

Possessive Constructions in P'urépecha

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1	first person
2	second person
3	third person
ACC	accusative
AGT	agent marker
BEN	benefactive
CAUS	causative
COP	copula
DATLOC	dative-locative
DEF	definite
DEM	demonstrative
F	feminine
FUT	future
GEN	genitive
IND	indicative
INAL	inalienable
LOC	locative
M	masculine
NEG	negation, negative
NOM	nominative
OBJ	object
PERS	personal
PFV	perfective
PL	plural
POSS	possessive
PP	past participle
PRE	present tense
U	unknown morphemes ¹

¹In some cases the meaning or function of the morpheme is not commonly documented in other literatures, and is irrelevant to the topics discussed in the paper. The morpheme will then be glossed 'U' to indicate that the meaning or function is not clear.

Introduction

In this paper, my objective is to present the possessive constructions of P'urépecha and to discuss these constructions under the current findings of possessive constructions cross-linguistically. At the same time, I will compare my findings in the data from the dialect of Azajo, to the ones in other literature of P'urépecha. Later in this section, I will introduce the background information of P'urépecha, including the specific dialect that I am studying. And then I will describe the basic properties of P'urépecha. In the second section, I will introduce the literature on possessive constructions and P'urépecha. In the third section, I will talk about the methods I use when doing elicitation with my language consultants. Afterward, in the fourth section, I will present my findings on the possessive constructions in P'urépecha.

Some of the findings are different from the current literature on P'urépecha: i) genitive case marker functioning as a clitic instead of a suffix; ii) more restrictive distribution of inalienable possessive marking. Others have rarely been discussed: four possessive verbs; ii) the integration of locative and possessive expressions. P'urépecha has four verbs that cover different types of predicative possession. The distribution of the four verbs exhibits split possession and unity of possessive and locative structure.

The motivation of this study is the diverse possessive constructions across world languages. Possession is a universal notion, but as abstract and ambiguous as the notion is, different languages have distinct ways to express the notion. Many linguists have tried to account for the various possessive constructions, including deconstructing the notion of possession (Heine, 1997), comparing the distribution of possessive constructions within a language (Chappel-McGregor, 1996), and studying the structural similarity of possession and other

notions (Koch, 2012). When I had the chance to study P'urépecha, I was interested in whether the data from it could be explained by theories from current literature, and more importantly, what kind of distinct and novel patterns it would exhibit.

P'urépecha and the dialect of Azajo

P'urépecha is an indigenous language spoken in the state of Michoacán, Mexico. It is a language isolate and does not share a significant number of characteristics with other meso-american languages. There are four linguistic areas, within which the language exhibits more similarity with one another than the language from outside of the area. They are Zacapu in the northeast, Lake Patzcuaro in the southeast, a village in the northwest, and the region of Sierra in the southwest. Among the four areas, the two in the west and the two in the east share more features with each other respectively.

The language consultants, Adriana and Francisco², who were a part of this project came from the village called Santiago Azajo, a village located in the region of Zacapu. It is one of the few villages in the region where P'urépecha is adopted in day-to-day conversations and is passed on the younger generation.

Basic Properties of P'urépecha

The basic properties of P'urépecha are described by Chamoreau (in press). It is an agglutinative language. The verb can take as many suffixes as it needs, including inflectional and derivational suffixes. The most common derivational suffixes are locative suffixes, directional suffixes, causative suffixes, desiderative and adverbial suffixes, and suffixes

² Special thanks to the language consultants Adriana Cuaraque Téllez and Francisco Cuaraque Téllez for providing the data used in this study. The elicitation sessions were a lot of fun because of these two.

expressing voice (Chamoreau, in press). The inflectional suffixes express aspect, tense, irrealis.

The verbs also take person markers.

The nouns are marked by plural markers and case markers expressing the objective, genitive, comitative and locative cases.

P'urépecha has a basic order of SV or SVO, which is associated with traits including suffix only and enclitics only. However, in the Azajo dialect described in this particular study, the order of verbs and objects is fairly flexible.

(1)	ji	t'iré-ra-sha-ka	uíchuni(dog)
	1	feed-U-PROG-IND1/2	
	ji	uíchuni	t'irérashaka
	'I feed the dog.' ³		

Chamoreau (2017) argues that P'urépecha is predominantly a dependent-marking language, which is typical of a SOV language. Historical data have shown that both SVO and SOV were both present in the sixteen century. The increase of SVO structure was probably due to areal contact with other verb-initial languages (Chamoreau, 2007).

Phonemic inventory. The phonemes of P'urépecha can be seen in Tables 1 and 2. The letters on the right are the IPA symbols, and the ones in the parentheses are the orthographic representation used in this paper.

Table 1: Consonants of P'urépecha

³ The examples that are not cited with the names of authors are original data from this study.

	Bilabial	alveolar	post-alveolar	Retroflex	palatal	velar	glottal
plosives	p ^h (p') p(p) b(b)	t ^h (t') t(t)			k ^h (k') k(k)	k ^{wh} (k'u) k ^w (ku)	
nasal	m(m)	n(n)					
affricates		ts ^h (ts') ts(ts)	tʃ ^h (ch') tʃ(ch)	tʂ ^h (tsh') tʂ(tsh)			
fricatives		s(s)	ʃ(x)			x(j)	
flaps		r(r)					
laterals		l(l)					
glides					j(y)	w(w)	

Table 2: Vowels of P'urépecha

	Front	Central	Back
Close	i(i)	ɨ(ɨ)	u(u)
Mid	e(e)		
Open		ɑ(a)	

The alveolar lateral and alveolar flap are not contrastive in the dialect of my two consultants, and intra-personal variation was observed. Long vowels are represented by duplicating the vowel. E.g. [e:] -> ee. The long vowels are categorized by the falling tone.

Literature On Possession

Heine (1997) wrote extensively on the semantics of possession. He categorized the notion of possession into specific subtypes (presented in this section). It would be interesting to find out if P'urépecha has different constructions for these types, in other words, if the distinction among these subtypes are significant to speakers of P'urépecha. At the same time, Heine also discussed

languages where the possessive constructions can be reconstructed back to the source schema.

These source schemas provides insights on the what the prototypical possession is.

The constructional similarity of possessive, locative, and existential expressions is also typologically common. Lots of literatures have talked about the relationship between 'have' and 'be' constructions in English, which was then followed by a discussion on the relationships among the three notions — existence, location, and possession. Part of the fieldwork will be focusing on these notions and their realization in P'urépecha.

In addition, inalienable possession is also studied as a prevalent kind of split possession. A survey conducted by Nichols (1988) has shown the frequent occurrence of inalienable possession. It would be interesting to see if P'urépecha has this split between alienable and inalienable possessions, if it does, what kind of object is inalienably possessed.

