

PHONOLOGICAL FEATURES OF LIMOS KALINGA,
WITH COMMENTS ON AFFECTED SPEECH

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0. Introduction

It is the purpose of this paper to present some of the phonological features of Limos Kalinga¹ and to comment on the affected speech of some more sophisticated speakers of this dialect.

Of particular interest to students of comparative Philippine linguistics is the *o* phoneme (Section 3.2), which is the reflex in this dialect of Kalinga of the high central proto-vowel **e*. This proto-vowel appears in many other Philippine languages as a high central unrounded *ɨ*. For example the *o* in Limos Kalinga *qadálom* 'deep' is a high central vowel in a number of Philippine languages such as Bontoc *qa'dakim* and Batak *qadakim* (Reid 1971:68). The *o* phoneme also occurs in the other Kalinga dialects of Guinaang and Mallango (Gieser 1958, Grayden 1975). Also of interest to comparative scholars would be the phonemic status of the mid front vowel *e*, which is lacking in the other two dialects of Kalinga. The different distribution of *k* and *q* from that described for Guinaang and Mallango should also provide interesting material for comparative linguistics.

Of more interest to students of sociolinguistics would be section 10, where some native-speaker reactions to several allophonic variations of phonemes of this dialect are presented.

1. The Syllable

A syllable consists of an obligatory peak preceded and optionally followed by a margin. Vowel phonemes (V) fill the peak slot of a syllable and consonants (C) occur at margins. A margin preceding a peak is called a syllable coda. Onset, peak, and coda slots can be filled only by single segmental phonemes. The peak slot, however, can be filled by a vowel plus the suprasegmental phoneme of length. Phonetically complex phoneme variants may occur in the onset slot. On the basis of nonsuspect phonemes, then, only two syllable patterns are possible: CV and CVC.

1.1 Interpretation of Suspect Phones and Sequences.

In accordance with the nonsuspect syllable patterns, the high vocoids [i] and [u] are interpreted as: (1) vowels *i* and *u* when they occur as syllable peak, and (2) consonants *y* and *w* when they occur in onset or coda slots. Examples: *qakit* 'few', *qadu* 'many', *dáya* 'south', 'upstream', *gáwa* 'middle', *tangqoy* 'lift', *labaw* 'above'.

When an open unstressed syllable whose peak slot is filled by a high vocoid precedes a syllable with an identical high vocoid in the onset slot, the peak of the first syllable is hardly distinguishable in rapid speech. In slow deliberate speech, however, such a

sequence can easily be distinguished as two syllables. The sequences [-i.i-] and [-u.u-], therefore, are interpreted as *i.y* and *u.w* (period indicates syllable boundary) in accordance with the nonsuspect syllable patterns. Examples: *siyam* 'nine', *buwang* 'stomach'.

When the initial unstressed syllable of a word has a glottal stop *q* as onset and a nasal as coda, the peak of that syllable is often lost in rapid speech and the nasal becomes syllabic. The sequence [qN] is interpreted as *qVN* since in slow, or deliberate, speech the vowel is clearly distinguishable. Example: *qinta* 'Let us (dual) go'.

All vowels may carry length. Long vowels are interpreted as one complex phonemic unit consisting of the segmental vowel and the suprasegmental phoneme of length, which is symbolized here by an acute (´) accent. Examples: *bálat* 'banana', *qútot* 'rat', *bílog* 'strong', *bélak* 'burn', *góled* 'pimple'. This interpretation also conforms to the nonsuspect CV patterns.

All consonants may be lengthened. Long consonants occur only word medially between two syllable peaks and are interpreted as geminate phonemes in accordance with the nonsuspect syllable patterns. The first member of a geminate cluster, then, is the coda of one syllable and the second member, the onset of the following syllable. Long consonants contrast with nonlengthened consonants (Section 3.1).

2. The Phoneme

The Limos dialect of Kalinga has 19 segmental phonemes, one more than in Guinaang and Mailango Kalinga (Gieser 1958, Grayden 1975). The phoneme is the minimal phonological unit and is the filler of slots in a syllable (Pike 1967:302-6). Phonemes are divided into two classes, consonants and vowels, on the basis of their distribution within the syllable (Section 1). No phoneme is a member of both classes.

