

ONOMATOPOEIA IN TABASCO CHONTAL¹

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0. A few calls to animals by Chontal² speakers, or the calls of the animals, do not fit the systematic phonetic patterns of the language. For instance, a call to turkeys to come consists of a series of bilabial nasals (**m::m m m m**); to chickens a series of domal clicks (**t' t' t' t'**) or a series of glottalized velars (**k' k' k' k'**).

Many onomatopoeic words do occur, however, which not only fit the phonetic patterns³ of the language, but also have regular grammatical formations and functions.

1. A few animal names are suggestive of their calls. The cry of the **a?i?** "hawk" is **?i? ?i? ?i?**. The cry of the **hub** "a kind of owl" is **hub hub hub**; the sound is referred to as **hu?hu?na**. The cry of the **ahk'aw** "grackle" is **k'a? k'a? k'a?** or **k'a:k'ak'ak'a**. The name of the sound is **k'a?lawe**. The cry of the **ahpum** "monkey" when calling for rain is **u:~u:~u:~u:** or **pum pum pum pum**. In each case, the name of the animal reflects the cry.

2. Words used to imitate sounds are usually of the pattern CVC or CV₁rV₁C. Complete reduplication is common.

Examples of single syllable imitation words are:

- | | | |
|-----------------------|-------------------------------|----------------------------|
| ?i? ?i? ?i? | - cry of the hawk | (a?i? "hawk") |
| k'i? k'i? k'i? | - cry of a baby grackle | |
| k'a? k'a? k'a? | - cry of a full grown grackle | (ahk'aw "grackle") |
| me::? | - cry of a calf | |
| ?o::? | - cry of a cow | |

ru:m	- sound of a big tree falling
ts'e? ts'e? ts'e?	- cry of piglets or possum
?e? ?e? ?e?	- cry of pigs
mau? mau?	- cry of cat
hos hos	- hissing of snake
woh woh woh	- barking of dog
wom wom wom	- barking of angry dog, or dog at a distance
lok lok lok	- gobble of turkey
hu? hu? hu?	- cry of owl (hub "owl")

Examples of CV₁rV₁C imitation words:

ts'irih ts'irih	- sound of cocoa beans toasting when you first put them on
tsirin tsirin	- sound of small bell ringing
tš'iri? tš'iri?	- buzz of mosquitos
t'ərən t'ərən	- sound of tin can rolling on ground
kərəp' kərəp'	- squeak of old box
taran taran	- sound of large bell ringing
tsarah tsarah	- sound of frying
torop' torop'	- sound of cocoa beans bursting

Examples of roots with both patterns:

tš'ip tš'ip tš'ip or tš'irip tš'irip	- cry of the ahbuk'arros (a kind of bird)
tum tum tum or turum turum	- drum beating; sound of bass viol

A third pattern is manifested in **hūéu? hūéu?** "sound of sawing wood". I have found only one illustration of this pattern, but further work might turn up more.

Imitation roots occur in regular grammatical formations and functions. The following is a summary of the kinds of constructions in which these roots occur. For each root cited, the core meaning is given, then the construction using the root for each of the three aspects in which it occurs.

<u>Root:</u>	<u>Core meaning:</u>	<u>Aspects:</u>		
		unmarked action:	iterative action:	continuous action:
ts'e?	cry of baby pigs	ts'e?lawe	ts'e?ts'e?ne	
tsin	sound of metal on metal, or small bell ringing	tsinlawe	tsintsinne	tsinikne
hos	panting; hissing of snake	hoslawe	hoshosne	hosokne

I shall treat each of these aspects in more detail later.

The basic CVC imitation roots I call 'onomatopoetic roots'. I also call onomatopoetic⁴ roots those roots which occur in words for sounds and which act grammatically like the imitation roots, but which I have not actually found in my data as imitation words. These words also refer to sounds, and behave like the imitation roots⁵.

