1 Introduction

This paper argues that Nubi, an Arabic creole spoken in Bombo, Uganda (among other places) escapes a categorization as either a tone language or a stress-accent languages. It could be classified as a pitch accent language in the sense of Beckman (1986), but unlike languages like Tokyo Japanese lacks a class of unaccented words.

2 Word accent

Syllable structure is (C)(C)V(C). With the exception of verb stems, polysyllabic words are most frequently accented on the penultimate syllable, but words with antepenultimate accent and final accent are common. Quantity-sensitivity is apparent to the extent that final closed syllables are accented (if we abstract away from the phrasal phonology). The generalizations governing the deletion or relocation of accents are both lexical, i.e. morphological, and post-lexical, i.e. occur in particular word combinations. The morphological use of accent is particularly apparent in the verb. There are three morphological classes, which, depending on the form of the base, may differ by the position of their accent alone.

The stem has the usual three positions of the accent, as shown in (1). Type (1a), a trisyllable ending in [u] and with initial accent, is by far the most common. The accent may occur on the penult, as in (1b), but trisyllabic stems with the accent on the final syllable do not exist. However, there is a small class of verbal adjectives, some of which are trisyllabic and have final accent, like /sakarán/ ‘be drunk’, /haragán/ ‘be sweaty’ and (1c,f). These adjectives refer to non-permanent physical and mental characteristics, and when used as predicates, resemble stative verbs (Wellens 2005, p. 67). The same forms can also be used transitively, in which case they are causatives. Vowel-final disyllables typically have the accent on the penult, as in (1d), but there are a handful of disyllabic verbs, all of which end in /i/, that have the accent on the last syllable, as shown in (1e). Like the adjectival verbs, verbs like /ariña/ ‘return’, /nesítu/ ‘forget’, /fértoku/ ‘separate’, /fáta/ ‘open’, /béredu/ ‘bath’, etc., are both transitive and intransitive.

(1) a. kásulu ‘wash’
   b. nesítu ‘forget’
   c. fatarán ‘be/make tired’
   d. fáta ‘open’
   e. wedí ‘give’
   f. tabán ‘be/make annoyed’
   g. só ‘do’
   h. gúm ‘get up’

The gerunds of (1) are given in (2). These forms are identical to the stems, except for verbs with antepenultimate stress, which appear with penultimate accent in the gerund. Because (2a) represents the most frequent type of verb, the numerical impact of gerund formation is greater than suggested by the large-scale homophony between (1) and (2).

(2) a. kasúlu ‘washing’
   b. nesítu ‘forgetting’
   c. fatarán ‘being tired’
   d. fáta ‘opening’
   e. wedí ‘giving’
   f. tabán ‘being angry’
   g. só ‘doing’
   h. gúm ‘getting up’

Passives have the accent on their last syllable. Verbs that end in a consonant acquire a final vowel to carry the accent, like /cék - cékı/ ‘check’, /taban - tabani/ ‘irritate’, /gúm - gumı/ ‘get up’. Impersonal passives occur, as in /gí gumı/ ‘People are getting up’. As shown in (3g), also stems that consist of a single open syllable acquire a copy of their vowel. Besides /já/ ‘arrive’, with its pas-
sive /ja.á/, there is /só/ ‘do’, with the passive /so.ó/.

(3) a. kasulú ‘washed’
 b. nesitú ‘forgotten’
 c. fataranú ‘made tired’
 d. fatá ‘opened’
 e. wedí ‘given’
 f. tabanú ‘angered’
 g. so.ó ‘done’
h. gumú ‘got up’

The passive of disyllabic verbs with final accented open syllables (cf. (3e)) has the same form as the stem and the gerund. All passives end in an accented vowel.

3 Phrasal phonology

There are two generalizations above the word level affecting the accentuation of verbs. The first concerns a deaccenting rule applying to nominalized verbs in pre-object position. The second is a rule of accent shift applying to adjectives before their heads.

3.1 Gerund Deaccenting

It is not uncommon for verbs to have reduced prominence in relation to their objects. English, German and Dutch deaccent predicates in combination with arguments (e.g. Gussenhoven 1992; Selkirk 1995). Nubi has a rule deaccenting verbs that occur together with their objects. Such deaccented gerunds have middish pitch throughout.

In many languages, deaccenting leaves stress behind, as it does in English. That is, English deaccenting is non-neutralizing since a phonological distinction exists between unstressed and unaccented stressed syllables, as illustrated by the last syllables of Andes and Andy’s, the latter being shorter than -des, while also having a shorter preceding syllable An- than An- in Andes. Deaccenting in Nubi has a neutralizing effect. For instance, for a number of speakers /pángesa/ ‘to rent’: even for these speakers, /pángisa júa má séme/, with a deaccented gerund in first position, is ambiguous between ‘Renting a house is not good’ and ‘Renting out a house is not good’. Because there is only a single type of unaccented syllable, it is often not clear just which syllable in a deaccented word is deaccented. In the case of ‘rent out’, for instance, it could be assumed that Gerund Deaccenting was performed on the stem, which has antepenultimate accent, or on the gerund, which has penultimate accent.

