Shingazidja focus hierarchy[1]

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Résumé

One of the most important and interesting characteristics of the Shingazidja prosodic system is the very wide variability of its tone patterns. This paper is a first attempt to explain the conditions that drive this variability. It is claimed that two conditions lead to this situation: i. focus is related to phrasing in this language ii. phrasing is sometimes not enough in order to render pragmatic distinctions. In a second part, it will be shown that alternative strategies may be required to indicate shift of focus, and that a deletion of lexical tones is sometimes necessary in broad-focused sentences.

1. Introduction

Shingazidja is a Bantu [G44a] language, spoken in La Grande Comore, Comoro Islands. It is part of the « Comorian group », with Shindzuani [G44b], Shimwali [G44c] and Shimaore [G44d]. The data used in this work (except when indicated) was collected in Paris, between june 2006 and january 2007, with a native speaker (from Moroni).

The purpose of this paper is to propose a first attempt to explain the prosodic variation in Shingazidja, outlined by previous researchers (« the very wide variability of surface accents in Shingazidja [... is] linked to pragmatic factors that have not been studied » Philippson (2005, 17)).

It will be claimed here: i. that phrasing in Shingazidja is strongly dependent on focus and that focus is canonically expressed with phonological phrasing, while contrastive phrasing is canonically expressed with intonational phrasing ii. that alternative strategies may be used to express contrastive focus (tone insertion, augment insertion, etc.) or broad-focus (accent deletion / reduction) iii. that those alternative strategies are selected when the prime ones (i.e. phrasing) do not permit to distinguish between a broad-focused

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sentence, a sentence with a focus and a sentence with a contrastive focus iv. that those strategies will be selected in a specific order.

2. Accent and tone in Shingazidja

When isolated, nouns with disyllabic roots may have: i. a high tone on the last syllable (LH) – cf. (1) ii. a high tone on the penultimate syllable (HL) – cf. (2).

(1)   ɲ-uŋgú *cooking pot*, ɲ-umɓá *house*, m-leví *drunkard*

(2)   páha *cat*, m-hóno *arm*, m-kóɓe *spoon*

Here are some minimal pairs:

(3)   síri *secret* / sirí *pants*, ntíɓe *sultan* / ntiɓé *cooked meat*

When a LH noun is followed by a LH adjective, a unique high tone appears on the penultimate syllable of the group:

(4)   ɲuŋgú + mɓilí → ɲuŋgu mɓíli *two cooking pots* (Philippson 2005, 4)

Following previous studies from Tucker & Bryan (1970), Cassimjee & Kisseberth (1989, 1992, 1993, 1998) and Philippson (1989, 1991, 2005), it will be said that in Shingazidja the tone shifts till the syllable preceding the following one, and that every other one is deleted.

When an HL word is followed by the same adjective, however, different strategies emerge:

(5)   mihóno + miilí → mihono miíli *two arms* (Philippson 2005, 4)

(6)   marúnɗa + mailí → marunɗa mailí *two oranges* (Philippson 2005, 4)

(7)   zikómɓe + ziilí → zikómɓe ziilí *two cups*

The nouns realised with a high tone on the penultimate syllable correspond in fact to three different categories: i. those that bear a lexical tone on the penultimate syllable (/páha/) ii. those that bear a lexical tone on their two last syllables (/zikómɓé/) iii. those that do not bear a lexical tone (/marunɗa/).

These claims are supported by examples where the adjective is HL:

(8)   ɲumɓá + nɗáru → ɲumɓá nɗaru *three cooking pots* (Philippson 2005, 5)

(9)   mihóno + miráru → mihono míraru *three arms* (Philippson 2005, 5)

Finally, it must be noted that words or phrases lacking underlying tones receive a tone on their penultimate syllable when they are isolated:

(10) /nɗevu/ → nɗévu *beard*; /wanɗu/ + /wadziro/ → wanɗu wadzíro *heavy people*

3. Phrasal phonology

The phonological phrase, in Shingazidja, corresponds roughly[3] to the syntactic phrase[4]:

(11) [(nde̲ ziɲama zií)(li̲ za) (há)he]_ϕ *his two animals (Stab/At – animals – two – cop – poss.3sg)*

(12) [tsiwo(no̲ má)(βa̲ha mai)(li̲ yá) [h](a̲)[h]e]_ϕ *I saw his two cats (I saw – cats – two – cop – poss.3sg)*

The subject NP and the VP phrase separately:

(13) [[w]o (wa̲na wá) (ha̲)(ŋgú)]_ϕ [wali(ndí̲)]_ϕ *my children waited (At – children – cop – poss.1sg – they waited)* (Cassimjee & Kisseberth 1993, 13)

(14) *[[w]o (wa̲na wá) (ha̲)(ŋgu walí)(ndí̲)]_ϕ

The intonational phrase corresponds roughly to the sentence in Shingazidja, and is marked with a so-called *extraprosodic* final syllable:

(15) [ɲu(ŋgu̲ ndzí)ro]_l *heavy pot(s)*

(16) *[ɲu(ŋgu̲ ndziró)]_l

In (15), the tone shifts from the syllable *-ŋgu* to the penultimate syllable of the prosodic phrase (*ndzi*), where it stops. The extraprosodicity of final syllables is widely attested in Bantu languages.