2.1 Consonants. The glottal stop is distinct from all other consonants on the basis of its limited distribution. It has not been found to occur as syllable coda, except in geminate clusters with certain morphophonemic changes. For example, with certain types of reduplication as in *manqiqqíbil* 'He is crying and crying'. The other consonants include two series of stops, voiced and voiceless, one series of nasals, a grooved fricative, a lateral, and a pair of semivowels. The consonants are displayed in Table 1.

	bilabial	alveolar	palatal	velar	glottal
vcl.	p	t		k	q
stops vcd.	b	d		g	
nasals	m	n		ng	
fricative			s		
lateral			l		
semivowels	w		y		

Table 1. Limos Kalinga consonant phonemes.

2.2 Vowels. Vowels are distinguished from consonants by their syllabicity. There are five vowel phonemes (Table 2) differentiated by front, central, or back position and by height, i.e. high or low. These, of course, do not represent absolute tongue positions; rather they indicate relative tongue positions in contrast to the other phonemes and are useful points of reference for describing variants of certain phonemes.

	front	central	back
high	i		u
low	e	a	o

Table 2. Limos Kalinga vowel phonemes.

3. Contrast of Phonemes

3.1 Consonants. The following sets of words illustrate the phonemic contrast of consonants in onset and coda positions.

- p* and *b*: *pákaw* 'handle', *bákaw* 'corn'; *gotop* 'roof', *gonob* 'shutter'.
b and *w*: *qábak* 'defeat', *qáwak* 'lower back'; *qigab* 'greedy', *qigaw* 'place'.
t and *d*: *takod* 'rattan tie', *dakol* 'big'; *qáwit* 'load', *qáwid* 'behind'.
t and *s*: *tíliw* 'fight', *síli* 'pepper'; *yápit* 'thin', *lápís* 'pencil'.
k and *g*: *kudud* 'lobster', *gudos* 'step'; *pilak* 'money', *bilag* 'dry'.
n and *ng*: *lúnud* 'vanish', *lúngug* 'hollow'; *qoðon* 'care for a child', *godong* 'straight'.
l and *y*: *dála* 'blood', *dáya* 'down stream'; *qápal* 'jealousy', *qápay* 'why'.
s and *y*: *básat* 'across', *báyad* 'payment'; *wakas* 'dawn', *lakay* 'old man'.

Since glottal stop rarely occurs as coda of a syllable, *k* and *q* can be shown to contrast only in onset position, for example: *sakit* 'sickness', *saqit* 'thorn'; *kalis* 'to pasture carabao', *qalis* 'transfer'.

Long consonants contrast with nonlengthened consonants as shown in the following examples:

- pp* and *p*: *qappuk* 'dust from pounded rice', *qapu* 'grandparent'.
tt and *t*: *qatteng* 'excrement', *qata* 'eye'.
kk and *k*: *qakkat* 'lift', *qakít* 'small', 'few'.
bb and *b*: *qabbak* 'monkey', *qaba* 'carry a child on the back'.
dd and *d*: *geddang* 'hide of animal', *badang* 'bolo knife'.
gg and *g*: *gaggawa* 'middle', *qagaw* 'grab'.
ss and *s*: *kussad* 'kick', *kasal* 'wedding'.
mm and *m*: *qamma* 'careful', *kama* 'like'.
nn and *n*: *bannug* 'tired', *danum* 'water'.
ngng and *ng*: *bongngog* 'deaf', *pangu* 'firstborn'.
ll and *l*: *ballang* 'dry rice paddy', *bulang* 'kind of palm'.
ww and *w*: *wawwaw* 'disoriented', *dawat* 'throw away'.
yy and *y*: *payyan* 'still, more', *payaw* 'rice paddy'.

3.2 Vowels. The two front vowels *i* and *e* contrast as follows: *qímíng* 'beard', *qémeng* 'smile'; *bílog* 'strong', *bélak* 'burn'. The low front vowel *e* and the low central *a* contrast as in: *bélak* 'burn', *bálat* 'banana'; *bennat* 'stretch', *bannug* 'tired'. The low central vowel *a* contrasts with the low back *o* as in: *baklas* 'side of a mountain', *banglos* 'spoiled', *lason* 'excuse', *losong* 'drown'. The back vowels *o* and *u* contrast as in: *lúpot* 'childless woman', *lúput* 'clothing'; *kolang* 'hook worm', *kulang* 'trunk of a tree'.

