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INDIVIDUAL AND GROUP DIFFERENCES IN THE PRODUCTION OF LENGUA  
PALENQUERA

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## ABSTRACT

The Afro-Colombian village of San Basilio de Palenque, formerly known as the Palenque de San Basilio, was established in the 17<sup>th</sup> century on Colombia's Atlantic coast by Africans and their descendants who escaped from bondage from Cartagena de Indias. The residents still speak a Spanish-based Creole language, Palenquero, called *Lengua* by local speakers. This language was formed by these maroons, and until recently has been negatively stigmatized by outsiders such that many Palenqueros stopped speaking the language and would not teach it to their children (Schwegler & Morton 2003; Del Castillo 1984: 89; Friedeman & Patiño 1983: 188-191). Although Palenquero has a history of being sociolinguistically marginalized, it has now been studied by linguists with an ethnographic approach. However, internal sociolinguistic divisions have not yet been studied. This study examines Lengua Palenquera as a "full" language, irrespective of its past, while looking for the type of sociolinguistic variation found in any community. The hypothesis is that language revitalization efforts, including teaching of LP, have led to the creation of sociolinguistic differences within the community. Recent language revitalization efforts have led to a heightened metalinguistic awareness on the part of the Palenquero language teachers, and their activist interventions are apparently producing community-wide sociolinguistic effects. These sociolinguistic differences may include exposure to classes in LP taught by Palenquero activists, how speakers acquired LP, where they currently speak the language, and age at the time of testing. To examine these questions, two experimental tasks were completed with a group of LP/Spanish bilinguals. Participants of various ages and educational experiences demonstrated word choice preferences between Spanish cognates and more canonically *Lengua* words. Additionally, participants were asked to translate Spanish sentences into *Lengua*. Preliminary results demonstrate lexical and grammatical variation within Lengua Palenquera based on potential sociolinguistic factors. Because Palenque is such a small community with a total population of about 3500 people, it is not

generally assumed that it will exhibit significant sociolinguistic variation (unless the culture requires it, such as different speech patterns between men and women, or different castes).

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## Language History

San Basilio de Palenque, a community of about 3500 inhabitants, was established in the 17<sup>th</sup> century on Colombia's Atlantic coast by individuals who escaped from bondage from Cartagena de Indias. The residents speak a Spanish-based Creole language, Palenquero, called *Lengua* by local speakers. This language was formed by these maroons, and until recently has been negatively stigmatized by outsiders with the result that many Palenqueros stopped speaking the language and would not teach it to their children (Schwegler & Morton 2003; Del Castillo 1984: 89; Friedeman & Patiño 1983: 188-191). Instead, many inhabitants chose to use more Spanish than LP, even within their community. For a time period, many discouraged their children from learning and using LP, especially in public outside of Palenque. However, there has been a recent shift in language attitude towards LP due to being recognized by UNESCO and the Colombian government for its heritage, as well as increased tourism and visits by foreign scholars. This has led to efforts to revitalize the language among the Palenqueros, including attempts to create written standardization and the implementation of Palenquero classes in schools.

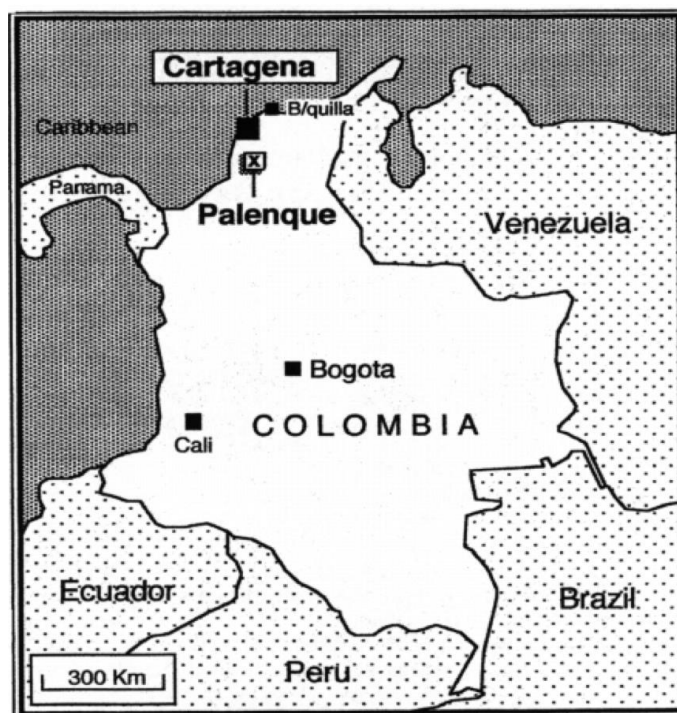


Figure 1: Colombia Map (Schwegler, 2003)

### Lengua Palenquera

LP grammar has been studied and documented by multiple researchers (Schwegler & Green 2007, Lipski 2012, Patiño 1983). Lack of feminine gender agreement, negation, and plural marker *ma* are examples of LP grammar features relevant to this paper's experiments and analysis. Table 1 includes examples of gender agreement in LP.