Semantics on Possession

Cross-linguistically, there are several types of possessive relationship typically from a semantic point of view. The most common notions that we depend on when distinguishing different types of possessions are control and spatial continuity(Heine, 1997). Here are some categories of possessions that Heine proposed.

'Physical possession' (PHYS) is usually set apart from other types of possessions. It is also noted by Johnson and Miller-Laird (1976) as 'momentary possession'(p. 565). It addresses the physical association between the possessor and possessum at the specific time.

(2) I want to fill in this form; do you have a pen? (Heine, 1997, p. 34)

'Temporary possession' (TEMP) describes the possessive relationship during a limited time. The possessor does not own the possessum but is allowed to temporarily use it.

- (3) I have a car that I use to go to the office but it belongs to Judy. (Heine, 1997, p. 34)

'Permanent possession' (PERM) addresses the legal ownership the possessor has over the possessum. It specially excludes the entitlement of other entities to the possessum.

- (4) Judy has a car but I use it all the time. (Heine, 1997, p34)

'Inalienable possession' (INAL) addresses the inseparable relation between the possessor and the possessum. It usually involves body parts and kinship terms.

- (5) I have blue eyes/two sisters. (Heine, 1997, p. 34)

'Abstract possession' (ABST), by its name, indicates the possession of invisible or intangible things, like money, a feeling, or a state.

- (6) He has no time/no mercy. (Heine, 1997, 34)

ABST is also used when the possession which once existed was has been stopped for some reason.

- (8) I have a missing tooth.

'Inanimate inalienable possession' (IN/I) refers to the possessive relation where the the possessor is inanimate and the possessum is inseparable to the possessor.

- (9) That tree has few branches. *Same structure as body parts in Purepecha)

- (9a) My study has three windows. (Heine, 1997, p. 35)

'Inanimate alienable possession' (IN/A) has possessee that is separable from the inanimate possessor.

- (10) That tree has crows on it. *What about fruits?

- (10a) My study has a lot of useless books in it. (Heine, 1997, p. 35)

In English, the genitive construction and the 'to have -' construction can apply to all types of possessions according to the context while in some other languages there is corresponding constructions to specific type of possession. Manding, for example, has different constructions denoting PHYS, PERM, and ABST.

(11) Manding (Mande, Niger-Congo; Bird, 1972; Kastenholz, 1988; Mohamed Toure, p.c.)

(a) wari ' be Baba kun.

money the be.at Baba head

'Baba has the money (on him).'

(b) wari ' be Baba fe.

money the be.at Baba at

'Baba has (=owns) the money'

(c) minnogo be u la.

thirst be.at their at

They have thirst (=are thirsty).' (Heine, 1997, p. 36)

Predicative possession. Predicative possession involves a possessive verb or predicative particle. In English as well as many other languages, the possessive verb is used to describe a wide range of relationship between the possessor and the possessee.

(12) I have an apartment. (Readings: I am renting the apartment; I bought the apartment and own it permanently or at least for a long period of time.)

Such complex semantic implication of possessive expressions tend to have come from simpler concrete concepts(Heine, 1997, p. 45). The predicative possession is likely to have been

derived from simpler and more concrete concepts, including action, location, accompaniment, and existence. Event schema represents a collection of attributes derived from stereotyped situations of many simpler events. Heine(1997) proposes eight event schemas that have derived predicative possession cross-linguistically.

Table 3: A formulaic description of source schemas used for the expression of attributive possession(Heine, 1997)

Schema	Process
Action Schema(13)	X takes Y > X has, owns Y
Location Schema(14)	Y is at X's place > X has, owns Y
Companion Schema(15)	X is with Y > X has, owns Y
Genitive Schema(16)	X's Y exists > X has Y
Goal Schema(17)	Y exists to/for X > X has, owns Y
Topic Schema(18)	As for X, Y (of X) exists > X has, owns Y
Source (19)	Y exists (away) from X > X has, owns Y
Equation Schema(20)	Y is X's (property) > Y belongs to X

(13) Portuguese (Freeze, 1992, p. 587)

O menino tern fome.
the child takes/has hunger
'The child is hungry.'⁴

(14) Turkish (Lyons 1968a:395)

Ben-de kitap var

⁴ *Note: Another group of verbs that suggest non-dynamic or inactive action, including 'hold', 'carry', 'get', 'obtain', 'acquire' and 'find', can also derive the possessive structure.

me-LOC book existent

'I have a book (on me/with me).'

- (15) *I!Am* (Central Khoisan, Khoisan; Claudi, 1986, p. 16)

!xu thiya-n gabi -n- ka nũĩ

chief many pipe -C.PL- with sit

'The chief has many pipes.'

- (16) K'ekchi' (Mayan, Penutian; Freeze, 1992, p. 589)

wan is- soʔsol- c'ic' li isq.

COP.LOC 3.GEN-dragonfly-metal the woman

The woman has a helicopter.' (Lit.: The woman's helicopter is.)'

- (17) Bolivian Quechua (Quechuan, Andean; Bills, Vallejo and Troike, 1969, p. 186)

waska tiya- puwan.

rope exist-for.me

'I have a rope.'

- (18) Lango (Western Nilotic, Nilo-Saharan; Noonan, 1992, p. 148)

okelo gwok'kere pe

Okelo dog.his 3.NEG.exist

'Okelo doesn't have a dog.'

- (19) Slave (Athabaskan, Na-Dene; Rice, 1989)

ts'et'u nets'e.

cigarette you.from

'Do you (sg.) have cigarettes?'

(20) Russian (Lyons, 1967, p. 394)

Kniga moja

book my

'The book is mine.'

Attributive possession. Attributive possession is structured with two noun phrases, a possessee(the head) and a possessor(the dependent, the genitive, or the modifier) linked together. The study of attributive possession focuses on the ways that the two noun phrases are linked, and which phrases are marked with the link.

The semantic differences between attributive possession and predicative possession include that, first, the attributive possession implies that the possession is presumed, and second, attributive possession often represents more concrete and permanent possessions. Syntactically the attributive possession involves phrasal syntax instead of clausal syntax.

The main sources for attributive and predicative possessions are the mostly the same. However, in only rare cases are the two possessions derived from the same schema in one language(Heine 1997).

Table 4: A formulaic description of source schemas used for the expression of attributive possession(Heine 1997:144).

Formula	Label of Event Schemas
Y at X	Location(21)

Y from X	Source(22)
Y for/to X	Goal(23)
X with Y	Companion(24)
(As for) X, X's Y	Topic(25)

- (21) Maninka (Mande, Niger-Congo; Friedlander, 1992, p. 60)

Mamadu la baara

Mamadu at work

'Mamadu's work.' (Historically: The work at the place where Mamadu is.)

