# RUHUÂ RU'MAN HIO'ÓO GATS<u>I</u>I 'IN THE HOLE OF WHITE DIRT' LEGEND IN CHICAHUAXTLA TRIQUI

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Chicahuaxtla Triqui (ISO code [trs]) is an Otomanguean language spoken in San Andrés Chicahuaxtla and eleven other communities located in the state of Oaxaca, Mexico. There are two other Triqui languages. One is spoken in San Juan Copala and the other in San Martín Itunyoso. The text presented here is a legend titled "Ruhuâ ru'man hio'ó gats<u>i</u>i" 'In the Hole of White Dirt'. The legend was written and recited by Felipe Santiago Rojas, a native-speaker of TRS. In this manuscript, I present a map of the Triqui region, an overview of TRS, its consonant and vowel inventories, tones, and information on current and competing spelling conventions. Other sections focus on Chicahuaxtla Triqui grammar, including a brief introduction to word structure, pronouns, glottally interrupted syllables, verbs, tone and aspect, and sentence final particles.

[KEYWORDS: Chicahuaxtla Triqui, Otomanguean, tone, glottally interrupted syllables, aspect, verb tenses, sentence final particles, morphology]

**1. Introduction.** Chicahuaxtla Triqui (ISO code [trs])<sup>1</sup> is an Otomanguean language spoken in San Andrés Chicahuaxtla and eleven other communities located in the state of Oaxaca, Mexico (Elliott et al., 2016). There are two other Triqui languages. One is spoken in San Juan Copala and the other in San Martín Itunyoso. Ethnologue (Lewis et al., 2016) estimates that TRC has 25,000 speakers, followed by TRS with 4,060 speakers and finally, TRQ with 2000 speakers. The demographic data reported for TRC and TRS date from 2007 while those for TRQ are from 1983.

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Table 1 lists mutual intelligibility figures among the Triqui languages as reported in Egland (1983). Based on survey data from the Summer Institute of Linguistics, native speakers of TRS understand approximately 74% of the Copala Triqui language (ISO code [trc]) and 77% of the Itunyoso Triqui (ISO code [trq]) language (Egland 1983; Lewis et al., 2016) while speakers of TRC comprehend 56% of TRS and 64% of TRQ. According to the survey, native speakers of TRQ evidence the highest mutual intelligibility coefficients and understand approximately 98% of TRS and 91% of TRC. Hollenbach (2008:2) states that the high intelligibility rate evidenced can be attributed to high levels of contact the Copala indigenous people have with those of San Martín Itunyoso because they travel to that region to sell their goods. (For more information regarding mutual intelligibility studies among the Triqui languages, see Casad, 1974).

	TRS	TRQ	TRC
TRS	97	98	56
TRQ	77	99	64
TRC	74	91	98

TABLE 1 MUTUAL INTELLIGIBILITY PERCENTAGES AMONG TRIQUI LANGUAGES (ADAPTED FROM EGLAND, 1983).

Figure 1 is a map of the Triqui region and lists the major areas where the Triqui languages are spoken. The Triqui indigenous people live in the northwestern region in the State of Oaxaca. TRS is spoken in approximately eleven communities: San Andrés Chicahuaxtla, La Laguna Guadalupe, San Isidro Morelos, San Marcos Mesoncito, Santa Cruz, Zaragoza, Yosonduchi, La Cañada Tejocote, Miguel Hidalgo Chicahuaxtla, San José Xochixtlán, Santo Domingo del Estado, and San Isidro del Estado (Hernández 2013), in addition to other neighboring areas such as Los Reyes Chicahuaxtla, Barranca del Cuche, Concepción del Progreso and Joya Grande, the area where the legend is believed to have taken place in the text below. San Andrés Chicahuaxtla has an altitude of 2419 meters above sea level or approximately 7,936 feet.



According to the 2010 census by the Instituto Nacional de Estadística y Geografía (INEGI) there are 1,120 inhabitants (592 women and 528 men) in San Andrés Chicahuaxtla, not all of whom speak TRS as a native language. Village leaders estimate that the population has fallen to 940 and is still in decline. Elliott et al. (2012) note that many of the Triqui indigenous people have left the village due to economic and educational opportunities of residing in Oaxaca, Mexico City or in the United States. Triqui families living in San Andrés Chicahuaxtla, Mexico City and other areas frequently use Spanish when speaking to their children. In addition, many Triqui males have married monolingual Spanish-speaking women who now reside in San Andrés Chicahuaxtla. Many of these women say that TRS is "too difficult to learn" and that they only speak Spanish to their family and friends (personal communication). Although language maintenance is an issue for the Triqui people of Chicahuaxtla, the pressure to speak Spanish is great due to the desire to gain educational and economic advantages associated with living outside of the village. Likewise, there are some native speakers of TRS who prefer speaking Spanish in order to avoid the social stigma of being indigenous. Although the elders, village leaders and teachers who speak TRS and who are natives of San Andrés Chicahuaxtla have made great strides in the conservation and maintenance of their language, many are dismayed by the increasing numbers of younger speakers who do not speak the language.

FIGURE 1: SAN ANDRÉS CHICAHUAXTLA AND SURROUNDING AREAS

**2. TRS Consonants.** TRS consonants are listed in International Phonetic Alphabet (IPA) format below. The symbols used in practical orthography appear in parentheses. Conventional orthography of TRS is discussed in § 5 below. Consonants that are marked with an asterisk indicate variations in pronunciation (i.e., allophones) for some native speakers of TRS.

	CONSONANT INVENTORY OF TRS																
p	b	ţ	ď	-	-	-	_	-	-	-	-	k	g	k <sup>w</sup>	g∞	?	-
(p)	(b)	(t)	(d)									(k)	(g)	(ku)	(gü)	(')	
-	-	-	nd (nd)	-	-	-	-	-	-	-	-	-	ŋg (ng)	-	-	-	-
-	-	fs	-	-	-	ťĵ	-	fş	-	-	-	-	-	-	-	-	-
	1 1 1	(ts)				(ch)		(chr)									
-	-	-	-	s (s)	-	_∫* (v)	3*	-	z*	-	-	-	-	-	-	h (i)	-
	m			(3)	n	(A)	0)		(1)							0)	
-	(m)	-	-	-	(n)	-	-	-	-	-	-	-	-	-	-	-	-
	m:				n:												
	(mm)				(nn)												
_	-	-	-	-	-	-	-	-	- 1	-	j		w	-	-	-	-
											(hi)		(hu)				
											ĵ†						
											(hi/n)						
											JI (hi (hii)		W:				
											(m/mi)		(nuu)				
-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
	;				(1)				-								
					L:												
	i		i		(11)												

TABLE 2

Voiceless and voiced bilabial stops (e.g., /p b/) are not native to TRS and are the result of Spanish loanwords. There are three principal ways in which TRS deals with Spanish loanwords that contain the consonant *p*: 1. retention, for example, *lapîj* [la<sup>3</sup>pi<sup>4</sup>h] 'pencil' from Spanish *lápiz* ['la.pis]; *plusîa* [plu<sup>3</sup>si<sup>4</sup>a:<sup>43</sup>] from the Spanish '*policía*'; 2. aphaeresis or the elimination of the first syllable of the Spanish loanword. For example: *drêj* [dreh<sup>4</sup>] 'father' from the Spanish '*padre*'; *lêla* [le<sup>4</sup>la:<sup>32</sup>] from '*panela*' (<SP [pa.'ne.la]) 'brown sugar'; or 3. voicing of initial Spanish *p* in disyllabic Spanish loanwords, for example: *besu* [<sup>m</sup>be<sup>4</sup>su:<sup>3</sup>] from '*peso*' (*Eng.* 'peso') or *belệtu* [be<sup>3</sup>le<sup>4</sup> tu:<sup>3</sup>] from '*pleito*' (<SP ['plei.to]) (*Eng.* 'lawsuit' or 'dispute')<sup>2</sup>.

/b/ is a voiced bilabial stop that may be pronounced as an approximant or fricative in intervocalic position and across word boundaries in words, for example [ne:<sup>32</sup>  $\beta$ erende:<sup>3</sup>] 'firewater' from the Spanish word *aguardiente*. In all other environments (e.g., after a nasal or a pause), it is pronounced as a stop. /b/ may be a result of direct transfer from the Spanish grapheme *b* or *v*, for example *burru*<sup>3</sup> [burro' (< SP ['bu.ro]) or *Betuj* [betu<sup>3</sup>h] < '*Beto*' short for Alberto in Spanish or *baka* [baka:<sup>3</sup>] from Spanish '*vaca*' 'cow'. /b/ in TRS may

<sup>&</sup>lt;sup>2</sup> Note that [bele<sup>4</sup>tu:<sup>3</sup>] also evidences diphthong reduction and epenthesis of <e> separating the consonant cluster <bl>, which is not permissible in TRS.

<sup>&</sup>lt;sup>3</sup> There are some native speakers who say *ûrruj u* [u<sup>4</sup>ru<sup>3h</sup>u] 'burro' as well.

also result from the Spanish consonant *f* as in *Belì* [beli:<sup>1</sup>] from the Spanish name *Félix*. It may also result from voicing of Spanish grapheme *p* in word initial position, for example *Balû* [mbalu:<sup>43</sup>] < '*Pablo'* (< SP ['pa.blo]) or *Berû* [bezu:<sup>43</sup>] < '*Pedro'*. It has been reported in the research literature (Longacre 1952:63) that there are some speakers who may pronounce *b* as partially voiced or voiceless when it occurs as the onset of a nonfinal syllable, as in *besu* [be<sup>4</sup>su:<sup>3</sup>] < '*peso'* (< SP ['pe.so]), however, there was a tendency for the consultants used in this and other related research to pronounce *b* as voiced as per analyses using PRAAT.

[t d] are voiceless and voiced denti-alveolar stops with long contact (Ladefoged & Maddieson 1996:22-23). Elliott et al. (2016) note that in some dialects of TRS, /t/ in word-initial position may be pronounced as /st/ in disyllabic words such as [tane:<sup>3</sup>] ~ [stane:<sup>3</sup>] 'goat'. /d/ in word-initial position may be pronounced with prenasalization, as in the TRS words [¤dawe:<sup>2</sup>] 'lake' or [¤do<sup>3</sup>h] 'more'. While /d/ is usually pronounced as a stop, it may be articulated as a fricative (e.g., [ð]) in intervocalic position or across word boundaries provided that the previous word ends in a vowel. Hollenbach (1977:36) has documented the fricative allophone of /d/ in TRC in intervocalic position in the onset of ultimas and in addition to Spanish loanwords as well. DiCanio (2010:229), however, has documented only one native word in TRQ, [ru³ða³?] 'grinding stone leg' that contains the voiced interdental fricative; all other examples of [ð] are found in Spanish loanwords.

/k g/ are voiceless and voiced velar stops in TRS. Like the other voiced stops in TRS, /g/ may be pronounced with prenasalization (e.g., [ŋg]) in word-initial position or after a pause, for example: [ŋgato:4] 'shirt', [ŋgato:2] 'mold' or [ŋgato2?] 'we will tell (him)'.

/kw/ and /gw/ are voiceless and voiced bilabial-velar stops. Elliott et al. (2016) note that the pronunciation of /g<sup>w</sup>/ varies "on a continuum from careful speech (e.g., /g<sup>w</sup>/) to the vernacular or rapid speech" where it may be pronounced as [<sup>g</sup>w], [w] or [<sup>h</sup>w] as in *güiì* [wi:<sup>31</sup>] 'people' or *nugu*an' [nuwã<sup>2</sup>?] 'word' in the text below.

