AFRICAN LANGUAGE STUDIES

XI

1970

IN HONOUR OF MALCOLM GUTHRIE

SCHOOL OF ORIENTAL
AND AFRICAN STUDIES
UNIVERSITY OF LONDON

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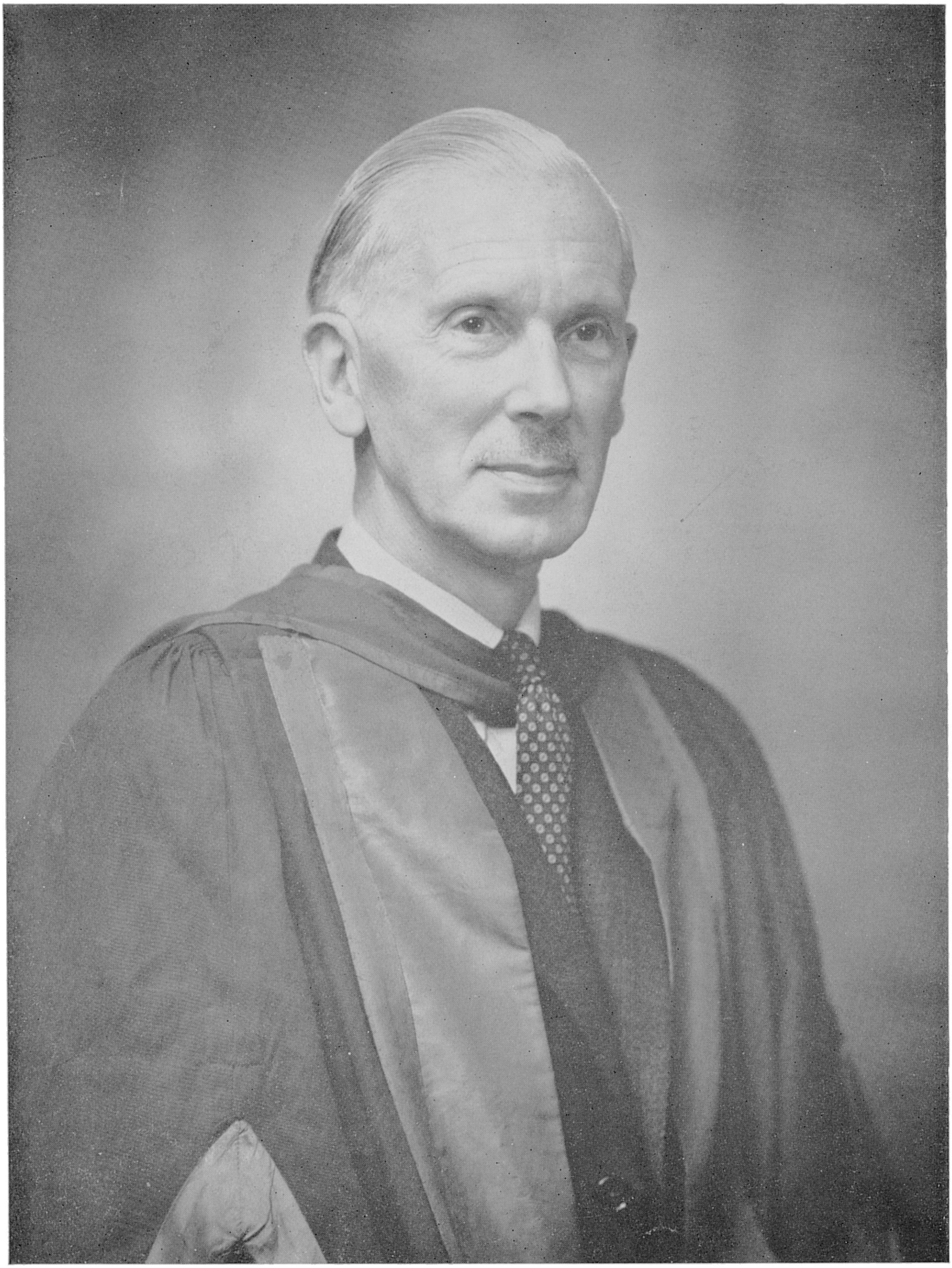
COLLECTED PAPERS IN ORIENTAL AND AFRICAN STUDIES

