

JUNCTION FEATURES IN BEKWARRA

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Introduction

The 34,000 or so Bekwarra people, known to their western and southern neighbours as 'Yakoro', live in the northern part of Ogoja Province, Eastern Nigeria, east of Ogoja town and adjacent to the border with Northern Nigeria. Their language is grouped by J.H. Greenberg ['The Languages of Africa'. 1963, p.9] with Boki and Gayi[Uge] as 'Cross River 1', part of the larger Benue - Congo grouping.

The purpose of this paper is to outline the main features of word-junction in Bekwarra. The scope of the paper of course precludes any attempt to give a full definition of the term 'word' as used in the analysis of Bekwarra phonology and grammar. The basic rules which may be postulated for the phonological features of word-junction may be set out, without reference to grammatical categories or relationships, and an attempt is made to do this in section 1, while noting certain exceptions which can only be accounted for by reference to grammatical categories. Sections 2 and 3 deal with junctions involving pronouns and relationals, which manifest phonological characteristics of other kinds.

The phonological structure of Bekwarra words may be described in terms of syllables of patterns CV, V. And N (the last mentioned consisting of one of the three nasals /m/, /n/, and /ŋ/). Each syllable normally carries one unit of tone [high, mid or low]. The most frequent syllable combinations in verbal and nominal roots are CV, CVCV, CVN, and CVCV, the first consisting of one tone-bearing syllable unit and the remainder of two units [phonetically rising and falling tones on CVN roots being analysed as sequences of two level tone units, the first associated with the CV syllable and the second with the final N]. Certain additional characteristic syllable patterns are found in some particles, but in general the patterns stated for verbal and nominal roots are basic to the whole language. All words end in a vowel or in one of the three nasals mentioned above.

Special reference, however, must be made to sequences consisting of the consonants /b/ or /r/ preceded and followed by identical vowels. All verbal roots of the pattern CVCV must have /b/ or /r/ as the second consonant and the vowels must be identical, except that when the first is /u/ the second is /i/; a significant proportion of nominal roots have the same feature. Verbal and nominal prefixes normally consist of a single vowel but there are two nominal 'prefixes' apparently of a VCV pattern, ebe- and iri-. The first vowel, however, has subordinate status, as will be seen below, and as is further indicated by the fact that the two vowels normally have identical tones and that in certain related languages the corresponding prefixes are of a CV pattern.

1. Basic System

The limitations on final consonants and the widespread use of both verbal and nominal prefixes consisting of or commencing with a vowel result in the frequent occurrence of word-junctions involving the interaction of vowels. The system described in the following paragraphs appears to operate in sequences of words of every class and standing in every possible mutual syntactic relationship, other than those referred to in sections 2 and 3. Attention is drawn below, however, to the following types of sequence, where certain exceptional features are found:

1. Noun + Attributive Noun [1.1, note e]
2. Verb + Noun Object [1.1, note f]
3. Nominal Phrase Subject + Verb [1.6]

The section is subdivided according to the various final and initial syllable patterns which may be found. The charts in paragraphs 1.1 to 1.3 list the final vowel[s] of the first word of a sequence in the left-hand column and the initial vowel of the second word in the first horizontal row. The remaining entries show the resultant forms from each possible combination. For the sake of simplicity and clarity most examples given are of verb plus noun object sequences, but unless otherwise stated the same rules apply to all the types of sequence referred to above.

1.1. Final [-]CV + Initial VC-

	i-	e-	a-	o-	u-
Ci	i:	ie	ia	io	iu
Ce	i:	e:	a:	o:	u:
Ca	e:	e:	a:	o:	o:
Co	i:	e:	a:	o:	o:
Cu	ui	ue	ua	uo	u:

