses require both the aspect and mood morphemes. The present tense is null, and the past tense is denoted by the morpheme -p-, thus verbs expressing actions in the present lack a morpheme for tense. There are four aspect categories: perfective (-s/-x), progressive (-xa), habitual (-xïn), and continuous (-xam). One of these is obligatory when using past or present tenses (but not future).

(51) a. piri-xa-ø-ti
   sing-PROG-PRS-IND3
   ‘s/he is singing’

b. piri-xa-p-ti
   sing-PROG-PST-IND3
   ‘s/he was singing’

(52) a. piri-xa-ø-ka=ni
   sing-PROG-PRS-IND1/2=CL.SBJ1
   ‘I am singing’

b. piri-xa-ø-ka=ri
   sing-PROG-PRS-IND1/2=CL.SBJ2
   ‘You are singing’

3.5.3 The case system

P’urhépecha is a nominative-accusative language, where the nominative case is the unmarked form and where there are case suffixes for predicate nominals. These are:
objective (-ni), genitive (-iri), instrumental (-mpo), comitative (-nku), locative (-ru), and residential (–a/-e). Objects are marked with the suffix –ni, regardless of their accusative or dative function. Both direct objects—inanimate (53) and animate (54)—and indirect objects (55) can be marked with this morpheme. In (55) the DP ‘that book’ has the object marker -ni on the determiner head rather than on the noun, which is the preferred position in DPs.

(53) T’u xe -s-ka k’umanjikua-ni
    PRON2 see-PFV-IND2 house-OBJ
    ‘You have seen the house’

(54) Pedru xe -s -ti Maria-ni
    Pedro see-PFV-IND3 Maria-OBJ
    ‘Pedro has seen Maria’

(55) Pedru ñntsí-kurhi-s-ti inte-ni karakata Maria-ni
    Pedro give-MED-PFV-IND3 DEM-OBJ book Maria-OBJ
    ‘Pedro gives that book to Maria’

However, not all objects take the object marker -ni; This depends on a continuum of animacy, definiteness, and specificity. Thus, P’urhépecha exhibits a differential object marker (DOM), which is constrained under parameters of animacy and definiteness as in (56). However, according to Capistrán (2012) this language differs from other languages that have DOM that are also constrained by these parameters in that P’urhépecha marks all plural nominals regardless of animacy and definiteness (57). Conversely, nominals that are not marked with suffix –ni occur only with singular inanimate nominals that do not have a demonstrative (58a) or the indefinite determiner ma (58b), or with generic/collective singular animate (59a) and inanimate (59b) nominals.

(56) a. xi xwá-s-Ø-ka i*(-ni) wíchu*(-ni) [+definite][+animate]
    PRON1 bring-PFV-PRS-IND1/2 this-OBJ dog-OBJ
    ‘I brought this dog’
b. ú-s-Ø-ti inté*(-ni) tsúntsu*(-ni) [+definite][-animate]
make-PFV-PRS-IND3 that-OBJ pot-OBJ
‘(s/he) made that pot’

(Capistrán 2012:50)

(57) María ínts-a-s-ti sïranta-icha*(-ni)
Maria give-3PL-PFV-IND3 paper-PL-OBJ
‘Maria has given the papers’

(Chamoreau 2009:148)

(58) a. acháati pyá-s-Ø-ti xáasï
man buy-PFV-PRS-IND2 fava-bean
‘The man has bought fava beans’

b. Pyá-a-ka=ni ma tää
buy=FUT-IND3=CL.SBJ1 a house
‘I will buy a house’

(Capistrán 2012:45,59)

(59) a. Xwánu atáranta-xïn-Ø-ti kurúcha
Juan sell-HAB-PRS-IND3 fish
‘Juan sells fish’

b. Páblu pyá-s-Ø-ti ya k’umánchikwa
Pablo buy-PFV-PRS-IND3 already house
‘Pablo has already bought a house’

(Capistrán 2012:56)

Therefore, all plural nominals will always be marked with objective case marker –ni, whereas singular nominals will be constrained by animacy and definiteness as well as the constraints of individuality: non-count/compact/mass, and genericity (Chamoreau 2009).
3.5.4 The pronominal clitic system

P’urhépecha has a system of strong personal pronouns and a system of weak or clitic pronouns for both subject and object. In terms of the strong pronoun system, P’urhépecha has subject and object forms for the 1st and 2nd persons only; demonstratives (*inde* for singular and *ima* for plural) are used in place of 3rd person subject pronouns. These pronouns are free forms, can take stress, are usually placed before the verb, and can also function as the nucleus of a DP. The forms are presented in Table 3.7.

Table 3.7 P’urhépecha Strong personal pronouns

<table>
<thead>
<tr>
<th></th>
<th>Subject</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>ji</td>
<td>jindini</td>
</tr>
<tr>
<td>2</td>
<td>t’u</td>
<td>t’UNKini</td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>jucha</td>
<td>juchants’ini</td>
</tr>
<tr>
<td>2</td>
<td>cha</td>
<td>chanxini</td>
</tr>
</tbody>
</table>

Subject pronouns can be dropped and are mostly used for emphasis. For example, (60a) uses the strong pronoun but (60b) does not and instead uses the subject clitic; both constructions mean *I have sung*.

(60) a. ji pire -s-ka

\[ PRON1 \text{ sing-PFV-IND1} \]

‘I have sung’

b. pire-s-ka=ni

\[ \text{sing-PFV-IND1=CL-SBJ1} \]

‘I have sung’

Strong object pronouns are usually placed after the verb and they can be used together with an enclitic as in (61), (62), and (63). Object pronouns are used not only for the thematic role of patient but also for recipient, source, or benefactor.
(61) T’u=rini chera-s-ka jindini
   PRON2=CL.OBJ1 scare-PFV-IND2 PRON.OBJ.1SG
   ‘you have scared me’

(62) Inde=rini chera-s-ti jindini
   DEM.SG=CL.OBJ1 scare-PFV-IND3 PRON.OBJ.1SG
   ‘he has scared me’

(63) Inde=kini chera-s-ti t’ungini
   DEM.SG=CL.OBJ2 scare-PFV-IND3 PRON.OBJ.2SG
   ‘he has scared you’

P’urhépecha is a suffixing language, so all clitics are enclitics. These cannot be stressed and are attached to a host. Furthermore, they are 2nd position clitics; they attach to the first constituent of a clause in an unmarked position (Chamoreau 2014). When used inside the VP, pronominal clitics have a fixed position to the right of the mood morpheme (-ka/-ti). Clitics can also be attached to other hosts such as strong pronouns, adverbs, negation words, nouns, interrogatives, and demonstratives (Chamoreau 2008). Pronominal clitics can be used on their own in a sentence or combined with a strong pronoun for emphasis.

P’urhépecha also has subject clitics, the forms are shown in Table 3.8. Example (64) demonstrates the paradigm using the verb to see.

Table 3.8 P’urhépecha Subject clitics

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ni/ ø</td>
<td>kxï/ch’e</td>
</tr>
<tr>
<td>2</td>
<td>ri</td>
<td>t’sï</td>
</tr>
<tr>
<td>3</td>
<td>ø</td>
<td>kxï</td>
</tr>
</tbody>
</table>

(64) a. xe-xa-ka =ni
      see-PROG-IND1=CL.SBJ.1SG
      ‘I’m seeing it’
b. xe-xa-ka=ri
   see-PROG-IND2=CL.SBJ.2SG
   ‘You are seeing it’

c. xe-xa-ti=ø
   see-PROG-IND3=CL.SBJ.3SG
   ‘He is seeing it’

d. xe-xa-ka=kxï
   see-PROG-IND1=CL.SBJ.1PL
   ‘We are seeing it’

e. xe-xa-ka =ts’ï
   see-PROG-IND2=CL.SBJ.2PL
   ‘You all are seeing it’

f. xe-xa-ti =kxï
   see-PROG-IND3=CL.SBJ.3PL
   ‘They are seeing it’

Object clitics in P’urhépecha have two different forms depending on whether the subject is singular or plural. According to Chamoreau (2009), there are no forms for 3rd person singular as in (65b) and (66b), where the lack of a clitic indicates that the object is 3rd person singular. The forms are shown in Table 3.9. In example (65a) the object clitic attaches to the strong subject pronoun, which seems to be the preferred position when the subject pronoun is present.

Table 3.9 P’urhépecha object clitics

<table>
<thead>
<tr>
<th></th>
<th>with singular subject</th>
<th>with plural subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singluar</td>
<td>Plural</td>
</tr>
<tr>
<td>1</td>
<td>rini</td>
<td>ts’ïni</td>
</tr>
<tr>
<td>2</td>
<td>kini</td>
<td>kxïni</td>
</tr>
<tr>
<td>3</td>
<td>ø</td>
<td>kxïni</td>
</tr>
</tbody>
</table>

1 This clitic is debatable, according to Capistrán (2015) there are no forms for 3rd person clitics all together.
Furthermore, 1st and 2nd person object clitics are obligatory in order to distinguish the object from the 3rd person null object clitic as in (67), where adding the object clitic (ts'ini) indicates to whom the object refers. But, as (67b) shows, without the object clitic the object cannot be attributed to any of the 1st or 2nd persons, thus it has to be a 3rd person.

(67) a. Pedru=ts'ini ewá-s-∅-ti
   Pedro=CL.OBJ.1PL take-PFV-PRS-IND3
   ‘Pedro took from us’

   b. Pedru=∅ ewá-s-∅-ti
   Pedro=CL.OBJ.3 take-PFV-PRS-IND3
   *’Pedro took from us’
   ‘Pedro took from him’

Although Chamorreo presents forms for 3rd person plural object clitics, Capistrán (2015) argues that there are no 3rd person object enclitics at all. Based on data that I have collected from an informant from San Andrés Tzirónaro, I also found that there are no 3rd person plural object clitics as presented in the following examples. In (68a) the 2nd person object enclitic -kini is attached to the strong subject pronoun ji and the mood inflection -ka agrees with the subject. In (68b), we see no 3rd person singular clitic attached to the strong pronoun indicating that the null clitic is referring to a 3rd person
object. In (68c) however, there is also no 3rd person plural clitic but there is suffix \(-a\) attached to the verbal root \(xe\) ‘see’. This suffix has been described as having distributive value, which marks plurals as individuated in P’urhépecha, yet, Capistrán argues that this suffix does not convey any number features. Based on this data, I will follow Capistrán’s analysis on this matter.

(68) a. \(Ji=kini\) xe-xa-ka ‘I’m seeing you’
\(\text{PRON1=CL.OBJ.2SG} \text{ see-PROG-IND1}\)

b. \(Ji=\emptyset\) xe-xa-ka ‘I’m seeing her’
\(\text{PRON1=CL.OBJ.3SG} \text{ see-PROG-IND1}\)

c. \(Ji=\emptyset\) xe-a-xa-ka ‘I’m seeing them’
\(\text{PRON1=CL.OBJ.3SG} \text{ see-3PL-PROG-IND1}\)

(Informant, San Andrés)

3.5.5 The applicative voice

In her analysis of verb argument constructions in P’urhépecha, Capistrán asserts that there are two classes of verbs that participate in three argument constructions: derived and non-derived (Capistrán 2006, 2015). The following table (3.10) shows examples of P’urhépecha derived and non-derived verbs taken from examples in Capistrán (2006) and (2015). I also provide the Spanish equivalent.

Table 3.10 P’urhépecha examples of derived and non-derived verbs

<table>
<thead>
<tr>
<th>Derived verbs</th>
<th>Non-derived verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>P’urhépecha</td>
<td>Spanish equivalent</td>
</tr>
<tr>
<td>pyá</td>
<td>comprar ‘buy’</td>
</tr>
<tr>
<td>xwá</td>
<td>traer ‘bring’</td>
</tr>
<tr>
<td>ú</td>
<td>hacer ‘make’</td>
</tr>
<tr>
<td>sípa</td>
<td>robar ‘steal’</td>
</tr>
<tr>
<td>pá</td>
<td>llevar ‘take’</td>
</tr>
<tr>
<td>gustari</td>
<td>gustar ‘like’</td>
</tr>
<tr>
<td>p’itá</td>
<td>sacar ‘take out’</td>
</tr>
<tr>
<td>eshé</td>
<td>ver/encontrar ‘find’</td>
</tr>
</tbody>
</table>
In P'urhépecha, non-derived verbs are verbs that require double object constructions (DOC), as in (69), without presenting an alternate prepositional phrase construction (PPC), and do not occur with monotransitive predicates. On the other hand, derived verbs can optionally take ditransitive predicate, and in this case, offer a DOC (70a) /PPC (70c) alternation.

(69) Xwánu ewá-(*ku)-s-ø-ti karákata-ni tumpi-ni
Juan took-PFV-PRS-IND3 letter-OBJ boy-OBJ
‘Juan took the letter from the boy’

(70) a. Pyá-ku -s-ø-ti tsúntsu-ni Maria-ni
buy-APPL3-PFV-PRS-IND3 pot-OBJ Maria-OBJ
‘(s/he) bought Maria the pot’

b. * Pyá-s-ø-ti tsúntsu-ni Maria-ni
buy-PFV-PRS-IND3 pot-OBJ Maria-OBJ

 c. Pyá-s-ø-ti tsúntsu-ni para Maria
buy-PFV-PRS-IND3 pot-OBJ for Maria
‘(s/he) bought the pot for Maria’

(Capistrán 2006: 87,88)

The above example demonstrates that the DOC/PPC alternation is available in P’urhépecha derived verbs. It is of note that this structure in analogous to the dative alternation observed in Spanish in both the availability of the alternation as well as in the presence of an applicative morpheme.

As in Spanish, the P’urhépecha applicative voice serves to express the association of two arguments in a theme/recipient type relationship. In P’urhépecha, the applied argument (recipient) is typically regarded either as a possessor, or beneficiary (Chamoreau 2009). Depending on person, there are two applicative morphemes in P’urhépecha: -chi for 1st and 2nd singular and plural persons (71a/b) and -ku for 3rd persons as in (71c).
Looking at an example of a non-derived verb (69) and (72), we see a construction similar to the derived DOC shown in (70) and (73); however, it is of note that the non-derived lacks an applicative morpheme. Capistrán (2006) states that the applicative affix morpheme cannot occur with non-derived verbs, due to the fact that they always require a ditransitive predicate and no argument needs to be applied/related to the theme (72).

Thus, inherently non-derived verbs such as the semantic equivalents of *pedir* ‘ask for’, *regalar* ‘lend/borrow’, *quitar* ‘take way’ etc. do not need the applicative voice because they already require two arguments, whereas the derived verbs display a DOC/PPC alternation in which the DOC variant requires the applicative voice.
3.6 Pronominal Clitic System: Spanish vs. P’urhépecha

When comparing Spanish to P’urhépecha we see that they are typologically very different. For instance, Spanish is a fusional language, whereas P’urhépecha is agglutinative; Spanish has gender and number morphology in nominals, whereas P’urhépecha marks nominals with case and number but not gender. Spanish has only object clitics with case differentiation in two possible syntactic positions (proclitic and enclitic), whereas P’urhépecha has both subject and object clitics with no accusative/case distinction that only occur in enclitic position.

The focus of this study is to understand the variability of the already complex and unstable clitic system of Spanish and its outcomes when spoken by sequential bilinguals of L1 P’urhépecha. As we have seen in the literature review of non-standard varieties of Spanish, certain systematic phenomena occur with clitics in different varieties of Spanish: neutralization, elision and doubling. These phenomena have also been documented in contact with P’urhépecha (Meneses 1998; Villavicencio 2003). In order to determine whether these phenomena can be accounted for in terms of Sánchez’s hypotheses of functional interference and convergence, I provide a comparison of parallel structure in both languages. This establishes potential sites for processes of feature reassembly, which may or may not result in non-standard mappings of feature to form in the Spanish of P’urhépecha bilinguals.

3.6.1 Spanish gender markings vs. P’urhépecha non-gender markings

Based on the gender of the referent DP/strong pronoun, Spanish uses gender marking on accusative clitics. As noted, P’urhépecha does not have grammatical gender features. This contrast has been observed to lead to gender neutralization in other language pairings (Nahuatl: Flores-Farfán 1999, 2008; Lope-Blanch 1965; Quechua: Caravedo 1999; Escobar 2000; Klee 1989, 1996; Maya: García-Tesoro 2002, 2006; Guaraní: de Granda 1996a, 1996b; Palacios 2000), in which bilingual speakers employ a single morpheme *lo* regardless of the grammatical gender and number of the referent. Within Sánchez’s framework, this would constitute an instance of functional convergence in
which both languages simply mark objective case with no featural specification of gender and number. This is manifested by mapping onto a single morpheme lo, disallowing forms marked for gender/number (la, los, las).

### 3.6.2 Spanish clitic position: proclisis/enclisis vs. P’urhépecha enclitic position

As seen in section 3.2.1.2, clitics in Spanish have two possible positions that depend on the finiteness of the verb. It is also of note that Spanish clitics are non-promiscuous in the sense that they can only be attached to verbal forms (74). In P’urhépecha, pronominal clitics appear only as enclitics that can be attached to various hosts: verbs, strong pronouns, adverbs, negation words, nouns, interrogatives, and demonstratives. Furthermore, the unmarked position of enclitics in P’urhépecha is 2nd position, which means that clitics appear after the first constituent of a clause (Chamoreau 2014) (75). Based on this, bilinguals may exhibit a preference for clitic positioning (second position) to that shown in studies that document clitic positioning preference in other L2 speakers (Bruhn de Garavito & Montrul 1996).

(74) a. él nos está viendo
   he CL2.ACC is seeing
   ‘he is seeing us’

b. él está viéndonos
   he is seeing-CL2.ACC

(75) a. ima=kxîni ixe-xa-ti
   DEM=CL.OBJ2PL see–PROG-IND3
   ‘He is seeing us’

   (Chamoreau 2009:66)

b. juchi tata=rini kwane-xîn-ti xiwatsî k’èri-ni
   POSS1 father=CL.OBJ1 lend–HAB-IND3 coyote old–OBJ
   ‘My father lends me to the old coyote…’

   (Chamoreau 2014:124)
3.6.3 Object agreement marking: Spanish accusative case vs. P’urhépecha nominal objective case

In transitive constructions, the direct object nominals in Spanish are not marked with case features (77a)—except when the direct object has [+animate][+specific] features—whereas in P’urhépecha direct and indirect object nominals are marked with the objective case –ni (78a) in nearly all cases. Furthermore, Spanish direct object anaphoras use the 3rd person accusative clitic, which is marked with gender, number, and case features and are used for both animate and inanimate referents. For example, in (77b) the direct object a la muchacha or la olla is replaced by the feminine singular accusative clitic la. P’urhépecha also uses clitics for object anaphoras, but they do not have case distinction, gender or number features, only person agreement. Furthermore, the 3rd person object clitic in P’urhépecha is a zero marker (78b).

(77) a. El joven llevó {a la muchacha}/ {la olla}
   The boy took {DOM the girl}/ {the pot}
   ‘The boy took the girl/ the pot’

   b. El joven la llevó
   The boy CL3.ACC took
   ‘The boy took her/it’

(78) a. Tumbí pá-s-p-ti marikwa-ni.
   Boy take-PFV-PST-IND3 girl-OBJ
   ‘The boy took the girl’

   b. Tumbí=Ø pá-s-p-ti
   Boy=CL.OBJ.3 take-PFV-PST-IND3
   ‘They boy took her’

(Meneses 1998:80)

Taking the perspective that Spanish accusative clitics are object agreement morphemes, presented briefly in section 3.2.1 and Ausín and Fernández-Rubiera’s analysis of le for les (§3.2.3.2), we see that certain conditions (strong pronoun, dislocation, covert objects) trigger object agreement, which is manifested as the object clitic. Furthermore, we see
that this kind of object agreement occurs in a wider range of contexts in non-standard/contact dialects, manifested as accusative clitic doubling.

Both the lack of overt third person clitics in P’urhépecha and the availability of object agreement morphology in Spanish create possible loci for cross-linguistic influences with feature mapping confounds for bilingual speakers. First, as P’urhépecha has to mark objective case in the nominal as a form of object agreement depending on DOM features, this could be manifested through accusative clitic doubling, similar to what is observed in the Rioplatense dialect, as well as with bilingual Spanish/Quechua speakers (see §4.4). Second, since the 3rd person object clitic is a zero marker in P’urhépecha, then omission of 3rd person clitics is a possible outcome, which has also been observed in contact dialects with Quechua, Maya, and Guaraní (see §4.3)

Here, while the omission of 3rd person Spanish clitics would be a case of functional convergence—similar to the neutralization of gender and number features explained in section 3.6.1—the instantiation of non-standard accusative object doubling would be an instance of functional interference. A combination of the L1 input that requires objects to be marked for case, as well as the availability of object agreement morphology and clitic doubled structures, could result in the activation of objective case marking expressed in Spanish. Because the closest morpholexical structure with a similar grammatical function is the accusative clitic system, we would expect a reassembly of P’urhépecha functional features mapped onto an accusative doubling structure.

3.6.4 The Applicative voice: Double object constructions in Spanish and P’urhépecha

In double object constructions, indirect objects in Spanish are marked with dative case on the nominal by using dative marker a and are accompanied by dative clitic le, which is the spell out of the low applicative head (see §3.2.3). These DOCs participate in a dative alternation, except in restricted cases (psych verbs, two argument unergatives, etc.), with a PPC alternate. In P’urhépecha, DOCs are also possible, and can also participate in DOC/PPC alternations in restricted contexts. Unlike Spanish, whether or not the
P’urhépecha DOC includes morphology for the applicative voice depends on whether the verb is derived, or non-derived (see §3.5.5).

Assuming that during the process of feature assembly P’urhépecha bilinguals map P’urhépecha applicative features onto the Spanish applicative morphology (dative clitic \textit{le}), the variation between the use of the applicative in P’urhépecha for derived and non-derived verb forms could serve as point of functional convergence between Spanish and P’urhépecha. Translating the group of non-derived P’urhépecha verbs to their Spanish equivalent, we see that many of these verbs participate in a dative alternation with the preposition \textit{a}. Since in the surface forms the only visible difference is the presence or absence of the dative clitic \textit{le}, P’urhépecha speakers could perceive the use of the applicative morpheme in the non-derived DOC as an unacceptable inclusion of applicative morphology. Assuming the \textit{a} in the PPC alternate is the same as the dative marker, the PPC alternate would seem to be the parallel structure to the non-derived DOC in P’urhépecha, as it lacks the applicative voice. This may result in a preference for PPC with Spanish equivalents of non-derived P’urhépecha verbs with the preposition \textit{a}.

### 3.6.5 Bundles of features

In sum, P’urhépecha and Spanish exhibit a series of differences in their functional feature specification as it relates to the pronominal clitic system in terms of case marking, gender, and number features, as well as in their use of the applicative voice and the availability of a DOC/PPC alternation for verbs with ditransitive predicates. In order to provide a concise comparison of the features described above, I have broken down the relevant constructions (Table 3.11) into their components to provide a side by side interlinguistic comparison of parallel features and forms.
### Table 3.11 Bundles of features comparing Spanish and P’urhépecha

#### Direct Object Clitics

<table>
<thead>
<tr>
<th>Form</th>
<th>PERSON</th>
<th>CASE</th>
<th>NUMBER</th>
<th>GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>me</em></td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td></td>
<td>[+sing]</td>
<td>[-gender]</td>
</tr>
<tr>
<td><em>te</em></td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td></td>
<td>[+sing]</td>
<td>[-gender]</td>
</tr>
<tr>
<td><em>nos</em></td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td></td>
<td>[-sing]</td>
<td>[-gender]</td>
</tr>
<tr>
<td><em>los</em></td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>ACC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>lo</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>ACC</td>
<td>[+sing]</td>
<td>[+masc]</td>
</tr>
<tr>
<td><em>los</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>ACC</td>
<td>[-sing]</td>
<td>[+masc]</td>
</tr>
<tr>
<td><em>la</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>ACC</td>
<td>[+sing]</td>
<td>[-masc]</td>
</tr>
<tr>
<td><em>las</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>ACC</td>
<td>[-sing]</td>
<td>[-masc]</td>
</tr>
</tbody>
</table>

#### P’urhépecha

<table>
<thead>
<tr>
<th>Form</th>
<th>PERSON</th>
<th>CASE</th>
<th>NUMBER</th>
<th>GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>rini</em></td>
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<td>[+sing]</td>
<td></td>
</tr>
<tr>
<td><em>ts’ïni</em></td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>+obj</td>
<td>[-sing]</td>
<td></td>
</tr>
<tr>
<td><em>kini,</em></td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>+obj</td>
<td>[+sing]</td>
<td></td>
</tr>
<tr>
<td><em>kxïni</em></td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>+obj</td>
<td>[-sing]</td>
<td></td>
</tr>
<tr>
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</table>

#### IO clitics/Appl voice

<table>
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<th>Form</th>
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<th>CASE</th>
<th>NUMBER</th>
<th>GENDER</th>
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<td><em>me</em></td>
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<tr>
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<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
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<td></td>
<td></td>
</tr>
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<td>DAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>le</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>DAT</td>
<td>[+sing]</td>
<td></td>
</tr>
<tr>
<td><em>les</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>DAT</td>
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#### P’urhépecha

<table>
<thead>
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<th>CASE</th>
<th>NUMBER</th>
<th>GENDER</th>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-<em>ku</em></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<sup>2</sup> Due to dialectal variation, 2<sup>nd</sup> person plural clitic *os* is not part of the variety in contact with P’urhépecha.
### Direct Object DPs

<table>
<thead>
<tr>
<th>Form</th>
<th>PERSON</th>
<th>CASE</th>
<th>NUMBER</th>
<th>GENDER</th>
<th>DOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>D+N</td>
<td>[-pers]</td>
<td>(DOM)</td>
<td>[±sing]</td>
<td>[±masc]</td>
<td>[+animate] [+specific]</td>
</tr>
</tbody>
</table>

**Spanish**

<table>
<thead>
<tr>
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<th>PERSON</th>
<th>CASE</th>
<th>[-NUMBER]</th>
<th>[-GENDER]</th>
<th>DOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>N+-ni</td>
<td>[-pers]</td>
<td>objective</td>
<td></td>
<td></td>
<td>[+human] [+definite] [+specific] [+individualized] [+focalized]</td>
</tr>
</tbody>
</table>

**P’urhépecha**

### Indirect Object DPs

<table>
<thead>
<tr>
<th>Form</th>
<th>PERSON</th>
<th>CASE</th>
<th>NUMBER</th>
<th>GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>D+N</td>
<td>[-pers]</td>
<td>DAT -a</td>
<td>[±sing]</td>
<td>[±masc]</td>
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</tbody>
</table>

**Spanish**

<table>
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<tr>
<th>Form</th>
<th>PERSON</th>
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<th>[-NUMBER]</th>
<th>[-GENDER]</th>
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<tbody>
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<td>objective</td>
<td></td>
<td></td>
<td>[+human] [+definite] [+specific] [+individualized] [+focalized]</td>
</tr>
</tbody>
</table>

**P’urhépecha**
Chapter 4

4 Pronominal Clitics in Contact with Amerindian Languages

4.1 Introduction

Previous studies on language contact have focused on the different variants of the Spanish spoken by speakers of Amerindian languages (Escobar 2012; de Granda 1996a; Klee & Lynch 2009; Palacios 2005a; Zimmermann 1995). Spanish in contact with languages with large numbers of speakers—Quechua, Guaraní, Mayan languages, Nahuatl—has been fairly well documented, with consistent outcomes despite the fact that these languages do not belong to the same language families. This is due principally to the fact that they are typologically similar, and therefore when in contact with Spanish produce similar results. For example, none of these languages have grammatical gender. When these languages come in contact with a gendered language like Spanish, the outcome for the L2 learners of Spanish is to neutralize gender features. Furthermore, they differ from Spanish in their case marking: Guaraní and Nahuatl have no case markers; Quechua and the Mayan languages have case markers, but they do not have gender specifications (Palacios 2013). The following table summarizes the typological similarities of these languages.

Table 4.1 Typological similarities of Amerindian Languages

<table>
<thead>
<tr>
<th></th>
<th>Quechua</th>
<th>Mayan</th>
<th>Guaraní</th>
<th>Nahuatl</th>
<th>P’urhépecha</th>
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</thead>
<tbody>
<tr>
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<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Word Order (OV)</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Alignment nom/acc</td>
<td>+</td>
<td>Ergative</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Gender</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Case markers</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>
As briefly outlined in Ch.1 there are various morphosyntactic phenomena that are characteristic of the variants of Spanish produced by contact with these languages. In this chapter, I survey the previous literature in this field, focusing on the variation of the pronominal clitic system that has been attributed to language contact with the indigenous languages. Specifically, I look at cases that diverge both from the standard forms of Spanish (outlined in §3.2), as well as from the non-standard forms of Spanish (see § 3.3) that were not the result language contact such as the previously mentioned leísmo/loísmo in Spain and the doubling in Rioplatense Spanish (outlined in § 3.3.3).

The chapter is divided as follows. First, I survey three major phenomena with pronominal clitics that occur in contact: neutralization of case and gender features, clitic omission, and clitic doubling. I outline the mayor studies regarding these phenomena that have been done with Quechua, Maya, Guaraní, and Nahuatl. Then, I review the previous literature on the acquisition of clitics in bilingual children, specifically with Quechua. Finally, I provide an overview of the studies done on contact with P’urhépecha that address pronominal clitics.

4.2 Neutralization of case and gender features

One of the most salient features observed in contact varieties of Spanish with Amerindian languages is the use of the archmorpheme lo to neutralize gender and number features or le to neutralize gender, number, and case features. This occurs when features of gender (sometimes case) in a 3rd person direct object clitic have been neutralized into a single form lo as in (1) or to le as in (2).

i. Gender neutralization:

(1) Fui a ver la carretera. Ya lo había arreglado.
I went to see the highway. Already CL3.ACC.M they had fixed
‘I went to see the highway. They had already fixed it.’

(Escobar 2012:71)
Many contact studies have documented this neutralization (Nahuatl: Flores-Farfán 1999, 2008; Lope-Blanch 1965; Quechua: Caravedo 1999; Escobar 2000; Klee 1989, 1996; Maya: García Tesoro 2002, 2006; Guaraní: de Granda 1996a, 1996b; Palacios 2000). However, based on the features of the relevant Amerindian language, different outcomes emerge. There are 4 main representations of the neutralization of 3rd person direct object clitic: i. neutralization of gender (1); ii. neutralization of case (2); iii. neutralization of both case and gender (3); and iv) the less common neutralization of number (4)

ii. Case neutralization:

(2) Le_{I} vi a Pedro_{I}

\text{CL3.DAT saw DOM Pedro}

‘I saw Pedro.’ (Palacios 2000:125)

iii. Case and gender neutralization:

(3) Le_{I} vi a la prof_{I} de pilates.

\text{CL3.DAT saw DOM the prof of pilates}

‘I saw the pilates teacher.’ (Palacios 2013:177)

iv. Number neutralization:

(4) Tenemos que hacer tamalitos_{I} así, [...] entonces lo_{I} calentamos

\text{We-have to make tamales.M.PL like-this, [...] so CL3.ACC.M.SG heat-up}

y lo_{I} mandamos a llevar al campo

and CL3.ACC.M.SG send to take to-the country.

‘We have to make tamales so we heat them up and send them to the country.’

(Palacios 2013:175)

The outcome of the neutralization can either take accusative form lo or the dative form le, depending on semantic features such as animacy, definiteness and count/mass distinctions—similar to the previously discussed non-standard peninsular varieties. In the following section I review the most common phenomena of clitic neutralization in Spanish in contact with Amerindian languages. We will see that whether the form of the
object clitic used is *lo* or *le* depends on various factors of the contact language. Furthermore, it will become evident that neutralization phenomena occur in a wide variety of contact situations: highly bilingual areas, such as Guatemala, Cuzco, Peru, and Paraguay; areas of historic bilingualism such as the Andean highlands; as well as in predominately monolingual areas, such as Lima, Peru.

### 4.2.1 Contact with Quechua

Spanish in contact with Quechua has been extensively investigated both in Peru and Ecuador (Escobar 1990, 1994, 2000; Kalt 2012; Klee 1989, 1996; Palacios 2006b; Sánchez 1996, 1999, 2003). There are many varieties of Quechua in the Andean region; some are quite similar, while others vary to the extent that they can be mutually unintelligible (Klee & Lynch 2009). This variation leads to different outcomes when in contact with Spanish. Furthermore, we find that depending on the region, there are varying degrees of bilingualism. There are highly bilingual areas such as Cuzco, areas that are historically bilingual but have become monolingual like Cajamarca, and non-Andean areas such as Lima, where factors such as migration have produced contact with bilingual speakers of Quechua. In the next section, I review the findings of four studies of neutralization occurring with the Andean variety of Spanish in different contact situations: Klee (1989, 1990, 1996), in a situation of bilingualism studying bilinguals in Calca, Peru; Valdes-Salas (2002) in a study of monolinguals in a historically bilingual area that has now completed language shift into Spanish in Chota, Peru; Klee and Caravedo (2005) in Lima, Peru, a non-bilingual area studying monolingual Spanish; and Palacios (2006b) in a study of bilingualism in Ecuador.

Some of the earliest quantitative work on bilinguals in Peru was done by Klee (1989, 1990, 1996). Her research focused on the Peruvian region of Calca, where she conducted 62 interviews with bilinguals of varying Spanish proficiency, educational level, socio-economic status, and contact with Spanish monolinguals. She analyzed a subset of 18 speakers and divided them into three social groups (6 speakers per group). 1) Professionals: college educated, Spanish dominant or balanced bilingual; 2) Middle: high school educated and mostly balanced bilinguals; 3) Lower: some schooling, balanced bilinguals or Quechua dominant. The results were coded for all 10 object pronouns:
Direct and Indirect in 1st, 2nd, 3rd person as well as pronoun se. The results show that for 1st and 2nd person both singular and plural and se (me, te, nos) the accuracy of use is above 94%, meaning the etymological form was used, for all three groups with no significant differences amongst groups. However, the results vary greatly for 3rd person pronouns in all groups. A summary of relevant results is shown in Table 4.2.

Table 4.2 Accuracy of use of 3rd person clitics from Klee (1990)

<table>
<thead>
<tr>
<th>Object</th>
<th>Number</th>
<th>CL</th>
<th>Professionals</th>
<th>Middle Class</th>
<th>Lower Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>Singular</td>
<td>lo</td>
<td>64%</td>
<td>68%</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>la</td>
<td>12%</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Plural</td>
<td>los</td>
<td>46%</td>
<td>34%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>las</td>
<td>11%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Indirect</td>
<td>Singular</td>
<td>le</td>
<td>99%</td>
<td>97%</td>
<td>77%</td>
</tr>
<tr>
<td></td>
<td>Plural</td>
<td>les</td>
<td>87%</td>
<td>91%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Overall, the results of the professional group and the middle class group are similar differing only by a couple percentage points in all types of clitics. However, the results of the lower class group are consistently lower and significantly different than the other two groups in all types of clitics (except le). First, we see that the clitics with the most accuracy are the datives especially singular le for both the professional group and the middle class group, however, for the lower class the percentages drop to 77% in the singular and 50% in the plural indicating a lot more variability for the lower class group especially for clitic les. For direct object pronouns, the results show a trend where masculine clitics (lo/los) are used more accurately than the feminine (la/las) regardless of number for all three groups. The professional and middle class groups perform similarly to one another, but the lower class group differs noticeably, especially with la, los, and las. The results indicate that the professional group and the middle class group exhibit a preference to neutralize gender features, but not number features. However, for the lower class groups there is a preference to neutralize both gender and number as well. These patterns indicate a non-standard use of the clitic system in the 3rd person regardless of socio economic class. Specifically, this occurs with direct object pronouns, as we observe the etymological uses of the indirect object clitic for the most part. Furthermore, results
show that the lower class often does not supply any clitic, regardless of the referent’s gender/case features.

