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A guide to Tamang tone

Maria Hari

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A GUIDE TO TAMANG TONE

Maria Hari

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A Guide to Tamang Tone

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A Guide to Tamang Tone.

Maria Hari

Introduction.

The analysis of tone has represented a major problem area in the analysis of several Tibeto-Burman languages of Nepal for members of the Summer Institute of Linguistics who have been working in them since 1967. Maria Hari's 'Guide to Tamang Tone' represents the first in a series of pedagogical presentations of tone systems of the languages of Nepal. This series is to be extended to cover all major tone languages of Nepal, and <possibly in somewhat revised form> should eventually constitute a Guide to Tone in Nepal.

The purpose of this series is to make available to students of the languages of Nepal a clear summary of the tone systems involved both on tape and transcribed, together with drills and listening tests of sufficient extent to enable the student to come to passive phonetic mastery of the system within a reasonable short period of time. It is hoped that this material will be useful not only to our own people in giving them convenient vantage points from which to view their own unsolved tone problems, but that it will also be of use to visiting scholars, government officials, and others for whom mastery of these systems has practical significance. To a certain extent it will also furnish students of Tibeto-Burman languages who are unable to conduct first-hand research in this delightful and beautiful country with taped material summarizing the results of our labors in the area of tone. It may furnish scholars with a basis for interpretation and evaluation of our work as well.

Comments on any aspect of this project are welcomed and should be sent to Austin Hale, Linguistic Consultant, Summer Institute of Linguistics, Box 115, Kathmandu, Nepal.

I. The Contrast System.

1. Voice Quality Contrast.

In Tamang we have contrast between tense and lax vowels. In the pronunciation of lax vowels the Adam's apple remains lowered. This results in a larger resonance chamber at the back of the mouth and the vowel sounds relaxed and vibrant. At the same time this lax pronunciation has a lowering effect on the pitch of the vowel. In the pronunciation of tense vowels the Adam's apple is raised slightly. This results in a smaller resonance chamber at the back of the mouth and the vowel sounds tense and less vibrant. Tense articulation conditions high pitch.

Listening drill no. 1.

The following three lists present a selection of monosyllabic nouns in a frame. The first list contains only items with tense vowels, the second only items with lax vowels. In the third list we have the same items in alternation. Listen to the different voice qualities and to the effect they have on the pitch of the vowel. In orthographic transcription laxness is symbolized with an "h" after the vowel, tenseness is not marked. Thus, vowels which are not followed by "h" are tense.

First list: Tense.

cú ngala ki yihmpa.

'This is my water.'

mii

eye

lii

face

me

fire

pú

pot

rú

horn

Tuu

sweat

pho

stomach

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cú ngala Ia yihmpa.

'This is my god.'

kaa

blood

ket

voice

phum

egg

kang

foot

prang

fire stand

chyong

necklace

Second list: Lax.

cú ngala gih yihmpa.

'This is my thatch.'

miih

person

liih

body

meh

cow

buh

field

Duuh

six

roh

friend

nooh

garlic

lah

mountain

daah

pole

mahng

dream

brahng

hut

ngyeht

liver

gruhng

intestines

gyoht

language

Third list: Tense contrasted with lax.

cú ngala ki yihmpa.

cú ngala la yihmpa.

mii

kaa

lii

lah

gih

daah

miih

mahng

liih

brahng

pu

prang

ru

kang

Tuu

ngyeht

buh

gruhng

Duuh

gyoht

roh

ket

pho

phum

me

chyong

meh

nooh

Some minimal pairs.

cú ngala mii yihmpa.

miih

lii

liih

cú ngala mē yihmpa.

meh

Voice quality is a characteristic of the morpheme. Laxness needs to be marked only in the first syllable of a morpheme.

Listening drill no. 2.

First list: Some bisyllabic nouns, tense and lax.

thela angi mupa.

'He has an aunt.'

ama

mother

nama

village

tungra

ginger

sanga

millet

naka

hen

tamra

beans

gohca

khukuri

gahnDu

dried raddish

guhri

cat

guhrli

bow

dohngpo

tree

bohmpo

shaman

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Second list: Some trisyllabic nouns, tense and lax.

cú thela <u>matyangi</u> yihmpa.	'This is an instrument.' <to make butter>
<u>phentalá</u>	small butterfly
<u>thangkare</u>	pine kernels
<u>guhçili</u>	armpit
<u>dahngsiri</u>	shrew
<u>dohngkale</u>	big ape
<u>tokoro</u>	garment
<u>tikalak</u>	lizard
<u>bahykalak</u>	swallow
<u>dahngkuluk</u>	grasshopper

Test no. 1.