Notes:

a. When the final vowel of the first word is i or u, both it and the initial vowel of the second word are retained. [Example 1]

b. In most other cases the resultant form is a slightly lengthened form of the initial vowel of the second word. [Example 2]

c. A sequence of -a + i- is, however, realised as a somewhat lengthened e, sometimes with a tendency to glide toward i. [Example 3]

d. Similarly, a sequence of -a + u- and also of -o + u- is realised as a somewhat lengthened o, sometimes with a tendency to glide toward u. [Example 4]

e. The tones of both syllables are retained in each case, except that when the two words concerned consist of a noun followed by another noun [other than a personal name] in an attributive relationship an initial low tone is replaced by a high tone [or a mid if it is preceded by a mid or low tone in the previous word and followed by another low tone]. [Examples 5 and 6]

f. When a verb with a vowel -i is followed by a noun object the resultant form is a lengthening of the initial vowel of the noun. Thus in this instance the first line of the above chart would have the following form:-

	i-	e-	a-	o-	u-
-Ci	i:	e:	a:	o:	u:

[Example 7]

- | | | | |
|----|------------|--------------|----------------------------------|
| 1. | ìpì àrìn | [ìpìàrìn] | 'this place' |
| 2. | ákpē ókú | [ákpṓókú] | 'he took the matches' |
| 3. | ákwā ícīē | [ákwḗícīē] | 'he held the pot' |
| 4. | ákwā ùkērè | [ákwṓúkērè] | 'he held the bag' |
| 5. | àrìwù áté | [àrìwùáté] | 'market place' [mouth of market] |
| 6. | àrìwù ákpà | [àrìwùákpà] | 'mouth of box' |
| 7. | ājì ācākā | [ājā́:cākā] | 'he stole the sweet potatoes' |

1.2. Final -C VV [with identical V's] + Initial VC-

	i-	e-	a-	o-	u-
Cii	i:	ie	ia	io	iu
Caa	e:	e:	a:	o:	o:
Cuu	ui	ue	ua	ua	u:

Notes:

a. One nominal root has been found with a vowel sequence -oo, but no verbal root has been found with this sequence. The sequence -ee has not been found in nominal or verbal roots, though it occurs in several particles.

b. It will be observed that the resultant forms shown in the above chart are identical with those in the corresponding sections of the chart in section 1.1. The gliding tendency mentioned in notes c and d above is again occasionally found.

c. The tone of the final vowel of the first word is lost, [it would in fact be convenient to speak of the complete loss of both the vowel and its tone]. The tones of the remaining two vowels are kept, again with the particular tonal features marking attributive relationship mentioned in 1.1, note e.

d. The exception in the case of verb plus noun object sequences mentioned in note f above does not apply in this case.

Examples

- | | | |
|----------------|-------------|--------------------------|
| 8. ábíí ácwōm | [ábííácwōm] | 'he asked for the knife' |
| 9. ábíí ùcī | [ábííùcī] | 'he asked for medicine' |
| 10. ábūū loīē | [ábūūlcīē] | 'he opened the pot' |
| 11. ábūū ùkērè | [ábūūkērè] | 'he opened the bag' |
| 12. ábūū ēkpē | [ábūūēkpē] | 'he opened the bottle' |
| 13. āfāā tēm | [āfāā:ēm] | 'he ground something' |

1.3. Final [-]CVV [with dissimilar V's] + Initial VC-

	i-	e-	a-	o-	u-
Cie	io	io	ia	io	io
Cia	ie	ie	ia	io	io
Cuo	ue	ue	ua	uo	uo
Cua	ue	ue	ua	uo	uo

Notes:

a. The four VV sequences shown in the left-hand column above are the only sequences of diverse vowels found within a single morpheme.

b. Tonal features are the same as those mentioned in section 1.2, note c.

c. The characteristic feature of this group is the lowering of the initial i- or u- of the second word in the sequence to e- or o-

respectively. Although the distinction between -ie and -ia and between -uo and -ua is obliterated, the lowering of the initial close vowel serves to preserve the distinction between these and words ending in -ii and -uu when occurring before an initial ^{close}vowel [Compare examples 14 and 15 with example 10 above, 16 and 17 with 11, ^uwith 9. Compare 12, 18, and 19 for loss of distinction].