TRS has two prenasalized stops [nd ng] as in [nda:<sup>3</sup>] 'until' and [nga:<sup>3</sup>] 'when'. In TRS, /n/ is often phonetically present but operates noncontrastively in words with *b d* and *g* in nonfinal syllables or after a pause and may be pronounced as [mb nd ng] as in [ndawe:<sup>2</sup>] 'lake' as in the text below. Previous research on TRS has shown that the prenasalization before *b*, *d*, and *g* is not a perceptually salient feature for native speakers of Chicahuaxtla whereas the nasalized segment in [nd ng] is. In addition, Elliott et al. (2012) reported that the prenasalized feature in [nd] and [ng] is approximately 50% longer in duration in comparison to prenasalization before /b d g/.

There are three voiceless affricates in TRS: denti-alveolar affricate/ts/; alveolo-palatal affricate /tʃ/, and retroflex affricate /tʂ/. There are several examples of affricates in the text, for example,  $[gatsi:^{13}]$  'white',  $[ga-nat]^{1:3}$  PST-

flow; [g-atʃiː<sup>4</sup>] PST-pass; [satʃi<sup>3h</sup>i] 'ancestor', [nũ<sup>2</sup>? ga<sup>2</sup>t͡şa<sup>3</sup>?] 'everywhere' and [t͡şuː<sup>3</sup>] 'tree'.

All native speakers of TRS have a minimum of two sibilants /s  $_3$ /. The graphemes *s* and *y* are normally pronounced as /s/ and / $_3$ /, there are, however, some speakers for whom /s/ and / $_3$ / occur in free variation with / $_2$ / and / $_3$ /, respectively. For example, the TRS word for 'serpent' in the text below may be pronounced with complete voicing as in [ $_3$ ukwa: $_35$ ], voiceless as in [ $_3$ ukwa: $_35$ ] or with partial final voicing as in [ $_3$ ukwa: $_35$ ].

In the research literature, rhotic *r* has been described as a voiced alveolar trill, however, recent research (Elliott et al., 2012, 2016) suggests that this sound can also be pronounced as a voiced retroflex sibilant and is transcribed as [z] when it is pronounced in this way. This results in an additional fricative for some speakers of the language. Many younger consultants pronounce rconsistently as a voiced alveolar trill as in Spanish, however, there are others for whom [r] and [z] occur in free variation. The speaker of the text varies in his pronunciation of r in TRS. For example, the consultant first pronounces the TRS word ru'man 'hole' as a trill in [ru?mã:3] then for the second occurrence, he subsequently pronounces it as [zu?mã:3]. There are some native speakers of TRS who pronounce intervocalic r as voiced alveolar flap [r] as in Berû [beru:<sup>43</sup>] < 'Pedro', others who may pronounce intervocalic /r/ as a voiced retroflex sibilant as in [bezu:<sup>43</sup>] < '*Pedro*', but all consultants pronounce r as a flap in the TRS words rè' [re<sup>1</sup>?] and nej e rè' [ne<sup>3h</sup>e re<sup>1</sup>?], 'you' FORM, SG and PL, respectively, regardless of other variant pronunciations of /r/ they may have. (For additional information regarding the pronunciation of r, see Elliott et al., 2016).

One of the more interesting phonological features of TRS is fortis-lenis consonant contrasts. Fortis-lenis consonant contrasts have also been reported for TRC (Hollenbach, 1977, 1984) and for TRQ (DiCanio, 2012). In addition, fortis-lenis contrasts have also been documented for Zapotec (Nellis & Hollenbach, 1980; Avelino, 2001; Leander, 2008), Amuzgo (Bauernschmidt, 1965) and Otomí (Bartholomew, 1960; Blight & Pike, 1976). Many of these studies have focused on a variety of phonetic correlates that distinguish fortis from lenis consonants, for example, duration of articulation, articulatory strength, tenseness of articulation, voicing versus voiceless distinctions, glottal width and the completeness of closure. (For more information on fortis-lenis distinctions in Triqui, see DiCanio 2012).

According to Longacre (1952:63 fn 1), TRS has ten fortis consonants /p t k s  $\int m: n: j: w: l:/$  and ten lenis consonants /b d g z 3 m n j w l/. TRS consonants /k t $\int r h$  ?/, are "undifferentiated as to fortis or lenis" (Longacre 1952:63 fn 1). In TRS fortis phonemes occur as the onset in monosyllables, for example, *nnee* [n:e:<sup>32</sup>]<sup>4</sup> 'water' as in the text below. In addition, Longacre (1952:63 fn 1) states

<sup>&</sup>lt;sup>4</sup> Word-final syllables ending in three-tone sequences shorten to two tones when used at the phrasal, sentential or utterance levels. Therefore the TRS word for 'water' when pronounced in isolation is [n:e:<sup>323</sup>] but shortens to [n:e:<sup>32</sup>] when used in a frame.

that "fortis consonants are distinguished from the corresponding lenis consonants by: 1) a perceptible lengthening of the fortis phonemes, especially with nasals and lateral /l:/; 2) by greater articulatory force and consistent voicelessness of the stops and sibilants of the fortis variety; and 3) by the consistent stop quality of /p t k/ as opposed to /b d g/ which may have fricative and stop allophonic variation. Consequently, the fortis-lenis consonants in TRS can refer to contrasts in: 1) consonant length, 2) voicing, or 3) strength of articulation.

The distinguishing feature for fortis-lenis sonorant contrasts in TRS is duration. Fortis sonorants are longer than their lenis counterparts. The difference in duration in TRS is similar to the singleton-geminate distinctions as per DiCanio (2012) in his research on TRQ. Figure 2 illustrates the lenis-fortis contrast comparing /n/ with /n:/ for this particular consultant with TRS words for [ne?e<sup>3</sup>h] 'child' and [n:e<sup>3</sup>e] 'rope'. The lenis consonant in [ne?e<sup>3</sup>h] 'child' has a duration of 59 ms while the fortis token /n:/ in [n:e<sup>3</sup>e] 'rope' is 351 ms in length. For this particular comparison, the lenis token is approximately 83% shorter in duration in comparison to its fortis counterpart.

FIGURE 2: LENIS AND FORTIS /n/ IN THE TRS WORDS [ne?e<sup>3</sup>h] 'CHILD' AND [n:e<sup>3</sup>e] 'ROPE'



Longacre (1952:63) notes that while fortis obstruents are voiceless, lenis obstruents in nonfinal syllables vary in terms of their degree of voicing and may be voiced, voiceless or semi-voiced. Analyses using PRAAT show that although

varying degrees of voicing may be evident with lenis fricatives (e.g.,  $[s] \sim [z]$  and  $[\int] \sim [3])$ , variation in voicing of obstruents [b d g] in nonfinal syllables was not observed for the tokens collected for this and other related research. That is to say, [b d g] were consistently pronounced as voiced consonants and frequently evidenced prenasalization resulting in [mb nd ng]. Elliott et al. (2016:3) note that prenasalization of voiced stops occurs in other Otomanguean languages such as Mazatec, Mixtec and Otomí.

Finally, both fortis and lenis voiced palatal approximants (e.g., /j:/ and /j/), undergo nasalization before a nasal vowel, for example,  $hi\underline{a}n'\underline{a}nh \underline{a}n$  or  $n\underline{a}n'\underline{a}nh$  $\underline{a}n$  [ $j\tilde{a}^2\tilde{r}\tilde{a}^{2h}\tilde{a}$ ] 'God' in the text below. Some native speakers write these words using  $\tilde{n}$  because they perceive its articulation to be similar to the voiced alveolopalatal nasal /n/ consonant in Spanish while others write it as *hi* (see § 5 below). Table 3 lists examples of fortis-lenis consonant contrasts in TRS.

	LENIS:	TRS:	GLOSS:	FORTIS:	TRS:	GLOSS:
a.	/d/	[do13h]	'few'	/t/	[to: <sup>313</sup> ]	'milk'
b.	/g/	[gã¹?]	'far'	/k/	[kã³h]	'sandal'
c.	/g <sup>w</sup> /	[g <sup>w</sup> i: <sup>31</sup> ]	'person'	/k <sup>w</sup> /	[k <sup>w</sup> e <sup>3</sup> h]	'pus'
d.	/m/	[mãː1]	'there is; there are'	/m:/	[mːã³h]	'thick'
e.	/n/	[naː4]	'long ago'	/nː/	[nːãː⁴]	'heat from the sun'
f.	/3/	[3i <sup>4</sup> ?]	'elder'	/ʃ/	[ʃeː²]	ʻspring–burst forth'
g.	/l/	[li <sup>3</sup> h]	'small'	/l:/	[l:e <sup>3</sup> ?]	'sister'
h.	/w/	[we <sup>4</sup> h]	'this.one'	/wː/	[w:e <sup>3h</sup> e]	'rock, cliff'
i.	/j/	[ja³h]	'ashes'	/jː/	[jːaː²]	'gossip'

**TABLE 3: FORTIS-LENIS CONSONANT CONTRASTS IN TRS** 

TRS has two laryngeals: glottal stop /?/ and /h/. There are no other wordfinal consonants that are lexically derived. Glottal stops occur only in final syllables, either as an onset or a coda consonant, for example, [?w:e<sup>3h</sup>e] 'thread' or [so<sup>1</sup>?] 'he – his'. In TRS, the voiceless glottal stop may occur before a sonorant but not before an obstruent as in /?m ?n ?ŋg ?l ?j ?w/, for example, [ru?mã:<sup>3</sup>] 'hole' and [g-a?mã<sup>3</sup>?] 'PST-heat up' in the text below.

**3. Vowels.** TRS has seven oral vowels [i e ə a o u u] as illustrated in Figure 3 below. Conventional orthographic symbols are included in parentheses. Of the vowels listed here, the mid central vowel /ə/ rarely occurs and was found in only four tokens we have documented thus far, the interjection  $\ddot{e}$  [ə<sup>43</sup>] 'what?',  $\ddot{e}'\ddot{e}j\,yi\hat{o}'$  [ə?ə<sup>32</sup> ʒio?<sup>4</sup>] 'hiccough', *hiëj* [jə<sup>3</sup>h] 'stone' and finally, *gudurë'* [gu-durə<sup>3</sup>?]

'PST-destroy' that appears in the text below. Younger Triqui-Spanish bilingual speakers in San Andrés Chicahuaxtla tend to merge /a/ with /e/ and /u/ with /i/ which may point to a future loss of both /a/ and /u/. In Santo Domingo del Estado, a town adjacent to San Andrés Chicahuaxtla, both /a/ and /u/ have already merged with /e/ and /i/, respectively.

FIGURE 3: TRS VOWELS

i (i)		ա (ï) ս (u)
e (e)		o (o)
	ə (ë)	
	a (a)	

TRS has four nasal vowels: [ĩ ã ũ ũ]. [ẽ õ] are not lexically derived but may occur in morphologically-derived forms in verbs, possessed nouns, predicate adjectives and prepositions (Elliott et al., 2016; Hernández Mendoza, 2013). Final vowel nasalization in these forms serves as a marker for 3SG forms, for example, [si:<sup>32</sup>-națõ:<sup>2</sup>-õ<sup>3</sup>] POSS:PREF-banana-CLS-RDUP:NAS:T<sup>3</sup> 'his/her banana' from the unpossessed noun [națo:<sup>2</sup>] 'banana' and [du<sup>4</sup>?we<sup>2</sup>-h-ẽ<sup>3</sup>] sell-CLS-RDUP:NAS:T<sup>3</sup> 'he/she sells' from the root [[du<sup>4</sup>?we<sup>2</sup>-h] 'sell'.

