



Against a Cr-Cluster in Ibibio

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ABSTRACT

Essien (1982, 1990) and others (cf, Urua, 2000; Noah, 1996, for instance) have made a case for a null consonant clustering in Ibibio; even though, Urua (2000) has also analysed the /dw/ as a CC, paradoxically. In this paper, we attempt to illustrate that intra-syllable consonant cluster, whether of the CC or Cr type, is phonotactically impossible, unrealistic, based on additional evidence and cross linguistic data¹. We claim that among the different possible phonetic representations for the syllable structure, a basic canonical structure CV or CV (V) (C) can be motivated phonologically for all syllable patterns in Ibibio². Among other evidence, this paper draws on syllable pattern, reduplication, tone pattern, segment deletion and phonotactic pattern in loans and pattern congruity³.

INTRODUCTION

The fact that two or more languages may have the same sound inventory but factor it out differently in their phonologies can (also) be borne out from the point of view of consonant cluster. As such, Ibibio and English may have the same set of sounds, let us say /p, t, w/, but phonologically the sounds would be used differently, in syllabification, for instance. Besides, the same sound can behave radically differently in the same language system. For example, in Ibibio: /p and ɸ/ cannot occur word initially, but they do so syllable initially, as in *dáp-pá* 'dream (v)' and *fê-ɸé* 'run'. As such, onset cluster or intra-syllabic consonant cluster is not attested in Ibibio phonologically. For the most part, except for nasal sounds, Ibibio nominals are hardly initiated by consonants (obstruents). This seems to apply even in the case verbally derived nominals, as an epenthetic vowel prefix is often utilized to pre-emptively repair any phonotactic aberration. Compare *man: u-man*, 'give birth: birth'. Generally, many languages are zero-consonant clustering. Some of these include Maori, Japanese, Mandarin Chinese, Yoruba, Neo-Melanesian, Hawaii and Nigerian Pidgin. Interestingly, languages like

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English and German can accommodate complex structures of the CCCC- and CCC0types respectively (cf. Hawkins,1992, Elbert & Pukui, 1979) And, the Nasal + Consonant sequence occurs only across syllable boundaries as in *m-fèm*, 'cockroach'. The apparent Cr-cluster in words like *fre*, 'forget', is only possible, generally, after vowel deletion, at the (surface) phonetic level. In addition, [r] occurs not only as a free variant of /d/ and is actually not a phoneme in Ibibio. The other questionable instance of a CC-cluster concerns forms such as /kw- and tw-/. However, when these forms are properly interpreted as a product of a non-contrastive secondary articulation, labialization, the matter becomes easily tractable and the need to posit it as a CC- cluster is obviated. x.In this paper, we have used additional evidence to bolster our postulation that Ibibio, indeed, does not favour consonant clusters within syllables. Such new evidence includes pattern congruity, tone pattern and reduplication in Ibibio.

Surface syllable structure

The syllable is the tone bearing unit in the language, with the vowel or the syllabic nasal (N) as the nucleus. However, a simple (or short, verbal) vowel may not carry a tone complex neither may a syllabic nasal. While we do not intend to drag the argument against the CCV structure in Ibibio, we may want to reassess the situation, in terms of the phonology of the syllable structure of Ibibio and other variables.

Monosyllabic stems in Ibibio exhibit forms that may be phonetically interpreted as in:

1. V, C(N), CV, CVV, CVC, CVVC, CrV, CD

Disyllabic words have such syllable patterns as in:

2. V-CV, CV-CV, C^wV, V-CVVC, CV-CVC, C-CVVC

Polysyllabic words combine the patterns in (1) and (2) above.

One of the exceedingly convoluted issues in the Ibibio syllable pattern is how to correctly interpret structures such as CCV and CVV in words involving labialized consonants, C + G + V, like /dwǝ/ 'fall' and /wai/ 'tear into pieces', vowel sequence or diphthongs. Phonetically, we can analyse this form as:

[duǝ], [d^wǝ], 'fall' and as vowel sequence or phonetically, we can analyse this form as:

3. [du], [d^w], [dw], [duw], [d^uw]

Whatever form that is selected must be motivated on some principles. For one, we can be sure no single language can utilize all these contrasts phonologically (also cf. Ahoua & Leben, 1998). The CCV can signify either of two things (in the first instance: CGV or CrV as 4a and 4b in: respectively)

4. (a) kwè 'block (V)' djá 'eat'

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(b) frě 'forget' trě 'stop
(V)'

Another way of analyzing the CC (V) structure is to postulate a CV-CV, as manifested in forms such as: [dùw□, kúwé, díjá], as an extant form that has innovated, where the V preceding the glide got deleted. But as we have already seen in 3 above, the internal morpho-phonological system in the language does not support this hypothesis because [dùw□], etc., cannot pass the bisyllabic negative suffixation test. Bisyllabic stems accept the *-ké* suffix, while monosyllabic stems like [dù□] take - ɛV (see Essien, 1982, Noah, 1996, etc.). Can the tonal pattern unlock this knot?

