

## **THE MAITHILI VOWELS**

**Sunil Kumar Jha**  
**SMBM Campus, Rajbiraj**  
**Tribhuvan University**

### **Introduction**

This paper<sup>1</sup> puts forward the description, classification and phonemic analysis of the vowels and diphthongs of a variety of the 'standard' dialect of Maithili.<sup>2</sup> It also includes brief discussions on the vowel clusters in Maithili. The main conclusions are summarised at the end of this paper.

Vowels can be defined in terms of both phonetics and phonology. Phonetically, they are sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible frication; the air escapes evenly over the centre of the tongue. If the air escapes solely through the mouth, the vowels are said to be oral. If, on the other hand, some air is simultaneously released through the nose, the vowels are said to be nasal. From a phonological point of view, vowels are those units which function as the focus of syllables.

Vowel segments are a great deal more difficult to describe than consonant segments. Almost all consonant segments are made with a stricture involving contact of relatively large areas of active as well as passive articulators. Since the contacts involved in the production of any given consonant can be ascertained fairly easily, such contacts usually provide a convenient basis for consonant description. But vowel segments are usually made with 'open approximation' of the articulators. For this reason, they involve little contact, sometimes none at all. They are therefore, literally, less 'tangible' than consonants.

Articulatorily, vowels may be described and classified in terms of such main factors as: (1) vertical tongue position (high-low), (2) horizontal tongue position (front-back), (3) lip position (rounded-unrounded), and (4) velic closure (oral-nasal).

## **Description, Classification and phonemic Analysis of the Maithili Vowels**

Maithili has sixteen phonologically distinctive vowel segments- i.e. eight oral vowels /i e æ a ə ɔ o u/ eight nasal vowels: /ĩ ẽ ã ă ǝ ɔ̃ ũ/, and two phonologically distinctive oral diphthongs /di/ and /du/. The length of vowels is not phonologically distinctive in Maithili, although the Devnagari script in which this language is now written does provide some separate graphemes for 'long' and 'short' vowels. At the level of surface phonology, however, Maithili has instances of long and short vowels. Hence, variations in the length of vowels, whether oral or nasal, are completely allophonic in Maithili: the long allophonic variants occur mainly in stressed syllables, while the short ones occur in unstressed syllables. This section classifies and describes the Maithili vowels and also presents their phonemic analysis.

**The Oral Vowels in Maithili:** The Maithili oral vowels /i e æ a o u/ may be classified into the following three main categories: (1) front vowels, (2) central vowels, and (3) back vowels.

**The Front Vowels in Maithili:** Maithili has three front vowels /i/, /e/ and /æ/. The Maithili /i/ may be described as a high front unrounded oral vowel. It has two major allophonic variants at the surface phonological level - i.e., [i:] and [i]. In the production of the Maithili [i:], the front of the tongue is raised to a height slightly below and behind the close front position; the lips are spread; the soft palate is in a raised position; the tongue is tense, with the side rims making a firm contact with the upper molars. [i], on the other hand, is the short allophonic variant of the Maithili /i/, and it is pronounced with a part of the tongue positioned nearer to centre than to front and raised just above the half-close position; the lips are loosely spread; the soft palate is in a raised position; the tongue is relatively lax, with the side rims making a light contact with the upper molars. Both [i:] and [i] occur in all word positions: initial, medial and final.

The Maithili /e/ may be described as a mid front unrounded oral vowel. In the pronunciation of its long allophonic variant [e:], the front of the tongue is raised almost half-way towards the hard palate; the lips are unrounded; the soft palate is in a raised position; the tongue is fairly tense, the side rims making a contact with the upper molars. [e:] occurs in all word positions. But in pronouncing the short allophonic variant [e], the front of the tongue is raised between the half-open and half-close positions; the lips are loosely spread and are slightly wider apart than for [i]; the soft palate is in a raised position; the tongue is relatively lax, the side rims making a light contact with the upper molars. [e] does not occur word-finally.

The Maithili /æ/ may be described as low front unrounded oral vowel. In pronouncing its long allophonic variant [æ:], the mouth is slightly more open than for [e:]; the front of the tongue is raised just below the half-open

position, with the side rims making a contact with the back upper molars; the lips are neutrally open; the soft palate is in a raised position. [æ:] occurs in all word positions, and there is a tendency to diphthongise it. The short allophonic variant [æ], on the other hand, is drawn towards the central position. In pronouncing [æ], the opening between the jaws is medium; the lips are unrounded; the soft palate is in a raised position; the tongue is somewhat retracted and lax, with the side rims making a very slight contact with the back upper molars. [æ] does not occur word-finally.

