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Chitwan Tharu phonemic summary

Dorothy Leal

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CHITWAN THARU

Phonemic Summary

Nepal Indo-Aryan Series - I

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Kirtipur, Nepal
June 1972.

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Chitwan Tharu Phonemic Summary

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I. Introduction.

A. Name of the language. The language described here is spoken by a people who call themselves 'Tharu' and whose language they also call 'Tharu', sometimes calling it 'Chitwan Tharu' to avoid confusion with other Tharu languages <such as Tharu Bhojpuri spoken in the Rautahat District>. This language will be referred to as 'Chitwan Tharu,' dropping the qualifier when there is no ambiguity.

B. Relatedness to other languages. Checking the Tharu's racial origin provides some insight into their language origin. Grierson cites Crooke as claiming that the Tharus were originally Dravidian, but since then they have intermarried with the hill people to the North and have thus acquired Mongolian features <Grierson 5.2.311>. Supporting the idea of a non-Aryan linguistic origin, it has been noted that, as spoken in and around Devauli village of Chitwan District, Tharu has certain non-Indo-Aryan features: for one thing, breathy voiced consonants are frequently pronounced with vocalic transition between the consonant and the breathiness <e.g., [b^hat] 'food, rice'. This may indicate that some Tharus, at least, learned to pronounce these Indo-Aryan voiced breathy consonants only imperfectly. Further, Tharu suffixes <such as /-k/ 'possessive'> on nouns do not vary in number as, for example, in Nepali </-ko/ 'sg. possessive' and /-ka/ 'pl. possessive'>. According to Dr. D.P. Pattanayak, in a lecture given in Kathmandu on November 21, 1971, this non-variation by number is a distinctive feature of Dravidian as against Indo-Aryan languages.

Srivastava <1958:15-27> notes Crooke's and other opinions regarding Tharu origin, then cites a work done by D.N. Majumdar in 1942 in which blood group types were established for 323 Indian Tharu persons. Srivastava argues from this study that the Tharus are predominantly Mongoloid, and through

inter-racial marriage have assimilated non-Mongoloid features.

Whether they are Dravidians who have mixed with Mongolians or vice versa, there is no doubting that the Tharus have shown a remarkable ability to adapt to their linguistic as well as racial environment, so much so that Grierson, considering the Indian Tharus, felt led to caution, 'There is, however, no such thing as a Tharu language.' <Grierson 5.2.311>. He claims that they speak, more or less correctly the languages of their Aryan neighbors. While this may have been true of those he considered at that time, it does not seem to be the case in Chitwan. It takes but a cursory look at the word lists and morphology to see that while Tharu is related to both Nepali and Bhojpuri, it nevertheless differs substantially from them. It appears, however, more closely related to Bhojpuri than to other Indo-Aryan languages. After the Swadesh cognate percentages lists for Chitwan Tharu have been compiled, we will be better able to assess the relationship of Chitwan Tharu to other Indo-Aryan languages.

Grierson's Specimen I <5.2.311> of the Bihari Bhojpuri Dialect from Camparan District in India shows only minor differences from Chitwan Tharu <such as 'daul' for 'dol' - 'good' and 'moi' for 'mui' - 'I'> and has proved in fact to be readily understood by a native speaker of Chitwan Tharu. Specimen II <Grierson 5.2.319> from the same speaker, however, is considerably different morphologically <and not readily intelligible by a native speaker of Chitwan> from Specimen I, leading one to wonder if perhaps the speaker might not have known Chitwan Tharu and learned the story recounted in Specimen I. Alternatively, Specimen II may have been imported from elsewhere. In any case, the similarity of Specimen I and Chitwan Tharu is undeniable. The other specimens given show distinct morphological differences from Chitwan Tharu.

C. Place Spoken. Chitwan Tharu is spoken in Chitwan District, Narayani Zone, Nepal. Although a survey has not been taken, speakers say that the boundaries are the Lothar forest to the East, the Narayani River to the West, and the

mountains to the North and South. A different, though probably mutually intelligible dialect, is spoken west of the Narayani.

D. Number of speakers. According to the 1971 census, there are 24,718 speakers of Tharu in Chitwan.

E. Dialect studied. The particular dialect studied by this investigator is spoken in and around Devauli village of Devauli Panchayat, near Bharatpur, Chitwan District, Nepal.

F. Language helpers used. The principal language helper used for this summary was Ram Kissan Rawat, a 25 year old man of Devauli.

G. Time of Research. The research for this report was conducted between May 1971 and May 1972.

H. Auspices. The Summer Institute of Linguistics, Nepal, and the Institute of Nepal Studies, Tribhuvan University, Kirtipur, Nepal.

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Government of Nepal <1961, 71> Census of Nepal.

K. Transcription conventions. In the following statement square brackets embrace data in phonetic transcription: [tor], slant lines data in phonemic transcription: /tor/, double quotation marks data in the orthography used in text: "tor", and single quotation marks the translation of data into English: 'your'.

The following conventions are used in the text orthography:

T	=	[ɖ̠] retroflexed
D	=	[ɖ̠] retroflexed, [ɖ̠ʰ] retroflexed
Th	=	[ɖ̠ʰ] retroflexed
Dh	=	[ɖ̠ʰ] retroflexed, [ɖ̠ʰʰ] retroflexed
nG	=	[ŋ]
nGh	=	[ŋʰ]
c	=	[tʂ̺]
j	=	[dʂ̺]
N	=	nasalization of previous vowel
a	=	[ə]
aa	=	[a]

II. Tharu Consonants.

A. Contrast. The evidence for contrast among consonants in Tharu leads us to posit the following system:

p	t	ṭ	c	k	
p ^h	t ^h	ṭ ^h	c ^h	k ^h	
b	d	ḍ	j	g	
b ^h	d ^h	ḍ ^h	j ^h	g ^h	
m	n			ŋ	
m ^h	n ^h			ŋ ^h	
	s				h
	l	r			
	l ^h	r ^h			
w				y	

Figure 1. Tharu consonants.

I have found no convincing evidence of consonant clusters in either word-initial or in word-final position. It is this absence of clusters which prompts me to regard aspirated and breathy consonants as unit phonemes.

