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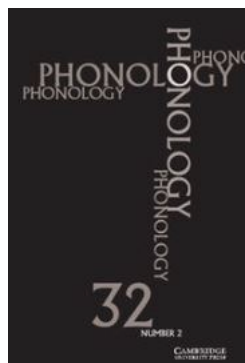
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Does Gokana really have syllables? A postscript

Larry M. Hyman

Squibs and replies

Does Gokana really have syllables? A postscript*

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After years of searching for evidence for the syllable in Gokana, I presented a possible argument in Hyman (2011) that the prosodic stem consists at most of two bimoraic syllables. In this note I show that there is an alternative account not involving syllables. Either way, Gokana makes very little reference to syllable structure, if at all.

In a recent article in *Phonology* (Hyman 2011), I provided evidence that Gokana, a Cross-River Niger-Congo language of Nigeria, cares very little, if at all, about organising its consonants and vowels into syllables. The only potential argument in favour of the syllable that was presented concerned the structure of the prosodic stem, which consists of a root and at most one derivational and one inflectional suffix. While the prosodic stem can have up to four moras and any of the shapes in (1a), the shapes in (1b) are unattested.

(1) a. CV, CVC, CVV, CVCV, CVVCV, CVVCVV, CVVVV
    b. *CVCVVV, *CVVVCV

The possible syllable-based explanation that was offered was that the prosodic stem consists of a single trochee with up to two bimoraic syllables, as in (2).

(2)

CV   CVV   CVC   CV.CV   CVV.CV

CV.CVV   CVV.V   CVV.CVV   CVV.VV

By this account the shapes in (1b) are ruled out by the common constraint that a syllable can be restricted to at most two moras. If the syllabic structures in (2) were not recognised, one would have to stipulate that quadrimoraic *CVCVVV and *CVVVCV are disallowed, while CVVVV and CVVCVV are well-formed. This was (and remains) the only evidence that Gokana phonology unambiguously refers to the syllable. Or does it?[1]

The question is how else one might 'explain' why *CVCVVV and *CVVVCV are unattested as possible prosodic stem shapes.[2] Since the appearance of Hyman (2011), I have realised that there is another possible account for the absence of these forms. Recall that the prosodic stem consists of an obligatory root and at most one derivational and one inflectional suffix. The class of such suffixes is, however, quite limited in the language. In (3) I repeat the structure of the prosodic stem from Hyman (2011: 70).[3]

(3) *Root* + (*derivational suffix*)   +   (*inflectional suffix*)

-È, -DE	CAUSATIVE	-ii	2PL SUBJECT
-a	ANTI-CAUSATIVE	-ÈÈ	LOGOPHORIC
-mà	INSTRUMENTAL		
-Da, -i	(frozen, lexical)		

As seen, derivational suffixes can have the shape -V or -CV, while inflectional suffixes have the shape -VV. Since simple roots have the shape CV, CVV or CVC, there are six possible input shapes for root + derivational suffix + inflectional suffix sequences.[4] However, as seen in (4), none of these six combinations can produce *CVCVVV or *CVVVCV.

(4)

a. CV + V + VV → CV-V-V   tá-ɛ̀-ɛ̀   'finish (TR LOG)'
     CV + CV + VV → CV-CV-V   bɛ-rɛ̀-ɛ̀   'lean (TR LOG)'

b. CVV + V + VV → CVV-V-V   kɛ̃ɛ̀-ɛ̀-ɛ̀   'wake (TR LOG)'
     CVV + CV + VV → CVV-CV-V   píì-nɛ̀-ɛ̀   'make silent (LOG)'

c. CVC + V + VV → CVC-V-V   bɔr-ɛ̀-ɛ̀   'soften (LOG)'
     CVC + CV + VV → CV-CV-V   di-má-ɛ̀   'hit with (LOG)'
                                   < /dib/

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[1] Note that although some scholars hypothesise the (CV) syllable as part of universal grammar with implications for language acquisition, my goal in Hyman (2011) was to seek unambiguous evidence that Gokana refers to syllables, not 'just' moras.

[2] One reviewer suggests that the absence of a third C might constitute another argument, since CVCVCV would require three syllables. However, this would not explain why CVCVC is also unattested. See Hyman (2011: 73) for further discussion.

[3] /D/ denotes an alveolar consonant which is realised as [r] or [n], depending on whether it occurs after a [+nasal] root. /E/ stands for a front non-high vowel which is realised as [e] or [ɛ], depending on vowel harmony, and [ɛ̃] after a [+nasal] root.

[4] One reviewer suggests that these root shapes provide more evidence for the syllable, since we can now say that a root is a single syllable with an obligatory onset and one or two moras. Since the final C of CVC may be followed by a V, it would presumably have to be resyllabified as CV.CV. An alternative without the syllable is that the root consists of a branching mora and a possible second non-branching mora.