The three front vowels in Maithili, /i e æ/, show full phonological opposition in all word positions: initial, medial and final. For example:

Initial		Medial		Final
/is/	'expression of pain'	/git/	song	/ki/ 'what'
/æ:s/	'luxury'	/gæt/	'will sing'	/kæ/ 'vomit'
/'ila/	'bring this'	/pit/	'beat (imp.)'	/Ji/ 'yes'
/'ela/	'came'	/pet/	'stomach'	/je/ 'which; that'
/'æna/	'looking glass'	/jæb/	'will go'	/gæ/ 'cow'
/'ena/	'like this'	/jeb/	'pocket'	/ge/ 'hi! (feminine)'

Of all these three front vowels in Maithili, /æ/ occur the least frequently. The short allophonic variants of these front vowels occur only in unstressed syllables. [i] occurs in all word positions; [e] and [æ], on the other hand, occur only word initially and word medially. For example:

Initial		Medial		Final
[ij]'la:s]	'court'	[bi'na:]	'without'	[ 'ra:ti] 'night'
[e'kð:r]	'his/her'	[ke'na:]	'how'	_____
[æ'la:]	'(he) came'	[pæ'ta:]	'(he) will get'	_____

The Central Vowels in Maithili: Maithili has two central vowels: /a/ and /ə/. The Maithili /a/ may be described as a low central unrounded oral vowel. In the articulation of its long allophonic variant [a:], there is a considerable separation of the jaws and the lips are neutrally open; the soft palate is in a raised position; a part of the tongue between the centre and back is in the open position, and there is no contact between the rims of the tongue and the upper molars. The Maithili [a:] is really a central vowel, and not as open as the English (RP) /a:/. The Maithili [a:] occurs in all word positions-initial, medial and final. The short allophonic variant [a], on the other hand, is slightly higher than [a:]. In the pronunciation of [a], the opening between the jaws is narrower than in the case of the long [a:]; and a part of the tongue between the centre and back is raised up. In articulating both [a:] and [a], the tongue is rather lax, and no diphthongising tendency is noticeable. [a] does not occur word-finally.

The Maithili /ə/ may be described as a mid central unrounded oral vowel.

Its long allophonic variant [ɔ:] has the quality of a central vowel with neutral lip position. [ɔ:] occurs in all word positions. The short allophonic variant [ɔ], on the other hand, has a high frequency of occurrence in unstressed syllables. It is also pronounced with a neutral lip position, raising the tongue between half-open and half-close, and it seems to advance to some extent towards the front, though basically it is also a central vowel. [ɔ], too, occurs in all word-positions.

Both /a/ and /ə/ show full phonological contrast in all word positions: initial, medial and final. For example:

<b>Initial</b>	<b>Medial</b>	<b>Final</b>
/an/ 'bring'	/kal/ 'time: enemy'	/'para/ 'a buffalo calf'
/ən/ 'grain'	/kəl/ 'machine'	/'pəɾə/ 'dig (imp.)'

It should be mentioned /ə/ occurs much more frequently in non-final word positions, and that in the word final position /ə/ occurs mainly in the imperative construction. In the above examples, the long allophonic variants of /a/ and /ə/ occurred. As stated above, these central vowels also have their short allophonic variants, [a] and [ə], both of which occur mainly in unstressed syllables. [a] does not occur word-finally; [ə], on the other hand, occurs in all word positions. For example:

<b>Initial</b>	<b>Medial</b>	<b>Final</b>
[ākɑ:rə] 'shape'	[bɑ'ca:lə] 'eloquent'	<u>          </u>
[ə'mɔ:rə] 'immortal'	[jə'di:] 'if'	[ 'pu:lə] "bridge"

**The Back Vowels in Maithili:** Maithili has three back vowels -/ɔ/, /o/ and /u/. The Maithili /ɔ/ may be described as a low back rounded oral vowel. Its long allophonic variant, [ɔ:], is articulated with medium lip-rounding; the back of the tongue is raised between the half-open and half-close positions; no contact is made between the tongue and the upper molars. [ɔ:] occurs in all word positions. In the articulation of the short allophonic variant, [ɔ], the raising of the tongue, in so far as the height is concerned, is almost the same as in the case of [ɔ:], but the raised part is nearly in the middle of the tongue rather than at its back; the rounding of the lips is a little greater in the case of [ɔ] than in [ɔ:]. [ɔ] does not occur word-finally.