- (22) the property of the university

- (23) West African Pidgin English (Schneider, 1966, p. 92)

aprántis fo kápenta

'an apprentice of the carpenter'

wok-tíng fo méсан

'tools of/for the mason'

- (24) Turkana (Eastern Nilotic, Nilo-Saharan; Dimmendaal, 1983, p. 340)

è- ya` keŋ` ka a-pà" kaŋ`

M-aunt his with F-father my

'my father's aunt'

- (25) Afrikaans (Germanic, Indo-European)

die boer se huis

the farmer his house

Across-linguistically genitive also has many metaphorical meanings. In Greek, the genitive extended metaphorical meanings include possessor, experiencer, kinship, material, cause, partitive, attribute, patient, comparative, origin and whole-part/inalienable possession. Except for the meaning of 'possessor', the other meanings are extended and developed from this original meaning.

Location and Possession

The constructional similarity of possessive and locative expressions is typologically common. Lots of literatures have talked about the relationship between 'have' and 'be' constructions in English, which was then followed by a discussion on the relationships among the three notions — existence, location, and possession. Koch (2012) proposed a diagram representing the semantic space of the three notions above. If two notions are adjacent to each other (sharing a border), they then tend to share similar constructions typologically.

Table 5: The structural similarity among possessive, locative and existential expressions (Koch 2012)

possession	Thematic location(27)
	Rhematic location(28)
Generic/Bounded existence(29/30)	

- (26) The man has an umbrella.
- (27) The apple is on the table.
- (28) There is an apple on the table.
- (29) There are many nice people.
- (30) There are many nice people in Canada.

Lyons(1967) also discussed the unity of possession and location. Possession and location not only share similar structures(31)(32), but are sometimes integrated in one sentence(33).

Mandarin (Lyons 1967)

(31) zhuō shàng yǒu shū
table on COP book

'There is a book on the table'(literal translation: The table has a book on it.)

(32) wǒ yǒu shū
1SG.Pro have book

'I have a book.'

(33) wǒ yǒu shū zài zhuō shàng
1SG.Pro have book LOC table on

'I have a book on the table.'

Possessional Splits: Inalienability

Inalienable possession denotes 'a permanent and inherent association' between two entities(Chappel-McGregor, 1996). Lévy-Bruhl(1914) described four types of inalienable possessions: (i) spatial relationship, as the 'front' or 'back' of something; (ii) possession of body part; (iii) kinship; (iv) possession of inalienable material objects, like clothes or house, which are essential to one's livelihood. This phenomenon is also called split possession.

One of the salient features that sets apart inalienable possession is that the possessor has little or no choice over the possessive relationship(Chappel-McGregor, 1996). This is evident for

the first three types of inalienable possessions mentioned above, for you cannot decide whether you have 'front' or 'back', whether you have a 'mother', or whether you have an 'eye' or a 'leg'. These three types of inalienable possessions also involves an unchanging possessee. The 'front' and the 'back' is always fixed relative to the possessor. The notions of 'front' and 'back' are not decided by the speaker's reference point, unlike notions like 'the left' or 'the right', which are often times ambiguous, as it is not clear, whether the direction reference point is of the possessor, or the speaker. As for kinship terms and body-part terms, it is more evident that possessee remains unchanged and clear through time. A possessor's mother will always be the same person, no matter if the possessor or his/her mother is deceased or not. Same goes with body part terms. The fourth type of possession, however, does not necessarily share the same features. One can decide to end the possessive relationship to many things that are essential to one's life, like houses and clothing. Moreover, one's houses or clothes are by no means permanent throughtout one's life. Therefore it is reasonable to predict that the fourth type of inalienable possession, i.e. the possession of inalienable material, is less likely to be regarded as inalienable possession in the languages that exhibit split possession.

In current literature, most of the studies on inalienable possession focuses on word or phrase level possessive construction. The alienable possessive phrase is constructed with two noun phrases linked by genitive markers, bound or free linker morphemes, possessive classifiers, or possessive pronominal linkers(Chappel-McGregor, 1996). Inalienable possessive phrases are usually less marked than alienable possession, and the possessor and possessee are structurally closer to each other.

Nichols (1988) did a survey among North and Central American languages and found a pattern with languages showing split possession: the inalienably possessed nouns cannot stand alone. Instead they have to take the possessive marker.

Navajo (Young and Morgan, 1980)

(34) bi- be'
3sg milk
'her (own) milk'

(35) 'a- be'
3U milk
'someone/something's milk'

Within predicative possession, body part incorporation is often discussed. In some languages, the body parts can be incorporated into the verb. In Mayali, body parts are incorporated into the verbs in the form of suffixes. With intransitive verbs, the incorporated body parts belong to the subject(36); with transitive verbs, the incorporated body parts belong to the transitive object(37); with ditransitive verbs, it was the direct object's body parts that are incorporated(38).

(Mayali, Evans, 1995)

(36) A-mim-warremi-nj
1-eye-go.bad-PP
'My eyesight has gone.'(Literally: I went bad in my eyes.)

(37) A-bid-garrme-ng daluk
1/3-hand-grasp-PP woman
'I touched the woman on her hand.'

- (38) Ngaye wurdyaw aban-ganem-bukka-ng doctor
1SG child 1/3a-ear-show-PP doctor
'I showed my child's ear to the doctors.'

Literature on P'urépecha

The main literature used as basic references for P'urépecha grammar includes Foster (1969) and Chamoreau (in press), each of which contains a comprehensive overview of the grammar, including phonology, stem formation, verb inflection, substantive inflection and clitics.

Chamoreau (2012) has described the role of genitive suffix *-eri*. It marks the possessor noun. It was derived from a postposition *eweri*.

Chamoreau(2012, p. 22)

- (39) inte-s-ti wámpa Maria-eri
be-AOR-ASS3S husband María-GEN
'He is Maria's husband.'

Foster(1969) documented some different usage of *-eri*. It is attached to nouns for materials or colors to mean 'be made of/with' or 'be painted with'.

- (40) witipu asukari-ri
crown sugar-GEN
'crown of sugar'

- (40a) ma kt'a k'eri atánchk'ata charápiti-ri

a house big paint red-GEN

'A big house painted red.'

