THE MORPHOPHONOLOGY OF THANGMI:  
A TIBETO-BURMAN LANGUAGE OF NEPAL

Mark Turin

1. INTRODUCTION. The Thangmi (Nepali Thâmî) are an ethnic group who number at least 35,000 and inhabit the central eastern hills of Nepal. The Thangmi claim to be autochthonous to the upper reaches of Dolakhâ district as well as to the eastern valleys of Sindhupâlcook district, and they speak a Tibeto-Burman language which has two distinctly recognisable and mutually unintelligible dialects. The greatest concentration of ethnic Thangmi and speakers of the language are in these two districts.

Thangmi most probably occupies a genetic position somewhere between the Kiranti or ‘Rai’ group of languages spoken in the east of Nepal, and the Newar language as spoken in Dolakhâ bazâr and around the Kathmandu valley. The Thangmi language exhibits certain grammatical features reminiscent of the Kiranti languages (Turin 1998), but has a lexicon more closely allied to Newar (Turin 2004). A point worthy of note is that the Thangmi feel next to no affinity to the Rai-Kiranti peoples living to their east, but talk rather of cultural, social and linguistic associations with the Newar of Dolakhâ and the Kathmandu valley beyond.

There is also a Thangmi community in north-eastern India, largely concentrated in and around Darjeeling, which is the product of an emigration earlier this century from high-altitude villages in Dolakhâ. According to the Ethnologue of the Summer Institute of Linguistics (Grimes 1978), there is also a Thangmi-speaking population in Tibet, although I was unable to verify this interesting proposition on a recent trip to Tibet (summer 2005).

The morphophonological regularities which are attested throughout the Thangmi language, or within a defined grammatical category, are the topic of this short article. While the actual realisations of specific morphemes are analysed in the my forthcoming grammar of Thangmi (Turin, forthcoming), they are discussed here only if their morphophonological forms are conditioned by factors which appear to be widespread throughout the Thangmi language. In line with established convention, morphemes and allomorphs are represented between morpheme brackets, as in <\text{-si}> (REF). Such a form is considered to be the underlying representation which may then undergo environmentally conditioned modifications. A phonetic form is represented in square brackets, as in [\text{si}], and a phonologically correct representation is italicised with no brackets, as in \text{si}. 


2. REMNANTS OF A LIQUID-NASAL ALTERNATION. Thangmi displays the remnants of what may be a defunct liquid-nasal alternation. Unlike Yamphu, which still attests an alternation of liquid initials in suffixes and auxiliary verbs (Rutgers 1998: 40), Thangmi retains a mere handful of examples of a system which may once have been more productive. The four instances of liquid-nasal variation attested in modern spoken Thangmi show an alternation between the voiced, apico-alveolar approximant /l/ [l] and the voiced, retroflex nasal continuant /ŋ/ [ŋ], as shown below:

<lyuf ~ liŋ ~ ṇŋif> stone, rock
<kili ~ kiŋi> faeces, excrement, shit
<lukumbasya ~ ŋukumbasya> behind, back
<lore ~ ɵnoŋŋe> jackal

While the alternation of /l/ and /ŋ/ is most commonly heard in the forms shown above, older monolingual Thangmi speakers use /l/ and /ŋ/ interchangeably in scores of native Thangmi words. In particular, popular alternations include <lu ~ ṇu> ‘later, after’ and <lumsa ~ ŋumsa> ‘to sink into water’ (both Sindhupâlcok dialect). These alternates are rejected by younger speakers.