Table 1: Lack of Grammatical Gender in LP

LP Example	English Translation
¡Ese muhé é muy goddo!	That woman is very fat!

Additionally, it has been documented that LP negation can occur in two ways. As documented by Schwegler and Green (2007) these negation structures are:

1. Strictly preverbal negation: *nu* V (....)

2. Double (discontinuous) negation: *nu V (...) nu*
3. Postverbal (clause- or sentence-final negation): *V (...) nu*

See Table 2 for correct LP negation examples.

**Table 2: Correct use of LP Negation**

<b>LP Example</b>	<b>English Translation</b>
Bo kelé nda mi na nu	You don't want to give me anything.
Nu dejá mi te nu!	Don't leave me here!
E sé kelé/ p' í tené-lo/nu	He does not want me to have it.

Additionally, according to Lipski (2008) "Palenquero forms plural by prefixing *ma*" See Table 3 for examples.

**Table 3: Use of Plural Prefix *ma* in LP**

<b>LP Example</b>	<b>English Translation</b>
<b>Ma muhé</b> asé bai pa mekkao i <b>ma ombre</b> asé bai pa monde	The <b>women</b> go to market and the <b>men</b> go to the field.
<b>Ma hende</b> asé kelaba ku boka abieta	<b>People</b> stood with their mouth open.
Abwela mi hwe <b>ma bieho</b> ke <b>ma numan'ele</b>	My grandmother is older than her <b>brothers</b> .

## Experiment Introduction

Although Palenquero has a history of being sociolinguistically marginalized, it has now been studied by linguists with an ethnographic approach. However, internal sociolinguistic divisions have not yet been studied. This study examines Lengua Palenquera (henceforth referred to as LP) as a "full" language, irrespective of its past, while looking for the type of sociolinguistic variation found in any community. To examine these questions, two experimental tasks were completed with a group of LP/Spanish bilinguals within the San Basilio de Palenque.

According to Silva-Corvalán (1995: 269), the central issue in language contact is the structural relationship between languages and the consequences that language contact may have had on linguistic structure. Silva-Corvalán (1995) also proposes that these contact situations are most favorable

to language change, as such, the unique linguistic situation in Palenque presents a more complicated system of linguistic change and resulting division in the population. While it is possible that Palenquero has transformed externally from either Spanish or Kikongo, the languages from which LP derives, it is also possible that it has transformed internally. These types of internal changes could affect morphological, lexical, phonological or syntactic variation among speakers. Additionally, although Schwegler and Green assert that “Old and young (Palenquero/Spanish) bilinguals employ virtually identical grammars,” Morton (2005) speculates that there are differences between traditional speakers and young speakers (273). Not only are students and other young Palenquero residents enthusiastic about studying and using Palenquero, but under the tutelage of a handful of activist teachers, they strive to restore a “pure” traditional form of the language, stripping Palenquero of Spanish language accretions that had become incorporated into the speech of older generations. For example, there are older, traditional speakers of the language who were raised speaking it and have continued to do so. Additionally, there are middle-aged heritage speakers who learned LP at home but who stopped using it due to prejudice and who have now returned to using it. Finally, there are younger speakers who were raised in households where they were not in direct contact with LP and who learned what they know primarily in school.

### **Hypotheses**

The hypothesis of these experiments is that language revitalization efforts, including teaching of LP, have led to the creation and/or the expansion of sociolinguistic differences within the community. Recent language revitalization efforts have led to a heightened metalinguistic awareness on the part of the Palenquero language teachers, and their activist interventions are apparently producing community-wide sociolinguistic effects. These sociolinguistic differences may include exposure to classes in LP taught by Palenquero activists, how speakers acquired LP, where they currently speak the language, and age at the time of testing. To obtain information regarding these

sociolinguistic variables, participants were asked a series of conversational questions (see Appendix B). To examine the potential lexical and morphological variation, two experimental tasks were completed with a group of LP/Spanish bilinguals. In Experiment 1, participants of various ages and educational experiences demonstrated word choice preferences between Spanish cognates and more canonically *Lengua* words. These sets of words were chosen based on variability demonstrated in previous studies (Lipski, 2012; Morton, 2005; Moniño 2012). Additionally, participants were asked to translate Spanish sentences into LP. Although multiple variables were being considered within the creation of stimuli for this translation task, only the plural marker *ma* is discussed in this paper's analysis. *Ma* was chosen based on variability in its use during data collection. It was noticed that *ma* was being used with singular nouns, in addition to plural nouns.