(41) It can also be used to express 'at the time of' when suffixed to a period of time of a day.

uitsíntekua inchatiru-eri

yesterday afternoon-GEN

'yesterday afternoon'

Foster also introduced the formation of the possessive pronouns. With the exception of first and second person possessive pronouns, they are formed by suffixing the personal personal pronouns with one of the allomorphs of the genitive marker *-eri*. Regarding the suppletive form of the first and second person possessive pronouns *jucheeeti* and *cheeti*, Foster suggested that they could be concerned as independent possessive pronouns. However, it is worth noticing that the first and second person singular forms respectively resemble their plural counterpart.

Table 6: personal possessive pronouns(Foster, 1969)

1st person sg.	jucheeeti(juchi)
2nd person sg.	cheeti(chi)
3rd person sg.	inteeri, imaari
1st person pl.	juchaari
2nd person pl.	chaari
3rd person pl.	ts'aari

Foster also introduced the inalienable possession marked by personal possessive suffixes. According to Foster(1969), the inalienable possesseees include kinship terms and the word for 'house'. The suffixes are listed in the table below.

Table 7: inalienable personal possessive suffixes(Foster, 1969)

	sg	pl
1st person	-ncha/-shk'wa	-ncha/-shk'wa
2nd person	-te/-shk'wa	-te/—shk'wa
3rd person	-empa	-empa

(Foster, 1969, p. 80)

(42) wáchĩ-mpa

child-3POSS.INAL

'his/her/their child'

(43) wachĩ-te

child-3POSS.INAL

'your child'

(44) pire-ncha

sister-1POSS.INAL

'my sister'

(45) pire-nchĩ-te⁵

sister-U*-2POSS.INAL

'your sister'

(46) tui-sk'wa

sister in law-1/2POSS.INAL

'my/our/your sister in law'

(47) kt'a-empa

house-3POSS.INAL

⁵ *The morpheme *-nchĩ* will be discussed later. Foster noted in her thesis that it partially underlies 'my'.

'his/her/their house'

In terms of predicative possession, many works have discussed the locative suffixes that refers to body parts in P'urépecha. Chamoreau (in press) gave a list of the locative suffixes that indicate different areas of the body. Garza (2015) described the incorporation of locative suffixes in details. With mono-transitive verb bases, if a locative suffix is incorporated in the base, the possessor of the body part can either be encoded in subject function(41), or be encoded in the object function(42). If the incorporated body part is expressed also with an NP, then it is of the locative case.

(P'urépecha; Garza, 2015)

- (48) Maria jupa-k'u-s-Ø-ti (jak'i-ni-rhu)
 Maria wash-upper.extremity-PRF-PRS-3IND (hand-OBJ-LOC)
 'Maria washed her hand.'
- (49) Pedru jupa-k'u-s-Ø-ti Maria-ni (jak'i-ni-rhu)
 Pedro wash-upper.extremity-PRF-PRS-3IND Maria-OBJ (hand-OBJ-LOC)
 'Pedro washed Maria's hand.'

In some cases, the mono-transitive verb receive an additional argument when incorporating the locative suffix that introduces a patient argument. The possessor of the body part suggested by the locative suffix would be encoded in subject or object function.

- (50) ji tsita-k'u-s-Ø-ka-ni limonisi-ni (jak'iri-rhu)

1SG squeeze-upper.extremity-PRF-PRS-1/2IND=1SG.SBJ (hand-OBJ-LOC)

'I squeezed the lemon onto my hand.'

(51) ji tsita-k'u-s-Ø-ka-ni limonisī-ni sapi-ni

1SG squeeze-upper.extremity-PRF-PRS-1/2IND=1SG.SBJ child-OBJ

(jak'iri-rhu)

(hand-OBJ-LOC)

'I squeezed the lemon onto the child's hand.'

Objectives

This study aims to acquire language samples of possessive construction from a specific dialect of P'urépecha: dialect of Azajo. For the constructions discussed in the current literature, the goal is to compare the literature with the data obtained in this study. For the constructions not discussed in the current literature on P'urépecha, the goal is to describe the new constructions and compare them with the current literature on possession.

Chamoreau's study covers various dialects of P'urépecha; Foster (1969) studies the dialects of the area around Lake Patzcuaro, which is very close to the village of Azajo on the south. Even though Chamoreau (in press) put Azajo into the northern linguistic area Zacapu, because the dialects are inter-intelligible in general, and also due to the geographical contiguity, the data from this study should be consistent with the data from other literature. Also, since split possession is observed in possessive phrases, I expect to find other constructions that display split possession. I will also look for the structural similarity between locative, existential, and possessive expressions.

Methods

The data used in this paper came from linguistic fieldwork. There were two subjects involved in the fieldwork. The recruitment of subjects had been approved by IRB before the elicitation started. The consent forms are attached in the appendix. The consent forms were translated into Spanish and signed by both subjects before the first elicitation. The two subjects (also referred to as ‘language consultants’) were both native speakers of P’urépecha, were both fluent in Spanish, and both had basic English communication skills. They were both from the village of Azajo, Michoacán. In each elicitation session, only one subject was being interviewed. Each elicitation was recorded with the subject’s oral consent. The language for communication was English, while both Spanish and English were used as stimuli. The subjects were asked to translate the stimuli, which were translated and organized beforehand, into P’urépecha.

Table 8: elicitation stimuli

words	phrases	sentences
dog/perro	a dog/un perro	I have a dog./Tengo un perro.
	my dog/mi perro	I have a dog at home./Tengo un perro en casa.
	a big dog/un gran perro	

Besides translating, the subjects were also asked to make judgments on phrases that were produced to test a certain hypothesis. For example, when asked “how do you say ‘my dog?’” The subject would say ‘uichuni jucheeti’(dog my). They then would be asked if ‘jucheeti uichuni’ is also right, to which they would give a positive answer. The answer would support the hypothesis that the order of head noun and possessive modifier is flexible. This hypothesis would then be tested using other phrases and in the same manner.

In some cases where subtle distinctions were important, additional context was provided.

The context was conveyed with explanatory texts.

Table 9: elicitation stimuli 2

Target sentence	Context	Spanish
<u>I have a book.</u>	I just borrowed it from the library.	<u>Tengo un libro.</u> Lo tomé prestado de la biblioteca.
<u>I have a book.</u>	I just bought it from the bookstore.	<u>Tengo un libro.</u> Acabo de comprarlo en la librería.
<u>I have a book.</u>	I wrote it last year.	<u>Tengo un libro.</u> Lo escribí el año pasado.

The texts in the examples make up for the lack of clarity in the Spanish and English expressions, and specify the relationship between a possessee and a possessor.

Usually, all the materials for elicitation were prepared. However, impromptu follow-up questions were common too. Here is an instance where follow-up questions were needed.

Stimulus: ‘The mother is washing her hands./La madre se está lavando las manos.’