3. ASSIMILATION. Verb stems and nouns that end in a voiced, velar nasal [ŋ] are morphophonologically ‘weak’. This weakness entails that under certain conditions, the segment does not retain its regular phonological identity but assimilates to the segments that follow, bringing about a regular alternation in the verb stem or nominal final. Before a short, mid-open, unrounded front vowel /e/ [ɛ], a voiced, velar nasal final is subject to regressive assimilation for place of articulation. The result is a palatalised /ny/ [ŋ], as in the following five examples:

\textit{wany-ŋ-du} \quad \text{they’re coming up from below}
[waŋŋeŋdu]
\textit{<wany-ŋ-du>}
\text{come from below - pas - npt}

\textit{dany-ŋ-no} \quad \text{they sought}
[daŋŋeŋno]
\textit{<dany-ŋ-no>}
\text{seek - pas - 3 \rightarrow 3/pt}
4. The morphophonology of intervocalic approximants. When followed by a vowel-initial verbal agreement suffix, Thangmi open-stem verbs are realised with an intervocalic glide, either /h/, /y/ or /w/, an example of which is amiy-Ø-an (sleep-sas-3s/pt) ‘he/she/it slept’, from amis-sa ‘to sleep’. The rules governing each vowel cluster combination are presented alongside illustrative examples below. The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with a short, open, unrounded, front vowel [a] is as follows:

\[
\Sigma /a/ \rightarrow \left\{ \begin{array}{c}
\Sigma /ah/ \\
\Sigma /ay/ 
\end{array} \right\}
\]

\[
\Sigma /a/ \rightarrow \left\{ \begin{array}{c}
\Sigma /ah/ \\
\Sigma /ay/ 
\end{array} \right\}
\]

This assimilation is represented by the following rule:

\[
\Sigma /\eta/ \rightarrow \Sigma /ny/ \quad / \quad _/e/
\]

\[
\Sigma /\eta/ \rightarrow \Sigma /ny/ \quad / \quad _/e/
\]
For the rule
\[
\Sigma /a/ \rightarrow \Sigma /ah/ / _/a/
\]

examples include:

\textit{thah-an} \quad \text{he/she/it became}
[\textit{th\"afian}]
\langle \text{thah-\O-an} \rangle
\text{be-sAS-3S/PT}

\textit{cawah-an} \quad \text{he/she/it walked}
[\textit{tsawafian}]
\langle \text{cawa-\O-an} \rangle
\text{walk-sAS-3S/PT}

For the rule
\[
\Sigma /a/ \rightarrow \Sigma /ah/ / _/o/
\]

examples include:

\textit{yah-o!} \quad \text{say it!}
[\textit{nafio}]
\langle \text{i-a-o} \rangle
\text{say-s\rightarrow3/IMP}

\textit{tortah-o!} \quad \text{leave it!}
[\textit{tor\textsuperscript{t}fio}]
\langle \text{torta-o} \rangle
\text{leave-s\rightarrow3/IMP}

For the rule
\[
\Sigma /a/ \rightarrow \Sigma /ah/ / _/u/
\]
examples include:

ηah-u-n-un η I said
[ŋaʃiunun] <ŋa-u-n-un> say-3P-1s→3-1s→3/PT
cyah-u-no he/she/it ate
[tsjafun] <cyu-O-u-no> eat-sas-3P-3→3/PT

For the rule

Σ /a/ → Σ /ay/ _/e/

examples include:

ŋay-eŋ-du they say
[ŋaʃeŋd] <ŋa-eŋ-du> say-pas-npt
usyay-eŋ-an he/she/it danced
[uʃjaʃeŋan] <usya-eŋ-an> dance-pas-3S/PT

For the rule

Σ /a/ → Σ /ay/ _/i/

examples include:

ra-i-n we came
[raʃin] <ra-i-n> come.from.level-1pps-PT
\textit{thay-i-du} \quad \text{we are} \\
[\text{\textipa{tʰajidu}}] \\
<\text{tha-i-du}> \\
\text{be-1PS-PT} \\

The rule governing a \textit{vowel-initial verbal agreement suffix following an open-stem verb ending with a short, mid-open, unrounded front vowel [e]} is as follows:

\[
\begin{align*}
\Sigma /e/ & \rightarrow \\
& \begin{cases} 
\Sigma /ey/ & \{_/a/ \} \\
\Sigma /eh/ & \{_/u/ \} \\
\Sigma /ew/ & \{_/o/ \} 
\end{cases}
\end{align*}
\]