AFRICAN LANGUAGE STUDIES XI



Elliott & Fry

Malcolm Guthrie

AFRICAN LANGUAGE STUDIES

XI

1970

PRESENTED TO MALCOLM GUTHRIE

Professor of Bantu Languages in the University of London
by his colleagues and friends
on the occasion of his retirement

Edited by
Guy Atkins

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CONTENTS

Dear Professor Guthrie,

I hope you will feel that this comprehensive collection of essays, written in your honour by your colleagues, disciples, and friends, represents a not unworthy reflection of the teaching, example, and inspiration which you yourself have evoked in your fellow-workers. In asking me, the least competent of your colleagues, to write this prefatory note, the editor of this volume was no doubt mindful of the combination in me of time-worn obsolescence and distance from Bantu studies.

From this vantage point I have for many years been able to appreciate and to admire the scholarly rigour and high measure of originality—apparent even to a student of a different language area—of such works as your classification of the Bantu languages and your Bantu sentence structure. You are generally acknowledged as the foremost scholar in the field of African languages in this country. Your *magnum opus* on Comparative Bantu, though only published in part so far, has already enjoyed a world-wide response and has led to your election as a Fellow of the British Academy, the first one in the sphere of African languages. In this way your role as pioneer of subject and method has received national and international recognition.

From a literary and bibliographical point of view the genre of *Festschriften* has not been universally fortunate, but the astonishing unity of treatment and substance, coupled with a most catholic coverage of area, apparent in the present volume, must surely be seen as a tribute to yourself. Those of us who have contributed to this volume (and not least the colleague who accepted the responsibility of editorship) have always been mindful and appreciative of your qualities as scholar and teacher, of the impeccable judgement you have brought to bear on your professional pronouncements, and the burdens of administration and organization which you have carried for so long to the abiding advantage of those who were members of your department.

In presenting this volume to you we had the threefold aim of acknowledging the eminence of your scholarship, of offering a token of our friendship and gratitude, and of wishing you and our subject a long continuance of your fruitful activity as leader and inspirer in the field of African studies.

Yours sincerely,

EDWARD ULLENDORFF

WRITINGS OF MALCOLM GUTHRIE

(Books, articles, translations)

1 *Lingala grammar and dictionary.* Conseil Protestant du Congo, Leopoldville, 1935.

2 *Grammaire et dictionnaire de lingala, avec un manuel de conversation français-lingala.* Heffer, Cambridge, 1939. 2nd ed. La Librairie Évangélique au Congo, Leopoldville, 1951. Reprinted by Gregg Press, Farnborough, Hants and Ridgewood, N.J., 1966.

The dictionary and phrasebook were also published as a separate item in 1939 and 1951.

3 ' Music in African worship ', *Congo Mission News*, 105, 1939, 23–4.

4 ' Tone ranges in a two-tone language (Lingala) ', *BSOAS*, X, 2, 1940, 469–78.

5 Translation of the New Testament into Lingala : *Mokanda na Kondimana na Sika na Nkolo na biso Yesu Masiya.* La Société Biblique Britannique et Étrangère, London, 1942.

6 ' The lingua franca of the Middle Congo ', *Africa*, XIV, 3, 1943, 118–23.

7 ' East Africa's reactions to European culture ', *JRSA*, XCIII, 4698, 1945, 488–97.

8 *The tonal structure of Bemba.* Thesis presented for the degree of Ph.D., University of London, 1945 (typescript).

9 ' The voice of Africa ', a Bemba poem by I. Braim Nkonde [English translation by Malcolm Guthrie], *Africa*, XVII, 4, 1947, 275–6.

10 *Bantu word division : a new study of an old problem.* OUP for International African Institute, Memorandum XXII, London, 1948.

11 *The classification of the Bantu languages.* OUP for International African Institute, London, 1948.

2nd ed. Dawsons for International African Institute, London, 1967.

12 ' Gender, number, and person in Bantu languages ', *BSOAS*, XII, 3/4, 1948, 847–56.