The subject’s translation:

(52) amá-mpa japo-narhii-sha-ti
 mother-3SG.POSS wash-hand-PRS.DUR-3SG

‘His mother is washing her hand.’

To see if the incorporating verb can take the patient argument in the object position, or if the possessor of the incorporated body part is necessarily encoded in the subject position, follow-up questions would be “can you say ‘amá-mpa japo-narhii-sha-ti jajki’(adding hands as an independent noun phrase)”, or ‘how about “His mother is washing the hands of her baby”(to see

if the change in possessive relationship would be represented in the sentence structure)'. This kind of follow-up question, including the ones that would come up later when analyzing the audio, often focused on one aspect of the grammar, and looked for more specific knowledge of how a word/phrase behave by controlling the irrelevant variables and only manipulating one variable at a time. In the above example, the sentence 'the mother is washing her hand' involves a lot of grammatical features. Changing 'her hand' to 'her "baby's hand"' changes the possessive relationship between *the mother* and *the hand* without meddling with other features. In this case, the result obtained suggests that the body part can be encoded as a separate NP in the object position, and if the possessor of the body part is not in the subject position, it would be encoded in an object position.

(53) amá-mpa japo-narhii-sha-ti jajki-lu
mother-3SG.POSS wash-hand-PRS.DUR-3SG hand-LOC

'His mother is washing her hand.'

(54) amá-mpa japo-narhii-sha-ti chalakua-ni
mother-3SG.POSS wash-hand-PRS.DUR-3SG baby-OBJ

'His mother is washing the baby's hand.'

In rare cases, the subjects would provide their own explanations for behavior of certain words. These accounts were taken into account when developing hypothesis, and then tested with other data.

Results

Attributive Possession

Genitive enclitic. The genitive case is marked by an enclitic *-eri*. It follows the possessor.

The reason why it is an enclitic, instead of a suffix according to Foster and Chamoreau, will be explained below.

- (55) mansána Juánu-eri
 apple Juan-GEN
 “Juan’s apple”

Phonological conditioning of ‘-eri’. The genitive case marker *-eri* is attached to the possessor noun. There are several allomorphs depending on the ending of the preceding noun, as well as several forms of base alterations that come with the case marker.

a) Nouns ending in *-a* is assimilated to *-e* when followed by *-eri*.

a -> e/_eri

E.g. jinkónekua + *-eri* -> jinkónekueeri(brother’s); pirémpa + *-eri* ->pirémpeeri(sister’s)

b) *-eri* is assimilated to *-iri* when preceded by a word that ends with *ï* or *i*.

-eri -> *-iri* / *ï/i*_

E.g. piréntshï + *-eri* -> piréntshïiri(sister’s); malikosichu sesininali + *-eri* -> malikosichu sesininaliiri(the beautiful girl’s)

c) *-eri* remains unchanged when preceded by a word that ends with *e* or *u*.

E.g. uauapu + *-eri* -> uauapueri(the bee’s)

Extended usage of *-eri*. Besides function of *-eri* as a genitive marker, *-eri*'s other more marginal use in expressing materials and qualities documented by Foster has also been seen in the data for this study(40, 40a, 41). This usage reflects Nikiforidou's findings on the genitive's metaphorical meanings. The notion of a possessor can be extended to 'origin', and then extended to 'material' and 'qualities'.

Personal Possessive Pronouns. Here is the paradigm of the personal possessive adjectives for alienable possession. In the data collected from the two language consultants, the variations of first and second possessive pronouns *-juchi* and *-chi* were not found.

Table 10: personal possessive pronouns(own data)

	sg.	Personal pronouns
1st person sg.	jucheeeti	ji
2nd person sg.	cheeti	t'u
3rd person sg.	inteeri, imaari	i, inte, ima
1st person pl.	juchaari	jucha
2nd person pl.	chaari	cha
3rd person pl.	ts'aari	ts'a

The ending to the personal possessive adjectives *-ri* is considered an allomorph to the genitive enclitic *-eri*(Foster 1969).

/jucha(1PL)-eri(GEN)/ -> juchaari: 1PL.POSS.

The first person and second person possessive adjectives have a different form, as seen in previous literature. Both take the corresponding plural personal pronouns and a suffix *-ti*. There is similar case of variation in P'urépecha. The present active participial *-iri* has an allomorph *-iti*. Both can occur after the thematic suffix *-p'e* with free variation(Foster 1969).

Possessive Phrase. The alienable personal possessive pronouns behave in a similar way as the regular genitive case. For convenience, the alienable personal possessive pronouns and the concatenation of the possessor noun and the genitive enclitic will both be referred to as the possessor phrase.

The possessor can be placed before or after the possessee. However, when there is more than one possessee, the possessive pronouns have to precede the possessee.

(56) i jatakua jucheetii-ti
This car 1SG.POSS-ASS3S

i jucheetii-ti jatakua
This 1SG.POSS-ASS3S car

‘This is my car.’

(57) mansána Juanu-eri
apple Juan-GEN

Juanu-eri mansána

Juan-GEN apple

“Juan’s apple”

The possessor phrase can modify two or more possessum nouns.

(58) ari pir-empe-ti ka jinkoneku-empa Juanu-eri
this brother-POSS.INAL3-IND3 and sister-POSS.INAL3 Juan-GEN

“They are Juan’s brother and sister.”

(59) atsī jucheetii-ti uichu ka misitu

Running head: POSSESSIVE CONSTRUCTIONS IN P'URÉPECHA

These 1SG.POSS-ASS3S dog and cat

'These are my dog and my cat.'

In the case where there are two or more possesseees, the possessor or possessive pronoun can be repeated for each possessee, or it can be placed in front of all or both possesseees.

However, it cannot be placed following all or both of the possesseees.

(60) ari juchee-ti arintsïkua ka juchee-ti uantarakua

this my-U book and my-U phone

'These are my book and my phone.'

(61) atshï Juanu-eri pir-empe-ti-icha ka Juanu-eri jinkoneku-

empe-echa

these Juan-GEN brother-POSS.INAL3-IND3-PL and Juan-GEN sister-

POSS.INAL3.PL

"They are Juan's brothers and sisters."

(62) *ari arintsïkua ka uantarakua jucheeti

this book and pen my

(63) * 'This is my book and my pen.

In P'urepecha, the plural enclitic *-echa* immediately follows the noun phrase that it is modifying, including the possessive phrase.

(64) mansana Juanu-eri-icha

apple Juan-GEN-PL

Juanu-eri mansane-echa

Juan-GEN apple-PL

“Juan’s apples”

(65) ta jucheeri-icha

house 1PL.POSS-PL

juche-eri ta-acha

1PL.POSS house-PL

‘our houses’

Compared to regular adjectives, the placing of possessive phrase is more flexible. It appears before or after the possessee, while adjectives can only follow the modified noun.