In the above examples the logophoric suffix /-ÈÈ/ undergoes a rule that shortens a long vowel which occurs after another vowel, i.e. VV → V / V __ (Hyman 2011: 65).[5] The last example also shows consonant-cluster simplification before the instrumental suffix /-ma/. In addition to simplex roots, there are complex roots of the shape CVCV or CVVCV, whose final V or CV is often identifiable as a frozen derivational suffix. When one of the derivational suffixes in (4) is added, it replaces the final V and sometimes the second root consonant (since a prosodic stem cannot have a third C). As a result, these also cannot produce *CVCVVV. The examples in (5) are repeated from Hyman (2011: 70).

(5) *lexical* -Da   bɛrà   'lean on sth'   kɛrà   'hang on neck'
    causative -DE   bɛrɛ   'lean (TR)'   kɛrɛ   'hang (TR)'
    anti-causative -a   bɛɛ̀à   'lean (INTR)'   kɛɛ̀à   'hang (INTR)'
    instrumental -ma   bɛɛ̀mà 'lean with'   kɛɛ̀mà 'hang with'

The significance of the above is that we now have two different potential explanations for why Gokana prosodic stems cannot have the shape *CVCVVV or *CVVVCV: (i) the syllabic trochee account of Hyman (2011), which allows CVV.CVV and CVV.VV, but not the trimoraic syllables of *CVVV.CV and *CV.CVVV; and (ii) the absence of a morphological input that could produce *CVCVVV or *CVVVCV. In (6) I provide inputs that could in principle give rise to these sequences, but don't (for the reasons indicated).[6]

(6) a. CVVV + CV + ∅   → *CVVVCV   *no* CVVV *roots*
       CVV   + V   + CV → *CVVVCV   *no* CV *inflectional suffixes*
    b. CVC   + VV + V   → *CVCVVV   *no* VV *derivational suffixes*
       CVCVV + ∅   + V   → *CVCVVV   *no* CVCVV *roots*
       CVCV   + V   + V   → *CVCVVV   *derivational* -V *replaces root-final* V

While the first explanation proposes a principled reason for the lack of these sequences, the second views their absence as an historical accident. Of course, since the morphology has been reduced from the original pre-Gokana situation, which undoubtedly was much richer, one could always argue that the diachronic morphological reduction was (partly) driven by the end goal of placing a maximal bisyllabic CVV.(C)VV condition on the prosodic stem. But to make this argument non-circular, we would have to say that Gokana introduced the V-shortening rule to make sure that an input such as CVC + V + VV did not come out as

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[5] The length of the 2nd plural subject and logophoric suffixes is seen in two environments: (i) when immediately following a CVC root, e.g. [dib-èè] 'hit (LOG)'; (ii) when immediately following a CVV root, in which case a -DVV allomorph is required, e.g. [dáà-rèè] 'sleep (LOG)'. However, the vowel-shortening rule instead applies when the root is CV: [tú-è] 'take (LOG)'. See also note 7.

[6] Recall that CVC+V+VV also cannot produce *CVCVVV, since the inflectional suffixes undergo vowel shortening after another vowel.

*CVCVVV.[7] However, this cannot be the reason why there is a vowel-shortening rule, since the rule applies even when not needed, e.g. after CV roots: /tú-è/ 'take (LOG)'. The first analysis would be much more convincing if vowel shortening took place only when it was needed to fit the string into the maximal CVV.(C)VV trochaic foot.[8] Given this, it seems that the second hypothesis has to be taken seriously: there is no CVCVVV or CVVVCV because no input can produce such an output. If correct, the syllabic trochee analysis may still be descriptively compatible with the data, but not necessarily explanatory of why the facts are the way they are. Gokana can thus still be considered to be a language which may not refer to the syllable at all.

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[7] A reviewer writes: 'VV is shortened after V. Analysis: shortening is driven by the constraint that syllables are maximally bimoraic'. However, this does not explain the fact that both -VV suffixes and =VV pronominal enclitics shorten postvocalically even where they could have been syllabified as VV syllables: CV-VV, CVV-VV and CVVV-VV become CV-V, CVV-V and CVVV-V respectively, e.g. /aè kɔ baè kẼẼ-ẼÈ-ẼÈ=EE/ (3SG.PAST say 3SPL.PAST wake-CAUS-LOG-3SG.OBJ) → [aè kɔ baè kẽ̀ɛ̀-ɛ̀-ɛ̀=ɛ] 'he$_i$ said that they woke him$_i$ up' (cf. Hyman 1985: 23–24, 29).

[8] Compare the Ibibio analysis of Akinlabi & Urua (2003), cited in Hyman (2011: 69–70), whereby the negative suffix /-ke/ undergoes major phonological changes only when it can be fitted into the required heavy–light trochee of the negative construction.