The following is a list of monosyllabic nouns containing lax and tense items. Sort them for lax and tense voice quality, remembering that high and low pitch can be used as criterion.

cú ngala pha yihmpa.	'This is my husband.'
sya	meat
ja	son
wa	wheat
jo	point
le	tongue
ngye	milk
suu	thigh

cú ngala mar yihmpa.

'This is my gold.'

mee

tail

rhin

bamboo

ken

rice

bam

shoulder

ngii

two

Solution see page 35.

Test no. 2.

The lax and tense contrast works the same way for adjectives. Listen to the following list of adjectives and sort them for tense and lax.

tila khriti yihnciwa.

'Was it dirty yesterday?'

kokta

crooked

cekke

little

rilto

round

bokta

old

sompo

alive

patca

thin

matca

low

yako

much

jita

small

pisku

steep <downwards>

khanto

steep <upwards>

jyaapa

beautiful

Solution see page 35.

Listening drill no. 3.

Some minimal pairs for voice quality contrast. Word initially voiced stops occur only before lax vowels. Laxness conditions initial voicing of stops. Phonemically they are to be written using the symbols for voiceless stops. In the text orthography which we are using here, they are written using the symbols for voiced stops.

curi ngala pū mupa.

'Here is my cooking pot.'

buh

field

kī

water

gih

thatch

Tuu

sweat

Duuh

six

lā

god

lah

mountain

prang

stand over fire

brahng

place
hut

thece tingi cyaaci.

'He looked today.'

thece dihngi cyaaci.

'He looked at the sun.'

thece nahmsyo waase mupa.

'He will feed tomorrow.'

waahse

thresh

wase

dig

wahse

measure

roose

bear fruit

roohse

fry

thece nahmsyo naase mupa. 'He will carry tomorrow.'

naahse persecute

plingse fill

the nahmsyo blihngse mupa. fall

2. Pitch Contrast.

Listening drill no. 4.

Listen to the following tense pairs.

cú ngala lě'yihmpa. 'This is my tongue.'

lě stalk

la' mouth (month^{ly})

la god

chí grass

chi' fat

the cungpari ngipa. 'He goes to sell.'

cungpari catch

tapari knock down fruit

tāpari be all right

phiipari peal

phiipari sprout

pangpari tell

pāngpari fall over

the [>]syee~~pari~~ ngipa.

'He goes to know.'

[<]syee~~pari~~

go <hon.>

<Recorded two times: Once at normal speed and once at slow speed.>

When listening to these pairs at normal speed we can hear that they are different but may find it difficult to tell precisely where the contrast lies. It is often helpful to listen to this kind of material at a slower speed than was used for recording, especially where pitch contours are involved. We will find that in Tamang it is most important to distinguish between a high falling and a high rising pitch, and between a fall from mid to low and a downstep to low. Slow speed will help us to locate these subtle contrasts.

Listen to the following lax pairs.

the [>]ji~~ih~~pari ngipa.

'He goes to remember.'

[<]ji~~ih~~pari

bite

[>]ga~~hr~~pari

belch

[<]ga~~hr~~pari

lock the door

[>]Du~~h~~ppari

sew

[<]Du~~h~~ppari

plough, pull

[>]Do~~h~~pari

sow

[<]Do~~h~~pari

be warm

[>]do~~oh~~pari

return

[<]do~~oh~~pari

arrive there

cú ngala [<]ng~~ah~~ yihmpa.

'This is my drum.'

[>]ng~~ah~~

five

cú ngala máhr yihmpa.





'This is my gold.'

máhr-

ghyu

<Recorded two times: Once at normal speed and once at slow speed.>

The pairs above show us that there is not only a contrast between tense and lax voice quality, but within each group we have also a pitch contrast. In tense we have a high falling contour contrasting with a mid rising contour. The latter one is only slightly rising and in the contrast system it can be viewed as basically level. In lax a mid falling contour contrasts with a low slightly falling contour. In the description, the latter one is viewed as basically level. We have two contrast systems intersecting with each other: The voice quality contrast between lax and tense intersects with the pitch contrast between contour and basically level. This results in four different tone patterns. The chart below summarizes this and shows how we have chosen to mark these contrasts in the orthographic transcription.

	sharply falling	basically level
tense <relative high>	I  "v̌"	II  "v̄"
lax <relative low>	III  "v̌h"	IV  "v̄h"

< v = vowel >

The lists presented up to now have not been sorted for the pitch contrasts. But we realize now that this is necessary. They contain items with basically level and with contour pitch and each one has to be classified. Before looking at the following listening drills go over the preceding listening drills again and have some fun trying to identify the pitch of those items.