In her 2002 PhD dissertation, Valdes-Salas conducted a research study investigating the transfer of linguistic features in 29 monolingual Spanish speakers in the historically bilingual region of Chota, Cajamarca in Peru. More specifically, she looked at the features of gender and number agreement between the clitic and the DP. In terms of gender, she found a distinct lack of agreement, up to 35%. Although 65% of clitics agreed with the gender of the referent, she found lo used with feminine referents 34% of the time, while la was used for masculine referents used only 1.02% of the time. This indicates the overgeneralization of lo for direct objects. In terms of number, she found only a 13.8% lack of agreement. Of this, she found 12.8% plural to singular and only 1% of singular to plural, indicating that number was sometimes neutralized to singular.

Leísmo was also identified in her sample, in that dative pronoun le was used 11.58% of cases instead of accusatives lo or la. She found that le instead of lo/la is more likely to occur with both animates and with human referents, which is consistent with other varieties of leístas Spanish. Furthermore, she finds that the tendency to use le instead of lo/la (61.97% with masculine and 38.03% with feminine referents out of the 11.58%) occurs more with the younger speakers (ages: 18-39), who uses it 41% of the time, indicating that they are leading the change towards leísmo in this variety. She also found variability with the indirect object pronouns where the preferred form was le when the referent was animate. However, she found tendencies to use lo/la for indirect objects when the referent was non-animate.

Klee and Caravedo (2005) conducted a pilot study in Lima, Peru, a monolingual Spanish speaking region, in order to determine whether stigmatized and non-stigmatized features of Andean Spanish had begun to transfer to Limeño Spanish. Their corpus consisted of 15 sociolinguistic interviews in the shanty towns of Lima. Participants were divided into three groups: 1) 1st generation migrant speakers of the Andean variety (L2 speakers); 2) 2nd generation migrants; 3) non-migrants (Limeño Spanish). They found three types of neutralization characteristic of Andean Spanish in all three groups: number neutralization
lo for los; gender neutralization lo(s) for la; and case neutralization le for lo/la. With respect to neutralization of gender and number into the archmorpheme lo, they found that 1st generation migrants had the highest rates of neutralization (number neutralization: 64%; gender neutralization 76%), followed by the 2nd generation (number neutralization: 57%; gender neutralization: 21%), while the Limeños only exhibit traces of neutralization to a much smaller degree (number neutralization: 22%; gender neutralization: 2%).

In terms of leísmo, they found an overall rate of 15% of le for direct objects, specifically male human direct objects. Both the L2 speakers group and the 2nd generation group produced the highest rates of leísmo with mostly animate referents, but also with inanimate referents: 22% for the L2 speakers and 20% for the 2nd generation. The Limeños produced only 4% of leísmo, but exclusively with human male referents.

The authors conclude that the L2 speakers tend to have a partial clitic system, in that they use lo to neutralize gender and number. The Limeños have a clitic system closer to the local standard variety where they differentiate case, number and gender. The 2nd generation, on the other hand, still have traces of the patterns of neutralization, but can be situated somewhere on the spectrum between their parents (L2 speakers) and the Limeños of similar social class.

Spanish in contact with Quichua, an Andean language closely related to Quechua, exhibits similar neutralization in pronominal clitic systems. Specifically, the Andean Spanish spoken in Ecuador is characterized by a leísta dialect that neutralizes both masculine and feminine direct and indirect objects.

Palacios (2006b) investigated this neutralization of lo (from lo/la to le) in 10 speakers from the highly bilingual region of Otavalo y de Ibarra in highland Ecuador. She hypothesizes that contact phenomena yield language change and these changes are due to direct or indirect contact with Amerindian languages, in this case Quichua. These changes are reflected as the simplification of the pronominal system where the features of gender and/or case tend to be neutralized. Furthermore, direct object pronouns are elided in less restrictive contexts than in standard Spanish. In order to demonstrate this, she interviewed five Quichua-Spanish bilinguals and five Ecuadorian Spanish monolinguals.
all residing in Madrid. These speakers participated in a semi-directed interviewed, which provided the corpus of study. She investigated four pronominal clitic systems previously documented (Palacios 2002, 2005b) in Ecuador: 1) the etymological system, 2) the *loísta* system, 3) the *leísta* system, and 4) the mixed system.

1) The standard system of Spanish differentiating between gender and case.
2) The *loísta* system, which uses *lo* as the default form for both masculine and feminine referents of a direct object; however, distinguishes case by maintaining *le* for indirect object referents.
3) The *leísta* system, which uses *le* as a single clitic without differentiating gender or case (and sometimes number).
4) The mixed system, which exhibits the tendency to use *lo* for masculine referents and *le* for feminine referents.

The results of this study showed that both monolingual and bilingual speakers are at different stages of all 4 systems. Only one of the monolinguals used system 1, system 2 was used by two of the bilinguals; system 3 was used by two bilinguals and one monolingual; and system 4 was used by two bilinguals and two monolinguals. This lead to the ironically non-conclusive conclusion that both bilinguals and monolinguals are susceptible to using non-standard forms at varying degrees.

4.2.2 Contact with Mayan

Another area of high contact between Spanish with an Amerindian language is Guatemala. More than half of the population speaks one of twenty Mayan languages (García-Tesoro 2002). Therefore, there is a spectrum of speakers of different varieties of Maya, as well as varying degrees of bilingualism. The contact phenomena found in this region have been documented to occur with both bilinguals and monolinguals, similar to the situation in the Andean region. There are two major studies that have investigated the clitic system in contact with the Mayan languages where gender neutralization and clitic omission are the most salient features.
García-Tesoro (2002) describes the Spanish in areas of contact by analyzing the variation of phenomena motivated by the influence of the Mayan languages. In this study she aims to explain the variations observed under the theoretical framework of language contact, and thus comparing her observations with what has been documented in other varieties of Spanish in contact with Amerindian languages. She collected oral and written data from four interviews in Quetzaltenango, a highly bilingual community in the Guatemalan Western Highlands region, with three monolingual Spanish speakers and one bilingual Spanish-Mam speaker; as well as texts (periodicals, books, etc.) produced by both monolingual and bilingual speakers. In her corpus, she extracted 130 tokens with masculine referents of which 97% used clitic lo, 2.3% used clitic le, and 0.7% clitic la. However, from the 81 female referents that she extracted 42% used clitic lo, 0% used clitic le and 56.8% used clitic la. This indicates that there is a tendency to neutralize gender into one single clitic lo, but barely any traces of leísmo. She further investigated this data in terms of the semantic features of animacy and human referents. Of the female [+animate] referents, she found 18.1% used clitic lo and 81.9% used clitic la; with [-animate] referents, 39.2% used clitic lo and 60.8% used clitic la. With [+human] features, 44.5% had clitic lo and 55.5% had clitic la; with [-human] 36% had clitic lo and 64% had clitic la. Her conclusion is that neutralization is favoured when the referent is inanimate, which she attributes to the fact that gender marking in Mayan is applied only to human or humanized beings. She then divides the data by type of speaker, finding that monolinguals neutralize a feminine referent 46.6% of the time, whereas bilingual speakers do the same in only 40% of the cases. This indicates that the monolinguals used neutralization slightly more than the bilinguals. This result, she says, is in line with results in similar studies in Ecuador, in which monolinguals show a higher rate of neutralization than bilinguals.

In another study by García Tesoro (2010), she further investigates the simplification of the 3rd person direct object clitic system used in variants in contact with Tzutujil Maya. She believes this simplification represents a restructuring of the parameters that constrain the selection and use of pronouns. The first change, she posits, is the neutralization of number and gender features to one single clitic lo. To test this, she used 24 interviews with a range of bilingual and monolingual individuals in four groups: i) monolinguals
with no contact; ii) monolinguals in contact with bilinguals; iii) balanced bilinguals; and, iv) instrumental bilinguals, or speakers that use Spanish when needed. She further divides these groups by two sociolinguistic variables: degree of bilingualism and level of education. The results of the study showed that for feminine referents, participants produced *lo(s)* 56.2% of the time. In terms of number neutralization, participants tended to use the singular masculine tokens in a standard fashion. However, 32% of the masculine plurals were neutralized to *lo* and 8.3% of the feminine plurals were neutralized to *la*, indicating a preference for number neutralization with plural masculine referents. When dividing participants into groups, the use of *lo* is gradient for both gender and number features. She finds that the use of *lo* for group I is 4.2% for gender and 2.3% for number; for group II is 33.3% for gender and 23.4% for number; for group III 84% for gender and 33.5% for number; and for group IV is 100% for gender and 87.9% for number. Therefore, both number and gender have the same directionality across groups. These results suggest that language contact is indeed a driving factor in neutralization—as contact increases, so does neutralization.

### 4.2.3 Contact with Guaraní

In Paraguay, *leísmo* has been documented historically as one of the most salient characteristics of Paraguayan Spanish. Before discussing the contact situation in Paraguay, it is important to mention that this country has a very different historical and social context relating to its indigenous language Guaraní than the other areas of contact in the Americas. Guaraní is one of the official languages of Paraguay. Socially speaking, this lends a level of language prestige to Guaraní not seen with other Amerindian languages. Most of the population, whether they are of indigenous descent or not, are to some extent bilingual. In fact, bilingualism is so commonplace that Spanish/Guaraní code switching has developed into its own language, called Jopará. Therefore, language contact phenomena in Paraguay is not exclusive to the indigenous populations, but tends to become the norm across all sectors of the population.

Palacios (2000) specifically addressed the variation of the pronominal clitic system in Paraguay. She finds that there are three main characteristics of variation due to contact with Guaraní that are closely interrelated: *loísmo*, *leísmo*, and object elision. To further
develop her hypotheses that these phenomena are a) related, b) due to contact, and c) occurring across different sociolects, she collected spoken and written samples. Her spoken samples came from an undefined number of interviews with bilingual speakers in Asunción ranging from 25-45 years old, both female and male, from urban and rural areas, and of various socioeconomic status (SES) and educational levels. The written samples came from literary texts of Paraguayan authors that attempted to recreate the colloquial Paraguayan speech. Her findings suggest that Paraguayan *leísmo* is different than the Peninsular *leísmo* in that the pronoun *le* is the only pronominal form without regard to case, gender, number and animacy features (5). The only exception occurs with [-masculine] [-singular] (5d), where *las* is still the preferred form.

(5) a. Le veo al niño  
   CL3.DAT see DOM-the boy 

b. Le veo a los niños  
   CL3.DAT see DOM the boys 

c. Le veo a la niña  
   CL3.DAT see DOM the girl 

d. *Le veo a las niñas  
   CL3.DAT see DOM the girls (Palacios 2000:123)

She also finds that *leísmo* occurs mostly in middle and middle high classes, in university educated people, and in urban areas. She further states that there is still optionality with *loísmo*, although it is rare when compared to the preferred *le* in these contexts. She attributes this neutralization to contact with Guaraní because this language lacks 3rd person clitic pronouns. However, the equivalent in Guaraní is a 3rd person tonic prepositional pronoun that functions for both accusative and dative constructions. Therefore, accusative/dative case is not a feature that requires distinction.
4.2.4 Contact with Nahuatl

Nahuatl is the language with the biggest population of speakers in Mexico. Despite this, quantitative studies on Spanish-Nahuatl language contact are scarce compared to Quechua, Guarani and Maya. Nevertheless, contact phenomena have been documented by Lope Blanch (1953, 1965, 1983), Flores Farfán (1999), and Zimmermann (2004). With respect to the clitic system, Flores Farfán (2008) has outlined the phenomenon of *loísmo* or “redundant accusative” as seen in (6). He argues that this accusative doubling surfaces in Spanish because Nahuatl has obligatory morphological object agreement that is mapped on to the archmorpheme *lo*. This morpheme is also used in case/gender neutralization. He believes Nahuatl speakers tend to neutralize case because Nahuatl uses a suffix –*ilia* to distinguish case instead of different pronominal forms. Gender is neutralized because Nahuatl has no grammatical gender. He further argues that the *loísmo* phenomenon both in neutralization of gender and case as well as clitic doubling occurs not only in L2 speakers of Spanish, but also in L1 Spanish speakers who are in contact with Nahuatl speakers.

(6)  \( Lo \quad \text{hace tortillas} \)

\[ \text{CL3.ACC make tortillas} \]

‘S/he makes tortillas.’

(Flores-Farfán 2008:44)

4.2.5 Summary

Overall, we find a spectrum of pronominal clitic use in different situations of bilingualism. On one side of the spectrum, bilinguals in a highly bilingual contact area, such as those observed in Klee (1990) and García-Tesoro (2010), tend to overgeneralize *lo* both with feminine referents and with plural referents, whereas the indirect object clitic *le* seems to be intact for the most part. Perhaps even more extreme are the Spanish-Guaraní bilinguals (Palacios 2000), who neutralize case, number, and gender (except +feminine, +accusative, +plural). Somewhat in the middle of the spectrum, we find monolingual Spanish speakers in a situation of historical bilingualism as in Valdes Salas (2002), where there is also a high rate of gender neutralization using clitic *lo*, but less so with number neutralization. We also see the tendency to use *le* for animate object
regardless of case, especially with the younger generation of speakers. On the other side
of the spectrum, looking at monolinguals in a monolingual area like those in Klee and
Caravedo (2005), we find great variety depending on the type of speaker: speakers with
the least contact with bilinguals tend to use the standard variety, as opposed to speakers
in contact with the Andean variety tend to differ from the standard variety.

Taking into account these experimental results, we can broadly classify the pronominal
case system observed in regions of contact with Amerindian languages. According to
Palacios (2013), there are four primary systems: 1) Etymological system, 2) Two-case
simplified system, 3) Transition System, and 4) One-case simplified system. The two-
case system is considered to be the first stage of simplification of the pronominal
etymological system. It is characterized by gender neutralization of direct object clitics to
one single form lo, but it maintains the case distinction between accusatives (lo) and
datives (le). This system has been documented in bilingual speakers of Spanish-Nahuatl
in Mexico, bilingual Spanish-Tzutujil and monolingual Spanish in Guatemala, and
bilingual and monolingual speakers in both bilingual areas and former bilingual Quichua
regions of Ecuador.

<table>
<thead>
<tr>
<th></th>
<th>Masculine/Feminine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accusative</td>
<td>Lo(s)</td>
</tr>
<tr>
<td>Dative</td>
<td>Le(s)</td>
</tr>
</tbody>
</table>

The transition system is considered to be the next step after a two-case system. Here,
gender is still neutralized, and case is still distinguished as in the two-case system.
However, the feature of animacy in direct objects is distinguished, where le(s) is used for
animate accusatives and lo(s) is used for inanimate accusatives; while the dative marker
remains unchanged as le(s). This system has mainly been documented in contact zones
close to Quito, Ecuador in both bilingual Quechua speakers as well as monolinguals
(Habound & De la Vega 2008 cited in Palacios 2013).
The final, and most simplified, system is the neutralization of case to a single form le(s). This occurs with both accusatives and datives, and does not take gender nor animacy features into account. This only has been observed in monolingual Andean Ecuadorian speakers in the Quito area and bilingual urban Paraguayans (Palacios 2000, 2013).

The process of neutralization in Amerindian language contact situations typically begins with the neutralization of gender. According to Palacios, typically the most marked features are the most susceptible to neutralization—for example, we see that feminine forms (la) are neutralized to masculine forms (lo). This could very well result from the fact that in Amerindian languages case and animacy are relevant features, while grammatical gender is not.

### 4.3 Clitic omission

Direct object clitic omission has been fairly well documented in language contact situations of Spanish with Quechua (Camacho, Paredes, & Sánchez 1995; Escobar 2000; Klee 1990; Mayer 2017), Quichua (Palacios 2006b; Suñer & Yépez 1988; Yépez 1986), Mayan (García Tesoro 2010), and Nahuatl (Flores-Farfán 2008). As described in section 3.2.2.2, clitic elision is possible in standard Spanish, but under very restricted conditions. In the following section, I outline some of the major studies performed in language
contact situations in order to shed light on how clitic elision in these varieties differs from the standard.

4.3.1 Contact with Quechua

Referring back to the study by Klee (1990) in the bilingual region of Calca, Peru, the author found clitic omission in all three of the social groups investigated: 1) professionals, 2) middle class, and 3) lower class. Although the focus of this particular study is not clitic omission, the numbers show that professionals and middle class have similar rates of clitic omission, 23% and 22% respectively. The rate of omission in the lower class goes up to 49%, indicating that omission among these speakers is used even more than the neutralized clitic lo (39%). Other studies in bilingual areas of Peru have shown that clitic omission occur under semantic constraints of specificity and definiteness (Sánchez 1998).

Camacho, Paredes, and Sánchez (1997) conducted a study on null objects in bilingual Andean Spanish speakers. There were 33 adult L2 Spanish speakers from a monolingual Quechua region in Southern Peru who migrated to Lima as adults and acquired Spanish in a naturalistic way. The authors further divided the speakers into 4 proficiency groups: 1) High proficiency; 2) Moderate proficiency; 3) Low proficiency; and 4) Very Low proficiency. Their findings show that null objects with definite and animate objects occur in all four groups. There was a correlation between animacy and definiteness and proficiency groups since the higher the proficiency the lower the percentage of null objects. In terms of animacy, the frequency of null objects with inanimate referents was 8% for the high proficient, 14% for moderate proficiency, 34% for low proficiency, and 54% for very low proficiency. The results are comparable with the rates of null objects with animate referents (HP: 11%; MP: 9%; LP: 31%; VLP:55%). When we consider the factor of definiteness, findings show a similar pattern for indefinite referents (HP: 7%; MP: 10%; LP: 26%; VLP: 55%) and for definite referents (HP: 16%; MP: 19%; LP: 60%; VLP: 44%). The authors conclude that proficiency dictates the constraints of possible null objects, because the higher proficiency speakers produce fewer null objects with animate and definite referents, while the lower proficiency speakers do not seem to be constrained by features of animacy or definiteness.
In her study of the Ecuadorian variety of the Sierra in Otavalo and Ibarra, Palacios (2006b) investigates pronominal direct object elision in speakers of four dialects: 1) the etymological system, 2) loísta variety (distinguishing case but not gender), 3) leísta variety (no distinction for case nor gender), and 4) mixed system (using both leísmo and loísmo). She finds that elision happens in both monolingual speakers of Spanish and bilingual speakers of Quichua-Spanish. It occurs with both determined and undetermined referents, as well as with specific and non-specific referents. More specifically she finds that 22.2% of pronominal direct objects were elided. In order to understand the restrictions of this phenomena, she analyzes her results in terms of the four types of speakers, as well as the semantic features of gender and animacy. She finds no significant effects related to gender; elision occurs systematically with female, male and neuter referents. On the other hand, she found that animacy does affect elision: [-animate] pronouns are more likely to be elided. Looking at speaker groups, she observes a low rate of elision (3.4%) amongst speakers who use the etymological system. However, in the loísta system she records 30.6% elision, in the leísta 26.1%, and in the mixed system 18.1%. Furthermore, when we consider animate and inanimate referents we find that the highest rates of omission occur with inanimate referents specifically in the loísta system with 34.5% rate of omission as opposed to animate referents where there is zero omission. We see similar frequency of omission with both inanimates (26%) and animates (25%) in the leísta system. Finally, in the mixed system we find a slightly higher rate of omission with inanimates (19%), than with animates (12.1%). The summary of results is found in Table 4.6.

Table 4.6 Frequency of clitic elision in Palacios (2006b)

<table>
<thead>
<tr>
<th></th>
<th>Inanimate</th>
<th></th>
<th>Animate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With clitic</td>
<td>CL omission</td>
<td>With clitic</td>
<td>CL omission</td>
</tr>
<tr>
<td>Loísmo</td>
<td>65.5%</td>
<td>34.5%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Leísmo</td>
<td>73.7%</td>
<td>26%</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>mixed</td>
<td>80.9%</td>
<td>19%</td>
<td>87.9%</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

These results indicate that both the semantic feature of animacy and dialect affect direct object pronoun elision. Speakers of the etymological system exhibit little or no elision
due to strong restrictions present in their dialect. Speakers of the loísta dialects are restricted by animacy constraints, only eliding pronouns with inanimate referents. In the leísta system we find that animacy is not a constraint for elision; it happens almost equally regardless of this semantic feature. Finally, we see that with the mixed system, animacy is not a constraint, but results suggest a tendency towards elision of inanimates more frequently than the animates.

In a study by Mayer (2017), she discusses the concepts of subject and object drop in both bilingual (L2 Spanish, L1 Quechua) and monolingual Spanish speakers in zones of historical contact in Peru. She notes that speakers optionally omit 3rd person object pronouns in a wide range of contexts, provided that they are recoverable from context. She links the potential to omit an object with its topicality and overall salience, stating that overall the tendency in Spanish for pro-drop with both subject and object pronouns suggests a tendency for topic drop. Topic drop is both a historical and current theme in romance linguistics – topical objects were null in Latin, and Brazilian Portuguese and Basque Spanish exhibit null topical objects as well. Thus, the tendency to omit topical objects when recoverable from anaphoric context can be viewed as complementary to the clitic doubling in the study by Mayer described in section 4.4. After a topic is introduced in a clitic doubled structure, it can be later dropped, context permitting.

4.3.2 Contact with Maya

In contact situations with Mayan languages we find very similar trends in 3rd person clitic elision. Referring back García-Tesoro’s (2002) corpus study, she finds that 3rd person direct object pronouns can be elided when the referent can be retrieved from context. More specifically, she makes the following claims: 1) 3rd person direct object clitics can be omitted when the topic has been introduced before the clitic position; and 2) when the clitic is within a coordinated or subordinate clause with the referent as an antecedent. In terms of semantic features, she finds that clitic omission can occur with both definite and indefinite referents, as well as continuous and abstract referents. In this study she does not find omission with human or other animate referents; however, in a follow-up study (2010), she finds omission with both animates and inanimates. In the 2010 study, she uses 24 interviews with monolinguals and bilinguals of Tzutujil Maya. The informants
were separated in four groups based on degree of bilingualism and level of education. Overall, she found omission in 18.5% of occurrences. When she divides the results by speaker groups (I: Monolinguals with no contact; II: Monolinguals in contact with bilinguals; III: Balanced bilinguals; IV: Instrumental bilinguals), her findings indicate that there is a correlation between group and frequency of omission. Group I omits the clitic in 6.5% of cases; group II in 12.4%; group III in 25.5%; and group IV in 29.2%. This indicates that both bilingual and monolingual speakers omit clitics, but also that as education decreases and dominance in Tzutujil increases, omission increases. She then analyzes these results in terms of the semantic feature of animacy, and finds that the majority of omissions happen with inanimate referents. Table 4.7 summarizes these results.

Table 4.7 Percentage of clitic omission in García-Tesoro (2010)

<table>
<thead>
<tr>
<th>Group</th>
<th>[+animate]</th>
<th>[-animate]</th>
<th>Total omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>2.4%</td>
<td>9.8%</td>
<td>6.5%</td>
</tr>
<tr>
<td>II</td>
<td>1%</td>
<td>18.3%</td>
<td>12.4%</td>
</tr>
<tr>
<td>III</td>
<td>5.6%</td>
<td>30.1%</td>
<td>25.5%</td>
</tr>
<tr>
<td>IV</td>
<td>13.6%</td>
<td>36.7%</td>
<td>29.2%</td>
</tr>
</tbody>
</table>

She concludes that omission occurs with both bilinguals and monolinguals, and that omissions increase as bilingualism increases and formal instruction decreases. Furthermore, she determines that animacy is a relevant semantic factor because pronouns with [-animate] referents are omitted more frequently. Finally, she argues that this variant of Spanish is possibly developing a way to do object agreement, since the neutralization of *lo* as a single pronoun indicates objecthood and the zero morpheme or elision acts like an agreement marker with 3rd person inanimate objects.

### 4.3.3 Contact with Guaraní

Palacios (2000) compares clitic omission in Paraguayan Spanish to etymological object drop (§3.2.2.2) to determine if the Paraguayan variety follows syntactic and semantic restrictions of standard Spanish. She uses the same corpus she used to investigate *leísmo* and *loísmo* i.e., spoken and written samples gathered from speakers of various SES and
educational levels. Overall, she finds that this variety ignores most of the syntactic and semantic restrictions observed with standard direct object clitic drop of inanimates. Her corpus shows examples of 3rd person inanimate clitic elision in the following cases:

i. [+definite] referents of a transitive verb
ii. [-definite] referents of a transitive verb
iii. with all types of TAM
iv. with verbs of knowledge, perception, speech and movement
v. in adverbial clauses.

She concludes by stating that this type of elision is generalizable in Paraguayan Spanish, and that it does not conform to the restrictions of the standard other than the [-animacy] constraint. Furthermore, this happens both in written and spoken language, and it is not particular to any sociolect. She attributes this to contact with Guaraní, which does not have features of gender or case distinction, but does make distinctions based on animacy.

4.3.4 Summary

Palacios (2013) argues that there are three stages of change in terms of direct object elision, beginning with the restrictions of the etymological system. In the previous sections, we see that the Rioplatense variety (§3.3.3) is less restrictive than standard Spanish, and varieties in contact with Amerindian languages are even less so. She argues that there are two changes in progress: 1) elision with animacy restriction, and 2) unrestricted elision.

The first change is found in northeastern Argentina, as well as the contact varieties of Paraguayan Spanish, Guatemalan Spanish, and the Ecuadorian Spanish. In the Paraguayan Spanish variety with a leísta system, the only restriction for elision is the animacy feature of the referent. Furthermore, there have been cases of [+animate] referents being elided, which can indicate the possibility of further change that is starting to take place. She also finds that in Ecuadorian varieties that maintain a two-case pronominal system (lo for accusatives and le for datives), the only restriction to elision is the animacy feature ([-animate] can be elided). However, in the Ecuadorian varieties with
the *leísta* system we find a completely unrestricted system in which the animacy feature has no effect on pronominal elision; it happens both with animate and inanimate referents. A representation of change progression is found in Figure 4.1.

<table>
<thead>
<tr>
<th>Etymological</th>
<th>Rioplatense</th>
<th>Contact 1 change</th>
<th>Contact 2 change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted</td>
<td>Less restricted</td>
<td>Animacy constraint</td>
<td>Unrestricted</td>
</tr>
</tbody>
</table>

Figure 4.1 Change progression for clitic elision according to Palacios (2013)

### 4.4 Clitic Doubling

Clitic doubling is another salient feature of the Spanish varieties in contact with Amerindian languages. Although doubling happens in standard Spanish, there are well defined restrictions (§ 3.2.2.1). Furthermore, we have seen that the norm for speakers of Rioplatense Spanish is accusative clitic doubling, but under the restriction of specificity.

In the following section I outline the relevant studies that investigate this phenomenon in Spanish in contact Quechua, Maya, and Nahuatl, comparing these results among varieties and to Rioplatense.

#### 4.4.1 Contact with Quechua

Bruhn de Garavito and Atoche (2006) conducted an experiment with 14 monolingual, high school educated speakers of Spanish in the town of Santa Rosa de Ocopa, Peru. They used two story telling elicitation tasks to examine the production of indirect objects, the use of direct object clitics, clitic doubled accusative objects, and objects that are not clitic-doubled. The first set of results were analyzed in terms of animacy and specificity. Clitics were used in over 92% of cases when referents were [+animate], both when replacing a DP and in cases of doubling. Inanimate objects were rarely doubled (5.35%) or replaced (7.29%). The distribution of non-doubled full DPs was almost equal: 43.56% for [+animate] and 56.44% for [-animate]. In terms of specificity, 100% of the objects with a clitic referred to a specific object and were marked with the personal *a*. Non-
doubled DPs were again produced equally for specific (56.44%) and non-specific (43.56%).

The second analysis was done in terms of gender and results demonstrate wide variability both within and between speaker groups. For masculine referents, there was mostly a preference for *lo* in both clitic constructions (73.08%), and clitic+DP constructions (62.92%) However, *le* was also found in these same contexts: 23.07% clitics, 37.04% clitics+DPs. There was only a 6% incidence of *la* instead of *lo*, but it was always produced by the same participants. For feminine referents, participants used either *lo* or *le* 48% of the time when replacing a DP. In clitic doubling constructions this replacement happened with a frequency up to 84%, however, the determiner always agreed correctly with the noun. This indicates that there is more variability of gender neutralization in clitic doubling constructions. To sum up, the authors find that there is a great deal of variation in various aspects of the clitic system: choice of *lo* vs. *le*, inconsistencies with gender agreement between clitic and its referent, and frequency of doubling DPs. Thus, the authors conclude that this variation seems to be the norm in contact varieties rather than the exception.

In her study of monolinguals in the region of Cajamarca, Perú, Valdes-Salas (2002) found cases of clitic doubling. Interestingly, they occurred mainly in postverbal position (81%), which is considered to be non-standard in Spanish. Using a Varbrul analysis, she found two significant semantic factors for clitic doubling: animacy and definiteness. Her findings indicate that definite NPs were more likely to be doubled than indefinite NPs, and inanimate objects were more likely to be doubled than animate objects. These results were consistent with Paredes (1996), but not with Silva-Corvalán (1980) and Franco (1993), which both found that human and animate referents are the more likely to get doubled. Furthermore, specificity was not found to be a significant semantic factor for doubling, which contradicts the tendency observed in Porteño Spanish by Suñer (1988).

Mayer (2017) also discusses the non-standard use of clitics in both bilingual (L2 Spanish, L1 Quechua) and monolingual Spanish speakers in zones of historical contact in Peru. In her study of standard Limeño Spanish and contact Limeño Spanish, she notes a pattern of
extended object marking, in which speakers extend the Spanish patterns seen with clitic left dislocation and clitic doubled strong pronouns to a wider range of contexts, with a preference for differential object marking, even with inanimate objects. Consider the following examples (7) and (8).

(7) Standard Lima Spanish

(A) esta silla la pongo en otro sitio.

DOM DEM.F.SG chair CL3.F.SG put-1SG in other place

‘I’ll put this chair somewhere else.’

(8) Standard Lima Spanish

a. ¿La frío a la cebolla?

CL3.F.SG fry-1SG DOM DET.F.SG onion.F.SG

‘Shall I fry the onion?’

Limeño Spanish in contact varieties

b. Lo / *la frío a la cebolla.


(Mayer 2017:107)

In the first example (7), we see a standard CLLD with the optional non-standard use of a (DOM), marking the inanimate object la silla. Mayer believes that this extended use of DOM is in part dependent on the topicality of the object, and when used confers topicality to the objects, as does standard CLLD. Looking to examples (8a), and (8b), we see the same non-standard use of DOM in a non-standard clitic doubled structure. Note that (8b) uses an invariant pronoun lo with the feminine noun la cebolla. Finally, in example (9) we see a non-standard clitic doubling with no DOM, in which (according to Mayer) lo is used as a topicality and transitivity marker.

(9) Limeño Spanish contact varieties

Lo he licuado un poquito de agua.

CL3.M.SG have-1SG mix.PPT a bit of water

‘I mixed a little bit of water in a blender’

(Mayer 2017:109)
Mayer believes that these examples suggest a series of steps along a process of language change in which the grammaticalization of third person object pronouns results in their use as topic markers that introduce secondary topics in the discourse. Behind this process, we see that a combination of language specific factors common to Amerindian languages such as head, object, and topic marking with the historic and inherent instability of the Spanish language drives the optionality in these structures throughout Latin America.

4.4.2 Contact with Maya

According to Garcia-Tesoro (2002), doubling only occurs in Guatemalan Spanish when overt direct objects are postverbal. She notices that there is complementary distribution between clitic omission and clitic doubling in the sense that there is elision in the preverbal position and doubling in a postverbal position. However, according to her corpus, doubling does not occur as frequently as omission. She only found 4 instances of doubling, and in all of them the clitic was neutralized to lo. This doubling occurred with DPs that were masculine/plural and singular as well as feminine plural as in (10).

(10) Sus dos hijas, se fueron a traer el agua,
    Her two daughters went to bring the water,
    \[lo_i \text{ llenaron sus } \text{cántaros}_i,\]
    CL3.ACC.M.SG filled their pitchers.M.PL,
    también las \text{ollas}j. \[lo_j \text{ llenaron todo en agua.}\]
    also the pots.F.PL CL3.ACC.M.SG filled all in water

‘Her two daughters went to get water, they filled the pitchers and also the pots, they filled them with water.’

(García-Tesoro 2002:48)

4.4.3 Contact with Nahuatl

In her 2006 study, Ramirez-Trujillo investigates accusative clitic doubling in Nahuatl-Spanish bilingual children. Using a grammaticality judgement task (GJT) and a production task, she tests clitic doubling with transitive and intransitive verbs, as well as specificity features. In Nahuatl there is obligatory object agreement within the VP,
therefore Ramirez-Trujillo hypothesized that Spanish sentences that would require object agreement in Nahuatl would be judged acceptable if the accusative clitic was doubled. In the GJT, her results show that children accepted intransitive sentences with clitic doubling about 30% of the time, however, intransitive sentences without a clitic was the preferred option (more than 60%). In transitive contexts, children found clitic doubling acceptable in the majority of instances (over 60%). Furthermore, they judged standard transitive and intransitives without a clitic (standard Spanish) to be acceptable 100% of the time. In the production task she found that they doubled clitics with transitive verbs more than 30% of the time, while only 5% in intransitive contexts. In terms of specificity, she found that children accepted equally specific and non-specific contexts. Therefore, she argues that specificity is not a crucial feature for clitic doubling, which goes contrary to results observed in Rioplatense Spanish (Suñer 1988). She concludes that these children have both options in their grammar: clitic doubling with mostly transitive verbs—where the Nahuatl structure would require object agreement—as well as the standard Spanish structures without a clitic.

### 4.4.4 Summary

Spanish clitic doubling is a common occurrence under very specific restrictions (§3.2.2.1). However, we find divergence from the standard variety in both contact and non-contact situations. In the studies outlined we find some commonalities among varying contact languages, for instance animacy is a constraint for clitic doubling in both studies of contact Quechua. Another similarity found in both contact Maya and contact Quechua relates to the position of the clitic. Unlike standard Spanish, where doubling occurs in a preverbal position, contact induced clitic doubling occurred mainly in a postverbal position. In terms of gender, when doubling occurred, the clitic is neutralized to the preferred clitic lo in both contact Quechua and Maya, although variability of le competing with lo was found in Bruhn de Garavito and Atoche (2006). Ramirez-Trujillo (2006) took transitivity into account and found that clitic doubling occurs mainly with transitive verbs in contact with Nahuatl. Finally, specificity remains an inconclusive factor for doubling, since in the non-contact Rioplatense variety specific DPs can be doubled. In line with these results, Bruhn de Garavito and Atoche found all doubling
contexts to be specific; however, both Valdes-Salas (2002) and Ramirez-Trujillo (2006) found that specificity was not a factor for clitic doubling.

4.5 The acquisition of clitics in contact with Amerindian languages

Research on the acquisition of clitics in bilingual children in contact situations between Spanish and Amerindian languages is relatively scarce. Notably, there are a few examples of studies done with bilingual indigenous children, specifically in Peru and Bolivia with Quechua and Aymara L1 speakers. Although there are no studies done yet on the acquisition of P’urhépecha, I review the results of the main studies done on bilingual Quechua-Spanish children in order lay the groundwork for possible parallels to the population studied here, as well as for comparison with the bilingual acquisition of clitics in non-Amerindian languages reviewed in chapter 3.