Examples:

- | | | | |
|-----|------------|------------|--------------------------|
| 14. | ábūō'lcīē | [ábūācīē] | 'he counted the pots' |
| 15. | ábūā lcīē | [ábūācīē] | 'he tied the pots' |
| 16. | ábūō ūkērē | [ábūōkērē] | 'he counted the bags' |
| 17. | ábūā ūkērē | [ábūōkērē] | 'he tied the bag' |
| 18. | ábūō ēkpē | [ábūēkpē] | 'he counted the bottles' |
| 19. | ábūā ēkpē | [ábūēkpē] | 'he tied the bottle' |
| 20. | ābīāāācwōm | [ābīācwōm] | 'he sharpened the knife' |
| 21. | ābīā ūcī | [ābīōcī] | 'he put on medicine' |

1.4. Final -Vb/rV + Initial VC-

The final vowel of the first word is lost, as is the tone of the final syllable. No other change takes place. The usual tonal feature marking attributive relationship is found [see 1.1 note e, and example 24].

- | | | | |
|-----|-------------|-------------|-----------------------|
| 22. | ásūrū lcīē | [ásūrīcīē] | 'he put the pot down' |
| 23. | átūbī ūtyén | [átūbūtyén] | 'he dug the farm' |
| 24. | ūtērē ūbū | [ūtērūbū] | 'goat's tail' |
| 25. | ūkērē ānīn | [ūkērānīn] | 'this bag' |

1.5. With Initial ebe- or iri- Prefix

In every case the initial vowel of the prefix is lost, together with its tone. The raised tone feature marking attributive relationship is retained on the second vowel of the prefix. [see example 29]

Examples:

- | | | | |
|-----|--------------|--------------|------------------------------|
| 26. | āṇwō ēbētūō | [āṇwōbētūō] | 'he drank palm-wine' |
| 27. | ābīī ēbētūō | [ābīībētūō] | 'he asked for palm-wine' |
| 28. | ábūō īrībūō | [ábūōrībūō] | 'he counted the kola' |
| 29. | ūṇwū īrīsī | [ūṇwūrīsī] | 'doorway' [mouth of door] |
| 30. | āyēbē īrībōm | [āyēbērībōm] | 'he demolished the yam-heap' |

1.6. Nominal Phrase Subject + Verb

When following a nominal phrase subject a verbal root is normally preceded by one of the pronominal prefixes i- [3rd. person singular non-past], a- [3rd. person singular past], e- [general plural]. Before a- and e- the normal rules given in sections 1.1 - 1.4. apply, but in rapid speech the i- prefix is lost after a vowel-final word, whatever the preceding vowel[s] may be, and no other change takes place.

Examples:

31. ènì ébé [èníébé] 'people came'
32. èkpè áciè [èkpā:cíè] 'the bottle is full'
33. ìciè áciè [ìcīá:cíè] 'the pot is full'
34. ùtèrè áwīā [ùtērāwīā] 'the tail is long'
35. èkpè ìyī kíñ [èkpēyīkīñ] 'the bottle is here'
36. ìciè ísā [ìcīèsā] 'the sun is hot'
37. ùkòrè ìyī kíñ [ùkērēyīkīñ] 'the bag is here'

2. Junctions Involving a Pronoun as Second Member

2.1. Noun + Attributive Pronoun

The full forms of the attributive ['possessive'] pronoun are as follows: singular, 1. ìyī 2. íwòn 3. ímēn; plural, 1. ítēn 2. ínēn 3. íbērē.

After a nasal-final noun the full form of the pronoun occurs, except that the initial vowel of the 3rd. person pronoun, both singular and plural, is normally lost in rapid speech after a final -m. In this case the -m is lengthened and carries the high tone normally on the í- in addition to its own.

Examples:

38. ùbāñ ímēn [ùbāñímēn] 'his country'
39. ùfāñ ímēn [ùfāñímēn] 'his side'
40. àcwōm ímēn [àcwōm:í:ēn] or [àcwōmímēn] 'his knife'
41. àcwōm íbērē [àcwōm:íbērē] or [àcwōmíbērē] 'their knives'

After a vowel-final noun the initial i- is always lost. Its high tone usually replaces the final tone of the preceding noun, but in the case of -CV final nouns [other than those including a -VbV or -VrV sequence - cf. section 1.4.] the final tone of the noun may be kept in addition to the high tone associated with the pronoun, and the final vowel slightly lengthened.