Listening drill no. 5.

<Contains the same items as listening drill no. 1.>

First list: Tense.

I	cú ngala ki yihmpa.	'This is my water.'
	mii	eye
	lii	face
	Tuu	sweat
	kaa	blood
	pho	stomach
II	pu	pot
	ru	horn
	me	fire
	la	god
I	ket	voice
	phum	egg
II	kang	foot
	prang	fire stand
	chyong	necklace

Second list: Lax.

III	cú ngala gi yihmpa.	'This is my thatch.'
	meh	cow
	buh	field

III cú ngala ~~Duuh~~ yihmpa.

'This is my six.'

~~nooh~~

garlic

IV

~~miih~~

person

~~liih~~

body

~~roh~~

friend

~~lah~~

mountain

~~daah~~

pole

III

~~ngyeht~~

liver

~~gyeht~~

language

IV

~~brahng~~

hut

~~gruhng~~

intestines

<Recorded two times: Once at normal speed and once at slow speed.>

Listening drill no. 6.

<Contains the same items as listening drill no. 2.>

We have already seen that voice quality is a characteristic of the morpheme, not of the syllable. The same is true for the contrastive pitch features. They spread over the one to three syllables of a morpheme.

First list: Tense.

I cú ngala ~~angi~~ yihmpa.

'This is my aunt.'

~~namaa~~

village

~~tungra~~

ginger

II cú ngala tamra yihmpa.

'These are my beens.'

naka

'This is my hen.'

sanga

millet

ama

mother

I

matyangi

instrument

tikalak

lizard

II

Tokoro

garment

phentala

small butterfly

thangkare

pine kernels

Second list: Lax.

IV cú ngala gohca yihmpa.

'This is my khukuri.'

gahnDu

dried raddish

guhrli

bow

III

guhri

cat

dohngpo

tree

IV

guhčili

armpit

dahngsiri

shrew

III

dohngkale

big ape

bahykalak

swallow

dahngkuluk

grasshopper

<Recorded two times: Once normal and once slow.>

Test no. 3.

The following four sets are sorted for voice quality and pitch. Each set represents one group. Decide which pattern each one represents and rewrite them in orthographic transcription.

- | | | |
|----|----------------------|---------------------------------|
| 1. | cú ngala Daa yihmpa. | 'This is my head carrying band' |
| | graa | spirit |
| | gyuu | sheep |
| | gyam | path |
| | dap | needle |
| 2. | mraa | weed |
| | phyaa | broom |
| | ku | nine |
| | nam | rain |
| | nap | nose mucus |
| 3. | ra | goat |
| | sa | tooth |
| | mee | t ail |
| | kree | crab |
| | phuu | fireplace |
| 4. | Di | skin |
| | go | back |

cú ngala bam yihmpa.

'This is my shoulder.'

byap

feather

buu

panting

<Recorded two times: Once at normal speed and
once at slow speed.>

Solution see page 35.

To this point we have concentrated mainly on nouns. The contrast system works the same way for all word classes. The list below gives us a few examples of the verbs for each group.

Listening drill no. 7.

I the syoo jihmci.

'He has just finished
begging.'

naa

carrying

khru

washing

ko

singing

ngon

showing

II thece hum jihmci.

'He has finished
swinging.'
putting on
<a hat>
bearing fruit

kuu

putting on

roo

<a hat>

bearing fruit

sor

sending

lop

learning

III duhp

picking

ngoh

calling

gih

buying

thece baah jihmci.

'He has finished
piling up.'
sleeping

the nuuh

IV the duuh

being tired

thece Daah

winning

syahl

<lipnu>

gyahng

threshing

the dahr

trembling

thece goh

understanding

<Recorded once at normal speed and once at slow speed.>

Listening drill no. 8.

We have not yet discovered any minimal sets representing all the four different patterns. The following sets each contain a minimal set of three. A nearly minimal item is inserted to represent the missing fourth member of the minimal set.

the pangpari ngipa.

'He goes to tell.'

pangpari

fall over

cahngpari

put down words

bahngpari

fight with words

the syoopari ngipa.

'He goes to beg.'

toopari

need

doohpari

return

doohpari

arrive there

the ~~tapari~~ ngipa.

'He goes to knock down.'

