

# Unreleased Codas and Tones in Meiteilol

*Meiraba Takhellambam  
Jawaharlal Nehru University*

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# Introduction

- Meiteilol is a Tibeto-Burman (Kuki-Chin-Naga) language spoken in Manipur a province in the north-eastern part of India and its surrounding areas.
- Meiteilol is listed as **mni** under **ISO 639-3** the International Standard for Language Code.



map from google map

# Sino-Tibetan

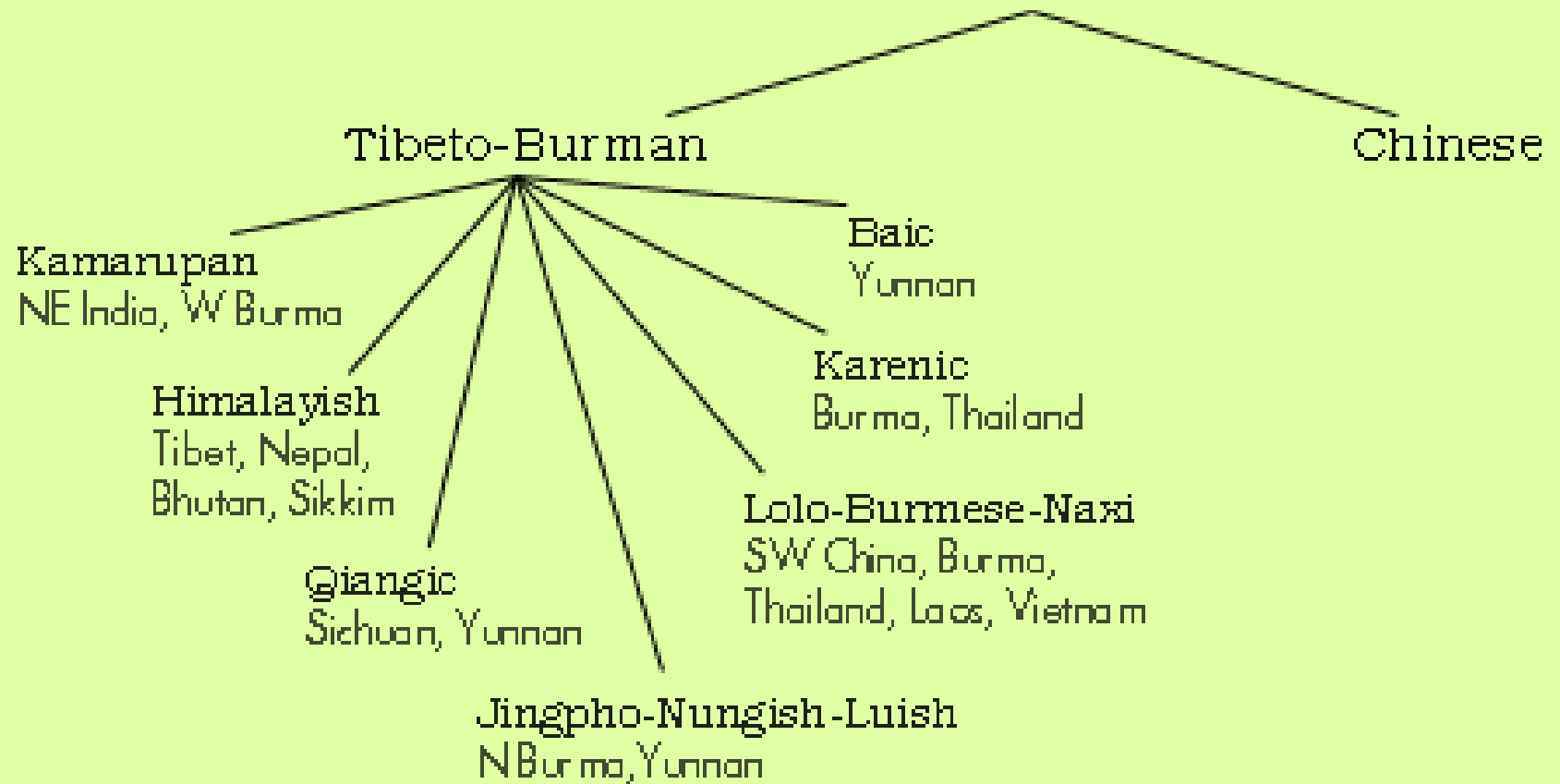


Figure from <http://stedt.berkeley.edu/about-st>

- Meiteilol is a monosyllabic language where both the nominal and the verbal categories can be analysed down to their constituent monosyllabic stem and the affixes are also monosyllabic .

- An interesting phenomenon that we observe in Meiteilol is that the nouns in Meiteilol can be both bound as well as free morphemes; but the Verbs in the Meiteilol are always bound, the verbal stem in itself cannot be without an inflectional affix.

- e.g.

Noun

i ‘thatch’

u ‘tree’

pa ‘eyelashes’

hi ‘boat’

câk ‘rice’

Verb

ibə ‘to write’

ubə ‘to see’

pabə ‘to read’

hibə ‘to slice’

câkpə ‘to burn’

- Meiteilol is a Tone language; it has two lexical tones ;