The Maithili /o/ may be described as a mid-back rounded oral vowel. Its long allophonic variant, [o:], is articulated by raising the mid part of the back of the tongue towards the soft palate; the lips are rounded; the soft palate is in a raised position. The short allophonic variant [o] seems to be advanced midway between the back and the central positions. The lips are rounded to a greater extent in the case of [o] than in that of [o:]. In articulating both [o:] and [o], the opening between the jaws is narrow and no contact is made between the tongue and the upper molars. The two variants occur in all word positions.

The Maithili /u/ be described as a high back rounded oral vowel. Its long allophonic variant, [u:], is a back close vowel. It is pronounced with the back of the tongue raised up; the lips tend to be closely rounded; the soft palate is in a raised position; the tongue is rather tense, though no firm contact is made between the tongue and the upper molars. The short allophonic variant, [u], on the other hand, is pronounced with a part of the tongue nearer to the centre than to back raised just above the half-close position; the lips are closely but loosely rounded; the soft palate is in a raised position; the tongue is relatively lax, with no firm contact made between the tongue and the upper molars. Both [u:] and [u] occur in all word positions.

All these three back vowels in Maithili, /ɔ o u/, show full phonological opposition in all word positions: initial, medial and final. For example:

Initial		Medial		Final	
/ɔr <sup>h</sup> /	'out of sight'	/kɔr/	'morsel'	/hɔ/	'whoa!'
/or <sup>h</sup> /	'wrap (imp.)'	/kor/	'edge'	/ho/	'also'
/ot <sup>h</sup> /	'lip'	/b <sup>h</sup> oɟ/	'feast'	/'p <sup>h</sup> ero/	'again'
/ut <sup>h</sup> /	'get up (imp.)'	/bhuj/	'fry (imp.)'	/'p <sup>h</sup> eru/	'turn aside'
/o'sar/	'verandah'	/bhor/	'morning'	/ko'ro/	'bamboo pole'
/u'sar/	'retreat (imp.)'	/bhur/	'hole'	/ko'ru/	'(please) dig'

Of all these three back vowels, /ɔ/ is the least frequent—especially in non-medial positions. The long allophonic variants of /ɔ o u/ occurred in the above examples. But these vowels also have their short allophonic variants, which occur in unstressed syllables. [ɔ] does not occur word finally; [o] and [u], on the other hand, occur in all word positions. For example:

Initial		Medial		Final	
[ɔ'ta:]	'will come'	[kɔ'ra:]	'food given to a dig'		
[o'kɔ:r]	'his/her'	[ko'dari]	'spade'	['to:ro]	'yours too'
[u'sa:sɔ]	'consolation'	[nu'kæ.lɔ]	'hidden'	['mɔ:d <sup>h</sup> u]	'honey'

The High, Mid and Low Vowels in Maithili: Maithili has three degrees of vowel height, which may be termed high, mid and low. The high vowels are /i/ and /u/, and they show full phonological opposition in all word positions: initial, medial and final. For example:

Initial		Medial		Final	
/i'nar/	'well (n)'	/kit/	'fix (imp.)'	/'tari/	'palm juice'
/u'nar/	'unbalanced'	/kut/	'hard cover (e.g. of a book)'	/'taru/	'please fry'

The mid vowels in Maithili, /e ə o/, also show full phonological contrast in all word positions. For example:

Initial	Medial	Final
/e'na/ 'like this'	/'kera/ 'banana'	/hè/ 'hai'
/o'na/ 'like that'	/'kora/ 'lap'	/ho/ 'become'
/e'kə̀r/ 'acre'	/per/ 'tree'	/'mare/ 'many'
/'kə̀r/ 'boast'	/pə̀r/ 'lie down (imp.)'	/'marə̀/ 'beat (imp.)'

The low vowels in Maithili, /æ aɔ/, also show full phonological contrast in all word positions. For example:

Initial	Medial	Final
/æ̀s/ 'luxury'	/pæ̀r/ 'leg'	/bhæ̀/ 'brother'
/as/ 'hope'	/par/ 'across'	/b <sup>h</sup> a/ 'pretention'
/ɔ'ta/ 'will come'	/s r/ 'sky'	/sɔ/ 'hundred'
/a'ta/ 'a kind of fruit'	/sar/ 'wife's brother'	/sa/ 'a musical note'

Based on the above description, the Maithili oral vowels are charted on the 'standard' vowel diagram in Figure 1. It should be mentioned here that these oral vowels have been charted in the diagram presented in Figure 1 on a purely impressionistic basis. The impressions, however, include those of