Studies of Quechua-Spanish bilinguals demonstrate that these speakers generally have wider possibilities for the interpretation of Spanish clitics than monolingual Spanish speakers due to the transfer of L1 (Quechua) DP features that become associated with Spanish clitics. Of particular interest here is the emergence of non-argumentative clitics (Kalt 2009; Camacho, Paredes, & Sánchez 1995). The classic example of non-argumentative clitics in Quechua bilinguals related to the possessor clitic has been observed with adults in southern Peru and is demonstrated using the phrase:

(11) Loi amarran su pata del condor.  
CL3.ACC.M.SG tie his leg of-the condor

‘They tie up the leg of the condor’

(Camacho et al. 1995:135)

Here it has been observed that the clitic lo is not coindexed with the DO (su pata del condor), but instead with the genitive (del condor) (see §2.2). Academics (Camacho et al. 1995; Kalt 2009, 2012; Sánchez 2015) propose that this is due to feature transfer of the Quechua’s genitive markers found in the DP and their reassociation with Spanish clitics.
Specifically, it is believed that the preposition *de* and the clitic have undergone a reanalysis that assigns Quechua genitive features to this structure.

Kalt expands this type of reanalysis by providing evidence for the widening interpretation of Spanish clitics in the L2 Spanish of bilingual children. In her 2002 study, Kalt investigates the interpretation of locative and possessive pronominal object markers with this population. She compared 84 Quechua-Spanish bilingual children between the ages of 6-14 to 16 monolingual Spanish speakers ages 6-10 with no contact with Quechua. She tested transitive and ditransitive sentences with reflexive clitics, non-reflexive clitics, and without clitics with [+human] referents and locatives. She found a statistically significant difference between the monolingual and bilingual groups. Monolingual children interpreted the sentences accurately; however, the bilingual children were less accurate interpreting obliques with dative interpretation (clitic *le*) than with reflexive objects (clitic *se*). The author concludes that these bilingual children have not acquired the feature specification of 3rd person dative objects as a Spanish monolingual would, and thus they have a wider interpretation for dative clitics that can include benefactives and locatives. She attributes this widening due to feature transfer from DPs in L1 Quechua.

Spanish-Quechua bilinguals also have been shown to produce null objects with definite antecedents. Sánchez (2003) investigated crosslinguistic influence and the mechanisms that produce interference in bilingual Quechua-Spanish children who live in a language contact situation. She looked at the direct object system of both Spanish and Quechua, since these differ in various grammatical aspects, in order to understand how both of these systems are represented in the bilingual mind. Using two oral tasks, a picture based story-telling task and a picture-sentence matching task, she compares two groups of bilinguals ages 8-13 from two different bilingual communities (Ulkumayo *n*=28 and Lamas *n*=30) in both their languages. She also compares the Spanish of these groups to one group of Spanish monolingual children (*n*=36) who live in a Spanish dominant area, but who have at least one bilingual parent. Her results indicate that bilinguals most frequently produce an overt DP, followed by a null object construction, which were always licensed by a previously mentioned overt DP. On the other hand, monolinguals produced a higher frequency of clitics and clitic doubling than null objects. She attributes
this to the lack of overt morphology for third person objects in Quechua, which is mapped onto definite null objects in Spanish—despite the availability of clitics. The overall results of her study show evidence for convergence between the two languages; however, with regard to clitics, she finds evidence of interference of feature specification which she concludes has become part of the steady state in bilinguals.

4.6 Previous studies on language contact with P’urhépecha

There are only a handful of contact studies between Spanish and P’urhépecha (Chávez 1999; Demislova 1999; Meneses 1998; Villavicencio 2003, 2006). Although most of them focus on the lexicon, two studies in particular document variation in the clitic system of bilingual speakers: Meneses (1998) in the region of lake Patzcuaro, and Villavicencio (2003) in the community of Carapan, in the region of la Cañada. These studies provide a thorough description of the phenomena encountered in these communities, but they are qualitative in nature. The only quantitative study on contact is Villavicencio (2006), which focuses on nominal predicates of the copulas ser/estar. To my knowledge there are not any experimental or quantitative studies on pronominal clitics in contact with P’urhépecha.

In her B.A. thesis, Meneses (1998) documents various phenomena of contact including the peculiarities of the pronominal clitic system. She obtained her corpus by informally interviewing members of the P’urhépecha community of the region of lake Patzcuaro, as well as using data from a text written by bilinguals ¡Juchar uinapikua! (1980) (cited in Meneses 1998). The oral data was taken from four communities: three that are still bilingual (San Andrés Tziróndaro, Santa Fe de la Laguna, and Puácuaro); and Zirahuen which is now “mestizo”. From her corpus, she selected nine informants of various ages and with different proficiency levels in their L2 Spanish. She then transcribed the interviews and extracted the morphemes that deviated from the local standard variety. The following surveys the main phenomena in terms of the pronominal clitic system used by bilinguals in Meneses’ corpus.

i. Gender, number neutralization
Ya compré mejor harina, Cl3.ACC.M ordered to bring, sí me Cl3.ACC.M brought ‘I already bought better flour, I ordered it and they brought it to me.’

Pero estas riquezas naturales no Cl3.ACC.M take-advantage we ‘But these natural riches we do not take advantage’

And REF went to look for the animals and que no Cl3.ACC.M.SG found anywhere ‘And s/he went to look for the animals and s/he did not find them anywhere’

These demonstrations CL3.ACC.M.PL we-made with the purpose of informing. ‘These demonstrations, we made them with the purpose of informing.’

What beautiful name Cl3.ACC gave [him/her] ‘What a beautiful name you gave him/her!’
Based on the observation in her corpus, Meneses proposes the clitic system to be simplified to the following: the use of \textit{lo}/\textit{los} for accusative clitics irrespective of gender as well as no case distinction between accusative and dative clitics into default \textit{lo}. Table 4.8 summarizes the clitic system proposed by Meneses.

Table 4.8 Clitic system for P’urhépecha-Spanish bilinguals proposed by Meneses (1998:84) (adapted)

<table>
<thead>
<tr>
<th></th>
<th>Accusative</th>
<th>Dative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine</td>
<td>\textit{lo}/\textit{los}</td>
<td>\textit{lo}</td>
</tr>
<tr>
<td>Feminine</td>
<td>\textit{lo}/\textit{los}</td>
<td></td>
</tr>
</tbody>
</table>

iii. Direct object clitic doubling

She also found clitics in preverbal position with DPs in postverbal position with both direct object referents and indirect object referents that were doubled using \textit{lo}:

(18) a. \textit{Y ya} \textit{lo\textsubscript{i}} \textit{usamos la medicina y se compuso.}  
And already \textsubscript{CL3,ACC,MSG} used the.F medicine and got-well  
\textit{‘And we already used the medicine and s/he got well.’}

b. \textit{Y yo levanto [el dinero] y lo entregué todo cheque.}  
And I picked-up [the money] and \textsubscript{CL3,ACC,M} gave all check  
\textit{‘And I picked up (the money) and gave him/her all the check.’}

iv. Direct object clitic elision

The object can be elided when the referent has been previously mentioned in the context.

(19) \textit{Ø Escondí aquí [el dinero]}  
Ø hid here [the money]
‘I hid (the money) here.’

v. **Indirect object clitic elision**

As mentioned above the dative clitic tends to be replaced by accusative clitic *lo*. However, it is also elided in the same manner as the accusative clitic.

(20) Deja decir Ø [a mi mujer] que venga a saludar.
    Let me tell Ø [to my wife] to come to greet
    ‘Let me tell my wife to come greet you’

vi. **Pronoun se instead of le**

She also finds a couple of examples where the pronoun *se* is used instead of dative *le* with derived verbs as well as with psych verbs:

(21) Un regular parcela que *se* dejó su esposo
    A regular parcel that CL.*se* left her husbands
    ‘A regular parcel that her husband left for her’

(22) A aquel siempre *se* gusta tomar mucho
    To that-one always CL.*se* likes to-drink a-lot.
    ‘S/he always likes to drink a lot.’

In another study, Villavicencio (2003) analyzed the text from a 1936 interview with a woman who spoke P’urhépecha as her first language in the region of Carapan. Villavicencio extracted various phonetic, morphological, syntactic and semantic phenomena from this one text. In terms of pronominal clitics she documents the following three phenomena:

i. **Clitic elision**

    *Accusative clitic*

(23) Yo Ø voy regañar pos es mi hermana menor
    I Ø going-to scold since is my sister younger
    ‘I’m going to scold (her), since she is my younger sister.’
**Dative clitic**

(24) Siempre tiene que pues alguno que Ø avisa

Always have that well someone that Ø tells

‘S/he always has someone that tells (him/her).’

Reflexive clitic se

(25) Y Tomás así venía pa’borracharØ

And Tomás like-this came to get-drunkØ

‘And Tomás came like this to get himself drunk.’

**ii. The use of a strong object pronoun instead of a clitic pronoun**

A tonic object pronoun used pre-verbally instead of a clitic pronoun:

(26) Así quería a mí matar

Like-this wanted to me to-kill

‘Like this s/he wanted to kill me.’

**iii. Clitic doubling with lack of number agreement between the clitic and strong pronoun**

(27) Porque ésta no tei quiere a ustedesì

because this-one does-not CL2.DAT.SG like to you.PL

‘Because this one does not like you-guys’

These studies seem to indicate irregular patterns in the clitic systems of bilingual speakers of P’urhépecha; however, whether or not these are systematic reinterpretation of Spanish clitics is yet to be demonstrated. This dissertation attempts to shed light on these phenomena in an experimental manner in order to define the possible sources of feature interference from P’urhépecha to Spanish.
Chapter 5

5 General Methods and Participants

This chapter is dedicated to describing the general methods implemented in this study as well as describing the groups of participants. The study consists of two experimental tasks implemented with two different groups of participants. I begin by describing the two groups of participants—P’urhépecha-Spanish bilinguals and Spanish monolinguals—and the questionnaire used to obtain the pertinent sociolinguistic information. I then provide a general overview of the two tasks—an acceptability judgement task and an oral elicitation task—explaining the rationale behind choosing them and detailing how the materials were designed. Since the same tasks were used for the two types of structures investigated in this study (i.e. accusative and dative clitics), here I just present the general design of the tasks. The specific experimental design pertinent to each structure are presented in more detail in chapter 6 for accusatives and in chapter 7 for datives. To conclude, I detail the testing protocol used in this study, including information on ethics and consent requirements.

5.1 Participants

In order to investigate feature mapping in P’urhépecha-Spanish bilinguals, I implemented a series of acceptability judgment and oral production tasks, which were administered to 40 participants in total. Of these, 23 were part of the bilingual group of P’urhépecha-Spanish speakers, and 17 were part of the monolingual group of Spanish speakers of the central Mexican variety, which was used as basis for comparison rather than a control group. I also designed a background questionnaire that was implemented as a sociolinguistic interview for the bilingual group in order to collect more naturalistic data, as well the necessary demographic data. For the Spanish monolingual group, the questionnaire was completed using an online survey platform.

5.1.1 Sociolinguistic Interview

Before completing the linguistic tasks, the participants were asked to complete a sociolinguistic interview. The questionnaire used was adapted from Montrul (2012) and
Sánchez (2006), who have worked with Spanish heritage speakers and with Quechua-Spanish bilingual children respectively. The questions were designed with two purposes in mind: one was to obtain personal information such as age, sex, place of origin, occupation, education, languages spoken and age of onset of acquisition; the second was to understand participants’ patterns of language use and language preferences (see Appendix A). In the case of the bilingual group (P’urhépecha-Spanish bilinguals), the interview was conducted orally and audio-recorded. For the monolingual group (Spanish monolinguals), the questionnaire was completed online using the platform available through surveygizmo.com.

5.1.2 P’urhépecha-Spanish Bilinguals

As described in chapter one, bilingualism in the P’urhépecha region is complex. Although 93% of P’urhépecha speakers are bilingual with Spanish (INALI 2015), there are only a few communities that remain predominantly P’urhépecha speaking. For this study, I chose to visit two of these communities located in the Lake Pátzcuaro region, Santa Fe de la Laguna and San Andrés Tzirónaro, which are both examples of the rare larger community that has not undergone language shift to Spanish.

This data was collected on site in the summer of 2016. In order to recruit participants for this study, I had the assistance of a community leader from Santa Fe de la Laguna. His support was of paramount importance. As an outsider it is often difficult to conduct any type of research in communities that have been targeted by the government, political parties, and organized crime. Since the community leader is well known by everyone in his community and surrounding areas, he was able to ask people if they would be interested in participating in a study on P’urhépecha-Spanish bilingualism, and in that sense acted as a bridge between me and the community members that participated in this study. He accompanied me to every meeting and acted as a mediator and facilitator when necessary.

Of the 23 participants in the bilingual group, 19 resided in Santa Fe de la Laguna and four in San Andrés Tzirónaro. These communities are only 11.3 km apart and travel between them consists of only a 15 minute car ride. Five participants were male and eighteen were
female, with ages ranging from 20 and 50 years old ($M=38$). Their education level varied, but most of them (13) had only reached elementary education; six had gone to secondary school (grades 7-8) all at different completion levels; two went to High School but only one finished; and two had university level studies, but only one had graduated. As most Spanish acquisition in these communities occurs in the school system, participants were asked about the use of language in their school environment. At an elementary school level, 18 individuals reported that their teachers were monolingual Spanish speakers and five reported that their teachers were bilingual P’urhépecha-Spanish. Although all classes were conducted in Spanish, all participants reported speaking P’urhépecha with their peers and Spanish with their monolingual teachers. The participants who went to secondary and high school reported that all schooling at this level was done in Spanish, since at the time neither Santa Fe de la Laguna nor San Andrés had local secondary/high schools. Therefore, students had to commute to the nearest town—either Quiroga or San Jerónimo respectively—which are both Spanish monolingual communities. Therefore at this point in their lives almost all communication had shifted to Spanish, except when they spoke P’urhépecha with peers from their communities.

To understand the economic activity of the participants, it is important to note that the region of lake Pátzcuaro is divided into 39 communities (Lemus 2015), each of which is known for a specific craft. In Santa Fe de la Laguna the economic activity is centered around the production of pottery—specifically the production of hand painted figurines made with locally gathered clay. In San Andrés, residents weave a type of straw called tule to produce hand crafted rugs called petates, as well as decorative bells and fans. This type of activity is reflected in the occupations reported by the participants—19 were artisans of some sort. Additionally, one participant reported being a musician of P’urhépecha music called pirekuas, another a vendor in a local variety store, and two female participants identified themselves as homemakers. Some participants also reported supplementing their income from pottery by selling food at night, or by farming and selling products at the local market.
Table 5.1 Distribution of participants P’amatiepepecha-Spanish Bilingual group.

<table>
<thead>
<tr>
<th>Speaker ID</th>
<th>Gender</th>
<th>Age</th>
<th>Occupation</th>
<th>AOA Spanish</th>
<th>Highest level of education</th>
<th>Language dominance (self-rating)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 101</td>
<td>M</td>
<td>34</td>
<td>Musician</td>
<td>6</td>
<td>University</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 102</td>
<td>M</td>
<td>50</td>
<td>Artisan/farmer</td>
<td>18</td>
<td>5th grade</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 103</td>
<td>F</td>
<td>48</td>
<td>Artisan</td>
<td>6-8</td>
<td>Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 104</td>
<td>F</td>
<td>46</td>
<td>Artisan</td>
<td>6</td>
<td>Secondary</td>
<td>Both</td>
</tr>
<tr>
<td>B 105</td>
<td>F</td>
<td>26</td>
<td>Artisan</td>
<td>9</td>
<td>some High school</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 106</td>
<td>F</td>
<td>46</td>
<td>Artisan</td>
<td>7</td>
<td>Elementary</td>
<td>Both</td>
</tr>
<tr>
<td>B 107</td>
<td>F</td>
<td>41</td>
<td>Artisan</td>
<td>6</td>
<td>Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 108</td>
<td>M</td>
<td>42</td>
<td>Artisan</td>
<td>15</td>
<td>Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 109</td>
<td>F</td>
<td>38</td>
<td>Homemaker/Artisan</td>
<td>Teens</td>
<td>Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 110</td>
<td>M</td>
<td>42</td>
<td>Vendor</td>
<td>After 6</td>
<td>1st secondary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 111</td>
<td>F</td>
<td>20</td>
<td>Homemaker</td>
<td>11</td>
<td>Elementary</td>
<td>Spanish</td>
</tr>
<tr>
<td>B 112</td>
<td>F</td>
<td>36</td>
<td>Artisan</td>
<td>12</td>
<td>Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 113</td>
<td>M</td>
<td>42</td>
<td>Artisan</td>
<td>After 6</td>
<td>2nd Secondary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 114</td>
<td>F</td>
<td>32</td>
<td>Artisan</td>
<td>After 6</td>
<td>Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 115</td>
<td>F</td>
<td>28</td>
<td>Artisan</td>
<td>8</td>
<td>1st Elementary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 116</td>
<td>F</td>
<td>23</td>
<td>Artisan</td>
<td>14-15</td>
<td>5th</td>
<td>Both</td>
</tr>
<tr>
<td>B 117</td>
<td>F</td>
<td>39</td>
<td>Artisan</td>
<td>11</td>
<td>6th</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 118</td>
<td>F</td>
<td>31</td>
<td>Artisan</td>
<td>8-10</td>
<td>1st High School</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 119</td>
<td>F</td>
<td>40</td>
<td>Homemaker</td>
<td>10</td>
<td>Secondary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 120</td>
<td>F</td>
<td>40</td>
<td>Artisan</td>
<td>12</td>
<td>3rd</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 121</td>
<td>F</td>
<td>50</td>
<td>Artisan/farmer</td>
<td>13</td>
<td>Some University</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 122</td>
<td>F</td>
<td>48</td>
<td>Artisan</td>
<td>8</td>
<td>Secondary</td>
<td>P’amatiepepecha</td>
</tr>
<tr>
<td>B 123</td>
<td>F</td>
<td>46</td>
<td>Artisan</td>
<td>8</td>
<td>Secondary</td>
<td>P’amatiepepecha</td>
</tr>
</tbody>
</table>
With respect to the age of onset of acquisition (AOA) of both languages, all participants reported learning P’urhépecha first and speaking only P’urhépecha until they started primary school. Therefore, the age of onset of acquisition of Spanish for most of them was between the ages of 6-8, when they started primary school in Spanish. Six of them reported that they did not learn Spanish until their teens. These individuals stated that when they started primary school in Spanish they did not understand it at all, and they continued communicating solely in P’urhépecha at home and with their peers. It was not until they had been in school for a couple of years that they started communicating in Spanish, primarily with their teachers, or when they visited the nearby Spanish speaking towns or the capital.

All 23 participants reported both their parents speaking P’urhépecha as their first language. However, parents’ levels of proficiency in Spanish varied considerably, both individually and between fathers and mothers. Overall, participants’ fathers tended to be more proficient in their L2: 15 reported their father speaking Spanish; six knew some Spanish; one reported their father knowing very little Spanish and one not knowing Spanish. Of the 15 who knew Spanish, two of them said their fathers were more dominant in Spanish due to the fact that one lived in the USA and the other had one parent who was a Spanish speaker. On the other hand, participants typically reported their mothers as less proficient in Spanish: seven indicated that their mother spoke Spanish; five said they spoke some Spanish; nine said they barely spoke Spanish, but were able to understand it; and two said they didn’t speak any Spanish. The observed imbalance is a result of various factors, with educational level being the most influential. Of the participants’ fathers, four had no schooling, 17 had some or elementary level schooling, and two went to secondary school. Of their mothers, 13 did not attend school, nine attended some elementary school, and 1 had higher education (nursing school). This data suggests that the prevalent bilingualism in these communities is recent, as the previous generation is not consistently fluent in Spanish. Table 5.2 summarizes the data on the parents’ language and Table 5.3 of parents’ education.
Table 5.2 Distribution of languages of parents

<table>
<thead>
<tr>
<th>Level</th>
<th>Father</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 P’urhépecha</td>
<td>23 (100%)</td>
<td>23 (100%)</td>
</tr>
<tr>
<td>L2 Spanish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1 (4%)</td>
<td>2 (8%)</td>
</tr>
<tr>
<td>Very little</td>
<td>1 (4%)</td>
<td>9 (39%)</td>
</tr>
<tr>
<td>Some</td>
<td>6 (26%)</td>
<td>5 (22%)</td>
</tr>
<tr>
<td>Fluent</td>
<td>15 (65%)</td>
<td>7 (30%)</td>
</tr>
<tr>
<td>Total</td>
<td>23 (100%)</td>
<td>23 (100%)</td>
</tr>
</tbody>
</table>

Table 5.3 Distribution of education of parents

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Father</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>4 (17%)</td>
<td>13 (57%)</td>
</tr>
<tr>
<td>Elementary/some</td>
<td>17 (74%)</td>
<td>9 (39%)</td>
</tr>
<tr>
<td>Secondary</td>
<td>2 (8%)</td>
<td>0</td>
</tr>
<tr>
<td>Higher</td>
<td>0</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Total</td>
<td>23 (100%)</td>
<td>23 (100%)</td>
</tr>
</tbody>
</table>

To assess the linguistic proficiency of the participants, I chose self-ratings and self-reporting for both languages, both in terms of proficiency and patterns of language use/preference. This methodology eschews the use of standard proficiency tests, following the work of Valdés and Figueroa with Spanish Heritage speakers in the U.S., and Sánchez with Quechua and Aymara bilingual populations. According to Sánchez (2006) and Valdés and Figueroa (1994), the use of standardized testing on bilingual populations poses the risk of oversimplifying the language of the participants in a language contact situation. Furthermore, with respect to the indigenous communities, Sánchez argues that due to the complexity of the sociolinguistic situation in the indigenous communities, proficiency measures are not well suited for these populations. Therefore, as part of the sociolinguistic interview, I asked participants to self-rate both
their languages in four skills: oral, listening, writing and reading. This task was particularly difficult for some of the participants, as it was hard for them to quantify their language skills in exact numbers. Many of them expressed that their P’urhépecha was not “pure” since they mix in many Spanish words such as conjunctions, prepositions, and adverbs. Also, there are many neologisms that do not have equivalents in P’urhépecha, and thus they insert the Spanish word when speaking P’urhépecha. Furthermore, many of them felt that their P’urhépecha was lacking since often times they were not able to communicate effectively in P’urhépecha with people from other regions, however, this is due to dialectal variations rather than lack of proficiency. Many expressed that they did not speak the P’urhépecha of their ancestors and thus they felt that they did not speak well.

During the interview, I tried to address these concerns by clarifying that in describing their language use they could disregard the words they use in Spanish, and that I was mainly interested in how they felt when they were speaking to individuals in their own community. I found this to be effective as it helped participants to move past any concerns and possible insecurities surrounding their language knowledge and use. After getting past those concerns, I believe that I was able to get an accurate self-reporting of their proficiency in both languages. The following Table 5.4 is a summary of these results for P’urhépecha and Table 5.5 for their Spanish proficiency. Of note here is that most participants rated themselves higher in their oral and listening skills in P’urhépecha than in the same skills in Spanish. However, it is the exact opposite for reading and writing, since they were all schooled in Spanish and not in their native language. It is only in recent years that school children in these communities are being taught to write and read in P’urhépecha. This creates an asymmetry of skills in both languages, especially the L1 P’urhépecha. Only a few participants knew how to write in P’urhépecha, and this was because they either self-taught or took classes as adults. All of them reported that they would like to learn or improve their writing and reading skills in their mother tongue. Several participants said they would like to have more access to literary materials in P’urhépecha.
Table 5.4 Distribution of participants by self-ratings (scale 1-10) of P’urhépecha (max=23)

<table>
<thead>
<tr>
<th>Rating</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7-8</th>
<th>9-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>9</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>39%</td>
<td>48%</td>
<td>9%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>57%</td>
<td>13%</td>
<td>13%</td>
<td>17%</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.5 Distribution of participants by self-ratings (scale 1-10) of Spanish (max=23)

<table>
<thead>
<tr>
<th>Rating</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7-8</th>
<th>9-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to have a more holistic understanding of participants’ language use and preference, I asked a series of questions relating to when and with whom participants used P’urhépecha: Did they speak it with parents, siblings, other residents, or friends? Did they use P’urhépecha at work, in school, or at church? The results indicate a diglossic situation common to all the participants. They all reported that they always
speak P’urhépecha with their close relatives, as well as other members of their community. Participants reported only speaking Spanish when dealing with outsiders who are monolingual Spanish speakers, and when they go to the nearby Spanish speaking towns. For those who attend church, they reported using Spanish during religious activities. As mentioned above, Spanish was also the language used during school. In terms of media, participants reported watching TV in Spanish. For those who listen to the radio it is both in Spanish and P’urhépecha because there are local P’urhépecha radio broadcasters in the region. To determine language preference, I asked which language they used most on a daily basis and in which language they felt more comfortable and dominant. In terms of general use, 21 participants reported speaking more P’urhépecha than Spanish on a daily basis. Only two of them reported speaking more Spanish, due to the fact that their work involves interaction with Spanish speakers. Only one participant reported speaking Spanish at home, because his wife is a Spanish speaker; however, he speaks P’urhépecha to the rest of his family. Regarding language dominance, 18 reported being most dominant and comfortable speaking P’urhépecha. Two participants reported being equally dominant and comfortable with both languages. Only one participant claimed being more comfortable with Spanish, even though she recognizes P’urhépecha as her mother tongue. These results are strongly linked to their identity, all 23 participants identified as being P’urhépecha and they all expressed that they were proud of knowing and speaking their language.

5.1.3 Spanish group

The Spanish group consisted of 17 monolingually raised Spanish speakers of Mexican Spanish. I recruited participants in Mexico (n=8) as well as in Canada (n=9). The participants living in Canada had all been in the country anywhere from 6 years to 6 months, but had been born and raised in Mexico, and migrated to Canada as adults. Most of the participants had some knowledge of English; however, none of them had any contact with any indigenous language. The ages ranged from 25 to 39 (M=34), nine were female and eight males. Two of them had a high school level education, while 15 had at least a college education. Seven were University students, four worked in public service, four were workers, one was a teacher and one was an office assistant. Twelve of them
were born in Mexico City and three of them in surrounding areas such as Puebla, Guanajuato, and San Luis Potosi. Two of them were born in northern states of Chihuahua and Tamaulipas. All of them reported having both parents born and raised in Mexico and being Spanish speakers. In terms of language use, all of them reported using Spanish at home; six reported using both Spanish and English at school and 11 reported only using Spanish at school; 14 reported using only Spanish at work and three reported using Spanish and English at work. All 17 participants reported Spanish as their dominant language and the language used for communication with their family. Seven of them reported using both Spanish and English with friends. Since most of them have at least some knowledge of English I asked for proficiency ratings in the four skills for both languages. Results show that participants are predominantly fluent in Spanish. The distribution of participants’ self-ratings is summarized in Table 5.6.

Table 5.6 Distribution of participants by self-ratings of Spanish and English by number of participants (max=17)

<table>
<thead>
<tr>
<th>Rating</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7-8</th>
<th>9-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>18%</td>
<td>5%</td>
<td>41%</td>
<td>18%</td>
</tr>
<tr>
<td>Speaking</td>
<td></td>
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</tr>
<tr>
<td>Spanish</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>18%</td>
<td>24%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Reading</td>
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</tr>
<tr>
<td>Spanish</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
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<tr>
<td>English</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>5%</td>
<td>5%</td>
<td>47%</td>
<td>18%</td>
</tr>
<tr>
<td>Writing</td>
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</tr>
<tr>
<td>Spanish</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>English</td>
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<td>1</td>
<td>3</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>5%</td>
<td>18%</td>
<td>41%</td>
<td>5%</td>
</tr>
</tbody>
</table>
5.2 Linguistic Tasks

The participants completed two linguistic tasks designed specifically to investigate the knowledge and production of accusative and dative clitics: one oral elicited production task (OET) and one acceptability judgement tasks (AJT). These were chosen in order to be complementary to each other, as my objective was to tap into the implicit knowledge of the participants both in their competence and performance. Furthermore, linguistic research with indigenous communities has been typically done collecting oral naturalistic data, or with guided narrations or interviews, rather than with controlled experimental tasks. Although naturalistic oral production data in fact reflects the knowledge of language use of the speakers, it can limit the types and quantity of structures produced. For instance, most of the research done on clitics with Amerindian language speakers has been done through naturalistic collection methods or through guided narrations such as the Frog Stories (Mayer & Mayer 1975). Although, it has been shown that a lot can be extracted from these methods (see Slobin 2004; Sánchez 2006), the quantity of tokens per variable produced and per participant cannot be controlled. For example, in the Frog Stories, when used for Spanish the characters are mainly masculine (i.e. el niño ‘boy’, el perro ‘dog’, el sapo/la rana ‘toad/frog’) thus the yield of frequency of masculine clitics is higher than for feminine clitics (if produced at all). Furthermore, they are all singular DPs. Therefore, since I wanted to extract clitics with different combinations of features (i.e. [±masculine] [±singular] [±animate]) I opted for creating an oral elicitation task that would provide the benefits of the oral production, but with controlled variables and content. Moreover, SLA methodology tasks such as grammaticality judgments or comprehension tasks are even less used in these communities (cf. Ramirez-Trujillo 2013; Kalt 2002) due to variability in literacy and educational levels. However, since these types of implicit tasks have been shown to provide insights on the grammatical intuitions of speakers (see Cowart 1997; Schütze 2016), I decided to implement an auditory Acceptability Judgment Task to overcome the possible confound of literacy.
5.2.1 Acceptability Judgement Task

In order to tap into the implicit knowledge of these participants, I implemented an auditory Acceptability Judgement Task using an iPad. Participants were only able to listen to the sentences; there was no reading involved in this task. This type of task has been widely used in the field of SLA based on the assumption that grammatical judgements provide evidence of the speaker’s competence in the language (Ionin 2012). Since this type of population has varying degrees of competency in their L2, I found it more appropriate to use a gradient of judgments as opposed to grammatical/ungrammatical in order to be able to account for the possibility of variation amongst these participants. Furthermore, in order to make sure that the participants were clear on the instructions of the task at hand, at the beginning of each session I guided each participant through a couple of sample sentences. This would ensure that the participants felt comfortable using the technology—both the iPad and the online interface—as well familiarizing themselves with the type of task they were required to perform.

The AJT contained two target linguistic structures: accusative clitics ($k=60$) and dative clitics ($k=24$), which served the complementary role of acting as distractors for each other. The task was implemented aurally using the online survey platform Surveygizmo.com. Each token contained two sentences: a context that provided the antecedent DP, and a follow up sentence that contained a pronominal clitic referent to the nominal in the previous sentence as shown in Figure 5.1.

<table>
<thead>
<tr>
<th>Context sentence</th>
<th>+</th>
<th>Target sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedent DP</td>
<td></td>
<td>Clitic</td>
</tr>
<tr>
<td>[gender], [number], [animacy]</td>
<td></td>
<td>[case], [((gender)), [number]</td>
</tr>
</tbody>
</table>

Figure 5.1 Design of stimuli context sentence and target sentence.
All sentences were audio recorded (by me) using an Olympus Zoom H4n and mp3 files were uploaded to the online platform. Participants completed the task on an iPad Air using Koss noise canceling headphones. Each participant would see the audio player on the screen, where they had to click play to listen to the sentence. They had the option to listen to the sentences twice. Underneath the audio player they had four radio button icons with four options to choose from: sounds very bad, sounds more or less bad, sounds more or less good, and sounds very good. These judgments were recorded by the software on a 1-4 Likert point scale. All tokens were pseudo randomized so that no two conditions and variables would appear consecutively. Furthermore, the task was divided into two parts so that participants had a break in between. Each part took approximately 18 minutes to complete. The details on the experimental design of each type of structure is provided in Chapter 6 for accusatives and Chapter 7 for datives.

5.2.2 Oral Elicitation Task

The oral elicitation task consisted of 24 scenarios presented in a PowerPoint presentation. Each slide presented a context, a question, a picture, and a verb as shown in Figure 5.2. Although the participants had the option to read the content from the slides, I presented the task orally in order to avoid issues of literacy. Participants were asked to listen to the context and the question, which I read out loud. Then, they were asked to formulate an answer based on the context, the picture and the verb given. Answers were audio recorded using an Olympus Zoom H4n, then transcribed and coded. The task consisted of scenarios that would elicit sentences containing accusative clitics ($k=8$) and dative clitics ($k=16$). They were presented in pseudo-randomized order so that no two sentences with the same verb would appear back to back. This task took approximately 15 minutes to complete.
5.3 Testing Protocol

All participants were recruited through personal connections both in Mexico and in Canada. They were all tested in a quiet room individually. The procedure was the same for each participant. First, they received the letter of information in compliance with the ethics protocol approved by the Ethics Board of the University of Western Ontario. Participants had the option to read it themselves or for me to read it to them. In the case of the P’urhépecha speakers, I had the assistance of a native speaker to explain or translate to P’urhépecha if participants requested or needed further clarification. The letter notified them that there were no risks to participating in the study, that all the information provided would be kept anonymous and confidential, that their participation was on a volunteer basis and that they could stop at any point, or could choose not to answer any of the questions given. They were told that the oral production task and the interview would be audio recorded. They were informed that completing the study would take approximately 2hrs. Afterwards, I answered any questions they had and after
agreeing to participate in the study verbally, they would sign the consent form and agree to be audio recorded.

Afterwards, we proceeded with the background questionnaire online for the Spanish monolingual group or the interview for the bilingual group. The interviews lasted anywhere from 10-30 minutes depending on how much participants wanted to share. The first experimental task given was the Oral Elicitation Task. The first five slides were practice slides –participants received instructions on how to complete the task and they were given an opportunity to ask questions. Each participant took anywhere from 5 to 10 minutes to complete this task. The second experimental task given was the Acceptability Judgment Task, which was divided into two sections. The first part was a bit more extensive, as participants had five practice rounds at the beginning so they would understand how to complete the task. Participants would work online using an iPad and headphones. After listening to the stimuli once or twice, they would click on one of the four options. After completing the practice round, any participant questions would be addressed and then participants would proceed to complete the first part of the task. Once completed, participants had a break of however many minutes they wanted and afterwards they began the second part of the AJT. Having completed all the tasks, the participants had a chance to debrief with me. As part of the ethics protocol, I also issued them a debriefing form that explained the purpose of the study, and answered any further questions they had about the study.
Chapter 6

6 Experiment 1: Accusative Clitics

This chapter is dedicated to the experiment performed with accusative clitics. It is divided into two main sections: §6.2 experimental design and §6.3 results. I begin by detailing the research questions and specific hypotheses pertinent to the accusative clitics based on the theoretical framework discussed in chapter 2, and the previous findings on Spanish pronominal clitics in language contact situations discussed in chapters 3 and 4. Then, I explain the experimental design used for accusative clitics in particular. Finally, I present the results obtained from the experiment in two sections: the results of the acceptability judgment task, followed by the results of the oral elicitation task.

6.1 Research questions and hypothesis

Based on previous research on P’urhépecha-Spanish bilinguals, as well as general trends observed in studies of Spanish in contact with Amerindian languages, I investigate the presence of variation in the clitic system in the grammar of bilinguals. Specifically, I focus on the following research questions.

1. Do P’urhépecha-Spanish bilinguals neutralize gender features in the Spanish accusative clitic system?
2. Do P’urhépecha-Spanish bilinguals omit accusative clitics in a wider range of contexts than monolingual speakers?
3. Do P’urhépecha-Spanish bilinguals instantiate object agreement through accusative clitic doubling?
4. Do P’urhépecha-Spanish speakers exhibit a preference for enclisis over proclisis?