For the rule
\[
\Sigma /e/ \rightarrow \Sigma /ey/ \quad / \quad_/a/
\]

an example is:

\textit{ikhey-an} \quad \text{it crowed} \\
[\text{\textipa{ikʰɛjan}}] \\
<\text{ikhe-Ø-an}> \\
crow-\text{SAS-3S/PT} \\

For the rule
\[
\Sigma /e/ \rightarrow \Sigma /ey/ \quad / \quad_/e/
\]
an example is:

\( \eta y-e\eta-to-le \) having ground
[\( \eta je\eta-tole \)]
<\( \eta-e\eta-to-le >
grind-pAS-TPP-PCL

For the rule
\[
\Sigma /e/ \rightarrow \Sigma /ey/ \quad / \quad _{/i/}
\]
an example is:

\( \eta y-i-n \) you/he/they beat us
[\( \eta ejin \)]
<\( \eta-e-i-n >
beat-1pPS-PT

For the rule
\[
\Sigma /e/ \rightarrow \Sigma /eh/ \quad / \quad _{/u/}
\]
an example is:

\( ko\grave{e}h-u-du \) he/she/it cuts
[\( ko\grave{e}fi\acute{u}du \)]
<\( ko\grave{e}-\emptyset-u-du >
cut-SAS-3P-NPT

For the rule
\[
\Sigma /e/ \rightarrow \Sigma /ew/ \quad / \quad _{/o/}
\]
an example is:

\( se-w-o! \) taste it!
[\( \acute{s}e\acute{w}o \)]
<\( se-o >
taste-s\rightarrow 3/IMP
The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with a short, unrounded, high front vowel [i] is shown below:

\[
\Sigma /i/ \rightarrow \left\{ \begin{array}{c}
\Sigma /iy/ \\
/ \Sigma /i/ & \{ /a/ \\
& /e/ \\
& /i/ \\
& /o/ \\
\end{array} \right. \\
\Sigma /ih \sim iy/ & \{ /u/ \}
\right\}
\]

For the rule

\[
\Sigma /i/ \rightarrow \Sigma /iy/ / / / _/a/
\]

an example is:

\textit{amiy-an} he/she/it slept
[amijan]
<ami-Ø-an>
sleep-sAS-3S/PT

For the rule

\[
\Sigma /i/ \rightarrow \Sigma /iy/ / / _/e/
\]

an example is:

\textit{piy-en-no} they gave
[pijëno]
<pi-en-no>
give-pAS-3→3/PT

For the rule

\[
\Sigma /i/ \rightarrow \Sigma /iy/ / / _/i/
\]
an example is:

\textit{ariy-i-n} \quad \text{we were afraid}  \\
\{arijín\} \quad \text{be.afraid-1PS-PT}

For the rule

\[ \Sigma /i/ \rightarrow \Sigma /iy/ \quad / \quad _{/o/} \]

an example is:

\textit{ciy-o!} \quad \text{throw it away!}  \\
\{tsijo\} \quad \text{throw.away-s} \rightarrow 3/\text{IMP}

The glides /ih/ and /iy/ exist in free variation, and are both equally attested in open-stem verb forms in allegro Thangmi speech. Both /ih/ and /iy/ are attested in the two main dialect areas and are used by Thangmi speakers of all ages.