~~tapari~~

be well

~~dahpari~~

discover

~~nahpari~~

raise

the ~~napari~~ ngipa.

'He goes to be sick.'

~~lapari~~

do

~~nahpari~~

rest

~~nahpari~~

raise

curi ~~la~~ mupa.

'Here is a month.'

~~la~~

god

~~laah~~

flower

~~lah~~

mountain

curi ~~nam~~ mupa.

'Here is rain.'

~~nga~~

am I

~~ngah~~

are five

~~ngah~~

is a drum

3. Suffixes.

In a tone language we must also investigate how the suffixes fit into the tone system. We have already stated that the morpheme is the basic unit on which the contrastive pitch system operates. As suffixes are morphemes by themselves, we might expect that each suffix would have a distinctive pitch. The analysis, however, has shown that this is not the case for Western Tamang. As to their tonal behavior we have to distinguish between two classes of suffixes: distinctive suffixes and neutral suffixes. <The terms tonal for distinctive, and non-tonal for neutral are also used.>

Neutral suffixes.

In Tamang the majority of the suffixes are neutral. Their pitch is conditioned by the stem to which they are attached. An item consisting of a monosyllabic stem plus a neutral suffix shows the same pitch contour as a bisyllabic morpheme. An item consisting of a monosyllabic stem and two neutral suffixes shows the same pitch contour as a trisyllabic morpheme. This is illustrated in the following listening drill.

Listening drill no. 9.

kyucu <u>namsa</u> yihm-pa.	'That is a village.'
kyucu <u>phum-ce</u> sehng-pa-la mu-pa.	'That is made of egg.'
kyucu <u>tamra</u> yihm-pa.	'That is a bean.'
kyucu <u>cang-ce</u> sehng-pa-la mu-pa.	'My daughter-in-law made that.'
kyucu <u>dohngpo</u> yihm-pa.	'That is a tree.'
kyucu <u>glahp-ce</u> sehng-pa-la mu-pa.	'The ox made that.'
kyucu <u>bohmpo</u> yihm-pa.'	'That is a shaman.'
kyucu <u>gruhng-ce</u> sehng-pa-la mu-pa.	'That is made of intestines.'

nga-la ~~lapita~~ mu-pa.

'I have a Nepali shirt.'

the ~~ta-pa-ri~~ ngi-pa.

'He goes to knock down fruit.'

nga-la ~~Tokoro~~ mu-pa.

'I have a tokoro.' <a garment>

the ~~ngoo-pa-ri~~ ngi-pa.

'He goes to tease.'

nga-la ~~gohngkare~~ mu-pa.

'I have gongdare.' <kind of food>

the ~~brehm-pa-ri~~ ngi-pa.

'He goes to wait.'

nga-la ~~dahngsiri~~ mu-pa.

'I have a shrew.'

the ~~bahm-pa-ri~~ ngi-pa.

'He goes to soak it.'

The following two drills illustrate further how the pitch of neutral suffixes on verb stems and nouns is conditioned by the stem to which they are attached.

Listening drill no. 10.

Neutral suffixes on verb stems.

I nga-ce ~~syoo-pa~~.

'I beg.'

~~syoo-pa-la~~.

past perfect

~~syoo-ri-pa-la~~.

past continuous

~~syoo-ri-pa-la-ro~~.

past continuous,
reported speech

II nga-ce ~~ngoo-pa~~.

'I tease.'

~~ngoo-pa-la~~.

past perfect

~~ngoo-ri-pa-la~~.

past continuous

~~ngoo-ri-pa-la-ro~~.

past continuous,
reported speech

- III nga-ce jyohr-pa. 'I make a bundle.'
jyohr-pa-la. past perfect
jyohr-Ti-pa-la. past continuous
jyohr-Ti-pa-la-ro. past continuous,
 reported speech
- IV nga-ce myahng-pa. 'I taste it.'
myahng-pa-la. past perfect
myahng-Ti-pa-la. past continuous
myahng-Ti-pa-la-ro. past continuous,
 reported speech

Listening drill no. 11.

Neutral suffixes on nouns <stems of one to three syllables.>

- I the mrang-Ti ngi-ci. 'He went into the garden.'
mrang-Ti-ee-no 'He went into the garden too.'
- namsa-ri 'He went into the village.'
namsa-ri-ee-no 'He went into the village too.'
- samuntra-ri 'He went into the ocean.'
samuntra-ri-ee-no 'He went into the ocean too.'
- II the-ce pha-ta pin-ci. 'She gave it to her husband.'
pha-ta-ee-no 'She gave it also to her husband.'
ama-ta 'She gave it to her mother.'
ama-ta-ee-no 'She gave it also to her mother.'