Each vowel represents a separate syllable in the Triqui languages. There are no diphthongs or triphthongs in TRS except for Spanish loanwords such as  $[gwaiju:^3]$  'horse' from the Spanish *caballo*,  $[skue^3la:^2]$  'school' from the Spanish *escuela* and  $[radiu:^3]$  'radio' from the Spanish *radio* that some speakers may pronounce with diphthongs or triphthongs as in Spanish. Final syllables may end in a modal, aspirated, or glottalized vowel (e.g., /V:/, /Vh/, /V?/ and /V<sup>?/h</sup>V/) and are phonemically contrastive. Final vowels are lengthened in words ending in a [V:]-stem rime but are shorter in duration before word-final coda consonants /? h/. There is a word-final constraint in TRS that vowels in word-final contexts must be lengthened. Word-final long vowels are phonetic and do not contrast with short vowels. (For additional information on vowels in TRS, see Elliott et al., 2016.)

**4. Tone.** TRS has five tones and a rich variety of tone contours. In this article, tones are marked from 1 to 5, where 1 is the lowest tone and 5 the highest. Contrastive tone is generally found in the final syllable with some exceptions that are listed below. In TRS, the default or unmarked tone is /3/ which is usually not indicated in nonfinal syllables unless it is found to be phonemically contrastive in minimal pair comparisons, for example, [ʒi<sup>4</sup>lu:<sup>3</sup>] 'knife'; [ʒi<sup>3</sup>lu:<sup>3</sup>] 'cat'; [ʒi<sup>3</sup>lu:<sup>53</sup>] 'worm'.

Final syllables in TRS may end in a single level tone: /4/, /3/, /2/, and /1/, for example, [na:<sup>4</sup>] 'long ago'; [asi<sup>2</sup>h] 'for' and [ʒi<sup>4</sup>?] 'elder' and are written with one final vowel. Tone /5/ occurs only in glides, for example /53/, /35/, /45/ as

in /dukwã:<sup>53</sup>/ 'line', /ʒukwa:<sup>35</sup>/ 'snake', /jo:<sup>35</sup>/ 'quick' and /aťJĨ:<sup>45</sup>/ 'ask' and are usually written with only one final vowel with some exceptions, for example, *kúu* [ku:<sup>53</sup>] 'bone'. Contour tones are restricted to final syllables. TRS words may end in two-tone sequences (i.e., contour tones), such as [ruwa:<sup>43</sup>] 'inside'; [ane<sup>32</sup>h] 'sell'; [uta<sup>31</sup>? si<sup>3</sup>h] 'he fights'. Three-tone sequences occur only in monosyllabic words that end in a vowel and are transcribed using multiple digits, for example, [w:e:<sup>353</sup>] 'palm mat'; [n:e:<sup>323</sup>] 'water', [ni:<sup>313</sup>] 'last night' and [m:ĩ:<sup>313</sup>] 'bridge'.

Table 4 gives examples of TRS tones and tone contours in words with three different word final rimes: [V:], [Vh] and [V?]. In TRS, tone and rime are different, although they interact. At the phonological level, the inventory of possible tones is constrained by whether and where the tone-bearing syllable involves laryngeals, for example, syllables ending in a glottal stop /?/ or /h/ show fewer tonal possibilities than those that end in a vowel. Based on the examples listed below, TRS has a total of 15 tone contrasts with a possibility of 25 different word-final tone and rime combinations. The text contains all but nine of the examples listed below. Those that do not appear in the text are marked with an asterisk.

	TRS							
	[V:] ton	ie samples:	[Vh] to	one samples:	[V?] tone samples:			
a.	4	na:4 'long ago'	4h	nã⁴h 'that'	4?	3i4? 'elder'		
b.	3	ru?mãː³ 'hole'	3h	ne <sup>3</sup> h 'the' PL	3?	darã³? 'all'		
c.	2	ni <sup>2</sup> 'and'	2h	asi²h 'for'	2?	nuywã²? 'word'		
d.	1*	w:i:1 'hidden'	1h*	ŋgo¹h 'low-grave'	1?	ni¹t͡şrũ¹? 'near'		
e.	53	jo?oː <sup>53</sup> 'dirt'	32h*	ane <sup>32</sup> h 'sell'	32?*	ri <sup>32</sup> ? 'achieve'		
f.	45*	at]i: <sup>45</sup> 'ask'						
g.	43	ruwa:43 'inside'						
h.	32	to: <sup>32</sup> 'feather'						
i.	31	g <sup>w</sup> iː <sup>31</sup> 'people'						
j.	23*	nda: <sup>23</sup> 'until'						
k.	21*	nane: <sup>21</sup> 'wind'						
l.	13	gatsiː13 'white'						
m.	353*	w:e: <sup>353</sup> 'palm						
		mat'						
n.	323	n:e: <sup>323</sup> 'water'						
0.	313*	m:ĩ: <sup>313</sup> 'bridge'						

TABLE 4: /V:/, /VH/ AND /V?/ FINAL TONE, TONE CONTOURS AND RIME SEQUENCES IN

**5. Conventional Orthography.** Although TRS is not commonly written, the desire to write the language has increased considerably over the past decade and more people are writing the language by hand or in texts, either printed or online. Consequently, teachers, village leaders and community members are engaged in ongoing efforts to develop a writing system, however, not all native speakers of TRS are in agreement as to what these conventions should be. The TRS practical writing system generally changes depending upon the audience for whom it is intended. Linguists typically represent all tones in writing in addition to fortis-lenis sonorant consonant contrasts, word-final vowel length and multitone contours. Practical orthography is by and large simplified when it is written for native speakers of the language.

Probably the largest contemporary sample of written TRS is a translation of the New Testament by Felipe Santiago Rojas (2016), the consultant used in this research, which is available online (see <u>http://triquidechicahuaxtla.org/es/page-2-0</u>). The spelling conventions in the online version of the New Testament translation are those that are discussed here and are used in the text below. Alternative spelling systems exist and are actively promoted by some teachers, village leaders and native language enthusiasts, both within the community, in schools and in online environments. In addition to the spelling conventions that are described here, alternate spelling practices will be highlighted where appropriate.

The diacritics used for indicating tone in the text included here are based on the five-tone system and were approved by committee in 2009 in San Andrés Chicahuaxtla and Santo Domingo del Estado. Tones in TRS are written using the following diacritics: (´) = 5; (^) = 4; () = 3; (\_) = 2 and (`) = 1. Lexical items ending in one tone are written with one final vowel while those ending in two-tone sequences are usually (but not consistently) written by doubling the final vowel and marking the corresponding tones, for example *güii* [gwi:<sup>31</sup>] 'people' and *gumàan* [gumã:<sup>13</sup>] 'rain' in the text below. The orthographic system currently used does not account for words ending in three-tone sequences, such as *húue* [w:e:<sup>353</sup>] 'straw mat', *mmii* [m:i:<sup>323</sup>] 'bridge', or *nii* [ni:<sup>313</sup>] 'last night'. Alternate writing systems currently in use mark only three tones. High to extra high tones are indicated with an acute accent (´); mid tones are not marked, while low to extra low tones are marked with a grave accent (`).

Triqui vowels are written as they are in Spanish (e.g., *a*, *e*, *i*, *o*, *u*) except for the close back unrounded vowel /u/ that is written as *i* and the mid central vowel /ə/ as *ë*, as in the TRS words *kij i* [ku<sup>3h</sup>u] 'mountain' and *ë'ëj* yiô' [ə?ə<sup>32</sup> gio?<sup>4</sup>] 'hiccough'. There are some native speakers who write these sounds as barred or using strikethrough text, e.g., *i* and *e*. Native speakers of TRS who speak a dialect in which /ə/ and /u/ have merged with /e/ and /i/ represent these sounds as *e* and *i* in writing.

TRS spelling conventions have changed over the past 65 years, therefore an explanation of some of the graphemes is warranted. For example, Longacre (1952, 1957, 1959), Good (1979), and Matsukawa (2009) represent voiceless velar stop /k/ as *c* before back vowels and *qu* before front vowels in accordance with Spanish spelling conventions. Today, however, there are many who write /k/ as *k* wherever it occurs.

Longacre (1952, 1957) and Good (1979) write voiceless and voiced bilabial-velar stops /k<sup>w</sup>/ and /g<sup>w</sup>/ as *cu* and *gü* before *e* and *i* in accordance with spelling conventions in Spanish, however, there are some native speakers who use the graphemes *kw* and *gw* to write these sounds. For example, based on spelling conventions used in the text presented here, the TRS words *güendâ* [g<sup>w</sup>enda:<sup>4</sup>] 'story' and *güi* [g<sup>w</sup>i:<sup>31</sup>] 'people' are sometimes written as *gwendá* and *gwi*. Based on Spanish spelling, *g* is written as *gu* before *e* or *i*, however some native speakers write /g/ as *g* wherever it occurs. Consequently the TRS word [ge:<sup>2</sup>] 'surprise' is written as *gue* as per the spelling conventions used in the text below but may be written as *gè* [ge:<sup>2</sup>] by some native speakers.

Voiceless and voiced postalveolar fricatives /ʃ/ and /ʒ/ are written as *x* and *y* respectively, for example: *xi'i* [ʃi?i:1] 'sickness', *yuhue* [ʒuwe:3] 'dog' and *yî'* [ʒi<sup>4</sup>?] 'elder'. In his dictionary, Good (1979) writes voiceless postalveolar fricative /ʃ/ as *xx* and voiced postalveolar fricative /ʒ/ as *x*, for example, *xuhue* [ʒuwe:3] 'dog' (Good, 1979:47); *xutan* [ʒut̪ã:3] 'bee' (Good, 1979:48) in comparison to *guxxun'* [gufũ<sup>2</sup>?] 'we are going to take it away' (Good, 1979:95).

The *saltillo* < ' > is used to represent the glottal stop [?] in accordance with spelling conventions used in the text below and reflects previous spelling conventions used by Longacre (1952, 1957), Good (1979), Mastukawa (2008, 2009), Elliott et al. (2012, 2016) and Santiago Rojas (2006, 2016). In TRC, the glottal stop is written using the *saltillo* < ' >, however, in TRQ it is represented by the grapheme *h*. Proponents of alternative writing systems of TRS have replaced the *saltillo* < ' > denoting a glottal stop [?] with the grapheme *h*. Therefore, words such as *ru'man* [ru?mãː³] 'hole', *y*i' [ʒi<sup>4</sup>?] 'ancestors' and '*ue'e* [?we³?e:] 'ice' are written by some as *ruhman*, *yih* and *hueh-e*, respectively.

The use of grapheme *h* to represent the glottal stop [7] in TRS is not uncommon and its popularity is growing. Figures 4 – 5 below show that many members and online contributors to *LenguayCulturaTriqui* twitter site prefer using the grapheme *h* as opposed to the *saltillo* < ' > in words that have a glottal stop [7]. According to the blog titled, "Pronunciación de la «h»" posted on the *Lengua y Cultura Triqui* Wordpress<sup>®</sup> website, "[h]ay autores que escriben este fonema con el apóstrofo «'» en vez de «h». Preferimos la «h» por cuestiones prácticas, pues es posible escribir dicha letra usando un teclado estándar de cualquier dispositivo electrónico, lo que facilitaría el envío de mensajes, correos electrónicos, publicaciones en redes sociales, etc." For example, Figures 4 – 5 below are two recent posts from the website in which the glottal stop [7] is represented as *h*. In Figure 4, *sí gono'ò* [si:<sup>53</sup> gono?o:<sup>1</sup>] 'doctor' (literally, medicine man), is spelled *sií gònòhò* and *dû'huej* [du<sup>4</sup>?we<sup>2</sup>h] 'sell' in Figure 5 is written as *dúhwèj*. As computers become more prevalent in San Andrés Chicahuaxtla and in the local school systems, extant keyboard symbols will undoubtedly influence the developing orthographic system of TRS. It would not be surprising that the grapheme *h* eventually replaces the saltillo < ' > for the glottal stop in the practical orthography of TRS.