1. Bilabial Stops.

p/ and /p^h/:

"pili"	/pili/	'bitch'
"philim"	/p ^h ilim/	'music'
"poNtaa"	/pota/	'nasal mucus'
"photo"	/p ^h oto/	'picture'
"upaaraa"	/upara/	'up'
"uphaaraa"	/up ^h ara/	'flea'

b/ and /b^h/:

"baar"	/bar/	'twelve'
"bhaar"	/b ^h ar/	'carrying pole'
"baalu"	/balu/	'sand'
"bhaalu"	/b ^h alu/	'bear'
"jab"	/jəb/	'when'
"sabhaa"	/səb ^h a/	'assembly, meeting'

p/ and /b/:

"paan"	/pan/	'betel'
"baan"	/ban/	'baboon'

and /b/:

"paap"	/pap/	'sin'
"baap"	/bap/	'father'
"upaaraa"	/upara/	'up'
"dubaaraa"	/dubara/	'extremely lean, emaciated'

2. Alveolar and retroflexed stops.

and /t^h/:

"tor"	/tor/	'your'
"thor"	/t ^h or/	'lip'
"paataa"	/pata/	'leaf'
"paathaa"	/pat ^h a/	'male lamb'
"jhuNt"	/j ^h ut/	'tall grass'
"jhuNth"	/j ^h ut ^h /	'liar'

and /d^h/:

"daan"	/dan/	'present'
"dhaan"	/d ^h an/	'paddy'
"dor"	/dor/	'basket'
"dhor"	/d ^h or/	'moon'
"aandini"	/andini/	'tomorrow'
"saamdhini"	/samd ^h ini/	'son's wife's mother'

/d/ and /t/:

"daan"	/dan/	'present'
"taan"	/tan/	'loom'
"din"	/din/	'day'
"tin"	/tin/	'three'
"maaidaa"	/maida/	'white flour'
"mit"	/mit/	'bond-friend'

/ɖ/ and /ɖ^h/:

"poNTi"	/pɔɖi/	'intestines'
"goNThi"	/gɔɖ ^h i/	'ankle'
"boT"	/boɖ/	'fisherman'
"puTh"	/puɖ ^h /	'buttock'
"TaaDhaa"	/ɖaɖ ^h a/	'dead tree'
"ThaaDhiai"	/ɖ ^h aɖ ^h iai/	'standing'

/ɖ/ and /ɖ^h/:

"Dol"	/ɖol/	'good'
"Dholaak"	/ɖ ^h olak/	'long drum'
"Daktar"	/ɖəkteɾ/	'doctor'
"Dhakaan"	/ɖ ^h əkan/	'cowdung'
"koNDaa"	/koɖa/	'whip'
"koNDhaa"	/koɖ ^h a/	'kidney'

ṭ/ and /ḍ/:

"Taal"	/ṭal/	'lake'
"Dol"	/ḍol/	'good'
"boṭ"	/boṭ/	'fisherman'
"ghoDaa"	/goḍa/	'horse'
"moTaa"	/moṭa/	'grease'
"koNDaa"	/koḍa/	'whip'

t/ and /ṭ/:

"taar"	/tar/	'wire'
"TaaDhaa"	/ṭad ^h a/	'dead tree'
"chaati"	/c ^h ati/	'everyone'
"chaaTi"	/c ^h aṭi/	'chest'
"taan"	/tan/	'loom'
"Taal"	/ṭal/	'lake'

d/ and /ḍ/:

"dukhi"	/duk ^h i/	'guilty'
"Dukuri"	/ḍukuri/	'small mouse'
"jaadaa"	/jada/	'very, much'
"jaaD"	/jaḍ/	'cold <weather>'
"ladi"	/lədi/	'river'
"paaDi"	/paḍi/	'buffalo calf'

3. Affricates.c/ and /c^h/:

"caauDu"	/cauḍu/	'uncooked rice'
"chaauDu"	/c ^h auḍu/	'ashes'
"curi"	/curi/	'bracelet'
"churi"	/c ^h uri/	'knife'
"baacaa"	/baca/	'child'
"paachaa"	/pac ^h a/	'back'

j/ and /j^h/:

"jor"	/jor/	'joint'
"jhor"	/j ^h or/	'vegetable soup'
"jani"	/jəni/	'woman'
"jhaanGi"	/j ^h əni/	'bush'
"jabaar"	/jəbar/	'big'
"jhagaar"	/j ^h əgar/	'fight'

c/ and /j/:

"cari"	/cəri/	'staff'
"jari"	/jəri/	'root'
"caar"	/car/	'four'
"jaar"	/jar/	'fever'
"kecuraa"	/kecura/	'scale <of an animal>'
"kaajuraa"	/kajura/	'centipede'

4. Velar Stops./k/ and /k^h/:

"kiraa"	/k ^h ira/	'pest that eats corn'
"khiraa"	/k ^h ira/	'cucumber'
"kursi"	/kursi/	'bench'
"khusi"	/k ^h usi/	'happy'
"thik"	/t ^h ik/	'correct, right'
"likh"	/lik ^h /	'louse egg <in clothes>'

/g/ and /g^h/:

"gaaNu"	/gau/	'village'
"ghaaau"	/g ^h au/	'wound'
"gaaDaa"	/gaḍa/	'wheel'
"ghaar"	/g ^h ar/	'house'
"naagaaraa"	/nagara/	'drum'
"eghaaraa"	/eg ^h ara/	'eleven'

/k/ and /g/:

"kaariyaa"	/kariya/	'black'
"gaarib"	/garib/	'poor'
"koelaa"	/koela/	'live coal'
"gol"	/gol/	'round'
"saakati"	/sakati/	'narrow'
"kaagaati"	/kagati/	'lemon'

5. Nasals.and /n^h/:

"khaanaa"	/k ^h ana/	'food'
"kaanhaa"	/ka ^h na/	'shoulder'
"gaanaai"	/ganaɪ/	'counting'
"baanhaai"	/ba ^h naɪ/	'typing'
"jani"	/jəni/	'woman'
"caanhi"	/ca ^h ni/	'roof'

and /ŋ^h/:

"sanG"	/səŋ/	'with'
"phonGhaa"	/p ^h oŋ ^h a/	'nostril'
"gaanGaa"	/gaŋa/	'sea'
"jaanGhaa"	/ja ^h ŋa/	'thigh'
"kaanGiaa"	/kaŋia/	'comb'
"konGhilaa"	/koŋ ^h ila/	'panther'

and /m^h/:

"maamaa"	/mama/	'mother's elder brother's uncle'
"khaamhaa"	/k ^h am ^h a/	'post'
"gaaram"	/gareṃ/	'warm'
"baaraamhaa"	/bareṃ ^h a/	'name of a god'
"ramaailo"	/remaɪlo/	'pleasant'
"kumhaaini"	/kum ^h aini/	'wasp'

/n/ and /ŋ/:

"taan"	/tan/	'loom'
"taanG"	/taŋ/	'leg'
"jani"	/jəni/	'woman'
"jhaanGi"	/jaŋi/	'bush'
"khaanaa"	/k ^h ana/	'food'
"gaanGaa"	/gaŋa/	'sea'

6. Laterals and Vibrants./l/ and /l^h/:

"botal"	/botəl/	'bottle'
"bokalhaa"	/bokəl ^h a/	'bark'
"phul"	/p ^h ul/	'flower'
"kulhaa"	/kul ^h a/	'hip'
"koelaa"	/koela/	'live coal'
"koaalhaa"	/koal ^h a/	'river bed'

/r/ and /r^h/:

"sikaari"	/sikari/	'chain link necklace'
"sikaarhi"	/sika ^h ri/	'hunter'
"keraa"	/kera/	'plantain'
"berhaa"	/ber ^h a/	'wall'
"saari"	/sari/	'sari <woman's dress>'
"daarhi"	/da ^h ri/	'beard'

B. Variation.

The major variants of Tharu consonants are discussed here under several headings: 1. Positional variants, 2. Deletion, 3. Free variants, 4. Variants conditioned by vowels, and 5. Minor variants.

1. Positional variants.

The word-initial manifestation of a consonant is taken to be its norm. Three other positions within a word have been identified as responsible for conditioning the occurrence of certain variants different from the norm. These are as follows:

- A. Intervocalic position, in normal rapid speech.
- B. Word-medial position <pre- or post-consonantal>.
- C. Word-final position.

Where these environments condition the occurrence of variants different from the norm, that difference can be characterized very broadly as an increase in laxness of articulation over that which is characteristic of the norm.

In Figure 2 below, I have charted the norm and the positional variants for each consonant except for /y/ and /w/. The labels which head the columns refer to the three positions discussed above. The symbols to the left of the rows represent the consonant phonemes. Where a given environment <A, B, or C> conditions a variant which to my hearing is distinct from the norm for a given consonant, the cell defined by the intersection of the column representing the relevant environment, and the row representing the affected consonant contains a number followed by a phonetic symbol in square brackets. The phonetic symbol represents the variant of the consonant conditioned in the environment. The number refers to the relevant example below. Three hyphens in a cell indicate that the variant of the consonant concerned which occurs in the specified environment is indistinguishable, in my hearing, from the norm <that is, from the variant of the consonant which occurs in word initial position> or does not occur.

		<u>Norm</u>	<u>A</u>	<u>B</u>	<u>C</u>
/p/	1.	[p]	---	---	---
/p ^h /	2.	[p ^h]	---	---	---
/b/	3.	[b]	4. [b]	---	---
/b ^h /	5.	[b ^h]	---	---	---
/t/	6.	[t]	---	---	---
/t ^h /	7.	[t ^h]	---	---	---
/d/	8.	[d]	---	---	---
/d ^h /	9.	[d ^h]	---	---	---
/ṭ/	10.	[ṭ]	---	---	---
/ṭ ^h /	11.	[ṭ ^h]	---	---	---
/ḍ/	12.	[ḍ]	13. [ṛ]	---	14. [ṛ]
/ḍ ^h /	15.	[ḍ ^h]	16. [ṛ ^h]	---	---
/c/	17.	[tṣ]	---	---	---
/c ^h /	18.	[tṣ ^h]	---	---	---
/j/	19.	[dʒ]	20. [ʒ]	---	---
/j ^h /	21.	[dʒ ^h]	---	---	---
/k/	22.	[k]	---	---	---
/k ^h /	23.	[k ^h]	---	---	---
/g/	24.	[g]	---	---	---
/g ^h /	25.	[g ^h]	---	---	---
/m/	26.	[m]	---	---	---
/m ^h /	27.	[m ^h]	---	---	---
/n/	28.	[n]	---	---	---
/n ^h /	29.	[n ^h]	---	---	---
/ŋ/	30.	[ŋ]	---	---	---
/ŋ ^h /	31.	[ŋ ^h]	---	---	---
/s/	32.	[s]	---	---	---

33.	h	---	---	---
34.	l	---	---	---
35.	l ^h	---	---	---
36.	r	---	37. [r̄]	---
38.	r ^h	---	---	---

Major positional variants of Tharu consonants.

[p] voiceless unaspirated bilabial stop.

/pili/	[pili]	'bitch'
/upara/	[upara]	'up'
/sap/	[sap]	'snake'

[p^h] voiceless aspirated bilabial stop.

/p ^h oto/	[p ^h oto]	'picture'
/p ^h ek/	[p ^h ek]	'faded'
/p ^h upsa/	[p ^h upsa]	'lung'

[b] voiced unaspirated bilabial stop.

/ben/	[ben/	'jungle'
/pabitre/	[pabitre]	'sacred'
/jeb/	[jeb]	'when'

[b̥] voiced bilabial fricative.