III	cu <u>braah-ce</u> sehng-pa-la.	'This is made of flour.'
	<u>braah-ce-ee-no</u>	'This is made of flour too.'
	<u>yahnga-ce</u>	'This is made of a branch.'
	<u>yahnga-ce-ee-no</u>	'This is made of a branch too.'
	<u>gohngkare-ce</u>	'This is made of gongkare.'
	<u>gohngkare-ce-ee-no</u>	'This is made of gongkare too.'

IV	cu <u>miih-ce</u> ca-ci.	'A man ate this.'
	<u>miih-ce-mi</u>	'A man then ate this.'
	<u>bohmpo-ce</u>	'A shaman ate this.'
	<u>bohmpo-ce-mi</u>	'A shaman then ate this.'
	<u>dahngsiri-ce</u>	'A shrew ate this.'
	<u>dahngsiri-ce-mi</u>	'A shrew then ate this.'

Distinctive suffixes.

A small number of suffixes are distinctive. Their pitch is not conditioned by the stem to which they are attached, but they manifest a distinctive pitch contour throughout their distribution. Distinctive suffixes occur only with lax vowels.

Listening drill no. 12.

Some examples with the distinctive plural suffix "-máah".

I	kyucuri ngýáhng-la ang-maah mu-pa.	'Our sisters are there.'
	tapu-maah	horses

II kyucuri ngyáhng-la acyo-maah mu-pa. 'Our brothers are there.'

naka-maah hens

III meehme-maah relatives

gahita-maah bags

IV juhmi-maah fingers

guhrli-maah bows

4. Compound Words.

In compound words, two stems are joined together. In that case each component retains its own distinctive pitch contour.

Listening drill no. 13.

Listen first to the components in a frame:

cu the-la sung yihm-pa. 'This is his mouth.'

phii bark

thing floor

yaa hand

mii eye

cham hair

mráp door

joh end, point

dahp needle

buhlung bug

The compound words:

the-la mii-cham mu-pa.	'He has eyebrows.'
mii-phii	eyelids
mrap-sung	a doorway
cham-buhlung	a caterpillar
sung-phii	lips
yaa-thing	hand palms
yaa-joh	fingertips
dahp-joh	needle points
buh-cham	body hair

Test no. 4.

Listen to the following echo words and draw your own conclusions.

the-ce cek-cek pin-ci.	'He gave only a little.'
the prep-prep ngi-ci.	'He went together with somebody.'
tila sim-sim nám yu-ci.	'Yesterday it was drizzling.'
the yo-yo ngi-ci.	'He went early.'
the-la syosyo mu-pa.	'He has paper.'
the-la wahng-wahng mu-pa.	'He has a spider.'
the-la buhr-buhr mu-pa.	'He has feathers.'

<Recorded once at normal speed and once at slow speed.>

Solution see page 35-36.

5. Prefixes.

There are only two prefixes in Tamang: the two negative prefixes. They are distinctive. Normally they occur only before stems and each component retains its pitch contour.

"tha-" is used with imperatives.

"á-" is used elsewhere.

Listening drill no. 14.

the-ce tila á-pang. 'He didn't say <it> yesterday.'

the tila á-pang. fall

the tila á-breñ. wait

the-ce tila á-bahng. abuse

tíngi tha-pang-o. 'Don't say <it> today!'

tha-pang-o. fall

tha-breñ-o. wait

tha-bahng-o. abuse

<Recorded once at normal and once at slow speed.>

II. Rules for Variation.

1. Impact of CV-patterns on Pitch Contours.

In bi- and trisyllabic morphemes certain syllable patterns cause quite drastic changes in the pitch contours. In general morpheme final syllables with CVC-patterns have a higher pitch than otherwise identical syllables with CV-patterns. In the following listening drill some examples with the normal pitch contour are given first, and then some with a morpheme final CVC-syllable.

Listening drill no. 15.

Set 1.

I normal:

tila chara yihn-ci-wa?

'He was restless yesterday,
wasn't he?'

krasu

'It was steep yesterday,
wasn't it?'

tunca

'It was short...

variation:

khapop

heaped

kyucyuk

narrow

thaareng

far

normal:

cú nga-la lapita yihm-pa. 'This is my Nepali shirt.'

variation:

tikalak

lizard

Set 2.

II normal:

tila klingto yihn-ci-wa?

'It was naked yesterday,
wasn't it?'

rilto

'It was round...

sompo

alive

variation:

thenten

empty

haktong

deep

phitcyor

outside

Set 3.