a) H Register Tone

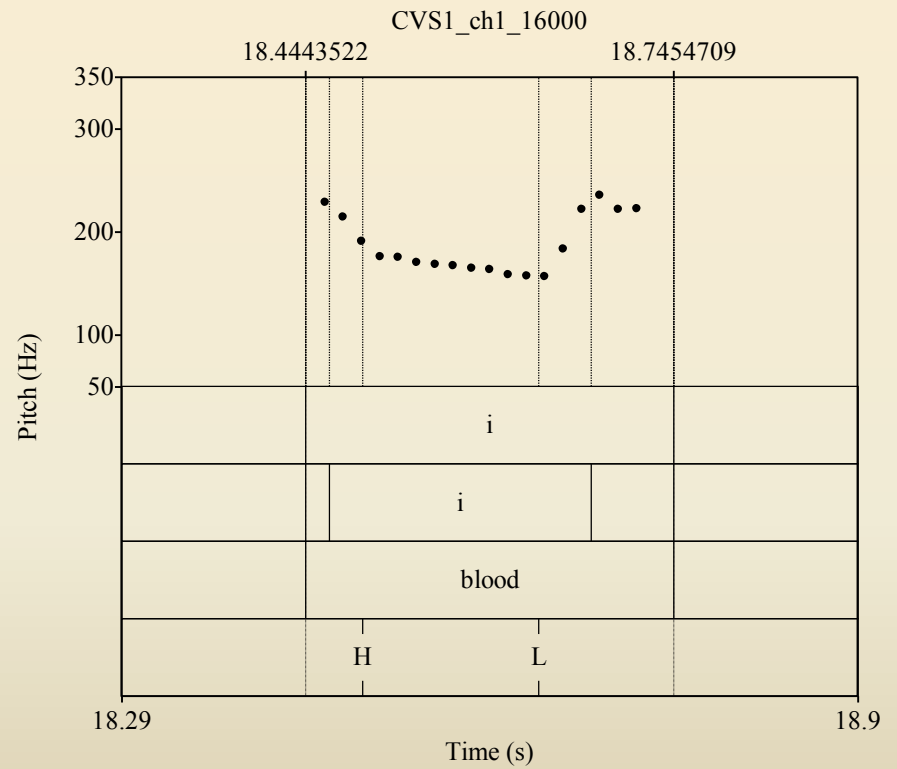
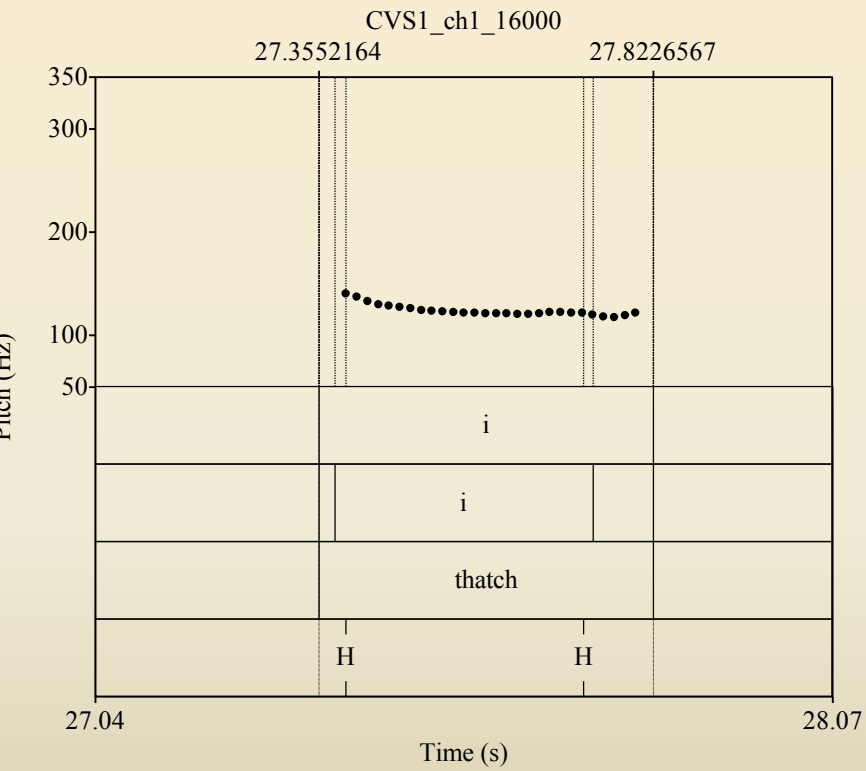
b) HL Falling Tone



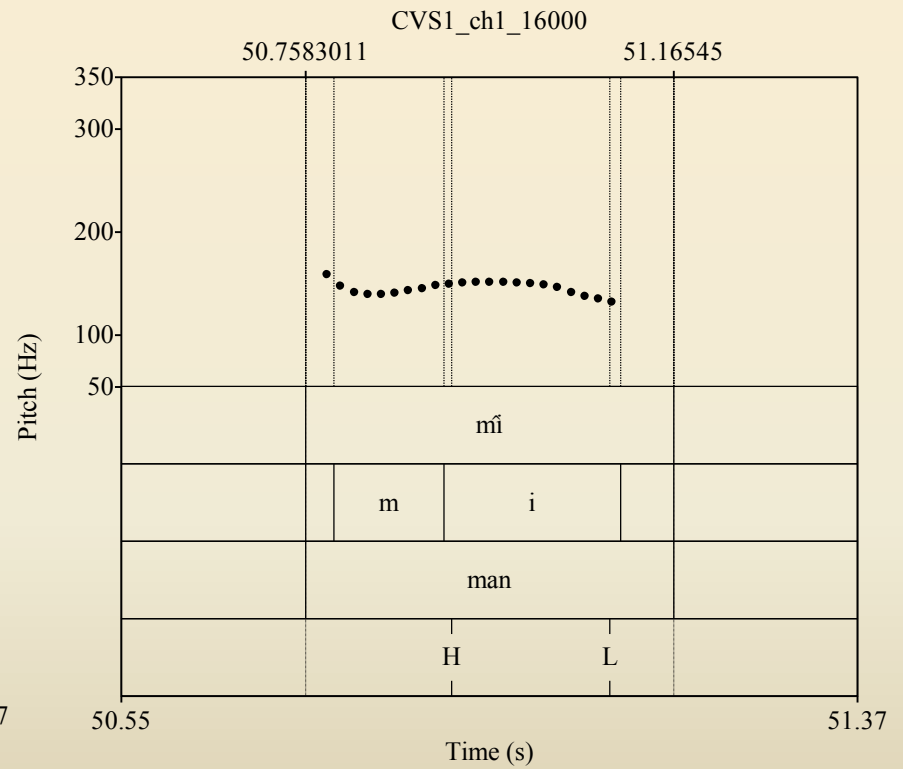
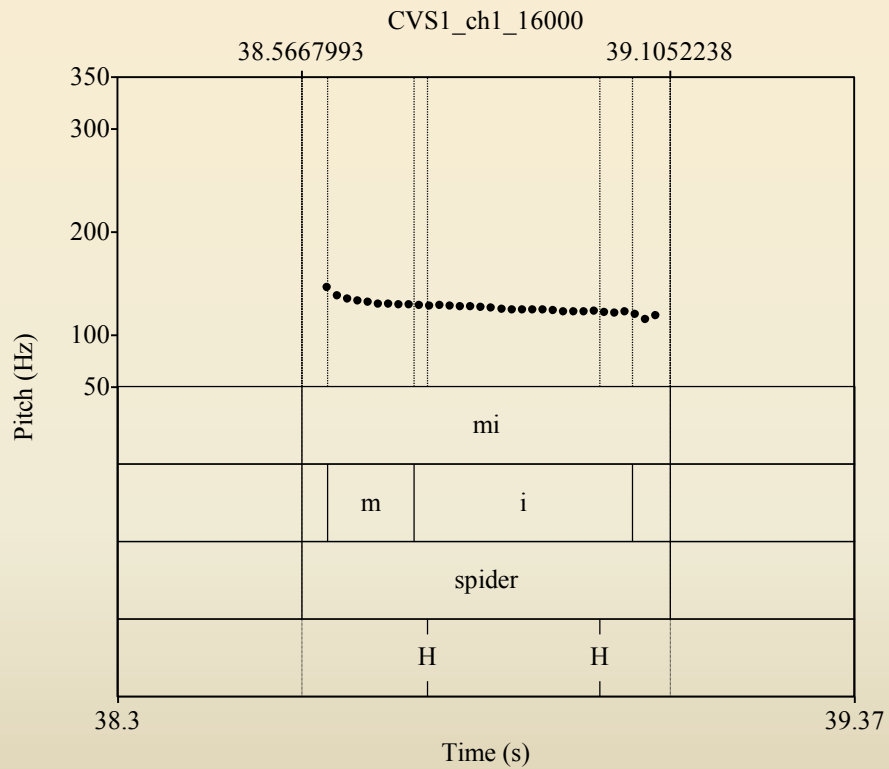
A list of *minimal pairs* is listed below:

tín	‘saliva’
k <sup>h</sup> oj	‘bee’
k <sup>h</sup> ónj	‘canal’
sínj	‘ginger’
sóm	‘basket’
mí	‘spider’
má	‘3PS’
lú	‘head’
wá	‘bamboo’
í	‘thatch’