(66) *chalapiti mansana

red apple

masana chalapiti

apple red

‘the red apple’⁶

In a possessive phrase, the possessor phrase is farther from the head noun than other modifiers.

⁶ Note: the first structure is possible when it is the object in a main clause. The movement in the main clause is beyond the scope of this paper.

(67)	ji	jaa-s-ka-ni	mansána	chalápiti	Juanu-eri-icha
	S1.IND	eat-PRET-IND.1/2	apple	red	Juanu-GEN-PL
	ji	jaa-s-ka	Juánu-eri	mansána	chalápiti-icha-ni
	S1.IND	eat-PRET-IND.1/2	Juan-GEN	apple	red-PL-OBJ

“I ate Juan’s red apples.”

The genitive marker *-eri*, being an enclitic, marks the possessor noun phrase, instead of directly following the head noun.

(68)	alintshikua	malikosichu	sesininali-iri
	book	girl	beautiful-GEN

“The beautiful girl’s book”

(69)	alintshikua	juchaari	pirentshī-ri-ti
	book	1PL.POSS	sister-GEN-IND3

(70)	alintshikua	pirentshī	juchaari-ri-ti
	book	sister	our-GEN-IND3

“The book of our sister”

Inalienable attributive possession. The possession of kinship terms and body part terms is inalienable. Possession of these terms is marked by possessive suffix for singular possession. Here is the paradigm of the personal possessive suffix for inalienable possession. The first person singular possession can sometimes be unmarked, but *juchheeti* is still frequently used.

Table 11: Inalienable possessive suffixes

	Inalienable possessives	Personal pronouns
1st person sg.	jucheeti	ji
2nd person sg.	-te	t'u
3rd person sg.	-empa	i, inte, ima
1st person pl.	juchaari	jucha
2nd person pl.	chaari	cha
3rd person pl.	ts'aari	tsi, icha

pirénchi + -empa -> pirempa 'his brother'

pirénchi + -te -> piréntshite 'your brother'

jajki + -empa -> jajkimpa 'his hand'

For the body-part term, there is a variation between the two speakers in whether to treat it as an alienable possessee or an inalienable one. For the word 'his hand', for example, can either be *jájkempa*, or *jájki imaari*. According to the language consultants, the usage varies among neighbouring villages.

With the word 'my sister', the answers can be *piréntsī*, or *pirénchi jucheeti*. Therefore, the suffix '-tsi' can be a first person singular possessive pronoun that is becoming obsolete.

In the case of 3rd person singular possession, when the possessor is indicated, the possessive suffix is still present, resulting in double marking.

(71) ari Juanu-eri-ti pir-empa ka jinkoneku-empa
 this Juan-GEN-POSS.INAL3 brother-POSS.INAL.3 and sister-POSS.INAL.3

"They are Juan's brother and sister."

Different from the data Foster(1969) had, in the dialect(Azajo) studied in this paper, the words for 'house', which are *k'umánchikua* and *ta*, do not take inalienable possessive suffixes.

- (72) ta cheeti
house 2SG.POSS
'your house'

Predicative Possession

There are four verbs that indicate possession: *kámsin-*, *jatsís-*, *jata-* and *juka-*. The distribution of *jata-* and *juka-* is unambiguous. *jata-* is used to describe the possessive relationship between the container and the fluid in the container. *juka-* is used to indicate possession of the body parts of plants and animals, including human, as well as the clothing of human. It is important to note that *juka-* is used only when the body part or clothing belongs to the possessor in the subject position(78, 79).

- (73) uiríri jatás-ka-ni
blood have-IND1/2-IND1
'I have blood.'

- (74) itsímatarakua jatá-ti itsí
cup have-IND3 water
'the cup contains water.'

- (75) Anatapu juka-ti namunititu asántiku-echa-ni

Running head: POSSESSIVE CONSTRUCTIONS IN P'URÉPECHA

have have-IND3 a.few branch-PL-OBJ

‘The tree has a few branches.’ (Jan. 26th 2018, A.C.)

(76) juka-ri-sha-ka ma katshikua

have-PRS-DUR-1.2.IND a hat

‘I am wearing a hat.’ (Feb. 16, 2018 Consultant 1)

(77) tsimáni jájki juká-ska-ni

two hand have-1/2.IND-1.SBJ

‘I have two hands’

(78) tsimáni éskua juká-ska-ni

two eye have-1/2IND-1.SBJ

‘I have two eyes.’

(79) tsimáni éskua kámsin-ka-ni

two eye have-1/2IND-1.SBJ

‘I have two eyes.’ (I’m holding two eyes.)

The distribution of *kámsin-*, *jatsís-* is more complicated. *kámsin-* is most widely used for concrete objects. However, when the location of the object is specified, *jatsís-* is used instead of *kámshin-*.

(80) kámsin-ka-ni ma jinkónekua-ni

have-1/2IND-IND1 a sister-OBJ

‘I have a sister.’

(81) *ji jinkónekua-ni ma jatsís-ka-ni ixú*
1SBJ sister-OBJ a have-1/2IND-IND1 here

‘I have my sister here.’ (It means that the speaker’s sister is in the town, or a specific geographic area. It does NOT mean that his sister is literally with him at this moment.)

When *jatsís-* is used, it does not necessary convey ownership. Comparing the two verbs when used with the possessee ‘sister’, the first stress the relationship that the speaker has. In the latter case, the location of this ‘sister’ is more stressed. According to the language consultants, when the speaker simply says *ji jinkonekua-ni ma jatsis-ka-ni*, the listener will expect to here where the sister is. The same goes with other objects.

(82) *jatsis-ka-ni ma alíntshíkua pitsítakua-lu*
have-IND1/2-IND1 a book table-LOC

‘I have a book on the table.’ (The speaker do not necessarily own the book, but the book is close to him/her on the table.)

jatsís- is also used for the possession of abstract objects, including ‘job’ and ‘property’, as well as unportable objects like ‘tree’ and ‘house’

(83) *anchíkoleta ma jatsís-ka-ni*
job a have-IND1/2-IND1

‘I have a job.’

- (84) sentáu ma jatsís-ka-ni
money a have-IND1/2-IND1

‘I have money.’ (The word ‘money’ here is an abstract term for properties. The possession of cash is expressed with the verb *kámsin-*.)

- (85) sentáu ma kámsin-ka-ni
money a have-IND1/2-IND1

‘I have cash.’

- (86) ta ma jatsís-ka-ni
house a have-IND1/2-IND1

‘I have a house.’