III normal:

cú the-la di qeno yihm-pa. 'This is his truth.'

gohngkare

food

dohngkale

big ape

variation:

dohngkukuk

grasshopper

lahngkalok

swallow

behngkukuk

a bird

Set 4.

II normal:

cú nga-la Tokoro yihm-pa. 'This is my garment.'

putali

butterfly

variation:

khentere

pheasant

sampani

small ant

hundeib

swing

ampale

small fruit

<Recorded set by set twice: Once at normal and once at slow speed.>

2. Pitch Variation under Intonation.

In Tamang the end of a phonological phrase is signalled by various intonational features such as intonational stress, pitch rise, and upstep in pitch on the last syllable before the juncture. For the contrastive intonation patterns of the phonological sentence it is generally also the last syllable of the sentence which

carries the heaviest manifestation of the contrast. The pitch of neutral suffixes in these positions <last syllables of phrase and sentence> is conditioned by the higher level intonation factors. Due to the structure of the language, these positions will most often be occupied by a neutral suffix, and this is very convenient. As they have no distinctive pitch they are to carry higher level intonation contrasts.

Note:

^ symbolizes a very short juncture.

/ symbolizes a longer juncture.

≠ symbolizes the end of an utterance.

Listening drill no. 16.

"-teng" 'and' and "-ce" 'agent marker' are neutral suffixes. In the following examples observe the behavior of these suffixes before the junctures.

- cū jah-teng / roh-ce / sehng-pa-la ≠ 'The son and a friend did this.'
- cū yoh-teng / roh-ce / sehng-pa-la ≠ 'A chief and a friend...'
- cū kola-teng / roh-ce / sehng-pa-la ≠ 'A child and...'
- cū acyo-teng / roh-ce ^ sehng-pa-la ≠ 'My brother...'

Listening drill no. 17.

"-ta" 'to'

"-no" 'emphasis'

In the following utterances we have "-ta" first as last syllable before the juncture, and then as second last syllable. Observe its different behavior in different positions and the 'stretchability' of the contours.

- nga-ce ^ tapu-ta / naah-ci ≠ 'I chased the horse.'
- nga-ce ^ tapu-ta-no / naah-ci ≠ 'chased the horse.'
- nga-ce ^ paret-ta / naah-ci ≠ 'I chased the bedbug.'
- nga-ce ^ paret-ta-no / naah-ce ≠ 'I chased the bedbug.'

~~nga-ce~~ ^ ~~dahprang-ta~~ / naah-ci ≠ 'I chased the crow.'

~~nga-ce~~ ^ ~~dahprang-ta-na~~ / naah-ci ≠ 'I chased the crow.'

~~nga-ce~~ ^ ~~buhlung-ta~~ / naah-ci ≠ 'I chased the bug.'

~~nga-ce~~ ^ ~~buhlung-ta-na~~ / naah-ci ≠ 'I chased the bug.'

Listening drill no. 18.

"-mi" attitude suffix <'then'>

In the first set we have "-mi" before a long juncture, in the second set it occurs before a very short one. Observe its variant behavior in these two environments.

~~the-ce~~ ~~kop-ma-mi~~ / ~~nga~~ ~~ngi-ci~~ ≠ 'While he was throwing it up I went.'

~~the-ce~~ ~~lop-ma-mi~~ / ~~nga~~ ~~ngi-ci~~ ≠ 'While he was learning...

~~the-ce~~ ~~jyohp-ma-mi~~ / ~~nga~~ ~~ngi-ci~~ ≠ kneading

~~the-ce~~ ~~ngyoh-ma-mi~~ / ~~nga~~ ~~ngi-ci~~ ≠ touching it

~~cu~~ ~~ana-la-mi~~ ^ ~~dihm~~ ~~yihm-pa~~ ≠ 'This then is the house of my sister.'

~~cu~~ ~~ale-la-mi~~ ^ ~~dihm~~ ~~yihm-pa~~ ≠ brother

~~cu~~ ~~meehme-la-mi~~ ^ ~~dihm~~ ~~yihm-pa~~ ≠ relatives

~~cu~~ ~~bohmpo-la-mi~~ ^ ~~dihm~~ ~~yihm-pa~~ ≠ shaman

Listening drill no. 19.

"-pa" 'present tense affix'

In the following drill observe the behavior of "-pa" before juncture and in utterance final position.

~~the~~ ~~rung-pa~~ / ~~kahm-pa~~ ≠ 'He can watch.'