This study examines Lengua Palenquera, looking for the type of sociolinguistic variation found in any community in relation to a variety of factors including exposure to classes in LP taught by Palenquero activists, how speakers acquired LP, where they currently speak the language, and age at the time of testing. Specifically, the study compares age group with the proportion of *ma* production, a plural marker that can be used with singular nouns, to determine if there is a correlation. A second analysis investigates whether the aforementioned factors predict participants' choice of word when speaking LP between a set of Spanish cognates and stereotypical LP words. The present study will provide insight into the variation that exists within the population, particularly within age groups. Studying LP through this approach can help to legitimize it by adopting the assumption that this speech community behaves just like any other one, regardless of size or prestige. Statistically significant variation is expected to be found within both experiments with regards to one or multiple sociolinguistic variables.

## Palenque Field Research

Palenque can be reached from Cartagena, under two hours, by a combination of public transportation, and the last stretch by motorbike. After arriving in Palenque, the researcher lived there for two weeks, staying with a family. This allowed the researcher to be a “Participant observer” within Palenque. Living with a family and among the Palenqueros gave the researcher additional exposure to the language and culture, helping to shape certain research questions such as the *muhé* and *changaína* example in Experiment 2. Because it would be inappropriate to seek out participants without assistance, a Palenquero guide, José Lawin Pérez Casséres, was assigned to help find suitable participants for the experiment. This guide’s judgement was trusted because he was chosen by a community activist, also his father, with whom he had worked closely, Bernadino Pérez Miranda, to provide participants for previous researchers. José Lawin made appointments with participants and acted as a liaison between the researcher and the community. He was remunerated for his assistance and support.

Participants were identified based on José Lawin’s connections to various community members, most of whom were in the young or middle age ranges (see Table 5). He only approached individuals that he knew personally by name, as it would otherwise be inappropriate to enter their home to conduct the study. Furthermore, José Lawin identified participants who he knew spoke both LP and Spanish. Each morning, José Lawin and I walked throughout the town in order to schedule appointments for the afternoon or following day. However, most participants were politely asked by José Lawin to participate at that moment, to which most Palenqueros replied that they were able. Multiple participants expressed appreciation for studying their language, and others were surprised to receive compensation for their time.

Existing freely throughout Palenque were animals such as dogs, cats, pigs, chickens, and more. The sounds of these animals can be heard within many recordings. Data was collected in

participants' homes, either inside or outside. This shaped the quality of the experiment. Participants were comfortable within their own homes and in a natural setting. Participants did not have familiarity with questionnaires, questions about language usage, and testing and experimental procedures in general. This is particularly relevant with older speakers, whose previous experience with researchers has been just speaking LP on their own terms rather than answering specific questions or performing experimental tasks. Data was collected via a recording device (TASCAM DR-05 recorder) in order to accommodate the type of experiments (interview-based) and Palenque setting. Sounds of children playing, babies laughing or crying, and LP speech and/or Spanish speech is also heard within many recordings, representing the naturalistic environment in which field research takes place.

### Experiment 1: Grammatical Variation within LP Translation

It has been noticed anecdotally that variation occurs within LP speech (Moniño, 2012; Lipski, 2012; Schwegler & Green 2007). Experiment 1 examines potential variation within LP, specifically with regards to plural marker *ma*, feminine gender agreement, and correct LP negation, with the goal of identifying whether or not age in relation to exposure to LP classes is an important determining factor of this variation. Spanish-like gender agreement and Spanish-like preverbal negation and LP negation have been documented in previous studies. Additionally, use of *ma* as singular has been documented for young L2 speakers by Lipski (2012, 2014). For example, Lipski (2012: 33) documents numerous instances of *ma* use with singular nouns (see Table 4). This experiment will serve as the first quantitative and variationist study.

Table 4: *Ma* Singular Examples

LP Example	English Translation
e ma posá jue di to suto	That house is ours.
e ma flo ta amaría	That flower is yellow.
ma changaina a sendá flaca	The girl is skinny.
ese ma música ngutá mi nu	I don't like that music.
ma puetta ta celao	The door is closed.

### Participants

The three groups speakers, grouped by age and language learning profiles, can be described as the following: the older traditional speakers (roughly age 45 and above) who were raised speaking LP and who have continued to do so, heritage speakers (typically ages between 25-45) who learned LP at home but who stopped using it due to prejudice and who have now returned to using it, younger speakers (under the age of 25) who were raised in households where at least some LP was spoken, typically by



grandparents, and who also have had LP classes in school. Also tested were younger speakers of the same age range (under 25) who were raised in households where they were not in direct contact with LP and who learned what they know primarily in school. It is important to note that these groups are generalizations, and there are exceptions and variability within each category. These groups were chosen based on other experimental work that has been done in which the distribution of responses, in general, supports this type of division (Morton, 2005). Aside from categorization by LP use, participants were split into three categories by age, Old, Middle, and Young (see Table 5).

