## KORKU SYLLABLES AND SYLLABLE STRESS

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The syllable is the unit of stress in Korku. It is assumed that 'stress', though difficult to define, is a feature, or some complex of features, validly and reliably identifiable by any linguist working on Korku as significantly characterising the syllables of that language, and that any complete description of Korku phonology needs some notion very similar to that we refer to as "stress". A Korku syllable is heard as being either "stressed" or "unstressed", and a syllable can be assigned a certain degree of "strength" - there are four degrees represented in "normally stressed" phonological words (PWs) - as a function of its stress relative to the syllables and/or junctures immediately preceding and following it within the PW. A set of rules is offered which derives the strength of a syllable from its consonant and vowel composition and gives the expected stress markings of syllables of any

An implicit - if messy - definition of the syllable along the lines of Trim and O'Connor (J. O'Connor and J. Trim, 'Vowel, Consonant, and Syllable - a Phonological Definition', Word, 1953, 103-22) can be obtained from the data given in this section and the next. The phonological importance of the syllable can be seen throughout the following discussion.

<sup>2&</sup>quot;Strength" - the term "rank" may be preferable in having no confusing connotations - is not a phonetic term; it is a derived construct characterising syllable types distinguished by their consonant-vowel-semivowel shapes. The actual stress of any syllable can be determined given the strength of the syllable type it belongs to, the strengths of the other syllable types tokens of which occur within the same PW, and the relative position of this PW's syllables. A set of rules which characterises every syllable of every Korku PW as either "stressed" or "unstressed" on the basis of this position and strength data is discussed at length in this chapter.

 $<sup>^3</sup>$ In a very few cases, e.g. in the form /kei/, it is not clear whether a syllable - here the ultima - is stressed or not. Where this happens, the decision is made on the basis of considerations of simplicity and utility elsewhere.

162 N.H. ZIDE

given strength in a PW as a function of these strengths and the positions of the syllables with reference to each other and the PW-bounding junctures of the form. Where a word's stress does not fit the predictions of these rules, it is supernormally - or phonemically - stressed on one of its syllables. The phonemic stress is then included in the strength assignment machinery along with the C and V component information - which now recognises syllables of five degrees of strength - and the rules are applied again, and yield results which adequately describe the syllable patterns of all forms of the language previously wrongly characterised.

Syllables are "marked" by application of a set of four rules in a fixed order; and result of the application of the set is a "final marking" consisting of pluses and minuses, these indicating stressed and unstressed syllables respectively (e.g. <+--+>, <-+-+>, <++>).

These symbols do not represent phonemes in any usual sense of that term.

## The Korku Phonemes

Consonants (C): p, b, m, t, d, n, c, j, k, g, N, q, 1, r, R, s.

Semivowels (W): y, w.

Vowels  $(\forall)$ : i, e,  $(\dagger)$ , a, o, u.

Accompaniments (A) are /~/ (nasalisation), // (voiceless aspiration-low tone), // (voiced aspiration-low tone).

"A" have no effect on stress weights and will not be mentioned further in this connection. $^{4}$ 

The symbol  $x^5$  will be used for "syllable" where no further specification as to syllable type is wanted; S indicates a CVC syllable, s a VC syllable; S a closed syllable: either S or s. Z indicates a CV syllable, z a V syllable; Z an open syllable: either Z or z. Phonemic stress is indicated by /'/ over the syllable vowel.  $^6$  X1, X2, ... indicate the

 $<sup>^1/^{\</sup>sim}/$  accompanies both W and V;  $/\_/$  and  $/\_/$  V only. The consonant symbol N represents the velar nasal; the palatal nasal is here written  $\tilde{\gamma}$ ; q represents glottal stop; and R a retroflex flap. b, d and j are preglottalised before consonants in close juncture, and pause. d and t are postalveolar ('retroflex') consonants.

<sup>&</sup>lt;sup>2</sup>'A' are written above and below V and W, e.g.  $/m\tilde{u}d\underline{a}ej/$ ,  $/ipt\underline{i}\tilde{y}aten/$ .

 $<sup>^3</sup>$ Phonemic stress /'/ and the junctures /+,#,=/ can be considered to constitute a fifth subclass of phonemes.

Note, however, that  $/\tilde{y}/$ , but not /y/ occurs as  $C^{wf}$ .

<sup>&</sup>lt;sup>5</sup>To be consistent, X should have been used to represent "any syllable", x for any onset-less syllable (s or z), and X for any onset-possessing syllable (S and Z). I use X instead of X since it is typographically simple and is the only one of these three class indicators at all frequently used.

<sup>&</sup>lt;sup>6</sup>But see also the discussion of ambisyllabic consonants.

first, second, etc., syllables of PW;  $x^n$  the PW-final syllable,  $x^{n-1}$ , its penultimate syllable, etc.,  $X^{i}X^{j}$  indicates any two adjacent syllables. The first consonant (onset) of a syllable is symbolised by  $X^{i}$  (C1), the second (coda),  $X^{i}$  (C2);  $X^{i}$  (V) indicates the vowel (nucleus); each syllable has one and only one vowel. The bar / is used to indicate that the thing indicated is both the symbols the bar separates, thus the symbol C can be defined as  $X^{i}(C2)/X^{j}(C1)$ , i.e. it is ambisyllabic. A PW syllabic formula is indicated by the use of these symbols enclosed in angular brackets < > with hyphens written between syllables, e.g. sort of syllabic formula are bounded by one or another of the three open junctures of Korku: "within-word juncture", /+/, e.g. in /ketej+ketejba/; word-juncture", /#/, e.g. in /dija#anteq/, and "phonological phrase juncture", /=/, e.g. in /=dija#bateq#heqen=/.4 Any phoneme sequence between open junctures is a PW; the stress pattern of any PW is determinable by means of the system to be described here. No further open juncture indications will be written in this section; . all forms to be discussed are PWs unless they are clearly designated as something else; all forms between "/ /-brackets" are PWs, if they contain no medial open junctures.