FIGURES 4 AND 5: SAMPLE TWITTER POSTS FROM LENGUAYCULTURATRIQUI



Figure 4

Figure 5

According to the spelling conventions used in the text below, grapheme *h* is mute and is used either: 1) at the beginning of a word that begins with two vowels, for example *hio'óo* [jo?o:<sup>53</sup>] 'dirt', or, 2) to indicate syllable divisions internally in words that consist of three or more contiguous vowels as in *dahuee* [dawe:<sup>23</sup>] 'lake' or *ruhuâa* [ruwa:<sup>43</sup>] 'in'. Alternate spellings are *yohóo*, *dawèe* and *ruwáa*, respectively.

The voiceless glottal fricative /h/ is written as *j* in TRS, for example, *asij* [asi<sup>2</sup>h] 'for'; *kij* [ku<sup>3</sup>h] 'mountain' and *sachij i* [satJi<sup>3</sup>hi] 'elders – ancestors'. Words that contain /h/ and are followed by a vowel are now written by some teachers with a space or a hyphen between the laryngeal and the vowel, whereas at one time, they were written as one word (Longacre 1952, 1957; Good 1979). For example, *sachij i* [satJi<sup>3</sup>hi] 'elders – ancestors' may be written as one word (as per Longacre 1952, 1957; Good 1979), or with a space or hyphenated in accordance with spelling conventions used today, thus resulting in the following three possibilities: *sachiji*, *sachij* i or *sachij-i*.

Grapheme *n* as the onset of a syllable is pronounced as a voiced alveolar nasal /n/, however when a vowel is followed by *n*, it signals nasalized pronunciation of the previous vowel, for example: *nuguan'* [nuywã<sup>2</sup>?] 'word';

 $hi\underline{a}n'\underline{a}nj \underline{a}n$  [ $j\tilde{a}?\tilde{a}^{2h}\tilde{a}$ ] 'God'; or *gumàan* [gumã:<sup>13</sup>] 'rain'. As indicated in § 2 above, some native speakers write [j] as  $\tilde{n}$  because they believe its pronunciation is similar to the voiced alveopalatal nasal /p/ consonant in Spanish.

The representation of fortis-lenis sonorant consonant contrasts in practical orthography has been of considerable debate among the teachers, village leaders and community members. Orthographic systems used by Longacre (1952, 1957, 1959) and Good (1979) differentiated fortis from lenis sonorants by writing fortis consonants as geminates, for example: [m: n: l: j:] as *mm*, *nn*, *ll*, *yy* while fortis [w:] was represented in writing as *<huu>*. Alternate writing systems currently in use represent both fortis and lenis */w/* as *w* wherever it occurs. Therefore, words such as [dawe:<sup>2</sup>] 'lake' or [ruwa:<sup>43</sup>] 'in' are written *dawè* and *ruwáa* rather than *dahue* or *ruhuâa* according to the spelling conventions used in the text. Santiago Rojas (2006) and Elliott et al. (2012, 2016) write fortis /j:/ as *hii* and lenis /j/ as *hi*.

Not all native speakers of TRS are in agreement whether or not fortis-lenis sonorant consonants should be represented in writing. Santiago Rojas reports (Elliott et al., 2012) that there are several teachers and school administrators in San Andrés Chicahuaxtla who reject the use of double consonants but that there are "still some people, although very few, who choose to write it the old way (i.e., using double consonants)." Consequently some native speakers of TRS are in favor of representing fortis-lenis sonorant consonant distinctions in writing while there are others who reject this. To date, no general consensus appears to have been reached.

Several of the graphemes currently used have not changed from earlier spelling conventions. For example, the voiceless denti-alveolar affricate  $/\hat{ts}/$  is represented as *ts*, the voiceless alveolar-palatal affricate  $/\hat{tJ}/$  as *ch*, and the voiceless retroflex affricate  $/\hat{ts}/$  is written as *chr*. (For more information regarding spelling in TRS, see Elliott et al., 2012). 6. Notes on Chicahuaxtla Triqui Grammar.

**6.1. Chicahuaxtla Triqui word structure.** TRS is a VSO language that consists mainly of monosyllabic and disyllabic words. Trisyllabic words are compounds and are not as common. Compound nouns may consist of a noun with another noun, verb or adjective. For example, in the text, [ $3ukwa:^5 to:^2$ ] <u>ja?a:^3</u>] 'plumed serpent' is a compound consisting of "snake feather brush". Hollenbach (2008:31) notes that over time, some compounds in TRC came to be pronounced as one word thus resulting in a new noun. The same is true for TRS. For example, in TRS [raf§ũ:<sup>53</sup>] 'bread' is derived from [f§a:<sup>3</sup>] 'tortilla' and [f§ũ:<sup>53</sup>] 'oven'. Some blended words resulted in three-syllable nouns, for example, *ruguachra'a* [rug<sup>w</sup>af§a<sup>27</sup>a] 'plank - board', derived from [f§u:<sup>3</sup>] 'tree, stick' and [gaf§a<sup>2</sup>?] 'wide' or *ruguchrin* [rugut§ũ:<sup>3</sup>] 'pine tree' comes from [f§ũ:<sup>3</sup>] 'tree' + [guf§i:<sup>3</sup>] 'pale', according to one consultant. Days of the week may also

result in three-syllable compound nouns, for example, *güigàn'anj* [gʷi³gã¹?ã³h] 'Thursday' consists of *güi* [gʷi:³] 'sun - day' and *gàn'anj* [gã¹?ã³h] 'four' while *güidungu* [gʷidũŋgu:³] 'Sunday' is a blend of TRS and Spanish, consisting of *güi* [gʷi:³] 'sun - day' and *-dungu* -[dũŋgu:] from the Spanish *domingo* for 'Sunday'. Complex lexemes are underlined in the text below.

TRS final syllables are accentually prominent and carry phonemically contrastive tone, except for the formation of the future and past tenses as discussed in § 6.4 below. Final syllables end in a long vowel [V:] or in a coda consonant /? h/. Word final –n signals nasalization of the previous vowel as in the word *ru'man* [ru?mã:<sup>3</sup>] 'hole' in the text below. Leftward spreading of nasalization is thwarted by an intervening laryngeal, either glottal stop /?/ or /h/ except for cases in which the root is nasalized, for example, *hian'anj an* [ $\tilde{j}a^{2}\tilde{r}a^{2h}\tilde{a}$ ] 'God', *nuguan'an* [nugwã<sup>72</sup> $\tilde{a}$ ] 'word' or *hian'aan* [ $\tilde{j}a\tilde{r}a^{:13}$ ] 'twins'. As indicated in § 3 above, final vowel nasalization may also occur in morphophonological forms and serves as a marker of 3SG short or fused forms in verbs, possessed nouns, predicate adjectives and prepositions, for example, *unīi*'īn [ $u^{3}nu^{31}$ ?ũ:<sup>3</sup>] 'he-she fights' from *unīi*' [ $u^{3}nu^{31}$ ?] 'fight'; *si-naton on* [si:<sup>32</sup> națõ:<sup>2</sup>õ:<sup>3</sup>] 'his-her banana' from *nato* [națo:<sup>2</sup>] 'banana'; *hìo on* [ $\tilde{j}$ õ:<sup>13</sup>õ:<sup>3</sup>] 'he/she is quick' from hìo [jo:<sup>13</sup>] 'quick', and *ngàn an* [ $\eta$ gã:<sup>1</sup>ã:<sup>3</sup>] 'with him/her' from *ngà* [ $\eta$ ga:<sup>1</sup>] 'with' (Edmondson et al., 2012; research in progress).

Chicahuaxtla Triqui nouns are not inflected for number or gender. When number is of importance, nouns may be preceded by a plural marker (PL) /ne<sup>3</sup>h/, which is also used to convert singular pronouns to their plural form (see § 6.2 below). *Nej* [ne<sup>3</sup>h] is also used as a plural definite article as well. The following examples are found in the text:

(1a)	ne <sup>3</sup> h <sup>PL</sup> 'elders'	3i4? elder
(1b)	ne <sup>3</sup> h <sup>PL</sup> 'they'	so4? he
(1c)	ne <sup>3</sup> h <sup>PL</sup> 'people'	g <sup>w</sup> iː <sup>31</sup> person
(1d)	ne <sup>3</sup> h <sup>PL</sup> 'ancesto	satJi <sup>3h</sup> i ancestor ors'

**6.2. Pronouns.** TRS has a rich set of free pronouns with approximately 30 different forms. Personal pronouns are invariable insofar as the same forms are used as subject, direct object, indirect object, the object of a preposition or the subject of a predicate adjective. Grammatical function is conveyed by means of word order or through the use of prepositions. Only the most commonly used pronouns are listed in Table 5 below.

	PERSON:	SINGULAR:	Plural:
a.	1	j̃ũ¹h	ne³h j̃ũ⁴h ∼ ne?⁴
b.	2 fam	so <sup>1</sup> ?	ne <sup>3</sup> h so <sup>3</sup> h
с.	2 FORM	re <sup>1</sup> ?	ne <sup>3h</sup> e re <sup>1</sup> ?
d.	3 masc	si³h ∼ so⁴?	ne³h si³h ~ ne³h so⁴?
e.	3 fem	j̃ũ⁴? ∼ jo⁴?	ne³h jũ⁴? ∼ ne³h jo⁴?
f.	3 ANIMAL	3u <sup>3</sup> h ∼ 30 <sup>4</sup> ?	$ne^{3}h$ $3u^{3}h \sim ne^{3}h$ $3o^{4}?$
g.	3 object(s)	o <sup>4</sup> ?	ne <sup>3</sup> h o <sup>4</sup> ?

TABLE 5: FREE PRONOUNS IN TRS.

While all pronouns reflect person and number, others are conditioned by natural or biological gender of the referent, speaker gender (i.e., pronouns specifically used by men while others are used by women), social deixis (i.e., formal and familiar forms) and endophoric reference. For example, males use two alternate forms for 3SG MASC: [si<sup>3</sup>h] and [so<sup>4</sup>?]. The former is used the first time that one refers to the 3SG MASC person while the latter is used for subsequent reference to the same male in discourse. In other cases, when a male is talking about two males, he will refer to the first man using /si<sup>3</sup>h/ and to the second using /so<sup>4</sup>?/. The same rules apply to  $[j\tilde{u}^4?]$  and  $[jo^4?]$  'she – her' and corresponding plural forms. In TRS, singular pronouns are changed to plural forms by adding a plural morpheme /ne<sup>3</sup>h/ (/ne<sup>3h</sup>e/ for 2PL FORM) before the singular pronominal form.

Another group of pronouns is used when referring to animals or inanimate objects (i.e., things). In (f), the pronoun  $/3u^3h/$  'he.animal' is used when referring to an animal for the first time, while subsequent reference to the same animal takes the pronoun  $/30?^4/$ . In the text below, the speaker first refers to the Plumed Serpent by using an overt compound noun in line 4, [ $3ukwa:^5 to:^{32}$ ] (plumed serpent' while  $/30?^4/$  'he.animal' occurs throughout the remainder of the text.

The pronouns presented here and used in the text below reflect male speech. Longacre (1952:114) notes that women speakers use pronouns that are different from those used by men.