3. In Chontal there is no general term for 'sound' or 'noise', but rather there are many specific terms. A few seem to be independent words, not fitting the regular patterns for onomatopoetic words, e.g.:

ha?tsihom	"sneeze"
habi?	"loud laugh"
ts'uyub	"whistle"
ts'intst'irink'u:?	"crow of rooster"

The majority of the specific terms for sounds, however, occur in two forms in each of the aspectual classes: one form for noun function and the other for stative verb or adverb function, as may be seen in sections 5, 6, and 7 below.

4. I have found some pairs of words in which front vowels are associated with little things, and vowels made farther back in the mouth are associated with larger things or deeper sounds.

Examples:

<u>Meaning</u>	<u>Name of sound</u>	<u>Imitation word</u>
bell ringing:		
tinkle (bell of an ice cream cart)	tsinlawe	tsirin tsirin

church bell	tənləwe	taran taran
grackle:		
baby bird	ts'i?ləwe	k'i?k'i?:k'i?:
large bird	k'a?ləwe	k'a:k'ak'ak'a
stringed instrument:		
guitar	tsintsinne	
bass viol	tuntunne	turum tum turum tu
cocoa beans toasting:		
when first put on fire	ts'ibləwe	ts'irih ts'irih
bursting	top'ləwe	torop' torop'
cow: calf		?ɛ:::?: mɛ:::?:
cow		?o:::?:
drum:	tuntunne	
cry of rats or bats:	ts'i?ts'i?ne	ts'i? ts'i? ts'i?
buzz of mosquitos:	tš'i?tš'i?ne	
dog barking:	wohwohna	woh woh woh
tree falling:		
small tree	š:ek'ləwe	
large tree		k'orok', ru:m

5. Now I shall discuss in more detail the three aspects in which the onomatopetic words occur. Group I words are of the pattern **CVCləwe/CVClaw**, with the meaning of 'unmarked or unspecified action'. The Group I words are formed by an onomatopoeic root followed by the suffix **-ləwe** to form the noun-like words, or the suffix **-law** to form the words functioning as stative verbs or adverbs.

First I shall illustrate in sentences the grammatical functions of words from this group, then I shall give a list of Group I words arranged according to the stem vowel. In the sentences, the words under attention are underlined.

Illustrations of noun, verb and adverbial usage:

Nouns

U tšen ?ə?ləwe untu persona que mu? u tšəmo.
'He makes a groaning sound a person who is dying.'

Cubi ump'e noh hu?ləwe tan kah, bišon kə tšənen kua? une.
'I heard a big noise (of people) in town, I went to see what it is.'

Ni we?e bahka an tə tsahkanba u tšen tsahləwe.
'The meat where it is frying makes frying noise.'

Hini noh kərəš witšu? hini u tšen wohwohne.
'That big cross dog there makes barking noise.'

U tšen tsinləwe ni palib hini hink'in a həts'e? t'ok u lot.
'It makes sound of metal that metal there when you bang it with it's kind.'

Stative verbs

Top'law tə kab ni botella.
It burst on the ground, the bottle.

Tsahlaw ni we?e bahka u tsahkan.
'It's making a frying sound the meat where it is being fried.'

Adverbs

Rəmlaw u nume.
'Whizzing it goes by.'

Təhhəmlaw biši iski.
'Zooming it went up.'

Həmlaw u biše bicicleta.
Roaring it goes the bicycle.'

I have arranged the following list of Group I words according to stem vowel because of the pairs of words in which front vowels are associated with little things and back vowels with larger things or deeper sounds as given above in Section 4, even though I do not see this correlation in all the material which follows.

Group I words (all have the meaning "the sound of ...")