13 *Universal decimal classification . . . reclassification of the Bantu languages* [incorporating Dr. Malcolm Guthrie's classification]. British Standards Institution, London, 1951 (duplicated).

14 *The Bantu languages of western equatorial Africa.* (Handbook of African languages.) OUP for International African Institute, London, 1953.

15 ' Some features of the Mfinu verbal system ', *BSOAS*, XVIII, 1, 1956, 84–102.

16 ' Observations on nominal classes in Bantu languages ', *BSOAS*, XVIII, 3, 1956, 545–55.

17 *Linguistic survey of the northern Bantu borderland.* Vol. I [supervisors Malcolm Guthrie and A. N. Tucker]. OUP for International African Institute, London, 1956.

18 ' La classification des langues bantus : approche synchronique, méthodes et résultats ', *Travaux de l'Institut de Linguistique de l'Université de Paris*, IV, 1959, 73–81.

19 ' Problèmes de génétique linguistique : la question du Bantu Commun ', *Travaux de l'Institut de Linguistique de l'Université de Paris*, IV, 1959, 83–92.

20 ' Teke radical structure and Common Bantu ', *ALS*, I, 1960, 1–15.

21 *Bantu sentence structure.* SOAS (agents : Luzac), London, 1961.

22 ' Bantu origins : a tentative new hypothesis ', *JAL*, I, 1, 1962, 9–21.

23 ' The status of radical extensions in Bantu languages ', *JAL*, I, 3, 1962, 202–20.

24 ' Some developments in the prehistory of the Bantu languages ', *JAH*, III, 2, 1962, 273–82.

25 ' A two-stage method of comparative Bantu study ', *ALS*, III, 1962, 1–24.

26 ' African languages ', in *Trends in modern linguistics. Ninth International Congress of Linguists, Cambridge, Mass., 27 Aug.–1 Sept. 1962.* Ed. Christine Mohrmann, F. Norman and Alf Sommerfelt, Spectrum, Utrecht, 1963, 59–61.

27 ' Bantu languages in the " Polyglotta Africana " ', *Sierra Leone Language Review*, III, 1964, 59–64.

28 ' Some uses of arithmetical computation in comparative Bantu studies ', *TPS 1964*, 1965, 108–28.

29 ' Comparative Bantu : a preview ', *JAL*, IV, 1, 1965, 40–5.

30 ' Language classification and African studies ', *African Affairs*, spring 1965 (special number), 29–36.

31 *Comparative Bantu : an introduction to the comparative linguistics of the Bantu languages.* Part I, Vol. 1 : *The comparative linguistics of the Bantu languages.* Gregg International Publishers, Farnborough, Hants, 1967.

Part I, Vol. 2 : *An outline of Bantu prehistory and an inventory of the Bantu languages* (in press).

Part II, Vols. 3 and 4 : *A catalogue of Common Bantu with commentary* (in press).

32 ' Variations in the range of classes in the Bantu languages ', in *Colloques internationaux du Centre National de la Recherche Scientifique. Sciences humaines.*

La classification nominale dans les langues négro-africaines. Aix-en-Provence, 3–7 juillet 1967. C.N.R.S., Paris, 1967, 341–53.

33 'A tale from western equatorial Africa [Fumu]', *J. Folklore Inst.* (Bloomington, Indiana), IV, 2/3, 1967, 240–9.

34 'Contributions from comparative Bantu to the study of African prehistory', in *Language and history in Africa: collected papers of the London seminar on language and prehistory in Africa.* Frank Cass, London (in press).

35 'The western Bantu languages', in *Current trends in linguistics*, ed. Thomas A. Sebeok, Vol. VII, Mouton, The Hague and Paris (in press).

36 'Features of verbal structure in south-west Fang' (Memorial Volume for Hans Wolff), *IJAL*, XXXV, 4, 1969, 356–65.

37 *Collected papers on Bantu linguistics.* Gregg International Publishers, Farnborough, Hants (in press).