**Table 5: Breakdown of Participants of Experiment 1**

<b>Group</b>	<b>Age Range</b>	<b># of Participants</b>
Old	≥ 45	4
Middle	26-44	24
Young	≤ 25	17

Again, because it would be inappropriate to seek out participants without assistance, a Palenquero guide, José Lawin Perez Casseres, was assigned to help find suitable participants for the experiment. Data acquisition occurred in participant's homes in Palenque. José Lawin made appointments with participants and acted as a liaison between the researcher and the community. Participants were identified based on José Lawin's connections to various community members. He only approached individuals that he knew personally by name, as it would otherwise be inappropriate to enter their home to conduct the study. Furthermore, José Lawin identified participants who he knew spoke LP. Each morning, José Lawin and I walked throughout the town in order to schedule appointments for the afternoon or following day. However, most often participants were politely asked by José Lawin to participate at that moment, to which most Palenqueros replied that they were able. Multiple participants expressed appreciation for studying their language, and others were surprised to receive compensation for their time.

## Materials

Thomas Morton's 2005 dissertation was used to select the materials for the stimuli and to find examples of original LP conversation (Morton, 2005). Additionally, original conversational data of LP from Dr. John Lipski's recorded speech samples was examined (Lipski, 2012). With Dr. Lipski's assistance, these samples were used in order to determine which specific features of LP to analyze. This preliminary examination of the recorded data helped to identify age as an important sociolinguistic variable. Next, Spanish speech samples from these recordings were selected as stimuli on the basis that their structure could result in instances of grammatical variation with regard to feminine gender agreement, Spanish-like preverbal negation, and the use of plural marker *ma* with singular nouns when translated into LP. This experiment was created with multiple variables in mind: feminine gender agreement, future tense, negation, use of verb *tener*, use of plural marker *ma*, lexical variation, and subjunctive clauses. Future tense, use of verb *tener*, lexical variation, and subjunctive clauses were ultimately rejected due to insufficient number of participant responses with regard to those variables. Furthermore, plural marker *ma*, feminine gender agreement, and negation were chosen because of noticeably varied participant responses. A list of 5 Spanish sentences became the stimuli creating the critical translation regions where the variation of feminine gender agreement is analyzed (see Appendix A). A list of 6 Spanish sentences became the stimuli creating critical translation regions where the variation of LP negation is analyzed (see Appendix B). A list of 22 Spanish sentences became the stimuli with 30 singular nouns creating the critical translation regions where the variation of *ma* production is analyzed (see Appendix C).

## Procedure

The stimuli consisted of a set of 33 Spanish sentences including filler items. The experiment consisted of a translation task. Participants were seated across from the researcher. The sentences were read aloud one at a time by the researcher, and the participant was instructed to translate the sentences from Spanish into LP. Responses were collected with a TASCAM DR-05 recorder. Participants were remunerated for their time.

## Results

### *Ma* use of Singular

Only 22 experimental sentences, those including the 30 singular noun stimuli, were included in the analysis. The other 11 sentences did not include any singular nouns, and were therefore not included in the analysis. Additionally, the use of *ma* was tabulated in nominally plural noun phrases before the analysis of *ma* usage with singular nouns. A T-test was used to compare the use of *ma* with plural nouns versus use of *ma* with singular nouns in the adult group. There is a significant difference, such that adult participants are using *ma* more with plural nouns than singular nouns (welch-t(53.197)=7.7102,  $p < 0.001$ ). An additional T-test compares use of *ma* with plural nouns versus use of *ma* with singular nouns in the adult group, which is comprised of the old and middle-aged speakers combined. There is a significant difference, such that they are using *ma* significantly more with plural nouns than singular nouns (t(29.876)=4.5883,  $p < 0.001$ ).

We see that while the young group is using *ma* more with singular nouns than the adult group, more than twice as often (see Table 6).

Table 6: *Ma* use with Singular and Plural Nouns

Group	% using <i>ma</i> (sing)	N	% using <i>ma</i> (plural)	N
Adult (o + m)	14.02	100	51.94	241
Young	35.80	178	65.42	157

Next, each singular noun in the sentences was coded for whether or not the speaker translated it using the feature *ma*, which ordinarily indicates plurality in LP. For each participant, the number of *ma* occurrences was totaled and calculated as a proportion of the number of singular nouns. An ANOVA on the arcsine-transformed proportion of *ma* used as singular was used to analyze proportions of *ma* used as a singular noun marker. A main effect was found for age as a significant predictor of *ma* in the singular ( $F(2, 42)=8.999, p<0.001$ ). A post-hoc Tukey Test revealed that there is a significant difference between Old and Young groups ( $p<0.01$ ), as well as Middle and Young groups ( $p < 0.01$ ), but not between Middle and Old groups ( $p=0.50$ ). These findings suggest that the Middle and Old groups are behaving similarly and it is the young vs. old + middle group that are driving the finding. To investigate further, the Old and Middle groups were collapsed to form the Adult group and compared to the Young group. A Welch Two Sample T-Test revealed that the Adult group (Old + Middle) use *ma* with singular nouns significantly less than the Young group ( $Welch t(30.357)=-3.9413, p<0.001$ ).

As predicted, the adult group use *ma* more with plural nouns and infrequently with singular nouns (14%). However, the young group is also using *ma* significantly more with plural nouns than with singular nouns. This suggests that though they have extended *ma* use with singular nouns, there is still a difference in the distribution of *ma* with singular and plural nouns. When comparing the proportions, it can be seen that the young speakers use *ma* more often overall than the adult speakers do.