3.2 A Rhythm Rule

Clash Resolution is a widely reported tendency for languages to avoid adjacent prominent elements and to create distance between them. The prominent elements are either stresses, i.e. foot heads, or accents. English has a rule that creates Phonological Phrases in which initial and final accents occur in preference to medial ones. Nubi has a similar rule that locates the accent on the first syllable of verbal adjectives, if they precede the Direct Object, which probably means that the domain is the Phonological Phrase. An example of a plain adjective undergoing the shift is given in (4a), which is to be compared with (4b).

(4) a. Æna kesím
   ‘I’m foolish’
 b. Késim Æna
   ‘What a fool I am!’

The rule applies to adjectival verbs like /fatarán, tabán/. Examples (5a,b) show that Accent Shift, interpreted as a left-edge alignment of accent and a (syntactic or prosodic) phrase containing an Adj +Head combination, is obligatory and does not depend on the distance between the accents. That is, it applies in the same way in (5), where the underlying accent on /tabán/ is separated by two syllables from the next accent, as it does to (6), where the underlying accents are
adjacent. Example (7) shows that verbs proper are exempt from stress shift.

(5) Ána tāban ἱρεκό
1st+sg irritate child
‘I irritate the child’

(6) Ána gi tāban tóru
1st+sg prog irritate bull
‘I’m irritating the bull’

(7) Ána gu rúa wedí bìkú
1sg will give booke
‘I will give a book’

Default L-tones occur between the H-tones. Representation (8) shows two inserted L-tones, plus the boundary L-tones that are characteristic of statements.

(8) { Ana gu rúa fi seregu }  
| L H L | H | H | L | L |
‘I will go stealing’

4 Typology

We consider to what extent Nubi conforms to the criteria for (a) a tone language and (b) a stress accent language

4.1 Is Nubi a tone language?

First, we consider whether Nubi is a tone language. Hyman’s (2001) definition in (9) makes Nubi a tone language, since all major class words and many function words have an accent in the lexical representation, in the sense of a location for the insertion of a tone.

(9) A language with tone is one in which an indication of pitch enters into the lexical realization of at least some morphemes (Hyman 2001, p. 1367)

However, there is an important difference between the languages that are typically cited as ‘accentual’ tone languages and Nubi. ‘Accentual’ tone languages invariably have one or more lexically idiosyncratic aspects in the way words are marked for pitch. Restricting ourselves to prosodic systems with a single accent per morphological or phonological word, the culminating systems of (Hyman 2006), there are three ways in which the accent can be lexically idiosyncratic.

First, there may be an unpredictable group of unaccented words, as in Japanese (Pierrehumbert & Beckman 1988). In Nubi, all words are accented in the lexical representation, and there is therefore no lexical idiosyncracy in the presence or absence of accent. Second, the location of the accent in the word may be lexically idiosyncratic. For instance, in Gernika Basque the accent can fall on any syllable except the last (Hualde et al. 2002). If the position of the accent is metrically defined, accent is ‘metrically bound’ by Hermans (1985). In metrically bound accent languages, the location of the accent is to be accounted for metrically, and the location of the accent may be unpredictable only to the extent that the location of the stress is unpredictable.

Third, there may be a paradigmatic choice for the tone to be inserted in the accented position. In Barasana, there are two options, H and HL, and the choice is lexically determined (Gomez-Imbert & Kenstowicz 2000). In Nubi, it is always H that is placed on in accented syllables.

Since Nubi fails all three lexically idiosyncratic aspects of pitch marking, it cannot really count as a tone language, other than by conforming to (9). To exclude Nubi, we could restrict (9) to languages in which either the identity of the morphemes, or the specific pitch feature specified, or the location of the pitch feature in the morpheme would otherwise be unpredictable from other features in the phonological representation, like the location of the stress.

4.2 Is Nubi a stress accent language?

Nubi is not a typical stress-accent lan-
language according to the criterion in Beckman (1986), which requires that the word prominence must be expressed phonetically by other things than pitch. It is according to (Hyman 2006), which requires the word prominence to be both obligatory (every word has at least one syllable marked for the highest degree of prominence) and culminative (every lexical word has at most one syllable marked for the highest degree of metrical prominence). It is suggested that Beckman’s distinction should have a discrete interpretation, as in (10).

(10) A language in which the phonological removal of pitch features, i.e. deaccentuation, leaves behind a syllable that is prosodically distinct from an otherwise equivalent syllable that never had those pitch features, the language has stress (as distinct from accent).

Since Nubi deaccentuation is neutralizing, it cannot be said to be a typical ‘stress language’, even though it has the hallmarks of a stress-accent language in having obligatory, culminative prominence.

5 Conclusion

Nubi represents the limiting case for the class of tone languages and the class of stress-accent languages: a language with obligatory, culminative, metrical bound accent and only a single tone to be inserted in the accent locations. Since the inserted tone does not contrast with any other tone, it does not define the phonological shape of the word, nor does it define a discoursal meaning. Given the appearance in surface structure of accents that have survived morphological and post-lexical deletions and insertions, the tone is predictable. The obligatory nature of its word prominence sets it apart from ‘pitch-accent languages’ like Japanese. The language can be seen as a pivot between the classes of tone languages and stress-accent languages, as well as ‘pitch accent languages’, if these are seen as constituting a typological class.

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References