~~chum-pa~~ / hide

~~hum-pa~~ / swing

the ~~hur~~-pa / ~~kham~~-pa ≠

'He can throw out.'

~~brehm~~-pa /

wait

~~jahng~~-pa /

put down words

~~glohng~~-pa /

swallow

~~myahng~~-pa /

taste

"-pa" with question intonation:

the-ce ~~rung~~-pa ~~kham~~-pa?

'Can he watch?'

the-ce ~~hum~~-pa ~~kham~~-pa?

swing

the-ce ~~brehm~~-pa ~~kham~~-pa?

wait

the-ce ~~myahng~~-pa ~~kham~~-pa?

taste it

Test no. 5.

"-o" "-ko" "-w" 'imperative suffix'

Listen to the following two sets and decide whether the imperative suffix is neutral or distinctive.

tíngi naa-ko.

'Carry it today.'

pang-o.

fall

baah-w.

bring

goh-w.

understand

nahmsyo ^ tha-naa-ko,

'Don't carry it tomorrow.'

tha-pang-o,

fall

tha-baah-w,

bring

tha-goh-w,

understand

Solution page 36.

Stem morphemes before junctures.

The morphemes that most frequently occur before major junctures are suffixes. Stems, however, may also occur in this position. The following drill shows how the lexical pitch contrasts are preserved in spite of added higher level intonation features.

Listening drill no. 20.

Bisyllabic stems before juncture:

- the-la kola / guhring Daah-pa ≠ 'His child will win next year.'
 the-la acyo / guhring Daah-pa ≠ brother
 the-la guhri / guhring Daah-pa ≠ cat
 the-la bahlpə / guhring Daah-pa ≠ frog

Monosyllabic stems before juncture:

- the-la pha / guhring Daah-pa ≠ 'His husband will win next year.'
 the-la mii / guhring Daah-pa ≠ eye
 the-la ket / guhring Daah-pa ≠ voice
 the-la maah / guhring Daah-pa ≠ son-in-law
 the-la grach / guhring Daah-pa ≠ spirit
 the-la glahp / guhring Daah-pa ≠ ox

Note: A morpheme final voiceless stop shortens the intonation rise or can even cut it off completely, but its extra length is striking enough to take over the function of the rise.

<Recorded twice: Once at normal and once at slow speed.>

Test no. 6.

"-sihm" 'attitude suffix'

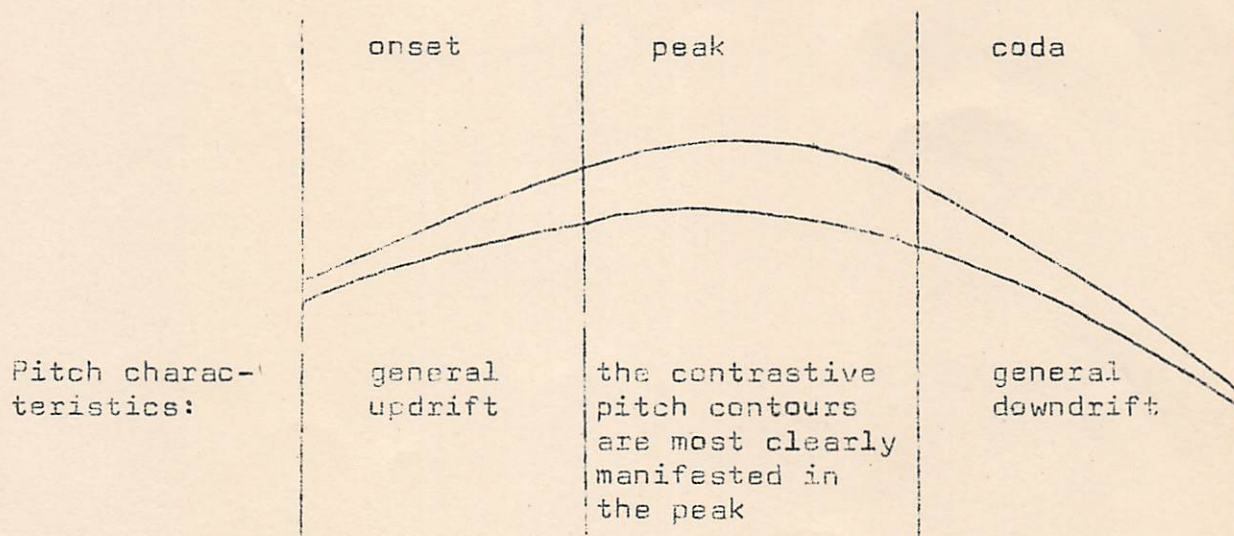
Listen to the following set and decide whether this suffix is neutral or distinctive.