In sum, we see that age group acts as an indication of overall proficiency in Palenquero. Old and middle age speakers are using *ma* in the manner in which it was originally intended, to indicate plurality, while young speakers are deviating from this norm, using *ma* in an unconventional way with singular nouns. Therefore, age is a significant predictor of *ma* used as a singular noun marker. Old and middle-aged participants are using *ma* less as a singular noun marker, while young participants are frequently

using *ma* as a singular noun marker. In other words, young people are driving this variation. This appears to be an emergent characteristic of young people. These young speakers might not have sufficient proficiency to form fully grammatical or traditional utterances. Experiment 2 was designed to further explore LP variation, as well as other factors in addition to age that might be affecting it.

### Feminine Gender Agreement

With regards to feminine gender use, 5 experimental sentences were included in the analysis (see Appendix B). Feminine gender agreement was tabulated for each participant within each of the 5 sentences. An ANOVA on the arcsine-transformed proportion of Spanish-like feminine gender agreement was used to analyze age with regards to feminine gender agreement. There was no main effect found for age as a significant predictor of feminine gender agreement ( $F(2, 42)=1.309$ ,  $p=0.281$ ). The hypothesis of this data was that it might demonstrate sociolinguistic variability according to age/proficiency in LP, similar to the *ma* data. However, this data may be an unrepresentative sample.

Table 7: Feminine Gender Use

Group	%	Feminine use	Total responses
Old	41.67	10	24
Middle	24.14	28	116
Young	27.85	22	79

### Negation

With regards to LP Negation, 6 experimental sentences were included in the analysis (see Appendix C). Postverbal negation (the norm for traditional LP usage) was tabulated for each participant within each of the 6 sentences. An ANOVA on the arcsine-transformed proportion of postverbal negation

was used to analyze age with regards to LP postverbal negation out of the total number of each participants' negated sentences. There was no main effect found for age as a significant predictor of Postverbal negation ( $F(2, 42)=0.3961$ ,  $p=0.6754$ ).

**Table 8: Postverbal LP Negation**

<b>Group</b>	<b>%</b>	<b>Postverbal LP Negation</b>	<b>Total Negated responses</b>
Old	93.75	15	16
Middle	83.74	103	123
Young	90.00	72	80

Additionally, the presence or absence of negation was tabulated for each participant within each of the 6 sentences. An ANOVA on the arcsine-transformed proportion of negated sentences was used to analyze age with regards to any form of negation out of the total number of possible negated sentences. There was a main effect found for age as a significant predictor of negation ( $F(2, 42)=3.4791$ ,  $p=0.03998$ ). The hypothesis was that it might demonstrate sociolinguistic variability, similar to the *ma* data. Although the postverbal negation does not appear to coincide with this hypothesis, LP negation does.

**Table 9: Negation**

<b>Group</b>	<b>%</b>	<b>Negation</b>	<b>Total responses</b>
Old	64.00	16	25
Middle	87.86	123	140
Young	86.96	80	92

## **Experiment 2: A variationist approach to LP word selection**

It has been noticed anecdotally that lexical variation occurs within LP speech (Moniño, 2012). Specifically, variation is noticed between Spanish cognates that appear to be used by older members of the community and LP words of non-Spanish origin that appear to be used by younger members of the community (Lipski, 2012). The goal with Experiment 2 is to quantitatively verify previously observed

lexical variation, and to determine what sociolinguistic factors, if any, are affecting it. Lastly, because of various participants' strong reactions to word pair *muhé* and *changaína* ('woman'). Reactions to this pair of words were examined in order to exemplify what sociolinguistic factors are affecting it. Strong reactions to this pair include articulating a firm opinion regarding the definition of *changaína*, offering detailed explanation regarding their word choice preference, or recounting the controversial history of the word *changaína*. Appendix C presents the pairs of words for which there appeared to be lexical variation among LP speakers.

## Participants

Participants were the same as those in Experiment 1 with the addition of four participants in the Old group (see Table 10). As in Experiment 1, the same Palenquero guide, José Lawin, acted as a liaison between participants and the researcher. Data acquisition occurred in participant's homes in Palenque.

**Table 10: Gender & Education Distribution**

Age Group	Age	# of Participants	Male	Female	Received Classes
Old	≥ 45	8	3	5	5
Middle	26-44	25	15	10	21
Young	≤ 25	17	6	11	15

## Materials

Lipski's 2012 analysis was examined in order to identify lexical variation in LP speech. For example, he references "*posá* 'house' replacing *casa*, *ngubá* 'peanut' replacing *maní*, *kombilesa* 'friend' replacing *amigo*, *chepa* 'clothes' replacing *ropa/trapo*, *piangulí* 'pig' replacing *seddo* or *puekko*, and *makaniá* 'to work' replacing *trabajá*." This preliminary examination of data also helped to identify

potential sociolinguistic variables such as age, gender, whether or not a speaker had classes in LP, how they learned LP, and where they speak LP now. Appendix D presents the sociolinguistic variables considered in this experiment as collected in the questionnaire.