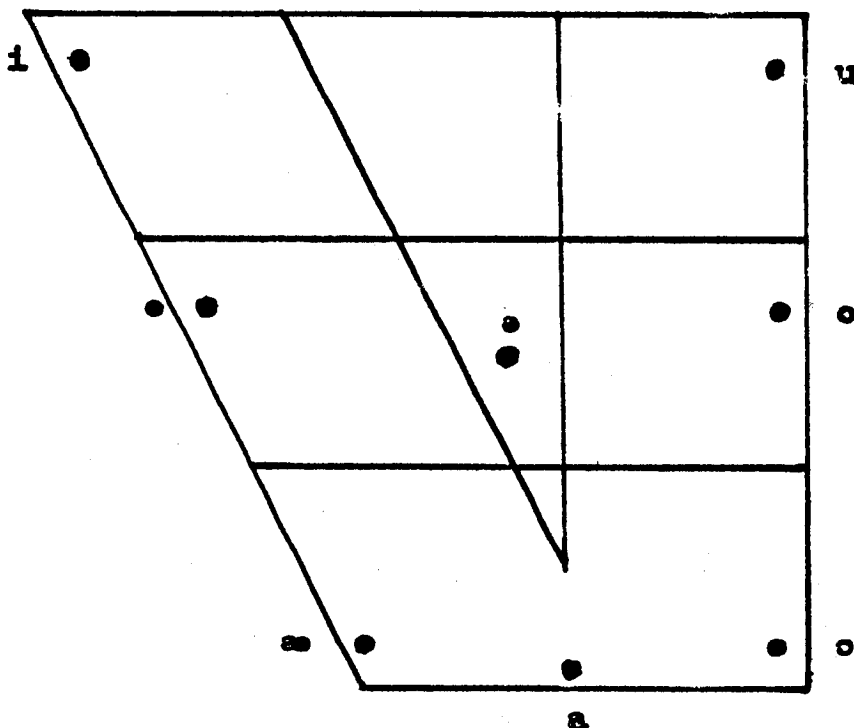


Figure 1: The Maithili oral vowels

other trained phoneticians (e.g. S. Jha, 1941: 40 and 1958: 65; G. Jha, 1974: 58 and 1979: 7; R. Yadav, 1979: 149) as well (also see S.K. Jha, 1984: 87-134, for the acoustic analysis of these vowels as well as for the average frequency values of  $F_1$  and  $F_2$  for these vowels spoken in different contexts and plotted on a number of formant charts). All the eight oral vowels in Maithili and their major allophonic variants are summarized and presented in Figure 2.