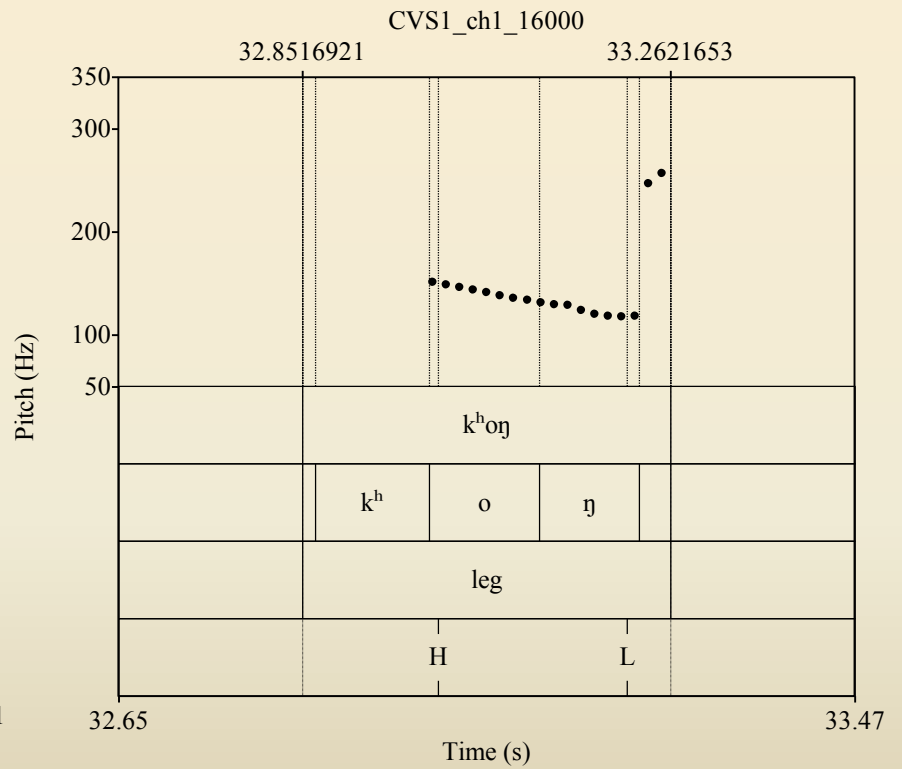
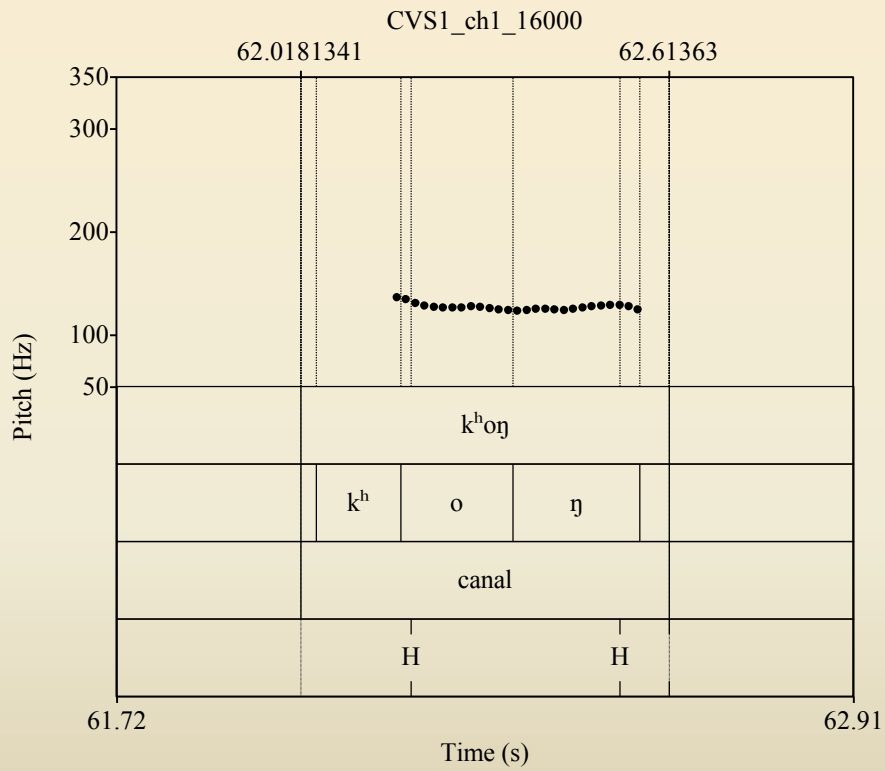
tîn	‘insect’
k <sup>h</sup> ôj	‘navel’
k <sup>h</sup> ônj	‘foot’
sînj	‘firewood’
sôm	‘hair’
mî	‘man’
mâ	‘bedbug’
lû	‘fishing trap’
wâ	‘word’
î	‘blood’