Next, speech examples from these recordings that indicated lexical variation were chosen. Special synonym pairs in LP were identified such that each pair consisted of a more LP-like word and a Spanish cognate word. Of particular interest to the analysis is word pair 1 (*muhé*, *changáina*, ‘woman’) because of the strong reactions of community members, which include articulating a firm opinion regarding the definition of *changaina*, offering detailed explanation regarding their word choice preference, or recounting the controversial history of the word *changaina*. Appendix C presents the pairs of words for which there appeared to be lexical variation among LP speakers.

### **Procedure**

This experiment consisted of a set of open-ended response questions to determine the sociolinguistic factors. The questions were asked by the experimenter in order to understand participants’ language-learning history, as well as with whom and how often they speak LP. These open-ended response questions are presented in Appendix D. These open-ended response questions were critical in order to gather a complete set of data of the participants’ language history. It is important to note that the questions were asked in a conversational manner. Each question was asked in a different sequence based on the flow of conversation between the participant and the experimenter. Certain questions were not asked directly if a participant inadvertently answered a question that had not yet been asked, providing information while answering another question.

Next, the participants completed a nine-question word-preference forced-choice task. Participants were asked orally in Spanish which of two LP words they prefer using. One set of words were Spanish derivations, often Spanish cognates, while the other set contained words that were more



identifiable with LP and did not appear to have derived from Spanish, whether or not they were commonly used among traditional speakers. These pairs of words are presented in Appendix III. After this task, they participated in a translation task (Experiment 1). All responses were in provided in Spanish. Recordings were made with a TASCAM DR-05 recorder.

## Results

The distribution of sociolinguistic factors and the demographic data of the participants is shown in Table 11. This data suggests that LP speakers who learn the language both at home and outside of the home are continuing to speak it both at home and outside of the home.

**Table 11: LP Participant Data**

	<b>Responses</b>	
	<b>N</b>	<b>%</b>
<b>Gender</b>		
Male	25	50
Female	25	50
<i>Total</i>	50	
<b>Attended LP Classes</b>		
Yes	36	73.5
No	13	26.5
<i>Total</i>	49	
<b>Where LP was learned</b>		
At home	8	16.3
At school &/or outside the home	7	14.3
Both at home & outside the home	34	69.4
<i>Total</i>	49	
<b>Current LP use</b>		
At home	3	6.7
Outside the home	15	33.3
Both at home & outside the home	27	60
<i>Total</i>	45	
<b>Age</b>		
Old	10	20
Middle	23	46
Young	17	34
<i>Total</i>	50	

Turning to the forced-choice word-preference task, there is a general preference for the LP-like words compared to the Spanish cognates (see Table 12). Some of the Spanish cognates had very low rates of usage such as words 3, 4, 7, 8 and 9. There seems to be two types of word pairs, those that have above 90% use of LP-like words, and those that have around 70% use of LP-like words; word pairs 1, 2, 5, and 6 are more variable. Based on the responses of the participants, there seem to be strong reactions to their choice within word pair 1. To further investigate this, a variable rule analysis was used.

**Table 12: Forced-Choice Word-Preference Responses**

		Spanish Cognate		LP-like word		Total		
		N	%	N	%			
<b>Word pair 1</b>	‘woman’	muhé	15	30	changaína	35	70	50
<b>Word pair 2</b>	‘water’	agua	11	22.9	apú	47	77.1	48
<b>Word pair 3</b>	‘work’	trabajá	4	8.2	makaniá	45	91.8	49
<b>Word pair 4</b>	‘death’	morí	2	4.1	lungá	47	95.9	49
<b>Word pair 5</b>	‘peanut’	maní	11	22.9	ngubá	37	77.1	48
<b>Word pair 6</b>	‘pig’	puekko	15	30.6	piangulí	34	69.4	49
<b>Word pair 7</b>	‘clothes’	ropa	4	8	chepa	46	92	50
<b>Word pair 8</b>	‘friend’	amigo	4	8.5	kombilesa	43	91.5	47
<b>Word pair 9</b>	‘teacher’	profesor	3	6	piacha	47	94	50

Table 13 shows the results of a multivariate analysis of the forced-choice word-preference factors selected as significant to the probability of *changaína* in LP. I used Goldvarb X, a logistical regression program where a factor weight of 0.5 means no effect, anything greater than 0.5 favors the application of the dependent variable, and less than 0.5 disfavors, (Sankoff, Tagliamonte, & Smith, 2005). This was used to find the relative contributions of the sociolinguistic variables, and the interaction with word pairs. The variables inputted were age, gender, whether or not a speaker attended classes in LP, where they learned LP, where they currently speak LP, and the other word pairs. A binomial step up and step down analysis on the selection of *changaína* and *muhé* selected only the variable that whether participants attended classes in LP as significant, and all other factor groups were eliminated. Table 13 shows the only significant factor variable and the factor weights. The multivariate analysis showed that participants who had taken classes favored the selection of *changaína* over *muhé*

with a factor weight of 0.69. Participants who have not attended LP classes disfavor the selection of *changaína* with a factor weight of 0.10. The data show a strong correlation that attending classes favors the selection of *changaína* over *muhé*.