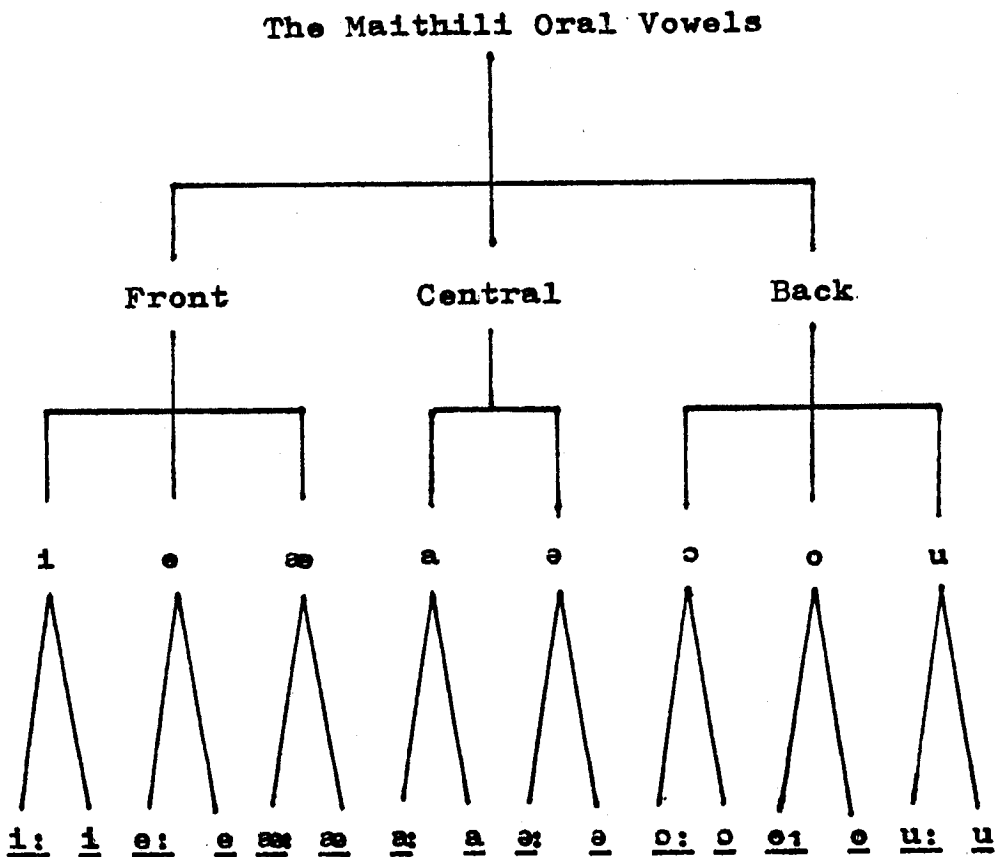


Figure 2: The Maithili oral vowels and their major allophonic variants

**The Nasal Vowels in Maithili:** The term 'nasal' is traditionally used in the phonetic classification of speech sounds on the basis of their manner of articulation. In the production of nasal sounds the velum is lowered and the nasal cavity is thus linked with the vocal tract below it. An airstream from the lungs may then pass through the "nasal port" into the nasal cavity.

Simultaneously, the airstream also enters the oral cavity. Modifications of the airflow by action of the tongue, teeth or lips or both may later give rise to various kinds of nasal sounds. In Maithili, both consonants and vowels may be articulated in this way. In the case of nasal vowels, air escapes through both the nose and the mouth simultaneously. The nasal vowels are transcribed with [̃] above the symbol - e.g., [ĩ], [õ̃], and so on.

Like in many other languages - e.g., French, Portuguese, Hindi and Gujarati - Maithili nasal vowels are opposed to oral vowels. Nasality is therefore an essential identifying feature of the vowel sounds in Maithili. All the eight oral vowels of Maithili have their phonologically distinctive nasal counterparts too - i.e., /ĩ ẽ æ̃ ɔ̃ õ̃ ũ̃. These nasal vowels are produced almost exactly like their oral counterparts, with the exception that during their production the soft palate is in a lowered position so that air escapes evenly through the nose.

The nasal vowels of some languages, like Slavic and French, for example, are said (e.g. see Lightner 1970; Ruhlen 1973, for more details) to be realizations of underlying vowel plus nasal (VN) sequences. Unlike Slavic and French, the nasal vowel in Maithili are truly phonemic. That is, in current Maithili, there are plenty of words where nasal vowels occur in non-nasal consonantal environments. Even in the same consonantal contexts they all show full phonological contrasts with their oral counterparts. In other words, whether it be the case of slow, formal or less formal speech, a nasal vowel in Maithili occurring in environments of non-nasal consonants exists as a phonologically distinct nasal vowel, and not as sequence of vowel plus nasal (for historical details of the nasal vowels of some modern Indo-Aryan languages, including Maithili, see, for example, Chatterji 1926/1970, 1960; S. Jha 1958). This does not, however, mean that the phonetic nasalization of vowels does not occur in Maithili. As discussed at some length in Jha (1984), a derived level non-nasal vowel in Maithili, is phonetically nasalized at the surface level, whenever the vowel in question occurs in the vicinity of any nasal consonants.

The oral and nasal vowels in Maithili show phonological opposition in all word positions: initial, medial and final. For example:

#### Initial Position

/i'ta/	'only this'	/ə'hi/	'only this (place/thing)'
/i'ta/	'brick'	/ə'hi/	'only you'
/ek/	'one'	/ot/	'will come'
/ɛr/	'heel'	/ɔt/	'boil (imp.)'
/æ/	'expression of contempt'	/ó/	'he/she'
/æ̃/	'what'	/õ̃/	'a groaning sound'



/a<sup>h</sup>/ 'eight'  
/ā/ 'courage'

/u<sup>h</sup>/ 'awake'; 'get up'  
/ū/ 'camel'

**Medial position**

/čhit/ 'scatter'  
/č<sup>h</sup>it/ 'garment dyed with spots'  
/b<sup>h</sup>ēt/ 'see'; 'get in touch'  
/b<sup>h</sup>ē/ 'a kind of water plant'  
/b<sup>h</sup>æt/ 'will become'  
/b<sup>h</sup>ǣt/ 'kind; type'  
/bas/ 'shelter; dwelling place'  
/bās/ 'bamboo'

/'kəṭgəṛ/ 'commendable; adequate'  
/'kəṭgəṛ/ 'thorny'  
/gət/ 'will sing'  
/gət/ '(cattle) urine'  
/g<sup>h</sup>ot/ 'mix (imp.)'  
/g<sup>h</sup>ōt/ 'swallow'  
/sūr/ 'brave (person)'  
/sūr<sup>h</sup>/ '(elephant's) trunk'