Examples:

42. ēkpē ímēn [ēkpémēn] or [ēkpēímēn] 'his bottle'
 43. ùfàā ímēn [ùfàāmēn] 'his fowl'
 44. ìcìē ímēn [ìcìémēn] 'his pot'
 45. ùkērē ímēn [ùkērémēn] 'his bag'

2.2 Verb + Pronoun Object

The object forms of the pronoun are as follows:

Direct Speech:	singular,	1. Mí ^m [m̄ after CV verbs]	2. wō	3. hē
	plural,	1. tī	2. āmēn	3. ābē
Reported Speech:	singular,	1. àmī	2. àwō	3. àhē*
	plural	1. àbērē	2. àmēn	3. àhē

*When referring to a person other than the subject of the verb introducing the reported speech the 3rd person singular form is āmēn for subject, object and attributive.

The characteristic feature of this construction is a high tone in the verb preceding the pronoun object. Verb roots of pattern CV in their 'basic' form [manifested in past tense and imperative without an object] may have a mid or a low tone [there is one high tone CV verb]; all other verb roots are of one of the three tone patterns {mid-mid, mid-low, low-low}.

Before a pronoun object 'mid' verbs have a high tone, both 'mid-mid' and 'mid-low' have two high tones; 'low' verbs have a low-high rise without any vowel lengthening, 'low-low' become low-high. When the verb is followed by one of the vowel-initial pronouns [2nd. and 3rd. person plural in direct speech and all the reported speech pronouns] the normal rules of junction as set out in section 1 apply, but the high tone feature remains.

In examples 46-53 the first column shows the verb as it occurs without an object, the second and third show the verb as it occurs with 3rd. person singular and plural direct speech objects. All the singular pronouns and the first person plural pattern in the same way as the 3rd person singular, the 2nd. person plural patterns in the same way as the 3rd person plural.

Examples 54a and 55a illustrate the patterning of the reported speech pronouns. When a low tone verb precedes a reported speech pronoun, the low initial tone of the pronoun is lost [example 54a] but when a non-low tone verb occurs the initial tone of the pronoun is retained [example 55a]. Examples 54b and 55b. show the corresponding direct speech forms.

The semivowel w in the second person singular pronouns iwōn [attributive] and wō [object] is lost in rapid speech. Examples 56 and 57 show the resultant forms when these pronouns follow a noun and a verb respectively.

46. a. áǵɪ 'he ate' b. [áǵíhē] 'he ate it' c. [áǵá:bē] 'he ate them'
47. a. āǵɪ 'he stole' b. [āǵíhē] 'he stole it' c. [āǵá:bē] 'he stole them'
48. a. ábūō 'he counted' b. [ábúóhē] 'he counted it' c. [ábúábē] 'he counted them'
49. a. áfūō 'he packed' b. [áfúóhē] 'he packed it' c. [áfúábē] 'he packed them'
50. a. āfūō 'he painted' b. [āfúóhē] 'he painted it' c. [āfúábē] 'he painted them'
51. a. áwúbɪ 'he jumped' b. [áwúbíhē] 'he pulled it out' c. [áwúbábē] 'he pulled them out'
52. a. áníbɪ 'he sucked' b. [áníbíhē] 'he sucked it' c. [áníbábē] 'he sucked them'
53. a. āníbɪ 'he twisted' b. [āníbíhē] 'he twisted it' c. [āníbábē] 'he twisted them'
- 54a. ādē ámén ìkē áhē [adā:mén ìkà:íhē] 'he said he should give to him'
- 54b. ìkē hē [ìkēhē] 'he should give to him'
- 55a. ādē ámén ìkwā áhē [adā:mén ìkwá:hē] 'he said he should hold him'
- 55b. ìkwā hē [ìkwáhē] 'he should hold him'
56. ǔhē íwòn [ùhó:n] 'your wife'
57. ānē wō [ānō:] 'he saw you'