The following hypothesis detail the expected answers to the above questions, based on features of the P’urhépecha language.

1. Given that P’urhépecha does not have grammatical gender, I predict that P’urhépecha-Spanish bilinguals will favour gender neutralization in the accusative clitic system. This will be evident in the use of the invariant lo(s) in both
anaphoric and clitic doubled structures, which has been observed in a range of contact dialects throughout the Americas.

2. As P’urhépecha does not have overt 3rd person pronominal objects (Capistrán 2015), I predict that P’urhépecha-Spanish bilinguals will favour omission of Spanish accusative object pronouns in a wider variety of contexts than monolingual Spanish speakers. This tendency is reinforced by the existing pattern of object drop in Spanish, though in bilinguals it will be extended to reflect the absence of the equivalent morphology in P’urhépecha.

3. Due to the fact that P’urhépecha requires that [+animate] and [+definite] and [+specific] and [+individuated (plural)] DPs be explicitly marked with an objective case suffix (-ni), I predict that P’urhépecha-Spanish bilinguals will favour clitic doubled constructions with accusative clitics in similar contexts, instantiating accusative clitic doubling as part of an object marking system.

4. Given that P’urhépecha only has enclisis, I predict that P’urhépecha-Spanish bilinguals will show a preference for enclisis over proclisis.

### 6.2 Experimental Design

Two tasks were implemented targeting accusative clitics, one acceptability judgment task (AJT) and one oral elicitation task (OET), which were complementary to each other. Recall from the methods section in chapter 5, the AJT was implemented aurally, meaning that participants were only able to listen to the sentences and no reading was involved, thus implicitly targeting the grammatical judgments of the participants. The OET elicited the production of these clitics based on a context read by me and the images shown. This in turn also tapped into their implicit knowledge of accusative clitics, but now combined with their oral performance. The following two sections detail the variables manipulated in this experiment, which were the same for both tasks: gender, number, animacy and clitic position.

#### 6.2.1 Acceptability Judgment Task design

This part of the experiment was designed to investigate three phenomena that commonly occur with accusative clitics in contact situations: gender/number neutralization,
accusative clitic doubling, and clitic omission. The design targeted direct object nominals with three semantic variables: gender (feminine & masculine), number (singular & plural), and animacy (animate & inanimate). These nominals were presented in the context sentence and then used as 3rd person direct object clitics in the follow-up target sentence as in (1).

(1) Context sentence

María vende las flores más bonitas del mercado.
María sells the flowers more beautiful of-the market.

Target sentence

Esta mañana estaba enferma y no fue a venderlas.
This morning she was sick and not went to sell

‘María sells the most beautiful flowers in the market. This morning she was sick and she did not go to sell them.’

In this example, las flores is the direct object DP in the context sentence, and in the follow-up target sentence the clitic las is the anaphora with matching gender and number features in enclitic position. Since the target sentences contained the clitic corresponding to the nominal presented in the context sentence, they also possessed the semantic features (gender and number) plus one syntactic variable: clitic position (enclitic vs. proclitic). In order to account for both positions of clitics, all target sentences were formed with verbal structures that accepted both possible positions: compound constructions and progressive constructions.

Five conditions were tested: 1) target use of the clitic; 2) neutralization of gender and/or number features into clitic lo; 3) clitic doubling with a post-verbal nominal; 4) clitic omission; and 5) repetition of the full DP with no clitic. Only conditions 1-3 had tokens for enclitic and proclitic variables, since conditions 4 and 5 do not use a clitic. Figure 6.1
summarizes the design. The 2x2x2x5 (plus 2 clitic positions in 3 of the conditions) design yielded a total number of 64 tokens, 8 tokens per 8 possible combinations of variables. However, there was a confound for 4 tokens that overlapped since the masculine singular clitic in condition 1 (target clitic) is the same as the masculine singular in condition 2 (clitic lo). Therefore, 4 tokens were taken out of the design yielding a total of 60 sentences targeting accusative clitics.

Figure 6.1 Experimental design of variables targeting accusative clitics

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3 The chart design is condensed. Only the feminine, singular, [-animate] is fully fleshed out.
The following example (2) provides the context and the 5 conditions of a token that targets an accusative pronominal clitic referring to nominal –*las flores*— with feminine, plural, and inanimate features in the enclitic position.

(2)

**Context:** María vende *las flores*$_{F.PL}$ más bonitas del mercado.

**Condition 1:** Target clitic

a) Esta mañana estaba enferma y no fue a vender*las*$_{i}$.  
   This morning she was sick and did-not went to sell-CL3._ACC.F.PL

**Condition 2:** Neutralization with clitic *lo*

b) Esta mañana estaba enferma y no fue a vender*lo*.  
   This morning she was sick and not went to sell-CL3._ACC.M.SG

**Condition 3:** Clitic doubling with *lo*

c) Esta mañana estaba enferma y no fue a vender*lo* las flores.  
   This morning she was sick and not went to sell-CL3._ACC.M.SG the flowers

**Condition 4:** Clitic omission

d) Esta mañana estaba enferma y no fue a vender.  
   This morning she was sick and not went to sell Ø

**Condition 5:** Full DP

e) Esta mañana estaba enferma y no fue a vender las flores.  
   This morning she was sick and not went to sell the flowers

Conditions 1 and 5 are grammatical in standard Spanish, however based on the context sentences, repeating the DP (condition 5) is pragmatically odd. Condition 2 is ungrammatical in standard Spanish when the referent DP is not masculine and singular, however if participants neutralize the gender of the DP this will be an acceptable choice. Condition 3 has clitic doubling always with clitic *lo* as the doubled clitic regardless of the gender and number features of DP. This was intentional since, as seen in §4.4, clitic doubling occurs with default *lo* more often than not. Finally, condition 4 omits the clitic,
However, since the target sentences are verb final these could also be interpreted as having an implied direct object. The following table (Table 6.1) summarizes the variables together with the direct object DPs and the verbs used.

Table 6.1 Combination of variable for targeting accusative clitics in the AJT

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Number</th>
<th>Animacy</th>
<th>Direct object DP</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>[-ani]</td>
<td>casa</td>
<td>vender</td>
</tr>
<tr>
<td>A2</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>[+ani]</td>
<td>abuela</td>
<td>ver</td>
</tr>
<tr>
<td>A3</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>[-ani]</td>
<td>flores</td>
<td>vender</td>
</tr>
<tr>
<td>A4</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>[+ani]</td>
<td>tías</td>
<td>visitar</td>
</tr>
<tr>
<td>A5</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>[-ani]</td>
<td>café</td>
<td>llevar</td>
</tr>
<tr>
<td>A6</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>[+ani]</td>
<td>perro</td>
<td>llevar</td>
</tr>
<tr>
<td>A7</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>[-ani]</td>
<td>tamales</td>
<td>hacer</td>
</tr>
<tr>
<td>A8</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>[+ani]</td>
<td>abuelitos</td>
<td>visitar</td>
</tr>
</tbody>
</table>

6.2.2 Oral Elicitation Task design

The OET used the same variables used in the AJT: gender, number and animacy. The combination of these 3 variables yielded 8 direct objects as shown in Table 6.2. The verbs used in this task were some of the same accusative verbs presented in the AJT: *vender*, *visitar*, *llevar*, *hacer*. These were chosen based on their valence in both P’urhépecha and Spanish, since they are monotransitive in both languages and in the case of standard Spanish they target accusative clitics when used as anaphoricas of a direct object DP.

Table 6.2 Combination of variable for targeting accusative clitics in the OET

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Number</th>
<th>Animacy</th>
<th>Direct object DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>[-ani]</td>
<td>casa</td>
</tr>
<tr>
<td>A2</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>[+ani]</td>
<td>abuelita</td>
</tr>
<tr>
<td>A3</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>[-ani]</td>
<td>pinturas</td>
</tr>
<tr>
<td>A4</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>[+ani]</td>
<td>primas</td>
</tr>
<tr>
<td>A5</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>[-ani]</td>
<td>libro</td>
</tr>
<tr>
<td>A6</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>[+ani]</td>
<td>perro</td>
</tr>
<tr>
<td>A7</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>[-ani]</td>
<td>tamales</td>
</tr>
<tr>
<td>A8</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>[+ani]</td>
<td>abuelitos</td>
</tr>
</tbody>
</table>
Recall that the OET consisted of 8 slides targeting accusative clitic in which there was a context and a question (read out loud by me to the participants), a picture and a verb. The participants were instructed to answer the question based on the context provided using the verbs given. These verbs were presented in the question using a verbal form in which both proclitic or enclitic position was acceptable –such as with modal verb *querer* ‘want to’ or in the present progressive construction *está haciendo* ‘is doing’. Figure 6.2 shows an example of a scenario targeting an accusative clitic with feminine and singular features.

![Figure 6.2 Sample scenario of Elicited Production Task for an accusative clitic.](image-url)

In this scenario the expected response is one of the following 3 possible answers in the standard variety: (3a) with a target clitic in enclitic position, (3b) with a target clitic with proclitic position, or (3c) repeating the DP and not using the clitic.

(3) Enclitic: a. Alejandro quiere vender *la*.

Alejandro wants sell-CL3.ACC.F.SG

Proclitic: b. Alejandro *la* quiere vender.

Alejandro CL3.ACC.F.SG wants sell

Full DP: c. Alejandro quiere vender su casa.

Alejandro wants sell his house
6.3 Results

In this section I present the results obtained in the Acceptability Judgment Task (AJT) and the Oral Elicitation Task (OET) for both groups of speakers. The AJT begins by discussing the acceptability mean scores for each of the 5 conditions tested, providing a comparison between groups, as well as the results of the repeated measures ANOVA performed on this data. I then discuss the effects and interactions relevant to my study, focusing on the interactions between and within groups for condition, gender, animacy, and number. For the OET, I first provide a comparison between both groups, and then move on to discuss the results within the P’urhépecha-Spanish group by providing examples of non-standard structures.

To briefly review the material presented in section 6.2, my experimental design implements two complementary tasks, implicit measures (AJT) and oral production (OET), which target the features of gender, number, animacy, and clitic position. The context materials provided a DP with gender, number, and animacy features, and participants had to either judge or produce sentences that target a specific clitic with gender, number, and case features. Clitic position was also controlled in the AJT, and measured in the OET. The results of the experiments are as follows.

6.3.1 Acceptability Judgment Task

The acceptability judgment scores were recorded using the online platform surveygizmo.com on a Likert scale of 1-4 with 1 being the least acceptable and 4 being the most acceptable. Results were tabulated for each individual and descriptive statistics were calculated over all participants for each condition ($k=60$). Of the five conditions tested, two are considered grammatical in standard Spanish (conditions 1 and 5), while three are considered non-standard Spanish (conditions 2, 3, and 4). Table 6.3 summarizes the mean rates of acceptance for each of the 5 conditions: 1) target clitic; 2) neutralization with clitic lo; 3) clitic doubling; 4) clitic omission; and 5) full DP with no clitic.
Table 6.3 Acceptability means scores and standard deviations for accusative clitics

<table>
<thead>
<tr>
<th>Condition</th>
<th>Bilinguals</th>
<th>Monolinguals</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Target clitic</td>
<td>3.2 (1.1)</td>
<td>3.6 (0.7)</td>
<td>0.004</td>
</tr>
<tr>
<td>2) Clitic ‘lo’</td>
<td>3.1 (1.1)</td>
<td>2 (0.9)</td>
<td>0.000</td>
</tr>
<tr>
<td>3) Doubling</td>
<td>2.8 (1.2)</td>
<td>1.8 (0.9)</td>
<td>0.000</td>
</tr>
<tr>
<td>4) Clitic omission</td>
<td>3.1 (1.1)</td>
<td>2.7 (0.9)</td>
<td>0.038</td>
</tr>
<tr>
<td>5) Full DP</td>
<td>3.1 (1.1)</td>
<td>3.3 (0.8)</td>
<td>0.088</td>
</tr>
</tbody>
</table>

For both groups, acceptability mean scores were highest for the target clitic condition 1. This is to be expected for both groups, as it is the clearly grammatical and preferred option in standard Spanish, as well as for the central Mexican variety. Condition 5 Full DP, was also rated highly by both groups. Again, as this is a grammatical option in standard Spanish, there are no surprises here. The similarity between groups stop here. Monolinguals rate all three of the non-standard options considerably lower than conditions 1 and 5 (C1: $M=3.6$ and C5: $M=3.3$), with omission being considerably more accepted than either Condition 2 clitic lo or Condition 3 doubling (C2: $M=2$ and C3: $M=1.8$, C4: $M=2.7$). On the other hand, the bilinguals rated all options in a similar fashion (C1: $M=3.2$, C2: $M=3.1$, C4: $M=3.1$, C5: $M=3.1$), with only a slight lower rating for doubling (C3: $M=2.8$). These results suggest a clear deviation from the monolingual group in terms of acceptability judgment, as show in Figure 6.3.

![Figure 6.3 Acceptability mean scores by group and condition](image-url)
In this test, acceptability scores were the dependent variable and *semantic feature* (gender, number and animacy), *condition*, and *group* were the independent variables. The AJT results for both groups were subjected to a repeated measures ANOVA with four within-subject variables: Gender (two levels: *feminine* and *masculine*), Number (two levels: *singular* and *plural*), Animacy (two levels: *inanimate* and *animate*), and Condition (five levels: *target clitic*, *clitic lo*, *clitic doubling*, *omission*, and *full DP*); and one between-subjects factor Group (2 levels: *bilingual* and *monolingual*). The results of the ANOVA show a main effect of Gender $F(1, 38)=16.97$, $p<.001$, Number $F(1,38)=40.037$, $p<.001$, and Condition $F(4, 152)=46.313$, $p<.001$, indicating that participants treated clitic pronouns differently depending on their gender and number features, as well as the conditions in which they appeared. There was also a significant main effect for Group $F(1,38)=5.157$, $p=.029$, which indicates that the groups do differ overall in their treatment of accusative clitic pronoun. There were three significant interactions, Number and Group $F(1, 38)=6.845$, $p=0.013$, Animacy and Group $F(1,38)=39.275$, $p<.001$, and Condition and Group $F(4,152)=31.24$, $p<.001$, which indicates significant difference between the groups for all variables. Furthermore there were interactions amongst variables of Condition and Gender $F(4,152)=4.19$, $p=.003$, Condition and Number $F(4,152)=5.14$, $p <.001$ and Condition and Animacy $F(4,152)=10.10$, $p<.001$, as well as a number of three way interactions.

6.3.1.1 Condition and Group

Perhaps the most telling interaction is between condition and group, which indicates that the monolinguals and bilinguals tested did behave differently depending on the condition. The mean averages per condition and group are displayed in Figure 6.4. The pairwise comparisons of the RM ANOVA shows that there are significant differences between groups for conditions C1: *Target clitic*, C2: *Clitic lo*, C3: *Doubling*, and C4: *omission* (all $p<.05$). There was no significant difference between groups for condition C5: *Full DP*. 
Figure 6.4 AJT mean responses by condition and group

As shown above in a simple glance at the mean AJT scores for all participants, bilinguals and monolinguals differed considerably in their judgment of the non-standard structures (conditions 2-4), while both rating the target condition (C1) the highest. Despite this, results indicate a significant difference for C1, seeming to suggest that somehow monolinguals have a stricter association between the referent DP features and the clitic than bilinguals, who have a wider range of options, as indicated by their acceptance of C2, C3, and C4. The lack of significant difference between C5 Full DP is unsurprising, as it is a clearly grammatical option with overt semantic features.

These results begin to paint the picture of an overall tendency for variation among the bilingual group, and consistent differences in performance between the bilingual and monolingual groups. This becomes increasingly evident considering the interactions related to the semantic features of gender, animacy and number, which are considered in the following sections.

6.3.1.2 Analysis by feature

Adding to the general analysis of between group factors, a feature-based approach allows us to dig deeper into the causes of the differences between groups. Some of the most illuminating results can be found by looking at the effects of features at a within subjects level for each group (monolinguals/bilinguals), and then comparing these results between
groups. The results were obtained using an independent RM ANOVA for each of the three features (gender, number, and animacy) with the same conditions used in the initial analysis. The following sections present the results of these tests and address the syntactic variable of clitic position to determine if the use of proclisis or enclisis affects acceptability judgment.

6.3.1.2.1 Gender

The general ANOVA indicated a main effect for Gender $F(1, 38)=16.97$, $p<.001$. To further examine the role of gender in the AJT, an independent RM ANOVA was carried out for the feature of Gender with 2 levels –feminine vs. masculine—for the 5 conditions. The results show that there is a main effect for Gender $F(1,38)=29.081$, $p<.001$ indicating that feminine referents were judged differently from masculine referents. Not all conditions were treated the same, there was also a main effect for Condition $F(4,15)=33.3$, $p<.001$. The mean responses by group and condition are shown in Figure 6.5.

![Figure 6.5 AJT mean responses of gender by group and condition.](image)

Again, these results demonstrate that the monolingual group rate the non-standard structures low, regardless of gender, while bilinguals rated them significantly higher. Looking at within subject measures for the bilinguals, we see significant differences
between the genders for conditions C2: clitic lo, C3: doubling, (both $p<.001$) and C4: omission ($p=.045$). Monolinguals also presented significant differences for C2 and C3. When viewed in terms of gender, C2 is somewhat different from the other measures. In the case of a feminine referent, C2 represents gender neutralization {la(s)} → lo, whereas with masculine referent, C2 is an instance of number neutralization {los} → lo. Thus, it is easy to imagine why masculine may be rated higher for this condition among both groups, the simplest explanation being the relatively common syntactic and phonological phenomenon of los → lo vs. the relatively marked change la → lo. Looking at C3, doubling, we see the same pattern—the monolinguals give an overall higher rating to the non-standard structure, and both groups prefer phrases with a masculine referent. This is due to the fact that feminine referents were paired with the clitic lo in doubling situations, and both groups seem to prefer sentences that display gender agreement, despite the non-standard clitic doubled structure. Under C4, omission, monolinguals display non-significant within group difference. Bilinguals on the other hand tend to demonstrate a higher acceptance of omission with masculine referents. Finally, there were no significant differences between gender for the two standard structures (C1: target clitic and C5: Full DP) for either groups; bilinguals show high rates of acceptance regardless of gender features. It is worth noticing that when comparing conditions C1 the use of the target clitic, C5 the repetition of the DP and, C4 the omission of the clitic with masculine referents, there is a slight preference for this group to omit the clitic (C4: $M=3.3$) instead of using the clitic (C1: $M=3.2$), or the full DP (C5: $M=3.1$). Mean acceptance rates by gender are displayed in Table 6.4.

Table 6.4 Bilingual mean responses and standard deviations by Gender

<table>
<thead>
<tr>
<th>Condition</th>
<th>Feminine</th>
<th>Masculine</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Target clitic</td>
<td>3.2 (0.62)</td>
<td>3.2 (0.52)</td>
<td>0.261</td>
</tr>
<tr>
<td>2) Clitic ‘lo’</td>
<td>2.9 (0.71)</td>
<td>3.5 (0.49)</td>
<td>0.000</td>
</tr>
<tr>
<td>3) Doubling</td>
<td>2.6 (0.83)</td>
<td>3 (0.68)</td>
<td>0.001</td>
</tr>
<tr>
<td>4) Clitic omission</td>
<td>2.9 (0.7)</td>
<td>3.3 (0.64)</td>
<td>0.045</td>
</tr>
<tr>
<td>5) Full DP</td>
<td>3.1 (0.78)</td>
<td>3.1 (0.75)</td>
<td>0.947</td>
</tr>
</tbody>
</table>
6.3.1.2.2 Number

The general ANOVA indicates main effect of Number $F(1,38)=40.037, p<.001$, as well as a main interaction of Number and Group $F(1, 38)=6.845, p<.001$ suggesting that groups judged number features differently. In an attempt to better understand these results, I performed an Independent RM ANOVA for the feature of Number. Results indicate a main effect for Number $F(1, 37)=35.205, p<.001$ and a main effect for Condition $F(4,148)=41.524, p<.001$. Overall bilinguals rated all plural forms in all 5 conditions significantly higher (all $p<.05$) than their singular counterparts. This trend is also observed with monolinguals, but is only significant for C1: Target clitic and C4: omission. Figure 6.6 displays the mean responses of number by group and condition.

![Figure 6.6 AJT mean responses of number by group and condition](image)

These somewhat strange results indicate that clitic neutralization, and especially clitic doubling and omission, is preferred when there are plural features on the referent DP. For condition C2, this indicates a higher preference for neutralization of las and los into lo than for neutralization of la to lo. Following this pattern, C3 and C4 also indicate a preference for plurals, which means a preference for doubling as well as omission with plural referents. These results are counterintuitive, and seem to suggest that in general
bilinguals find sentences more acceptable when there are plural referents. The mean responses by number are displayed in Table 6.5.

Table 6.5 Bilingual mean responses and standard deviations by Number

<table>
<thead>
<tr>
<th>Condition</th>
<th>Singular</th>
<th>Plural</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Target clitic</td>
<td>2.9 (0.68)</td>
<td>3.5 (0.56)</td>
<td>0.000</td>
</tr>
<tr>
<td>2) Clitic ‘lo’</td>
<td>2.9 (0.85)</td>
<td>3.2 (0.61)</td>
<td>0.004</td>
</tr>
<tr>
<td>3) Doubling</td>
<td>2.6 (0.80)</td>
<td>3.0 (0.68)</td>
<td>0.000</td>
</tr>
<tr>
<td>4) Clitic omission</td>
<td>2.9 (0.86)</td>
<td>3.3 (0.62)</td>
<td>0.001</td>
</tr>
<tr>
<td>5) Full DP</td>
<td>2.8 (0.81)</td>
<td>3.4 (0.50)</td>
<td>0.000</td>
</tr>
</tbody>
</table>

6.3.1.2.3 Animacy

The general ANOVA also showed a main interaction between Animacy and Group $F(1,38)=39.275$, $p<.001$. This indicates that conditions were treated differently between groups depending on the animacy of the referent DP in the context sentence. The mean responses for animacy are displayed in Figure 6.7 by group and condition.

![Figure 6.7 AJT mean responses of animacy by group and condition](image-url)
A third Independent RM ANOVA was performed based on the Animacy feature with 2 levels: inanimate DP vs. animate DP. The within groups analysis for the bilinguals shows that there are significant differences between animacy categories for conditions C1: *target clitic* (*p* < .001), C2: *clitic lo* (*p* < .05), C3: *doubling* (*p* < .001), and C5: *full DP* (*p* < .05) where animate referents were rated more acceptable than their inanimate counterparts. Only C4: *omission* was found to have no animacy effect. These results indicate that explicit mention using either a DP or a clitic is generally favoured by bilinguals in the case that the referent is animate, but omission was an acceptable option regardless of animacy. Table 6.6 shows the mean acceptance rates for the bilingual group. Interestingly, the results for the monolingual group demonstrate the exact opposite pattern. As expected, animacy is irrelevant in their judgement for all conditions except omission. In the case of omission, we see a significant difference (*p* < .001) for the omission condition indicating that monolinguals prefer omission of clitic with inanimate objects, which follows the pattern established in standard Spanish.

### Table 6.6 Bilingual mean acceptability responses and standard deviations by Animacy

<table>
<thead>
<tr>
<th>Condition</th>
<th>-animate</th>
<th>+animate</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Target clitic</td>
<td>3 (0.67)</td>
<td>3.4 (0.50)</td>
<td>0.000</td>
</tr>
<tr>
<td>2) Clitic ‘lo’</td>
<td>3 (0.67)</td>
<td>3.2 (0.64)</td>
<td>0.020</td>
</tr>
<tr>
<td>3) Doubling</td>
<td>2.6 (0.78)</td>
<td>3.1 (0.71)</td>
<td>0.000</td>
</tr>
<tr>
<td>4) Clitic omission</td>
<td>3 (0.85)</td>
<td>3.2 (0.62)</td>
<td>0.126</td>
</tr>
<tr>
<td>5) Full DP</td>
<td>2.9 (0.86)</td>
<td>3.3 (0.74)</td>
<td>0.044</td>
</tr>
</tbody>
</table>

### 6.3.1.3 Clitic position

There was no difference in mean scores between groups for sentence pairs featuring clitics placed in proclitic or enclitic positions as shown in Tables 6.7 for bilinguals and 6.8 for monolinguals. This indicates that all participants are able to correctly interpret sentences with clitics in either position.
Table 6.7 Bilingual acceptability mean responses and SD for clitic position

<table>
<thead>
<tr>
<th>Condition</th>
<th>Proclitic</th>
<th>Enclitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Target clitic</td>
<td>3.2 (0.38)</td>
<td>3.2 (0.51)</td>
</tr>
<tr>
<td>2) Clitic ‘lo’</td>
<td>3.1 (0.34)</td>
<td>3.1 (0.48)</td>
</tr>
<tr>
<td>3) Doubling</td>
<td>2.8 (0.39)</td>
<td>2.9 (0.59)</td>
</tr>
</tbody>
</table>

Table 6.8 Monolingual acceptability mean responses and SD for clitic position

<table>
<thead>
<tr>
<th>Condition</th>
<th>Proclitic</th>
<th>Enclitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Target clitic</td>
<td>3.6 (0.47)</td>
<td>3.7 (0.28)</td>
</tr>
<tr>
<td>2) Clitic ‘lo’</td>
<td>1.9 (0.18)</td>
<td>2.1 (0.23)</td>
</tr>
<tr>
<td>3) Doubling</td>
<td>1.7 (0.28)</td>
<td>1.8 (0.31)</td>
</tr>
</tbody>
</table>

There is a slight difference (non-significant) for the monolingual group in condition 2, however, this could be attributed to the generally low ratings for this particular condition, rather than to the clitic position. A repeated measures ANOVA was performed targeting clitic position and the three applicable conditions: target clitic, clitic lo, and doubling. There were two within-subject variables: position and condition; and one between subjects factor: bilinguals and monolinguals. The results show that there was no effect for clitic position $F(1,37)=0.238, p=.628$. Figure 6.8 shows the means of acceptance of clitic position by condition and group.

![Acceptability mean responses for clitic position by condition and group](image)
6.3.1.4 Summary AJT

Overall results for the AJT show that bilinguals and monolinguals deviate in their judgments in all grammatical structures except for full DP. Overall, the bilingual results demonstrate a higher tendency for variability, as well as a general higher rate of acceptance for non-standard structures when compared to the monolinguals. In terms of our study, this experiment produced the following important results:

1) Both groups judge grammatical structures to be highly acceptable, but bilinguals rate target clitic structures slightly lower than monolinguals, indicating greater variability in their interpretation of the Spanish clitic system.

2) Bilinguals demonstrate a high acceptability judgement of structures containing: accusative clitic neutralization (gender/number), accusative clitic doubling, and accusative clitic omission.

3) Bilinguals rate all structures containing referent DPs with plural features more highly than their singular counterparts.

4) Bilinguals prefer explicit morphology/mention of accusative object when the object is animate, but judge omission acceptable regardless of animacy. Conversely, monolinguals judge omission significantly more acceptable when the referent is inanimate.

5) Clitic position has no effect on acceptability judgement in either group.

6.3.2 Oral Elicitation Task

Proceeding from the results of the AJT presented in the previous section, this task targeted similar structures, but instead of asking participants to judge sentences, the task was designed to elicit eight target accusative clitics, which were referents to direct object DPs with gender, number, and animacy features. After the responses were transcribed, they were coded by the type of structure that was produced, either a) target clitic (lo, la, los, las) and its clitic position (enclitic vs. proclitic); b) full DP, repeating the DP that was previously provided in the context instead of using the clitic; c) clitic doubling, using both the clitic and the DP; d) omission, neither providing a clitic nor a DP; or e) non-target clitic, using a pronoun that does not match the features of the DP. Although the
original design targeted 8 sentences with accusative clitics (one per variable), some participants produced more than one sentence per slide which were also coded. In other instances, participants failed to produce target sentences, instead saying something unrelated, using an unexpected verb, etc. These statements were discarded from the sample. The number of tokens by type of structure per participant were counted and then averaged by group. Overall, the bilingual group \((N=23)\) produced 197 tokens, the monolingual group \((N=17)\) produced 131.

### 6.3.2.1 Comparing both groups

The overall results (Table 6.9) show that Bilinguals produced 78% of target constructions either by using a clitic (32%) or by repeating the DP (46%). They produced a total of 22% of non-target constructions either by using clitic doubling (7%), clitic omission (7%), or using another clitic (8%). The monolinguals performed at 100%, producing target constructions either using a clitic (51%) or repeating the DP (49%).

Table 6.9 Total mean percentages of production by structure and group

<table>
<thead>
<tr>
<th>Group</th>
<th>Target clitic</th>
<th>Full DP</th>
<th>Clitic Doubling</th>
<th>Omission</th>
<th>Non-target clitic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilingual</td>
<td>32% ((63t))</td>
<td>46% ((90t))</td>
<td>7% ((14t))</td>
<td>7% ((14t))</td>
<td>8% ((16t))</td>
<td>100% ((197t))</td>
</tr>
<tr>
<td>Monolingual</td>
<td>51% ((67t))</td>
<td>49% ((64t))</td>
<td>0% ((14t))</td>
<td>0% ((14t))</td>
<td>0% ((16t))</td>
<td>100% ((131t))</td>
</tr>
</tbody>
</table>

The percentages of all 5 structures were submitted to a one-way multivariate ANOVA by type of structure to determine if there were significant differences between groups. The results of the MANOVA show no significance for target clitic \((p=0.073)\) and full DP \((p=0.686)\), but proved significant for doubling, omission, and non-target clitic (all \(p<0.05\)). These results indicate that both groups typically produce standard structures; however, while monolinguals produce no variation, bilinguals do. This variation is reflected in the production of the observed non-standard structures.
Results were further analyzed by clitic pronoun (Table 6.10). The column ‘Clitic’ represents the target clitic that the task was designed to elicit. For instance, in the case of *lo*, the participant was presented with a singular masculine referent DP, for *las*, they were presented with a plural feminine DP. The condition columns (Target Clitic, Full DP, etc.) show what the participant actually produced. Bilinguals produced instances of clitic doubling, clitic omission, and use of another clitic (neutralization) with all four types of referents ([±masculine] and [±singular] DPs). Non-standard production was relatively, consistent across all three conditions—clitic doubling \((k=14; 7\%)\), omission \((k=14; 7\%)\), and non-target clitic \((k=16; 8\%)\)—as well as across pronouns (Figure 6.9). Regardless of the gender/number features of the target pronoun, bilinguals produced a non-standard variant approximately 20-30% of the time. It is worth noting that both groups had a higher preference for repeating the DP instead of using the clitic with all types of referents except for the masculine singular. With this type of referent, the bilinguals produced the clitic (40%) and the DP (40%) equally, but the monolinguals preferred the use of the clitic (68%) over the use of the DP (32%).

Table 6.10 Mean percentages of production of pronouns by condition and group

<table>
<thead>
<tr>
<th>Clitic</th>
<th>Group</th>
<th>Target clitic</th>
<th>Full DP</th>
<th>Clitic Doubling</th>
<th>Omission</th>
<th>Other clitic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO</td>
<td>Bilingual</td>
<td>40% (23t)</td>
<td>40% (23t)</td>
<td>7% (4t)</td>
<td>7% (4t)</td>
<td>7% (4t)</td>
<td>100% (58t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>68% (23t)</td>
<td>32% (11)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>100% (34t)</td>
</tr>
<tr>
<td>LA</td>
<td>Bilingual</td>
<td>36% (15t)</td>
<td>40% (17t)</td>
<td>10% (4t)</td>
<td>7% (3t)</td>
<td>7% (3t)</td>
<td>100% (42t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>41% (13t)</td>
<td>59% (19t)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>100% (32t)</td>
</tr>
<tr>
<td>LOS</td>
<td>Bilingual</td>
<td>27% (16t)</td>
<td>54% (32t)</td>
<td>3% (2t)</td>
<td>5% (3t)</td>
<td>10% (6t)</td>
<td>100% (39t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>45% (15t)</td>
<td>55% (18t)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>100% (33t)</td>
</tr>
<tr>
<td>LAS</td>
<td>Bilingual</td>
<td>24% (9t)</td>
<td>47% (18t)</td>
<td>11% (4t)</td>
<td>11% (4t)</td>
<td>8% (3t)</td>
<td>100% (38t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>50% (16t)</td>
<td>50% (16t)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>100% (32t)</td>
</tr>
</tbody>
</table>
6.3.2.1.1 Clitic Position

For all productions with a clitic (target clitic, doubling, and non-target clitic), position was counted in order to see if there was preference of use for either position. Results show that both groups produced more enclisis (B: 27%, M: 34%) than proclisis (B: 20%, M: 18%). An independent Repeated Measures ANOVA was performed with one within-subject variable Position (2 levels: proclitic vs. enclitic) and one between subjects factor: bilinguals and monolingual. The results show a significant main effect of Position $F(1,36)=4.998, p=.032$ indicating that overall more enclitics were produced than proclitics. However, there was no significant interaction between position and group indicating that there is no difference between groups—both groups produce more accusative enclitics than proclitics. Table 6.11 shows the distribution of clitics by position and group.

Table 6.11 Distribution of proclitics and enclitics in both groups

<table>
<thead>
<tr>
<th></th>
<th>Proclitics</th>
<th>Enclitics</th>
<th>Full DP</th>
<th>Omission</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilinguals</td>
<td>20% (39t)</td>
<td>27% (54t)</td>
<td>46% (90t)</td>
<td>7% (14t)</td>
<td>100% (197t)</td>
</tr>
<tr>
<td>Monolinguals</td>
<td>18% (23t)</td>
<td>34% (44t)</td>
<td>49% (64t)</td>
<td>0% (0)</td>
<td>100% (131t)</td>
</tr>
</tbody>
</table>
6.3.2.2 Analysis of non-standard structures

Aside from demonstrating the statistical variation in the production of non-standard forms between bilingual and monolingual participants, the OET presents the unique opportunity to observe structures actually produced by bilingual speakers. This is particularly valuable in the context of my study, as we are interested in the specifics of linguistic production as evidence of processes of interference and convergence. The following sections are dedicated to analyzing the 22% of tokens produced by the bilingual participants that were non-standard forms, breaking them down by condition to illustrate the intricacies of the variation produced by these speakers.

6.3.2.2.1 Clitic doubling

There were a total of 14 instances (7%) of clitic doubling. When separated by the semantic feature of the referent, there were: six [+masculine], eight [-masculine], eight [+singular], six [-singular], ten [+animate], and four [-animate]. Of these, ten had clitic agreement with the DP as in (4) with clitic lo (4a), clitic los (4b), clitic la (4c) and clitic las (4d).

(4) a. Lo quiere llevar al perrito también a donde va él.
   CL3.ACC.M.SG wants take a-the little-dog also to where goes he.
   ‘(he) wants to also take the little dog with him wherever he goes’.  (B103)

b. Beto tiene mucho tiempo que no los miraba a sus abuelitos.
   Beto has a lot time that not CL3.ACC.M.PL seen DOM his grandparents
   ‘Beto has not seen his grandparents in long time.’ (B102)

c. Ver=la a su abuelita.
   See-CL3.ACC.F.SG DOM her grandmother
   ‘To see her grandmother.’  (B117)

4 These indicate the participant who produce the example by group (B=bilingual; M=monolingual) and by participant number.
There were, however, 4 instances of mismatch between the features of the clitic and those of the DP. Each of these was an instance of gender neutralization, either \(la \rightarrow lo\) (5a), and \(las \rightarrow los\) (5b). Note that number features were maintained despite gender neutralization.