For the rule

\[ \Sigma /i/ \rightarrow \Sigma /ih \sim iy/ \quad / \quad _{/u/} \]

Examples include:

\textit{nih-u-n-uŋ \sim niy-u-n-uŋ} \quad \text{I saw}  \\
\{nifuñuŋ \sim nijunuŋ\} \quad \text{see-3P-1s} \rightarrow 3-1s \rightarrow 3/\text{PT}

\textit{pih-∅-u-no \sim piy-∅-u-no} \quad \text{he/she/it gave}  \\
\{pifuno \sim pijuno\} \quad \text{give-sAS-3P-3} \rightarrow 3/\text{PT}

\textit{pīu-no uŋ} \quad \text{I gave}  \\
\text{pīu-no uŋ} \quad \text{he/she/it}  \\
\text{pīu-no uŋ} \quad \text{give-sAS-3P-3} \rightarrow 3/\text{PT}
The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with a short, mid-closed, rounded, back vowel [o] is shown on the following page:

\[\Sigma /o/ \rightarrow \left\{ \begin{array}{ll}
\Sigma /oy/ & \left\{ \begin{array}{l}
_/e/
\end{array} \right.
\vspace{1cm}
\Sigma /oh/ & \left\{ \begin{array}{l}
_/o/
\end{array} \right.
\vspace{1cm}
\Sigma /oh/ & \left\{ \begin{array}{l}
_/u/
\end{array} \right.
\vspace{1cm}
\Sigma /ow/ & \left\{ \begin{array}{l}
_/a/
\end{array} \right.
\end{array} \right.\]

For the rule
\[\Sigma /o/ \rightarrow \Sigma /oy/ / _{/e/}\]

an example is:

\textit{yoy-en-no} \hspace{1cm} \text{they looked at [something]}
[\textit{joje\-no}]
<\textit{yo-en-no}>
\text{look.at-pAS-3\rightarrow3/PT}

For the rule
\[\Sigma /o/ \rightarrow \Sigma /oh/ / _{/i/}\]

an example is:

\textit{poy-i-n} \hspace{1cm} \text{you/he/they chased us}
[\textit{pojin}]
<\textit{po-i-n}>
\text{chase-1PPS-PT}

For the rule
\[\Sigma /o/ \rightarrow \Sigma /oh/ / _{/o/}\]
The morphophonology of Thangmi

an example is:

toh-o! dig!
[toh-o]
<to-o>
dig-s → 3/IMP

For the rule

\[ \Sigma /o/ \rightarrow \Sigma /oh/ \quad / \quad _/u/ \]

an example is:

yoh-u-du he/she/it looks at [something]
[jofiudu]
<yoh-o-u-du> look-at-sas-3p-npt

For the rule

\[ \Sigma /o/ \rightarrow \Sigma /ow/ \quad / \quad _/a/ \]

an example is:

mow-an he/she/it survived
[mow-an]
<mo-o-an> survive-sas-3s/pt

The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with a short, closed, rounded high back vowel [u] is:

\[ \Sigma /u/ \rightarrow \left\{ \begin{array}{c}
\Sigma /uy/ \quad \left\{ \begin{array}{c}
_/e/
_/i/
\end{array} \right. \\
\Sigma /uw/ \quad \left\{ \begin{array}{c}
_/a/
_/o/
\end{array} \right. \\
\Sigma /uh/ \quad \left\{ _/u/ \right. 
\end{array} \right. \]
For the rule
\[ \sum /u/ \rightarrow \sum /uy/ \]
\[ \sum /u/ \rightarrow \sum /ue/ \]

an example is:
\textit{cabuy-eŋ-du} \hspace{1cm} \textit{they carry}
\text{[tsabujɛŋdu]}
\text{<cabu-eŋ-du>}
\text{carry-pAS-NPT}

For the rule
\[ \sum /u/ \rightarrow \sum /uy/ \]
\[ \sum /u/ \rightarrow \sum /ui/ \]

an example is:
\textit{nuy-i-n} \hspace{1cm} \textit{we laughed}
\text{[nujin]}
\text{<nu-i-n>}
\text{laugh-1PPS-PT}

For the rule
\[ \sum /u/ \rightarrow \sum /uw/ \]
\[ \sum /u/ \rightarrow \sum /ua/ \]

an example is:
\textit{yuw-an} \hspace{1cm} \textit{he/she/it came from above}
\text{[juwan]}
\text{<ju-Ø-an>}
\text{come.from.above-sAS-3S/PT}