3. Relationals

There are three of these, often translatable by a 'preposition' in English. They are alike in consisting of a single consonant closely tied to the following noun or pronoun [the latter always having the same form as an object pronoun in reported speech, cf. section 2.2]. Although sequences of relational and noun or pronoun do not constitute word-junctions in the same sense as in the foregoing sections, they are included here in view of certain parallels with features already described. The three relationals are listed separately with a description of their distinctive characteristics.

k. High tone replaces the normal tone of the vowel prefix^{of} following noun or the initial vowel of a pronoun. When both the prefix and the first root syllable of the noun normally have low tones,

the prefix tone is raised to mid, not to high [Examples 61b and 62b].

When either of the nominal prefixes ebe- or iri- occurs, both syllables of the prefix have a high tone after k, or mid if the first root syllable is low. (Examples 63b - 65b)

In somewhat slow speech the normal tone of a vowel prefix may be kept in addition to the high [or mid] tone, with slight lengthening of the vowel. This, however, does not occur with the prefixes ebe- and iri-.

The k itself is often omitted in rapid speech, but the tonal features remain the same.

[Examples in column b. below]

n. There is a distinct lengthening [fully double the normal length] of a vowel prefix or the initial vowel of a pronoun. The high tone associated with the relational is followed by the normal tone of the prefix or the pronoun.

When either of the nominal prefixes ebe- or iri- occurs, the first syllable of the prefix has a high tone, without any lengthening of the vowel, and the second syllable retains its normal tone.

This is the only circumstance in which the two syllables of these prefixes do not have identical tones.

[Examples in column c. below]

r. This relational is simply added to the normal form of the noun or pronoun with no change of tone or vowel lengthening. [Examples in column a. below].

Clause connectives resemble the relationals in having phonological features of a similar kind in conjunction with a following word, whether noun, pronoun or verb with pronominal prefix, but these are not worked out in this paper.

Examples:	a. <u>r</u> 'with'	b. <u>k</u> 'locative'	c. <u>n</u> 'with'
58.	[rēkpē]	[kēkpē]	[né:kpē] 'bottle'
59.	[rābō]	[kābō]	[ná:bō] 'arm'
60.	[rūcī]	[kūcī]	[ná:ci] 'tree'
61.	[rākpā]	[kākpā]	[ná:kpā] 'box'
62.	[rābiā]	[kābiā]	[ná:biā] 'leg'
63.	[rēbēcīē]	[kēbēcīē]	[nébēcīē] 'cocoyam'
64.	[rīrījī]	[kīrījī]	[nīrījī] 'food'
65.	[rīrīsī]	[kīrīsī]	[nīrīsī] 'door'
66.	[rāhē]	[kāhē]	[ná:hē] '3rd. pers.' singular

Conclusion

The foregoing material illustrates the operation of several types of phonological 'process' at word-boundaries in connected speech. Although the fundamental system can be described solely in terms of phonological 'rules', it is necessary to make reference to grammatical factors to account satisfactorily for all the data.

One further point arising is the possibility of speaking of some kind of 'ranking' of both final and initial vowels on the basis of junction features. The second vowel of a CVV sequence or of a CVb/rV sequence quite clearly has a subordinate status in that in word junction of the type described in section 1 [other than the cases referred to in 1.5 and 1.6] all trace of it, and of the tone associated with the syllable of which it is the nucleus, is lost, whereas there is always some trace of the vowel and the tone of a CV sequence, even if it is only in the lengthening of a following initial vowel. Within the CV sequences, i and u may be considered as being of higher rank than the other vowels, in that with one exception, they alone are retained unchanged across a word-boundary.

In the case of initial vowels, reference has already been made to the subordinate status of the first vowel of the nominal prefixes ebe- and iri-, which is lost in every case mentioned other than when preceded by one of the relationals or connectives. The initial vowel [though not the tone] of the attributive pronoun is also of a lower rank.