**Table 13: Changaína Analysis**

		Changaína		
<b>N</b>		35		
<b>Average</b>		70%		
<b>Log Likelihood</b>		-21.885		
		<b>Factor Weights</b>	<b>N</b>	<b>%</b>
<b>Attended LP classes</b>				
	Yes	.69	31	86.1
	No	.10	3	23.1
	Range	59		
<b>Input</b>		0.735		

In sum, we see that participants who have attended classes in LP impacts their decision to choose either *muhé* or *changaína*. Furthermore, we see that word pair 1, *muhé* and *changaína*, have variable results, as well as elicited strong reactions from participants. The likely cause of this influence of LP class attendance on word choice comes from the teachers, who are using this word in their classes, while more traditional speakers prefer the Spanish cognate. This shows that the hypotheses of sociolinguistic variability existing within LP may be correct.

## General Discussion

Experiment 1 demonstrates that age, probably with reference to overall proficiency in LP, acts as a significant predictor of *ma* used as a singular noun marker. Furthermore, Experiment 1 shows that age does not act as a significant predictor of Spanish-like feminine gender agreement or correct LP negation. Previous research notes, “contemporary young learners of Palenquero have hit upon *ma* as a

quintessential Palenquero element; they employ it not only for plural reference more frequently than fluent native speakers, but – in striking contrast to all previous generations of speakers – also as an unambiguously SINGULAR article” (Lipski, 2012: 31). In the present study, we find that old and middle-aged participants are using *ma* less as a singular noun marker, while young participants are frequently using *ma* as a singular noun marker. Experiment 2 correlates exposure to LP classes and choice of particular words such as *muhé* or *changaína*. In both of the studies, young people who have had classes in LP appear to be driving this variation. In the case of singular *ma*, this doesn’t come from LP classes but rather from limited proficiency in LP. This appears to be an emergent characteristic of young people. These young speakers might not have sufficient proficiency to form fully grammatical or traditional utterances. These findings reported in Lipski (2012: 27), note that, “Not only are students and other young Palenquero residents enthusiastic about studying and using Palenquero, but under the tutelage of a handful of activist teachers, they strive to restore a “pure” traditional form of the language, stripping Palenquero of Spanish language accretions that had become incorporated into the speech of older generations.”

Anecdotal references that various participants provided during their interviews serves as further evidence for this. Specifically, multiple participants had strong reactions to making the decision between *muhé* and *changaína*.

**Table 14: Muhé/Changaína**

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La changaína en Lengua Palenquera es aquí lo llamamos mujer mala.  
*La changaína* in Lengua Palenquera is what we call a bad woman here.  
 Yo prefiero usar mujer porque changaína todavía hay controversia.  
 I prefer using *mujer* because *changaína* is still controversial here.  
 Changaína porque es un termino nuevo.  
*Changaína* because it is a new term.  
 No, no, no, no—La changaína—Eso no es mujer.  
 No, no, no, no—*La changaína*—This is not a woman.

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In total, 11 participants of various ages commented after articulating their preference between *muhé* and *changaína*. Some explained the purported origins of *changaína*, while others described

the “community discussion” surrounding its use, such as the opinions of various groups of speakers on the word’s use. Some, like example 4 (see Table 14), react strongly and negatively towards the use of *changaína* by articulating their disapproval at its use. This provided a unique opportunity to learn about LP. Previous research that has been done typically asks LP speakers to simply produce speech. This study, however, asks Palenqueros to offer opinions.

### Conclusions

In conclusion, a sociolinguistic approach to analyzing variation within LP demonstrates interesting results. While some factors are less significant than others, whether or not speakers have had classes in LP is correlated with speakers’ use of two factors: plural marker *ma* with singular nouns and word preference between *muhé* and *changaína*. Age is a correlative factor, probably related to overall proficiency. Speakers within the young age range may produce LP differently than speakers of the middle and old age range due to potential lack of proficiency in the language. Similarly, many speakers within the young age range have only been exposed to LP through classes, indicating that they are perhaps learning LP differently in a classroom setting than the old or middle age range speakers did in an immersive, home environment. Again, this difference in acquisition may result in varied proficiency, and therefore account for the differences in what young speakers produce compared to the old or middle groups. These experiments provide support for this study’s original hypothesis that language revitalization efforts, including teaching of LP, have led to the creation of sociolinguistic differences within the Palenquero community.