/debasu/	[deb̥asu]	'I will give!'
/kabatur/	[kab̥atur]	'pigeon'

- /b^h/ 5. [b^h] voiced breathy bilabial stop.
- | | | |
|----------------------|-----------------------|------------|
| /b ^h alu/ | [b ^h alu] | 'bear' |
| /səb ^h a/ | [səb ^h a] | 'assembly' |
| /jib ^h i/ | [dʒib ^h i] | 'tongue' |
- /t/ 6. [t] voiceless dental stop.
- | | | |
|----------|----------|------------------|
| /ṭi/ | [ṭi] | 'you <familiar>' |
| /rati/ | [rati] | 'night' |
| /səntan/ | [səntan] | 'descendant' |
- /t^h/ 7. [t^h] voiceless aspirated dental stop.
- | | | |
|-----------------------|-----------------------|-----------|
| /t ^h okar/ | [t ^h okar] | 'solid' |
| /get ^h i/ | [get ^h i] | 'knot' |
| /bet ^h ai/ | [bet ^h ai] | 'hurting' |
- /d/ 8. [d] voiced dental stop.
- | | | |
|--------|--------|-----------------|
| /dan/ | [dan] | 'present' |
| /dada/ | [dada] | 'elder brother' |
| /soad/ | [soad] | 'tasty' |
- /d^h/ 9. [d^h] voiced breathy dental stop.
- | | | |
|----------------------|----------------------|------------|
| /d ^h an/ | [d ^h an] | 'paddy' |
| /məd ^h u/ | [məd ^h u] | 'honey' |
| /əd ^h a/ | [əd ^h a] | 'one-half' |

- /ṭ/ 10. [ṭ] voiceless alveolar retroflexed stop.
- | | | |
|------------|-------------|---------------|
| /ṭəmṭuhar/ | [ṭəmṭuhar] | 'coppersmith' |
| /boṭ/ | [boṭ] | 'fisherman' |
| /cḥaṭi/ | [ṭṣ̣ḥaṭi] | 'everybody' |
- /ṭ^h/ 11. [ṭ^h] voiceless aspirated alveolar retroflexed stop.
- | | | |
|------------------------------------|------------------------------------|------------|
| /ṭ ^h aḍiai/ | [ṭ ^h aḍiai] | 'standing' |
| /g ^h oṭ ^h i/ | [g ^h oṭ ^h i] | 'ankle' |
| /kaṭ ^h / | [kaṭ ^h] | 'thorn' |
- /ḍ/ 12. [ḍ] voiced alveolar retroflexed stop.
- | | | |
|----------|----------|---------------|
| /ḍol/ | [ḍol] | 'good' |
| /ḍukuri/ | [ḍukuri] | 'small mouse' |
| /ḍakter/ | [ḍakter] | 'doctor' |
13. [ɽ] voiced alveolar retrofled flap <the tongue motion is forward from a point behind the alveolar ridge to a point in front of the alveolar ridge>.
- | | | |
|----------------------|----------------------|----------------------------|
| /paḍi/ | [paɽi] | 'buffalo calf
<female>' |
| /g ^h oḍa/ | [g ^h oɽa] | 'horse' |
| /koḍa/ | [koɽa] | 'whip' |
14. [ɽ] voiced alveolar retroflexed flap
- | | | |
|-------|---------|--------|
| /jaḍ/ | [ḍɽar] | 'cold' |
|-------|---------|--------|

- /ɖ^h/ 15. [ɖ^h] voiced breathy alveolar retroflexed stop.
 /ɖ^holak/ [ɖ^holak] 'long drum'
 /ɖ^hakana/ [ɖ^hakana] 'cowdung'
16. [ɾ^h] voiced breathy alveopalatal flap.
 /koɖ^ha/ [koɾ^ha] 'kidney'
- /c/ 17. [tʂ] voiceless lamino-alveolar affricate.
 /ciŋeni/ [tʂiŋeni] 'chicken'
 /cikata/ [tʂikata] 'smooth'
 /baca/ [batʂa] 'child'
- /c^h/ 18. [tʂ^h] aspirated lamino-alveolar affricate.
 /c^heri/ [tʂ^heri] 'horse whip'
 /c^himta/ [tʂ^himta] 'pincer'
 /mac^hi/ [matʂ^hi] 'fly'
- /j/ 19. [dʒ] voiced lamino-alveolar affricate.
 /jeni/ [dʒeni] 'woman'
 /juɖ/ [dʒuɖ] 'wet'
 /lajike/ [ladʒike] 'near'
20. [ʒ] voiced lamino-alveolar sibilant.
 /haija/ [haiza] 'malaria'
 /ijor/ [iʒor] 'light'
 /soja/ [soʒa] 'straight'

- /j^h/ 21. [dʒ^h] voiced breathy lamino-alveolar affricate.
- | | | |
|-------------------------------------|---------------------------------------|---------------|
| /j ^h or/ | [dʒ ^h or] | 'soup' |
| /j ^h ij ^h er/ | [dʒ ^h idʒ ^h er] | 'transparent' |
| /saj ^h a/ | [sədʒ ^h a] | 'twilight' |
- /k/ 22. [k] voiceless velar stop.
- | | | |
|----------|----------|-------------------|
| /kundil/ | [kundil] | 'lower ear-ring' |
| /bulaki/ | [bulaki] | 'lower nose ring' |
| /sarki/ | [sarki] | 'skinner, tanner' |
- /k^h/ 23. [k^h] voiceless aspirated velar stop.
- | | | |
|-------------------------|-------------------------|-------------|
| /k ^h ira/ | [k ^h ira] | 'cucumber' |
| /lik ^h i/ | [lik ^h i] | 'louse egg' |
| /phək ^h ura/ | [phək ^h ura] | 'upper arm' |
- /g/ 24. [g] voiced velar stop.
- | | | |
|-----------|------------|-------------------|
| /gaila/ | [gaila] | 'large water pot' |
| /agi/ | [agi] | 'fire' |
| /cilgeḍi/ | [tʂilgeḍi] | 'airplane' |
- /g^h/ 25. [g^h] voiced breathy velar stop.
- | | | |
|--------------------------------------|--------------------------------------|--------------------|
| /g ^h umai/ | [g ^h umai] | 'walking, roaming' |
| /k ^h eg ^h uli/ | [k ^h eg ^h uli] | 'larynx' |
| /kaug ^h a/ | [kaug ^h a] | 'crow' |