Vowels occurring as peak of an open penultimate syllable in a grammatical word may be long. Long and nonlengthened vowels contrast as follows: *í* and *i*, *bílog* 'strong',

bilag 'dry'; *é* and *e*, *bélak* 'burn', *penal* 'plant rice for seedlings'; *á* and *a*, *qáta* 'green', *qata* 'eye'; *ó* and *o*, *góled* 'pimple', *kolop* 'dark'; and *ú* and *u*, *lútung* 'rotten', *husung* 'mortar'.

4. Variation of Phonemes

4.1 Consonants. All stops, *p*, *t*, *k*, *b*, *d*, and *g*, have unreleased allophones in syllable coda position. The phoneme *p* is a voiceless bilabial stop, and *t* is a voiceless alveolar stop. *k* is a voiceless back velar stop. In clusters with other consonants, however, the backing is less pronounced and is often completely absent when *k* occurs in clusters with other stops.

The voiced stops, *b*, *d*, and *g*, are produced at the bilabial, alveolar, and velar points of articulation. Each of the voiced stops has a variant occurring in syllable onset under certain conditions. Due to difficulty, however, in eliciting these variants it has not been possible as yet to define those conditions. It appears that these allophones may be linked to one of the higher level phonological features, since it has been almost impossible to hear them in isolated words. Thus far, in non-elicited speech, a labialized allophone of *b* has been observed before *a* and *o*, as in *qabbak* [qabb^wak] 'monkey'. A palatalized variant of *d* has been observed before *i*, *a*, and *o*, as in *taddok* [tadd^yok] 'dance', and a fricative released allophone of *g*, before *a*, as in *bigat* [big^hat] 'tomorrow'. Another relevant observation seems to be that these allophones have been noted only in stressed syllables and in conjunction with relatively low intonation.

The grooved fricative *s* has two variants. An alveolar grooved fricative [s^h] occurs as syllable onset, while a palatalized grooved fricative [s^y] occurs as syllable coda or in geminate clusters. A subphonemic glottal fricative [h] is sometimes substituted for *s* in conversational speech. This phenomenon has been observed only in a few words: *sítu* [sa:tu] or [ha:tu] 'here', *sákon* [sa:kon] or [ha:kon] 'I'.

The nasal series, *m*, *n*, and *ng*, is voiced and produced at the bilabial, alveolar, and back velar points of articulation. No variants of these phonemes have been observed.

These are three variants of the lateral phoneme *l*. One variant is a voiced alveolar lateral [l], and another is a voiced palatal lateral [l^y], produced by extending the tongue tip slightly between the teeth and touching it against the upper teeth while at the same time relaxing the tongue blade and allowing the escaping stream of air to pass over the sides of the tongue. This variant corresponds to central resonant oral [ɭ], described by Gieser (1958) for Guinaang Kalinga. The third allophone of *l* is a retroflexed vocoid [ɭ], which fluctuates with a voiced retroflexed lateral [ɭ]. No final statement of the distribution of these three allophones is possible yet; however, a tentative statement is presented below.

The retroflexed allophones [ɭ] ~ [ɭ] have been found only in a limited group of words, all of which are composed of reduplicated syllables whose peak slot is filled by *o*. Examples are: *molmol* [mormor] ~ [mɔlmɔl] 'one dog overpowering another', *bolbol* [borbor] ~ [bɔlbɔl] 'big frog', *golgol* [gorgor] ~ [gɔlgɔl] 'cutting meat with a bolo using sawing motion', *ngolngol* [ngorngor] ~ [ngɔlngɔl] 'growl', *doldol* [dordor] ~ [dɔldɔl] 'to thresh rice by pounding'. When any of these words gets a suffix, the *l* becomes a regular alveolar lateral. Examples of this are: *doldolam* 'you thresh the rice by pounding it', and *molmolam* 'overpower him'.

The alveolar lateral [l] occurs in the following environments:

- a. Utterance initially, *labaw* 'top'.
- b. In geminate clusters, or as a reduplication of the syllable-final member of such a cluster, *dulla* 'wrap', *nanduldulla* 'always wrapping'.
- c. Following consonants made at the alveolar point of articulation, *nanláti* 'rusted'.
- d. Following *g*, except in the onset of a reduplicated syllable ending in *g*, *kaghus* [kaghus] 'slippery', but *naloglog* [naɔglog] 'washing hair'.
- e. Adjacent to a front vowel or separated from a front vowel by an intervening consonant, *ageled* 'rainy season', *bilog* 'strong', *iklang* 'decreased health'.