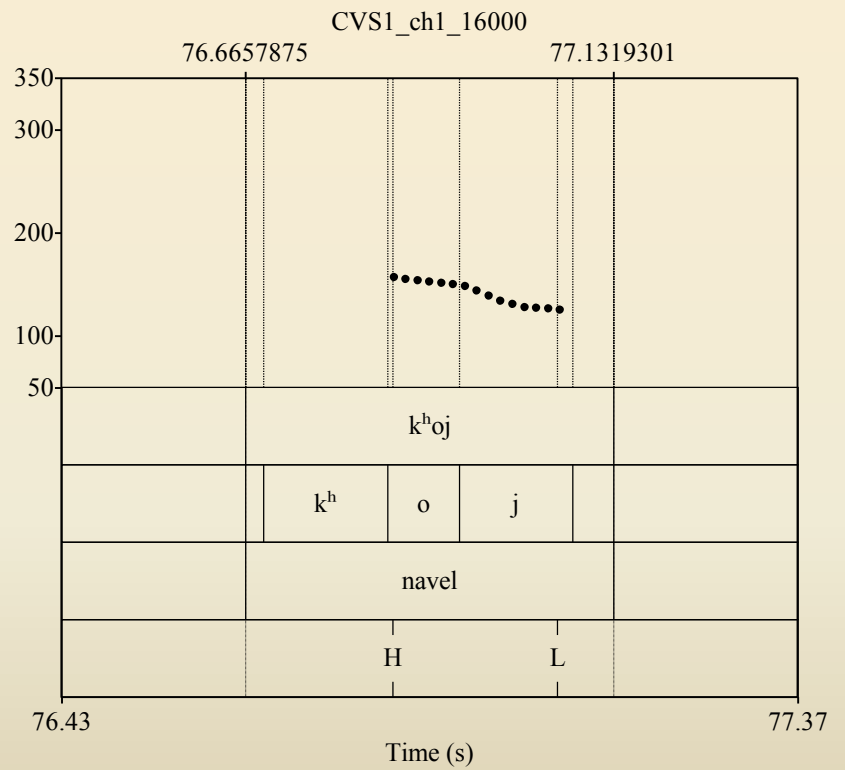
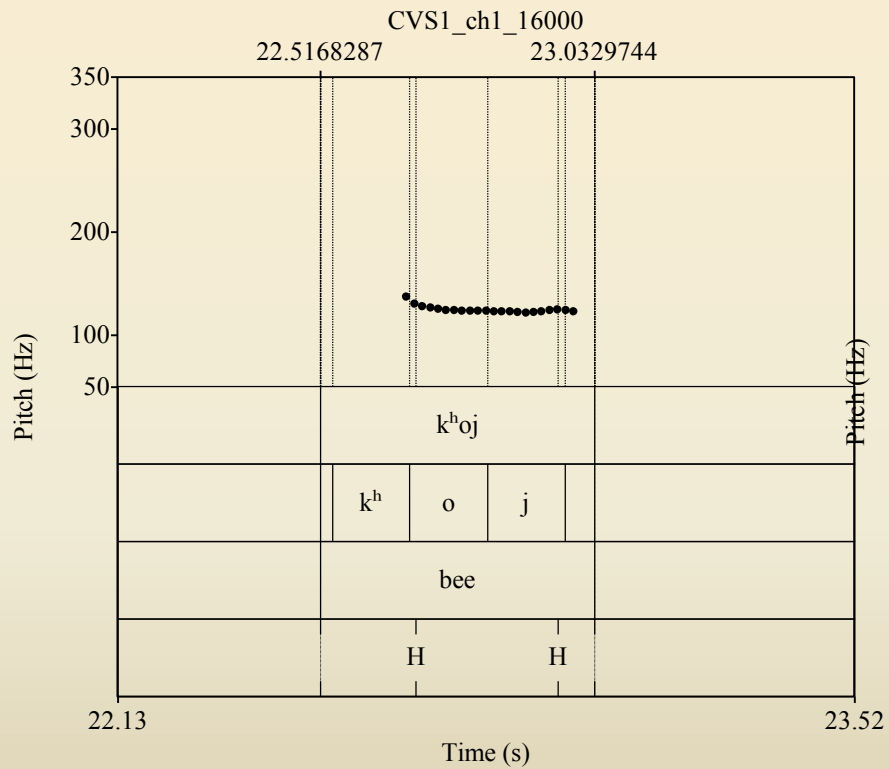
F0 map for the words *i* 'thatch' and the word *i* 'blood'



F0 map for the words *mi* 'spider' and the word *mî* 'man'



F0 map for the words  $k^h o \eta$  'canal' and the word  $k^h o \eta$  'foot'



F0 map for the words  $k^hoj$  'bee' and the word  $k^hoj$  'navel'

- To describe Meiteilol tone any further; considering the importance stressed upon the coda position of a syllable for the study of tone especially in Tibeto-Burman languages the ramification of the CVC syllable structure into CVS *smooth syllables* and CVT *stopped syllable* (where S= sonorant and T= obstruent) is inevitable.

- In Meiteilol the realisation of tonal contrast can be affected by the coda consonants. The tone on the *stopped syllables* can be identified with the tones on the *smooth syllables* (Hyman 2007); where the *stopped syllables* have voiceless unaspirated plosives at their coda position.

- Meiteilol displays a rich inventory of consonants which can occur at the Coda position of a syllable.



	Labial	Alveolar	Palatal	Velar	Glottal
Plosive	<i>p</i>	<i>t</i>		<i>k</i>	
Nasals	<i>m</i>	<i>n</i>		<i>ŋ</i>	
Approximant	<i>w</i>		<i>j</i>		
Lateral Approximant			<i>l</i>		

*Table . Consonants in the Coda position*

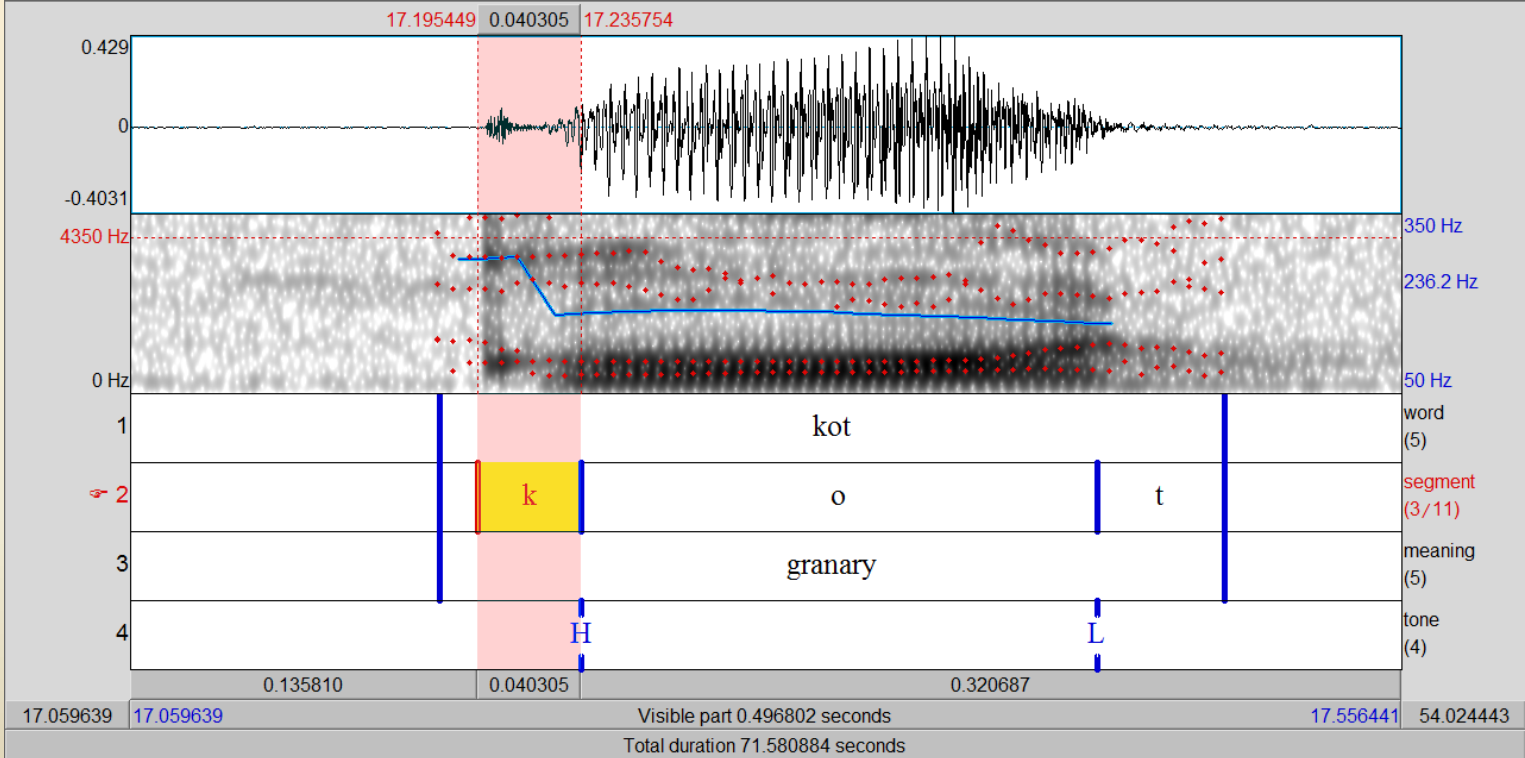
- The presence of obstruent in the Coda or *stopped syllable* CVT restricts the number of contrasting tones in Meiteilol; the obstruent-final syllable carries only the HL Falling tone.