The goal of this study was to analyze LP, looking for the type of sociolinguistic variation found in any community in relation to a variety of factors including exposure to classes in LP taught by Palenquero activists, how speakers acquired LP, where they currently speak the language, and age at the time of testing. The present study provides insight into the variation that exists within the population, particularly

within age groups in regards to plural marker *ma* and synonymous word pairs such as *muhé* and *changaina*. Studying LP through this approach can help to legitimize it by adopting the assumption that this speech community behaves just like any other one, regardless of size or prestige.

## Appendix A

### Feminine Gender Agreement Stimuli

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La chica lleva una falda <b>bonita</b> .	The girl wears a beautiful skirt.
Hay una cama cerca de <b>la puerta</b> .	There is a bed near the door.
Las puertas están abiertas durante <b>las mañanas</b> .	The doors are open during the mornings.
<b>La mochila</b> roja lleva muchos libros.	The red backpack carries many books.
La chica lleva una camisa <b>negra</b> .	The girl wears a black shirt.

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## Appendix B

### LP Negation Stimuli

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No quiero ir a la fiesta.	I do not want to go to the party.
Ella no tiene que salir.	She does not want to leave.
La comida no está caliente.	The food is not hot.
El globo no está lleno de aire.	The balloon is not full of air.
No hay libros en la biblioteca.	There are not books in the library.
Los niños no nadaron ayer.	The children did not swim yesterday.

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## Appendix C

### Ma Stimuli

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<p> <b>Mi abuelo</b> tiene once nietos.  <b>La chica</b> lleva <b>una falda</b> bonita.          Hay <b>una cama</b> cerca de <b>la puerta</b>.  <b>La mochila</b> roja lleva muchos libros.  <b>La chica</b> lleva <b>una camisa</b> negra.  <b>El pájaro</b> volará con los otros pájaros.  <b>Tu amiga</b> ayudará a <b>tu hermana</b>.          ¿Vas a hacer <b>la cama</b>?  <b>Su primo</b> llegará a las ocho.          No quiero ir a <b>la fiesta</b>.  <b>Ella</b> no tiene que salir.  <b>La comida</b> no está caliente.  <b>El globo</b> no está lleno de aire.  <b>La hija</b> tiene <b>una chaqueta</b>.  <b>La mujer</b> tenía <b>un bebé</b>.  <b>El hombre</b> tiene <b>una toalla</b>.  <b>El gato</b> tiene ojos azules.  <b>La casa</b> está pintada de azul.  <b>La mujer</b> lleva gafas del sol.          Trabajamos cada día en <b>la tienda</b>.          Quiero que me ayudes con <b>la tarea</b>.          Busco <b>una persona</b> que me pueda ayudar con <b>la comida</b>.       </p>	<p>         My <b>grandmother</b> has 11 grandchildren.          The <b>girl</b> wears a beautiful <b>skirt</b>.          There is a <b>bed</b> near the <b>door</b>.          The red <b>backpack</b> carries many books.          The <b>girl</b> wears a black <b>shirt</b>.          The <b>bird</b> flies with the other birds.          Your <b>friend</b> helps your <b>sister</b>.          Are you going to make your <b>bed</b>?          Your <b>cousin</b> will arrive at 8:00.          I do not want to go to the <b>party</b>.  <b>She</b> does not want to leave.          The <b>food</b> is not hot.          The <b>balloon</b> is not full of air.          The <b>daughter</b> has a <b>jacket</b>.          The <b>woman</b> has a <b>baby</b>.          The <b>man</b> has a <b>towel</b>.          The <b>cat</b> has blue eyes.          The <b>house</b> is painted blue.          The <b>woman</b> wears sunglasses.          We work every day in the <b>store</b>.          I want you to help me with the <b>homework</b>.          I am looking for a <b>person</b> who can help with the <b>food</b>.       </p>
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## Appendix D

### Sociolinguistic Interview Questions

<b>Question</b>	<b>English Translation</b>
¿Cómo aprendió lengua palenquera?	How did you learn lengua palenquera?
¿Cuándo aprendió lengua palenquera?	When did you learn lengua palenquera?
¿Con quien hablaba lengua palenquera en el pasado?	With whom did you speak Lengua Palenquera in the past?
¿Con quien habla la lengua palenquera hoy día?	With whom do you speak Lengua Palenquera today?
¿Alguna vez ha dejado de hablar lengua palenquera?	Have you ever stopped speaking Lengua Palenquera?
¿Tuvo clases de lengua palenquera?	Did you take classes in Lengua Palenquera?
¿Por cuantas años asistió la escuela?	How many years did you attend school?
¿Cuántos años tiene?	How old are you?

## Appendix E

### Word-Preference Word Pairs

<b>Word Pair #</b>	<b>Choice #1</b>	<b>Choice #2</b>	<b>English Translation</b>
1	muhé	changáina	woman
2	agua	apú	water
3	trabajá	makaniá	work
4	morí	lungá	die
5	maní	ngubá	peanut
6	puekko	piangulí	pig
7	ropa	chepa	clothing
8	amigo	kombilesa	friend
9	profesor	piacha	teacher

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