Shingazidja IPs *Extraprosodicity, Boundary Tones and the Phonetics-Phonology Interface*

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Shingazidja

Shingazidja: Bantu language [G44a] spoken on *Grande Comore* (Comoros). One of the five **Comorian** languages, along with Shindzuani [G44b], Shimwali [G44c], Shimaore [G44d] and Shikombani [G44e]

Dialects *(used in this poster -* Data = recorded in Paris *)*

(1) 'Western' - main informant: Ibrahim Barwane - Moroni (2006-2010)
(2) 'Southern' - informant: Said Bacarzme – Fumbuni – 07/08 & 03/09
(3) 'Northern' - main informant: Mohamed Miraddji Lihoma – Mbeni – 07/08 & 03/09

A Tone rules

(Cassimjee & Kisseberth 1989, 1998; Patin 2007, etc.)

⇨ 'Unbounded' tone shift phenomenon: a tone shifts to the end of a phonological phrase except if it is blocked by a following tone bearing unit

⇨ Tone shift leads to the deletion of every even-numbered tone (OCP)

(1) a. wa-levi̱ 2-drunkard *drunkards*
b. wa-levi̱ 2-drunkard wa-ili̱ 2-two *two drunkards*
c. ha-o̱no 3 (past)-see wa-lévi̱ 2-drunkard wa-ili̱ 2-two *he saw two drunkards*

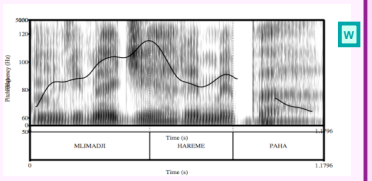
Phrasing (Patin 2007, 2008, etc.)

⇨ The *Phonological phrase*, in Shingazidja, corresponds roughly to the max. syntactic phrase.

(2) (tsi-wo̱no 3sg(past)-see má-βaha 6-cat ma-ili̱ 6-two yá of ha̱he his)φ
I saw his two cats

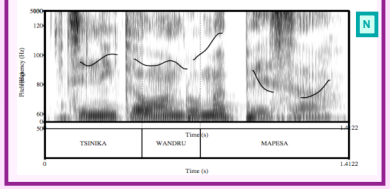
⇨ The subject NP and the VP, for instance, phrase separately. In (3), the tone of the subject NP cannot shift to the first syllable of the verb.

(3) (m-lima̱djí)φ (ha-re̱m'é)φ
1-farmer 1(past)-beat (5-)cat
the farmer beat a cat



⇨ The whole VP forms a single phonological Phrase.

(4) (tsi-ni̱ka 1sg(past)-*give* wa-ndu̱ 2-*person* má-pe̱s'á 6-*money*)Φ
I gave money to people



B Intonational phrases (Patin 2007, 2008)

⇨ Extraprosodicity: a tone cannot shift to the last syllable of a clause.

(1) a. (ha-ni̱ká)Φ (ye=ɲ-uŋgu̱ n-dzˈíro)Φ
1(past)-*give* At_9=9-*pot* 9-*heavy*
he gave the heavy cooking pot
b. *(ha-ni̱ká)Φ (ye=ɲ-uŋgu̱ n-dziró)Φ

⇨ However, a tone can be expressed on the last syllable of a clause (see also (1a), (1c) and (4) of A):

(2) a. (ha-o̱nó)φ (ye=m-levˈí)φ
1(past)-see At_1=1-drunkard
he saw the drunkard
b. (m-baβá)φ (ŋgu-djo-hu̱l'=é)φ (ʃ-ahulˈá)φ
1-father 1imp-fut-buy=At_7 7-food
Father will buy the food

⇨ Patin (2007): 'Extraprosodicity' is the clue for Intonational phrasing

Nonfinality IP, R (HD) (Cassimjee & Kisseberth 1998 < Prince & Smolensky 1993)

The right edge of a High Domain may not be aligned with the right edge of an Intonational phrase.

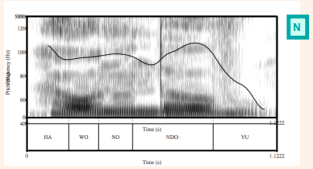
This constraint dominates the constraint that aligns the right edge of a High Domain with the right edge of a Phonological phrase.

⇨ Note that in colloquial Shingazidja, an initial High tone shifts to the second syllable.

Rules that apply at the IP level in Northern Shingazidja (Patin 2009)

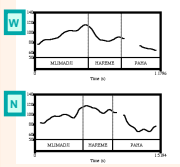
⇨ Penultimate lengthening:

(3) [(ha-wo̱no 1(past)-*see* n-dó:vu 9-*elephant*)Φ]I
he saw an elephant



⇨ Tone spread (compare with (3) of A):

(4) [(mlima̱djí)φ (hárεmé pa̱ha)φ]I
the farmer beat a cat



Tone spread occurs through the PP boundaries.

The spreading does not lead to the deletion of a lexical tone.

⇨ Tone insertion on the penult of the IP when there is no lexical tone (in Western Shingazidja, the rule occurs at the PP level).