- (87) jatsis-ka ma anatapu
have-IND1/2 a tree

‘I have a tree.’

What is also interesting is that you can use both *kámsin-* and *jatsis-* for ‘having a wife/ husband’, but only *jatsis-* for ‘having a girlfriend/boyfriend’.

- (88) kámsin-ka-ni uariiti
jatsis-ka-ni uatiiti
have-IND1/2-IND1 woman

'I have a wife.'

- (89) jatsis-ka-ni tempuna
have-IND1/2-IND1 girlfriend

'I have a girlfriend.'

There is one case, however, where *kámsin-* is used where the ownership is not explicit. It is when the possessee is in proximity to the possessor, usually indicated by words like 'here' (*ixu*)

- (90) ixu kamsin-ka-ni ma uichu-ni.
here have-IND1/2-IND1 a dog-OBJ

'I have a dog here.' (The dog is right near her at this moment, however the dog does not necessary belong to the speaker.)

Locative suffixes indicating body parts have also been found. The indicated body parts have their possessor either encoded in subject function, or in object function with an object marker. The body part can be marked optionally as an NP. When the possessor of the body part is not in the subject position, it could also be overtly marked with the genitive marker.

- (91) amá-mpa japo-k'u-sha-ti (jajki-lu)
mother-3SG.POSS wash-extremit.upper—PRS.DUR-3SG (hand-LOC)

'The mother is washing her hand.'

- (92) amá-mpa japo-narhii-sha-ti

mother-3SG.POSS wash-principle-PRS.DUR-3SG

'The mother is washing her face.'

(93) amá-mpa chalakua-ni japo-narhii-sha-ti

mother-3SG.POSS baby-OBJ wash-principle-PRS.DUR-3SG

'The mother is washing the baby's face.'

(94) amá-mpa japo-narhii-sha-ti chalaku-eri kanalikua

mother-3SG.POSS wash-principle-PRS.DUR-3SG baby-GEN face

'The mother is washing the baby's face.'

Discussion

Comparison to Current Literature on P'urépecha

The data obtained from the elicitation with language consultants are mostly consistent with the data from the previous literature. There are just a few differences worth pointing out.

i) The genitive marker *-eri*, is described by both Foster and Chamoreau to be a suffix.

However, the data here show that it is an enclitic, as it marks the entire phrase(68-70). This inconsistency appears with the locative enclitic(95) and the plural enclitic as well(64).

(95) pjaru ma epu juchee-ti-lu kala-sha-ti

bird a head 1SG.POSS-U-LOC fly-PRS.DUR-3IND

'A bird flies over my head.'

ii) The inalienable possessive structure observed in this study is more restrictive. Instead of having inalienable possessive markers for all three persons and two numbers as described by Chamoreau, here only the second and third person singular possessors are marked by inalienable markers. At the same time, the word for house is not marked by the inalienable possessive marker, unlike what Foster documented. As discussed in the literature review regarding inalienability, the objects that are essential to livelihood, are less prototypical objects to be inalienably possessed, as the possession can be controlled by the possessor, and the possessee can change throughout the life of the possessor. Therefore, it is not unusual that different dialects would agree on the inalienability of kinship terms while disagreeing on the possession of material objects like 'house'. The possession of body parts, which according to the language consultants, are to some speakers inalienable, was not mentioned in Foster's account of inalienable possession.

iii) In terms of body-part incorporation in verbs, the data in this study are consistent with Garza's findings, but the consultants also give an alternative expression(94). Therefore, there are two ways to express possession of the body part when its possessor is not encoded in the subject position: either to mark the possessor as an object(86), or mark it with a genitive marker to modify the body part.

Inalienability in Predicative Possession

In this study, four different verb stems that express possession are found, the distribution of which has not been found elsewhere in the current literature on P'urépecha. Among the four verb stems, *jata-* and *juka-* have very restricted distribution. The distribution of *juka-* resembles split possession in attributive possession. The objects with which one can use *juka-* include body

parts and clothing, both of which are commonly possessed inalienably according to Lévy-Bruhl.

This type of 'inalienable' possession in predicative construction is mentioned in Heine (1997)(5), where he gives an example of inalienable predicative possession.

The distribution of *jatsis-*

The word *jatsis-* has a complex distribution that cannot fit into any subtype proposed by Heine. It is used in the following environment: i) where the possessed object is abstract (job, wealth); ii) where the possessed object is unportable (house, yard, tree); iii) where the possessed objects are concrete portable or animate, and the location of the object is expressed in the same clause. Under Heine's theory, this construction indicates less 'control' from the possessor to the possessee. The abstract or unportable things are clearly harder to control than concrete and portable objects; if the location is specified, then the emphasis on ownership is weaker(82), thus also implies less control from the possessor. The possession of abstract nouns, were mentioned by Heine. However, it is hard to categorize the use of *jatsis-* for possession of concrete objects with a specific location, where it does not necessarily indicates ownership, but instead emphasizes the location of the possessed. The unity of location and possession is present in many languages, and was mentioned by Koch (2012). Similar pattern where location and possession are integrated in one clause could also be seen in Mandarin(28). What is different, is that *jatsis-* requires the specification of location. If the location is not specified, *kamsin-* is used instead. In other cases where location and possession are integrated in one sentences, the possessive verb would stay the same as when the location is not specified.

According to Heine, possessive construction can be reconstructed back to a source schema. It is worth noticing, that the possessive predicate *jatsis-* partially resembles the verb

stem *ja-* meaning 'be there' (Foster, 1969, p. 154). With the requirement of a locative argument, I suggest that *jatsis-* could have been derived from location schema. However, this hypothesis needs more extensive knowledge of morphology and diachronic data to support it.

- (96) mansana Juanu-eri mesa-lu ja-la-ti
apple Juan-GEN table-LOC there.be-SG-3IND

'Juan's apple is on the table.'

The flexibility of the relative position of the possessor and possessee corresponds to the flexible word order in P'urépecha. This requires further study of the association of head directionality in phrasal structures and clausal structures.

Conclusion

The possessive constructions of P'urépecha share some familiar traits well documented in the previous literature, including split possession, abstract possession, the genitive marker, and the unity of locative, possessive, and existential constructions. However, there are some discrepancies that could either be caused by dialectal differences or the lack of language data in some of the literature: i) since both Foster and Chamoreau claimed that the genitive case markers were suffixes, while the data in this study showed that it was an enclitic, more data from other dialects are needed to see if this is a dialectal difference; ii) the set of inalienably possessed objects in the data are more restrictive than Foster's data and exhibit interpersonal variations. It is possible that the inalienable possession is shifting to regular possession. A longer period of

study and more participants are needed to find out whether the shift is happening, and if it is, through what kind of process. There are also new discoveries on the four possessive verbs. However, more study is needed to find out the source schemas of the four possessive verbs, especially *jatsis-* which seems to share similar structures with the verb stem 'ja', meaning existence. The changing valence of the verb *jatsis-* also needs more data to explain: when does it require only a possessed object, and when does it require both the possessed object and the location of the object. Is the requirement due to semantic reasons, or syntactic ones? All these questions are worth further studies and need data from more speakers and dialects.