For the rule
\[ \sum /u/ \rightarrow \sum /uw/ \]
\[ \sum /u/ \rightarrow \sum /uo/ \]
an example is:

\textit{chyuw-o!} \hspace{1cm} \text{tie it up!}
[tsʰjuwo]
<chyu-o>
tie-s$\rightarrow$3/IMP

For the rule

\[
\Sigma /u/ \rightarrow \Sigma /uh/ / _/u/
\]

an example is:

\textit{dapuh-u-du} \hspace{1cm} \text{he/she/it spies}
[dapuɦuɗu]
<dpu-Ø-u-du>
spy-SAS-3P-NPT

Verb stems ending in a diphthong also take an intervocalic glide when followed by a vowel-initial verbal agreement suffix. The examples I have collected are represented by the rules below. The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with the diphthong /ài/ is as follows:

\[
\Sigma /āi/ \rightarrow \left\{ \right. \\
\{ /a/ \} \\
\{ /e/ \} \\
\{ /i/ \} \\
\{ /o/ \} \\
\{ /u/ \} \\
\left. \right\}
\]

Examples include:

\textit{māiy-an} \hspace{1cm} \text{he/she/it must [preterite tense]}
[maɪjan]
<māi-Ø-an>
must-SAS-3S/PT
The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with the diphthong /ei/ is as follows:

$$\Sigma /ei/ \rightarrow \begin{cases} \Sigma /eiy/ \{ /a/ \} \\ \Sigma /eiy/ \{ /u/ \} \end{cases}$$

Examples include:

- *kheiy-an* it spilled
  
  [kʰeɪjan]
  
  <kheɪ-O-an>
  
  spill-sAS-3s/PT

- *kheiy-u-no* he/she/it poured
  
  [kʰeɪjuno]
  
  <kheɪ-O-u-no>
  
  pour-sAS-3p-3→3/PT
The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with the diphthong /ui/ is as follows:

$$\Sigma /ui/ \rightarrow \Sigma /uiy/ \quad /\_\_\_\_\_\_\_a/$$

an example of which is:

nuuiy-an he/she/it laughed
[nuijan]
<nu-i-Ø-an>
laugh-SAS-3S/PT

The rule governing a vowel-initial verbal agreement suffix following an open-stem verb ending with the diphthong /ei/ is as follows:

$$\Sigma /ou/ \rightarrow \left\{ \begin{array}{l} \Sigma /ouw/ \quad \{ \_\_\_\_\_\_\_a/ \} \\ \Sigma /ouy/ \quad \{ \_\_\_\_\_\_\_i/ \} \\ \Sigma /ouh/ \quad \{ \_\_\_\_\_\_\_u/ \} \end{array} \right\}$$

Examples include:

aghyouw-an he/she/it cried out
[agˈjʊwan]
<aghyou-Ø-an>
cry.out-SAS-3S/PT

urouy-i-n you/he/they called us
[urʊʃɪn]
<urou-i-n>
call-1PPS-PT
Younger Thangmi speakers of the Dolakhā dialect with increasing fluency in Nepali sometimes disregard the morphophonology of open verb stems when the initial of the following verbal agreement suffix is the same vowel as the verb stem. In such cases, younger speakers lengthen the vowel of the verb stem, as shown in the examples below:

*urouh*-u-du  
he/she/it calls  
[urɔ统领u]  
<urou-Ø-u-du>  
call-SAS-3P-NPT

*tha-an*  
he/she/it became  
[ʈʰa:]n rather than [ʈʰaʃi:n]  
<tha-Ø-an>  
be-SAS-3S/PT

*ne-ey-to-le*  
having ground  
[neɲeɬo] rather than [neʃeŋtop]  
<ne-eŋ-to-le>  
grind-PAS-TPP-PCL

*ari-i-n*  
we were afraid  
[arɪn] rather than [ariʃi:n]  
<ari-i-n>  
be.afraid-1pPS-PT