The palatal lateral allophone [ɲ] occurs in all other environments.

The first problem related to this statement is that there are exceptions. The words, *búla* 'ball', *pála* 'shovel', *talak* 'truck', and *talangka* 'fence', are all pronounced with the alveolar lateral [l]. All examples occur before *a*, but then many examples could be cited where the palatal lateral [ɲ] is found in this environment as well. On further investigation it was discovered that at least three of these examples were words borrowed from other languages and that could explain the irregularity. A more perplexing problem arose when a few pairs of words were discovered which showed [l] and [ɲ] to be in contrast. *dáлом* [da:ɔlom] 'inside', and *qáлом* [qa:ɔlom] 'to court'; *qálak* [qa:ɔlak] 'irrigation', and *qálak* [qa:ɔlak] 'liquor'. This problem remains unresolved and needs further investigation. Both *qáлом* 'to court' and *qálak* 'liquor' may be recent borrowings from Ilocano *arak* and *arem*, which have not been adapted to the Limos Kalinga phonemic system. It may also be that Limos Kalinga is in a state of transition between having one lateral phoneme and two. The weight of the evidence, such as the fact that the alveolar lateral always occurs utterance intially while the palatal lateral never does, remains in favor of regarding the two phones as one phoneme. The fact that native speakers of Limos Kalinga often pronounce [l] instead of [ɲ] in affected speech or in deliberate speech for the benefit of outsiders is evidence that the native speaker also views them as one phoneme. In the practical orthography only one symbol will be used for the lateral consonant.

The two semivowels are voiced and occur at bilabial and palatal points of articulation respectively. The bilabial semivowel *w* is a high close back rounded vocoid and has no marked variants. The palatal semivowel *y* has two allophones: [ɥ] is a high close front unrounded vocoid and occurs at the syllable coda, [ɣ] is a high close front unrounded vocoid produced with varying degrees of local friction. This allophone occurs in syllable onset position and sometimes fluctuates with the other allophone [y], especially in affected speech.

4.2 Vowels. The high front vowel phoneme *i* is a high close unrounded vocoid [i] in most environments, but varies to the high open unrounded vocoid [ɪ] when contiguous to the back velars *k* and *ng*. When *i* precedes the voiceless alveolar stop *t* or the lateral phoneme *l* in closed syllables, it is produced with a slight high open unrounded off-glide [i'] which varies in degree from one speaker to another.

The low front vowel *e* has two allophones. The mid open unrounded [e] occurs in closed syllables which are not closed by a voiced stop or an alveolar nasal. It also occurs in open syllables when contiguous to the velar nasal *ng* or when followed by another syllable whose peak slot is filled by [e]. Elsewhere the mid close unrounded [e] occurs.

The central and back vowels *a*, *o*, and *u* are drawn forward in the mouth when they precede the palatal lateral [ɲ] in closed syllables. The vowel *a* moves from central un-

rounded [a] to front unrounded [æ], *o* moves from back rounded [o] to central rounded [ə], and *u* moves from back rounded [u] to central rounded [ʊ].

A mid open unrounded [ʌ] allophone of the vowel *a* occurs in open unstressed syllables or in syllables closed by a voiced stop or a semivowel. In all other environments the low open unrounded allophone [a] is found.

A mid back close rounded [o] allophone of the vowel *o* is found in open syllables or in syllables closed by a voiced stop or semivowel. In other environments the production of the *o* phoneme varies between the low back close rounded [ɔ] and the mid back close rounded [o].

The production of the vowel *u* varies in closed syllables from just above the mid back close rounded [o], but below high back open rounded [u], to just above high back open rounded [u] but below high back close rounded [u]. The higher variety is heard more often before voiced stops and semivowels. In open non-final syllables the high back close rounded [u] is always heard, while in open final syllables fluctuation is heard between high back close rounded [u] and mid back close rounded [o].