ée-ce khru-ko-sihm ≠	'Then you wash.'
ée-ce hur-o-sihm ≠	throw away
ée núuh-ko-sihm ≠	sleep
ée byuhng-o-sihm ≠	cough

Solution page 36.

Relativeness of pitch.

The pitch dimensions of a phonological sentence can be represented in the following way:



In the onset and coda the pitch contrasts shrink in their dimensions as the representation attempts to show. Because of the over-riding up- and downdrift characteristic of the phonological sentence all statements about high and low pitch are relative to the point of the phonological sentence at which the pitch in question occurs. High has to be higher than low only at the same point of the phonological sentence, but can be lower than low at another point. Up to now

we have concentrated on listening to the contrasts as they are manifested within the peak of the sentence. In the following drills we also want to listen to what is going on in the margins.

Listening drill no. 21.

Listen first to the general up- and downdrift in these four sentences. Then concentrate also on listening to the four contrastive patterns of "tíngi, tila, dáhrma, nahmsyo" in the onset and of "glúh-, naah-, cúng-, and cung-" in the offset.

1. tíngi the-ngi-máah / bohmpo-máah-ki / díhm glúh-pa-ri ngi-pa ≠
 today they-pl shaman-pl-of house buy-v-v go-v
2. tila the-ngi-máah / bohmpo-máah-ki ^ naka-máah /
 yesterday hen-pl
 naah-pa-ri ngi-ci ≠
 chase-v-v
3. dáhrma bohmpo-máah / ama-ki ^ cánu-máah cúng-pa-ri ngi-pa ≠
 later mother-of wasp-pl sell-v-v
4. nahmsyo ngyáhng-ki ^ roh-máah / gráah-ki jah-máah /
 tomorrow we-of friend-pl spirit-of son-pl
 cung-pa-ri ngi-pa ≠
 catch-v-v go-v

Free translation:

1. Today they go to buy the house of the shamans.
2. Yesterday they went to chase the hens of the shamans.
3. Later the shamans will go and sell mother's wasps.
4. Tomorrow our friends will go and catch the sons of the spirit.

Listening drill no. 22.

In the following set we have substitution in the offset of the sentence. Observe how the contrasts are manifested there, and draw the pitch contours as you hear them.

- II the tíngi phúm syóo-pa-ri ngi-pa-ro.
- I the nahmsyo phúm syóo-pa-ri khá-pa-ro.
- III the reehlano phúm syóop-pa-ri bráh-pa-ro.
- IV the kyu-cu phúm syóo-pa-ri sehng-pa-ro.

- II 'He will go and beg for eggs today, he said.'
- I 'He will come and beg for eggs tomorrow, he said.'
- III 'He always walks around begging for eggs, he said.'
- IV 'He does that in order to beg eggs, he said.'

Solutions to the Tests.

Test no. 1.

tense: jha - husband
 sya - meat
 le - tongue
 mee - tall
 shin - bamboo
 ken - rice

lax: jah - son
 wah - wheat
 joh - point
 ngyeh - milk
 suuh - thigh
 mahr - gold
 bahm - shoulder
 ngyiah - two

Test no. 2.

tense: khriti patca
 kokta matca
 cekke pisku
 rilto khanto
 sompo

lax: bohcta
 yáhko
 jihta
 jyahpa

Test no. 3.

1 = III

2 = I

3 = II

4 = IV

Dáah

mráa

ra

Dih

gráah

hyáa

sa

goh

gyúuh

kú

mee

be'ha

gyáhm

nám

kree

byahp

dáhp

náp

phuu

buuh

Test no. 4.

Echo words do not fit into the pitch patterns of normal bisyllabic morphemes. They act like compound words containing the same morpheme twice. Morphemes with basically level pitch produce no new patterns, they could fit into the patterns of normal bisyllabic

morphemes, but morphemes with sharp falls produce strikingly different patterns, and we therefore consider echo words as compounds.

cek-cek

yo-yo

buhr-buhr

prep-prep

syo-syo

sim-sim

wahng-wahng

Test no. 5.

The imperative suffix is neutral. Its variant behavior in the two sets is conditioned by higher level intonation. The contrast can be signalled by punctuation marks.

Test no. 6.

"-sihm" is distinctive: it is low basically level <IV>. Compare its pitch contour with "maah" 'son-in-law' in listening drill no. 20.