



# Prosodic boundaries and EPP in Swahili

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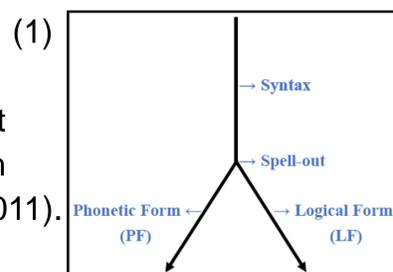
## Introduction

- Richards (2010, 2016) proposes a way of identifying affixes by looking into their metrical dependencies initially detected in narrow syntax.
- I adopt **Contiguity Theory** (Richards 2016) and argue that suprasegmental features are visible in narrow syntax.
- Swahili tense affixes require metrical boundaries on **both** left and right of their peripheries.
- The metrical boundary on its left is satisfied by an XP targeting [spec,TP] which eventually gives rise to the desired **EPP-effect**.

## Contiguity Theory

- Overt movements triggered by uninterpretable features such as [wh] and EPP (Chomsky 1995) are reanalyzed as operations **sensitive to suprasegmental features**.

- The driving cause for syntactic movements are related to prosodic requirements which must be **satisfied prior to spell-out**:



- Richards discusses motivations for movement which are compatible with **Match Theory** (Selkirk 2011).

### (2) Probe-Goal Contiguity

Given a probe  $\alpha$  and a goal  $\beta$ ,  $\alpha$  and  $\beta$  must be dominated by a single  $\varphi$ , within which  $\beta$  is Contiguity-prominent.

### (3) Affix Support

If a head is an affix, there must be a metrical boundary in the direction in which it attaches.

- English satisfies **both** (2) and (3) via **EPP** (also referred to as **Multitasking**).

## Prosodic boundaries and syntactic movement

- According to Richards (2016), there are four ways of categorizing languages depending on their syntactic headedness and prosodic boundedness:

	C to right of TP	C to left of TP
Prosodic boundaries on right of XPs	Basque (Movement required)	Chicheŵa, <Swahili> (Movement not required)
Prosodic boundaries on the left of XPs	Korean / Japanese (Movement not required)	English / Danish (Movement required)

- The combination of 'C to the right of TP + Prosodic boundaries on the left of XPs' and 'C to the left of TP + Prosodic boundaries on the right of XPs' do not require *wh*-movement.

- Here, I argue that Swahili is similar to Chicheŵa in terms of showing prosodic boundaries on the right edge of XPs.

### [1] Swahili *wh*-in-situ

- Bantu languages in general (e.g., Swahili, Chicheŵa, Kilega, and Kinande) do not undergo obligatory *wh*-movement:

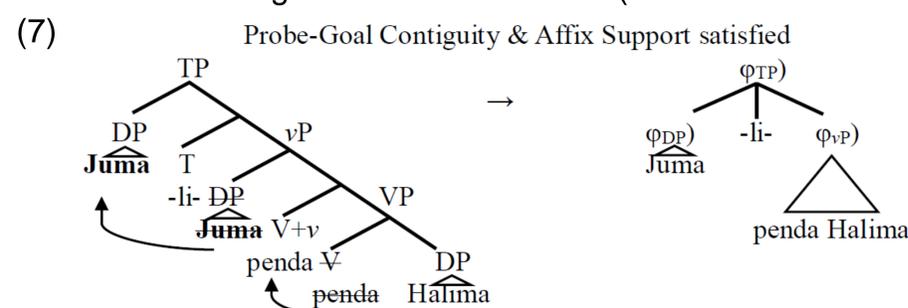
- (5) a. huyu m-tu m-refu a-na-penda **nini**  
 1.this 1-man 1-tall 3rd.sg-PRES-like what  
 'What does this tall man like?'
- b.  $[_{CP} C_{TP} [huyu\ m-tu\ m-refu\ a-na-penda\ [_{DP}\ nini] ] ]$  [= (5a)]  
 $\rightarrow [_{\varphi} C_{\alpha} \dots [_{\omega} nini]_{\beta} ]_{prosodic\ active\ edge} ]_{prosodic\ active\ edge}$

- Both (1) **Probe-Goal Contiguity** and (2) **Affix Support** are satisfied without having to move the *wh*-element to [spec,CP]:

### [2] Swahili EPP

- Carstens (2005, 2011) points out that Bantu languages in general display EPP.

- (6) Juma a-li-penda Halima  
 Juma 3rd.sg-PST-like Halima ('Juma liked Halima.')



- Since (2) is satisfied without movement, we rely on (3):
  - The right metrical boundary of T is satisfied by what is internal to vP.
  - The **left metrical boundary of T** is satisfied by **an XP targeting [spec,TP]**.

## Conclusion

- Swahili is a head-initial language with a prosodic active edge on the right, which is similar to Chicheŵa.
- Swahili Probe-Goal Contiguity is satisfied without the need for an overt movement.
- I argue that Swahili tense morphemes require metrical boundaries on **both left and right**.
- This explains how **Affix Support** gives rise to the desired **EPP-effect** in Swahili.
- No additional mechanisms need to be introduced in deriving well-formedness.

## Implications

- A **syntax-prosody driven motivation** for Swahili EPP is introduced.
- Affix Support can apply to affixes in need of one or more prosodic boundaries.
- **Many Bantu languages show similar patterns** as Swahili which add additional support to our claim.
- Close examination on **metrical dependencies and EPP** may shed further light on the status of Ts in Bantu.

## Selected references

- Carstens, Vicki. 2005. Agree and EPP in Bantu. *Natural Language & Linguistic Theory* 23: 219-279.
- Richards, Norvin. 2016. *Contiguity Theory*. MA: The MIT Press.
- Selkirk, Elizabeth. 2011. The syntax-phonology interface. In *The Handbook of Phonological Theory*. 435-484. J. Goldsmith, J. Riggle, & A. C. L. Yu (eds.). Oxford: Wiley-Blackwell.