5. The Stress Group

A stress group is the phonological unit within which syllables are distributed. At the nucleus of each stress group is a stressed syllable which is optionally followed by one or two unstressed syllables and may be preceded by from one to three unstressed syllables at the pre-nuclear margin. No stress group has been found to date containing more than five syllables (Section 9). A slight rise in pitch and an increase in volume are features of the stress group nucleus. Stress group juncture consists of a very slight pause.

6. The Pause Group

Stress groups are distributed within the pause group. Pause groups consisting of from one to six stress groups have been observed. The nucleus of a pause group is a stress group with heavier stress than that which is found at the margins of the pause group. The nucleus has been found to occur on the last or second to the last stress group of the pause group. An accompanying primary intonation contour is a feature of the pause group.² This intonation contour characteristically exhibits a slight rise or fall at the juncture of each pause group in the material analyzed to date. The pause marking pause group juncture is more pronounced than that which occurs at the juncture of stress groups.

7. The Breath Group

A breath group is the phonological unit within which one or more pause groups are distributed. Silence, breath intake, and relatively low pitch mark the beginning of a breath group. The juncture at the end of a breath group seems to be associated with a characteristic final intonation pattern. In the data analyzed this intonation pattern exhibited a pronounced rise and fall in pitch at the end of the breath group. Increased volume fading into silence accompanied the rise and fall in pitch. Features on a higher level have been found to override lower level phonological features.

8. Comments on a Practical Orthography

The phonemic transcription will be used as the orthographic representation in all cases except that of the glottal stop. Glottal stop will not be represented when occurring utterance initially or between vowels, since there is no contrast between the occurrence of glottal stop and its absence in these positions. A glottal stop following another consonant will be represented by a hyphen, and a geminate glottal will be represented by a single hyphen between two vowels. When *n* and *g* combine in a consonant cluster they will be separated by a hyphen to distinguish them from the single phoneme *ng*.

Although *r* is not a phoneme in 'pure' Limos Kalinga, this symbol will be used in the orthography to write the many borrowed words where *r* is pronounced by most speakers. Where past convention, in writing proper names, has used symbols other than those needed to represent the phonemes of Limos Kalinga these are retained. For example: *r* in Pedro, *c* in Balutoc, and *j* in Juan.

9. Text

The following phonological features are indicated in the text which appears below: stress-group juncture (#) and stress relating to the stress group ('), pause-group juncture (/) and stress relating to the pause group (''), breath-group juncture (//), and intonation contours. This text is a portion of a tape-recording of a story dictated by Mr. Balutoc. An interlinear translation is given with the text followed by a free translation below.

1. "Sada / "Juan #ka'nu / kan "Pedro / 'mansúnod # "da //
 There-are Juan it-is-said and Pedro siblings they
2. 'Sadat # "duwan # man'súnod / a'di da #'kanu #
 Those two siblings not they it-is-said
 ma"tákong / tá man'súbo # 'súbog "da / a'di da #kanu #
 get-along since always-quarrel they not they it-is-said
 manlolo'nok # si bo"loy / a'di da #ka'nu # man'kak # ka'kan /
 enter the house not they it-is-said eat-together
 si bo"loy // 3. Ut # "si #'Juan/ un "pangu / ing'gaw #
 in-the house Now-then Juan the eldest had
 ka'nu # ud ga'yom # 'na / un ba"liwon // 4. A'dikad #
 it-is-said a friend his a lowlander Furthermore
 'sadit # ga'yom # ud 'Juan / ta' lóna napi'ya #ka'nu #
 this friend of Juan truly good it-is-said
 dit mang"wa na # kan 'Juan / si'ya #kanu "pay / dit
 the doing his to Juan same it-is-said also the

ko'on #ud 'Juan #kan si'ya // 5. Ma'ngan da #ka'nu #
 action of Juan to him Feed they it-is-said
 "kad / mansin'núbu # 'da / nu maba"lin // 6. Ut "da /
 even one-another they if possible And they
 kanka'náyon #ka'nu # un man'ába # 'ábat # "da / ta
 always it-is-said meet-together they since
 man-ga'yom # "da // 7. Na'piya #ka'nu # dit ko'on # "da //
 be-friends they Good it is-said the action their

9.1 Free Translation

1. Once upon a time there were two brothers named Juan and Pedro. 2. They say that these two brothers did not get along well together, since they were always quarreling. They didn't enter or eat together in each other's homes. 3. Now, they say that the older brother Juan had a friend who was a lowlander. 4. This friend of Juan's, they say, was always doing good things for Juan and they say that Juan did the same for him. 5. They say that they would even feed each other if possible. 6. It is reported that they were always getting together because they were friends. 7. People say that what they did was good.