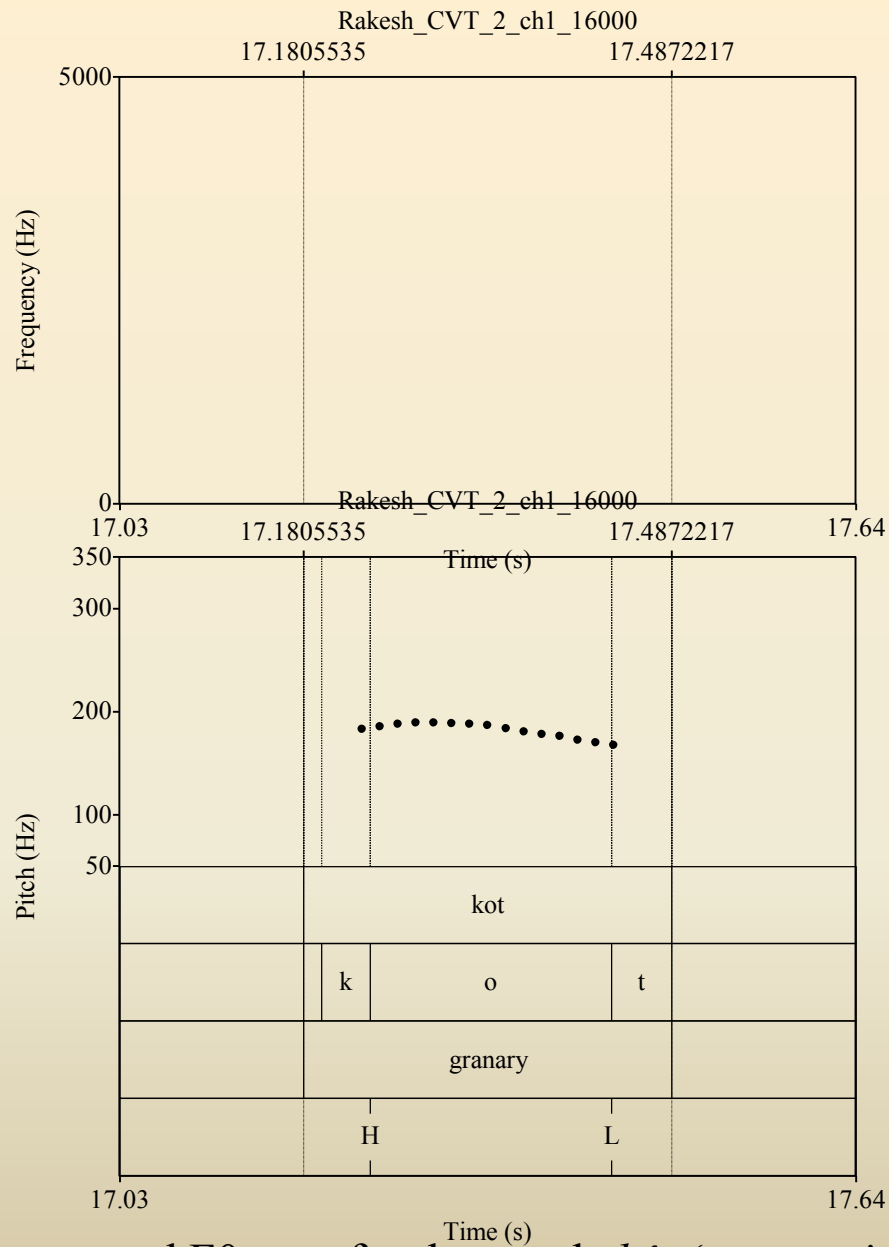
# List of words with HL Falling Tones

<b>mît</b>	<b>eye</b>
<b>hîk</b>	lice
<b>lîk</b>	Necklace
<b>mûk</b>	ink
<b>k<sup>h</sup>ût</b>	hand
<b>lûk</b>	platter
<b>cûk</b>	pole
<b>pûk</b>	belly
<b>sûk</b>	mortar
<b>lûp</b>	group

<b>cêk</b>	<b>brick</b>
<b>têk</b>	brass pot
<b>pôt</b>	thing
<b>kôt</b>	granary
<b>kôk</b>	head
<b>pôk</b>	grey hair
<b>jôt</b>	Iron
<b>p<sup>h</sup>êk</b>	mat
<b>sôk</b>	appearance
<b>t<sup>h</sup>êk</b>	Caterpillar
<b>pât</b>	lake
<b>tât</b>	excuse
<b>kâp</b>	span
<b>nât</b>	culture
<b>câk</b>	food