[COMPILED BY GUY ATKINS]

PRE-INITIAL ELEMENTS IN BULU (A.74) NOMINALS

By Pierre Alexandre

' The demonstrative pronoun . . . takes the place of a relative pronoun in the sense of " the one who " or " the one which ". . . . It is probable that there is a slight vowel sound preceding when used in this sense, but not sufficient to warrant its writing, as it then becomes too strong. . . . This vowel may appear with nouns as well showing that it is not a real part of the word.' [1]

Neither is it a real vowel ! In fact the pre-initial element described by A. I. Good in the quotation given above could well be termed a tone-peg since its main (or sole) function seems, in fact, to be to support a high tone, which is the true distinctive trait.

Von Hagen and Bates both failed to notice this prefixal adjunct, and Good did not expand its description beyond the few lines I quote. Its Ewondo (A.72) reflex **é** is termed ' article ' by Pichon and Graffin.[2] In Fang (A.75) it is rendered by **e** in the Protestant spelling, but Galley [3] does not mention it in his grammar and seems, in fact, to confuse it to some extent with his so-called ' preposition ', i.e. the locative extra-independent prefix (also termed ' preposition ' by Pichon and Graffin), which it does indeed resemble.

Shape

As has been suggested before, the shape of this element can be described as a pre-initial high tone, with various kinds of supporting elements. The use of the term ' pre-initial ' is to be understood in relation with the ' quotation form ' of independent nominals, the class prefixes of these forms always having a low tone.

The tone-peg can be :

A short neutral vowel, before prefixes Ø and C (except when C is a nasal), e.g.

cl. 1A	**tatɛ́**	father	**ə́tatɛ́**
cl. 2	**bĭngá**	women	**ə́bĭngá**
cl. 5	**jam**	affair	**ə́jam**
cl. 5	**dís̀**	eye	**ə́dís̀**
cl. 7	**jóm̀**	thing	**ə́jóm̀**
cl. 9/10	**fa**	cutlass	**ə́fa**
cl. *16	**vóm̀**	place	**ə́vóm̀**

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[1] Good, 16.

[2] Pichon and Graffin, 12–13, 94–6.

[3] Galley, *passim*, esp. 586–8.

A short homophonic syllabic nasal before nasal prefixes followed by a vowel stem

cl. 1	**mot**	person	**ḿmot**
cl. 9/10	**nyɔ́ɔ**	snake	**ńnyɔ́ɔ**

However in the southern dialects this nasal is often replaced by **ə́-** as above, e.g. **mot, ə́mot**

With non-syllabic nasal prefixes, the prefix is vocalized and becomes syllabic

cl. 9/10	**ndá**	house	**ńdá**

With all syllabic prefixes, the tone of the prefixal syllable changes from low to high :

cl. 1	**ngál**	wife	**ńgál**
cl. 2	**beyál**	wives	**béyál**
cl. 3	**mfék**	bag	**ḿfék**
cl. 4	**mimfék**	bags	**mímfék**
cl. 5	**alú**	night	**álú**
cl. 6	**melú**	nights	**mélú**
cl. 7	**elé**	tree	**élé**
etc.			

In proverbs, drumming, songs, and other oral literature, however, there are occurrences of **ə́-** before CV prefixes : **ə́bilé, ə́beyál**, etc.

With dependent nominals, the shape of this element is conditioned by the grammatical function or form of the DN, rather than by its shape.

With demonstrative adjective-pronouns it is either **ə́-** (as mentioned by Good) or **ń-**

cl. 1	**nyu**	**ə́nyu, ńnyu**
cl. 2	**bá**	**ə́bá, ḿbá**
cl. 3	**wú**	**ə́wú, ŋ́wú**
etc.		

With personal substitutes it is always **ń-**

cl. 1	**nyɛ**	**ńnyɛ**
cl. 2	**bɛ́**	**ḿbɛ̂**
cl. 3	**wó**	**ŋ́wô**
etc.		

With the so-called ' indefinite ' adjective-pronoun **-bɔ́k** it is high tone on DP when **-bɔ́k** acts as nominal substitute

(ḿ)motə m̀bɔ́k	the other person
ḿbɔ́k	the other (cl. 1)

Other dependent nominals have no corresponding forms.