10. Observations on Affected Speech in This Dialect.

It appears that Ilocano, which is the commercial language in northern Luzon, and English, which is a language of instruction in the Philippine educational system, both enjoy considerable prestige among the speakers of this dialect, especially among literates. The phonemic system presented in this paper is that of 'pure' Limos Kalinga. However, since there are many speakers of this dialect who have learned English in the schools and Ilocano through contacts with Ilocano speakers, these languages have had influence, especially on the speech of the more sophisticated, i.e. those who have been educated and have traveled. These effects are discussed below in the context of the reactions of some sophisticated native speakers to phonological features in their language which are not found in English or Ilocano.

That Ilocano is considered a prestige language by most of the Limos Kalinga people is demonstrated by their practice of speaking Ilocano with outsiders or at formal gatherings. Many speak Ilocano with an outsider even when they are told that he understands their language better than Ilocano. The prestige enjoyed by English is demonstrated by the willingness of people to speak English even when they know only a very little.

Probably the one feature, more than any other, that distinguishes the Kalinga language from neighboring languages is the unique production of the voiced lateral *l* in certain environments. The 'Kalinga *l*' described in this paper as a voiced palatal lateral (Section 4.1), is very close to being a vocoid. In fact, Gieser (1958) describes it as a central resonant oral. It is often mistaken by non-Kalingas for the semivowel *y*.

In Asibanglan, educated speakers of Limos Kalinga have often been heard not to pronounce this allophone of *l* at all, but rather to pronounce the regular alveolar lateral

in all environments, especially when speaking to non-Kalingas. One reason for this may be their desire to try to regularize their speech in order to make it easier for outsiders to understand. Another explanation may be the frequently heard comment that their language cannot be written because there is no symbol for their *l* in the alphabet. They may be changing the pronunciation in order, in their opinion, to make it easier to write their language.

When words containing *l* or *r* are borrowed from other languages, many people, especially the more sophisticated, do not make the phonological changes one would expect for these words to conform to the Limos phonemic system. This may be due to some of the same reasons given above for not pronouncing the palatal lateral allophone of *l* in certain situations.

Another observation concerning the affected speech of educated speakers of this dialect is that they can rarely be persuaded to repeat what are probably normal allophonic variants of the voiced stop phonemes. This is true especially in the case of isolated words, even though these allophones are heard often in the natural conversational style of most speakers. When these variations have been observed in conversation and pointed out to educated informants, various nonlinguistic explanations have been given for them.

For example, one explanation was that the person speaking was old and unable to pronounce clearly; another was that the speaker had some teeth missing and that affected his speech. On another occasion when the speaker was a young child with no missing teeth the explanation was that the child had buck-teeth. When these variants were pronounced in isolated words for an educated informant, he identified them as features of another Kalinga dialect.

These variants may be vestiges of allophones that still persist in other Kalinga dialects as well as neighboring mountain languages. Apparently, the Kalingas in the Limos area have had longer and more frequent contact with Ilocanos and other lowland groups whose languages do not have these variants. Possibly the Limos people have been adjusting their speech over many years in order that it would conform more closely to the lowland languages, which seem to enjoy greater prestige both among the Limos people and most other Filipinos. Another hypothesis, suggested also in section 4.1, is that these variants of *b*, *d*, and *g* are conditioned by higher level phonological features not present in elicited speech. A third hypothesis is that there is a formal, literary, or recitation, style that does not include these variants, and that this style is used in elicited speech.

NOTES

¹This dialect of Kalinga is spoken by approximately 5,300 people living in eight barrios along the lower Saltan river in the municipality of Pinokpok. Most of the people living in this area claim to have originated from the area around the barrio of Limos and refer to themselves as 'the Limos Line'. The dialect is also referred to by many as the Limos dialect. This is only one of several dialects of Kalinga spoken in the province of Kalinga-Apayao located in the northern part of the island of Luzon in the Republic of the Philippines.

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²Obviously further analysis is needed on the higher level phonological features, especially intonation.

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