4. Variations

One of the most important and interesting characteristics of the Singazidja prosodic system is the considerable amount of variation it presents. For instance, my informant accepts all the following realisations – and even more – of the sentence *tsiwono̲ pa̲ha la mlevi̲* « I saw a cat of a beggar » (NB: the first realisation is the expected one):

(17) tsiwónó paha la mleví ~ tsiwono paha la mlévi ~ tsiwónó paha la mlévi ~ tsiwónó pahá la mleví ~ tsiwono páha la mleví ~ tsiwono páha la mlévi ~ tsiwono páha lá mlevi ~ tsiwono pahá la mleví ~ tsiwono pahá la mlévi

The variabilty of accentual realisations was signaled by Cassimjee & Kisseberth (1992,1993) and Philippson (2005):

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[3] The system presents several complications that I am not able to detail here because of a lack of space

[4] An underlined vowel bears a lexical tone ; brackets correspond to the domain of the tone ;]_ϕ is the limit of a *phonological* phrase, while]_l is the limit of an *intonational* phrase

(18)   ze ntsu(zi [y]é) (mw<u>a</u>na y-a)-(hú)la ~ ze ntsu(zi [y]e mw<u>a</u>na y-a-hú)la ～ ze ntsu(zi [y]e mw<u>a</u>na y-á)-(hu)la *the beans that the child bought* (Cassimjee & Kisseberth 1993)

However, neither Cassimjee & Kisseberth nor Philippson heve identified the conditions that leed to these different realisations.

5. Focus: prime strategies

In this work, it will be said that the prosodic variability of Shingazidja is related to focus strategies. In Shingazidja a focalised word is typically followed by a phonological phrase boundary (see Kanerva 1990, Downing 2004, 2006, Zerbian 2004, among others, for similar phenomena in other Bantu languages). Compare for instance (19) with (20):

(19)   [tsiwo(n<u>o</u> ndovu ya wá)(m<u>e</u>)zi]_φ I saw the elephant of the beggars (1sg.saw elephant of beggars)

(20)   [tsiwo(n<u>o</u> ndovú)]_φ [ya wamezi]_φ *I saw the ELEPHANT of the beggars* (answering the question: what did you see of the beggars?)

In (19), the accent shifts from the last syllable of the verb to the first syllable of the word « beggars ». In (20), however, the accent stops on the last syllable of the focalized word « elephant ».

To place a contrastive focus, an intonational phrase boundary is inserted

(21)   [tsiwo(n<u>o</u> ndó)vu]_I [ya wá)(m<u>e</u>)zi]_I *(No!) I saw the <u>ELEPHANT</u> of the beggars* (answering the question: did you see the horse of the beggars?)

In (21), the word « elephant », which carries a contrastive focus, exhibits a tone, coming from the last syllable of the verb, on its first syllable. The extraprosodicity of the last syllable of « elephant » means that it is followed by an intonational phrase boundary.

6. Alternative strategies

Phrasing alone, however, is not enough to indicate shift of focus in some cases. Alternative strategies are sometimes selected to express contrastive focus, e.g. tone insertion, augment insertion. Moreover, tone deletion is sometimes selected to express broad-focus

6.1. Tone insertion

Tone insertion may mark focalisation, in particular in verbs. The verb /r<u>i</u>won<u>o</u>/ « we saw», for instance, may present an additional high tone when it carries a contrastive focus:

(22)   (r<u>i</u>wó)(n<u>o</u>) *we saw*

(23) riwónó *(No!) we <u>SAW</u>* (answering the question: did you hear [...]?)

(24) ríwóno *(No!) <u>WE</u> saw* (answering the question: did they see [...]?)

6.2. Tone deletion

A verb may lose one of its accents in a broad-focus sentence. The expected realisation – (25) – does not correspond, as expected, to the broad-focus interpretation. The broad focus interpretation is here retated to the deletion of the last lexical tone of the verb /wawon<u>o</u>/ « we saw »:

(25) [(w<u>a</u>wó)(n<u>o</u>)]$_\phi$ [mle(v<u>i</u>)]$_\phi$ *they SAW a drunkard* [the verb presents a new information]

(26) [(wawono mlé)(ví)]$_\phi$ *they saw (a) drunkard*

Moreover, the nouns that bear two lexical tones – here /m<u>i</u>ko6<u>e</u>/ « spoons » – lose one of them in broad-focus sentences.

(27) [(nďe mí)(k<u>o</u>)(6<u>e</u> mií)(l<u>i</u>)]$_\phi$ *(it is) the TWO spoons...* [St/At – spoons – two] – expected realisation, but the number of spoons is a new information

(28) [(nďe mí)(k<u>o</u>6e mii)(lí)]$_\phi$ *the two spoons...* – broad-focus

6.3. Augment insertion

To place a focus on the object in the sentence /w<u>a</u>won<u>o</u>/ « he saw a cat », an *augment*[5] will be inserted (in Shingazidja, the augment is always preceded by a phonological phrase boundary):

(29) [hawo(nó)]$_\phi$ [le-(pá)ha]$_\phi$ *he saw a/the CAT* (answering the question: what did he see?)