It is worth noting that although there were instances in the corpus of incorrect gender assignment to nouns, in these instances of clitic doubling all participants assigned the correct gender to the DP even if they did not produce agreement when doubling the clitic (5a).

(5)  

a. \(Lo \ quiere \ vender \ la \ casa\)  
\(CL3.ACC.M.SG \) wants to-sell \(theF.SG\) house  
‘(he) wants to sell the house.’

b. \(Pues \ Andrea \ tenía \ rato \ que \ no \ miraba \ sus \ primas\)  
Well Andrea had \(time\) that \(not CL3.ACC.M.PL\) seen \(her\) cousins\(F.PL\)  
‘Well Andrea had not seen her cousins in a while’

I also found two instances from two different participants in which the clitic was produced in both positions (proclitic and enclitic). This occurred exclusively with masculine singular animate referents as in (6).

(6)  

a. \(Lo \ quiere \ llevar=lo\)  
\(CL3.ACC.M.SG \) wants to-take\(CL3.ACC.M.SG\)  
‘(he) wants to take it’

b. \(Lo \ quiere \ llevar=se=lo \ a \ su \ trabajo\).  
\(CL3.ACC.M.SG \) wants to-take\(CL3.DAT-CL3.ACC.M.SG\) to his job  
‘(he) wants to take it to his job’
In terms of clitic position, 11 of the 14 clitic doubling constructions were produced in proclitic position and only three in the enclitic position. This indicates the possibility of clitic doubling in both positions, but there is a tendency to do it more in the proclitic position.

6.3.2.2.2 Omission

Participants produced a total of 14 instances of omission with the four types of referent DPs: masculine singular (7a), masculine plural (7b), feminine singular (7c), and feminine plural (7d). There did not seem to be any preference to drop objects/omit clitics based on number or gender. There were 8 omissions where the DP had an inanimate referent and 6 with animates, suggesting a slight preference to omit when the referent is [-animate]. Although definiteness was not one of the variables of the experimental design, all referent DPs were definite in the contexts given. We see here that omission is possible with definite referents, unlike standard Spanish.

(7) a. Le daba lástima dejar solito [el perro]
    CL3.DAT gave pity leave alone [the dog]
    ‘He felt bad leaving it alone’
    (B102)

    b. Pues Ana ya hizo sus compras para preparar y
    So Ana already made her shopping to prepare and
    tiene que empezar a hacer [los tamales]
    has to start to make [the tamales]
    ‘So Ana already did her shopping to prepare them and has to start to make them.’
    (B112)

    c. Ya nunca fue a visitar pues [a su abuelita]
    Already never went to visit so [her grandmother]
    ‘She never went to visit her’
    (B110)
d. Cuando se encontraron le dio mucho gusto por eso fue a visitar sus primas
When they met CL3.DAT gave a lot of joy that’s why went to visit [her cousins]
‘When they met she was very happy so that’s why she went to visit them’

(8) a. El niño fue a visitar a su abuela. Y como tenía rato
The boy went to visit his grandmother. And since had while
que no lo miraba y le dio mucho gusto
that not CL3.ACC.MSG seen and CL3.DAT gave lots joy
‘The boy went to visit his grandmother. And since (he) had not seen her in a
while, he was glad to see her.’

(8) b. Cocinar=lo pues cocer las corundas.
To-cook=CL3.ACC.MSG well to-cook the.F.PL corundas.F.PL
‘To cook them, well to steam the corundas.’

6.3.2.2.3 Non-target clitic

There were 16 instances (8%) of production of a non-target clitic. These were identified by comparing the clitic produced with the referent DP mentioned previously by the speaker and/or the referent DP in the context given in the task. The results show that for [-masculine] [+singular] referent DPs, there were 3 instances of neutralization that all defaulted to clitic lo (8a). For the feminine plural DPs there were 3 instances, one that defaulted to lo (8b), and two that defaulted to los (8c). For the [+masculine] [+singular], there were 4 tokens that used the dative clitic: three occurrences of le (8d) and one of les (8e). In these examples, the participants are using a dative construction rather than neutralizing case, however, by doing so they are omitting the direct object in three of the examples. For instance, in (8d) the direct object is dropped, but the participant did not specify the referent of the indirect object. Therefore, it is unclear whether the participant used a dative construction with no IO doubling or if s/he was neutralizing the clitic to refer to the DO.
c. Pues ya los, fue a visitar ya están ahí con sus primas.

Well already CL3.ACC.M.PL went to visit already they-are there with their cousins.

‘Well (she) already went to visit them, (she) is there with her cousins.’

(B104)

d. Les está llevando [el libro]

CL3.DAT is taking [the book]

‘He is taking it’

(B101)

e. Le voy a llevar a un compañero [el libro]

CL3.DAT going to-take to a classmate [the book]

‘He is going to take it to a classmate’

(B109)

Finally for [+masculine] [-singular] referents, there were six instances of non-target pronouns: one to lo (9a), four to las (9b), and one to les (9c). In example 9a, it is clear that number is being neutralized since the participant was referring to los tamales. In example 9b, the participant refers first to los tamales, but then uses the clitic for a feminine plural. In example 9c, the participant is referring to the price of the paintings los cuadros, for which s/he uses the clitic los with the verb ‘to see’ viéndolos, but s/he uses the dative clitic les with verb ‘to give’ darles, which is a verb that normally takes two internal arguments and thus typically is paired with the dative clitic.

(9) a. Context: ¿Qué va a hacer ahora? [con los tamales]

‘What are is she going to do now? [with the tamalesM.PL]’

Response: Cocer=lo

To-cook-CL3.ACC.M.SG

‘To cook them’

(B105)

b. Tiene que hacer los tamales, y después cocinar=las

(she) has to make the tamalesM.PL and after cook-CL3.ACC.F.PL

‘She has to make the tamales and afterwards cook them’

(B108)
c. (está) viéndolo los [los cuadros] a ver como para dar=les

(he-is) seeing-CL3.ACC.M.PL [the paintings] to-see how to give-CL3.DAT

a como qué precio

at what price

‘He is seeing them to see what price to give them’ (B103)

Table 6.12 presents a summary of the distribution of clitics in non-target contexts. Notice that with the exception of three tokens, number is not usually neutralized. Also, the dative clitic was only produced with a masculine referent. In terms of animacy, 11 tokens had inanimate referents and only five tokens had animate referents. This seems to indicate that participants tend to neutralize in the context of inanimate referents.

Table 6.12 Distribution of non-target clitics

<table>
<thead>
<tr>
<th>Referent</th>
<th>DP</th>
<th>Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>lo</td>
</tr>
<tr>
<td>Feminine</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Masculine</td>
<td></td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

6.3.3 Summary of both tasks

The following is a summary outlining the main findings paralleling both tasks in order to understand the salient patterns in the variety of the bilinguals. A summary comparing both tasks by condition and group is displayed in Table 6.13.

Clitic Position

In the AJT neither group showed preference for either position. In contrast, in the OET there was a significantly higher production of enclitics than proclitics for both groups.

Target clitic/DP

In the AJT bilinguals had a mean acceptance score of $M=3.2$ (on a Likert scale of 1-4) with sentences containing target clitics and $M=3.1$ with full DP constructions. The
monolinguals produced a mean acceptance of $M=3.6$ with target clitics and $M=3.3$ with full DP constructions. In the OET bilinguals produced 78% target constructions either with a clitic (32%) or with a DP (46%) and only 22% of non-target uses. Monolinguals had 100% target use either with a clitic (51%) or with a DP (49%). There were no significant differences between groups in the Full DP structure for both tasks.

**Clitic Doubling**

In the AJT, bilinguals had a mean acceptance of $M=2.8$ for sentences with a clitic and a post-verbal DP –especially when the DP was [+animate]. The monolinguals judged this condition less favourably ($M=1.8$). In the OET, bilinguals produced clitic doubling structures 7% of the time, mostly with [+animate] referents. Monolinguals did not produce clitic doubling.

**Omission**

In the AJT, bilinguals had a mean acceptance of $M=3.1$ for sentences with clitic omission –mainly with plurals and with both animate and inanimate referents. Monolingual rated these structures lower ($M=2.7$), mostly with [-animate] referents. In the OET bilinguals omitted the clitic in 7% of sentences, mostly with [-animate] referents. The monolinguals did not produce omission.

**Non-target clitic**

In the AJT, bilinguals had a mean acceptance rate of $M=3.1$ for sentences with neutralization of the clitics *la, los,* and *las* into *lo* irrespective of animacy features, while the monolinguals judged these sentences considerably less favourably ($M=2.0$). In the OET bilinguals produced 8% of non-target clitics mostly with [-animate] referents. Monolinguals did not produce any non-target clitics.
<table>
<thead>
<tr>
<th>Condition</th>
<th>AJT (acceptability mean scores)</th>
<th>OET (production rates)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bilingual</td>
<td>Monolingual</td>
</tr>
<tr>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclitic</td>
<td>3.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Proclitic</td>
<td>3.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clitic</td>
<td>3.2</td>
<td>3.6</td>
</tr>
<tr>
<td>DP</td>
<td>3.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Clitic doubling</td>
<td>2.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Omission</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Non-target clitic</td>
<td>3.1</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Chapter 7

7 Experiment 2: Dative Clitics

This chapter is dedicated to the experiment performed using constructions with dative clitics. I begin by laying out the research questions and specific hypotheses pertinent to dative clitics, DOCs, and the applicative voice based on the theoretical framework discussed in chapter 2, Cuervo’s analysis of the Spanish dative alternation (§3.2.3), and the use of the applicative voice in P’urhépecha (§3.5.5). In section 7.2, I present the relevant details of the experimental design. Finally, in section 7.3, I present the results of the AJT followed by the results of the OET.

7.1 Research questions and hypothesis

The overarching research question is whether there is influence or convergence in the Spanish of these bilinguals in terms of how they express indirect objects in Spanish. Based on the use of the applicative voice in P’urhépecha and Cuervo’s analysis of the dative alternation and applicative voice in Spanish, I investigate the following research questions.

1. Do P’urhépecha-Spanish bilinguals map the applicative voice in P’urhépecha to the Spanish dative clitic le?

2. Is this visible in the Spanish grammar of P’urhépecha-Spanish bilinguals based on their use of the clitic le with the Spanish equivalents of derived/non-derived P’urhépecha verbs?

The following hypothesis details the expected answers to the above questions, based on expected processes of functional interference centered around the parallel functional category of the applicative voice in both languages in the bilingual grammar.

1. P’urhépecha-Spanish bilinguals will favour doubling by a dative clitic le in double object constructions only with the Spanish lexical equivalents of derived verbs, while showing a preference for the PPC phrase alternate with non-derived verbs in the case that the preposition is a. This hypothesis is predicated on the
assumption that the applicative voice in P’urhépecha and the applicative voice in Spanish represent a parallel functional category, and that bilinguals map P’urhépecha applicative features to the dative clitic le (see § 3.2.3).

7.2 Experimental design

For this experiment, participants performed an Acceptability Judgement Task and an Oral Elicitation Task. The AJT was conducted aurally. Participants listened to two sentences sequentially—a context sentence and a target sentence—and then rated their acceptability on a scale of 1 to 4. This task was designed to determine whether participants accepted or rejected double object constructions with clitic le, clitic lo, or no clitic. To complement these judgments, the OET targeted the same type of DOCs, but here participants were expected to either produce a DOC or a prepositional phrase construction (PPC). The main independent variable for this experiment is the type of verb: derived vs. non-derived. This distinction is borrowed from studies of P’urhépecha, and the verb type was mapped from P’urhépecha to its lexical equivalent in Spanish.

7.2.1 Acceptability Judgement Task

This part of the experiment was designed to determine if the P’urhépecha applicative voice mapped onto the Spanish dative clitic le in double object constructions, and if so, how these constructions are judged by bilingual speakers depending on verb type. Three conditions were tested to account for the possible outcomes of this phenomenon: 1) target use of the dative clitic; 2) neutralization of the dative clitic into lo; and 3) dative clitic omission. The independent variables were: type of verb—derived vs. non-derived; and clitic position –enclitic vs. proclitic. All combinations of variables were used for each of the three conditions yielding a total of 24 tokens, composed of a context sentence and a follow-up target sentence containing one of the three conditions. Figure 7.1 summarizes the dative experimental design.
**Figure 7.1** Experimental design of variables targeting dative clitics

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5 The chart design is condensed. Only the Derived *comprar* and Non-derived *prestar* are fully fleshed out. The rest of the verbs follow the same design.
Similar to the accusative clitic design, the context sentence provided the DP of the direct object. However, for dative constructions the context sentence also provided the second participant, or indirect object. The follow-up target sentence then provided the subject, the verb, a clitic (except in the omission condition) and the overt direct object. As in DOCs it is optional to express an overt indirect object, all target sentences had null IOs since the dative clitic is obligatory when the IO is not expressed in DOCs.

(1)

Context sentence

El esposo de Laura necesita un pantalón nuevo, por eso...
The husband of Laura needs a pants new, that’s why...

Target sentence

Laura le va a comprar un pantalón nuevo [a su esposo].
Laura CL3.DAT is going to buy a pant new [for her husband]

“Laura’s husband needs a new pair of pants, that is why Laura is going to buy a new pair for him.”

All direct objects DPs were given masculine gender and singular number. This was done to remove any possible distracting gender or number features in the tokens, as here the goal is to focus solely on case. Furthermore, in the case of condition 2 lo, I did not want the obvious mismatch between gender/number and clitic to effect participant judgement of target sentences. The Table 7.1 summarizes the objects used with each one of the verbs.
Table 7.1 Combination of variables for targeting dative clitics in the AJT

<table>
<thead>
<tr>
<th>Variable</th>
<th>Verb</th>
<th>DO</th>
<th>IO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derived 1</td>
<td>comprar</td>
<td>pantalón</td>
<td>esposo</td>
</tr>
<tr>
<td></td>
<td>[+masc,+sing]</td>
<td>[+masc,+sing]</td>
<td></td>
</tr>
<tr>
<td>Derived 2</td>
<td>cocinar</td>
<td>desayuno</td>
<td>hijos</td>
</tr>
<tr>
<td></td>
<td>[+masc,+sing]</td>
<td>[+masc,-sing]</td>
<td></td>
</tr>
<tr>
<td>Non-D 1</td>
<td>prestar</td>
<td>dinero</td>
<td>amigo</td>
</tr>
<tr>
<td></td>
<td>[+masc,+sing]</td>
<td>[+masc,+sing]</td>
<td></td>
</tr>
<tr>
<td>Non-D 2</td>
<td>quitar</td>
<td>dolor</td>
<td>pacientes</td>
</tr>
<tr>
<td></td>
<td>[+masc,+sing]</td>
<td>[+masc,-sing]</td>
<td></td>
</tr>
</tbody>
</table>

**Type of Verb**

Verbs were selected and divided into categories based on the distinction between derived and non-derived verbs. Recall from section 3.5.5 that in P’urhépecha a non-derived verb always takes two objects, and is always a DOC with no available PPC alternate and does not require an applicative morpheme. Derived verbs participate in a dative alternation, but in the case that they are a DOC, they require the applicative voice. With this in mind, four P’urhépecha verbs were chosen, based on both their valence and defined by Capistrán (2015), and the availability of a direct translation to Spanish. For derived verbs, I selected *pyáni* ‘buy’ and *úkusti* ‘prepare food’, which both require the applicative voice when adding a third argument to the verb in DOCs. For non-derived verbs, I selected *kwánita* ‘lend/borrow’ and *ewá* ‘take away’, which always produce DOCs and prohibit the applicative voice. These verbs were then translated to their Spanish equivalents: *comprar* ‘to buy’, *cocinar* ‘to cook’, *prestar* ‘to borrow’, and *quitar* ‘to take away’. This resulted in six tokens per verb for a total of 24 sentences divided into the three conditions mentioned above (C1: target clitic, C2: clitic lo, and C3: omission), in which C1 and C2 also had the variable of clitic position.

**Clitic position**

Clitic position was also taken into account to determine whether the bilingual group exhibits a preference for the enclisis or proclisis position in DOCs. Stimuli for conditions 1 and 2 included four tokens with enclisis and four tokens with proclisis for a total of eight tokens each. As condition 3 omission lacks a clitic, clitic position was not relevant for these tokens. In order to produce 8 tokens for this condition, I simply used each of the verbs twice.
7.2.1.1 Conditions

Each condition was designed to test a different possible outcome of feature mapping from P’urhépecha to Spanish. Condition 1, target clitic, tested whether participants accepted or rejected the dative clitic with derived and non-derived verbs. Condition 2 clitic lo tested whether participants accepted or rejected case neutralization by using lo instead of le/les. Condition 3 clitic omission tested whether participants accepted omission of dative clitics equally or differently with the two types of verbs. Due to the complexities of the argument structures, thematic roles, and their comparison between languages, I believe that each condition deserves to be discussed more thoroughly. Therefore, the following section details how results were analyzed for each type of construction as in each of the three conditions tested. Table 7.2 provides a summary of the expected responses by each group per condition and per type of verb.

Condition 1 vs. Condition 3: Target dative clitic le/les vs. omission

Recall Cuervo’s (2003b) analysis in §3.2.3 for the dative alternation in Spanish. Verbs with a ditransitive predicate can participate in an alternation between a DOC with the clitic le and dative marker a and a PPC with one of a variety of prepositions, including a. For derived verbs that have a PPC alternate with preposition other than a, it is easy to identify the DOC (with clitic le) (2a), the alternate PPC (2b), as well as a clear case of clitic omission (2c) when it should be required in the DOC with the dative marker a. Comparing Spanish derived verb structures to P’urhépecha is quite straightforward, as the grammatical options are the same. Recalling section 3.5.5, derived verbs in P’urhépecha also participate in a dative alternation, and always require an applicative morpheme in the case of a DOC. Dealing with non-derived verbs is slightly more complex. Because the majority of Spanish lexical equivalents of P’urhépecha non-derived verbs pair with the preposition a, there is no clear case of omission. Instead, we see the presence/absence of clitic le, and interpret the a as either the dative marker (3a) or a preposition (3b), respectively. This presents an interesting challenge for the analysis for both the AJT and OET data under my hypothesis. Although we accept that for these verbs, the absence of a clitic signifies a PPC, I treat these as cases of omission. I do this because I believe that to a bilingual speaker, it is not obvious, as it is with derived verbs, that this is truly a dative
alternation. Instead, it appears to be a situation of optionality—even linguistics treated these structures as such until relatively recently. Thus, when we see that a bilingual “omits” the *le* for a non-derived verb, this represents a choice to not use applicative morphology, as opposed to a choice to use a PPC alternate. This treatment allows us to draw a parallel between these structures in Spanish and phrase structure in P’urhépecha for non-derived verbs, which do not present a dative alternation, nor an applicative morpheme. Thus, we expect bilingual speakers to always prefer “omission” (the PPC) for non-derived verbs (3b), when the preposition is *a*, over the DOC (3a).

(2) **Derived verb:**

a. María *(le)* compra los libros *(a Carlos)*
   María CL3.DAT buys the books *(for Carlos)*

b. María *(le)* compra los libros para Carlos
   María buys the books for Carlos

c. *María compra los libros a Carlos
   María buys the books for Carlos

‘Maria buys books for Carlos’

(3) **Non-derived verb:**

a. María *(le)* presta los libros a Carlos.
   María CL3.DAT lends the books to Carlos.

b. María Ø presta los libros a Carlos
   María lends the books to Carlos

c. *María presta los libros para Carlos

‘Maria lends the books to Carlos’

Looking a bit more closely at omission, we find a caveat—since the IO nominal is implicit in the target sentences, a sentence like (4) is read like a normal transitive sentence. It is only based on the previous context that participants know that there should be an IO. However, since this is lacking these sentences could be judged acceptable for both groups as they are grammatical if interpreted as transitive constructions.
Derived Verb:

(4) Laura Ø está comprando un pantalón (a su esposo)

Laura is buying a pant

‘Laura is buying a pair of pants.’

Condition 2: Neutralization clitic lo

To determine whether bilinguals neutralize case in dative clitics (i.e. le → lo) (Condition 2), it was necessary to distinguish accusative clitics from dative clitics. In Spanish this can only be achieved by focusing on 3rd person clitics, as they have different forms (unlike first/second person clitics). Neutralization of dative case should be altogether unacceptable for the monolingual speakers. For bilingual speakers, the use of the clitic lo could be interpreted as either using the neutral, accusative clitic as a morphological marker for the applicative voice, or an accusative clitic doubled structure that coindexes the clitic with the DO nominal, both of which are ungrammatical in standard Spanish as in (5) and (6).

Derived verb:

(5) *Lo está comprando un pantalón

CL3,ACC.M.SG is buying a pant

‘s/he is buying a pair of pants’

Non-derived verb:

(6) *Su amigo lo está prestando dinero

his friend CL3,ACC.M.SG is lending money

‘His friend is lending [him/her] money.’
Table 7.2 Expected responses by condition, type of verb and group

<table>
<thead>
<tr>
<th>Condition</th>
<th>Type of verb</th>
<th>Bilingual expected response</th>
<th>Monolingual expected response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Derived</td>
<td><strong>Accept</strong> (P’urhépecha requires ApplIV)</td>
<td><strong>Accept</strong> (Spanish requires le in DOC)</td>
</tr>
<tr>
<td>Target <em>le</em></td>
<td>Non-derived</td>
<td><strong>Reject</strong> (P’urhépecha does not require ApplIV)</td>
<td><strong>Accept</strong> (Spanish requires le in DOC)</td>
</tr>
<tr>
<td>Omission</td>
<td>Derived</td>
<td><strong>Reject</strong> (P’urhépecha requires ApplIV)</td>
<td><strong>Reject</strong> (Spanish requires le in DOC)</td>
</tr>
<tr>
<td></td>
<td>Non-derived</td>
<td><strong>Accept</strong> (P’urhépecha does not require ApplIV)</td>
<td><strong>Reject</strong> (if interpreted as DOC) <strong>Accept</strong> (if interpreted as PPC)</td>
</tr>
<tr>
<td>Clitic <em>lo</em></td>
<td>Derived</td>
<td><strong>Accept</strong> (if interpreted as clitic doubling)</td>
<td><strong>Reject</strong></td>
</tr>
<tr>
<td></td>
<td>Non-derived</td>
<td><strong>Accept</strong> (if interpreted as clitic doubling) <strong>Reject</strong></td>
<td></td>
</tr>
</tbody>
</table>

7.2.2 Oral Elicitation Task

The OET for dative clitics consisted of 16 slides that contained a context sentence, a question, a picture and a verb. Participants were asked to respond to the question (read out loud by me) using the context, the picture and verb given. The variables used for the OET were the same as those used in the AJT: two derived verbs (*comprar* and *cocinar*), and two non-derived verbs (*prestar* and *quitar*). For the direct object DPs, I attempted to keep the gender and number variables constant by only using images of masculine, singular nouns. Despite this, participants had the option to produce any nominal that they saw fit. For example, even though the slide presented an image of ice cream “el helado”, a masculine singular noun, one participant produced the near synonym “la nieve”, a feminine noun used to refer to frozen treats in Mexico. Therefore, controlling the gender
and number of the direct objects was not entirely possible, but it also was not of paramount importance. The indirect object arguments were all animate nouns with both gender and number features; the combination of these features yielded four tokens per verb for a total of 16 scenarios as shown in Table 7.3.

Table 7.3 Combination of variable for targeting dative clitics in the OET

<table>
<thead>
<tr>
<th>Variable</th>
<th>Verb</th>
<th>Gender</th>
<th>Number</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Comprar</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>hijo</td>
</tr>
<tr>
<td>D2</td>
<td>Comprar</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>hija</td>
</tr>
<tr>
<td>D3</td>
<td>Comprar</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>nietos</td>
</tr>
<tr>
<td>D4</td>
<td>Comprar</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>amigas</td>
</tr>
<tr>
<td>D5</td>
<td>Cocinar</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>esposo</td>
</tr>
<tr>
<td>D6</td>
<td>Cocinar</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>hija</td>
</tr>
<tr>
<td>D7</td>
<td>Cocinar</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>amigos</td>
</tr>
<tr>
<td>D8</td>
<td>Cocinar</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>amigas</td>
</tr>
<tr>
<td>D9</td>
<td>Prestar</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>Carlos</td>
</tr>
<tr>
<td>D10</td>
<td>Prestar</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>María</td>
</tr>
<tr>
<td>D11</td>
<td>Prestar</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>alumnos</td>
</tr>
<tr>
<td>D12</td>
<td>Prestar</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>hijas</td>
</tr>
<tr>
<td>D13</td>
<td>Quitar</td>
<td>[+masc]</td>
<td>[+sing]</td>
<td>Juanito</td>
</tr>
<tr>
<td>D14</td>
<td>Quitar</td>
<td>[+fem]</td>
<td>[+sing]</td>
<td>hermana</td>
</tr>
<tr>
<td>D15</td>
<td>Quitar</td>
<td>[+masc]</td>
<td>[+plu]</td>
<td>niñas</td>
</tr>
<tr>
<td>D16</td>
<td>Quitar</td>
<td>[+fem]</td>
<td>[+plu]</td>
<td>niñas</td>
</tr>
</tbody>
</table>

The following example (Figure 7.2) shows a scenario targeting a singular dative clitic. In this scenario the possible answers in the standard variety would be one of the four sentences presented in (7). Although these stimuli were designed to elicit the dative clitic plus the direct object nominal (7 a/b), responses with clitic clusters were still possible (7 c/d).
Mario siempre molesta a su hermanita. ¿Qué está haciendo Mario?

Figure 7.2 Sample scenario of elicited production task targeting a dative clitic

(7)

a. Enclitic: Mario está quitándole el oso a su hermanita.
   Mario is taking-away-CL3.DAT.SG the bear to his sister

b. Proclitic: Mario le está quitando el osito a su hermanita.
   Mario CL3.DAT.SG is taking-away the bear to his sister

c. Enclitic: Mario se lo está quitando
   Mario CL3.DAT CL3.ACC.M.SG is taking-away

d. Proclitic: Mario está quitándole se=lo
   Mario is taking-away-CL3.DAT-CL3.ACC.M.SG
7.3 Results

In this section, I present the results of the AJT task first, then of the OET, and finally a summary of both tasks.

7.3.1 Acceptability Judgment Task

To review, the AJT presented a total of 24 sentences targeting dative clitics that were divided into three conditions. Participants were required to judge acceptability on a scale of 1-4. The three conditions consisted of: 1) target clitic le/les, 2) clitic lo, and 3) omission of dative clitic. Half of the sentences featured the derived verbs comprar ‘to buy’ and cocinar ‘to cook’, and the other half had the non-derived verbs prestar ‘to borrow’ and quitar ‘to take away’. Also, clitic position was tested in both pro- and enclitic position for sentences in both conditions. Table 7.4 summarizes the overall results of acceptability mean ratings by type of verb, condition and group.

Table 7.4 Acceptability mean scores and SD for dative clitics by type

<table>
<thead>
<tr>
<th>Condition</th>
<th>Derived</th>
<th>Non-derived</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bilingual</td>
<td>Monolingual</td>
</tr>
<tr>
<td>1) Target clitic</td>
<td>3.7 (0.48)</td>
<td>3.4 (0.57)</td>
</tr>
<tr>
<td>2) Clitic lo</td>
<td>3.1 (0.9)</td>
<td>1.8 (0.84)</td>
</tr>
<tr>
<td>3) Omission</td>
<td>3.6 (0.57)</td>
<td>3.6 (0.54)</td>
</tr>
</tbody>
</table>

Condition 1 (target clitic) is the grammatical option for all target sentences. As shown in Table 7.4 this condition had high acceptance rates for both groups and across verb type. Condition 2 (clitic lo) is the ungrammatical option in standard Spanish. Here we see that monolinguals rated it the lowest of all the conditions (M=1.8), but bilinguals had high rates of acceptance (M=3.1/2.8). Condition 3 (omission) was deemed highly acceptable by both groups for derived verbs, and notably less so with non-derived verbs, particularly in the case of monolinguals (M=2.5). These results are shown in Figure 7.3. As with the results presented in the previous chapter, we immediately begin to see more variation in the bilingual grammar, illustrated by bilinguals’ higher rating overall of non-standard structures.
The average acceptability ratings of both groups were subjected to a repeated measures ANOVA with two within-subject variables: Type of verb (2 levels: derived vs. non-derived) and Condition (3 levels: target clitic, clitic lo and omission); and one between-subjects factor Group (2 levels: bilingual and monolingual). The results of the ANOVA indicate a main effect of Type of verb $F(1,38)=21.73, p<.001$, and Condition $F(2,49)=65.03, p<.001$; and an interaction between Type and Condition $F(2,75)=18.5, p<.001$, indicating that the conditions were treated differently depending on the type of verb. There was also a significant main effect of Group $F(1,38)=10.41, p=.003$, an interaction between Condition and Group $F(2,49)=16.97, p=.000$, and a three-way interaction among Type*Condition*Group $F(2,75)=9.97, p<.001$.

To explore these interactions, I performed an independent RM ANOVA for each type of verb. For derived verbs, there was a main effect for Condition $F(2,76)=56.055, p<.001$ and Group $F(1,38)=14.186, p<.001$, indicating that groups did treat conditions differently; however, pairwise comparisons show no significant difference between groups for Condition 1 target clitic ($p=.055$) nor for Condition 3 omission ($p=.968$). The source of the difference is C2, clitic lo, for which pairwise comparisons showed a significant difference ($p<.001$). The source of variation with respect to bilinguals’ judgement of C2 is unclear—while it is possible that this is a case of neutralization, it is highly likely that these structures are viewed as instances of accusative clitic doubling by the participants. Despite this uncertainty, the monolingual participants provided extremely low ratings for these structures with both types of verbs, again indicating a more rigid adherence to a “standard” central Mexican dialect.

For the Non-derived verbs, there was a main effect for Condition $F(2,76)=47.979, p<.001$ as well as for Group $F(1,38)=5.125, p=.029$. The pairwise comparisons indicate that for C1: target clitic there were no significant differences between groups ($p=.171$). However, there were significant differences between groups for the other two conditions C2: clitic lo ($p<.001$) and C3: omission ($p=.026$). Condition 3 here is of particular interest, because as my hypothesis states, we expect bilinguals to rate the omission of the clitic le with non-derived DOCs more favourably than the monolinguals, and they do.
Figure 7.3 AJT mean responses by type of verb, condition, and group

It stands out on Figure 7.3 that both groups appear to rate omission with derived verbs very high. This is contrary to what was expected, especially with the bilingual group, whose members were expected to prefer the dative clitic le with derived verbs due to L1 influence. However, as noted above in section 7.2.1, the token sentences were ambiguous due to the lack of an explicit IO, and could be interpreted as regular transitive constructions instead of DOCs, which would require the clitic le.

**Clitic position**

Enclitic and proclitic position was taken into account for the two applicable conditions: target clitic and clitic lo. Results show that both groups of participants do not have preference for either position, as the ratings are pretty much equal between groups. An independent repeated measures ANOVA was performed for the conditions. There was one within-subject variable: position and condition; and one between-subjects factor: bilinguals and monolinguals. The results show that there was no effect for clitic position $F(1,38)=0.676, p=0.416$. Figure 7.4 shows the means of acceptance of clitic position.
Figure 7.4 Acceptability mean responses of clitic position by condition and group

**Summary**

The results of the AJT show that there is in fact a difference between the judgements of the monolingual and the bilinguals groups between derived and non-derived verbs. Although results are not overly strong, we do see a tendency for the P’urhépecha bilinguals to prefer the use of the dative clitic *le* with derived verbs as well as the preference of omission with non-derived verbs. Furthermore, we see that bilinguals also have no problem accepting clitic *lo* with DOCs—which can most likely be interpreted as accusative clitic doubling rather than case neutralization. Finally, there was no significant difference between the groups for clitic position.

7.3.2 Oral Elicitation Task

The transcribed results of the OET for dative constructions (*k*=16) produced 373 tokens for bilinguals and 255 tokens for monolinguals. Each token was coded depending on whether the participant produced: a) a DOC with target dative clitic *le/les*; b) a PPC with preposition *para, de, en*, etc. (not *a*); c) a transitive construction; d) clitic omission; or e) a non-target clitic. Furthermore, all verbs produced by the participants were coded as derived or non-derived and divided for analysis.
Omission with derived verbs can be ambiguous in the sense that it not clear if participants are using a transitive construction or if they are omitting the clitic. To solve this, omission was coded only if the phrase contained an overt IO with dative marker a. In the case that there was no clitic and no overt IO with a derived verb, these constructions were coded as transitive. For the non-derived verbs, clitic omission was coded if there was no clitic and no overt IO, in the case that there was no clitic but an overt IO then these were coded as PPCs with preposition a. In terms of use of a non-target clitic, these were coded when there was a use of le with plural IOs, the use of accusative clitics instead of a dative clitic, and the use of se instead of le.

Overall, we see that true DOCs were the preferred construction for monolingual speakers, who produced them 62% of the time. Bilinguals also favoured DOCs, though not to the extent that the monolinguals did, producing them 45% of the time. On the other hand, the variant PPCs were only produced 15% of the time by monolinguals and even less (9%) by bilingual participants. Looking at these measures together, we see that the expected dative alternation accounts for 77% of the production of monolingual speaker, while only 53% in the case of the bilinguals. The rest of the instances consisted of either transitive constructions or non-standard constructions. Bilinguals produced more transitive constructions (20%) than monolinguals (14%), and while not the desired outcome, these were grammatical responses in a standard dialect. The remaining 26% of responses by bilinguals were non-standard constructions: clitic omission (16%) and non-target clitics. Monolinguals only omitted in 5% of responses, and rarely produced non-target clitics (4%), and they were all instances of “le-for-les”.