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Appendix

Adult Consent Form

University of North Carolina at Chapel Hill

Consent to Participate in a Research Study

Adult Participants

Consent Form Version Date: 01/10/2018

IRB Study # 17-2298

Title of Study: A Study of Possessive and Existential Constructions in P'urhepecha

Principal Investigator: Yining Zhu

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What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary.

You may choose not to participate, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this research study is to investigate the grammar of the indigenous language P'urépecha, specifically the possessive(e.g. I have a car) and existential(e.g. There is a car at my home) constructions as the part of the grammatical structure.

Optional.

You are being asked to be in the study because you are a native speaker of P'urepecha and are fluent in Spanish.

Are there any reasons you should not be in this study?

You should not be in this study if you are not fluent in P'urepecha, or suffer from hearing impairment.

How many people will take part in this study?

There will be approximately five people in this research study.

How long will your part in this study last?

You will be participating in sessions(interviews) that each lasts for an hour. You will be participating in two to ten interviews. This study will be active for approximately five months.

What will happen if you take part in the study?

In each interview session, you will be speaking to the investigator(also the interviewer) and the conversation will be recorded given your oral consent before each session. The interviewer will show you some sentences on the laptop screen, like 'I have a house' and 'There is a house' in both Spanish and English, and ask you to interpret them in P'urepecha. You will also be shown some images, like a photo of a room, and asked to describe the items in the image. You will be asked if some P'urepecha sentences or words sound correct to you. You will also be asked some follow-up questions depending on your answer to the previous question. For ALL the questions asked in an interview, you may choose not to

answer for any reason. You can also stop the interview or ask for a break at any point of the interview for any reason.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. You will not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?

There are no known risks from being in this study.

There may be uncommon or previously unknown risks. You should report any problems to the researcher.

What if we learn about new findings or information during the study?

You will be given any new information gained during the course of the study that might affect your willingness to continue your participation.

How will information about you be protected?

During the course of the study, your name will only be appearing on this consent form. The consent forms will be stored in a safe place and only the principal investigator will have access to them.

Participants will not be identified in any report or publication about this study without the permission of the participant. The purpose of identification in any publication will only be to acknowledge the contribution of the participants, considering that the study is based on their knowledge of the language.

Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety.

There will be no personal information in the audio recordings. You will be identified using an assigned number at the beginning of every recording. The recordings will be stored on an encrypted external hard drive and kept until the study ends.

You may request that the recordings be turned off at any point during the interview sessions.

Check the line that best matches your choice:

OK to record me during the study

Not OK to record me during the study

For each interview, the principal investigator will prepare the questions in both English and Spanish. If necessary, the faculty advisor for this study will be present to help interpret. No one other than the participants, the principal investigator, and the faculty advisor will be present at the interviews.

What will happen if you are injured by this research?

This section may be omitted if the study involves no more than minimal risk and no chance of personal injury. The language below should be used if there is no commercial Sponsor; there is an alternative version for sponsored studies. To the extent they are known, describe any medical treatments for injury that might be available or where the subject can obtain further information.

All research involves a chance that something bad might happen to you. This may include the risk of personal injury. In spite of all safety measures, you might develop a reaction or injury from being in this study. If such problems occur, the researchers will help you get medical care, but any costs for the medical care will be billed to you and/or your insurance company. The University of North Carolina at Chapel Hill has not set aside funds to pay you for any such reactions or injuries, or for the related medical care. You do not give up any of your legal rights by signing this form.

What if you want to stop before your part in the study is complete?

You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped. You will be paid for the amount of time you participate before the termination.

Will you receive anything for being in this study?

You will be receiving 15 USD per hour for taking part in this study. If you decide to withdraw from the study at any point, you will be paid for the amount of time you have participated before the withdrawal.

Will it cost you anything to be in this study?

It will not cost you anything to be in this study.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study (including payments), complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

Signature of Research Participant

Date

Printed Name of Research Participant

Signature of Research Team Member Obtaining Consent

Date

Printed Name of Research Team Member Obtaining Consent

IRB Approval Email

To: Yining Zhu

Linguistics

From: Non-Biomedical IRB

Approval Date: 1/18/2018

Expiration Date of Approval: 1/17/2019

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)

Submission Type: Initial

Expedited Category: 6.Voice/image research recordings,7.Surveys/interviews/focus groups

Study #: 17-2298

Study Title: A Study of Possessive and Existential Constructions in P'urépecha

This submission has been approved by the IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Study Description:

Running head: POSSESSIVE CONSTRUCTIONS IN P'URÉPECHA

Purpose: To study the grammar of the indigenous language P'urépecha, specifically the possessive and existential constructions as the part of the grammatical structure.

Participants: Native P'urépecha speakers, which mainly include the immigrants from Michoacan, Mexico, who currently live in or near Chapel Hill.

Procedures (methods): The researcher will sit down with one or more subjects and elicit the P'urépecha sentences and words I need by asking them to translate certain sentences, or asking them to identify certain things in the P'urépecha language. The conversation will be recorded with the subjects' consent and the speech will be analyzed later in terms of its phonology, syntax, and other grammatical features. Each elicitation session will be around 30 minutes to 1 hour, agreed upon by the researcher and the subjects before each session. The subjects can end the session at anytime if they wish. Water will be provided during the session.

Investigator's Responsibilities:

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

Your approved consent forms and other documents are available online at http://apps.research.unc.edu/irb/index.cfm?event=home.dashboard.irbStudyManagement&irb_id=17-2298.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented. Any unanticipated problem involving risks to subjects or others (including adverse events reportable under UNC-Chapel Hill policy) should be reported to the IRB using the web portal at <http://irbis.unc.edu>.

Running head: POSSESSIVE CONSTRUCTIONS IN P'URÉPECHA

Please be aware that additional approvals may still be required from other relevant authorities or "gatekeepers" (e.g., school principals, facility directors, custodians of records).

The current data security level determination is Level II. Any changes in the data security level need to be discussed with the relevant IT official. If data security level II and III, consult with your IT official to develop a data security plan. Data security is ultimately the responsibility of the Principal Investigator.

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

CC:

David Mora Marin, LinguisticsIRB Informational Message - please do not use email REPLY to this address