Phonological foot in Jowulu (Samogo, Western Mande)

0. Jowulu is a Samogo (< Western Mande) language spoken by about 15 000 people within a small area at the border between Mali and Burkina Faso. Here I am going to present an attempt to apply to Jowulu the notion of phonological foot.

1.1. Normally, the notion of phonological foot is used in connection with stress languages and usually it presupposes the presence of a stress by its definition. However, being slightly modified, this notion can be valuable also when describing the behavior of syllabic structures and prosodies in some languages which do not have stress. In [Kuznetsova 2007] and [Vydrin 2008] such an approach has been provided for analyzing the data of Guro, Bamana and several other Mande languages.

1.2. The fact is that in many Mande languages two- and three-syllable sequences (usually the ones occurring within a single word) can have a high degree of internal integrity, which manifests itself in various phenomena (unlike sets of consonants permitted in each position of the sequence, restricted set of possible toneme combinations, nasalization and/or vowel quality harmonization etc.). Such facts make us assume that sequence of this kind comprises a special phonological unit. Since one of the syllables of such sequence is also usually predominant in one way or another, the parallel between this unit and the foot of stress languages seems quite rightful.

2. Jowulu [Carlson 1993; Djilla et al. 2004; Hochstetler et Ouattara 2000] features open syllables with structure V (very rare), CV, CVi, CV₁V₁ (long vowels are analyzed as biphonemic combinations), NCV, NCVi, and NCV₁V₁; the most frequent are CV и CV₁V₁. Also, due to a tendency to elision of vowels, closed syllables with structure ...L, and syllables beginning with a CL... cluster can occur.

3. Disyllabic sequences (within a word) with an intervocalic alveolar sonorant ([l], [ɾ] or [n]) show certain special features in Jowulu. (Precise notation of such sequences would be (N)CV(V).LV(V), but further I will use a simplified notation CV.LV).

3.1. Occasional vowel elision can take place in CV.LV sequences, in which the first and/or the second syllable nucleus consists of a single close vowel ([u], [o], [y], [i] or [ɪ]):

CU.LV → CLV (cf. k(ú)l’ò ‘hip’; s(ʃ)nàmɔ̀ ‘worm’)
CV.LU → CVL (cf. fʷß̀n(ı)zɛ̀(i)sɛ́r(ı) ‘earthquake’)
CU.LU → CUL (cf. bil(ı)tür(ʊ) ‘to burn’)

3.2. Another process taking place in CV.LV sequences is occasional vowel harmony. If the second syllable nucleus consists of a single vowel [i] or [ɪ], this vowel can assimilate to that of the first syllable, cf.:

kɔ̏l’ ~ kɔ́lɔ̀ ‘(species of monkey)’;
gbɛ̀lì ~ gbɛ̀lè ‘(species of tree)’.

3.3. An analysis of Jowulu lexis (based on a dictionary by Robert Carlson [1993: 28–108], which has 693 lexemes in total) showed that more than 58% of all disyllabics have CV.LV structure. Also about 83% of all (other) polysyllabics contain CV.LV disyllabic sequences and at the same time do not contain disyllabic sequences of another structure...

4. Introduction of such phonological unit as foot may facilitate the description of these phenomena and of the rhythmic organization of Jowulu in general. We can postulate two main types of foot in Jowulu: monosyllabic ((N)C(L)V(V)(L) and disyllabic (N)CV(V).LV(V).
Abbreviations

V — vowel
V₁(...)V₁ — identical vowels
V₁(...)V₂ — different vowels
U — close vowel ([i], [ɨ], [u], [ʊ], [ʊ̰])
C — consonant
N — nasal consonant ([m], [mʲ], [n], [ɲ], [ŋ], [ŋ̚m])
L — alveolar sonorant ([l], [ɭ], [n])
. — syllable boundary

References