- /m/ 26. [m] voiced bilabial nasal.
- | | | |
|-----------|------------|------------|
| /macari/ | [mat̪sari] | 'fish' |
| /am/ | [am] | 'mango' |
| /remailo/ | [remailo] | 'pleasant' |
-
- /m^h/ 27. [m^h] voiced breathy bilabial nasal.
- | | | |
|------------------------------------|------------------------------------|-----------------|
| /k ^h am ^h a/ | [k ^h am ^h a] | 'post <house>' |
| /baram ^h a/ | [baram ^h a] | 'name of a god' |
| /kum ^h aini/ | [kum ^h aini] | 'wasp' |
-
- /n/ 28. [n] voiced alveolar nasal.
- | | | |
|---------------------------|---------------------------|-----------------|
| /nəl/ | [nəl] | 'carrying pole' |
| /bireni/ | [bireni] | 'long braid' |
| /d ^h arsenpau/ | [d ^h arsenpau] | 'greetings' |
-
- /n^h/ 29. [n^h] voiced breathy alveolar nasal.
- | | | |
|-----------------------|------------------------|------------|
| /kan ^h a/ | [kan ^h a] | 'shoulder' |
| /ban ^h ai/ | [ban ^h ai] | 'tying' |
| /can ^h i/ | [t̪san ^h i] | 'roof' |
-
- /ŋ/ 30. [ŋ] voiced velar nasal.
- | | | |
|---------|---------|----------------|
| /taŋ/ | [taŋ] | 'leg' |
| /gaŋa/ | [saŋa] | 'sea or ocean' |
| /kaŋia/ | [kaŋia] | 'comb' |

- /ŋ^h/ 31. [ŋ^h] voiced breathy velar nasal.
- | | | |
|------------------------------------|------------------------------------|-----------|
| /p ^h oŋ ^h a/ | [p ^h oŋ ^h a] | 'nostril' |
| /jaŋ ^h a/ | [dʒaŋ ^h a] | 'thigh' |
| /koŋ ^h ila/ | [koŋ ^h ila] | 'leopard' |
- /s/ 32. [s] voiceless lamino-dental sibilant.
- | | | |
|-----------|-----------|------------|
| /səhi/ | [səhi] | 'hedgehog' |
| /bis/ | [bis] | 'twenty' |
| /duseməŋ/ | [duseməŋ] | 'enemy' |
- /h/ 33. [h] voiceless glottal fricative.
- | | | |
|----------|------------|-------------|
| /haha/ | [haha] | 'jealousy' |
| /hikəci/ | [hiket̪si] | 'hiccoughs' |
| /bəhut/ | [bəhut] | 'much' |
- /l/ 34. [l] voiced alveolar lateral.
- | | | |
|--------|--------|---------|
| /lədi/ | [lədi] | 'river' |
| /ʈal/ | [ʈal] | 'lake' |
| /hela/ | [hela] | 'hate' |
- /l^h/ 35. [l^h] voiced breathy alveolar lateral.
- | | | |
|------------------------|------------------------|-------------|
| /kul ^h a/ | [kul ^h a] | 'hip' |
| /bokəl ^h a/ | [bokəl ^h a] | 'bark' |
| /koal ^h a/ | [koal ^h a] | 'river-bed' |

/r/	36. [r] voiced alveolar tap.		
/rela/	[rela]		'rail or train'
/petara/	[petara]		'hailstone'
/ba _̣ r/	[ba _̣ r]		'spinster'

37. [ɾ̥] voiced alveolar trill.

/gaɾən/	[gaɾən]		'neck'
/puɾnosi/	[puɾnosi]		'full moon'

/r ^h /	38. [r ^h] voiced breathy alveolar tap.		
/sika ^h i/	[sika ^h i]		'hunter'
/be ^h a/	[be ^h a]		'wall'
/da ^h i/	[da ^h i]		'beard'

2. Deletion of /h/ intervocalically.

All examples to this point have represented careful, slow, at times even slightly learned pronunciations. The purpose of this section and the following sections is to balance this somewhat artificial picture with some of the more obvious phenomena of natural speech. The first example is the deletion of inter-vocalic /h/.

/h/ is generally elided intervocalically in normal speech. This elision of /h/ has not been noted in the phonetic transcription of examples given elsewhere in this paper.

/t ^h ehun/	→	/t ^h eun/	'knee'
/sihua/	→	/siua/	'marrow'
/ko _̣ har/	→	/ko _̣ ar/	'squash'
/t ^h eluha/	→	/t ^h elua/	'swing'

When the following vowel is /e/, then the entire syllable is omitted, as shown below:

/gohep^han/ → /gop^han/ 'slingshot'

3. Free variants.

In Tharu there are two examples of free variants: [p^h] and [p̤]; and [h] and [h̤] <voiced or breathy h>. Neither of these have been noted in the phonetic transcription of examples given elsewhere in this paper.

a. /p^h/: [p^h] and [p̤].

/b ^h ap ^h /	[b ^h ap ^h] ~ [b ^h ap̤]	'steam'
/up ^h ara/	[up ^h ara] ~ [up̤ara]	'up'
/p ^h op ^h i/	[p ^h op ^h i] ~ [p̤opi]	'side nose ring'
/gohep ^h an/	[gohep ^h an] ~ [gohep̤an]	'slingshot'

b. /h/: [h] and [h̤].

/her/	[her] ~ [h̤er]	'plow with cow'
/helehalī/	[helehalī] ~ [h̤elehalī]	'fast, quickly'
/k ^h esehi/	[k ^h esehi] ~ [k ^h eseh̤i]	'I am going to eat'
/hila/	[hila] ~ [h̤ila]	'mud'

4. Variants conditioned by vowels.

a. The range of /k/ and /g/.

The velars /k/ and /g/ range from the front velar position following or preceding a front vowel to the back velar position following mid and back vowels. This effect can be noted in series like the following. This

variation has not been noted in the phonetic transcription of examples given elsewhere in this paper.

/kira/	[k ^h ira]	'worm'
/kelona/	[k ^h elona]	'toy'
/git/	[g ^h it]	'song'
/kan/	[k ^h an]	'ear'
/gardan/	[g ^h ardan]	'neck'
/koela/	[k ^h oela]	'live coal'
/kukur/	[k ^h ukur]	'dog'
/gol/	[g ^h ol]	'round'

b. The range of /l/.

The lateral /l/ ranges from apico-postdental before or after front vowels to apico-alveolar or apico-alveopalatal before or after back vowels. This effect can be noted in series like the following. This variation has not been noted in the phonetic transcription of examples given elsewhere in this paper.

/lilar/	[l ^h ilar]	'forehead'
/k ^h eladi/	[k ^h eladi]	'player'
/larket/	[l ^h arket]	'cane'
/loṭa/	[l ^h oṭa]	'drinking pot'
/ulhas/	[ul ^h as]	'pleasant'

5. Minor variants.

In addition to the generally lax articulation of non-initial consonants in normal rapid speech, two minor variants have been observed: a. the occurrence of [ʔ] <glottal stop>, and b. /ə/ as a vocalic transition. These have not been noted elsewhere in the phonetic transcription.

a. Glottal Stop.