Function

Pre-initial high tone regularly occurs :

When the nominal is followed by a demonstrative of shape DP-(**lí**)/(**ná**)
When it is subject antecedent to a relative clause
When it is the subject of an auto-predicative sentence (most often in answer to a question)

Thus :

bot béngáwú	people died
ə́botə bá (bálé, báná) béngáwú	those (these) people died
ə́botə béngáwú, ḿbɛ̂ bána	the people who died are these (lit. ' they these ')
(ə́)jé jí ? ə́fa	what (is) this? It's a cutlass

With dependent nominals :

Demonstratives

ə́bá béngáwú . . .	those who died . . .
bá béngáwú	those died

Personal substitutes

. . . **bɛ́ vɛ̌wú**	(and) they die
bɛ̂ béwúya	as for them they are dead
ḿbɛ̂ béwúya	they are the ones who are dead
zǎ lɛɛ́ ? ńnyɛ	who is (there)? It's him

Pre-initial high tone may also occur :

In ordinal construction

kálátə báa or **ə́kálátə báa**	second book

With possessive adjectives

ndá jam or **ńdá jam**	my house

Compare the construction of possessive pronouns (**én**-DP-Stem)

cl. 1	**wam**	my	**éŋwam**	mine
cl. 2	**bám̀**	my	**émbám̀**	mine
etc.				

In the genitive construction with connective **yǎ**. In this case there seems to be a difference between

	botə yǎ ǹlam	(some) people of/from the village
and	**ə́botə yǎ ǹlam**	the people of/from the village

With adjective-pronoun **-bɔ́k**. Here again there may be a nuance

	botə bevɔ́k	other people *or* certain people
	ə́botə bevɔ́k	the other people
cf.	**bévɔ́k**	the others (cl. 2)

With object antecedent in relative construction, when object substitute is not used after the verb

	ḿmot mengáyén . . .	the man I saw . . .
or	**mot mengáyénə nyɛ̂ . . .**	the man whom I saw . . .

Nature of pre-initial HT

From all that precedes it would seem that Bulu prefixes with pre-initial high tone are quite comparable to the double prefixes encountered in so many Bantu languages in other zones (D, E, F, etc.).

There is, nevertheless, in Bulu a strong possibility of confusion with other pre-prefixal elements having identical or nearly identical shapes.

Extra-dependent prefixes

In genitival constructions the EDP is, in most cases, reduced to a high tone, either in the last syllable of the *nomen regens* or on the first syllable of the *nomen rectum*, depending on their shape

anyu	edge
anyǔ fa	edge of cutlass
anyu óceŋ	edge of knife

The exceptions occur when the *nomen regens* belongs to a class with CV prefix ; one can then use a CV́ extra-prefix if, and only if, the *nomen rectum* itself does not have a CV prefix

	beyál bé-evét	wives of the chief
or	**beyál évet**	
but	**beyál bívet**	wives of chiefs

Locatives

Position in time and space is indicated in Bulu by a pre-initial element whose shape differs but slightly from that given above

á- before cl. 9 independent nominals which have become lexicalized and act as ‘ prepositions ’ or ‘ adverbs ’

sí	earth	**ási**	under, below, down
yôb	sky	**áyôb**	up, on, upon
yǎt	far bank of river	**áyǎt**	beyond, across
ndá	house	**ándá**	home

mvûs	back	**ámvûs**	back, behind
ngoˀé	evening	**ángoˀé**	yesterday
etc.			

ə́- before names of various classes with Ø or C prefix

əDiwálá	in Duala	
ə́Yewondo	in Yaoundé	
ə́Falásí	in France	
ə́mákit	at the market	(**mákit**, cl. 1A)
ə́jăl	at the village	(**jăl**, cl. 5)
ə́sí	in the country	(**sí**, cl. 9)
etc.		

High tone on syllabic prefixes and probably with non-lexicalized cl. 9 with a non-syllabic **n**-prefix and a consonantal stem

cl. 3	**m̀fék**	bag	**ḿfék**	in the bag
cl. 5	**afan**	forest	**áfan**	in/to the forest
cl. 9	**ndá**	house	**ńdá**	in/at the house (cf. **ə́sí/ásí**)
cl. 7	**eyɔŋ**	occasion	**éyɔŋ**	when
cl. 6	**mefúb**	fields	**méfúb**	in/to the fields
etc.				