The distributions of production by category divided in derived and non-derived verbs are displayed for bilinguals in Table 7.5 and for monolinguals in Table 7.6. The percentages per type of verb and per category were submitted to a RM ANOVA with two within subject variables: type of verb (two levels: Derived and Non-derived) and category (5 levels: DOC, PPC, transitive construction, clitic omission, and non-target clitic); and one between subject factor: group (2 levels: bilingual and monolingual). There was one main effect of Category $F(4,84)=45.3, p=.000$ and two significant interactions Category*Group $F(4,84)=4.05, p=0.004$ and Type*Category $F(4,105)=48.53, p=.000$. 
Table 7.5 Distribution of production by type of construction in Bilinguals

<table>
<thead>
<tr>
<th></th>
<th>DOC</th>
<th>PPC</th>
<th>Transitive</th>
<th>Omission</th>
<th>Non-target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derived</td>
<td>29%</td>
<td>17%</td>
<td>37%</td>
<td>8%</td>
<td>8%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(57t)</td>
<td>(34t)</td>
<td>(73t)</td>
<td>(16t)</td>
<td>(15t)</td>
<td>(195t)</td>
</tr>
<tr>
<td>Non-derived</td>
<td>63%</td>
<td>0%</td>
<td>0%</td>
<td>24%</td>
<td>13%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(112t)</td>
<td></td>
<td></td>
<td>(42t)</td>
<td>(24t)</td>
<td>(178t)</td>
</tr>
<tr>
<td>Total</td>
<td>45%</td>
<td>9%</td>
<td>20%</td>
<td>16%</td>
<td>10%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(169t)</td>
<td>(34t)</td>
<td>(73t)</td>
<td>(58t)</td>
<td>(39t)</td>
<td>(373t)</td>
</tr>
</tbody>
</table>

Table 7.6 Distribution of production by type of construction in Monolinguals

<table>
<thead>
<tr>
<th></th>
<th>DOC</th>
<th>PPC</th>
<th>Transitive</th>
<th>Omission</th>
<th>Non-target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derived</td>
<td>44%</td>
<td>28%</td>
<td>27%</td>
<td>0%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(56t)</td>
<td>(36t)</td>
<td>(35t)</td>
<td></td>
<td>(1t)</td>
<td>(128t)</td>
</tr>
<tr>
<td>Non-derived</td>
<td>80%</td>
<td>2%</td>
<td>1%</td>
<td>9%</td>
<td>8%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(102t)</td>
<td>(2t)</td>
<td>(1t)</td>
<td>(12)</td>
<td>(10t)</td>
<td>(127t)</td>
</tr>
<tr>
<td>Total</td>
<td>62%</td>
<td>15%</td>
<td>14%</td>
<td>5%</td>
<td>4%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(159t)</td>
<td>(38t)</td>
<td>(36t)</td>
<td>(12t)</td>
<td>(11t)</td>
<td>(255t)</td>
</tr>
</tbody>
</table>

Overall results again point towards a greater degree of variation in the clitic system of bilinguals, who produced 71% of target structures (DOCs, PPCs, and transitive constructions) and 29% of non-target structures (omission and non-target clitic), compared to 91% / 9% target/non-target for monolinguals. To better understand the observed variation, results were further analyzed by category and verb, since there were different types of constructions produced within each category, with these outcomes depending on the type of verb.
7.3.2.1 Double Object Constructions

There were five types of DOCs structures with target dative clitics: 1) \textit{le}+DO+IO, 2) \textit{le}+DO, 3) \textit{le}+IO, 4) \textit{le} no objects, 5) clitic cluster. Structure type \textit{le}+DO+IO, contained both overt objects—and produced a dative clitic structure (8). Structure type \textit{le}+DO (9) had only the DO with no overt IO meaning that there is no dative clitic doubling. These types of constructions are both grammatical in standard Spanish. Structure type \textit{le}+IO (10), however, has dative clitic doubling but with an omitted DO. This type of construction is admitted in P’urhépecha (see §3.5.5) but is very restricted in standard Spanish (see § 3.2.2.2). Likewise, structure type \textit{le} no objects (11) has omitted DO as well as omitted IO, this type is admitted in P’urhépecha, but again in standard Spanish omitting DOs is restricted and omitting IOs is optional. Finally, structure type Clitic cluster (12) contains a clitic cluster of dative + accusative, which is grammatical in Spanish.

(8) \textit{le} + DO +IO

a. Le \textit{va} a comprar un vestido nuevo a su hija Derived verb
   \textit{CL3.DAT} going to buy a dress new for her daughter
   ‘[She] is going to buy a new dress for her daughter.’ (B07)

b. Le \textit{va} a prestar el dinero a su hermana Non-derived verb
   \textit{CL3.DAT} going to lend the money to his sister
   ‘[He] is going to lend money to his sister’ (B05)

(9) \textit{le} +DO

a. Le tiene que comprar un libro Derived verb
   \textit{CL3.DAT} has to buy a book
   ‘[She] has to buy a book [for him].’ (B11)

These indicate the participant who produced the example by group (B=bilingual; M=monolingual) and by participant number.
b. Le está prestando el dinero

CL3.DAT is lending the money

‘[He] is lending [her] the money.’

(10) **le + IO**

a. Llevar=les a sus amigas

Derived verb

bring-CL3.DAT.PL to her friends

‘Bring it to her friends’ (B15)

b. Prestar=les a sus hijas

Non-derived verb

lend-CL3.DAT.PL to his daughters

‘Lend it to his daughters.’ (B15)

(11) **le (no objects)**

a. Paco les está cocinando

Derived verb

Paco CL3.DAT.PL is cooking

‘Paco is cooking [for them].’ (B23)

b. Le está prestando

Non-derived verb

CL3.DAT is lending

‘[He] is lending [him/her] [money].’ (B01)

(12) **Clitic cluster** (Dative clitic + Accusative clitic)

a. Veo que está escogiendo libro para comprar=se=lo

Derived verb

I-see that is choosing book for buy- CL3.DAT-CL3.ACC.M.SG

porque el niño necesita el libro.
because the boy needs the book

‘I see that she is choosing the book to buy it for him, because the boy needs the book.’ (B05)

b. Pues se las puedo quitar

Non-derived verb

Well CL3.DAT CL3.ACC.F.PL can take-away
para que ya no se peleen
for that already not CL3.REF fight
‘Well, I can take it away from them so that they do not fight with each other.’

(B09)

Table 7.7 Production of DOCs by type comparing both groups

<table>
<thead>
<tr>
<th>Type</th>
<th>Group</th>
<th>Derived</th>
<th>Non-derived</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Le +DO+IO</td>
<td>Bilingual</td>
<td>4% (6t)</td>
<td>19% (32t)</td>
<td>22% (38t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>10% (16t)</td>
<td>13% (21t)</td>
<td>23% (37t)</td>
</tr>
<tr>
<td>Le+DO</td>
<td>Bilingual</td>
<td>18% (31t)</td>
<td>36% (60t)</td>
<td>54% (91t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>17% (27t)</td>
<td>42% (67t)</td>
<td>59% (94t)</td>
</tr>
<tr>
<td>Le+IO</td>
<td>Bilingual</td>
<td>5% (8t)</td>
<td>5% (9t)</td>
<td>10% (17t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>1% (1t)</td>
<td>0%</td>
<td>1% (1t)</td>
</tr>
<tr>
<td>Le no objects</td>
<td>Bilingual</td>
<td>6% (10t)</td>
<td>5% (9t)</td>
<td>11% (19t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>3% (5t)</td>
<td>3% (4t)</td>
<td>6% (9t)</td>
</tr>
<tr>
<td>CL cluster</td>
<td>Bilingual</td>
<td>1% (2t)</td>
<td>1% (2t)</td>
<td>2% (4t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>4% (7t)</td>
<td>6% (10t)</td>
<td>11% (17t)</td>
</tr>
<tr>
<td>Total</td>
<td>Bilingual</td>
<td>34% (57t)</td>
<td>66% (112t)</td>
<td>100% (169t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>35% (56t)</td>
<td>65% (102t)</td>
<td>100% (158t)</td>
</tr>
</tbody>
</table>

Table 7.7 shows the distribution of productions by type of DOC per type of verb and by group. First of all, if we compare structure le+DO+IO (doubling) with structure le+DO (no doubling), we see that both groups produce more non-doubled structures (clitic le only) (B:54%, M:59%), though doubled structures are common as well (B:22%, M:23%).
Bilinguals barely produced clitic clusters (2%), whereas we see that the monolinguals produced them 11% of the time. Both other structures were not commonly produced by the monolingual group. In general, we found that monolinguals do not produce sentences without a DO when the IO is present (1%), while bilinguals do produce these relatively odd constructions (10%). Finally, we see a similar pattern between groups for structure *le no objects* (null DO- null IO), where bilinguals produce 11% and monolinguals 6%, though many of these productions were infinitives plus clitic (*comprarles*) or the gerund plus clitic (*comprándoles*).

### 7.3.2.2 PPC

In many cases, participants used a PPC alternate instead of a DOC. Overall, PPC mostly occurred with preposition *para* since the theta roles of the IO were beneficiaries. I was able to extract three types of structures from the tokens produced: structure P1 has the overt DO with a prepositional phrase with *para* (13); P2 has implicit/null DO with a PP (14); both of these are grammatical in standard Spanish. Structure P3 (15) contains both the dative clitic and the prepositional phrase, which is ungrammatical in standard Spanish.

(13) **Verb +DO +PP [P1]**

<table>
<thead>
<tr>
<th>(13)</th>
<th>Verb +DO +PP [P1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Marisa compró regalos para sus amigas.</td>
<td>Derived verb</td>
</tr>
<tr>
<td>'Marisa bought gifts for her friends.'</td>
<td>(B03)</td>
</tr>
<tr>
<td>b. ¿Está prestando su dinero para las hijas de Paco.</td>
<td>Non-derived verb</td>
</tr>
<tr>
<td>'S/he is lending money to Paco’s daughter.'</td>
<td>(M09)</td>
</tr>
</tbody>
</table>

(14) **Verb + (no DO) + PP [P2]**

<table>
<thead>
<tr>
<th>(14)</th>
<th>Verb + (no DO) + PP [P2]</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Está cocinando para su esposo.</td>
<td>Derived verb</td>
</tr>
<tr>
<td>'She is cooking for her husband'</td>
<td>(B09)</td>
</tr>
</tbody>
</table>
(15) **Dative CL + Verb + PP** [P3] Derived verb

a. *Tiene que comprar=le para su hija.
   has to buy-CL3.DAT for her daughter
   ‘[She] has to buy [it] for her daughter’ (B23)

<table>
<thead>
<tr>
<th></th>
<th>Derived (%)</th>
<th>Non-derived (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P1</strong> Bilingual</td>
<td>50% (17t)</td>
<td>0%</td>
<td>50% (17t)</td>
</tr>
<tr>
<td>Monolingual</td>
<td>45% (17t)</td>
<td>7% (2t)</td>
<td>50% (19t)</td>
</tr>
<tr>
<td><strong>P2</strong> Bilingual</td>
<td>38% (13t)</td>
<td>0%</td>
<td>38% (13t)</td>
</tr>
<tr>
<td>Monolingual</td>
<td>50% (19t)</td>
<td>0%</td>
<td>50% (19t)</td>
</tr>
<tr>
<td><strong>P3</strong> Bilingual</td>
<td>12% (4t)</td>
<td>0%</td>
<td>12% (4t)</td>
</tr>
<tr>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong> Bilingual</td>
<td>100% (34t)</td>
<td>0%</td>
<td>100% (34t)</td>
</tr>
<tr>
<td>Monolingual</td>
<td>95% (36t)</td>
<td>5% (2t)</td>
<td>100% (38t)</td>
</tr>
</tbody>
</table>

As we can observe in Table 7.8, both groups produced PPCs mostly with derived verbs—both with the DO (13a) and without the DO (14a). There were only two productions of a PPC with a non-derived verb made by the monolinguals (13b). There were no productions of PPCs with preposition *para* with non-derived verbs with the bilingual group. Finally, there were three productions of both the dative clitic and the PP (P3), but only with derived verbs and only by bilingual participants (15a). Overall, we see that both groups used more PPCs rather than DOCs with derived verbs, which is an acceptable choice in both languages.
7.3.2.3 Transitives

Transitive constructions with derived verbs were coded when there was no dative clitic nor overt IO with dative marker a. For the non-derived contexts, there were instances when participants used the required verb together with a derived verb such as *mandar pedir prestado*. In these cases, the verbs were treated as derived verbs. I was able to extract four types of transitive constructions with derived verbs. Type T1 is a transitive construction with an explicit DO (16). Type T2 corresponds to transitive verbs with implicit direct objects in a non-finite use of the verb *está cocinando / va a cocinar* (17). Type T3 is the use of an anaphoric accusative clitic to replace the DO (18a). Finally, type T4 is a transitive construction with accusative clitic doubling (19). There was only one instance of a non-derived verb used with an accusative clitic produced by a monolingual (18b). Of these types, the first three are grammatical in standard Spanish, but the fourth is not.

(16) verb + DO [T1]

    a. Va a comprar un helado
       Derived verb
       ‘[S/he] is going to buy an icecream’
       (B10)

(17) verb (no DO) [T2]

    a. Josefina está cocinando.
       Derived verb
       Josefina is cooking
       ‘Josefina is cooking’
       (B02)

(18) verb + accusative clitic [T3]

    a. Lo está jalando [el osito]
       Derived verb
       CL3.ACC.M.SG is pulling [the bear]
       ‘[S/he] is pulling [the bear]’
       (B04)

    b. Los pide prestados [los libros]
       Non-derived verb
       CL3.ACC.M.PL ask-for borrowed [the books]
‘[S/he] asks to borrow [the books]’

(19) **verb with accusative clitic doubling** [T4]

a. Paco los invitó a sus hijos

Derived verb

Paco CL3.ACC,M.PL.DOM invited his sons

‘Paco invited his sons.’

Table 7.9 Production of Transitive constructions by type comparing both groups

<table>
<thead>
<tr>
<th></th>
<th>Derived</th>
<th>Non-derived</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>Bilingual</td>
<td>52% (38)</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>75% (27)</td>
<td>0%</td>
</tr>
<tr>
<td><strong>T2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no DO</td>
<td>Bilingual</td>
<td>27% (20)</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>19% (7)</td>
<td>0%</td>
</tr>
<tr>
<td><strong>T3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC CL</td>
<td>Bilingual</td>
<td>16% (12)</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>3% (1)</td>
<td>3% (1)</td>
</tr>
<tr>
<td><strong>T4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>doubling</em></td>
<td>Bilingual</td>
<td>4% (3)</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bilingual</td>
<td>100% (73)</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>97% (35)</td>
<td>3% (1)</td>
</tr>
</tbody>
</table>

As consistent with earlier results, we see a greater range of variation and production of non-standard structures with the bilingual group. Overall both groups produced a large amount of simple transitive constructions with explicit DO instead of using the dative construction (Table 7.9). On the other hand, we see that bilinguals produced transitive
constructions with an implicit DO (27%) more than monolinguals (19%). As mentioned previously this construction could overlap with dative clitic omission, since based on the contexts of the task at hand participants should have produced a dative clitic. However, when interpreted as transitive, these constructions are perfectly grammatical, therefore in many instances it was difficult to know whether they were omitting the dative clitic or if they were just producing a transitive sentence, thus only constructions with dative a marker were coded as omission (see omission below). For type T3 (anaphoric DO) we see that bilinguals (16%) produced more than monolinguals (6%). Furthermore, for this type of structure 4 of the 12 tokens produced by bilinguals were non-target: three with gender neutralization las → los (20a); and one with case neutralization lo → le (20b). Finally, there were only three instances of accusative clitic doubling, all produced by bilingual participants (19).

(20) **Non-target accusative clitics**

a. Lo que su papá debería de hacer ver=los,
   CL3.ACC.M.SG what their dad should of do see-CL3.ACC.M.PL
   calmar=los [a sus hijas].
   calm-CL3.ACC.M.SG [his daughters]
   ‘What his father should do is see them and calm them.’

(\textbf{B02})

b. Su mama está enojada también pero le está acariciando [a su hijo].
   His mom is angry also but CL3.DAT is caressing [her son]
   ‘His mom is also angry but [she] is caressing him’

(\textbf{B02})

7.3.2.4 **Omission**

Dative clitic omission was coded with derived verbs in ambiguous contexts when there was lack of a dative clitic and an overt IO as in (21a); and for non-derived verb when the dative clitic was null (21b). I extracted five structures with omission, which are all considered ungrammatical in standard Spanish. A summary of the distribution by type is found in Table 7.10. Type O1 had no dative clitic, but had overt DO and IO as in (21). Type O2 had no overt IO and null dative clitic, but overt DO. These were particularly
hard to code with derived verbs (22a), since these could be interpreted as transitives, however, in these cases, the participants mentioned the recipient/benefactor even though it was not in IO position. Thus, these instances were coded as dative clitic omission. Type O3 is omission of the dative clitic, null DO and overt IO. For these, the dative clitic is necessary since the lack of it produced a transitive sentence with a different meaning (23a) in which the sentence reads as *she wants to cook her husband*—not the intended dative meaning *she wants to cook for her husband*. The same is similar with non-derived verbs as in (23b) since the lack of clitic in this sentence can be interpreted as *he wants to lend his sister* rather than *he wants to lend her money*. Type O4 has both null objects, in derived sentences these only happened as adjuncts as in (24a), where we see that the DO is mentioned in the main clause and therefore the verb in the PP is expected to take a complement in the form of a clitic. In this case *comprárselo* is the expected form, but the participant produced *comprar*. For non-derived verbs, we find the omission in the main clause, but it always occurs with non-finite verbal forms, namely infinitives and gerunds (24b)—in this case we would expect *prestarle* or *prestárselo*. Type O5 contains either a dative or accusative clitic with omission of an accusative or dative clitic respectively in a clitic cluster. Notice in (25a) that the accusative clitic is agreeing with the IO *su hija* ‘her daughter’ rather than with the DO *un vestido* ‘a dress’ therefore there is omission of the dative clitic, but also a non-target use of the accusative clitic. In example (25b) we find the target dative clitic, but omission of the accusative clitic which is expected since the DO was previously mentioned.

(21) **no dative clitic with DO and IO (O1)**

a. Se siente feliz porque Ø compró los nieves a los niños. Derived verb
   CL3REF feels happy because bought the icecream to the kids
   ‘He feels happy because he bought ice cream for the kids.’ (B02)

b. Está quitandoØ el osito a su hermanita. (PPC) Non-derived verb
   Is taking-away the bear to his sister
   ‘He is taking waway the bear from his sister.’ (B03)
(22) **no dative clitic with DO (O2)**

a. Hay que comprar otro libro para que siga a estudiar Derived verb
   have to buy another book so that continues to study
   ‘We have to buy another book so that [s/he] continues to study.’ (B20)

b. Prestar su dinero. Non-derived verb
   lend his money
   ‘To lend his money.’ (B08)

(23) **no dative clitic with IO (O3)**

a. Va a cocinar a su esposo Derived verb
   is-going to cook to his husband (B05)

b. Está sacando el dinero en su cartera pa’ prestar a su hermana Non-derived
   is taking-out the money in his wallet for to-lend to his sister
   ‘He is pulling money out of his wallet to lend it to his sister.’ (B04)

(24) **no dative clitic no DO no IO (O4)**

a. Está escogiendo un vestido para comprar Derived verb
   is choosing a dress for buy
   ‘She is choosing a dress to buy [it]’ (B12)

b. pues empezó a quitar y empezó a llorar Non-derived
   well started to remove and started to cry
   ‘Well she started to remove [it] and [he] started to cry.’ (B08)

(25) **clitic (dative/accusative) with omission of clitic (accusative/dative) (O5)**

a. Está mirando un vestido nuevo para comprar=la [a su hija] Derived verb
   Is looking a dress new for buying-CL3.ACC.F.SG [for her daughter]
   ‘She is looking at a new dress to buy [it] [for her].’ (B10)
b. Estaba haciendo travesuras con el juguettito  
Was doing mischief with the toy
por eso le Ø quitó y lo está regañando.
therefore CL3.DAT Ø remove and CL3.ACC.M.SG is scolding
‘He was doing mischief and that’s why [she] removed [it] from him and is scolding him.’

Table 7.10 Production of clitic omission by type comparing both groups

<table>
<thead>
<tr>
<th></th>
<th>Derived</th>
<th>Non-derived</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>O1</strong></td>
<td>Bilingual</td>
<td>2% (1t)</td>
<td>16% (9t)</td>
</tr>
<tr>
<td>DO+IO</td>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>O2</strong></td>
<td>Bilingual</td>
<td>3% (2t)</td>
<td>29% (17t)</td>
</tr>
<tr>
<td>DO</td>
<td>Monolingual</td>
<td>0%</td>
<td>83% (10t)</td>
</tr>
<tr>
<td><strong>O3</strong></td>
<td>Bilingual</td>
<td>12% (7t)</td>
<td>9% (5t)</td>
</tr>
<tr>
<td>IO</td>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>O4</strong></td>
<td>Bilingual</td>
<td>5% (3t)</td>
<td>14% (8t)</td>
</tr>
<tr>
<td>no objects</td>
<td>Monolingual</td>
<td>0%</td>
<td>17% (2t)</td>
</tr>
<tr>
<td><strong>O5</strong></td>
<td>Bilingual</td>
<td>5% (3t)</td>
<td>5% (3t)</td>
</tr>
<tr>
<td>no clitic</td>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Bilingual</td>
<td>28% (16t)</td>
<td>72% (42t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>0%</td>
<td>100% (12t)</td>
</tr>
</tbody>
</table>

Pairwise comparison showed a significant difference between groups in omission for both derived and non-derived verbs (both $p<0.05$), with the bilingual group producing considerably more omission than the monolingual group (B:58 tokens vs. M:12 tokens). Furthermore, bilinguals produced omission with both types of verbs and with a wider
range of structures, whereas the monolinguals only produced omission with non-derived verbs mostly when the DO is present (O2). While this is the most common condition for omission with bilinguals as well, we see that overall omission in bilinguals occurs more with non-derived verbs (72%) than with derived verbs (28%). In the within group pairwise comparison for bilinguals, the difference in omission between derived and non-derived was shown to be significant ($p<0.05$).

7.3.2.5 Non-target clitic

I identified three types of non-target dative clitics in the production data: 1) les $\rightarrow$ le, 2) le $\rightarrow$ la, and 3) le/les $\rightarrow$ se. Both groups produced les $\rightarrow$ le with both types of verbs, particularly with non-derived verbs. Monolinguals had a total of 11 non-target tokens, all of which were instances of le for les, a common phenomenon documented in many varieties of Spanish (Ausin & Fernández-Rubiera 2017); one with a derived verb (26a) and 10 with non-derived verbs (26b). Of these, they produced eight with both overt DO and IO and three with just the DO. Bilinguals also produced most of the non-target clitics as instances of les $\rightarrow$ le, but at a much higher rate ($k=33$), and in a wider variety of contexts. Of these, seven were produced with both DO and IO (27a); 15 with just the DO (27b); seven with just the IO (derived verbs only) (27c); and four with no objects (non-derived verbs only) (27d). Interestingly, bilinguals produced a total of four instances of le $\rightarrow$ se, a phenomenon previously documented in P’urhépecha speakers by Meneses (1998), two with derived verbs (28a) and two with non-derived verbs (28b). Of these, two were produced with an overt DO, one with just the IO, and one had no objects. Finally, I found two instances of le $\rightarrow$ la with derived verbs (29), where the clitic agrees with the gender of the IO and not with the gender of the DO, similarly to the phenomena documented with latismo dialects. However, example (29b) is ambiguous since it is not clear whether the participant is producing accusative clitic doubling or if s/he is doing gender agreement with the IO su hija. Table 7.11 shows the distribution of productions of non-target clitics by type of verb and group.
(26) **Non-target *les* → *le***

a. Marisa *le*i está comprando regalos a sus amigasí. Derived verb
   Marisa CL3.DAT is buying gifts for her friends
   ‘Marisa is buying gifts for her friends.’ (M11)

b. Manuel *le*i quita los juguetes a sus hijasí. Non-derived verb
   Manuel CL3.DAT take-away the toys from his daughters
   ‘Manuel takes away the toys from his daughters.’ (M05)

(27) **Non-target *les* → *le***

a. Leí compró regalos a sus amigasí Derived verb
   CL3.DAT bought gifts for her friends
   ‘She bought gifts for her friends.’ (B11)

b. Comprar=le otro mono para que no estén peleando Derived verb
   to-buy-CL3.DAT another doll so that no is fighting
   ‘To buy them another doll so that they do not fight.’ (B02)

c. Marisa está de compras para llevar=leí a sus amigasí Derived verb
   Marisa is shopping for to-take-CL3.DAT to her friends
   ‘Marisa is shopping so that she can take [it] to her friends.’ (B18)

d. Le está prestando para que puedan hacer la tarea Non-derived verb
   CL3.DAT is lending so that be-able to-do the homework
   ‘[S/he] is lending [them] so that they are able to do their homework.’ (B17)

(28) **Non-target *le/les* → *se***

a. Su mama *se* está preparando a su hija para que coma Derived verb
   her mom CL3.SE is preparing for her daughter so that eat
   ‘Her mom is preparing [food] so that her daughter eats.’ (B02)
b. Está enojado se quitó la muñeca [a sus hijas] Non-derived
is angry CL3.SE removed the doll. [from his daughters]
‘He is angry [he] took-away the doll.’ (B08)

(29) Non-target le → la

a. Comprar=la [un vestido] [a su hija] Derived verb
To-buy-CL3.ACC.F.SG [a dress] [for her daughter]
‘To buy her [a dress].’ (B19)

b. La hace la comida pues su hija no tiene tiempo de hacer
CL3.ACC.F.SG makes the food since her daughter no have time to make
pues la comida.
well the food
‘[She] makes the food since her daughter has no time to make the food.’ (B20)

Table 7.11 Production of Non-target clitic by type comparing both groups

<table>
<thead>
<tr>
<th>Clitic Type</th>
<th>Derived</th>
<th>Non-derived</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>les → le</td>
<td>Bilingual</td>
<td>28% (11t)</td>
<td>56% (22t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>9% (1t)</td>
<td>91% (10t)</td>
</tr>
<tr>
<td>le → la</td>
<td>Bilingual</td>
<td>5% (2t)</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>le/les → se</td>
<td>Bilingual</td>
<td>5% (2t)</td>
<td>5% (2t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>Bilingual</td>
<td>38% (15t)</td>
<td>62% (24t)</td>
</tr>
<tr>
<td></td>
<td>Monolingual</td>
<td>9% (1t)</td>
<td>91% (10t)</td>
</tr>
</tbody>
</table>
7.3.2.6 Clitic Position

Finally, clitic position was noted for all of the clitic productions made. We find a very similar pattern between monolinguals and bilinguals in which proclisis was the preferred position—70% for bilinguals and 64% for monolinguals. An independent repeated measures ANOVA was performed with one within-subject variable position and one between subjects factor: bilinguals and monolinguals. The results show that there was a significant main effect for position $F(1,36)=14.418$, $p=.001$ indicating that both groups produced more proclisis than enclisis with datives and no significant interaction between position and group ($F(1,36)=.025$, $p=.876$). Table 7.12 summarizes the distribution of clitic position by type of verb and by group.

Table 7.12 Distribution of clitic position by type comparing both groups

<table>
<thead>
<tr>
<th></th>
<th>Derived</th>
<th>Non-derived</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proclisis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilingual</td>
<td>25% (58t)</td>
<td>45% (104t)</td>
<td>70% (162t)</td>
</tr>
<tr>
<td>Monolingual</td>
<td>20% (34t)</td>
<td>44% (76t)</td>
<td>64% (110t)</td>
</tr>
<tr>
<td><strong>Enclisis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilingual</td>
<td>15% (35t)</td>
<td>15% (35t)</td>
<td>30% (70t)</td>
</tr>
<tr>
<td>Monolingual</td>
<td>14% (24t)</td>
<td>22% (38t)</td>
<td>36% (62t)</td>
</tr>
</tbody>
</table>

| **Total**    |         |             |         |
| Bilingual    | 40% (93t) | 60% (139t) | 100% (232t) |
| Monolingual  | 34% (58t) | 66% (114t) | 100% (172t) |

7.3.3 Summary of both tasks

The following summary provides the main findings from both the AJT and OET. Table 7.13 displays the results of both tasks by condition and group.

*Clitic position*

The AJT shows no significant difference for either position, indicating that both groups are able to recognize well-formed sentences with the clitic in both positions. However, in the OET we find a significant difference between conditions, with the clitic being
produced mostly in proclitic position for both groups. This contrasts with the results from the accusative clitic OET, where enclisis was the preferred option.

**Target clitic**

Condition 1 target clitic, had high rates of acceptance in the AJT with both groups. There were no significant differences between groups with either type of verb. This indicates that both groups accept the grammaticality of clitic *le* in these types of DOCs with both types of verbs. In the OET, however, we find a great deal of variability. For derived verbs, bilinguals produced DOC in 29% of instances and the monolinguals produced a DOC 44% of the time. The remaining instances consisted of PPCs or monotransitive constructions. In turn, for non-derived verbs, we see a much higher rate of DOC productions, 63% for the bilingual group and 80% for the monolingual group.

**Omission**

For the omission condition in the AJT we find similar rates of acceptability between the two groups with derived verbs. Although I was expecting low acceptability in this condition for derived verbs, the lack of an explicit IO in the target sentence produced an alternate transitive interpretation, which is grammatical and was interpreted as such by both groups. Despite this caveat, for the non-derived verbs, results show a significant difference between groups where omission (PPC) had a mean acceptance score of $M=3.1$ for the bilingual group and only $M=2.5$ for the monolingual group. Furthermore, results from the OET support this trend where there was a total of 24% of clitic omission with non-derived verbs in the bilingual group as opposed to 9% for the monolingual group.

**Non-target clitic**

In the AJT, non-target clitic *lo* had a mean acceptance score of $M=3.1$ with derived verbs and comparable score of $M=2.8$ for non-derived verbs with the bilingual group. However, for the monolingual groups this condition had very low acceptance ($M=1.8$) for both types of verbs. This indicates that monolinguals perceive the case mismatch in DOCs, however, for the bilingual group the relatively high acceptance rate doesn’t necessarily mean that they accept neutralization of case from dative to accusative clitics. The similar rate of acceptance between the two types of verbs actually leads us to posit...
that rather than case neutralization, participants are accepting the possible reading for non-standard accusative clitic doubling as seen in the previous chapter.

Table 7.13 Summary of results comparing both tasks by condition and groups in dative clitics

<table>
<thead>
<tr>
<th>Condition</th>
<th>AJT (acceptance mean rates)</th>
<th>OET (production rates)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bilingual</td>
<td>Monolingual</td>
</tr>
<tr>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclitic</td>
<td>3.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Proclitic</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Target Clitic le</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derived</td>
<td>3.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Non-derived</td>
<td>3.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Omission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derived</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Non-derived</td>
<td>3.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Non-target CL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derived</td>
<td>3.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Non-derived</td>
<td>2.8</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Chapter 8

8 Discussion

8.1 Introduction

The present study demonstrated that P’urhépecha-Spanish bilinguals display more variation in both their judgment and production of Spanish clitics than monolingual Spanish speakers of the central Mexican dialect. This variation is expressed as a state of stabilized optionality in the L2 Spanish grammar of these speakers, which results in two or more acceptable grammatical structures that express the same meaning (Sorace 2000). Despite this, bilinguals appeared to have fully acquired grammatical knowledge of functional features related to the Spanish clitic system, which suggests that, as Lardiere states, the observed variation is rooted in the mapping between feature and form. Other authors, such as Prévost and White (2000), have noted the same disassociation of featural knowledge and production, regarding “optionality as a surface problem rooted not so much in learners’ representation of abstract features, but rather in a specific difficulty with the morphological instantiation of these features” (Sorace 2000:98). What this implies is that learners have acquired the abstract morphosyntax of their L2, yet they are not always able to instantiate the correct surface forms. The result of this breakdown between morphology and syntax appears to manifest as “a much greater degree of tolerance for synonymy” (Sorace 2000:98) in L2 and bilingual grammars. Furthermore, it is often noted that optionality is prone to occur in certain areas of the grammar, depending on the language, often in areas that tend to display variation even in monolingual speakers.

The Spanish clitic system illustrates this principle quite well, exhibiting a range of well documented variation in both monolingual and bilingual contexts. Crucially, though the context of variation may change, there are a somewhat limited set of outcomes that depend on the characteristics of the Spanish grammar. To put this another way, it appears that Spanish grammar provides certain constraints that dictate the range of possible variants, and that non-standard varieties operate within these constraints. For instance, we
see the phenomenon of *leísmo* occurs both with monolinguals and bilinguals in contact situations (Ecuador, Paraguay), as well as with monolinguals in central Spain. Another common construction, accusative clitic doubling, is observed in the Americas in both a monolingual and bilingual (non-contact/contact) contexts and appears to be a somewhat natural extension of the availability of these structures in Spanish, simply expanded to a wider range of contexts. Despite these common outcomes, differences appear when we study these changes in different contexts. For instance, we find that in *Rioplatense* Spanish, doubled clitics maintain gender and number features as in (1), while in certain contact dialects, such as Limeño, doubled structures are produced using an invariant clitic *lo* as in (2).

(1) La veo a la maestra. Rioplatense Spanish
   CL3.FSG see DOM DET.FSG teacher.FSG
   ‘I see the teacher.’

(2) Lo conoce a las chicas. Limeño Spanish
   CL3.MSG know DOM DET.F.PL girl.F.PL
   ‘She knows the girls.’

(Mayer 2017:64-65)

In the case of language contact situations, I believe that these differences are due to processes of interaction between L1 and L2 grammars in the bilingual mind. Recalling Sánchez’s proposal of functional interference and convergence, we pinpoint the source of this variation as the non-standard association of functional features with morphology during the language acquisition process, which results in functional features of the L1 being mapped onto parallel functional morphology in the L2, or the convergence (mixing) of features from both languages and the resulting morphological associations. The utility of Sánchez’s proposal lies in its search for explanation. Going beyond the ideas that we a) observe variation/optionality in the clitic system of bilingual individuals, and b) the source of this variation appears to be rooted in a process of morphological feature association/instantiation, Sánchez proposes that the source of this variation can be
found by careful investigation of parallel functional categories in both languages. That is what I attempt to do here.

8.1.1 Restatement of General Research Questions

For clarity, I would like to reiterate my primary research questions, as presented in section 1.5.

1. Does the Spanish grammar of P’urhépecha-Spanish bilinguals show evidence of cross linguistic influence?
2. If so, how is this manifested in the grammar of steady state P’urhépecha-Spanish bilinguals?
3. Is there an emergent variety of Spanish spoken by P’urhépecha-Spanish bilinguals? If so, how does this variety differ from other varieties of Spanish both in contact and non-contact situations?

In my attempt to answer these questions, I implemented a series of experiments (Ch. 5, 6, 7) designed to identify systematic variation in the Spanish of these individuals by comparing their judgement (AJT) and production (OET) of target structures to those of monolingual speakers of standard central Mexican Spanish, who had virtually no contact with any indigenous Mexican language. Specifically, the tests focused on the use of 3rd person accusative and dative clitics and were carefully designed to test both standard and non-standard Spanish structures in a way that provided a means of comparison between corresponding Spanish and P’urhépecha functional categories related to object agreement and applicative argument licensing.

8.1.2 Summary of results

Addressing my general research questions, I can now begin to tentatively provide some answers. While the initial, overarching question –does the Spanish grammar of P’urhépecha-Spanish bilinguals show evidence of cross-linguistic influence?– is hard to answer definitively, I can begin by saying that yes, there is evidence that Spanish P’urhépecha bilinguals differ from monolingual speakers both in terms of their judgment and their production of 3rd person object clitics. Looking first at accusative clitics, the AJT indicates that both groups interpret the grammatical structures target clitic and full
DP similarly. However, for the three non-standard structures—*neutralization to clitic lo, doubling*, and *omission*—we find significant differences among groups showing that bilinguals are more accepting than monolinguals, indicating possible non-standard variation in the bilingual grammar. This is corroborated by the OET, in which monolinguals did not produce any of these non-standard structures but the bilinguals did, demonstrating optionality/variation in clitic use.

Many non-standard accusative structures produced by bilinguals both during interviews and the OET pattern strongly with other non-standard structures observed in contact varieties and bilingual grammars in other areas of the Americas, such as use of an invariant anaphoric *lo* to refer to feminine referents (3), object/topic drop phenomena (4), and the production of accusative clitic doubling (5), often using the invariant *lo* regardless of the gender of the doubled DP. Each of these structures will be discussed in turn in the following sections.

(3) Cocinar=lo$_i$ pues coce las corundas$_i$.

To-cook-CL3.ACC.M.SG well to-cook the$_F$.PL.corundas$_F$.PL

‘To cook them, well to steam the corundas.’

(B103)

(4) Le daba lástima dejarØ solito [el perro]

CL3.DAT gave pity leave alone [the dog]

‘He felt bad leaving it alone’

(B102)

(5) Lo quiere vender la casa

CL3.ACC.M.SG wants to-sell the$_F$.SG.house

‘(he) wants to sell the house.’

(B112)

AJT results for dative clitics were more mixed. The target clitic *le* was highly rated by both groups in the AJT. The OET shows that overall monolinguals produced more DOCs than bilinguals, for both derived and non-derived verbs, though results were not
significant. Interestingly, though PPC were common with derived verbs (6), they were considerably less so with non-derived, which typically attracted a DOC (7).