**6.3 Glottally interrupted final syllables.** Unlike the other Triqui languages, TRS has glottally interrupted vowels in final syllables in which a

single vocalic gesture is interrupted by a laryngeal, either /?/ or /h/ in nominal forms. First reported by Longacre in 1952, glottally interrupted syllables in TRS consist of one nucleus, either glottal stop /2/ or /h/, in which phonemically contrastive tone is found throughout the entire vowel save for the perturbation in tone trajectory from glottal constriction in mid-syllable. This unique combination of words that contain mid-syllable interrupts, either /V<sup>?T</sup>V/ or /V<sup>hT</sup>V/ and those that have vowel-glottal stop-vowel sequences, i.e., /V?V<sup>T</sup>/, has significant consequences for the tone-larvngeal morphophonological system of TRS for it is precisely the combination of the laryngeal gesture, either glottal stop /?/ or /h/, along with the tone of the glottally interrupted vowel that determines the correct morphophonological patterns that emerge. Syllables that are interrupted by a glottal stop /?/ have a [V?]-stem rime sequence and while those that are interrupted by /h/ have [Vh]-stem rime sequence. For example, the TRS word  $[\hat{ts}a^{3?}a]$  'song' is a mid-syllable interrupt that has a /V?/ final stem rime while the word [tşe<sup>3h</sup>e] 'road' has /Vh/ final stem rime. Both of these examples follow a tone-laryngeal pattern for lexical items ending in tone /3/. Although glottally interrupted forms most commonly occur with tone /3/. other combinations, such as  $/V^{21}V/$ ,  $/V^{22}V/$  and  $/V^{h1}V/$ ,  $/V^{h2}V/$  are possible, for example, nuguan'an [nugwã<sup>22</sup>ã] 'word' or hiàn'àn [jã<sup>21</sup>ã] 'night'. Glottally interrupted syllables do not occur with high or extra high tones.

Longacre (1952: 75 fn2.1) states that glottally interrupted syllables do not undergo final vowel lengthening as vowel-glottal stop-vowel sequences do. There is a word-final constraint in TRS that vowels in word-final contexts must be lengthened. This constraint can differentiate minimal pairs with glottally interrupted vowels that are interrupted by a glottal stop /?/, e.g.,  $[V^{TV}]$ , from "true" vowel-glottal stop-vowel structures  $[V?V^T]$  as in the following examples in Table 6 below<sup>5</sup>:

	/V?TV/		/V?V:T/	
a.	3e <sup>?1</sup> e	'outside'	3e?e:1	'long'
b.	nug <sup>w</sup> ã <sup>?2</sup> ã	'word'	nug <sup>w</sup> ã?ã:²	'together'
с.	we <sup>?3</sup> e	'house'	we?e:4	'fine'
d.	ĵã <sup>?1</sup> ã	'night'	ĵã?ã:1	'twins'

 TABLE 6: MINIMAL PAIRS COMPARING GLOTTALLY INTERRUPTED VOWELS (E.G., /V?TV/)

 TO GLOTTAL STOPS IN INTERVOCALIC POSITION (E.G., /V?V:T/)

 $<sup>^5</sup>$  While minimal pair contrasts can be found for glottally interrupted vowels that have a glottal stop, (i.e., /V<sup>TV</sup>/) and true vowel-glottal stop-vowel lexical items (i.e., /V<sup>TV</sup>/), syllables that are interrupted by /h/, (i.e., /V<sup>hT</sup>V/) do not form minimal contrasts with /VhV:<sup>T</sup>/ words which do not exist in TRS.

Glottally interrupted vowels are not found in TRC or TRQ. Table 7 compares lexical items with glottally interrupted syllables and intervocalic glottal stops to cognates in TRQ and TRC. Words (a) – (c) have glottally interrupted vowels in TRS and correspond to monosyllabic cognates in TRC and TRQ. Items (d) through (f), however, are true vowel-glottal stop-vowel sequences in all three language in which phonemically contrastive tone is found on the last vowel.

TABLE 7: TRS GLOTTALLY INTERRUPTED VOWELS (E.G., /V<sup>?T</sup>V/) AND VOWEL-GLOTTAL STOP-VOWEL SEQUENCES (E.G., /V?V:<sup>T</sup>/ COMPARED TO COGNATES IN TRQ & TRC<sup>6</sup>

	Proto-Triqui	TRS	TRQ	TRC	GLOSS:
a.	*ne? <sup>3</sup>	ne <sup>?3</sup> e	ne?³	ne? <sup>3</sup>	rope
b.	*chra? <sup>3</sup>	chra <sup>?3</sup> a	chra? <sup>3</sup>	chra? <sup>3</sup>	song
с.	*chrej <sup>3</sup>	chre <sup>h3</sup> e	chreej <sup>3</sup>	chrej <sup>32</sup>	road
d.	*ko?o <sup>32</sup>	go?o <sup>32</sup>	ko?o <sup>32</sup>	ko?o <sup>32</sup>	drink
e.	*ko?o <sup>3</sup>	go?o <sup>3</sup>	ko?o³	ko?o³	plate
f.	*ni?i <sup>3</sup>	ni?i <sup>3</sup>	ni?i <sup>3</sup>	ne?e <sup>3</sup> n	know

There are a few examples of glottally interrupted vowels in the text below, for example, *sachij i* [sat]i<sup>3</sup>hi] 'elders - ancestors' or *nuguan'an* [nugwã<sup>22</sup>ã] 'word' and *kij* [kuu<sup>3</sup>h] from *kij i* [kuu<sup>h3</sup>u] 'mountain'. The laryngeal features in glottally interrupted syllables are superscripted to show these words are one-syllable constructions, (e.g., /<sup>*i*</sup> h/) while vowel-glottal stop-vowel structures are transcribed with the /*i*/ written on the line.

**6.4 Verbs, Tone and Aspect.** Probably the most comprehensive attempt to uncover any underlying systematicity with TRS tone-laryngeal verb morphology, its conjugations and aspect morphology can be attributed to Good (1979) and is found in the appendix of his Chicahuaxtla Triqui-Spanish/Spanish-Triqui language dictionary, (available online at the Summer Institute of Linguistics website at: https://www.sil.org/resources/archives/10957). A significant finding with this and other related studies is that the TRS data collected today largely corroborate the TRS verb classification system and aspect morphology as outlined per Good (1979:105-107). Although the system appears to have diversified slightly over the years through the incorporation of new lexical items and Spanish and English borrowings, the overarching patterns as outlined by Good appear to have remained largely intact and relatively stable over the

<sup>&</sup>lt;sup>6</sup> Data for Itunyoso Triqui are from DiCanio (Personal Website Database) and those for trc are from Hollenbach (2016). Proto-Triqui reconstructed forms are based on Matsukawa (2008).

years with some exceptions. For example, Good (1979:22) documents the TRS verb 'to sell' as [du?we<sup>4</sup>h], ending in a high register tone, however, based on current research, native speakers pronounce this form as [du?we<sup>2</sup>h] in tone /2/. It is difficult to speculate what may account for this discrepancy.

TRS verbs<sup>7</sup> occur in three possible tenses: PRESENT, FUTURE and PAST. If the verb expresses actions that can be carried out by everyone, the form naturally given by the native speaker consultant is in the 1INCL form of the future tense. For example, [ga<sup>2</sup>?mi<sup>2</sup>?] 'we are going to speak'; [ga<sup>2</sup>to<sup>2</sup>?] 'we are going to sleep', and [gu<sup>2</sup>nu<sup>4</sup>?] 'we are going to hear (him, her, it)'. Actions that are carried out by animals or inanimate objects, for example, howling or leaking, or those that are limited to specific individuals such as baptizing a person or breastfeeding a child are given in the 3SG form (Good 1979:105) of the PRESENT. Sample verbs of this type are illustrated in Table 8 below.

TABLE 8: SAMPLE ACTIONS LIMITED TO SPECIFIC INDIVIDUALS, ANIMALS OR INANIMATE OBJECTS IN TRS

	- ) -	
	TRS:	GLOSS:
a.	[dugʷat̪a³¹ʔ nːeː³² si³h]	'he baptizes'
b.	[dugut͡siː³]	'(she) breastfeeds'
c.	[ʒiʔj̃ã¹h s͡tu³h]	'howls (dog)'
d.	[akaː1]	'leaks (house, roof)'
e.	[amã¹?]	'rains'
f.	[naʒigũː²1]	ʻgleams (sun)'

Verb roots in TRS may end in a modal, nasalized, aspirated or glottalized vowel, (e.g., /V:/,  $/\tilde{V}$ :/, /Vh/, /V?/) as per the examples listed in Table 9 below:

-				
	VERB ROOT ENDINGS:		EXAMPLE:	GLOSS:
a.	Modal	/V:/	[ajaː <sup>32</sup> ]	'count-read'
b.	Nasal	/Ũ:/	[at]ĩ: <sup>45</sup> ]	'ask'
c.	Aspirated	/Vh/	[we <sup>4</sup> h]	'jump'
d.	Glottalized	/V?/	[ut̪a <sup>31</sup> ?]	'fight'

TABLE 9: SAMPLE VERB ROOTS IN TRS

<sup>&</sup>lt;sup>7</sup> TRS morphophology is very complex and cannot be fully presented in great detail in this paper. The purpose of this section is to provide the reader with an overview of the TRS verbal system. Consequently, it is not intended to be a comprehensive study of TRS verb morphophonology but rather it is designed to serve as a point of departure. For additional information on TRS verb conjugations, see Good (1979:105-107).

In the formation of the present tense, the verb root or stem is used before a free pronoun, for example,  $[a\hat{t}sa:^{35} ce^{17}]$  'you sing',  $[du^2we^2h ne^3h si^3h]$  'they sell' or  $[unu^{31}? si^3h]$  'he argues'. Verb roots may also be used before an overt noun as in the sample excerpts from the text below.

(2a)	gananũ <sup>4</sup>	ne <sup>3</sup> h	3i?4	
	ga–nänűr <sup>4</sup>	ne <sup>3</sup> h	3174	
	PST <b>-tell</b>	PL	elder	
	'our elders told	•		
(2b)	qanat li <sup>3</sup>	nita <sup>3</sup>		n:e <sup>32</sup>
	ga-nat[i: <sup>3</sup>	nita: <sup>3</sup>		n:e: <sup>32</sup>
	PST-flow	founta	in	water
	'water springs	flowed'		
(2c)	qata <sup>3</sup> h	ne <sup>3</sup> h	sat[i³hi	
	g–ața³h	ne <sup>3</sup> h	satj̃i³ʰi	
	PST-say	PL	ancesto	or
	'the ancestors s	aid'		

Although the tone of the root does not usually change before the majority of free pronouns, there are some verbs in which the tone or tone contour may change before the free pronouns /re<sup>1</sup>?/ and /so<sup>1</sup>?/ 'you' 2SG FORM and FAM, respectively. For example, /gu?wi<sup>32</sup>?/ 'afraid' is the root that is used before all other free pronouns but it raises to tone /4/ before /re<sup>1</sup>?/ and /so<sup>1</sup>?/ as in /gu?wi<sup>4</sup>? re<sup>1</sup>?/ 'you are afraid' 2 SG FORM and /gu?wi<sup>4</sup>? so<sup>1</sup>?/ 'you are afraid' 2SG FAM. Other examples of tone allomorphy before the pronouns /re<sup>1</sup>?/ and /so<sup>1</sup>?/ are included in Table 10 below.