I hesitate to call this locative element an extra-independent prefix, as the concord system is quite irregular—that is *if* there is a locative concord system.[4]

The demonstrative paradigm DP-(**lí**)/(**ná**) has quite regular reflexes of CB classes 16 and 18

vá	**váná**	**válé**
mú	**múná**	**múlí**

generally presented as ‘ adverbs ’, but in fact absolutely identical in structure with

cl. 1	**nyu**	**nyuná**	**nyulí**
cl. 2	**bá**	**báná**	**bálé**
etc.			

Yet **mú** and **vá** are in most cases used by themselves in sentences such as

zaˀá mú	come here
bésɛ́kɛ válé	they are not there

and only seldom encountered in phrases such as

ə́Diwálá múná	right here in Duala

---

[4] There is quite definitely one in A.72. Cf. Pichon and Graffin, 28.

Furthermore the independent nominals keep their regular concord pattern which can, however, be encased within what looks like a locative concord

ńdá nyi	in this house [5]
ńdá nyi mú	in this here house

the latter occurrence being indeed rather rare.

Finally the verbal concord, at least in modern usage, is identical with the general impersonal concord, i.e. cl. 1 or 9, without predictability (**vóm̀** place, has 1/6 concord)

anɛ mvɔˀé (cl. 1), **enɛ mvɔˀé** (cl. 9)	it's all right, *ça va bien*
əDiwálá anɛ abeŋ **ə́Diwálá enɛ abeŋ**	in Duala it's beautiful
əvóm̀ mengátɔɔ́ mú am̀bɛ́ abeŋ	it was beautiful where I stayed *or* the place in which I stayed was beautiful

I have some reasons to think—but I cannot check without going back to the field—that older people would use a locative verbal prefix **á-** in these sentences.

Instrumental and connective **á**

Instrumental relationship [6] and plain connection between two things are marked by a pre-initial **á-**. This **á-** could not formerly be used to mark connection between two persons, for which **bá** was used, but this usage tends to become obsolescent and **á-** is now used as a general connective

mendím á-meyɔk	water and/with wine
esá á-bɔ́ngó (formerly **esá bá bɔ́ngó**)	father and children

There is, however, a difference in shape between the connective and the instrumental : while the former cannot be elided, the latter is reduced to initial high tone when preceding a syllabic prefix or a cl. 9 **n-**

	acíˀi elé á-fa	he cuts wood with a cutlass
	acíˀi elé óvóǹ	he cuts wood with an axe
but	**fa á-ovóǹ**	cutlass and axe

Conclusion

The more one studies the A zone languages, the more one becomes convinced of their orthodoxy, if I may term it so. The ' not quite Bantu ' fallacy is generally based upon the lack of elements commonly found in many or most languages of the other zones : vowel suffixes, double prefixes, locative classes are often-quoted

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[5] Possibly **ə́ndá nyi** ≠ **ńdá nyi** :: in this house ≠ this house.

[6] The passive extension in **-ban** is very seldom used ; when it is used the agent is introduced by **á-**. A sentence like **ə́kálátə nyu atilibanaya á-tíca** ' this book has been written by a teacher ', is ' theoretically ' possible and ' theoretically ' correct, and quite unlikely except in written form.

examples. A deeper analysis shows that these elements are not really missing, but rather submerged and partly coalescent. In the most drastic cases, tones still subsist as the ghosts of vanished phonemes. Which is indeed a very significant clue for the reconstruction of Bantu genesis.

BIBLIOGRAPHY

(Sources quoted in the article)

BATES, G. L., *Handbook of Bulu*, Elat, 1926.
GALLEY, S., *Dictionnaire fang-français et français-fang suivi d'une grammaire fang*, Neuchâtel, 1964.
GOOD, A. I., *Bulu handbook supplement*, Elat, 1934.
HAGEN, G. T. von, *Lehrbuch der Bulu Sprache*, Berlin, 1914.
PICHON, F., and R. GRAFFIN, *Grammaire ewondo*, Paris, 1930.

LANGUAGE AND PROPERTY:
A UNIVERSAL VOCABULARY FOR THE ANALYSIS AND DESCRIPTION OF PROPRIETARY RELATIONSHIPS

By ANTONY ALLOTT

This paper is provoked by experience over the years in the investigation of African property systems, and the difficulties to which this gives rise in the analysis and presentation of the data.