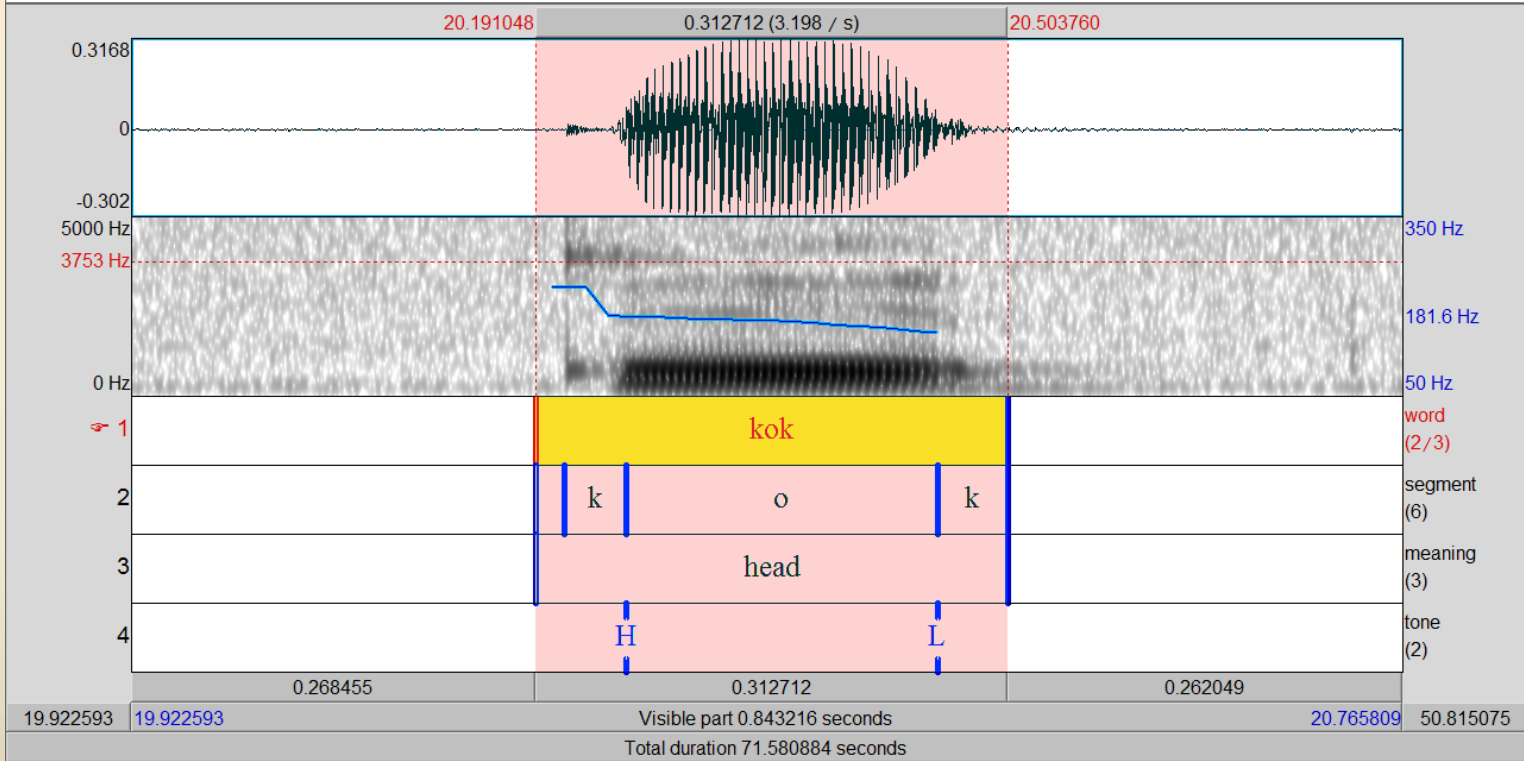
k

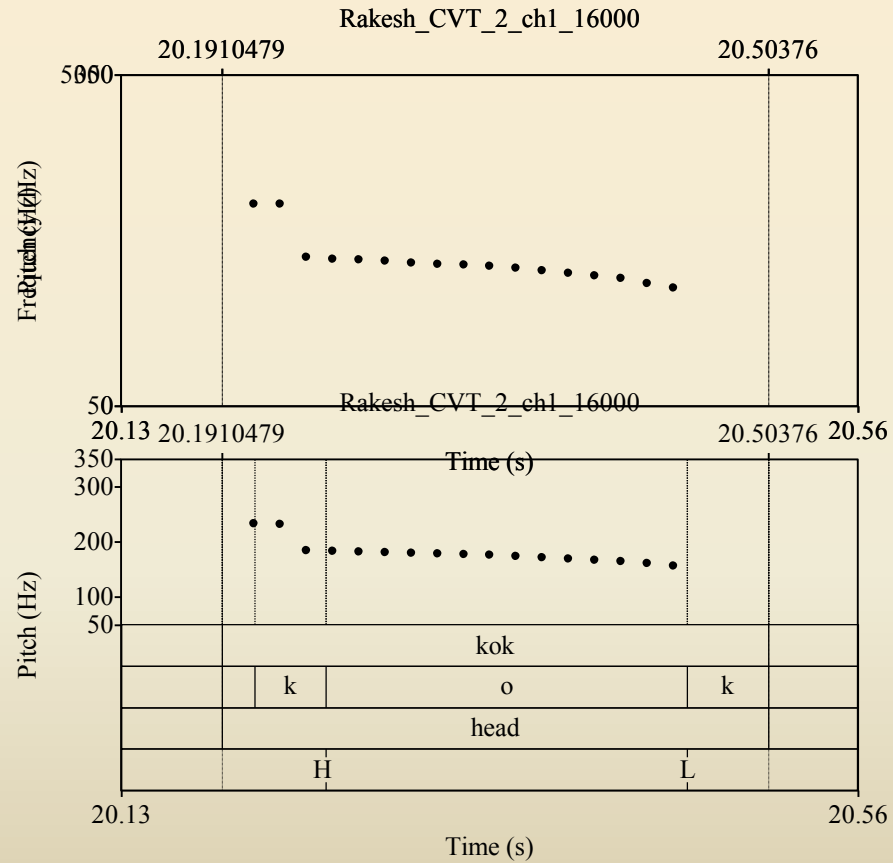




Spectrogram and F0 map for the words *kôt* 'granary'

