

## INTERNAL EVIDENCE FOR FINAL VOWEL LOWERING IN HAUSA\*

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Internal factors involving phonotactic asymmetries and irregular morphological alternations suggest that final \*/uu/ in Hausa historically lowered to /oo/ when the preceding syllable contained /aa/, e.g. \*kwààdoo 'frog' < \*kwàadu. (Note: L tone is indicated by a grave accent, H tone is left unmarked. Long vowels are indicated by double letters.) The aim of this paper is to present evidence supporting this proposal and to suggest implications of the historical vowel change for one of Hausa's many plural formations, the ablaut plural. (For background studies on the history of vowels in Hausa and Chadic, see Barreteau [1987], Frajzyngier [1986], Newman [1979b], Parsons [1970], Schuh [1984], and Wolff [1983].)

### 1. Phonotactic Asymmetry

Hausa has five vowels—*i(i)*, *e(e)*, *a(a)*, *o(o)*, *u(u)*—all of which can occur in word-final position, e.g.

(1) <i>hancìi</i>	'nose'	<i>kiifii</i>	'fish'
<i>shingee</i>	'fence'	<i>beebee</i>	'deaf mute'
<i>rùmfaa</i>	'shed'	<i>raanaa</i>	'sun'
<i>bàngoo</i>	'a gourd'	<i>zoomoo</i>	'hare'
<i>ganduu</i>	'farm'	<i>tuuruu</i>	'stubborn person'

When one looks at disyllabic words of the form *CaaCVV*, however, one finds distributional asymmetries which previously have not been noticed. Whereas the

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sequences *aa...ii*, *aa...ee*, *aa...aa*, and *aa...oo* are quite normal, the *aa...uu* sequence with the final high back vowel is surprisingly restricted, e.g.

- (2) *bàakii* ‘mouth’, *daagii* ‘digging rod’, *gaashii* ‘hair’, *ràafii* ‘stream’, etc.  
*baabèe* ‘locust’, *daalèe* ‘lavish living’, *saashèe* ‘section’, *waakee* ‘beans’, etc.  
*faatàa* ‘hide’, *kàazaa* ‘hen’, *naamàa* ‘meat’, *raanaa* ‘sun’, etc.  
*gaabòo* ‘simpleton’, *gwaaloo* ‘grimace’, *ràagoo* ‘ram’, *yaaròo* ‘boy’, etc.  
*baaʔuu* ‘hyena’, *fàaruu* ‘the tree *Odina barteri*’, *gàaʔuu* ‘town wall’

Plurals with final *-uu* preceded by */aa/* exist, e.g. *kaanuu* ‘heads’, *maasuu* ‘spears’, as do verbal nouns, e.g. *kaamùu* ‘catching’, *saamùu* ‘getting’. There are also *aa...u* words where the final *-u* is short e.g. *kàawu* ‘uncle’, *dàazu* ‘right now’, not to mention the numerous medio-passive “grade 7” verb forms, e.g. *tàaru* ‘assemble’, *fàaru* ‘happen’, *kàamu* ‘be caught, infected’. But with simple monomorphemic stems, examples of *aa...uu* are extremely rare, and those that do occur are not basic native words. The word *gàaʔuu*, for example, is a loanword from Kanuri, and *baaʔuu*, whose source is not identifiable, also appears to be a loanword, in that it contains the rolled */r̄/* instead of the native flap and because it is a feminine word ending in a vowel other than */aa/*. The one possibly native word exhibiting the *aa...uu* pattern, *fàaruu*, stands in sharp contrast to the thirty-five or so examples of everyday common nouns containing *aa...oo*. The explanation that I would offer to account for the absence of words with the vowel sequence *aa...uu* and the overabundance of those with *aa...oo* is that there was a historical sound change of final *\*/uu/* to */oo/* which was conditioned by */aa/* in the preceding syllable. As a result, words originally of the form *\*CaaCuu* now appear as *CaaCoo*.

## 2. Abstract Nouns

Hausa has a number of related suffixes *-(n)taa*, *-(n)cii*, *-(n)takaa*, etc. which are used to form abstract nouns, e.g. *jàaʔùmatakàa* ‘bravery’ < *jaaʔùmii* ‘a brave person’. Disyllabic nouns generally use an allomorph of the suffix containing the */n/* and add it to the full lexical stem including the final vowel. (Shortening of vowels in closed syllables and consequent centralization of short */e/* and */o/* to */a/* are phonologically determined.) For example,

- |                    |                      |   |                |              |
|--------------------|----------------------|---|----------------|--------------|
| (3) <i>gwàntàa</i> | ‘expertise’          | < | <i>gwàanii</i> | ‘expert’     |
| <i>bèebàntakàa</i> | ‘muteness’           | < | <i>beebee</i>  | ‘deaf mute’  |
| <i>bàràntakàa</i>  | ‘service’            | < | <i>baràa</i>   | ‘servant’    |
| <i>angwancìi</i>   | ‘being a bridegroom’ | < | <i>angòo</i>   | ‘bridegroom’ |

<i>ràgwàntakàa</i>	‘laziness’	< <i>ragoo</i>	‘slacker’
<i>zùmùntaa</i>	‘relationship’	< <i>zumùu</i>	‘friend, cousin’

A few nouns ending in *-oo* exhibit an irregular vowel change when the abstract suffix is added, e.g.