The field may be seen as a set of interlocking systems. For the given society the total social structure in action is one such system, which may be broken down into a large number of overlapping sub-systems. One such sub-system is the agglomeration of institutions which regulate the exploitation of land. The language of the society is another system, of which the specialized legal vocabulary (if any) is a sub-system.

Each of these systems or sub-systems has a descriptive and a normative aspect or dimension. Institutions function; legal and other rules prescribe how they are to function. Not infrequently there is contradiction or tension between the way things are and the way they ought to be—laws are broken, ungrammatical sentences are uttered, etiquette is disregarded, and so on.

I

THE PROBLEMS OF INVESTIGATING AFRICAN PROPERTY SYSTEMS AND THEIR LANGUAGE

The problem at the level of investigation is to uncover or expose the structure and functioning of the relevant systems. So far as African customary land law is concerned, this involves an identification and description of the persons or institutions involved in the exploitation, or control of exploitation, of the land; and a specification of the range of permitted action or inaction by each interested person, and in respect of what subject-matter.

In its turn this requires an examination of the set of verbal categories through which the chosen society expresses or refers to these systems of exploitation; in other words, a study of the indigenous operational language through which these systems function or are explained.

Lastly the research findings must be put in coherent and acceptable verbal form for communication to the appropriate community, whether this be the practical world of judges and lawyers in an African country or the academic community at large. A language of analysis and presentation is therefore required. The elaboration of such a language is one of the major preoccupations of this paper.

Field investigation of African customary land law: the role of the vernacular language

Anthropological, administrative, economic, geographical and legal investigations of African land laws have been numerous and effective and the literature on them is large. This is not the occasion to review these investigations or criticize their research methods; but one may propose that a useful and under-employed ancillary technique of investigation is through the indigenous language associated with the given land law. This can include the recording of the naïve presentations by indigenous informants of the land law system or some part of it, and the more systematic pursuit of the vocabulary and other linguistic apparatus by means of which the system is operated. A number of such investigations have been made by the present author in conjunction with linguists and local informants, notably into Sotho, Akan, Swahili and Yoruba.

Without falling into the error of presuming that an institution cannot exist in the law unless there is a term to refer to it, one may state that there is generally a correspondence between the linguistic and legal sub-systems. If there is no term to identify an interest-holder, or to pick out a given category of interest, then that kind of interest-holder or that category of interest may not ' exist ', i.e. is not overtly incorporated or recognized in the legal system. The external analyst may, of course, identify a category of interest-holders (e.g. corporate holders) not so identified by uninstructed informants, or debate the presence or absence of some legal quality or function (e.g. ' ownership '; the loss of interests by prescription), without there being a verbal parallel in the indigenous language; in such an instance he is creating an analytical super-category or meta-rule.

A report on the use of Yoruba legal terminology, based on investigations conducted by E. C. Rowlands and the present writer, in conjunction with A. Adeyefa, illustrates some of these points. The purpose of the investigation was to try to discover whether the Yoruba language has a specialized legal vocabulary, and secondly how terms are used in a legal context. A specialized legal vocabulary could imply one of three things:

(1) Terms which have an exclusively legal meaning (i.e. are used only in legal contexts), and are thus not readily intelligible to the ordinary man (an English example would be the term ' fee simple ').
(2) Terms which have a specialized meaning, i.e. an exclusive legal function, but which may be intelligible to the non-specialist (cf. the English word ' tort ').
(3) Terms which have legal and non-legal uses or meanings (there are many such examples in the English language: ' estate ', ' frustration ' are just two examples).

It is *prima facie* unlikely that African vernacular languages operating in conjunction with unwritten customary laws will have developed an arcane legal language unintelligible to the ordinary members of society, since law is an activity typically performed in public, involving members of the public both as participants in legal relations, as parties in disputes and as adjudicators or arbitrators. This is true even where specialized legal personnel have emerged (as with traditional legal or judicial personnel in some African societies). It is perhaps only in a conquest situation that law and its administrators can be alien to the majority of the population—and this is not the case in recent Yoruba history.

