

XVIII. Gadsup Phoneme and Toneme Units

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1. INTRODUCTION

The segmental phonemes and the phonemic tones of Gadsup will be described in this chapter.¹

The segmental phonemes each occur with two or more allophones (except the bilabial nasal and glottal stop) which have similar phonetic characteristics and occurrences. The description of the distribution of the phonemes is based upon the four types of syllables observed. The four phonemic tones (two levels, two glides) are described in terms of their contrast and of their distinctive distributional and allophonic characteristics.

The existence of tones was at an early date highlighted to us through the fairly frequent use of 'whistle talk'. In Gadsup whistle talk, not only are the tones conveyed, but also the segmental phonemes of the utterance are articulated.

2. SEGMENTAL PHONEMES

The segmental phonemes of Gadsup consist of nine consonants: *p, t, k, q, b, d, m, n, y*; and six vowels: *i, a, u, e, aa, o*.

¹ This paper was prepared under the auspices of the Summer Institute of Linguistics. The material for it was collected over a period of two years residence at the village of Ommomunta. Much of the detailed checking of this paper was done with the help of two informants, Aupi and Yaduma, both young men of about eighteen years of age. The authors gratefully acknowledge the assistance and encouragement of Howard McKaughan and the editorial help of Alan Pence. The paper first appeared in published form as pp. 1-11 in *Papers in New Guinea Linguistics, No. 5*, Linguistic Circle of Canberra Publication (Series A: Occasional Papers, No. 7) (Australian National University, 1966), and is reissued here by permission.

2.4. Frequency

Frequency of phonemes was determined from a study of field notes comprising approximately 5,926 segments and 1,500 grammatical words. The consonants occur with a slightly higher frequency than the vowels. For example, one of the texts contained 513 consonants and 451 vowels.

Each of the nasals occurs more frequently than any one of the stops or the continuant, respectively, the ratio being at least two to one. The velar consonant /k/ and glottal stop /q/ each occur one third more frequently than each of the bilabials /p/ or /b/ or the continuant /y/; and also occur more frequently (almost one-fourth) than either one of the alveolar phonemes /t/ or /d/. The bilabial stops and the continuant, /p/, /b/, and /y/, are the least frequent of the consonants.

The front vowel /i/ is the most frequent, occurring three times more than each of the back vowels /u/ and /o/, and twice as often as each of the two front vowels /e/ and /aa/ and the central vowel /a/.

3. SUPRASEGMENTAL PHONEMES

Four contrastive tones have been noted in Gadsup: /´/ high, /`/ low, /ˊ/ up-glide, and /ˋ/ down-glide. We shall first indicate the various contrasts, and then proceed to amplify why it appears advisable to analyze the glides as units and not as sequences of two level tonemes. Finally we will state some of the distributional characteristics of the tones.

3.1. Contrast between the Four Tones

A. Contrast between high and low: *mákùni* 'earthquake', *màkùni* 'village'; *bèqú* 'I go', *bèqù* 'I stay.'

B. Contrast between high and up-glide: *yápùmì* 'a grasshopper', *kábàni* 'a frog'; *kátòni* Type of grasshopper, *kònámi* 'a fog or cloud bank'.

C. Contrast between high and down-glide: *ódèmi* 'a small animal', *òdèmi* 'He is abstaining'; *índè* 'I hear', *aàndà* 'trunk of a tree'.

D. Contrast between low and up-glide: *àqnèmi* 'He throws away', *òqèmi* 'spirit'; *àpù* 'ripe', *àpù* 'knot hole in tree'.

E. Contrast between low and down-glide: *ànòni* 'the securing knot for bark skirts', *ànòni* 'obese'; *ààni* 'a path', *aàni* 'the point of . . . '.

F. Contrast between up-glide and down-glide: *ùnaă* 'a bag', *yùnaâ* 'food'; *àkâm* name of a tree, *àkâm* 'his/your ear'.

3.4. *Stress*

Stress is nonphonemic. In analogous environments syllables (A) with *aa*, *e*, or *o* have more stress than those with *a*, *i*, or *u*; (B) with high, rising, or falling tones have more stress than those with low; (C) with a phonetic stop onset have more stress than those with nonstop onset. Combinations of these features lead to varying degrees of noncontrastive stress.

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