The occurrence of glottal stop usually comes word-initially before a vowel, as shown in the following:

/ia/	[ʔia]	'this'
/ari/	[ʔari]	'hey'

b. /ə/ as a vocalic transition.

Breathy voiced consonants tend to have a vocalic transition between the consonant and the breathiness, as illustrated in the following examples:

/b ^h at/	[bə ^h at]	'rice, food'
/b ^h alu/	[bə ^h alu]	'bear'
/d ^h odar/	[də ^h odar]	'hollow'

C. Distribution.1. Consonant distribution in the syllable.

The Tharu syllable has the generalized shape of C_1VC_2 . The inventories of consonants occurring at C_1 and C_2 vary according to the position of the syllable in the phonological word. Following is a summary of consonant distribution in the syllable.

a. Monosyllabic words.

C_1 = all consonants except $/n^h/$, $/\eta^h/$, $/m^h/$, $/l^h/$, $/r^h/$, and $/\eta/$.

C_2 = all consonants except the voiced breathy series and $/h/$, $/w/$, and $/y/$.

b. First syllable, disyllabic words.

C_1 = same as for monosyllabic words.

C_2 = voiceless unaspirated stops $/p, t, k/$; the nasals $/m, n, \eta/$; the liquids $/r/$ and $/l/$; and the sibilant $/s/$.

c. Second syllable of disyllabic words.

C_1 = all consonants.

C_2 = all consonants except the voiced breathy series and $/\eta/$, $/h/$, $/w/$, and $/y/$.

2. Word Medial consonant clusters.

Figure 5, page 37, displays all of the known occurrences of consonant clusters. It is again noteworthy that these occur only word medially and across syllable boundaries. This will receive full attention under the section on the syllable.

III. Tharu Vowels.A. Contrast.

The evidence for contrast among vowels in Tharu points to positing the following system:

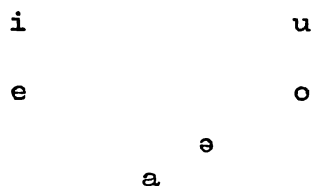
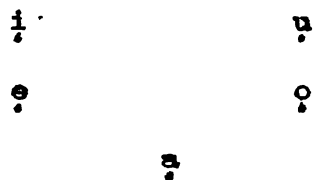


Figure 3. Tharu Vowels.

There is also some evidence of distinctive nasalization, with the exception of /ə/. Nasalization is represented by a nasalization mark under the vowel.



The evidence for contrast among these vowels is to be found in examples such as the following:

/a/ and /ə/:

"kaam"	/kam/	'work'
"kəm"	/kəm/	'insufficient'
"chaaʔi"	/c ^h aʔi/	'chest'
"cəti"	/cəti/	'sandal'

/a/ and /ə/:		
"baan"	/ban/	'elastic'
"ban"	/ben/	'jungle'
/i/ and /i/:		
"debahi"	/debəhi/	'you <fam.> give'
"debahiN"	/debəhi/	'I give'
"aari"	/ari/	'terrace wall'
"aariN"	/ari/	'ear-ring'
"dui"	/dui/	'two'
"bhuiN"	/bhui/	'floor'
/e/ and /e/:		
"ghenTi"	/g ^h enti/	'neck'
"geNthi"	/gɛ ^h ti/	'joint'
"bacheDaa"	/bac ^h ɛda/	'male colt'
"paheNDaa"	/pahe ^h ɛda/	'path'
"berhaa"	/ber ^h a/	'wall'
"teNDhaa"	/te ^h ɛda/	'curved'
/a/ and /a/:		
"ghau"	/g ^h au/	'sore, sound'
"gaNu"	/ga ^h u/	'village'
"baph"	/bap ^h /	'father'
"saNp"	/sap/	'snake'
"nac"	/nac/	'dance'
"saNc"	/sac/	'correct'
/o/ and /o/:		
"ghoDaa"	/g ^h o ^h da/	'horse'
"goNDi"	/go ^h di/	'navel'
"photo"	/p ^h oto/	'picture'
"poNtaa"	/po ^h ta/	'nasal mucus'

"gol"	/gol/	'round'
"roN"	/rɔ/	'hair <body>'

/u/ and /u:/

"dui"	/dui/	'two'
"tuNi"	/tɨi/	'you <fam.>'
"sukaa"	/suka/	'twenty-five paise'
"phuNkaa"	/p ^h uka/	'jaws'
"sihuaa"	/sihua/	'marrow'
"kaahuaa"	/kahua/	'here'

B. Variation.

It has been noted that vocoids in the environment following voiced aspirated stops are breathy. The difference between breathy and clear vocoids has not been noted in the phonetic transcription elsewhere in this paper. Other variation among Tharu vowels is as follows:

1. Free Variants.

In Tharu the following three vowels have the illustrated free variants in unstressed syllables only. This has not been noted in the phonetic transcription elsewhere in this paper.

- a. /i/ [i] voiced high front close unrounded vocoid
 [ɨ] voiced high front open unrounded vocoid

/ləli/	ləli	ləɨ	'forearm'
/amiti/	amiti	amɨɨ	'acid'
/ləjike/	ladʒike	ladʒɨke	'near'

- b. /e/ [e] voiced mid front close unrounded vocoid
 [ɛ] voiced mid front open unrounded vocoid

/abe/	[abe]	[abɛ]	'if'
/pardesi/	[pardesi]	[pardɛsi]	'inhabitant'
/g ^h aɛla/	[g ^h aɛla]	[g ^h aɛla]	'cork, stopper'

- c. /u/ [u] voiced high back close rounded vocoid
 [ʊ] voiced high back open rounded vocoid

/dadu/	[dadu]	[dadʊ]	'skin rash'
/suruj/	[surudʒ]	[surudʒ]	'sun'
/naŋulo/	[naŋulo]	[naŋʊlo]	'winnowing basket'

2. Minor Variants.

There are several minor variants occurring among the vowels, which are covered in the following sections:

- a. Optional /y/; b. Lengthened vowels; c. The quality of /a/ and /e/ in rapid speech; and d. Optional /ə/ and e. Nasalized variants of oral vowels.

a. Optional /y/.