TABLE 10: EXAMPLES OF TONE ALLOMORPHY BEFORE /RE<sup>1</sup>?/ AND /SO<sup>1</sup>?/ IN TRS

	VERB ROOT:	FORM BEFORE Free Pronoun:	BEFORE /RE <sup>1</sup> ?/ AND /SO <sup>1</sup> ?/:	GLOSS:
a.	/ʒu?wi <sup>32</sup> ?/	/ʒu?wi <sup>32</sup> ?/	/ʒu?wi4?/	'be afraid'
b.	/wːĩː³/	/ w:ĩ: <sup>3</sup> /	/ w:ĩ: <sup>35</sup> /	'be'
c.	/ni?i: <sup>3</sup> /	/ni?i: <sup>3</sup> /	/ni?i: <sup>35</sup> /	'know'

TRS has two separate systems for indicating the subject in the formation of 1sG and 1INCL forms. The first consists of using the root before a free pronoun while the second employs systematic changes in the tone of the root and at times, the addition of clitic pronouns for marking person and number, for example, the addition or deletion of /=h/ for 1sG or the addition of glottal stop /=?/ for 1INCL. For example, native speakers of TRS may say [du?we<sup>2</sup>h  $\tilde{y}^{1}h$ ] 'I

sell' using the root before the free pronoun  $[\tilde{j}\tilde{u}^{1}h]$  'I' or a fused form  $[du?we:^{43}]$  'I sell' without an accompanying free pronoun. Likewise, the verb root for 1INCL may be used before the pronoun  $/\tilde{j}\tilde{u}^{12}$ / 'we' as in  $/a?mi:^{32} \tilde{j}\tilde{u}^{12}$ / 'we speak' or a fused equivalent form  $/a?mi^{4}=?$ / 'we speak', without a free pronoun.

Native speakers refer to forms that are used with a free pronoun as long forms while the lexical items that mark person and number by means of tonal changes, either changes in tone height or contour, and/or the addition or deletion of clitics are referred to as short forms. Native speakers of TRS tend to use 1SG and 1INCL long and short forms with roughly the same amount of frequency. The choice of form, long versus short, is not dependent upon the root of the verb.

Table 11 lists several examples of 1sG long and short forms in TRS. Person and number are marked by a variety of means in the formation of the 1sG short forms. For example, the root form may undergo changes in tone height as illustrated by (a) /a?mi:<sup>32</sup>  $\tilde{j}\tilde{u}^{1}h/ \sim /a?mi:^{43}/$  'I speak'. Other forms may undergo changes in tone height plus the addition of laryngeal /h/, as in (b) /go?o:<sup>32</sup>  $\tilde{j}\tilde{u}^{1}h/ \sim$  /go?o<sup>4</sup>=h/ 'I drink'. Items (d) through (f) have changes in tone height and undergo /h/ deletion in the formation of the 1sG short form, as in (d) /du?we<sup>2</sup>h  $\tilde{j}\tilde{u}^{1}h/ \sim /du?we:^{43}/$  'I sell'; (e) /o<sup>4</sup>h  $\tilde{j}\tilde{u}^{1}h/ \sim /o:^{43}/$  'I shell (corn)' and (f) /r $\tilde{a}^{4}$ ? $\tilde{a}^{1}h$  $\tilde{j}\tilde{u}^{1}h / \sim /r\tilde{a}^{4}$ ? $\tilde{a}:^{43}/$  'I dance' while (g) /u $\tilde{k}a^{31}$ ?  $\tilde{j}\tilde{u}^{1}h/ \sim$ /u $\tilde{k}a:^{35}/$  'I fight' changes in tone height and undergoes glottal stop /?/ deletion. There is yet another small group of verbs that undergo final syllable reduplication and the addition of laryngeal /h/, as in (h) /sa<sup>1</sup>?  $\tilde{j}\tilde{u}^{1}h/ \sim /sa^{1}$ ? $a^{1}=h/$  'I am good'.

	VERB ROOT:	Long Form:	SHORT FORM:	GLOSS:
a.	/a?mi: <sup>32</sup> /	/a?miː³² j̃ũ¹h/	/ a?mi:43/	'I speak'
b.	/go?o: <sup>32</sup> /	/go?oː <sup>32</sup> ĵũ¹h/	/go?o:4=h/	'I drink'
c.	/ʒigɯː¹/	/ʒigɯː¹ ĵũ¹h/	/ʒigɯː¹=h/	'I wake up'
d.	/du?we²h/	/du?we²h j̃ũ¹h/	/du?we:43/	'I sell'
e.	/o4h/	∕o⁴h ĵũ¹h∕	/o: <sup>43</sup> /	ʻI shell (corn)'†
f.	/rã4?ã1h/	/rã4?ã1h jũ1h /	/rã4?ã:43/	'I dance'
g.	/ut̪a <sup>31</sup> ?/	/uța <sup>31</sup> ? jũ <sup>1</sup> h/	/ut̪aː³5/	'I fight'
h.	/sa <sup>1</sup> ?/	/sa¹? j̃ũ¹h/	/sa¹?a¹=h/	'I am good'

TABLE 11: 1SG LONG AND SHORT FORMS IN TRS

<sup>†</sup> The entire expression in TRS / $o^4h$  tã<sup>3?</sup>ã/ 'to shell corn'

1INCL short forms are always marked with a glottal stop /=?/ as illustrated in the examples in Table 12 below. There are some verbs that undergo tone raising in the formation of 1INCL short forms, for example, (a)  $/a?mi:^{32}/$  'speak' goes to  $/a?mi^{4}=?/$  'we speak', while others maintain the tone of the root along with the addition of glottal stop as in (b)  $/qo?o^{32}$  (drink' and  $/qo?o^{32}$ =?/ 'we drink'. There are other verb roots ending in /h/ that undergo /h/ deletion and glottal stop replacement as a marker of 1 incL. For example, (c) /du?we<sup>2</sup>h/ 'sell' changes to /du?we<sup>2</sup>=?/ 'we sell' and /o<sup>4</sup>h/ 'shuck (corn)' changes to /o<sup>4</sup>=?/ 'we Verb roots that end in /a/ or / $\tilde{a}$ / change to /o/ and / $\tilde{u}$ / shuck (corn)'. respectively in the formation of 1INCL forms. For example, (e) /uta<sup>31</sup>?/ 'fight' changes to /uto<sup>4</sup>=?/ 'we fight' and (f.) /ta<sup>1</sup>h/ 'be on top' goes to /to<sup>1</sup>=?/ 'we are on top'. If the root has a glottal stop /?/ between two central nasalized vowels, for example  $/\tilde{a}/\tilde{a}/$ , both vowels change to  $/\tilde{u}/$ , as in (g.)  $/r\tilde{a}^4/\tilde{a}^1h/$  'dance' which changes to  $/r\tilde{u}^4/\tilde{u}^1=?/$  'we dance'. In TRS the vowel change moves regressively through a glottal stop when both vowels are nasal, but not through any other intervening consonant, for example, in (h.) /na?mã:3/ 'to reheat' and (i.) /na?ma:<sup>32</sup>/ 'to let get cold', only the final nasalized vowel changes to  $/\tilde{u}$ / while the vowel before the glottal stop remains as is, for example, /na?mũ<sup>4</sup>=?/ 'we reheat (it)' and  $/na?m\tilde{u}^2=?/$  'we let it get cold'.

TABLE 12: 1PL LONG AND SHORT FORMS IN TRS

	VERB ROOT:	Long Form:	SHORT FORM:	GLOSS:
a.	/a?mi: <sup>32</sup> /	/a?mi: <sup>32</sup> j̃ũ¹?/	/ a?mi4=?/	'we speak'
b.	/go?o: <sup>32</sup> /	/go?o: <sup>32</sup> j̃ũ¹?/	/go?o <sup>32</sup> =?/	'we drink'
c.	/du?we²h/	/du?we²h j̃ũ¹?/	/ du?we <sup>2</sup> =?/	'we sell'
d.	/o4h/†	/o4h j̃ũ1?/	/o <sup>4</sup> =?/	'we shell (corn)'
e.	/ut̪a <sup>31</sup> ?/	/u̪t̪a <sup>31</sup> ? j̃ũ¹?/	/uto4=?/	'we fight'
f.	/ta¹h/	/ta¹h ĵũ¹?/	/to1=?/	'we are on top'
g.	/rã4?ã1h/	/rã4?ã1h jũ1?/	/rũ4?ũ1=?/	'we dance'
h.	/na?mãː³/	/na?mãː³ j̃ũ¹?/	/na?mũ4=?/	'we reheat (it)'
i.	/na?maː <sup>32</sup> /	/na?ma: <sup>32</sup> j̃ũ¹?/	/na?mũ²=?/	'we let it get cold'

† The entire expression in TRS /o4h tã37ã/ 'to shell corn'

FUTURE and PAST tense forms take an aspectual prefix [ga]-, [gi]- or [gV]that distinguishes these forms from the PRESENT. Contrastive tones are generally found on the prefixed inflectional morphemes which indicate tense, usually tone /3/ for the *past* and /2/ for the *future*. Present and past forms end in the same tone or tone contour as the root (Good, 1979:107).

Table 13 illustrates aspectual prefixes used in the formation of the past and future tenses in TRS, along with the root in the formation of the present. Items (a.) and (b.) in the table below take the aspectual prefix /g/- in the formation of the past and future tenses. For example, (a.) [atJe:<sup>35</sup>] 'walk' changes to [g-a<sup>3</sup>tJe:<sup>35</sup>] 'walked' and [g-a<sup>2</sup>tJe:<sup>2</sup>] 'will walk' and (b.) [unã<sup>4</sup>h] 'run' changes to [g-u<sup>3</sup>nã<sup>4</sup>h] 'ran' and [g-u<sup>2</sup>nã<sup>2</sup>h] 'will run'. The TRS verb (c.) [nari:<sup>3</sup>] 'draw' takes the

aspectual prefix /ga/- as in [ga<sup>3</sup>-nari:<sup>3</sup>] 'drew' and [ga<sup>2</sup>-nari:<sup>2</sup>] 'will draw'. Item (d.) [rã<sup>4</sup>?ã<sup>1</sup>h] 'dance' illustrates the use of the prefix /gi/- with forms such as [gi<sup>3</sup>-rã<sup>4</sup>?ã<sup>1</sup>h] 'danced' and [gi<sup>2</sup>-rã<sup>2</sup>?ã<sup>1</sup>h] 'will dance' in the formation of the past and future tenses, respectively. There exists a small subset of verbs, for example [3a:<sup>43</sup>] 'eat', cf., item (e.) below, in which the present and past tenses are indistinguishable and are context dependent. For example, /3a:<sup>43</sup>/ may be translated as 'eats' or 'ate' while the root undergoes tone lowering in the formation of the future, e.g., /3a:<sup>2</sup>/ 'will eat'.