Nonfinality in Bantu (Philippson 1991, etc.)

⇨ Nonfinality is highly common in Bantu. A tone cannot shift to the last syllable of a clause in Giryama (Kisseberth 2001), Kuria, or Jita (Downing 1990), or spread to the final in Gweno. A final tone is deleted in Kibondei (Cassimjee & Kisseberth 1998) or in Shi, displaced on the penult in Kinga, etc.

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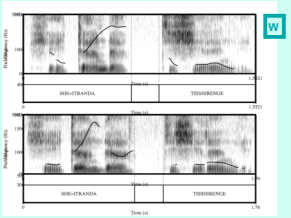
C Tone liaison in the Northern dialect (Patin 2009)

⇨ Nonfinality always applies at the end of the sentence, 'optionnaly' at the end of the clause.

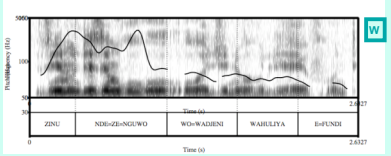
(1) a. [(ʃe=i-ta̱ndá)φ (tsi-ʃi-rˈéŋgε̱)φ]I
At_7=7-bed 1sg(past)-om_7-take
the bed, I took it
b. [(ʃe=i-tándá)φ]I [(tsi-ʃi-rˈéŋgε̱)φ]I
At_7=7-bed 1sg(past)-om_7-take
THE BED, I took it



⇨ A focused element is followed by a phonological boundary in Shingazidja (Patin 2008). However, it will be followed by an IP boundary if it is already followed by a PP boundary in broad-focus sentences (= contrast preservation) - cf. Patin (2007b)

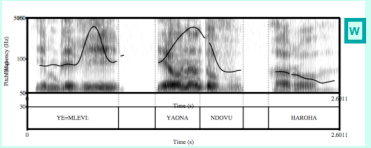
⇨ The final vowel of a non-final IP receives a Mid intone.

(2) [(zi̱nú)Φ (ndε=zε̱= ŋ-gúwo)Φ]I
DEM.10 STAB= A^1_{10}=10-*clothes*
ˈ[(o=wa-djεnˈí)Φ (wa-hu̱liyá)Φ (ye=fúnd(i))Φ]I
A^1_2=2-*visitor* 2REL-*buy*(APP) A^1_9 = 9-*teacher*
These are the clothes *the visitors bought for the teacher*



⇨ Nonfinality is highly ranked. A vowel may be lenghtened to maintain the contrast.

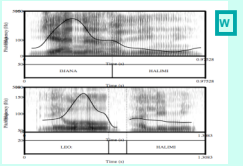
(3) [(ye=m-levíí)φ]I [(ya-wo̱ná n-do̱vu)φ]I
At_9=9-drunkard 1re(past)-*see* 9-*elephant*
the bed, I took it
[(ha-rohˈá)φ]I
1(past)-leave
THE DRUNKARD, who saw an elephant, has left



Tone liaison in the Northern dialect (Patin 2009)

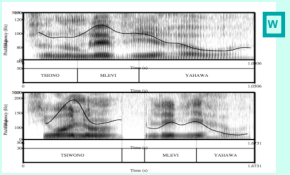
⇨ Compare for instance (4a) and (4b):

(4) a. [(djána)φ]I [(ha-limˈí)φ]I
yesterday 1(past)-cultivate
YESTERDAY,, I have cultivated
b. [(leóo)φ]I [(ha-limˈí)φ]I < /leó/
today 1(past)-cultivate
TODAY,, I have cultivated



⇨ Note that an IP boundary can appear after any lexical item, especially if it is associated with a contrastive focus.

(5) a. [(tsi-wo̱no 1sg(past)-*see* m-lévi̱ 1-*drunkard* ya-ha-wˈá 1re(past)-15-*fall*)φ]I
I saw a drunkard that fell
b. [(tsi-wóno)φ]I [(m-levíí)φ (ya-ha-wˈá)φ]I
I SAW a drunkard that fell



D The intone of the last IP

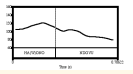
⇨ In the Western and Northern dialects of Shingazidja (but not in the Southern dialect), a tone appearing on the penult is:

- sharply high when it is followed by a sponsor:

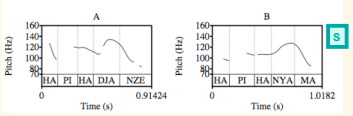
(1) (ha-o̱no 3sg(past)-see m-lévi̱ 1-drunkard)φ
he saw a drunkard

⇨ Otherwise realized as a Mid:

(2) (ha-o̱no 3sg(past)-see n-dóvu 9-elephant)φ
he saw an elephant



⇨ there is a boundary L% tone, associated with the last syllable of the utterance, that spreads on its left.The spreading is blocked by the left edge of a sponsor (underlying High).

⇨ The L% tone does not spread in Southern Shingazidja.

(3) (ha-pi̱ha 3sg(past)-*cook* djándzε̱ (5-)*crab* / nyáma 9-*meat*)φ
he cooked a crab / meat