(6) Marisa compró regalos para sus amigas. Derived verb  
Marisa bought gifts for her friends  
‘Marisa bought gifts for her friends.’ (B03)

(7) Le va a prestar el dinero a su hermana Non-derived verb  
CL3_DAT going to lend the money to his sister  
‘[He] is going to lend money to his sister’ (B05)

The second condition observed in the AJT, clitic omission (or the PPC alternate in the case of non-derived verbs, see §7.2.1.1), showed no significant difference between bilinguals and monolinguals with derived verbs. This was largely due to the fact that the lack of an explicit IO in my tokens allowed for a transitive interpretation as in (8). On the other hand, a significant difference was observed between groups in the case of non-derived verbs. Monolingual speakers of central Mexican Spanish rated the PPC alternate for non-derived verbs (9) significantly lower than the bilingual group, who found this to be a highly acceptable structure. This result is echoed in the OET, in which monolinguals rarely produced a PPC alternate with a non-derived verb, but bilinguals optionally used either the PPC or the DOC.

(8) Laura Ø está comprando un pantalón [a su esposo].  
Laura is buying a pant [for her husband]  
‘Laura is buying a pair of pants.’

(9) María Ø presta los libros a Carlos.  
María lends the books to Carlos  
‘Maria lends the books to Carlos’

Non-target clitic structures, such as (10), were consistently rated low by monolinguals, who perceived the case mismatch as ungrammatical. Bilinguals on the other hand rated these structures positively. However, I believe that this is not case neutralization $le \rightarrow lo$, as bilinguals never produced case neutralization in production tasks, and tended to use $le$
correctly. Instead it appears that the bilinguals interpret sentences like (10) as clitic doubled structures, which they judged highly acceptable in the AJT and as well as produced in the OET.

(10) *Su amigo lo está prestando dinero

his friend CL3.ACC.M.SG is lending money

‘His friend is lending [him/her] money.’

Finally, experimental results indicate no difference between groups based on clitic position. Interestingly, OET results indicate that both groups tend to favour enclisis with accusative clitics and proclisis with datives, which may indicate a general trend for the Spanish spoken in central Mexico, occurring outside the effects of bilingualism and language contact.

Whether my experimental results are due to cross-linguistic influence is debatable. As many authors from various disciplines and perspectives have shown, 3rd person clitics in Spanish show a great deal of variation (Ormazabal & Romero 2013) in monolingual Spanish as well as in bilingual acquisition (McCarthy 2008). Regardless of their apparent vulnerability, I believe that there is sufficient evidence that contact with other languages does drive variation in the Spanish clitic system, which results in the highly permissive nature of the variation observed in contact situations, as opposed to the somewhat stricter variation observed in some monolingual dialects. Furthermore, I believe that evidence provided by linguists such as Sánchez provides a link between the emergence of non-standard forms and dialects in the Americas and the mental representation of bilinguals by demonstrating how L1 features influence non-standard mapping strategies used in L2 acquisition. Following Sánchez’s line of work, I believe that the evidence in this study suggests that the frequent activation of features in P’urhépecha combined with the inherent instability of the Spanish clitic system does result in non-standard mappings of feature to form in the Spanish of P’urhépecha-Spanish bilinguals. The rest of the chapter is devoted to discussing this evidence by presenting the results of my experiments in context of the research questions, both with respect to previous studies on clitics in
contact/non-contact situations, and with Sánchez’s framework of functional convergence and Cuervo’s analysis of *le* as the applicative voice.

### 8.2 Describing the variety

The second and third general research questions (§8.1.1) are both related to the outcomes of the cross linguistic influence in P’urhépecha-Spanish bilinguals. Assuming this influence does occur, one of the primary goals of this dissertation is to address the non-standard forms observed in the grammar of these individuals and locate them within the field of contact linguistics by comparing them to other varieties of Spanish in both contact and non-contact settings. The current section addresses these goals by describing the patterns of non-standard clitics observed in my experiments and comparing them to those found in other varieties of Spanish. In doing so, I also address the specific research questions related to each experiment. Based on participant judgments, production data from the OET, and examples in P’urhépecha, I examine my hypotheses to determine if participant outcomes align with my initial predictions, discussing them in the context of the relevant theoretical framework(s) — functional interference/convergence, feature/morphology mapping, optionality, the applicative voice, and bilingualism.

In broad terms, results indicate a significantly higher degree of variation and optionality in the clitic system of bilingual participants compared to monolingual participants. Statistically significant variation was observed in both the AJT and OET for both accusative and dative clitics. Specifically, four phenomena were observed: a) neutralization of gender of 3rd person accusative clitics; b) omission of 3rd person clitics of [±animate] antecedent; c) accusative clitic doubling; and d) preference for PPCs with Spanish equivalents of P’urhépecha non-derived verbs. These observations were separated by type of clitic—accusative (a, b, c) and dative (d).

#### 8.2.1 Accusative Clitics

##### 8.2.1.1 Omission of 3rd person clitics

Results indicate that bilingual participants both accept and produce accusative clitic omission in a wider range of contexts than their monolingual counterparts. Interestingly, we observed that monolinguals also accepted high rates of omission in the AJT, however,
preferably with [-animate] DPs ($M=3.3$ of acceptance vs. $M=2.2$ of acceptance with animates), which suggests that speakers of central Mexican Spanish may accept omission in a wider range of conditions than speakers of typical monolingual varieties. Recall that accusative clitic omission does occur in standard Spanish, but only under specific circumstances, most notably when the referents is both [-definite] and retrievable from context. In certain non-standard contact/bilingual varieties, omission has been observed in a wider range of conditions, including with [+definite] references. For example, in Ecuador dropping of the resumptive pronoun in CLLD structures has been observed by Suñer and Yepéz (1988) (11), as well as drop of inanimate discourse topics to produce elliptical objects (12). In Basque Spanish, which uses the indirect le to refer to animate direct objects, topical inanimate objects can be dropped, as shown by the following example by Franco and Landa (2003) (13). However, as Mayer notes, drop is optional and depends on topicality of the referent. In Limeño Spanish, object drop is observed with [+definite] referents that are recoverable from context, as well as with resumptive pronouns (11) in CLLD structures and ellipticals (12).

(11) Todos los cursos que hice, $Ø$ hice en una fábrica en Massachusetts

all the courses that take-PAST.1SG CL3,M,PL take-PAST.1SG in a factory in Massachusetts

‘All courses I took were at a factory in Massachusetts.’

(12) Da=me $Ø$

give-2SG-CL1,SG $Ø$

‘Give me (something/anything).’

(Mayer 2017:175)

(13) Ha llegado el paquete, esta mañana pero no hemos abierto $Ø_i$

has-3SG arrived the parcel this morning but not have-1PL opened $Ø$

‘The parcel arrived this morning, but we haven’t opened (it).’

(Mayer 2017:180)

In her discussion of object/topic drop, Mayer cites two “triggers” that drive object drop in Latin American contact varieties: 1) contact with Amerindian dialects (Mayer cites Quechua and Guarani); and 2) “an inherently variant and unstable clitic paradigm since early Latin, where null objects were topical”. It appears that these non-standard structures
typically build upon an existing structure in Spanish (or Romance in general), using them as a template upon which to build new structures that are analogous to structures in indigenous languages. In the case of P’urhépecha, there is simply no morphology for 3rd person objects as in (14), regardless of topicality, recoverability, definiteness, or animacy. It appears that this translates to the variability observed in my corpus. While monolingual speakers never produced phrases with object drop, bilinguals did, regardless of factors of animacy and definiteness (15).

(14) eshé-s-ø-ka=ni

\[ \text{see-PRF-PRS-1/2IND=1SG.SBJ} \]
‘I saw it/him/her.’ (Capistrán 2015:48)

(15) a. Le daba lástima dejarØ solito [el perro]

\[ \text{CL3.DAT gave pity leave alone [the dog]} \]
‘He felt bad leaving it alone’ (B102)

b. Pues Ana ya hizo sus compras para preparar y

So Ana already made her shopping to prepare and

\[ \text{tiene que empezar a hacerØ [los tamales]} \]
‘So Ana already did her shopping to prepare them and has to start to make them.’ (B112)

The above examples illustrate the general permissiveness of the P’urhépecha bilingual grammar with respect to object drop. Building upon Mayer’s analysis that this phenomenon is triggered by availability of topic drop in Romance as well as the typological factors of the contact language, we see that we can provide a more detailed analysis by considering the specifics of P’urhépecha. We note that the P’urhépecha bilinguals demonstrate complete acquisition of third person objects and can correctly use them, as well as associated pronominal forms as in (16). Incomplete acquisition is not the issue here, instead we see a type of optionality in which bilinguals have a broad tolerance for object drop. In this case, 3rd person object features are mapped to a null
surface form or dropped object in Spanish as it would be in P’urhépecha. Because Spanish already provides object drop as an option, albeit in restricted circumstances, bilinguals are able to extend this option to coincide more with the familiar lack of form in their L1. Specifically, we could indicate that this is an instance of functional convergence, as both grammars have converged upon an object drop strategy for expressing 3rd person anaphoras.

(16) La quiere vender [la casa]
    CL3.F.SG want to-buy [the.F.SG house.F.SG]
    ‘he wants to sell it.’ (B121)

Though my experiment was not specifically designed to test topicality, it is important to note that in Mayer’s study of Limeño Spanish, she presents a compelling case that instances of object drop are strongly related to pragmatic factors such as the topicality of an object. Here it appears that the most likely scenario is that an object is introduced in a clitic doubled structure that marks the introduction of a new topic. In subsequent utterances, the anaphoric clitic is dropped, due to the recoverability and saliency of the topic introduced by the clitic doubled phrase. It has been noted that clitic doubled structures exist in complementary distribution with clitic omission in other contact varieties (García-Tesoro 2002). This suggests a relationship between omission and the liberal clitic doubling observed in many contact varieties, which I discuss in the following section.

8.2.1.2 Clitic doubling

Bilingual participants differed significantly from monolinguals in both their acceptance and production of doubled clitics in non-standard context. Non-standard doubling occurs when a clitic co-occurs with a postverbal DP in a context not typically observed in standard Spanish. Recall that accusative clitic doubling does occur, both in standard and non-standard Spanish, but typically in only very limited circumstances. In standard Spanish, we see that clitic doubling is mandatory with strong pronouns (17), as well as with clitic left dislocation (18) (see §3.2), but not allowed in other contexts. In certain non-standard varieties, such as Rioplatense Spanish, clitic doubling occurs, conditioned
by [+specific] features (19), and though studies indicate a level of optionality in these structures related to various pragmatic factors (Mayer 2017), [-specific] objects are never doubled.

(17) a. Me_i ha visto a mí_i.
    (S/he) CL1.ACC has seen me.
    ‘S/he has seen me’

b. *Ha visto a mí
    has seen to me

(Fernández-Soriano 1999:1248)

(18) a. Las flores_i, las_i compró ella (CLLD)
    the flowers CL3.ACC bought she
    ‘She bought the flowers’

b. *las flores compró ella
    the flowers bought her

(19) a. Lo_i vimos a Juan_i [+animate] [+specific]
    CL3.ACC saw DOM Juan
    ‘We saw Juan.’

Many contact varieties and bilingual grammars are much more permissive with regard to clitic doubling. In monolingual varieties of regions with historical contact with Quechua, there are studies that demonstrate that doubling occurs mainly with [+animate] objects (Bruhn de Garavito & Atoche 2006; Franco 1993; Silva-Corvalán 1980), which is consistent with earlier findings that show that clitic doubling typically occurs in [+specific] [+animate] contexts (Suñer 1988). However, other studies conclude the opposite, showing that inanimate objects are the most likely to be doubled (Valdes-Salas 2002), or that there is no animacy constraint (Paredes 1996). Also of note, many clitic doubled structures exhibit the invariant lo, as shown in the examples taken from speakers of Andean Spanish in Peru (20).
My results indicate high acceptance of doubling overall when compared to monolinguals, though it seems that animacy plays some role in participant judgement. The results of the AJT show that doubling was preferred when the DP had [+masculine], [+plural], and [+animate] features. The OET does not show a preference for either number or gender in doubling structures, however, it shows a tendency for doubling with animate referents, similar to results seen in the AJT. Therefore, it appears that animacy does play a role in accusative clitic doubling with these speakers; however, doubling also occurs with inanimates, which also suggest that other factors may also play a role in this process.

While consensus on what conditions accusative clitic doubled structures in contact situations has not yet been reached, it is undoubtable that these varieties are more permissive than standard Spanish, as well as clitic doubling dialects such as Rioplatense. Authors like Mayer (2008) note that these structures may be the result of a topicalization device, in which a “preverbal non-agreeing non-referential clitic introduces the subsequent new information in the post-verbal object DP as the secondary topic” (p.363). As we have seen in clitic left dislocation structures (CLLD), this sort of doubling/topicalization relationship occurs when a speaker left dislocates an object, which serves to topicalize the object and produces a doubled clitic. Crucial to the CLLD is the movement of the object to the preverbal position, which is the canonic topical position in Spanish (Mayer 2008). In the case of the non-standard clitic doubled structures, this movement does not occur; however, it seems that the accusative clitic can act as an anchor between the object and the canonical topic position to the left of the verb. Mayer notes that this pattern corresponds to pragmatic marking strategies characteristic of head marking Amerindian languages, thus pointing to the typological similarity of these languages as a factor that results in the relatively widespread nature of clitic doubling in American contact varieties. P’urhépecha is also a head marking language, as demonstrated by the genitive marking in phrases like in (21).
We see the use of objective case marking on both nouns and demonstratives, as in (22), which, recalling the discussion in Chapter 3 (§3.5.3), depends on a variety of factors such as specificity, individuation, animacy, humanness, and focus/topicalization.

This brings us to the core hypothesis related to doubled accusative structures: bilingual P’urhépecha speakers will prefer clitic doubled structures due to the required object marking in the L1. The idea here is that because P’urhépecha has obligatory marking on overt objects, they will map this strategy to the accusative clitic lo. This hypothesis, though based on anecdotal observations and previous research in other contact varieties, is again rooted strongly in the theories of language contact and acquisition presented by authors like Sánchez, Lardiere, and Mayer. In this case, we view the tendency for bilinguals to clitic double as a process of functional interference. Following this line of thinking, we see that the L1 has a feature associated with obligatory case marking that is not present in the L2. The activation of this feature in the L1 drives a process of reconfiguration of features in the L2. In this case, P’urhépecha objective case marking is mapped onto the Spanish accusative clitic, causing a feature reassembly that results in clitics that exhibit non-standard forms. Specifically, they tend to lose agreement features relating to gender and number, while acquiring features related to object agreement and topicalization. It seems, however, that the existing pattern for clitic doubling in Spanish, including CLLD and doubling with strong pronouns, provides an easy template for
bilinguals to build upon, or extend to a more generalizable rule of clitic doubling for object marking/topicalization.

### 8.2.1.3 Gender Neutralization

Experimental results provided evidence of gender neutralization amongst bilinguals in both the AJT and OET, in which participants either accept or produce 3rd person anaphoric clitics with [+feminine] and [±plural] referents as single clitic *lo* in a way that is significantly different than the monolingual group. Particularly noteworthy was the AJT, in which bilinguals demonstrated significantly higher rates of acceptance than the monolingual group in their judgement of the clitic *lo* when the reference DP had [+feminine] features. Furthermore, in the oral elicitation task there was no evidence of gender neutralization with the monolingual group, while the bilinguals neutralized gender in 6 of the 16 (37%) instances of non-target clitics, producing phrases such as (23).

(23) Pues ya losi, fue a visitar ya están ahí con sus primasí.

Well already CL3.ACC.M.PL went-to-visit already they-are there with their cousinsSF.PL.

‘Well (she) already went to visit them [her cousins.F.PL], (she) is there with her cousins.’

(B104)

Recalling the review of clitic use across peninsular and monolingual varieties of Spanish (see Ch. 3), gender neutralization of accusative clitics is not a phenomenon that occurs in standard Spanish. Even dialects that are more permissive with clitic use in doubled structures (Rioplatense), or that exhibit case neutralization (central Peninsular *leismo*), always maintain gender distinctions when using etymological clitics *lo/la/los/las*. Gender neutralization has been observed, however, in varieties of Spanish with both current and historical contact with Amerindian languages, as shown in these examples (24) from the Limeño variety.

(24) a. Lavo a la yuca, pelo la yuca

\textit{wash-1 SG DOM DET.FSG cassava peel-1 SG DET. F.SG cassava}

‘I wash the cassava, I peel the cassava.’

B104
b. lo lavo, lo hago en trozos y lo sancocho

`I wash it, cut it into pieces and stew it.'

(Mayer 2017:144)

Palacios (2013) (see §4.2) documents the lack of distinction between gender in contact varieties as the first step on the path to a complete loss of gender/case distinction with clitic use. She calls this step the two case simplified systems, which maintains accusative dative distinctions, but lacks grammatical gender. The relatively commonplace nature of gender neutralization in contact varieties and with bilingual speakers throughout the Americas is likely due to shared typological traits of Amerindian languages, such as lack of grammatical gender, head marking, etc.

Like other Amerindian languages, P’urhépecha does not have grammatical gender, which presents an initial barrier to the acquisition of this feature and a potential site of interference/mapping errors between languages. As noted, this interference is manifested as a process of variation or optionality in participant performance. Typically, we see that bilinguals accept and produce standard structures that include gender features in a way that is very similar to the monolingual participants. Despite this, the acceptance of *lo* in the case of feminine referents was significantly higher than their monolingual counterparts (*M*=2.9 acceptance rate and 3% of production), which indicates an optionality with respect to gender specification not seen with monolingual participants. Furthermore, I would like to indicate that in certain interviews with my informants, I noted consistent use of the pronoun *lo*, regardless of the gender of the referent, even in phrases in which the full DP and clitic are highly proximate, as seen in the following example (25).

(25) Aquí encontró una mariposa y *lo* metió aquí en un vaso. Se ve que la mariposa se salió, *lo* perdió. Y aquí ya *lo* anda buscando con el perrito. Y *lo* busca en todos lados y no *lo* encuentra.
‘Here (he) finds a butterfly and puts it in a glass. You can see that the butterfly left, (he) lost it. And here, (he) is looking for it with his doggie. And he looks for it everywhere and cannot find it.’

This example clearly illustrates neutralization of gender features associated with the clitic—even though the speaker clearly recognizes that mariposa is a feminine noun and uses the correct determiner (both definite and indefinite articles), they consistently use the pronoun lo when an anaphora is required. Considering the results of the AJT and OET, as well as the phrases produced in individual interviews, it appears that there are two related phenomena occurring related to gender neutralization: 1) high rate of acceptance of structures with standard clitic use (with gender features) as well as those with neutralized clitics (lo for la), and 2) the optional use of the form lo as a catch-all anaphora, regardless of the gender of the noun referent. As Mayer (2017) notes, this sort of optionality/variation is common in bilingual grammars, and even individual participants produced variation in proximate phrases, mixing both neutralized and gendered clitics, as in (26).

(26) El niño atrapó una mariposa en el campo con su perrito y lo encerró en una tacita. De repente dejó la taza sin taparla y cuando menos se acordó ya la mariposa se había escapado porque no la tapó. Entonces, el niño muy preocupado, muy curioso fue a buscarlo, salió de su casa y fue a buscarlo en el campo.

‘The boy trapped a butterfly in the field with his doggie and locked it in a little cup. Suddenly, (he) left the cup without covering it and when he remembered the butterfly had escaped because he hadn’t covered it. So, the boy was very worried, very curious, he went to look for it, he left his house and went to look for it in the field.’

Here we see that the participant produced the masculine pronoun lo when referring to the feminine noun la mariposa, but in the following phrase uses the feminine la to refer to the feminine noun la taza. It has been noted that this sort of variability goes hand in hand with language change (Aitchison 2001), that old and new forms coexist in the grammar of bilinguals and other agents of language change (Mayer 2017); however, it is unknown
at this time if the observed optionality will lead to language change in the local dialects, that is to say, whether the use of an invariant clitic \textit{lo} would become the standard anaphoric pronoun, regardless of the gender of the referent.

The source of this variation is likely linked to the fact that a): P’urhépecha does not have grammatical gender; b) P’urhépecha does not have overt morphology for 3\textsuperscript{rd} person object clitics; but, c) does exhibit head marking and have morphological object marking. Due to the lack of morphology for 3\textsuperscript{rd} person anaphoras, it is difficult to produce parallel structures in P’urhépecha that provide a template for production of non-standard Spanish sentences. However, considering the above characteristics of P’urhépecha (a, b, c), and the theoretical perspective presented by Lardiere, Sánchez, and others, I can propose a mechanism related to morphological feature mapping and functional convergence that may drive the observed variation.

Following the premise presented by Lardiere, the optional gender neutralization I observed with my participants can be viewed as a partial disassociation of functional feature and form resulting from an incomplete mapping of grammatical gender features to the associated accusative clitic morphological forms. The bilinguals obviously have acquired grammatical gender in Spanish, they use determiners correctly in DPs and correctly assign gender to overt nouns; however, the requirement for gender agreement between pronominal forms and their referents seems to be somewhat less strict than in standard dialects. The resulting variation produces the outcome in which speakers can use \textit{lo} to refer to feminine referents. I believe that what I observed here is similar to the phenomena observed with accusative clitic doubled structures. It appears that the accusative clitic has lost its agreement function, instead, it is being used as a secondary topic marker. The tendency to use \textit{lo} instead of say, \textit{la}, is driven by the fact that \textit{lo} is the underspecified, unmarked form in Spanish, which will act as the default form. This is apparent in its use as the common gender in determiners and adjectives, neuter forms, and generally wide syntactic distribution (McCarthy 2008).

Taking the perspective of Sánchez, the incomplete mapping of gender to accusative clitics can be viewed as part of a process of functional interference caused by the
activation of P’urhépecha functional features that affect the Spanish grammar of bilingual speakers. Teasing apart the mechanics of this interference is quite challenging. Simply indicating the lack of grammatical gender in P’urhépecha does not seem to be enough, as P’urhépecha speakers typically did not produce incorrect gender assignment in overt DPs. Furthermore, recall that P’urhépecha lacks 3rd person pronominal clitics in general, which complicates the issue even more. Instead, this seems to relate to P’urhépecha object marking. As discussed in the clitic doubling section, the use of doubling with invariant lo is a common strategy used by bilinguals, and parallels topic marking strategies used in both Spanish and P’urhépecha. It appears that secondary topic marking with lo is mapped onto the Spanish template of anaphoric clitic use, created somewhat of a hybrid between a topic marking strategy with invariant lo and a referential accusative clitic.

8.2.2 Dative clitics

When discussing the results presented in Chapter 7, it is important to note that unlike the experiments involving accusative clitics, this investigation does not build upon previous research or observations about languages in contact with Amerindian languages. Instead, in uses Cuervo’s analysis of the Spanish dative alternation and the applicative voice to analyze the use of applicative morphology in single and double object constructions. Recall that in P’urhépecha, certain verbs require a morphological marker, or the applicative voice, in order to participate in three argument constructions (27). Verbs that require the applicative voice are referred to as derived by the scholars who study P’urhépecha. Derived verbs are monotransitive but can be also used in DOCs with the addition of the applicative voice. Furthermore, we see that P’urhépecha derived verbs participate in a dative alternation, which consists of either a DOC with the applicative voice (28), or a PPC oblique phrase with no applicative marker (29). On the other hand, non-derived verbs always participate in DOCs—there is no PPC alternate—and therefore never require the applicative voice (30).

(27) Pyá-ku-s -Ø -ti tsúntsú-ní María-ní
    buy-APPL3-PFV-PRS-IND3 pot-OBJ María-OBJ
   ‘(s/he) bought Maria the pot’

(Capistrán 2006:86)
(28) Pia-ku-s–ti=ø
  buy-APPL3-PFV-IND3=CL.OBJ.3SG
  ‘(s/he) has bought him (something)’

  (Chamoreau 2009:170)

(29) Pyá-s-ø-ti     tsúntsu-ni para María
  buy-PFV-PRV-IND3 pot-OBJ for María
  ‘(s/he) bought the pot for María’

  (Capistrán 2006:88)

(30) ewá (*–chi)–s–ø–ti=rini ichárhuta-ni
  take–APPL1/2-PFV–PRS-IND3=CL.OBJ.1SG canoe-OBJ
  ‘he has taken the canoe from me’

Following Cuervo’s analysis, we see that Spanish also requires an applicative morpheme (dative le) in true DOCs (31a), while structures lacking this morpheme are oblique PPCs (31b). Importantly, Spanish differs from P’urhépecha in that the type of verb does not affect the availability of a PPC. For example, we see that both verbs like dar (32) as well as verbs like comprar (31) offer both alternates as grammatical options.

(31)  a. Le:     compró un regalo a Maríai         DOC
       CL3.DAT bought a gift María.DAT
       ‘(s/he) bought Maria a gift’

       b. Compró un regalo para María               PPC
          bought a gift for María
          ‘(s/he) bought a gift for Maria’

       c. *Compró un regalo a María
          bought a gift María.DAT

(32)  a. Le:     doy un regalo a Maríai         DOC
       CL3.DAT I-give a gift María.DAT
       ‘(s/he) bought Maria a gift’
b. Doy un regalo a María PPC
I-give a gift PREP María
‘(s/he) bought a gift for Maria’

My study seeks to determine whether parallels can be drawn between a Spanish structure using the true DOC with the applicative *le* as in (33) and the P’urhépecha structure with a derived verb and the applicative -*ku/chi* in P’urhépecha as in (27) above.

(33) Ella *(le) compró la olla a María.
She CL3.DAT bought the pot a.DAT María
‘She bought María the pot’

Recalling Chapter 7, I hypothesize that some sort of parallelism between the Spanish/P’urhépecha applicative does exist, and that P’urhépecha strategies of marking the applicative voice would cause interference in the use of the Spanish morphology *le*, depending on whether the verb in Spanish corresponded to a derived or non-derived verb in P’urhépecha. Therefore, with a Spanish verb like *prestar* (non-derived in P’urhépecha), we would expect that bilinguals would prefer the omission of the clitic *le* (PPC alternate using the preposition *a*), producing a structure similar to the P’urhépecha translation equivalent *kwáni* (34), whereas monolinguals should accept it with (DOC) or without (PPC) *le*. With a (derived) verb like *comprar*, the dative alternation is more obvious, the phrase must either use the DOC structure that employs the applicative *le* and dative marker *a* or use the prepositional phrase alternate, which in the case of the verbs used here would employ a different preposition—*para*. Therefore, omission of *le* in DOCs should be ungrammatical for both groups of participants based on the grammatical constructs of both languages.

(34) Juanu kwanita-s-ti tumina pirembimba-ni
Juan lend-PFV-IND3 money sister.OBJ
‘Juan presta dinero a su hermana’

Results do indicate a significant difference between groups, but not exactly in the same way I expected. Looking at non-derived verbs, we see that both bilinguals and
monolinguals accept these structures with the target clitic le (32a). This is an ubiquitous grammatical structure (DOC) in Spanish, and it appears that the bilingual participants have acquired all of the relevant morphology and features related to dative case marking and double object constructions that are required to interpret these structures. On the other hand, structures with non-derived verbs that did not carry the clitic le (PPCs) yielded more interesting results (32b). Although, according to Cuervo’s analysis, the provided PPCs are completely grammatical, we saw that monolinguals rated this construction significantly lower than bilinguals, who rated it just as high as the DOC alternate. This unexpected result may be due to dialectal variation—Mexican Spanish has been identified as having a strong tendency to overuse/require le in a wider range of contexts than other dialects (Company 2006; Navarro & Espinal 2012).

Looking at derived verbs, we see that there is a tendency in the AJT between groups (p=.055) for the target condition le. Both groups accept this structure, but the bilinguals seem to prefer it, possibly due to the correspondence to their own applicative morphology required in this situation to add the applied argument to the derived verb, as shown previously in example (28). The counterpart structure, omission of clitic le with derived verbs, was ungrammatical—each verb we used required the preposition para for the PPC (31b). This led me to expect low acceptance for this structure both with bilinguals and monolinguals, due to the ungrammatical nature of the phrase and because this structure requires the ApplV in P’urhépecha. Despite this, results indicate high rates of acceptance for both groups with this structure. Considering these surprising results, I identified a problem here with my experimental design—it was possible for these sentences to be interpreted as normal transitive sentences due to the fact that there was no explicit IO. Consider the following example (35a). So, even though the context required that the follow-up sentence be interpreted as a DOC with clitic le, I conclude that the participants interpreted these tokens as transitive sentence (they are not ungrammatical if interpreted this way). This unexpected treatment of these sentences rendered them nearly useless in terms of my study. To be able to tease apart this problem, an explicit IO should have been part of the target sentence, as shown by this hypothetical sentence (35b).
(35) a. El hijo de Laura necesita un pantalón nuevo. Por eso Laura Ø compró

The son of Laura needs a pants new Therefore Laura bought
un pantalón.

a pants.

‘Laura’s son need a new pair of pants. Therefore, Laura bought a pair of pants’

b. El hijo de Laura necesita un pantalón nuevo.

The son of Laura needs a pants new
Por eso Laura Ø compró un pantalón a su hijo.

Therefore Laura bought a pants for his son.

Overall, the result of the AJT for both target clitic and omission are corroborated by data from the OET. Dividing the production data from the bilingual group by type of verb, we find that omission in the bilingual group occurs mostly with non-derived verbs (k=42; 24%) (36) as opposed to with derived verbs (k=16; 8%). This result suggests that bilingual speakers may in fact rely on P’urhépecha equivalents to some degree when choosing between equally grammatical alternates, favouring the alternate that is most like P’urhépecha. Thus, we see the PPC alternate ([-ApplV] morphology) more commonly with non-derived verbs than with derived verbs, which typically were produced as a DOC ([+ApplV] morphology). Monolinguals, on the other hand, only produced 12 tokens (9%) with omission of a dative clitic and these occurred exclusively with Non-derived verbs indicating that they chose the PPC alternate over the DOC.

(36) Está quitando el osito a su hermanita.

Is taking-away the teddy-bear to his little-sister

‘He is taking away the teddy bear from his little sister’

(B114)

The final condition addressed in the experiment pertained to the use of lo instead of the clitic le, which is a form of clitic neutralization that has been observed in other contact situations (Paredes 1996). If the bilinguals in my study do map the P’urhépecha applicative voice to the Spanish le, I wanted to investigate if bilingual speakers had a tendency to neutralize the AppIV into an invariable clitic (use it as marker for the AppIV
disregarding case features of Spanish). If so, this evidence could further reinforce that the P’urhépecha applicative morphology has been mapped to the Spanish clitic system, as it would represent a true non-standard use of Spanish clitics. In the case of monolinguals, it was expected that this structure would be rejected categorically, as clitic lo does not cover the dative function needed in these structures. For the bilingual group, I predicted that they would accept this structure with derived verbs, implying that they need a morpheme that represent the ApplV regardless of form, and reject it with non-derived verbs (they do not need a morpheme in place of the ApplV). Results show that monolinguals rated these phrases low regardless of the type of verb, as expected. Bilinguals produced significantly different results here as well, with a much higher acceptance of clitic lo with both derived and non-derived verbs, with a slight preference for derived verbs.

These results can be interpreted in two different ways. We do see that the bilinguals give the highest rating to derived verbs, and they do differ from the monolinguals in their judgment of these structures; however, they accept it with non-derived as well. The most likely scenario is that these structures were interpreted as transitive constructions, as the IO was not overt. With this interpretation, these sentences could be interpreted as accusative doubled structures, which, as we know from previous results, bilinguals find highly acceptable. To illustrate this, consider example (37). Here the results are again ambiguous, and with these tokens it is not possible to tease apart whether the clitic is coindexed with the overt DO or with the implied IO. Without this information, it is impossible to determine whether they are doing accusative clitic doubling, or case neutralization of clitic le.

(37) El hijo de Laura necesita un pantalón nuevo. Por eso Laura lo compró un pantalón.

The son of Laura needs a pants new. Therefore Laura CL3.ACC bought a pants.

‘Laura’s son need a new pair of pants. Therefore Laura bought a pair of pants’

Even though in some cases this experiment produced ambiguous results, we do see some differences in interpretation that could be related to the P’urhépecha use of the applicative voice. The fact that the monolingual group seemed to reject the use of PPCs
with non-derived verbs, despite the fact that it is technically a grammatical structure, but the bilinguals did not, is indeed interesting. One would expect that if there is a dialect variation in central Mexican Spanish that requires the use of *le* with these types of non-derived verbs, that it would be observed in the bilinguals as well. Because it is not, we can posit that this may be a case of functional convergence in which the bilingual grammar displays greater variation due to cross linguistic influences.

As we have seen, both Spanish and P’urhépecha have a dative alternation. In Spanish, this alternation occurs with a wide variety of verbs and prepositions, but in the case of a DOC, it always requires the applicative morphology *le*, regardless of the host verb. P’urhépecha’s dative alternation only occurs with verbs displaying certain characteristics, termed derived verbs, and derived verbs participating in a DOC are always marked with the P’urhépecha applicative marker *-chil–ku*. On the other hand, non-derived verbs in P’urhépecha must participate in a DOC, have no PPC alternate, and do not exhibit applicative morphology. Despite the differences in P’urhépecha based on verb type, it is easy to see the parallelism between available constructions and morphology in these two languages, especially between derived P’urhépecha verbs and Spanish verbs. Available constructions for each language are shown in Table 8.1 (Spanish examples adapted from Cuervo 2007).

Table 8.1 P’urhépecha and Spanish comparison of sentence structure

<table>
<thead>
<tr>
<th></th>
<th>P’urhépecha</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Derived verb</strong></td>
<td><strong>DOC</strong></td>
<td><strong>P’urhépecha</strong></td>
</tr>
<tr>
<td></td>
<td>SUBJ-V+ApplV-DP&lt;sub&gt;DOM&lt;/sub&gt;-DP&lt;sub&gt;DOM&lt;/sub&gt;</td>
<td>SUBJ-ApplV+V-DP&lt;sub&gt;-a&lt;/sub&gt;-DP</td>
</tr>
<tr>
<td></td>
<td>SUBJ-V-DP&lt;sub&gt;DOM&lt;/sub&gt;-PP</td>
<td>SUBJ-V-DP-PP</td>
</tr>
<tr>
<td><strong>Non-derived</strong></td>
<td><strong>DOC</strong></td>
<td>SUBJ-V-DP&lt;sub&gt;DOM&lt;/sub&gt;-DP&lt;sub&gt;DOM&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>No PPC alternate</td>
<td>SUBJ-V-DP-PP</td>
</tr>
</tbody>
</table>

Results indicate that monolinguals and bilinguals perform very similarly with these constructions, which can be expected due to the obvious similarity between grammars. In the case of non-derived verbs, we see parallel structures between a P’urhépecha DOC and
a Spanish PPC; however, there is no similar structure in P’urhépecha to the Spanish DOC with a non-derived verb. These conflicting patterns may very well be the source of the greater variation observed in bilingual speakers. The [-AppIV] P’urhépecha non-derived structure serves as the template for the corresponding sentence in Spanish, whereas the [+AppIV] non-derived DOC in Spanish is the least attractive alternative, despite the fact that monolinguals prefer this structure, both in acceptability judgement and production. Though the bilingual group have obviously acquired non-derived DOCs in Spanish, and can both interpret and produce them, their preferred set of options for these constructions in Spanish seem to have converged with parallel structures in P’urhépecha. Looking again at Table 8.1, we see that the subset of preferred Spanish options for bilinguals (Derived DOC, Derived PPC, Non-Derived PPC) correspond to the available options in P’urhépecha, whereas the option with no P’urhépecha equivalent (Non-Derived DOC) was the least produced structure in the bilingual corpus.

