

3. INVENTORY OF PHONEMES

Three classes of phonemes may be defined as consonants, vowels, and neutral. Consonants have three linear and three horizontal distinctions, vowels three linear and two horizontal, and the two neutral phonemes contrast both linearly and horizontally. Table 60 specifies the nature of these distinctions.

TABLE 60
AGARABI PHONEMES

Consonants			
	Bilabial	Alveolar	Velar
Oral			
Voiceless	<i>p</i>	<i>t</i>	<i>k</i>
Voiced	<i>w</i>	<i>y</i>	
Nasals	<i>m</i>	<i>n</i>	
Vowels			
	Front	Central	Back
High	<i>i</i>		<i>u</i>
Low	<i>e</i>	<i>a</i>	<i>o</i>
Neutral			
Glottal			
<i>q</i>			
Liquid			
<i>r</i>			

3.1. *Description of Phonemes*

Consonant phonemes divide into two contrastive classes, nasal and oral. Oral consonants further divide into voiceless and voiced. Voiceless oral consonants contrast at bilabial, alveolar, and velar points of articulation. Allophones of voiceless oral consonants occur as follows: aspirated stops, [pʰ], [tʰ], and [kʰ], occur initially and following complex vowel-nasal or vowel-glottal nuclei; fricatives, [p], [s], and [x], occur between oral vowels and may fluctuate with stop allophones. (The alveolar stop and fricative allophones freely fluctuate initially, the bilabial allophones occasionally fluctuate initially, and the velar allophones rarely fluctuate initially, but an unaspirated allophone [k] may occasionally fluctuate with the fricative between oral vowels.) An alveolar affricate allophone [ts] fluctuates occasionally with the aspirated stop initially.

Voiced oral consonants and nasal consonants contrast only at bilabial and alveolar points of articulation. Allophones of voiced oral consonants (*w* and *y*) occur as follows. Voiced stop allophones [b] and [d] occur initially and following complex syllable nuclei. These fluctuate with labialized stop [bʷ], palatalized stop [dʲ] and semivowels [w] and [y]. Between oral vowels, semivowels [w] and [y] occur, which may be accompanied by greater or lesser degrees of friction. A voiced bilabial fricative [β] with or without labialization may fluctuate with [w] between oral vowels. Nasal phonemes /m/ and /n/ occur without allophonic variations. It should be noted, however, that a velar nasal phone [ŋ] occurs before [k] as the homorganic manifestation of the feature of nasalization.

Vowels /i/, /e/, /u/, and /o/ tend to be open rather than close. The central vowel as described in Section 2.3 is the close [ə] when it occurs singly and the open and long [a:] when it occurs in sequence with itself. Front and back vowels also contrast as to tongue height.

Two neutral phonemes, the liquid, /r/, and glottal, /q/, vary allophonically as follows: The liquid phoneme may be either an alveolar flap [r] or an alveolar trill [r̄]. These seem to fluctuate freely with some speakers using the flap almost exclusively and others using the trill more frequently; still others fluctuate between the two. The glottal stop phoneme may in limited environments occasionally vary to a glottal fricative.

3.2. *Distribution of Phonemes*

Each class of phonemes has a distribution unique to that particular class. Consonant phonemes occur only word or phrase initially and medially as syllable onsets; vowels may occur in all word and phrase positions as the nucleus of the syllable; neutral phonemes occur only word and phrase medially as syllable onsets. The glottal phoneme may occur as part of a complex syllable nucleus word or phrase medially and finally. Nasal con-

sonants may occur medially and finally as manifestations of nasalization and part of a complex syllable nucleus.

Only vowels and voiceless consonants follow a complex nasal-vowel syllable nucleus within the word but all consonants may occur following the nasal-vowel complex across word boundaries. Neutral phonemes do not occur following complex nasal or glottal syllable nuclei.

Up to two vowels may occur as the nucleus of a single syllable and two-syllable nuclei may occur in sequence with an intervening nonvocoid. While all vowels may occur word finally, only the long back vowels and the sequence of two central vowels occur finally in verb stems (i.e., /e/, /o/, and /aa/). All onset vowel combinations have been observed in stem morphemes although some combinations are considerably less frequent than others.

Bee, Darlene, Lorna Luff, and Jean Goddard. 1973. "Notes on Agarabi phonology." In Howard McKaughan (ed.), *The languages of the Eastern family of the East New Guinea Highland stock*, 414-23. *Anthropological Studies in the Eastern Highlands of New Guinea*, 1. Seattle: University of Washington.