**Final Position**

/kə'hi/ '(I/you) say'  
/kə'hī/ '(what) if'  
/me/ 'May'  
/mē/ 'in'  
/sæ/ 'thus'; 'that way'  
/sǣ/ 'husband'

/hə/ 'oh!'  
/hə/ 'yes'  
/b<sup>h</sup>ə/ 'price'  
/b<sup>h</sup>ō/ 'eyebrow'  
/kə'so/ 'get tightened (imp.)'  
/kə'sō/ 'small hole from which  
water leaks in the field'  
/kə'hu/ '(you) say'  
/kə'hū/ 'somewhere'; 'in case'

Of the eight nasal vowels in Maithili, /ĩ ð õ ũ/ have both long and short allophonic variants: the long variants occur mainly in stressed syllables; the short ones occur in unstressed syllables. The short [ĩ] and [ũ] occur in all word positions: initial, medial and final. For example:

Initial	Medial	Final
[ĩ jə: tə] 'light'	[hĩ sa: bə] 'account'	[bā: hi] 'arm'
[ũ'ka:] 'the high one'	[sũ'riani:] 'a hamlet of brewers'	[kəh'ld:hũ] '(I) said'

But the short [ə] occurs mainly word initially and word medially, whereas [õ] occurs primarily in the word-medial position. For example:

Initial	Medial
[ə'hı:] 'only you'	[kə'hı:] 'what) if'
	[tõti'æ:l] 'seedling becoming apparent'

The remaining four nasal vowels, i.e., /ẽ æ ǣ ǫ/, occur primarily in stressed syllables, and they all have only one variant each. All the Maithili nasal vowels and their major allophonic variants are summarized and presented in Figure 3 below:

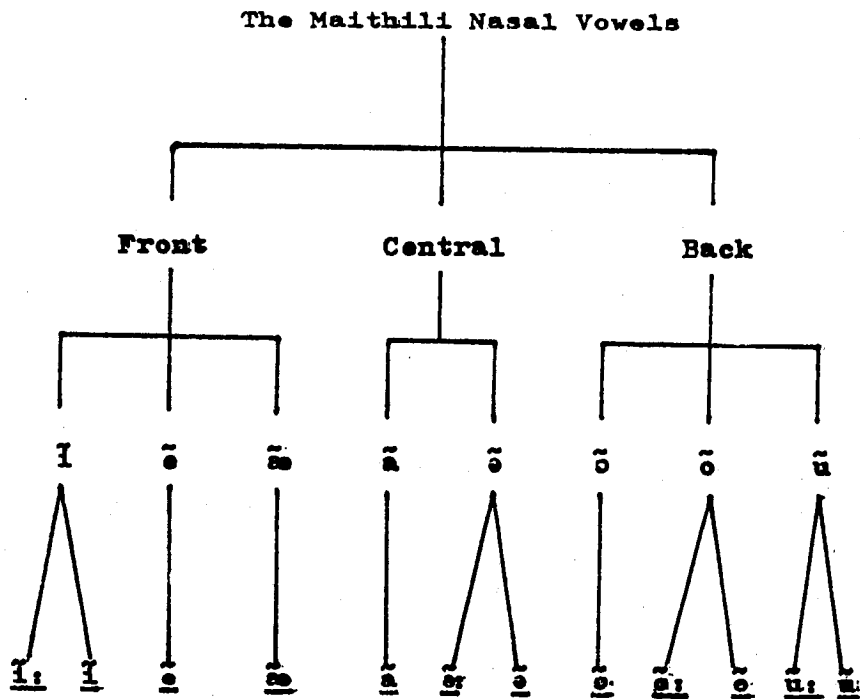


Figure 3: The Maithili nasal vowels and their major allophonic variants.

The Diphthongs in Maithili: Like many other languages, Maithili has some vowel segments whose quality is not constant. That is to say, it changes continually while the vowel is being uttered. The technical term for a vowel of continually changing quality is a 'diphthong'. Maithili has two such diphthongs, /ði/ and /ðu/, and both of them are phonologically distinctive. They can be described and identified in terms of their beginning and ending

points, which form a glide within one and the same syllable. Both Maithili diphthongs have their first element in the region of [ə] and their second element is either in the region of [i] or in that of [u]. Most of the stress associated with these diphthongs is concentrated on the first element, whereas the second element is only lightly sounded, although it is usually longer than the first element. The two diphthongs may briefly be described in the following way:

For the production of the Maithili /əi/, the mouth remains in a position between half-close and half-open. The tongue glide begins at a central position, and then moves in the direction of the Maithili /i/, with a slight closing movement of the lower jaw. The lips change from a neutral to a loosely spread position; the soft palate is in a raised position, and as a result air escapes only through the oral cavity.