	Root	PRES	PAST	FUT	GLOSS
a.	[at͡ʃeː <sup>35</sup> ]	[at͡ʃeː <sup>35</sup> ]	[g-a <sup>3</sup> t͡ʃeː <sup>35</sup> ]	[g-a <sup>2</sup> t͡ʃeː <sup>2</sup> ]	'walk'
b.	[unã⁴h]	[unã⁴h]	[g-u³nã⁴h]	[g-u²nã²h]	'run'
c.	[nariː³]	[nariː³]	[ga <sup>3</sup> -nariː <sup>3</sup> ]	[ga <sup>2</sup> -nari: <sup>2</sup> ]	'draw'
d.	[rã4?ã1h]	[rã4?ã1h]	[gi³-rã⁴?ã¹h]	[gi²-rã³?ã¹h]	'dance'
e.	[ʒaː <sup>43</sup> ]	[3a: <sup>43</sup> ]	[ʒaː <sup>43</sup> ]	[ʒaː²]	'eat'

 TABLE 13: SAMPLE ASPECTUAL PREFIXES IN TRS: PRESENT, PAST AND FUTURE

Verb roots ending in a high tone not only acquire the aspectual prefix in tone /2/ in the formation of the future tense, there is also a concomitant lowering of tone in the final syllable. This finding lends credence to Mastukawa's (2009:2) claim that high register tones undergo tone lowering in the final syllable in order to distinguish the potential aspect (i.e., future) from a completive aspect (i.e., past). For example, the TRS verb (b.) [a<sup>3</sup>t]e:<sup>35</sup>] 'walk' in Table 14 below, retains the tone of the root in the formation of the past tense, e.g.,  $[g-a^3f]e^{35}$  'walked' but lowers to tone /2/ in the final syllable in the formation of the future, e.g.,  $[q-a^2t]e:^2$  'will speak'. Other verb roots ending in a tones /53/ /43/ /4h/ /V<sup>3</sup>?/ /32/ and /31/ lower the tone of the final syllable to tones  $\frac{2}{\text{ or } 1}$  in the formation of the future; cf. items (a.) through (d.) below. Table 14 summarizes tone lowering patterns in the formation of the future tense in TRS as proposed by Matsukawa (2009:2). The examples provided in Table 14 were recorded by the consultant and author of the text and support Matsukawa's reported findings. (For more information regarding TRS tone and aspect, see Matsukawa 2009).

AS PER MATSUKAWA (2009:2)				
Present – Past:	FUTURE:	Exampi	LE:	GLOSS:
		PAST:	FUTURE:	
/V <sup>5</sup> /§	/V <sup>1</sup> h/ /V <sup>2</sup> /	(a.) [gi <sup>3</sup> -nã: <sup>35</sup> ] (b.) [g-a <sup>3</sup> t͡]e: <sup>35</sup> ]	[gi²-nã:¹h] [g-a²t͡ʃe:²]	'washed' – 'will wash' 'walked' – 'will walk'
/V4h/	/V <sup>2</sup> h/ /V <sup>2</sup> /	(c.) [gi <sup>3</sup> -rã <sup>4</sup> h]	[gi²-rãː²]	'bought' – 'will buy'
/V <sup>43</sup> /	/V <sup>2</sup> / /V <sup>1</sup> /	(d.) $[g-a^{3}t]i:^{43}]$	$[g-a^2\hat{t}]\hat{i}\hat{z}^2]$	'passed' – 'will pass'
/V <sup>3</sup> CV <sup>3</sup> /	/V <sup>2</sup> CV <sup>3</sup> /	(e.) [ga <sup>3</sup> -nariː <sup>3</sup> ]	[ga <sup>2</sup> -nariː <sup>3</sup> ]	'drew' – 'will draw'
/V <sup>3</sup> ?/	/V1?/	(f.) [g-a <sup>3</sup> ?ne <sup>3</sup> ?]	[g-a²?ne1?]	'cut' – 'will cut'
/32/	/2/	(g.) [g-a <sup>3</sup> ?mi: <sup>32</sup> ]	[g-a²?mi:²]	'spoke' – 'will speak'
/31/	/1/	(h.) [g-u <sup>3</sup> țu: <sup>31</sup> ]	[g-u²ṯuː¹]	'broke' – 'will break'

TABLE 14 TONE LOWERING PATTERNS FOR THE FUTURE TENSE IN TRS

§ Although Matsukawa lists verb forms ending in level tone /5/, this tone is always realized as a glide in final syllables, for example: /35/ or /53/.

While the text below contains no examples of the present there are several examples of past tense forms, for example:  $[g-a^3ta^3h]$  'said',  $[ga^3-nan\tilde{u}:^4]$  'told' and  $[ga^3-w\tilde{r}:^3]$  'was'. There is also one future form included  $[ga^2-na^2w\tilde{r}:^3g\tilde{u}:^2]$  'FUT-become warm'. There are also two examples of tenseless or unmarked verbs. The TRS word  $[n\tilde{u}:^2]$  'be.in' and  $[nita^3h]$  'there.be.no' are used in the present but are unmarked verb forms used to discuss on-going events in the past.

**6.5 Sentence final particles.** In TRS and other Triqui languages as well, there are sentence-final particles used for questions, commands, affirmative and negative sentences. In TRS, not all sentences end in a final particle. Hollenbach (2008:141) reports that TRC may have as many as sixty sentence final particles. Hollenbach adds that the most common sentence particles in TRC are used in the formation of declarative, persuasive and negative statements, in addition to particles that signal questions, desires, or commands. The most commonly used sentence-final particles in TRS are:  $n\underline{a}nj$  anj /n $\underline{a}^2h\underline{a}^3h$ / used with affirmative declarative sentences,  $m\hat{a}nj$  /m $\underline{a}^4h$ /, for negative declarative sentences, and  $r\dot{a}'aj$  /r $a^1$ ? $a^3h$ / which is used for questions that require a response from the listener. Although the original written version of the text did not contain any sentence-final particles, the consultant appended  $n\underline{a}nj$  anj /n $\underline{a}^2h\underline{a}^3h$ / at the end of the legend. When queried, he indicated that it was to signal the end of the story and that it was the equivalent of a sentence-final period.

**7. Legends of the Plumed Serpent.** The mythological plumed serpent is a recurring motif in many legends throughout the Triqui region and Mesoamerica in general. Longacre (1966) was the first to publish an account of the TRS plumed serpent legend in a text titled, "The Plumed Serpent Rescues a Man". Longacre (1966:114) states that according to Triqui legend, "it is believed that when a lightning serpent [(i.e., the plumed serpent)] comes to live in a shallow

lake in a region, there will be abundant rainfall that year." He adds that if the people are careless, wasteful of resources, specifically corn, the serpent takes offense and leaves, consequently resulting in several years of drought. In the legend documented by Longacre, the plumed serpent is a champion and defender of people who were wronged; he rewards virtues and punishes those who are violent. Longacre's text is of considerable linguistic importance for it is one of the few documented Triqui legends narrated by a woman. Longacre notes that pronouns used by men are different from those used by woman, however, he offers no additional commentary.

The text documented here recounts a popular Triqui legend written and recited by Felipe Santiago Rojas, a native speaker of TRS. The legend was originally told to him by his father, José Venancio Santiago who was born and raised in San Andrés Chicahuaxtla. The text was recorded in an area called *La Cañada Tejocote* located on the outskirts of San Andrés Chicahuaxtla in July, 2011 at the home of Felipe Santiago Rojas. The legend is titled, "In the Hole of White Dirt" and features the "plumed serpent"—a mythological creature that is half-serpent and half-bird. Neil Baldwin (1998) states that the plumed serpent is one of the most pervasive symbols in all of Mexican history and has existed from primordial times to the present. He adds that the serpent symbolizes the passing of time while the bird represents the four elements—earth, wind, fire and water. The plumed serpent thus symbolizes creation.

According to this Triqui legend, the *Hole of White Dirt* used to be a lake where the plumed serpent once lived. The legend describes the area as rainy with gushing brooks, pine trees, green foliage and pristine waters. During the day, the plumed serpent would come out to rest in order to soak up the heat of the sun's rays. The villagers, however, avoided walking near the lake for fear that the plumed serpent would swallow them. As time passed, the plumed serpent became annoyed with the overpopulation of the village and mankind's destruction of the environment. Consequently, the plumed serpent abandoned the lake to seek out a better place to live. Once the plumed serpent left, the rains no longer returned so the lake dried up leaving in its wake what is now known as the Hole of White Dirt.

The text was recorded with Audacity 1.3.9 using a Zoom H4n portable digital recorder connected to a MACbook Pro computer at a sampling rate of 44.1 KHz and a quantization of 16 bits—CD quality.

The Triqui languages have very complex tonal systems and TRS is not an exception. Consequently, very few articles have examined TRS tone beyond the word level. Although it lies beyond the scope of this study, words ending in two- or three-tone sequences frequently undergo tone reduction when used at the sentential, phrasal and utterance levels. For example, in the text below, the TRS word for 'dirt' is *hio'óo* [jo?o:<sup>53</sup>] and ends in a two-tone sequence when spoken in isolation or before a pause, however, it may shorten to one tone *hio'ó gatsii* [jo?o:<sup>5</sup> gatsi:<sup>13</sup>] 'white dirt' when spoken in a frame or in larger contexts.

Both the broad and narrow transcriptions below reflect tones and tone contour representing the way in which the consultant pronounces the word in the recording and may not reflect the way in which the word is pronounced in isolation. What follows is an orthographic representation of the legend and a free translation along with a broad and narrow transcription of the text using the International Phonetic Alphabet (IPA). Tones are marked using superscripts ranging from a low tone of (1) to a high tone of (5).

8. Orthographic representation of text in TRS. Ruhuâ ru'man hio'ó gats<u>i</u>i, guinun dahu<u>e</u>e as<u>ij</u> nâ gataj nugu<u>a</u>n' gananîn nej yî', n<u>i</u> gananîn nej sô' si kij hi<u>a'a</u>nj an gahuin nìn' <u>ga</u>chra' kij yinûn', n<u>i</u> ûta guimân chrun ruguchriin n<u>i</u> ûta ganachi nita nne<u>e</u>. N<u>i</u> daran' diû gaman' gumàan, n<u>i</u> ruhuâ dahu<u>e</u> nânj guinun Yukuá t<u>o</u> hia'a, n<u>i</u> nga gahuin gu<u>i</u>n n<u>e</u>' güi n<u>i</u> gahui yô' ruhuâ dahu<u>e</u> nânj güendâ <u>gana</u>huin gu<u>i</u>n yô' nân, n<u>i</u> nitaj si gachîn nìchrùn' nej güi hian n<u>u</u>n dahu<u>e</u> nânj, dadin' nga gananîn nej sô', rayi'î dânj n<u>i</u> ûta <u>ga</u>n' gachîn nej sô', san<u>i</u> nga guiyinanj güi n<u>i</u> ga'man ruhuâ yô' dadin' gudurë' nìn' nej güi hian n<u>u</u>n yô', n<u>i</u> gahui yô' n<u>i</u> ga'anj yô' a'ngô ne<u>e</u>' hio'óo, huê danj n<u>i</u> ganakò dahu<u>e</u> guinun ruhuâ ru'man nânj dadin' nitaj si gaman' niko <u>ga</u>' gataj nej sachij i n<u>a</u>nj anj.

**9. Free translation.** Our elders spoke to us about a lake that had existed long ago where the hole of white dirt now stands. They told us that in all of God's mountain and in our region, there were many pine trees, many water springs and it was always raining. A feathered serpent that lived in the lake would come out in the warmth of the day so he could soak up the heat of the sun. Nobody could walk near the lake because when they did, the plumed serpent would surprisingly swallow them up. For that reason, people would stay far away from the lake. When the population kept growing, the plumed serpent became so annoyed because they were destroying everything. Our elders told us that he decided to abandon the lake to go live in another land and after that the lake dried up because the rains never returned.'