8.2.3 Clitic Placement

There is one final research question that we have not yet addressed. In Chapter 6, we hypothesized that P’urhépecha-Spanish speakers would exhibit a preference for enclisis over proclisis, due to the fact that P’urhépecha is an exclusively enclitic language and Spanish has optionality depending on verb finiteness (see § 3.2.1.2). Clitic placement in bilingualism and L2 acquisition has been studied, with various language pairings, notably Spanish and English (Duffield & White 1999; Perez-Leroux, Cuza, & Thomas 2011; Thomas 2012). Studies on clitic placement for contact varieties are scarce, but in a study with Nahuatl-Spanish bilinguals, Ramirez-Trujillo and Bruhn de Garavito (2015) found no errors in the position of the clitic relative to the verb. Because of the aforementioned observation about P’urhépecha clitic placement, I included clitic placement as a variable for judgement and production in the AJT and OET respectively.

Results do not indicate that bilinguals differ from monolinguals. Participants in both groups produced similar results in the AJT and the OET with both accusative and dative constructions. This indicates that these bilinguals have the same intuitions about clitic placement as the monolinguals. Therefore, I conclude that this is not an area in which L1 introduces interference in the L2 Spanish of these speakers.
Interestingly, these results show another pattern that relates to the general phenomenon of Spanish clitic climbing. It is generally assumed that the enclitic position is the unmarked position (Masullo 2004). However, various studies indicate that animacy plays a role in clitic climbing. In spoken language, animate referents tend to climb and are expressed with proclisis, while inanmites tend to appear in the unmarked enclitic position (Myhill 1988). Later corpus studies, such as Davies (1995) and Schwenter and Torres (2014), somewhat contest this in that they have found a clear tendency for proclitic position in modern Spanish for 3rd person direct object clitics in all cases. Furthermore, they also identified that the semantics of the verb is a determining factor for limiting this optionality, such that highly frequent constructions like \textit{ir a} + Infinitive, \textit{poder}, \textit{querer}, \textit{tener} que + Infinitive, and \textit{estar} + Gerund are more likely to have proclitics. In addition, Schwenter and Torres (2014) conclude that “3rd person DO clitic placement is sensitive to semantic-pragmatic factors of animacy and topic persistence.” (p.532), indicating that propositional and non-referential clitics favour enclisis, whereas referents that are persistent, specifically inanimate ones tend to favour proclisis.

Interestingly, the results of the OET in my study show an interesting and somewhat contradictory pattern: both groups produced more enclisis when using accusative clitics and proclisis when using dative clitics. This difference could be explained partly in terms of animacy, as all indirect objects used in the dative experiment were animate, which was not the case for the accusatives. However, when I further divided the accusative results in terms of animacy, I found no difference between animate and inanimate referents nor between groups, meaning that there is a clear preference for enclisis regardless of animacy. Thus, here we observe an entirely different pattern than what had been previously documented by Schwenter and Torres (2014) and Davis (1995) in their corpus studies. However, since my study was not a corpus study, we cannot really draw too much of a comparison here, let alone claim to refute any other findings. I do believe that this would present an interesting topic for future research, though it goes beyond the scope of this dissertation.
8.2.4 Summary

In sum, we see that bilingual P’urhépecha-Spanish speakers exhibit a much higher degree of variability in both their production and judgment of Spanish clitics when compared to monolingual speakers of a similar variety. Bilinguals displayed a tendency to accept and produce non-standard structures optionally, meaning that they also accepted and produced standard structures similar to monolingual speakers. In some cases, at least anecdotally, it appears that they prefer the optional, non-standard clitic use (think back to the butterfly story). As this study is, in its own little way, pioneering in the sense that it is the first experimental study of its kind with P’urhépecha-Spanish bilinguals, I am not able to provide a comparison with other experimental findings on P’urhépecha. However, recalling the research presented in chapter 4, as well as throughout the theoretical and discussion chapters, there is a broad foundation of research about bilingualism, upon which a wide variety of studies in the field of Amerindian contact varieties have been based. In discussing the results of my study, I have focused on placing my results within the theoretical frameworks presented by Sánchez, Lardiere, and, to a lesser degree, Mayer. To conclude this discussion, I would like to indicate I believe there are two overarching themes that are the primary take aways from this study. First of all, regardless of the specific phenomenon, we see a considerable amount of variation in the clitic system of the bilingual participants. This variation may indicate that these speakers are participating in an ongoing process of language change, or that a process of interference somehow affects the relationship of morphology and functional features in their grammar. While it is important to recognize that variation is a natural part of language in general, and that even production of clitics in monolinguals may present some variation, we saw that monolinguals displayed little variation in their production of target structures, while bilinguals did, considerably in some cases. This suggests that the observed variation is somehow linked to the bilinguals’ status as bilinguals. Second, it appears that this variation is linked to features of both the L1 and L2. Across the Americas, we can observe commonalities in language contact situations, particularly in the accusative clitic system (omission, doubling, neutralization). These similarities are most likely linked to the typological similarities of the Amerindian language, which drive similar processes of interference and change based on shared strategies of head marking,
object agreement and topic marking, and lack of grammatical gender. Furthermore, we have seen that the non-standard structures observed in contact varieties and bilinguals throughout the Americas manifest in historically vulnerable areas of Spanish grammar such as the pronominal clitic system, using existing structures in Spanish (i.e. clitic doubling, object drop) as a type of template upon which to expand. Thus, it appears that the observed variation and non-standard structures depend on a complex interplay of factors stemming from both languages.

Beyond theoretical perspectives, I believe that it is important to provide a more general comparison to the contact varieties observed throughout the Americas, at least where I have not previously done so implicitly. Recalling the analysis presented by Palacios (chapter 4), we see that various dialects across the Americas have different generalizable patterns with regards to non-standard clitic use: two-case simplified system (case distinction; no gender distinction); the transition system (case distinction with animacy constraints); and the one-case system (no case, gender, nor animacy constraints). Whether or not these systems represent a progression of simplification of the clitic system is debatable, regardless, the categorization seems somewhat useful. It seems that P’urhépecha speakers display optionality in both judgement and production that tends towards the use of a two-case simplified system, with a relaxed requirement for gender marking on accusative pronouns. Here it is important to note that the use of a two-case system is optional in these speakers, unlike other dialects in which the loss of gender number features in accusative clitics have been lost completely. They do not display any tendencies towards leísmo, or towards the loss of case distinction.

Thinking in these terms, we see that the Spanish spoken by my participants is decidedly different from varieties observed in Ecuador and Paraguay (leísta), as well as peninsular contact varieties (Basque). It is more reminiscent of the Spanish observed in situation of contact with Quechua and Mayan languages. In particular, the tendency toward liberal clitic doubling, often using the clitic lo despite the gender of the doubled DP, is a common feature shared by these dialects, as well as the tendency to omit topical clitics that are recoverable from context. This suggests perhaps that P’urhépecha bilinguals use similar strategies for object agreement and topic marking as those outlined by Mayer in
her study of Peruvian Spanish. My future work on this topic will explore this line of thinking, investigating the relationships between information structure and accusative clitic doubling, neutralization, DOM, and topic drop in the context of P’urhépecha, providing a detailed comparison with Mayer’s analysis of Peruvian speakers.

8.3 Concluding remarks: Bilingualism and language contact

To conclude, one thing that stood out throughout many of the interviews with the bilingual participants was their own perception of their bilingualism. Although all of them were proud to be speakers of P’urhépecha and members of the P’urhépecha community, nearly all of them commented that they don’t speak Spanish “correctly” and how they don’t speak the P’urhépecha of their ancestors. I would like to briefly consider this statement and its implications. Though these bilinguals fluently speak two languages, they have learned to consider their use of both languages to be somehow deficient. Because the variety of Spanish they speak does exhibit variation from the standard dialect, they face stigmatization as speakers of an inferior dialect, when the reality is that they are simply participating in a natural linguistic process. In terms of their P’urhépecha, it seems that they believe it is somehow lacking as well. When asked why, they indicate borrowings, the inability to communicate with speakers of other dialects, and their inability to express certain concepts in P’urhépecha. I believe that there are other factors at play here as well, that can be broadly related to socio political conditions that discriminate against Amerindian languages. First and foremost, of these is a lack of access to formal education in their L1. It goes beyond this though as well; I believe that there is a lack of understanding of these languages throughout societies at large. They are often referred to as dialecto “dialects”, which seems to convey some sort of inferiority right from the start. Again, I would like to emphasize these participants were all proud speakers of P’urhépecha, but one cannot ignore the larger societal attitudes seen in daily Mexican life.

I sincerely hope that my dissertation can contribute to the current movement to dispel these myths about both the Spanish and Amerindian languages of individuals living in contact zones throughout Latin America. In the case of these participants, most of the
P’urhépecha individuals now learn Spanish as children, before the age of seven, and are thus not adult L2 speakers, but child L2 bilinguals. The fact that they speak a different variety of Spanish has nothing to do with their cognitive abilities, and this sort of thinking needs to be dismissed. Bilinguals speak different varieties of both languages due to complex processes of linguistic interaction in a mind that accommodates two distinct linguistic systems. The fact that variation is observed in the language of these individuals is universal to bilinguals the world over, it is not in any way related to the use of inferior or impure dialects, despite the differences from standard monolingual varieties.

Therefore, my humble contribution to these communities of speakers is to provide evidence that these phenomena that are often times perceived as negative by them, or stigmatized by the society at large, are just part of the complex ability of being bilingual and that their variety is just as valid as any other variety of Spanish or P’urhépecha.

8.4 Future work

This project was planned as a starting point to document the Spanish variety in contact with P’urhépecha in the region of lake Pátzcuaro. There are many other interesting phenomena that can be investigated as well as proceeding with detailed studies on each one of the phenomena discussed in this dissertation that would tease apart some of the limitations of this study. Nevertheless, as the field of clitics is so fertile, I am interested in further exploring these recurring phenomena but in monolingual Spanish speakers that are in contact with P’urhépecha. As mentioned in the introduction chapter, the town of San Jerónimo is located in between San Andrés and Santa Fe. This town was P’urhépecha speaking some 60 years ago and due to various social factors, it has now fully shifted to Spanish. Through my fieldwork, I encountered the same comment about the people of San Jerónimo by people of various towns surrounding it. This recurring comment was something like this: los de San Jerónimo ya no hablan p’urhépecha pero hablan español como si hablanan p’urhé. (Those of San Jerónimo, they no longer speak P’urhépecha, but they speak Spanish as is they were speaking P’urhépecha). One of the participants went further by saying that because he knows P’urhépecha he identifies the “P’urhepecha” in their Spanish and he further commented on how they should just go back to speaking P’urhépecha if they’re going to be speaking Spanish like P’urhépecha.
This observation is incredibly interesting in the field of contact linguistics as we could make more predictions in terms of language change and emerging varieties. I hope to be able to tackle this in my future work.
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Appendices

Appendix A – Sociolinguistic Interview

Cuestionario Lingüístico Bilingüe para hablantes de P’urhépecha / Español

Adaptado de Silvina Montrul

Date: 2012

http://www.nhlrc.ucla.edu/data/questionnaires.asp

(Esta información será confidencial)

Número de participante: ____________

Iniciales: ______________________________ Edad: ________________

I. Datos Personales

1.1 ¿Cuál es su nivel más alto de educación formal? (Por favor circule uno):

   Primaria  Secundaria Preparatoria/GED  Universidad

1.2 País, estado y pueblo de nacimiento: ________________________________

   País y estado de residencia: ________________________________

1.3 ¿Cuántos años ha vivido en su país de origen?

1.4 ¿Cuántos años ha vivido en su comunidad de origen?

1.5 ¿Qué idiomas se hablan en su comunidad de origen? ¿Cuál se habla más?

1.6 ¿Ha vivido en otras ciudades/pueblos? ¿Por cuánto tiempo? ¿Qué idiomas se hablan ahí?

1.7 ¿Cuántos años ha vivido en su país de residencia?

1.8 ¿A qué se dedica?

II. Historia Familiar

2.1 ¿De dónde son sus padres (Estado/ciudad/pueblo/comunidad)?

   Madre: ____________  Padre: ____________
2.2 ¿Qué idiomas hablan sus padres?
Madre: __________  Padre: __________

2.3 ¿A qué se dedican sus padres?
Madre: __________  Padre: __________

2.4 ¿Cuál es el nivel escolar de sus padres? (circule uno para cada uno)
Madre:  Padre:
primaria  primaria
secundaria  secundaria
preparatoria  preparatoria
universidad  universidad

2.5 ¿De dónde es su familia?

III. Historial Lingüístico

3.1 ¿A qué edad empezó a aprender P’urhépecha? ¿dónde y cómo lo aprendió?

3.2 ¿A qué edad empezó a aprender español? ¿dónde y cómo lo aprendió?

3.3 ¿A qué edad empezó a aprender inglés? ¿dónde y cómo lo aprendió?

3.4 ¿Empezó a aprender ambos P’urhépecha y español antes de los 5 años? (circule uno)
Sí  No

3.5 ¿Qué idiomas escuchó en su casa entre la edad de 0 - 5 años? (circule todos los que apliquen)
P’urhépecha  Español  Ambos  Mezclado  Otro (especifique)

3.6 ¿En qué lengua o leguas le hablaban sus padres cuando era niño?
P’urhépecha  Español  Ambos  Mezclado  Otro (especifique)

3.7 ¿En qué lengua o lenguas les hablaba a sus padres?
P’urhépecha  Español  Ambos  Mezclado  Otro (especifique)

3.8 ¿Tiene hermanos?
Sí      No      ¿Cuántos?      ¿Son mayores o menores?

3.9 ¿En qué lengua le habla a sus hermanos?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.10 ¿En qué lengua le hablan sus hermanos a usted?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.11 ¿Vivían sus abuelos en su casa cuando era niño/a?

Sí      No

3.12 ¿En qué idioma le hablaban sus abuelos a usted?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.13 ¿En qué idioma les hablaba a sus abuelos?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.14 ¿Había alguien más que lo cuidara de niño/a (tíos/primos/padrinos)?

Sí      No      ¿Quién?

3.15 ¿En qué idioma le hablaba esa persona o personas a usted?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.16 ¿En qué idioma usted le hablaba a esa persona?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.17 ¿Fue a algún tipo de guardería antes de la edad de 5 o estaba en su casa?

Guardería    En casa con __________

3.18 ¿Qué idioma se usaba en la guardería o casa?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.19 ¿Qué idioma se usaba en su escuela de niño/a?

P’urhépecha    Español    Mezclado    Ambos    Otro (especifique)

3.20 ¿Jugaba con niños que no hablaban español?

Sí      No
3.21 ¿Qué idioma usaba con los demás niños?

P’urhépecha  Español  Mezclado  Ambos  Otro (especifique)

3.22 ¿Veía la televisión o escuchaba el radio en español?

Sí          No

3.23 ¿Le alentaban sus padres a hablar español?

Sí          No

3.24 ¿Le alentaban sus padres a hablar P’urhépecha?

Sí          No

3.25 ¿Sus padres le corregían cuando hablaba español?

Sí          No

3.26 ¿Sus padres le corregían cuando hablaba P’urhépecha?

Sí          No

3.27 Indique que idioma o idiomas usaba en su comunidad de origen en las siguientes situaciones:

Casa___________

Escuela_________

Trabajo__________

Iglesia__________

Comunidad__________

IV. En la primaria

4.1 ¿Cuánto español hablaba entre la edad de 6-10 años?

siempre  a veces  muy poco  nunca

4.2 ¿Con quién hablaba español?

Madre/padre  hermanos  amigos  otros

4.3 ¿Cuánto P’urhépecha hablaba entre la edad de 6-10 años?

siempre  a veces  muy poco  nunca
4.4 ¿Con quién hablaba P’urhépecha?
   Madre/padre hermanos amigos otros

4.5 ¿Dónde hizo la primaria?
   Estado/ciudad/ pueblo ____________

4.6 ¿Cuál era la lengua de instrucción?
   P’urhépecha español ambos

4.7 ¿En qué idioma les hablaba el maestro a los estudiantes?
   P’urhépecha español ambos

4.8 ¿Le enseñaban clases de español en su primaria?
   Sí    No

4.9 ¿Le enseñaban clases de P’urhépecha en su primaria?
   Sí    No

4.10 ¿Cuántas horas de español había a la semana en su primaria?
   2 horas 5 horas 10 horas más de 10 horas

4.11 ¿Sus amigos de la primaria en qué idioma hablaban?
   P’urhépecha español ambos

4.12. ¿En qué idioma hablaba usted con sus amigos de la primaria?
   P’urhépecha español ambos

V. En la secundaria o entre la edad de 11 - 13

5.1 ¿Cuánto español hablaba entre la edad de 11-13 años?
   siempre a veces muy poco nunca

5.2 ¿Con quién hablaba español?
   Madre/padre hermanos amigos otros

5.3 ¿Cuánto P’urhépecha hablaba entre la edad de 11-13 años?
   siempre a veces muy poco nunca
5.4 ¿Con quién hablaba P’urhépecha?
   Madre/padre       hermanos amigos otros
5.5 ¿Dónde cursó la secundaria? (País/estado/comunidad)
5.6 ¿Cuál era la lengua de instrucción?
   P’urhépecha   español   ambos   otro (especifique)
5.7 ¿En qué idioma les hablaban los maestros a los estudiantes?
   P’urhépecha   español   ambos   otro (especifique)
5.8 ¿Le enseñaban clases de español en su secundaria?
   Sí       No
5.9 ¿Le enseñaban clases de P’urhépecha en su secundaria?
   Sí       No
5.10 ¿Cuántas horas de español había a la semana en su secundaria?
   2 horas   5 horas   10 horas   más de 10 horas
5.11 ¿Sus amigos de la secundaria en qué idioma hablaban?
   P’urhépecha   español   ambos   otro (especifique)
5.12 ¿En qué idioma hablaban usted con sus amigos de la secundaria?
   P’urhépecha   español   ambos   otro (especifique)

VI. En la preparatoria o entre la edad de 13-17
6.1 ¿Dónde vivía cuando tenía de 13-17 años?
6.2 ¿Cuánto español hablaba entre la edad de 13-17 años?
   siempre   a veces   muy poco   nunca
6.3 ¿Con quién hablaba español?
   Madre/padre       hermanos amigos otros
6.4 ¿Cuánto P’urhépecha hablaba entre la edad de 11-13 años?
   siempre   a veces   muy poco   nunca
6.5 ¿Con quién hablaba P’urhépecha?

Madre/padre    hermanos  amigos    otros

6.6 ¿Qué idioma se usaba en su preparatoria o trabajo?

P’urhépecha  español  ambos  otro (especifique)________

6.7 ¿Cuál era la lengua de instrucción?

P’urhépecha  español  ambos  otro (especifique)________

6.8 ¿En qué idioma les hablaban los maestros a los estudiantes?

P’urhépecha  español  ambos  otro (especifique)________

6.9 ¿Le enseñaban clases de español en su preparatoria?

Sí    No

6.10 ¿Le enseñaban clases de P’urhépecha en su preparatoria?

Sí    No

6.11 ¿Sus amigos de la preparatoria o trabajo en qué idioma hablaban?

P’urhépecha  español  ambos  otro (especifique)________

6.12 ¿En qué idioma hablaba usted con sus amigos de la preparatoria o trabajo?

P’urhépecha  español  ambos  otro (especifique)________

VII. Nivel de dominio del idioma ahora

7.1 Del 1 al 5, ¿cuál cree que es su nivel actual de P’URHEPECHA?

1 = entiendo pero no hablo

2 = entiendo pero me cuesta mucho hablarlo

3 = entiendo y lo hablo pero a veces me cuesta

4 = entiendo y lo hablo más o menos bien

5 = entiendo y lo hablo con fluidez

7.2 Del 1 al 5, ¿cuál cree que es su nivel actual de ESPAÑOL?

1 = entiendo pero no hablo
2 = entiendo pero me cuesta mucho hablarlo
3 = entiendo y lo hablo pero a veces me cuesta
4 = entiendo y lo hablo más o menos bien
5 = entiendo y lo hablo con fluidez

7.3 Del 1 to 5, cuáles son sus habilidades en P’urhépecha y en español

(1 =muy mal; 2= más o menos; 3=bien; 4= muy bien ; 5= excelente)

P’urhépecha: Lectura = Hablar= Escuchar= Escritura=
Español: Lectura = Hablar= Escuchar= Escritura=

7.4 En general ¿qué idioma prefiere hablar?
P’urhépecha Español Ambos Inglés
Depende con quién esté hablando

7.5 ¿Siente que el P’urhépecha es su lengua materna o su segunda lengua?
Lengua maternal Segunda lengua

7.6 ¿Siente que el español es su lengua materna o su segunda lengua?
Lengua maternal Segunda lengua

7.7 ¿Le gustaría mejorar su P’urhépecha?
Sí No ¿Por qué?

7.8 ¿Le gustaría mejorar su español?
Sí No ¿Por qué?

7.9 ¿Qué le gustaría mejorar de su P’urhépecha?

7.10 ¿Es importante para usted hablar P’urhépecha?

7.11 ¿Cree usted que es importante en su vida mantener y mejorar su P’urhépecha?

7.12 ¿Cómo cree que usted puede usar su P’urhépecha en el futuro?
Appendix B – Acceptability Judgment Task (Audio)

Instructions:
Va a escuchar dos frases seguidas y usted tiene que juzgar cómo le suenan las frases. Presione el botón de “play” para escuchar las frases.

¿Cómo le sonó la segunda frase? Puede volver a escuchar si es necesario

Muy bien Muy bien Más o menos bien Muy bien Más o menos mal

Part 1

<table>
<thead>
<tr>
<th>Block 1</th>
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</thead>
<tbody>
<tr>
<td>A1</td>
<td>Pedro necesita dinero y necesita vender su casa. Pero está tan contento que no quiere venderla</td>
</tr>
<tr>
<td>A16</td>
<td>Rosario quiere mucho a su abuela. Pero hace mucho tiempo que quiere ver a su abuela</td>
</tr>
<tr>
<td>A23</td>
<td>María vende las flores más bonitas del mercado. Esta mañana estaba enferma y no lo fue a vender las flores</td>
</tr>
<tr>
<td>A30</td>
<td>Claudia tiene tiempo sin ver a sus tías. Por eso, esta semana lo quiere visitar.</td>
</tr>
<tr>
<td>A38</td>
<td>Rebeca lleva café para sus compañeros todas las mañanas. Pero está mañana se levantó tarde y no pudo llevar el café.</td>
</tr>
<tr>
<td>A46</td>
<td>La señora Hernández hace los mejores tamales. Por eso le tocó hacerlo para la fiesta</td>
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</tbody>
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<thead>
<tr>
<th>Block 2</th>
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<tbody>
<tr>
<td>A54</td>
<td>Beto tiene tiempo sin ver a sus abuelitos. Por eso pronto quiere ir a visitarlo</td>
</tr>
<tr>
<td>D1</td>
<td>El hijo de Laura necesita un pantalón nuevo. Por eso Laura le está comprando</td>
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<td>Block 3</td>
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<tr>
<td><strong>D16</strong></td>
<td>Los hijos de Magdalena van a la escuela muy temprano. Por eso ella tiene que cocinarles el desayuno.</td>
</tr>
<tr>
<td><strong>D30</strong></td>
<td>Juan tiene muchas deudas y no tiene dinero. Por eso su amigo quiere prestar dinero</td>
</tr>
<tr>
<td><strong>D38</strong></td>
<td>Los enfermos están tomando un nuevo medicamento, que lo está quitando el dolor.</td>
</tr>
<tr>
<td><strong>A2</strong></td>
<td>Pedro necesita dinero y necesita vender su casa. Pero está tan contento que no quiere venderlo</td>
</tr>
<tr>
<td><strong>A9</strong></td>
<td>Rosario quiere mucho a su abuela. Pero tiene mucho tiempo sin verla</td>
</tr>
<tr>
<td><strong>A24</strong></td>
<td>María vende las flores más bonitas del mercado. Esta mañana estaba enferma y no fue a vender las flores.</td>
</tr>
<tr>
<td><strong>A31</strong></td>
<td>Claudia tiene tiempo sin ver a sus tías. Por eso, esta semana lo quiere visitar a las tías.</td>
</tr>
<tr>
<td><strong>A39</strong></td>
<td>Tomás se va a ir de viaje y quiere llevar a su perro. Pero va a estar tan ocupado que decidió mejor no llevarlo</td>
</tr>
<tr>
<td><strong>A47</strong></td>
<td>La señora Hernández hace los mejores tamales. Por eso le tocó hacerlos los tamales para la fiesta</td>
</tr>
<tr>
<td><strong>A55</strong></td>
<td>Beto tiene tiempo sin ver a sus abuelitos. Por eso pronto quiere ir a visitarlo a los abuelitos</td>
</tr>
<tr>
<td><strong>D2</strong></td>
<td>El hijo de Laura necesita un pantalón nuevo. Por eso Laura lo está comprando</td>
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<tr>
<td><strong>un pantalón.</strong></td>
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</tr>
<tr>
<td><strong>D39</strong></td>
<td>Los enfermos están tomando un nuevo medicamento, que está quitando el dolor.</td>
</tr>
<tr>
<td><strong>A3</strong></td>
<td>Pedro necesita dinero y necesita vender su casa. Pero está tan contento que no quiere venderlo la casa</td>
</tr>
<tr>
<td><strong>A10</strong></td>
<td>Rosario quiere mucho a su abuela. Pero tiene mucho tiempo sin verlo</td>
</tr>
<tr>
<td><strong>A17</strong></td>
<td>María vende las flores más bonitas del mercado. Esta mañana estaba enferma y no fue a venderlas</td>
</tr>
<tr>
<td><strong>A32</strong></td>
<td>Claudia tiene tiempo sin ver a sus tíos. Por eso, esta semana quiere visitar a las tías</td>
</tr>
<tr>
<td><strong>A40</strong></td>
<td>Tomás se va a ir de viaje y quiere llevar a su perro. Pero va a estar tan ocupado que decidió mejor no llevarlo al perro.</td>
</tr>
<tr>
<td><strong>A48</strong></td>
<td>La señora Hernández hace los mejores tamales. Por eso le tocó hacer para la fiesta</td>
</tr>
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<tr>
<td><strong>A56</strong></td>
<td>Beto tiene tiempo sin ver a sus abuelitos. Por eso pronto quiere ir a visitar</td>
</tr>
<tr>
<td><strong>D3</strong></td>
<td>El hijo de Laura necesita un pantalón nuevo. Por eso Laura está comprando un pantalón.</td>
</tr>
<tr>
<td><strong>D17</strong></td>
<td>Los hijos de Magdalena van a la escuela muy temprano. Por eso ella tiene que cocinarlo el desayuno</td>
</tr>
<tr>
<td><strong>D40</strong></td>
<td>Los enfermos están tomando un nuevo medicamento, que va a quitarles el dolor.</td>
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<tr>
<td>A4</td>
<td>Pedro necesita dinero y necesita vender su casa. Pero está tan contento que no quiere vender.</td>
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<tr>
<td>A11</td>
<td>Rosario quiere mucho a su abuela. Pero tiene mucho tiempo sin verlo a su abuela</td>
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<tr>
<td>A18</td>
<td>María vende las flores más bonitas del mercado. Esta mañana estaba enferma y no fue a venderlo</td>
</tr>
<tr>
<td>A25</td>
<td>Claudia tiene tiempo sin ver a sus tías. Por eso, esta semana quiere visitarlas.</td>
</tr>
<tr>
<td>A33</td>
<td>Rebeca lleva café para sus compañeros todas las mañanas. Pero está mañana se levantó tarde y no pudo llevarlo</td>
</tr>
<tr>
<td>A41</td>
<td>Tomás se va a ir de viaje y quiere llevar a su perro. Pero va a estar tan ocupado que decidió mejor no llevar</td>
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<tr>
<td>A49</td>
<td>La señora Hernández hace los mejores tamales. Por eso los tiene que hacer para la fiesta</td>
</tr>
<tr>
<td>A57</td>
<td>Beto tiene tiempo sin ver a sus abuelitos. Por eso pronto los quiere visitar</td>
</tr>
<tr>
<td>D4</td>
<td>El hijo de Laura necesita un pantalón nuevo. Por eso Laura quiere comprarle un pantalón.</td>
</tr>
<tr>
<td>D18</td>
<td>Los hijos de Magdalena van a la escuela muy temprano. Por eso ella tiene que cocinar el desayuno</td>
</tr>
<tr>
<td>D25</td>
<td>Juan tiene muchas deudas y no tiene dinero. Por eso su amigo le está prestando dinero</td>
</tr>
<tr>
<td>D41</td>
<td>Los enfermos están tomando un nuevo medicamento, que va a quitarlo el dolor</td>
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Part 2

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<tr>
<td><strong>D6</strong></td>
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<tr>
<td><strong>D13</strong></td>
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<td>Block 3</td>
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<td>-----------------------------------------------------------------------</td>
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<tr>
<td><strong>A7</strong> Pedro necesita dinero y necesita vender su casa. Pero está tan</td>
</tr>
<tr>
<td>contento que no lo quiere vender la casa.</td>
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<tr>
<td><strong>A14</strong> Rosario quiere mucho a su abuela. Pero hace mucho tiempo que</td>
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<tr>
<td>lo quiere ver</td>
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<tr>
<td><strong>A21</strong> María vende las flores más bonitas del mercado.Esta mañana</td>
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<tr>
<td>estaba enferma y no las fue a vender.</td>
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<tr>
<td><strong>A28</strong> Claudia tiene tiempo sin ver a sus tías. Por eso, esta semana</td>
</tr>
<tr>
<td>quiere visitar</td>
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<tr>
<td><strong>A36</strong> Rebeca lleva café para sus compañeros todas las mañanas. Pero</td>
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<tr>
<td>está mañana se levantó tarde y no lo pudo llevar.</td>
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<td><strong>A44</strong> Tomás se va a ir de viaje y quiere llevar a su perro. Pero va</td>
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<tr>
<td>a estar tan ocupado que decidió que no quiere llevar al perro.</td>
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<tr>
<td><strong>A52</strong> La señora Hernández hace los mejores tamales. Por eso tiene</td>
</tr>
<tr>
<td>que hacer los tamales para la fiesta</td>
</tr>
<tr>
<td><strong>A60</strong> Beto tiene tiempo sin ver a sus abuelitos. Por eso pronto quie</td>
</tr>
<tr>
<td>re visitar a los abuelitos.</td>
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<tr>
<td><strong>D14</strong> Los hijos de Magdalena van a la escuela muy temprano. Por eso</td>
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<tr>
<td>ella lo cocina el desayuno</td>
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<tr>
<td><strong>D28</strong> Juan tiene muchas deudas y no tiene dinero. Por eso su amigo</td>
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<td>quiere prestarle dinero</td>
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<td><strong>A8</strong> Pedro necesita dinero y necesita vender su casa. Pero está tan</td>
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<td>contento que no quiere vender la casa.</td>
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<td>A15</td>
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<td>A53</td>
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<td>D15</td>
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<td>D29</td>
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<td>D37</td>
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Appendix C – Oral Elicitation Task

**Instructions:**
Construya oraciones con la información dada.

A continuación, va a ver un contexto y unas imágenes. Con la información dada, las imágenes y las palabras en los cuadros, responda a la pregunta usando la palabra en el recuadro.

El hijo de Laura necesita un libro nuevo para la escuela. ¿Qué está haciendo Laura?

[Image of a scene where a child is looking at books with a caption: buy (COMPRAR)]
La hija de Alejandra no tiene tiempo de hacerse el desayuno. ¿Qué está haciendo Alejandra?

Alejandro ya no quiere vivir en su casa. ¿Qué quiere hacer con su casa?
Los alumnos de Raúl necesitan un libro para hacer la tarea.
¿Qué está haciendo Raúl?

Las hijas de Manuel siempre se pelean por los juguetes.
¿Qué tiene que hacer Manuel?
Elisa no ha visitado a su abuelita hace mucho tiempo.
¿Qué va a hacer Elisa?

La hija de Ana necesita un vestido nuevo.
¿Qué está haciendo Ana?

VISITAR

COMPRAR
Paco cocina muy bien y quiere invitar a sus amigos a comer ¿Qué está haciendo Paco?

Las pinturas de Vicente son muy populares ¿Qué quiere hacer con sus pinturas?
Las hijas de Paco necesitan dinero.
¿Qué está haciendo Paco?

Juanito se ha portado muy mal.
¿Qué está haciendo su mamá?
Hace tiempo que Andrea no ha visto a sus primas. ¿Qué quiere hacer Andrea?

Pablo quiere ir a visitar a sus nietos. ¿Qué va a hacer Pablo?
Patricia cocina delicioso y quiere invitar a sus amigas a comer. ¿Qué está haciendo Patricia?

Joaquín compró un libro para su clase. ¿Qué va a hacer con el libro?
Carlos necesita dinero. ¿Qué está haciendo su amigo?

Mario siempre molesta a su hermanita. ¿Qué está haciendo Mario?
David se va de viaje y no quiere dejar al perro solo.

¿Qué quiere hacer David con el perro?

LLEVAR

Marisa quiere a ir a visitar a sus amigas
¿Qué va a hacer Marisa?

COMPRAR
Josefina quiere sorprender a su esposo con el desayuno. ¿Qué está haciendo Josefina?

Ana compró todo para hacer tamales. ¿Qué tiene que hacer ahora?
María necesita dinero.
¿Qué está haciendo su hermano?

Beto tiene tiempo sin ver a sus abuelitos.
¿Qué quiere hacer Beto?
Appendix D – Ethics Approval Certificate
Western University Non-Medical Research Ethics Board
NMREB Amendment Approval Notice

Principal Investigator: Prof. Silvia Pepinan
Department & Institution: Arts and Humanities/Modern Languages & Literatures, Western University

NMREB File Number: 107544
Study Title: Clinic mapping in Spanish-Purhepecha Bilinguals
Sponsor: Ontario Graduate Scholarship

NMREB Revision Approval Date: July 08, 2016
NMREB Expiry Date: January 29, 2017

Documents Approved and/or Received for Information:

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<td>Revised Western University Protocol</td>
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<td>Revised Letter of Information &amp; Consent</td>
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<td>Instruments</td>
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The Western University Non-Medical Science Research Ethics Board (NMREB) has reviewed and approved the amendment to the above named study, as of the NMREB Amendment Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Ethics Officer, on behalf of Dr. Riley Hinson, NMREB Chair

Ethics Officer: Erika Basile   Katelyn Harris   Nicole Kaminski   Grace Kelly   Vikki Tran   Ken Gaspal
Curriculum Vitae

Name: Itziri Moreno Villamar

Post-secondary Education and Degrees:
- University of Oregon, Eugene, Oregon, USA
  - 2006-2010 B.A.

The University of Western Ontario, London, Ontario, Canada
- 2011-2018 Ph.D.

Honours and Award:
- Award for Excellence in the Role of GTA: 2011-2012, 2015-2016
- Province of Ontario Graduate Scholarship: 2015-2016
- Graduate Thesis Research Award: 2015
- Western Graduate Research Scholarship: 2011-2015
- Chair’s Entrance Scholarship: 2012
- Dean’s Entrance Scholarship: 2011

Related Work Experience:
- Lecturer, University of Washington Tacoma: 2017-present
- Teaching Assistant, CEMS at Richard Ivey School of Business, The University of Western Ontario: 2017 (Winter Term)
Service Learning Coordinator (Spanish)
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2015-2016

Teaching Assistant (Instructor of Spanish)
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2011-2015

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