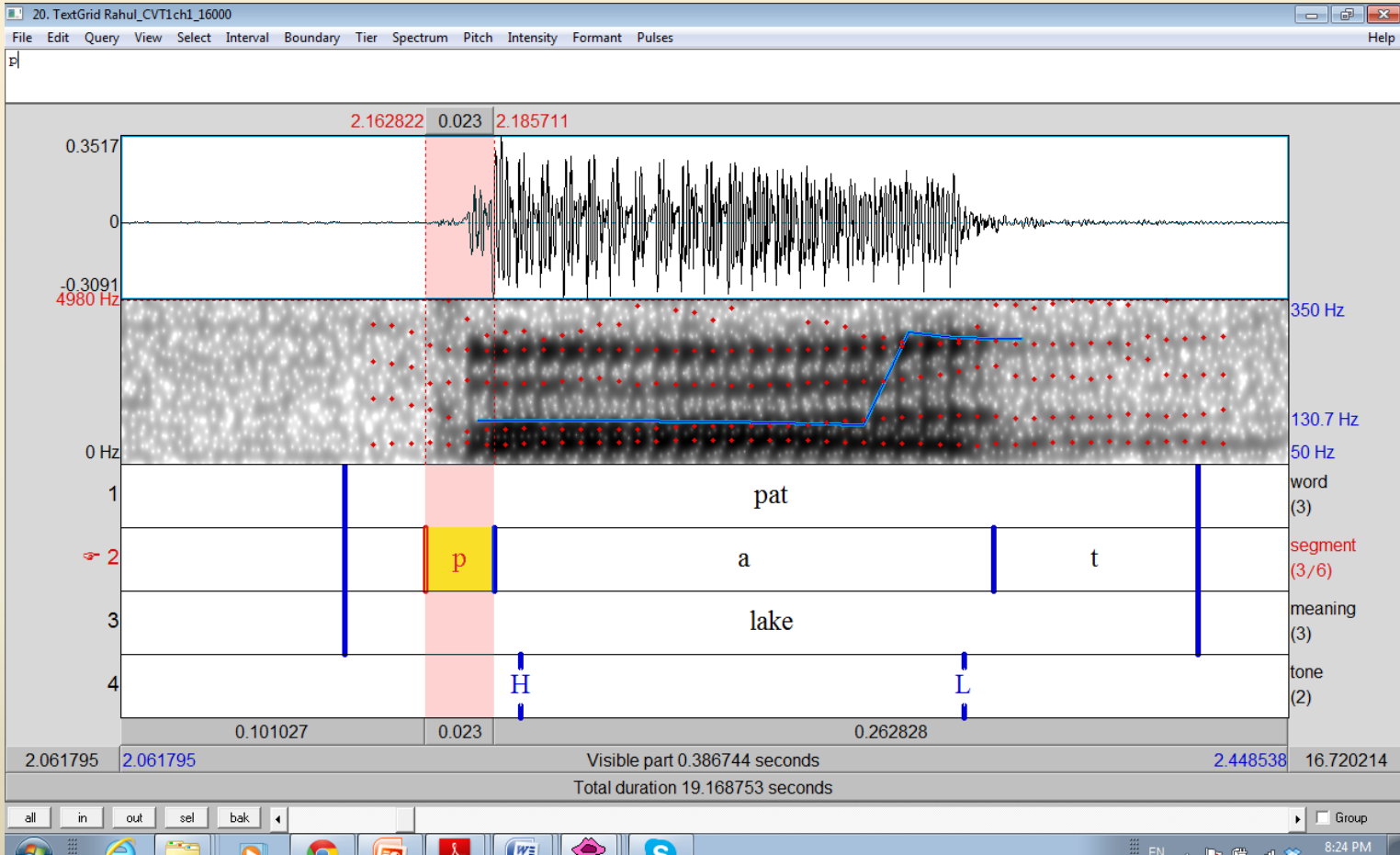
kok

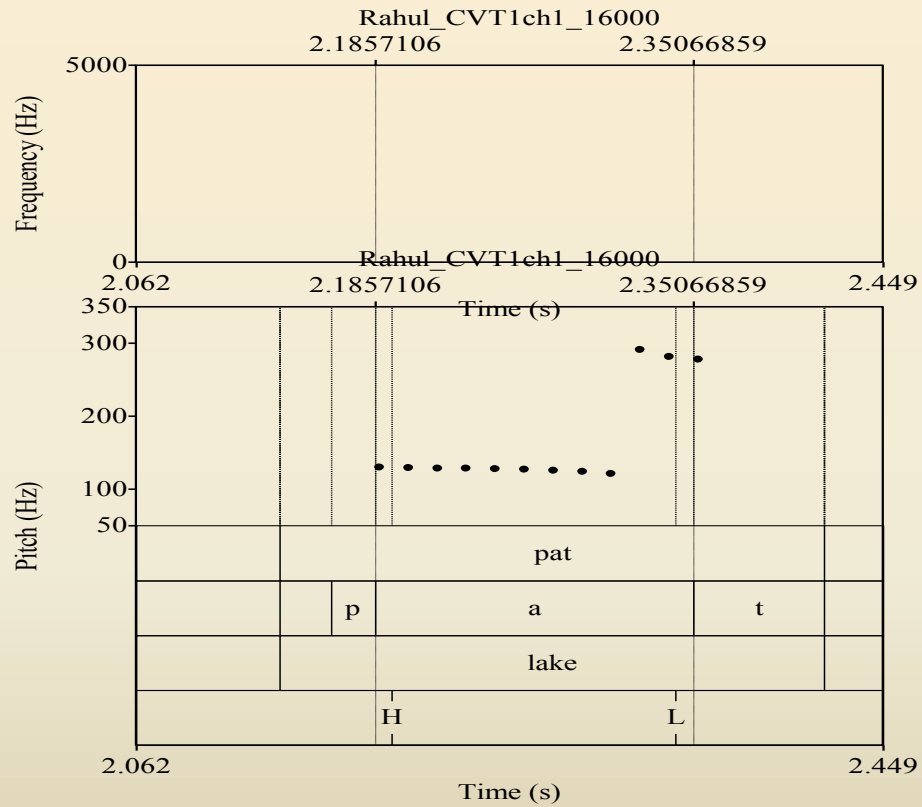




Spectrogram and F0 map for the words *kôk* 'head'