## 10. Transcription.

## Play Audio

1)	TITLE:	Ruhuâ ru'man hio'ó g	atsìi	
	ruwa <sup>4</sup>	ru?mã <sup>3</sup>	jo?o <sup>5</sup>	gatsi <sup>13</sup>
	ruwa:4	ru?mãː³	jQ²Q:5	gatsi:13
	in	hole	dirt	white

 Ruhuâ ru'man hio'ó gatsìi, guinun dahu<u>e</u> as<u>i</u>j nâ gataj nugu<u>a</u>n' gananîn nej yî',

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ruwa <sup>4</sup>	ru?mã³	jo?o <sup>53</sup>	gatsi <sup>13</sup>	ginũ <sup>3</sup>
ruwa: <sup>4</sup>	zu?mãː³	jo?oː <sup>53</sup>	gatsi: <sup>13</sup>	gi–nũː <sup>3</sup>
in	hole	dirt	white	PST–be
dawe²	asi <sup>2</sup> h	na <sup>4</sup>	gata <sup>3</sup> h	
<sup>"</sup> dawe:²	asi <sup>2</sup> h	na: <sup>4</sup>	ga-t̪a <sup>32</sup> h	
lake	for	long.ago	PST-say	
nugwã²?	gananũ <sup>4</sup>	ne <sup>3</sup> h	3i? <sup>4</sup> ,	
nuwã²?	ga–nãnũː <sup>4</sup>	ne <sup>3</sup> h	3i? <sup>4</sup>	
word	PST–tell	PL	elder	

'Our elders spoke to us about a lake that existed long ago where the hole of white dirt now stands,'

 n<u>i</u> gananîn nej sô' si kij hi<u>a'anj an</u> gahuin nìn' gachra' kij yinûn', n<u>i</u> ûta guimân chrun ruguchriin n<u>i</u> ûta ganachi nita nne<u>e</u>.

ni <sup>2</sup>	gananũ <sup>4</sup>	ne <sup>3</sup> h	so <sup>4</sup> ?
ni: <sup>2</sup>	ga–nanũ: <sup>4</sup>	ne <sup>3</sup> h	so <sup>4</sup> ?
and	PST–tell	PL	he
si <sup>3</sup> -ku <sup>3</sup> h	J̃ã²J̃ã²hã²	gawĩ <sup>3</sup>	nũ1? ga²tşa³?
si: <sup>3</sup> -ku <sup>3h</sup>	J̃ã²J̃ã²hã²	ga–wĩ: <sup>3</sup>	nũ1? ga²tşa³?
POSS:mountain	god	PST–be	everywhere
kw³h	zinũ?4,	ni²	u <sup>4</sup> ta <sup>3</sup>
kw³h	zinũ-?4	ni:²	u <sup>4</sup> t̪a: <sup>3</sup>
mountain	town:11NCL	and	many
gimã <sup>4</sup>	tşũ <sup>3</sup>	rugutşũi <sup>3</sup>	ni²
gi–mã: <sup>4</sup>	tşũ: <sup>3</sup>	rugut͡şũiː <sup>3</sup>	ni:²
PST–be	tree	pine	and
u <sup>4</sup> ta <sup>3</sup>	ganatʃi <sup>3</sup>	nita <sup>3</sup>	n:e <sup>32</sup>
u <sup>4</sup> ța: <sup>3</sup>	ga-nat͡ʃiː <sup>3</sup>	nița: <sup>3</sup>	n:e: <sup>32</sup>
many	PST-flow	fountain	water

'and they told us that in all of God's mountain and in our region, there were many pine trees and many water springs'

4) N<u>i</u> daran' diû gaman' gumàan, n<u>i</u> ruhuâ dahu<u>e</u> nânj guinun Yukuá t<u>o</u> hia'a, n<u>i</u> nga gahuin gu<u>i</u>n n<u>e</u>' gui n<u>i</u> gahui yô' ruhuâ dahu<u>e</u> nânj guendâ gan<u>a</u>huin gu<sup>n</sup>n yô' nân,

ni² niː²	darã³? d'rã³?	diu <sup>4</sup> diu: <sup>4</sup>	gamã q–am	37 ã37	gun qun	nã <sup>13</sup> , nã: <sup>13</sup>	ni:² ni:²
and	all	time	PST-ra	ain	rain	1	and
ruwa <sup>43</sup> ruwa: <sup>43</sup> in	dawe² dawe:² lake	nã <sup>4</sup> h nã <sup>4</sup> h that	ginũ <sup>3</sup> gi <sup>3</sup> –n PST–b	ũː³ e	<u>3ukwa</u> 3ukwa snake	a <sup>5</sup> to² ja a: <sup>5</sup> to²² plume	<u>a?a³</u> , ja?aː³ ed
ni² niː² and	ŋga <sup>3</sup> ŋga: <sup>3</sup> when	gawĩ <sup>3</sup> ɣa <sup>3</sup> –wĩː <sup>3</sup> PST–be	gũ² gũ:² warm	1	ne <sup>32</sup> ? ne <sup>32</sup> ? toward	l	
gwi <sup>3</sup> wi: <sup>3</sup> sun	ni² ni:² and	gawi <sup>3</sup> g-awi: <sup>3</sup> PST-com	e.out	30 <sup>4</sup> ] 30 <sup>4</sup> ] the	? ? .animal	ruwa <sup>4</sup> ruwa: into	4
dawe <sup>2</sup> dawe: <sup>2</sup> lake	nã <sup>4</sup> h nã <sup>4</sup> h that		gwen gwen for	da⁴ daː⁴		ga²na ga²-1 FUT-l	a <sup>2</sup> wĩ <sup>3</sup> na <sup>2</sup> wĩː <sup>3</sup> pecome
gũi <sup>2</sup> gũi: <sup>2</sup> FUT:warm	304? 304? he.anii	mal	nã <sup>4</sup> , nã: <sup>4</sup> heat.c	of.su	n		

'and it was always raining and in the lake lived a feathered serpent who would come out in the warmth of the day so he could soak up the heat of the sun'

5) n<u>i</u> nitaj si gachîn nìchrùn' nej güil hian n<u>u</u>n dahu<u>e</u> nânj, dadin' nga gachin nìchrùn' ninj n<u>i</u> gayamânj gu<u>e</u> yukuá t<u>o</u> hia'a dânj ninj gataj nej sachij i nga gananîn nej sô', rayi'î dânj n<u>i</u> ûta <u>ga</u>n' gachîn nej sô',

ni² niː² and	<u>nita³h si³</u> niṯa³h si there.be.1	<u>1:3</u> 10	gat∫i⁴ g–at͡ʃiː PST–pa	4 SS	ni¹tşrũ¹? ni¹t̂şrũ¹? near
ne <sup>3</sup> h	gwi <sup>31</sup>	j̃ã <sup>3</sup>	nũ²	dawe²	nã4h,
ne <sup>3</sup> h	gwi: <sup>31</sup>	j̃ãː <sup>3</sup>	nũ:²	dawe:²	nã4h,
the	people	where	be.in	lake	that

dadĩ <sup>3</sup> ?	ŋga³	gat∫ĩ³	ni¹tşũ¹i	nĩ³h
dadı̃3?	nga:³	g–at∫ĩ:⁴	ni¹t͡şũ¹í	? nĩ³h
because	when	PST-pass	near	they
ni <sup>2</sup>	gaʒamã⁴h	ge <sup>2</sup>	<u>3ukwa</u> 5	to² ja?a <sup>3</sup>
ni:2	ga–ʒamã⁴h	ge:2	3ukwa:	<u>5 tor² ja?ar3</u>
and	PST-swallow	surprise	<u>snake p</u>	olumed
dã⁴h	nĩ³h		gata³h	ne³h sat∫i³hi
dã4h	nĩ³h		g–at̪a³h	ne³h sat∫i³hi
that.one	they		PST <b>-say</b>	PL ancestor
			_	
ŋga³	gananũ	ú <sup>4</sup>	ne <sup>3</sup> h	SO47,
ŋgaː³	ga–nan	ũː4	ne³h	so4?,
when	PST-tell		PL	he
raʒi³ʔi⁴	dã4h		ni²	u4ta3
raʒi³ʔiː⁴	dã⁴h		ni:²	u4ța:3
therefore	that		and	very
gã²?	gat∫ĩ⁴		ne <sup>3</sup> h	so4?,
gã²?	g–atĵĩ:4		ne³h	so4?,
far	PST-pas	SS	PL	he

'but nobody could walk near the lake because when they did, the plumed serpent would surprisingly swallow them up. For that reason, people would stay far from the lake'

6) san<u>i</u> nga guiyinanj güiì n<u>i</u> ga'man ruhuâ yô' dadin' gudurë' nồn' nej güiì hian n<u>u</u>n yô', n<u>i</u> gahui yô' n<u>i</u> ga'anj yô' a'ngô ne<u>e</u>' hio'óo,

sani <sup>2</sup>	ŋga <sup>3</sup>	giʒinã³h
sani: <sup>2</sup>	ŋga: <sup>3</sup>	gi–ʒinã³h
but	when	PST–multiply
gwi <sup>31</sup>	ni²	<u>ga?mã³? ruwa4</u>
gwi: <sup>31</sup>	ni:²	g–a?mã³? ruwa:4
people	and	PST–heat.up.inside <sup>8</sup>

<sup>&</sup>lt;sup>8</sup> [g-a?mã<sup>3</sup>? ruwa:<sup>4</sup>] 'PST-heat.up inside' means 'become angry' in TRS.

30 <sup>4</sup> ? 30 <sup>4</sup> ?	dadĩ <sup>3</sup> ? dadĩ <sup>3</sup> ? bocauso	gudurə <sup>3</sup> ? gu–durə <sup>3</sup> 7	2	nũ <sup>1</sup> ? nũ <sup>1</sup> ? completely
ne.annnai	Decause	PS1-destroy		completely
ne <sup>3</sup> h	gwi <sup>31</sup>	jã <sup>3</sup>	nũ²	30 <sup>4</sup> ?,
ne <sup>3</sup> h	wiː <sup>31</sup>	ĵã: <sup>3</sup>	nũ:²	30 <sup>4</sup> ?,
PL	people	where	be.in	he.animal
ni²	gawi <sup>3</sup>	30 <sup>4</sup> ?	ni²	gaʔã³h
ni:²	g–awi: <sup>3</sup>	30 <sup>4</sup> ?	ni:²	g–aʔã³h
and	PST–leave	he.animal	and	PST–go
304?	a'ŋgo <sup>4</sup>	ne <sup>32</sup> ?		jo?o <sup>53</sup> ,
304?	a'ŋgoː <sup>43</sup>	ne <sup>32</sup> ?		jo <sup>?</sup> oː <sup>53</sup> ,
he.animal	another	toward		land,

'but when the population kept growing, the plumed serpent became so annoyed because they were destroying everything so he decided to abandon that lake to go live in another land'

7) huê danj n<u>i</u> ganakò dahu<u>e</u> guinun ruhuâ ru'man nânj dadin' nitaj si gaman' niko <u>ga</u>' gataj nej sachij i n<u>a</u>nj anj.

<u>we<sup>4</sup> dã<sup>3</sup></u> we: <sup>4</sup> dã therefor	<u>h ni²</u> <sup>3</sup> h niː² re	ganako <sup>1</sup> ga–nako: <sup>1</sup> PST–dry.up	dawe² dawe:² lake		
ginũ <sup>3</sup>	2	ruwa <sup>4</sup>	ru?mã <sup>3</sup>	nã4h	dadĩ <sup>32</sup> ?
gi–nũː <sup>32</sup>		zuwa: <sup>4</sup>	zu?mãː <sup>32</sup>	nã4h	dadĩ <sup>32</sup> ?
PST-be		inside	hole	this	because
<u>nita<sup>3</sup>h s</u> <u>nita<sup>3</sup>h s</u> there.be	<u>i<sup>3</sup> iː<sup>32</sup></u> e.nothing	gamã³? g–amã³? g PST–rain	niko <sup>3</sup> niko: <sup>3</sup> much		
ga²?	gata <sup>3</sup> h	ne <sup>3</sup> h	sat∫i³hi	nã²hã³h	[.)
ga²?	g-aṯa <sup>3</sup> h	ne <sup>3</sup> h	satĴi <sup>3h</sup>	nã²hã³h	
now	PST-say	PL	ancestor	PART (	

'and after that, the lake dried up because the rain never returned, our elders told us.'

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