hik'ləwe - coughing

tsik'ləwe - broken rib

ts'ibləwe	- toasting cocoa beans when first put on fire
tsinləwe	- metal against metal; small bell ringing
ts'i?ləwe	- cry of kittens or baby rats
tš'i?ləwe	- buzz of mosquitos
tš'ipləwe	- cry of baby birds
ne?ləwe	- cry of calf
wək'ləwe	- moving water in container
wetš'ləwe	- throwing out water
tš'ehləwe	- metal on metal (e.g. nail against another nail; machete against another machete)
ts'e?ləwe	- cry of baby pigs
tšek'ləwe	- small stones rattling in a can
kəts'ləwe	- squeaking of hammock ropes when swinging
hək'ləwe	- hiccough
rəmləwe	- whizzing of something thrown rapidly through the air
həmləwe	- roar of truck going by fast
?ə?ləwe	- groan, as when someone falls to the ground
tənləwe	- big bell ringing
həhləwe	- sound made by a frightened person
mə?ləwe	- cry of cat
rahləwe	- palm falling to the ground; sound of spanking
səhləwe	- animals going through weeds; crackling
tsəhləwe	- sound of frying

hoslawe	- hiss of snake or turtle; panting
top'lawe	- bursting (e.g., cocoa beans when being toasted)
k'o?lawe	- cry of frog or heron
kop'lawe	- dog eating a bone
t'ohlawe	- knocking on wood
pok'lawe	- sound made by wet trousers as you walk along
pošlawe	- cow or horse blowing out air
hu?lawe	- sound made by a crowd of people
tumlawe	- drum beating
mušlawe	- crunching sound of eating toasted tortillas

6. Group II words are of the pattern **CVCCVCne/CVCCVCna** with the meaning of 'iterative' or 'repeated action', in contrast to the **-lawe/-law** forms of Section 5. Group II forms consist of complete reduplication of the basic onomatopoeic root plus the suffix **-ne** for nouns, and the suffix **-na** for stative verb or adverbial functions. Reduplication for iterative action is a productive pattern, and occurs with words which are not⁶ onomatopoeic, such as **liklikna**, **tšiktšikna** both of which mean 'shivering'; **muts'muts'na** or **p'ikp'ikna** both of which mean 'blinking the eyes'; **welwelna** 'flapping in the wind'.

The iterative meaning is shown by the word used for the sound a refrigerator makes -- the motor goes for a while, then stops; then starts again: **?əm?əmma**. Consider also **sahsahna**, 'repeated swish of weeds', which is used to describe the sound of a person walking through weeds, first putting down one foot, then the other. Compare this form with **sahlawe**, which simply means 'sound of walking through weeds'. Another word that indicates an iterative action is **tsahtsahna**, which is used if you fry something two or three times. Compare with **tsahlawe**, which refers simply to the sound of frying.

Illustrations of noun, verb and adverbial usage:

Nouns

Tš'ok mut u tšen tš'iptš'ipne.
'Baby bird makes chirping sound.'

Ahtšohob u tšen t'oht'ohne u sakən u pa? nok'.
'Woodpecker makes pecking noise, it hunts worms to eat.'

Stative verbs

Ts'i?ts'i?na tš'ok ištšuk.
'The baby rats are squeaking.'

Wohwohna witš'u?
The dog is barking.

Hu?hu?na u yuk'e ni hub.
It goes hu? the cry of the owl.

Adverbs

Na? piyo? k'otk'otna u hok'e? u yal.
'Mother hen clucking it calls its young.'

?eh?ehna u te por to?o bih.
'Grunting it comes the whole way (the pig).'

Group II words (all have the meaning "the sound of ...")

tip'tip'na	- heart beat
ts'i?ts'i?na	- cry of rats or bats
tš'i?tš'i?ne	- buzz of mosquitos; noise made by crickets
siksikna	- sniffling
tš'iptš'ipne	- cry of baby birds
tsintsinna	- metal on metal; bell; guitar
hik'hik'na	- laughter
tš'ehtš'ehne	- machete on machete
?eh?ehna	- pig calling its young
ts'e?ts'e?ne	- piglets following the mother pig; possum
wek'wek'na	- water moving in a container
tšek'tšek'na	- small stones rattling in a can
kəts'kəts'na	- hammock swinging
kəp'kəp'na	- squeaking of old box (kəɾəp' kəɾəp')
lətšlətšna	- sound of chicken scratching