The syllabification of Korku PWs whose syllables are of the types listed above - we will discuss "ambisyllabic consonants", and other non-basic syllable types in later paragraphs - can be done in only one way, i.e. in a PW of any consonant-vowel composition, there is only one permissible analysis of the phoneme sequence into syllables.<sup>5</sup>

This syllabification can be obtained as follows: (1) count backward from the end of the PW until either a second vowel, or a non-PW-final consonant not immediately preceded by another consonant – whichever of the two comes first – is reached; indicate a syllable boundary at that point (i.e. before the second vowel, or before the second (immediately preceding) consonant); thus, /katkomku/<sup>6</sup> is katkom-ku, /tipiej/<sup>7</sup> is

 $<sup>\</sup>overline{1}$  use  $C^1$  and  $C^2$  for onset and coda, i.e.  $C^2$  does not mean the second consonant of a syllable - the syllable may have only a  $C^2$  - but that it follows the syllable vowel.

<sup>&</sup>lt;sup>2</sup>/ketej+ketejb<u>a</u>/ 'clatters'.

<sup>3/</sup>dija#anteq/ 'his mother'.

 $<sup>^{4}</sup>$ /=dij<u>a</u>#bateq#heqen=/ ' $his\ father\ came'$ .

<sup>&</sup>lt;sup>5</sup>A non-basic syllable type is one which occurs only when accompanied by phonemic stress; "accompaniment" here, means is placed coincident with onset, nucleus, or coda of the syllable.

<sup>&</sup>lt;sup>6</sup>/katk<u>o</u>mku/ *'crabs'* (plural).

<sup>7/</sup>tipiej/ 'tell him (or her)'.

tipi-ej, etc. (2) Continue to move toward the front of the word marking syllable boundaries between all sequences of two vowels and of two consonants; thus, ti-pi-ej, kat-kom-ku. Any sequence of phonemes bounded by hyphens or by a hyphen and an open juncture is a syllable.

Two kinds of ambisyllabicity are distinguished here; they are represented by separate symbols and in part, discussed separately because one must be considered phonemic (this is indicated by a consonant with a (phonemic) stress mark over it (e.g. in /kimihen/2) and referred to as  $\dot{C}$ ; the other by no (necessary) stress mark, and referred to as cc. The two are in complementary distribution within the PW:  $\dot{X}^{CC}$  always occurs as  $\dot{X}^{1}(C2)/\dot{X}^{2}(C1)$ , while  $\dot{C}$  occurs as  $\dot{X}^{1}(C2)/\dot{X}^{1}(C1)$  where  $\dot{X}^{1} \neq \dot{X}^{1}$ .

 $\dot{\text{C}}$  and  $\dot{\text{cc}}$  can be indicated in our syllabic formulae by special symbols,  $^3$  but this unnecessarily complicates the formulae and masks certain useful distributional information.

The representation here preferred for ambisyllabic syllables is this: S with stressed coda (VC, CVC) are represented as they would be without the /'/: s, S; X with stressed onset (CVC, CV) are written as onsetless, i.e. as VC or <s>, and V or <z>. Thus, /lemedejba/ would be <Z-S-z-Z>, /kiminaten/ $^4$  <Z-S-z-S>, etc. If a transcription representing CV and CVC as Z and S respectively were used, the resulting formula would be homonymous with those for PW, different in their consonant and vowel structure, e.g. /pulumkiba/ $^5$  and /lemedeba/ $^6$  would be identical in terms

<sup>&#</sup>x27;Ambisyllabicity' is a phonetic term used to indicate that the ambisyllabic (consonant) is not heard as clearly belonging to only one of its neighbouring syllables (as either onset or coda), but as belonging less clearly to both: as coda of its 'predecessor', and as onset of its 'successor'. The occlusion of the ambisyllabic is usually but not necessarily longer than that of a non-ambisyllabic; the syllable-timed rhythm indicates ambisyllabicity when it does not indicate a C as belonging prosodically to one and only one syllable. (The syllable it would normally belong to is that whose nucleus is the vowel following the ambisyllabic.) Ambisyllabics contrast with both geminates and unambisyllabic single consonants. The "strong" ambisyllabics are prosodically ambisyllabic and have longer occlusions than "weak" ambisyllabics. The 'kinds of ambisyllabicity' mentioned above are distinguished not phonetically (although they could be distinguished phonetically, i.e. the C are all voiceless stops, the C never are, etc.) but on the grounds of their phonemic status.

<sup>&</sup>lt;sup>2</sup>/kimihen/ 'to the daughter-in-law'.

 $<sup>^3</sup>For$  instance, by the following symbols (the ambisyllabic syllable types that occur are CV, CVC, VC, and CVC, CCVC and CVCC):  $Z^b$  for CV and CCV;  $S^b$  for CVC and CCVC;  $s^a$  for CVC and CVCC. /lemedejba/ 'massage him', 'rubs (something into) him' would be represented as  $^2S^a-S^b-Z>$ . An  $X^a$  is always followed by an  $X^b$  and an  $X^b$  is necessarily preceded by an  $X^a$ . A less redundant, more useful transcription is given above.

<sup>4/</sup>kiminaten/ 'from the daughter-in-law'.

<sup>&</sup>lt;sup>5</sup>/pulumkib<u>a</u>/ 'bleaches it' (intensive).

<sup>6/</sup>lemedeba/ 'rubs it (in)'.