Words which in the phonemic transcription begin with the phoneme /a/ may be pronounced either with or without a word-initial /y/, as shown in the following examples <elsewhere not noted in the transcription>:

/aɖa/	[aɖa]	—	[yaɖa]	'egg'
/abe/	[abe]	—	[yabe]	'if'
/agi/	[agi]	—	[yagi]	'fire'

b. Lengthened vowels.

Lengthened vowels in Tharu are conditioned by stress and syllable shape. Vowels in open stressed syllables will receive the maximum length, while vowels in closed unstressed syllables will receive the minimum length. In addition, if an aspirated consonant occurs syllable initial in an open stressed syllable, the length will be intensified even more.

1. Examples of maximum length:

/b ^h alu/	[b ^h <u>a</u> :lu]	'boar'
/d ^h odar/	[d ^h <u>o</u> :dar]	'hollow'
/balu/	[<u>ba</u> :lu]	'sand'

2. Examples of minimum length:

/pərdit/	[pə <u>nd</u> it]	'diviner'
/gardan/	[ga <u>rd</u> an]	'neck'
/kancus/	[ka <u>nc</u> us]	'stingy'

<In the above cases, the underlined syllable is the stressed syllable, and the colons represent length, with a double colon indicating maximum length.>

c. The quality of /a/ and /ə/ in rapid speech.

In rapid speech the low front central vowel /a/ and the low back central vowel /ə/ <actually /ɑ/, which we write throughout this paper as /ə/ and [ə] due to the limitations of our typewriter keyboard> have backed and raised allophones [ʌ] and [ɤ] respectively, as shown in the following examples. This has not been noted elsewhere in this paper in the phonetic transcriptions.

Slow speechFast speech

[agi]	[a ^ʌ gi]	'fire'
[rati]	[ra ^ɤ ti]	'night'
[ceti]	[ts ^ʌ ti]	'sandal'
[kəm]	[k ^ɤ m]	'insufficient'

d. Optional /ə/.

The peculiar behavior of /ə/ is noted at this point. It appears that /ə/ is an optional phoneme at the end of any word with a final VC or CVC pattern. In other words, it is in free variation with its absence. The following words are illustrative. This also has not been noted elsewhere in this paper in phonetic transcriptions.

/boṭ/	[boṭ]	↪	[boṭə]	'fisherman'
/d ^h olək/	[d ^h olək]	↪	[d ^h oləkə]	'long drum'
/t ^h ik/	[t ^h ik]	↪	[t ^h ikə]	'correct, right'
/put ^h /	[put ^h]	↪	[put ^h ə]	'buttock'
/garib/	[garib]	↪	[garikə]	'poor'

The only place where /ə/ must be written is in borrowed words such as in /putrə/ and /pabitə/ where the preceding consonant cluster is /tr/.

e. Nasalized variants of oral vowels.

An oral vowel immediately preceding or following a nasal vowel is phonetically nasalized, as shown in the following examples:

/ṭui/	[ṭui]	↪	[ṭuĩ]	'you'
/jau/	[ḍẓau]	↪	[ḍẓaũ]	'let's go'
/geuri/	[geuri]	↪	[geurĩ]	'sparrow'

In certain instances a vowel may become somewhat nasalized following a nasal consonant, as shown in the following example:

.'nama/	[mama]	↪	[mãma]	'uncle'
---------	--------	---	---------	---------

C. Distribution.

Each vowel may occur in each of the four syllable types, as discussed in the following section. It is to be noted

that there are no vowel clusters within a single syllable. Thus, where two vowels occur contiguous to one another within a single word, a syllable break lies between them. This type of vowel cluster occurs according to Figure 4 on page 35.

IV. Tharu Syllables.

A. Contrast.

The basic syllable type in Tharu is <C>N<C>. The consonants are optional and only the nucleus <N> is obligatory. See Section II. C, page 27 for the summary of consonant distribution. The obligatory vowel nucleus can be any one of the eleven contrastive vowels <this includes nasalized vowels>.

There are four distinct and contrastive syllable types in Tharu. These are V, CV, VC, CVC and are here illustrated :

V

"ijor"	/ijor/	'light'
"uDisaa"	/uḍisa/	'bug'
"ia"	/ia/	'this'

CV

"maa"	/ma/	'at, in'
"se"	/se/	'from'
"haahaa"	/haha/	'jealousy'

VC

"ultaa"	/ulta/	'opposite'
"ekh"	/ek ^h /	'one'
"maur"	/mœur/	'chicken's comb'

CVC

"Dol"	/ḍol/	'good'
"benG"	/ben/	'ground frog'
"ghum"	/g ^h um/	'rain shield'

B. Variation.

- a. Monosyllabic variants such as [dui], [tui], [sai], etc., are phonemically disyllabic. Vowel clusters occur across but not within syllable boundaries.
- b. In words containing three or more vocoids in succession some of these are phonetically perceived as syllable peaks and others as syllable margins. Our language assistant consistently pronounces sequences of two vowels as disyllabic. He also pronounces sequences of three vocoids as disyllabic. The marginal vocoid is always [w] or [y]. I have interpreted these marginal or non-syllabic vocoids as /w/ and /y/ respectively.
- c. The constraints on syllable co-occurrence in a word that has a CV.VC or like shape <in which the period between the V's represents syllable boundary>, are illustrated in Figure 4 below.

		Second Member					
F.							
i		i	e	a	ə	o	u
r							
s	i	1	2	3		5	6
t	e	7				11	12
M	a	13	14			17	18
e	ə	19	20			23	24
m							
b	o	25	26	27			30
e	u	31		33			
r							

Figure 4. Distribution of vowels in V.V clusters.

These clusters may be exemplified as follows. The numbers in the cells above refer to examples in the list below.