rənrəna	- hum of bees
məkəkna	- repeated opening and closing
hənhəna	- dogs growling, gurgling of a baby
?əm?əna	- hum of refrigerator
tsabtsabne	- sound of frying
sabsabna	- sound of a person walking through weeds
k'o?k'o?ne	- cry of a heron
kop'kop'ne	- crunching sound of a dog eating a bone
hoshosna	- wheezing; gasping; deep breathing; panting
loklokna	- turkey gobble
lowlowna	- cry of turkey hen
pok'pok'ne	- sound of wet trousers as one walks along
t'oht'ohne	- tapping or knocking on wood
wohwohna	- barking of a dog
wowwonna	- barking of an angry dog, or one at a distance
pošpošna u ni'	- snorting of horse or cow when tired
k'otk'otna	- hen clucking
mušmušna	- eating crackers or toasted tortillas
šukšukna	- sound of animals in weeds
tuntunna	- drum beating
hu?hu?na	- cry of owl
bulbulna	- gurgling of water in a bottle under water

7. Group III words, which are of the pattern **CVCV~~k~~ne/CVCV~~k~~na**, have the meaning of 'continuous action'. The Group III words consist of the CVC stem, reduplication of the stem vowel plus **-k**, followed by the appropriate suffix for noun, stative verb or adverbial function.

Illustrations of function:

Nouns

U tš'i sahakne ni yopte? t'ok ik'.
 'It made a swishing noise the leaves from the wind.'

Ahtšiba u tšen kətš'əkne yeh.
 'The drunk makes a grinding of his teeth.'

Stative verbs

?əməkna a?utš'a? ak'əb.
 'Mosquitos buzz at night.'

Witšu? hənəkna u luk'ub.
 'Dogs growl.'

kətš'əkna yeh ni noh kərəš baləm.
 'The angry tiger is gritting his teeth.'

Adverbs

Hu?ukna u te ik'.
 'Roaring it comes the wind.'

Group III words (all have the meaning "the sound of ...")

- tsinikne** - metal on metal
- kətš'əkne yeh** - grinding teeth
- bənəkne** - sound of wind; water
- hənəkne u luk'ub** - roar; growl
- kəts'əkna** - squeaking of rope
- ?əməkne** - buzz of bees; mosquitos
- t'ərəkna** - sound of ball or can rolling on the ground
 (t'ərən t'ərən)
- kələkna** - rocks rolling
- sahakne** - swish of leaves; sound of animals in weeds
- hosokne** - hiss of snake
- hu?ukna** - sound of wind

8. Another reduplicative pattern occurs in the word **pok'ehpok'e**, referring to the sound which wet, muddy clothing makes as one walks along. The word is used with adverbial function, as in the following sentence:

K'ak'a? tš'ibəlni ah Juan y u huyi uba tə pusu, pok'ehpok'e huli tu yotot.

'John got drunk and wallowed in the mud; his clothes were so wet and muddy that they made a sound as he went along walking to his house.'

I have not found any other instances of this pattern in my data, but probably there are more.

9. Some onomatopoetic roots occur as the stem for transitive or intransitive verbs. For example:

<u>Transitive verb</u>	<u>meaning</u>	<u>compare with</u>	<u>Onomatopoetic word</u>	<u>meaning</u> "sound of..."
wohən	bark at it		wohwohna	(dog) barking
tsahe?	fry it		tsabtsahna	frying
mušən	crush it		mušmušna	crunching something in the mouth
t'ohe?	peck at it		t'oht'ohna	knocking on wood
wek'an	move liquid in a container		wek'ləwe	liquid moving in a container
tšek'an	shake it		tšek'ləwe	small stones being shaken in a can
wetš'an	throw out (water)		wetš'ləwe	throwing out water
pok'an	(dog) shakes its ears		pok'pok'na, or pok'ehpok'e ⁷	wet clothes as you walk along
latšən	scratch it		latšlatšne ⁸	scratching
hanən u luk'ub	clear his throat		hənhəne	gurgle of baby, grow of dogs

Also note the occurrence of an onomatopoetic root as stem for an intransitive verb, which with the causative suffix **-es** becomes the stem for a transitive verb.

intransitive	u top'e	"it bursts"
transitive	top'esən	"burst it"

(compare with **top'ləwe** "sound of cocoa beans hursting as they toast" (or anything bursting))

Onomatopoetic roots also⁹ enter into compounds, as in the transitive verb **rəmhule?** "throw it with a whizzing sound"

(onomatopoetic root **rəm** "sound of whizzing" plus transitive verb root **hul** "throw"); **rahbəts'e?** "spank with a spanking noise" (onomatopoetic root **rah** "sound of spanking" plus transitive verb root **bəts'** "hit").