*to-o!*  
dig!  
[toɬ] rather than [toʃiːo]  
<to-o>  
dig-s→3/IMP

*∂apuh-u-du*  
he/she/it spies  
[∂apu统领u] rather than [∂apu统领u]  
<∂apu-Ø-u-du>  
spy-SAS-3P-NPT

Thangmi speakers from the village of Piskar in Sindhupālcok district insert a glottal stop in the place of a glide. This intervocalic hiatus prevents diphthongisation. The phenomenon of a hiatus is not attested elsewhere in Sindhupālcok, and is also rejected by speakers of the Dolakhā dialect of Thangmi. The following three examples demonstrate this glottalisation:
**5. Syncope.** Syncope is internal deletion involving the omission of sounds from within a word. In Thangmi, vowel syncope is a feature of both the Dolakhā and Sindhupālcok dialects when a verb stem has the following structure:

\[ C \, V \, /t/ \, V \]

In such instances, as shown in the examples below, the first vowel may be syncopated. While both vowel syncope and vowel retention are attested, the rate of omission increases with connected or flowing natural speech.\(^1\)

\[ \begin{align*}
\text{dorok-an} & \sim \text{drok-an} & \text{he/she/it ran} \\
[dɔɾəkan \sim dɾəkan] & <\text{dorok-Ø-an}> \\
\text{run-SAS-3S/PT} & \\
\text{serek-an} & \sim \text{srek-an} & \text{he/she/it got up} \\
[ʃəɾəkan \sim ʃɾəkan] & <\text{serek-Ø-an}> \\
\text{arise-SAS-3S/PT} & \\
\end{align*} \]

---

\(^1\) The same is true in English, in which some cases of syncope are conventions which speed up or simplify speech patterns, as in [səkriːtri] rather than [ˈsɛkrɪtri] ‘secretary’.
6. ABBREVIATIONS.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>agent (of a transitive verb)</td>
</tr>
<tr>
<td>ABL</td>
<td>ablatiave</td>
</tr>
<tr>
<td>ADH</td>
<td>adhortative</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
</tr>
<tr>
<td>CLF</td>
<td>non-human numeral classifier</td>
</tr>
<tr>
<td>CON</td>
<td>continuous background activity suffix</td>
</tr>
<tr>
<td>DIM</td>
<td>diminutive</td>
</tr>
<tr>
<td>ERG</td>
<td>ergative</td>
</tr>
<tr>
<td>FEM</td>
<td>feminine, female gender</td>
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<td>FOC</td>
<td>focus particle</td>
</tr>
<tr>
<td>(G)</td>
<td>glide</td>
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<tr>
<td>GEN</td>
<td>genitive</td>
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<tr>
<td>IMP</td>
<td>imperative</td>
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<td>individuative suffix</td>
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<td>instrumental</td>
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<tr>
<td>IPP</td>
<td>intr. preterite participle</td>
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<td>LOC</td>
<td>locative</td>
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<td>MALE</td>
<td>masculine, male gender</td>
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<td>NEG</td>
<td>negative</td>
</tr>
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<td>NPS</td>
<td>neg. participial suffix</td>
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<tr>
<td>NPT</td>
<td>non-preterite</td>
</tr>
<tr>
<td>OPT</td>
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<td>p</td>
<td>plural</td>
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<td>P</td>
<td>patient (of a transitive verb)</td>
</tr>
<tr>
<td>PCL</td>
<td>participial</td>
</tr>
<tr>
<td>PERM</td>
<td>permissive</td>
</tr>
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<td>perfect gerund</td>
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<tr>
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<td>&lt;...&gt;</td>
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<td>~</td>
<td>direction of a transitive relationship</td>
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<td>first person</td>
</tr>
<tr>
<td>2</td>
<td>second person</td>
</tr>
<tr>
<td>3</td>
<td>third person</td>
</tr>
<tr>
<td>Σ</td>
<td>stem</td>
</tr>
</tbody>
</table>

7. REFERENCES.