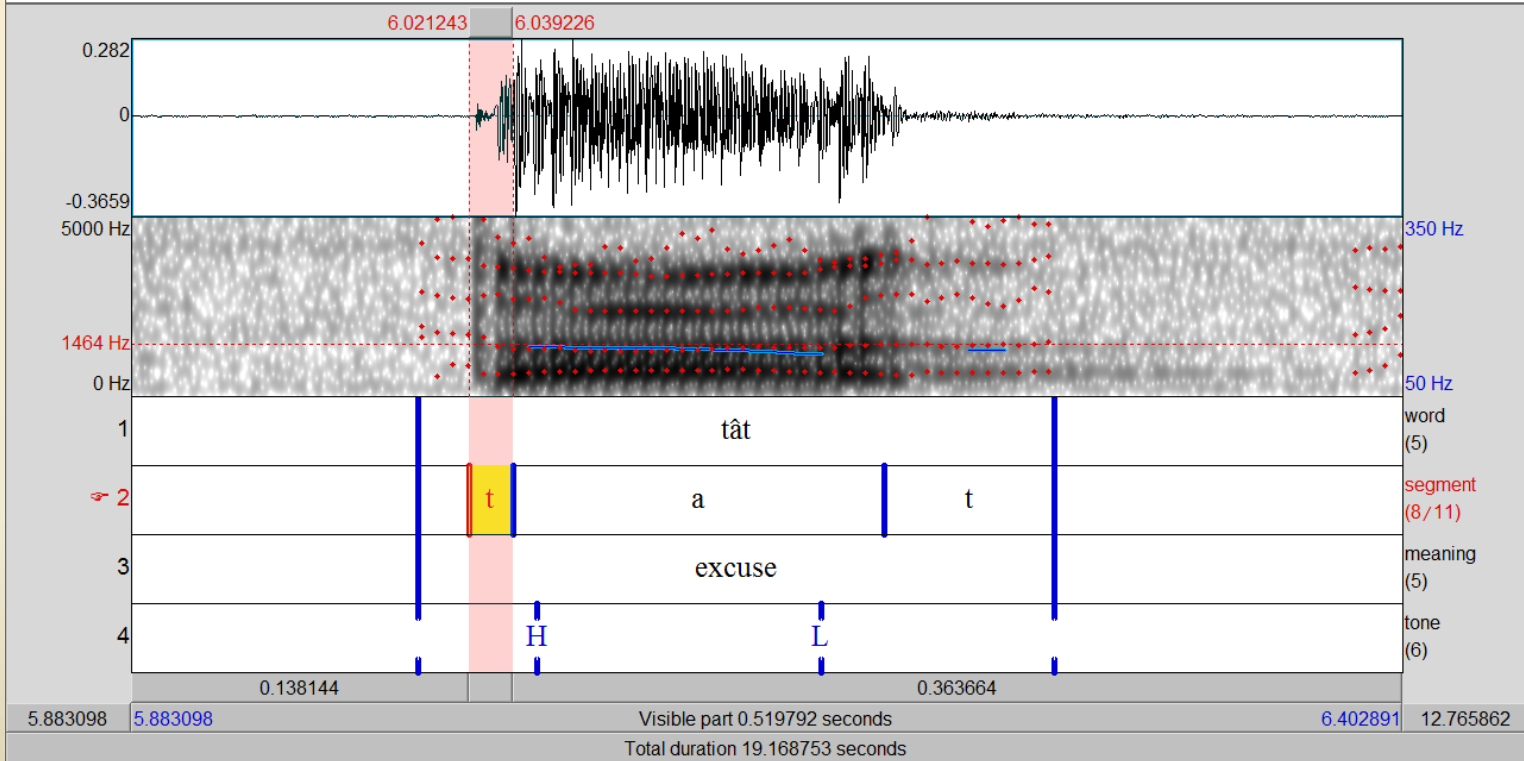


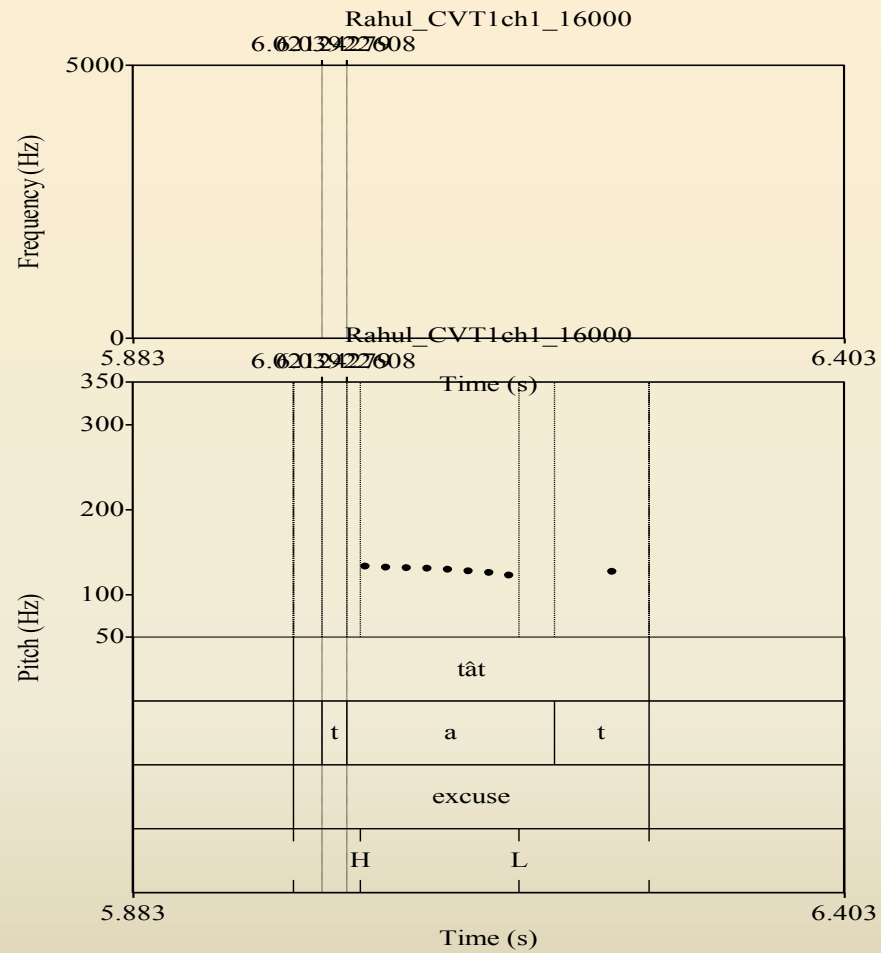




Spectrogram and F0 map for the words *pât* 'lake'

t|





Spectrogram and F0 map for the words *tât* 'excuse'

- The realisation of tonal contrast on monosyllabic nouns is neutralized due to the nature of the coda consonant and in this case the voiceless obstruents.
- The three stages that we associate with stops; contact, hold and release can be observed when the voiceless obstruents /p/ /t/ and /k/ occur in the onset position.

- However, when /p/, /t/ and /k/ occur in the coda position in Meiteilol the stops are unreleased as were observed from the Spectograms.
- The unreleased phonation blocks the phonetic spreading of the tone onto the coda consonant in the CVT syllables.

# The distribution of Tone in Meiteilol

	<i>H level tone</i>	<i>HL falling tone</i>
V	+	+
CV	+	+
CVS	+	+
CVT		+

# References

- Chen, M. Y. (2012, April). Tone rule typology. In *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* (Vol. 18, No. 2).
- Hyman, L.M. (2007). Kuki Thaadow: An African Tone System in Southeast Asia, UC Berkeley Phonology Lab Annual Report.
- Kingston, J. (2005). The phonetics of Athabaskan tonogenesis. *AMSTERDAM STUDIES IN THE THEORY AND HISTORY OF LINGUISTIC SCIENCE SERIES 4*, 269, 137.
- Steriade, D. (1997). Phonetics in phonology: the case of laryngeal neutralization.