For the production of the Maithili /əu/, the mouth position remains between half close and half open. The tongue glide begins at a central position, and then moves in the direction of the Maithili /u/, with a slight closing movement of the lower jaw. The lips are neutral for the first element, i.e., for [ə], but they have a tendency to round on the second element, [u]. During the production of this diphthong, the soft palate remains in a raised position, and, as a result, air escapes only through the oral cavity.

The two Maithili diphthongs, /əi/ and /əu/, show full phonological contrast in all word positions. For example:

#### Initial

/ʔəik<sup>h</sup>en/ 'at this time'  
/ʔəuk<sup>h</sup>ən/ 'even at this time'

#### Medial

/kəil/ 'of a white colour'  
/kəu<sup>h</sup>/ 'small mill'

#### Final

/kəhə ɪ'kəi/ 'someone said (something to a third person)'  
/kəhə ɪ'kəu/ 'someone said (something to a second person)'

The acoustic analysis of these diphthongs is found in Jha (1984: 117-131).

#### Vowel Clusters in Maithili

As pointed out earlier a diphthong is usually defined as a sequence of two perceptually different vowel sounds within one and the same syllable. But a sequence of two vowels which occupy two syllables is not a diphthong in the real sense of the term. In Maithili, we have several examples of two as well as of even three vowel clusters.

Two-vowel Clusters in Maithili: Given below are a few examples of those two vowel clusters that occur in Maithili in the word-initial position:

ði-	/ʔdiṯ <sup>h</sup> am/	'at this place'	ðe-	/ʔðeta/	'(he) will come'
ðu-	/ʔðuta/	'will come'	ai-	/ʔai/	'today'
oi-	/ʔoiṯ <sup>h</sup> am/	'there'; 'at that place'			

similarly, the two-vowel clusters that occur in the word-medial position in Maithili are, for example:

-ie-	/ʔsieta/	'will get sewn'	-iæ-	/si'æ/	'stitched/sewn'
-ið-	/ʔpier /	'yellow'	-ia	/ʔdieð/	'kin'
-ic-	/di'cr/	husband's younger brother	-ði-	/ʔbðis/	'sit (imp.)'
-ðe-	/bð'es/	'age'	-ðo-	/kðrbð'ota/	'will get done'
-ðu-	/ʔj <sup>h</sup> ðul/	'confused noise'	-ai-	/ʔbail/	'crop'
-æ-	/ʔpael/	'the act of getting'	-ao-	/paot/	'will get'
-au-	/ʔbaul/	'sand'	-oi-	/ʔkoila/	'coal'
-oe-	/d <sup>h</sup> o'eta/	'will get washed'	-oa-	/po'ar/	'straw'
-ui-	/pu'ir/	'fill up'	-ue-	/k <sup>h</sup> u'eta/	'will make eat'
-uæ-	/ju'æ/	'matured'	-ua-	/ju'ari/	'gambler'

Likewise, the two-vowel clusters that occur in the word-final position in Maithili are, for example:

-ið	/ʔdið/	'(please) give'	-iæ	/ki'æ/	'why'
-ia	/ʔpia/	'lover'; 'husband'	-io	/ʔsio/	'get stitched/sewn)
-iu	/ʔpiu/	'(please) drink'	-ði	/ʔlði/	'paste'
-ða	/lð'a/	'go and bring'	-ðu	/çðu/	'jaw'
-ai	/kð'sai/	'butcher'	-æ	/ʔmae/	'mother'
-au	/ʔbau/	'a form of address used for a boy'	-oi	/ʔloi/	'a lump of moist flour'
-oa	/ʔd <sup>h</sup> oa/	'whitened'	-ui	/ʔsui/	'needle'
-ua	/ʔjua/	'gambling'			

All the above mentioned two-vowel clusters in Maithili are summarized and presented in Table 1 below:

**Table 1: Two-vowel Clusters in Maithili**

V <sub>2</sub>	i	e	æ	ɔ		c	o	u
V <sub>1</sub>								
i		+	+	+	+	+	+	+
e								
æ								
ɔ	+	+						+
	+	+		+			+	+
c								
o	+	+		+				
u	+	+	+	+				

**Three-vowel Clusters in Maithili:** Maithili does not have any three-vowel clusters word initially, but it does have such clusters word medially and word finally. The word-medial three-vowel clusters in Maithili are mainly /-iau-/ and /-ɔuæ/. For example:

-iau- /pi'auj/ 'onion'                      -ɔuæ- /bɔu'æɫ/ 'lost'  
           /di'aul/ '(being) given'                      /hɔu'æɫ/ 'in a slumbering state'

The word-final three-vowel clusters in Maithili are mainly three: /iɔu/, /oai/ and /-ɔua/. For example:

-iɔu /'diɔu/ '(please) give'                      -iau /bi'au/ 'give birth'  
           /'liɔu/ '(please) take'                      /ʃi'au/ 'make someone live'  
 -ɔua /'kɔua/ 'crow'  
           /'nɔua/ 'barber'

**Summary of Conclusions**

To sum up, there are eight oral vowels in Maithili: /i e æ ɔ o u/. These are classified and described in Table 2 below:

**Table 2: Classification and description of the oral vowels in Maithili**

Classification	Nos	Vowels	Description
1. Front Vowels	1	/i/	high front unrounded
	2	/e/	mid front unrounded
	3	/æ/	low front unrounded
2. Central Vowels	4	/a/	low central unrounded
	5	/ə/	mid central unrounded
	6	/ɔ/	low back rounded
3. Back Vowels	7	/o/	mid back rounded
	8	/u/	high back rounded

All these oral vowels have their phonologically distinctive nasal counterparts as well: /ĩ ē æ ã ð ɔ̃ õ ũ/. In addition, Maithili also has two phonologically distinctive oral diphthongs, /di/ and /du/. Thus, Maithili has a total of 18 phonologically distinctive vowel segments, i.e., 8 oral vowels, 8 nasal vowels, and 2 oral diphthongs.

The length of vowels is not phonologically distinctive in Maithili. This language nevertheless uses both long and short allophonic variants of its 8 oral vowels. The long allophonic variants, i.e. [i: e: æ: a: ə:ɔ: o: u:], occur mainly in stressed syllables; the short ones, i.e., [i e æ a ə ə o u], occur in unstressed syllables. Of the 8 nasal vowels in Maithili, /ĩ ē æ ã ɔ̃/ have only one variant each, which all occur primarily in stressed environments. The remaining four nasal vowels, /ĩ ð õ ũ/, have both the long [ĩ: ð̃: õ̃: ũ:] and the short [ĩ ð õ ũ] allophonic variants. The former occurs in stressed syllables while the latter occurs only in unstressed environments. A final summary of the Maithili oral and nasal vowels as well as of their major allophonic variants is given in Figure 4.

As for the Maithili diphthongs, /di/ and /du/, most of the stress associated with both of them is always concentrated on the first element, while the second element is only lightly sounded. Maithili also has plenty of examples of two-vowel clusters occurring in all positions. There are only a few examples of three-vowel clusters, and such three-vowel clusters occur only in the word-medial and word final positions.



### Notes

1. This paper forms part of the second chapter of Jha's (1984) doctoral dissertation. The author is grateful to both Professor marcel A.A. Tatham and Dr. Jacques Durand of the Department of Language and Linguistics at Essex University (England) for their detailed criticisms, comments and suggestions on various versions of this study which have led to improvements in both style and in content.
2. For more information in connection with this variety of the standard dialect of Maithili, see Jha (1984:26-30).

### References

- Chatterji, S.K. 1926/1970. *The Origin and Development of the Bengali Language*. 2 Vols. London: George Allen and Unwin.
- \_\_\_\_\_, 1960. *Indo-Aryan and Hindi*. 2nd. Ed. Ahmedabad (India): Gujarat Vernacular society,
- Jha, G. 1974. *Maithili Bhasaka Vikas* (The Development of the Maithili Language). Patna: Bihar Hindi Granth Academy (in Hindi).
- \_\_\_\_\_, 1979. *Uccatara Maithili Vyakarana* (A Higher Maithili Grammar). Patna: Maithili Academy (in Maithili).
- Jha, S. 1941. "Maithili Phonetics". *Indian Linguistics*, 8 (1940-1944), pp. 39-70.
- \_\_\_\_\_, 1958. *The Formation of the Maithili Language*. London: Louzac and Co.
- Jha, S.K. 1984. "A Study of Some Phonetic and Phonological Aspects of Maithili". Unpublished Ph. D. Thesis, University of Essex (England).
- Lightner, T.M. 1970. "Why and How Does Vowel Nasalization Take Place?" *Papers in Linguistics*, 2, pp. 197-226.
- Ruhlen, M. 1973. "Nasal Vowels". *Stanford University Working papers on Language Universals*, 12, pp. 1-36.
- Yadav, R. 1979. "Maithili Phonetics and Phonology". Unpublished Ph. D. Thesis, University of Kansas (U.S.A.).