The tonal patterns of verbs

The final syllable in Ibibio disyllabic verbs almost always ends with a high tone (except in relative clauses, among a few other instances, Urua (2007). Observe this in the following examples:

- 5. (a) sèémé 'agonize'
- (a) f□kk□ 'uncover'
- (b) dàppá 'retrieve object from fire'
- (c) démmé 'wake up'
- (d) k□□n□ 'team up (for physical assault)'

Such high tone occurrence coheres with what obtains in the 'controversial' disyllabics below. We think this tonal correspondence actually betrays the true disyllabic nature of such verbs.

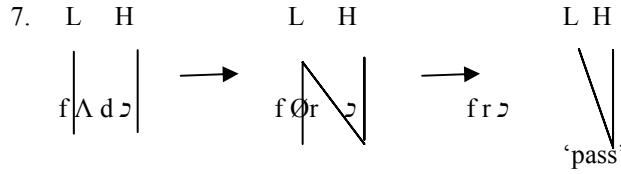
Ibibio exhibits two tonal patterns (high and or low) for monosyllabic verbs, generally. Simmon's (1957) survey of 577 Ibibio verbs yielded only eight monosyllabic verbs with complex tones, with the possibility that these eight could be disyllabic, from their internal composition. Phonologically, the CCV (CrV) verb structure in Ibibio is disyllabic, CV-CV, with a predominantly low-high sequence or at least with a high tone on the final syllable. This is typical of obvious disyllabics in 5 above, whose tonal pattern is similar to the ones below:

- 6. (a) fr^h → fλ-d□ 'pass'
- (b) brě → bî -dé 'play'
- (c) trě → tî -dé 'stop'
- (d) frě → fî -dé 'forget'

The data show that CCV (CrV) not only behaves like CV-CV, but also is actually . In other words, the L-H contour tone is manifest on the next TBU,

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for example, the after segment of the first TBU (Λ) via tonal relinking, which can be easily illustrated below:



Let us observe also this pattern in reduplication.

Reduplication

Essien (1986) defines reduplication as "a process by which a category or constituent of a sentence can be doubled" (p.68). Ibibio creates a type of intensive adjective and emphatic verb (Verb Focus) by reduplication. Our interest for now is on the verbs. Observe how the reduplication of CCV verb structure actually reveals its fundamental CV-CV status:

- (a) fr^h 'pass' → f□-fr□ 'pass'
(Focus)'
- (b) brě 'play' → bè-bré 'play (Focus)'
- (c) trě 'stop' → tè-tré 'stop'(Focus)
- (d) frě 'forget' → fè-fré 'forget' (Focus)

As we can see above, words like *frě* reduplicate by coping its internal CV canonical template. If *frě* is analysed as CCV, it would have yielded an expected, but unattested form like, **frefre*, and **trefre*, in the VF. But this is not possible. That the /fidé/ pattern reflects the true phonological reality in Ibibio can also be seen in a very closely related (but) culturally more conservative speech form, Anaang, which still retains the Ibibio extant phonological form as its phonetic form. The *frě*, etc., phonetic form is therefore, in our own thinking, a very recent innovation in Ibibio, which may have been influenced by Efik contact.

Syllable structure and segment deletion

Scholars in Ibibio (such as Essien, 1990; Urua, 2007) have presented such excellent treatise on segment deletion in Ibibio that we can hardly do more than a heuristic overview here. In particular, Essien (1990:45 ff) is quite incisive and painstaking, especially, from the angles of intra, inter word elision, preposition + noun, full, partial deletion, plural morpheme (^hmè) + noun, ^hmè as conjunction, noun + adjective, noun + noun.

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cluster at the phonological level, as we earlier stated. In Ibibio, only consonant germinate and homorganic nasals may constitute a ‘cluster.’ However, knowing that such instances are across syllable boundaries, as in *ɲ-kan* ‘charcoal’ and *tam-ma* ‘jump,’ there can be no case for clustering here.