- (4) *sàabùntaa* ‘freshness, newness’ < *saaboo* ‘new’  
*baakuncii* ‘hospitality, being a stranger’ < *bàakoo* ‘guest, stranger’  
*yàarìntaa* (< */yàarùntaa/*) ‘childishness’ < *yaaròo* ‘child, boy’  
 (cf. also *yaarinyàa* ‘girl’ < */yaaru-nyàa/*, with the feminine derivational suffix *-nyàa* [Newman 1979a])

When one observes that all of these examples have a long /aa/ in the first syllable, an explanation for the vowel alternation immediately presents itself, namely that formerly, these words all had the form *CaaCuu*, i.e. *\*bàakuu*, *\*saabuu*, *\*yaarùu*. The final *\*/uu/* was retained in abstracts and other derivational forms involving suffixation (such as the verbalizer *-ntaa*, e.g. *saabùntaa* ‘renew’) whereas in word-final position the *\*/uu/* lowered to */oo/*, e.g.

- (5) *\*saabuu + ntaa* → *sàabùntaa* ‘newness’; *\*saabuu* > *saaboo* ‘new’.

### 3. Plurals

Most Hausa plural formations involve the addition of a suffix with an associated tone pattern, e.g. *zoomoo* ‘hare’, pl. *zoomàayee*; *keesòo* ‘grass mat’, pl. *keesunàa*; *kàakaa* ‘grandparent’, pl. *kàakànnii*. Some basic disyllabic nouns, on the other hand, form their plurals by final vowel replacement, e.g. *faatàa* ‘hide’, pl. *faatuu*; *raamii* ‘hole’, pl. *raamuu*; *kàazaa* ‘hen’, pl. *kàajii*; *tsàakoo* ‘chick’, pl. *tsàakii*. Notice that the singular nouns operating ablaut plurals generally end in */ii/*, */aa/*, and */oo/*, a phonologically unnatural class. If, however, one interprets the */oo/* in these words as deriving historically from *\*/uu/*, as suggested above, then the class becomes quite regular. That is, the formation consists in taking singulars ending in one of the prime vowels */ii/*, */aa/*, or */uu/* and altering them by switching to another prime vowel, e.g.

- | (6) Singular                          | Plural         |            |
|---------------------------------------|----------------|------------|
| <i>*bàakuu</i> (now <i>bàakoo</i> )   | <i>bàakii</i>  | ‘stranger’ |
| <i>*kwàadu</i> (now <i>kwàadoo</i> )  | <i>kwàadii</i> | ‘frog’     |
| <i>*ƙwàaruu</i> (now <i>ƙwàaroo</i> ) | <i>ƙwàarii</i> | ‘insect’   |

	* <i>tsàakuu</i> (now <i>tsàakoo</i> )	<i>tsàakii</i>	‘chick’
	* <i>zàabuu</i> (now <i>zàaboo</i> )	<i>zàabii</i>	‘guinea-fowl’
cf.	<i>maashii</i>	<i>maasuu</i>	‘spear’
	<i>raamii</i>	<i>raamuu</i>	‘hole’
	<i>fàaraa</i>	<i>fàarii</i>	‘locust’
	<i>kàazaa</i>	<i>kàajii</i>	‘hen’
	<i>naamàa</i>	<i>naamuu</i>	‘animal’
	<i>yaatsàa</i>	<i>yaatsuu</i>	‘finger’

Whereas all common nouns of the shape \**CaaCuu* would have changed into *CaaCoo*, not all *oo*-final words would necessarily have come from earlier forms with final \*/*uu*/. Some would have ended in /*oo*/. These words with an etymological final /*oo*/ would not have been eligible for the ablaut plural; instead they would have formed plurals by suffixation, as is still the case, e.g. *kòtsoo* ‘type of drum’, pl. *kootsunàa*; *ràagoo* (NOT < \**ràaguu*) ‘ram’, pl. *raagunàa* (cf. the synchronically similar word *zàaboo* ‘guinea-fowl’ in (6) above).

#### 4. Conclusion

In this brief communication I have suggested that Hausa historically underwent a phonologically conditioned change of final \*/*uu*/ to /*oo*/ in the environment of /*aa*/ in the preceding syllable. This historical process provides an explanation for vowel alternations in the formation of abstract nouns and in the phonologically skewed distribution of nouns that form ablaut plurals.

#### REFERENCES

- Barreteau, Daniel. 1987. “Du vocalisme en tchadique.” In Daniel Barreteau (ed.), *Langues et cultures dans le bassin du lac Tchad*, pp. 161-191. (Collections Colloques et Séminaires.) Paris: ORSTOM.
- Frajzyngier, Zygmunt. 1986. “Lowering rules in Chadic.” *Bulletin of the School of Oriental and African Studies* 49:384-385.
- Newman, Paul. 1979a. “Explaining Hausa feminines.” *Studies in African Linguistics* 10:197-226.
- Newman, Paul. 1979b. “The historical development of medial /*ee*/ and /*oo*/ in Hausa.” *Journal of African Languages and Linguistics* 1:172-188.

- Parsons, F.W. 1970. "Is Hausa really a Chadic language? Some problems of comparative phonology." *African Language Studies* 11:272-288.
- Schuh, Russell G. 1984. "West Chadic vowel correspondences." In James Bynon (ed.), *Current Progress in Afro-Asiatic Linguistics*, pp. 167-223. (Current Issues in Linguistic Theory, 28.) Amsterdam: John Benjamins.
- Wolff, Ekkehard. 1983. "Reconstructing vowels in Central Chadic." In Ekkehard Wolff and Hilke Meyer-Bahlburg (eds.), *Studies in Chadic and Afroasiatic Linguistics*, pp. 211-232. Hamburg: Helmut Buske.