1. ii ----	19. ei : /unə ^h ei/ 'twenty-nine'
2. ie /periehe/ 'dear'	20. ee /k ^h eeera/ 'brown'
3. ia /bia/ 'seed'	21. ea ---
4. ie ---	22. ee ---
5. io /cariori/ 'around'	23. eo /ləota/ 'new'
6. iu /tiuna/ 'curry'	24. eu /mœur/ 'chicken's comb'
7. ei /teis/ 'twenty-three'	25. oi /cəloi/ 'I shoot'
8. ee ---	26. oe /d ^h oe/ 'he washes'
9. ea ---	27. oa /soad/ 'tasty'
10. ee ---	28. oe ---
11. eo /neori sap/ 'mongoose'	29. oo ---
12. eu /geuri/ 'sparrow'	30. ou /nou/ 'nine'
13. ai /b ^h ai/ 'cousin'	31. ui /d ^h ud ^h ui/ 'hurricane'
14. ae /k ^h ae/ 'he eats'	32. ue ---
15. aa ---	33. ua /babua/ 'nephew'
16. ae ---	34. ve ---
17. ao /agaori/ 'in front of'	35. uo ---
18. au /paujib/ 'anklet'	36. uu ---

- d. Another constraint on syllable co-occurrence in a word is that of consonant distribution in such patterns as CVC.CVC, VC.CV, etc. Only the following clusters may occur across such syllable boundaries. It is also to be noted that consonant clusters of more than two consonants do not occur. There are no CCC patterns in Tharu.

Second Member

	<u>p</u>	<u>p^h</u>	<u>b</u>	<u>b^h</u>	<u>t</u>	<u>t^h</u>	<u>d</u>	<u>d^h</u>	<u>ɽ</u>	<u>t^h</u>	<u>k</u>	<u>k^h</u>	<u>g</u>	<u>c</u>	<u>c^h</u>	<u>j</u>	<u>j^h</u>	<u>m</u>	<u>n</u>	<u>s</u>	<u>l</u>	<u>r</u>
p					1					2										3		
t																				4		5
k				6	7																	
m			8		9		10	11	12		13							14				
n	15				16		17	18		19	20			21					22		23	24
n										25	26		27									
s		28			29						30									31		
r	32		33		34	35	36				37	38	39		40	41				42	43	44
l		45																				
									46					47	48		49					

Figure 5. Distribution of consonants in CC clusters.

To date /g^h/ has not been found as a second member of a CC Cluster, although it might be expected to occur in this position. It is expected that other combinations of the above consonants will eventually be found.

The following are illustrations of each consonant cluster above. The numbers in the cells above refer to examples in the list below.

1. pt /həpta/ 'week'
2. pk /səpkat^h neori/ 'mongoose'
3. ps /apsos/ 'sorrow'
4. ts /jetsasuk mared/ 'wife's elder sister's husband'
5. tr /pabitre/ 'sacred'
6. kb^h /b^hakb^hakaha/ 'stutter'
7. kt /dəkteɽ/ 'doctor'
8. mb /d^harambi suasa/ 'belief, creed'

9. mt	/cimta/	'tongs'
10. md	/dəmda/	'brother-in-law'
11. md ^h	/səmd ^h i/	'son's wife's father'
12. mṭ	/ṭəṭṭuṭaṭera/	'coppersmith'
13. mk	/gəmkə/	'perfume'
14. mj ^h	/j ^h imj ^h im pani/	'drizzle'
15. np	/kənpəti/	'temple'
16. nt	/untis/	'twenty-nine'
17. nd	/nəndi/	'sister-in-law'
18. nd ^h	/t ^h ənd ^h a/	'wet'
19. nṭ ^h	/sənt ^h i/	'black powder'
20. nk	/hunkə/	'third person plural pronoun'
21. nc	/kəncus/	'stingy'
22. nm	/janmara/	'murderer'
23. ns	/sənsar/	'world'
24. nl	/kinlahar manse/	'buyer'
25. nṭ	/ləṇṭe/	'bare, naked'
26. nḱ	/kəṇkari/	'skeleton'
27. nḡ	/səṇḡit kara/	'musician'
28. sp ^h	/j ^h asp ^h asiya/	'clumsy'
29. st	/pusta/	'generation'
30. sk	/iskul/	'school'
31. sn	/kəsnahən/	'how'
32. rp	/carpata/	'roof beam'
33. rb	/parbet/	'mountain'
34. rt	/lərti/	'larynx'
35. rt ^h	/bert ^h e/	'foolishly'
36. rd	/murda/	'corpse'
37. rk	/sarki/	'skinner, tanner'

38.	rk ^h	/murk ^h a/	'stupidity'
39.	rg	/gurgurai/	'thunder'
40.	rc ^h	/p ^h arc ^h in/	'clean'
41.	rj	/surje garehan/	'solar eclipse'
42.	rn	/purnausi/	'full moon'
43.	rs	/barsa/	'year'
44.	rl	/marla/	'dead'
45.	lp ^h	/p ^h alp ^h ul/	'fruit'
46.	lṭ	/ulṭa/	'opposite'
47.	lg	/cilgeḍi/	'airplane'
48.	lc	/telca/	'lock'
49.	lj	/meljari/	'dysentery'

- e. The final constraint on syllable co-occurrence is that of glides. The glides "y" and "w" have been defined as 'non-peak' vowel qualities within a syllable before a vowel, and are treated as consonants. There are certain constraints governing the clustering of glides with vowels within the syllable. The following chart illustrates all the possible combinations of pre-vocalic glides occurring with vowels.

<u>Glide</u>	<u>Vowel</u>
y	e
	ə
w	a

Examples:

/ye/	/behana yehe/	'early <in the morning>'
/yə/	/yəṇut ^h i/	'ring'
/wa/	/hawa/	'wind'

C. Distribution.

There are certain restrictions on the distributions of syllables within the word. The following chart illustrates the distribution of the four basic syllable types within a word. A period marks a syllable break in the phonetic transcription.

	<u>V</u>	<u>VC</u>	<u>CV</u>	<u>CVC</u>
First Syllable				
<u>V</u>	/ia/ [i.a] 'this'	/aena/ [a.ne.a] 'mirror'	/anike/ [a.ni.ke] 'various'	/ijor/ [i.jor] 'light'
<u>VC</u>	not possible	not possible	/ul̥ta/ [ul̥.ta] 'opposite'	/apsos/ [ap.sos] 'sorrow'
<u>CV</u>	/dau/ [da.u] 'mother'	/m̥ur/ [m̥e.ur] 'chicken's comb'	/ceti/ [c̥e.ti] 'sandal'	/d ^h olak/ [d ^h o.lak] 'long drum'
<u>CVC</u>	not possible	not possible	/pusta/ [pus.te] 'generation'	/kancus/ [kan.cus] 'stingy'

Figure 6. Syllable distribution within the word.