One way to validate our thesis of zero-consonant clustering in the language is in the domain of loans. Let us observe instances of English loans in Ibibio:

	Foreign items	Ibibio
11.	(a) Hitler	Í-kídà
	(b) Train	à-tàdén
	(c) Kettle	à-kétídè
	(d) Charles	à-sàdí

First, observe that [d] and [r] do alternate intervocally or across stem boundary, hence, [Íkírà ⇌ Íkídà], [atàdén ⇌ atàrén]. Second, vowel deletion is very common after lenition, so that we also have [íkrà] and [atren]. However, the lenition process (free variation) is not automatic as it does not yield in the case of [asadi] 12d, above. Third, please note how Ibibio uses vowel epenthesis to break clusters and avoid (consonant) coda in all the examples in 12 above.

The above data has vindicated our claim that Ibibio admits no C-cluster. The Ibibio case is however not isolated. Many Cross River languages, for example, do not only prohibit consonant clusters, but they also restrict consonant onset. Let us observe the situation in Yala (Ogoja):

	English	Yala
12.	(a) Jesus	ijisusi
	(b) Christ	ikrìsì
	(c) milk	imilìkì
	(d) slippers	isilìpasì
	(e) rice	irìsì

Efutop exhibits similar zero CC-cluster and null onset cluster

	English	Efutop
13.	(a) slippers	i-silepas(i)
	(b) rice	e-resi
	(c) glass	e-ge-lasi

Pattern Congruity

Among other arguments one can marshal against a CC-cluster in Ibibio, Urua (2000) states that, “in the Ibibio language, for instance, non-identical

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consonant clusters are not permitted in the syllable structure” (p. 75). This is why it is more insightful to analyse forms like *ikwǒ* and *ikwâ* as: [ikùś and ikùà], ‘pr. n, knife’. Noah (2011) sums this point

As such, phonologically, it does not lead to a principled analysis to appraise /tié/ as /tye/ or /tje/ or /dùś/ as / dwo/ since /t/ and /y,j/, /dw/ or/br/ are phonetically unidentical in terms of natural class features. This is one simple reason why we do not have *d or t + K sequence in *kèèdkèèd but kèèdèkèèd ‘one each/one by one’. If this consonant cluster is not permitted across word boundary, it would be a lot stranger to conceive of it intra- syllabically.

Since there is no phonemic labialisation in Ibibio, we simply attribute the Cw form to a product of phonetic co-articulation, labialization, which is motivated by the presence of back vowels: /a, etc. /.

CONCLUSION

Though the patterns could benefit from more proof for the CV pattern than just tonal pattern, phonotactic pattern in loans, pattern congruity, reduplication and segment deletion, our presentation points to the fact that a simple canonical structure can be motivated based on segmental and tonal evidence. Part of the consequences for the phonological inventory of Ibibio is that clustering and labialization have no phonemic status in the language. This analysis also demonstrates the close phonological unity among Cross River and Benue Congo languages in terms of anti-consonant clustering feature, and cross-linguistic evidence from Yala and Efutop show.

ENDNOTES

1. Ibibio is a Central Lower Cross (LC) language of the Benue Congo Group with about 5.5 million speakers, (AUA, 1998). It is the dominant language in Akwa Ibom State and is spoken by a sizable population in Cross River, Rivers and Abia States, as well as in Western Cameroun.
2. Many scholars have also acknowledged the CV structure as canonical for most LC languages (cf. Faraclass, 1989; Essien, 1990; Urua, 2000 & 2007). The major difference is that they have not used similar evidence to justify it.
3. Essien 1983, 1990; Ward 1933,; Urua , 1990, 2000, have adequately analysed the syllable structure of Ibibio. Though we may not accept all aspects of the analyses in Urua (*ibid*), a full re-analysis of the internal structure of the Ibibio syllable template is envisaged in future research,

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especially, the connection between syllables and feet. This is part of the reason we present just a sketch in this paper.

4. In contrast with Ward (1933), in Ibibio, at least, it is not necessarily the first of the two vowels that is deleted. Any of the vowels (that is, even the second vowel) can be deleted, as may be dictated by vowel quality or and grammatical consideration. We expect that the situation may not be very different in Efik, when critically re-examined.
5. As a matter of fact, there are a lot more phonological processes than those mentioned here that are involved in 'ibibionization' of loans in general and in the above data in particular; but such details are tangential to this paper.

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