10. Although the meaning is clearly established for each of the three aspects of sound words, not all roots occur in each aspect. This limitation may be due in part to gaps in my data, but there also seem to be some semantic restrictions. I should like to illustrate, however, roots which do occur in each aspectual group:

Root	Aspects: <u>unmarked</u>	(all have the meaning "sound of ...") <u>repetitive</u>	<u>continuative</u>
kəts'	kəts'ləwe squeaking of hammock ropes	kəts'kəts'na swinging in hammock, back and forth, back and forth	kəts'əkna continual squeaking of hammock ropes
hos	hosləwe hiss of a snake; panting	hoshosna panting, wheez- ing; deep breath- ing, one breath after another	hosokna continual hissing of snake
sab	sabləwe animals going through weeds; crackling of weeds as they go through	sabsabna person going through weeds, one foot after the other	sabakne continual swish of leaves as animals go through

NOTES

¹Besides being presented at the Symposium of Indian Languages in Mexico City in May, 1983, this paper was also given at a Colloquium at the University of Washington sponsored by SIL in July, 1983, and again at the Tenth International Congress of Phonetic Sciences, Utrecht, Holland, in August, 1983. I have profited from the discussion in each instance and have incorporated some ideas received at those times.

²Chontal is a Mayan language spoken in the state of Tabasco in southeastern Mexico. My data comes from speakers living in the town of Tapotzingo, one of at least 35 towns and villages of Chontal speakers scattered over the state.

³Chontal consonants are **p, t, ts, tš, k, ʔ, p', t', ts', tš' k', b, d, g, s, š, h, m, n, w, l, r, y**. Vowels are **i, ə, u, e, a, o**. **d** and **g** are infrequent; **b** becomes voiceless finally, with simultaneous glottal closure; **n** becomes **ŋ** before velars and before pause; **w** becomes **v** before front vowels; open transition is frequent. For a detailed description of the phonemes see Keller "The Phonemes of Chontal (Mayan)" IJAL 25:44-53 (1959). In this paper I have chosen to represent the affricates as **ts, tš, ts', tš'** rather than as **c, č, c' č'** of the former article.

⁴Some other terms might better reflect my data, such as: "expressive words", "ideophones", or simply "sound words". Jan-Olaf Svantesson brought to my attention the widespread use of expressives in Southeast Asian languages. For a discussion of expressives in one Southeast Asian language see Svantesson, "Kammu Phonology and Morphology", Sections 4.2.3 and 7., Travaux de l'Institut de Linguistique de Lund XVIII, CWK GLEERUP 1983, LiberFörlag Lund, Infotryck ab, Malmö, Sweden.

⁵Some Chontal words which do not refer to sounds behave somewhat like the onomatopoeic ones. These are usually motion words. I did not include these in this study. One reason I have restricted myself is that I have so few examples of what seem to be purely motion words. However, in some of the words I have listed as sound words, both sound and motion are involved.

For a treatment in a Mayan language of sound and motion roots together, see Thomas C. Smith-Stark, "Jilotepequeño Pocomam Phonology and Morphology", Ch. 8, Ph.D. thesis, University of Chicago, 1983. Smith-Stark calls these "affect roots".

⁶See footnote 5.

⁷See Section 8 above.

⁸Note the stem vowel alternation between **a** and **ə** in both this example and the one following.

⁹At least one onomatopoeic root is a simple noun: **hos** "act of panting". It also enters into an adjective formation in the noun phrase **hosil oba** "asthma", "panting cough" (-**il** adjective formative suffix, **oba** "cough"). Compare with **hoshosna** "sound of panting" and with **hosokne** "sound of a snake in its cave".