Can we predict the selection of those different strategies? It will here be claimed that they are selected when phrasing strategies fail to apply.

7. Analysis

Cassimjee & Kisseberth (1993) have identified a phonological rule they called Initial Accent Deletion [IAD]. This rule, which permits a deletion of a lexical tone following a *surface accent / prosodic boundary* combination has the following properties: i. optionality (30) ii. it only affects initial lexical accents (31) iii. only a surface tone can trigger (32).

(30) [wo-(w<u>a</u>ná)]$_\phi$ [(w<u>a</u>-lí)(ndǐ)]$_\phi$ ~ [wo-(waná)]$_\phi$ [wa-li(ndǐ)]$_\phi$ *the children waited* (Cassimjee & Kisseberth 1993, 12)

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[5] The augment is generally associated to definiteness in Shingazidja

(31)   [(ʃá)]_φ [tsi-(dʒo̠-hú)-(la)]_φ ~ *[(ʃá)]_φ [tsi-dʒo̠-hu-(lá)]_φ *but I would eat*

(32)   [[y]e ma-duku(té)(ra̠)]_φ [(wa̠-lí)(ndĩ̠)]_φ ~ *[[y]e ma-duku(té)(ra̠)]_φ [wa-li(ndĩ̠)]_φ
       the doctors waited

When IAD does not occur, the presence of a boundary does not modify the phonological realisation:

(33)   ...´]_φ [(_... = ...´) (_...

In those situations, phrasing will not be a suitable strategy to produce different prosodic realisations. It will then be necessary to use alternative strategies.

8. Case studies

8.1. First case

In (34), it will not be possible to make a phonological distinction if a prosodic boundary is simply inserted between the verb and its object. Because the object is automatically followed by a *phonological phrase boundary* and an *intonational phrase boundary*, since it is the last word of the sentence, no distinction can be made using cannonical phrasing strategies.

(34)   ?[hawo(nó) (pa̠)ha]_φ or ?[hawo(nó)]_φ [(pa̠)ha]_φ *he saw a cat/CAT*

Alternative strategies will then be used to express pragmatic distinctions. To focus a verb, it is then necessary to modify its tone pattern:

(35)   [hawónó]_φ [(pa̠)ha]_φ he <u>SAW</u> a cat (answering the question: did he hear a cat?)

To focus the object, an augment should be inserted (NB: a tone on the last syllable of the noun would lead to an interrogative interpretation):

(36)   [hawo(nó)]_φ [le (pa̠)ha]_φ *he saw the CAT* (answering the question: what did he see?)

For a contrastive focus interpretation, the augment will receive a tone:

(37)   [hawo(nó)]_φ [lé pa̠ha]_φ *he saw the <u>CAT</u>* (answering the question: did he see an elephant?)

A broad-focus interpretation will then require accent deletion

(38)   [hawono (pá)ha]_φ *he saw a cat*

8.2. Second case

In (39), Philippson showed that the subject NP and the VP may be separated with a phonological phrase boundary or an intonational phrase boundary:

(39) [e-(mwá)na]₁ [ha(dʒa)]₁ ~ [e-(mwá)na]ᵩ [ha(dʒá)]ᵩ *the child came* (Philippson 2005, 17)

When the subject is a final-accent word, there are no difference if the NP and the VP are separated with a phonological phrase boundary or an intonational phrase boundary (NB: a sentence initial augment is unaccented):

(40) ?[e-mle(ví)]ᵩ [ha(dʒá)]ᵩ ~ ?[e-mle(ví)]₁ [ha(dʒa)]₁ *the drunkard came*

Then a cleft relative has to be built. The so-called *stabilizer nḓe* licenses a parsing of the tone of the augment (if the drunkard is known)

(41) [(nḓe-mlé)(vi)]ᵩ [ha(dʒá)]ᵩ *the DRUNKARD came* (answering the question: who came?)

If the drunkard is unknown, the last syllable of the noun is lenghtened, in order to build an intonational phrase boundary.

(42) ? [e-mlevíi]₁ [ha(dʒá)]₁ <u>putatively:</u>[6] *the DRUNKARD came (*answering the question: who came?)

9. Conclusion

In this paper, it was argued that the prosodic variation results in Shingazidja from focus strategies. The prosodic rules attested in the language (tone shift, deletion of surface tones) lead to situations where phrasing is not a suitable solution to indicate shifts of focus. In those situations, alternative strategies are selected to express contrastive focus (tone insertion, augment insertion, etc.). Lexical tone deletion is then associated to broad-focus sentences.

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[6] I do not have this specific example in my data, but, for instance, cf. *ye mleví yawona nḓóvu hawu* vs *ye mlevíi yawona nḓóvu hawu* « the DRUNKARD / <u>DRUNKARD</u> that has seen an elephant has fallen »

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