On the other hand, it is quite possible that in African traditional societies of any degree of complexity there will have developed specifically legal social contexts and hence the specialized use of vernacular terms in legal situations. Our enquiry into Yoruba legal language was thus a search for specialized terms with no non-legal uses or for terms having both legal and non-legal functions.

Investigation of a legal vocabulary is to a large extent investigation of the law which supports it. The function of terms as defining or classifying factors must be continually borne in mind. At its broadest and vaguest this classifying function is seen at work in discriminating between ' law ' and ' non-law ', or between a ' right ' which is legal and one which is only a moral or social claim. Investigation of abstract terms, such as the Yoruba equivalents to ' law ', ' obligation ', ' ought ', ' right ', ' contract ', is part of the exercise. There is also a search for terms with a specialized legal meaning, which may or may not consist in the restriction or function of a word which has a much more general meaning in ordinary parlance (an English example would be the difference between the lawyer's and the non-lawyer's use of the word ' agreement '). Another field for investigation, at least in some languages, is that of legal proverbs and maxims. Such proverbs and maxims may have an explicit and primary legal reference— ' the chief owns the land '; or no explicit legal reference, but frequent citation in legal contexts.

Ni *and the vocabulary of ownership and possession* [1]

In many commentaries on or explanations of Yoruba land law, one meets statements about ownership of land and other property. Thus Lloyd [2] mentions ' such oft-recurring and ambiguous phrases as " the land belongs to the oba " '. Equally one reads: ' The paramount chief is owner of the lands, but he is not owner in the sense in which owner is understood in this country [sc. England—A.N.A.]. He has no fee simple, but only a usufructuary title '.[3] These statements involve an analysis of Yoruba property and vocabulary systems, a similar analysis

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[1] See R. C. Abraham, *Dictionary of modern Yoruba*, London, 1958, 438–9; P. C. Lloyd, *Yoruba land law*, London, 1962, 60 et seq.; G. Sertorio, *Struttura sociale, politica, e ordinamento fondario yoruba*, Como, 1967, 287 et seq.

[2] Op. cit., 43.

[3] *Per* the Privy Council in *Oshodi* v. *Dakolo* [1930] A.C. 667, at p. 668.

of the English property and vocabulary systems, and an attempt to strike an equivalence between the two.

There are two main ways of dealing with the problem of analysing such statements: either one can start off from an English term or statement and ask how it could be translated into Yoruba, or one can start off with the Yoruba words and consider how they may be rendered into English. In both cases what is actually involved goes further than the mere establishment of a one-to-one correspondence between the meaning of a Yoruba term and the English term, since it is necessary to understand and to be able to compare the property systems which underlie each of the languages. So what one is doing is really to compare property systems through the medium of language.

It is worth remarking that one is not restricted to a consideration of nouns so-called; verbs, possessive adjectives, particles, etc., may all be brought into operation to express a connexion between a person and an object. In law, the relationship is more than one of mere connexion or association, since possession is deemed to be legitimate, i.e. deriving from a title recognized by law; so one of the things to be investigated in Yoruba is whether there are any words which discriminate between the mere fact of possession, and possession in pursuance of a lawful title. It was stated that Yoruba does not distinguish verbally between questions of the form ‘ who is the owner of this car ? ’ (**Ta lo ni motor yi**) and ‘ who is in charge of—e.g., the driver—this car ? ’. Apparently **ni** signifies ‘ to be in charge of ’, ‘ in possession of ’; that is, as with comparable terms in many African languages, it expresses a simple association between a person and property (abstract or concrete) or thing: one may compare the English ‘ have ’. Other words which are relevant in the description of possession are **gbe**, **lo** and **ti**. **Gbe** is translated as ‘ occupy ’, ‘ live in ’ or ‘ inhabit ’. Thus: **Emi ni o ngbe ile kan ni Ibadan sugbon to Mr. A ni** ‘ I occupy a house at Ibadan, but it belongs to Mr. A ’; and **Ibadan ni mo ngbe** ‘ I live in Ibadan ’. **Lo** is translated as ‘ use ’; thus ‘ I am using this car, but it is not mine ’ **Emi ni o nlo motor yi**.

Ti: This is described as a nominal particle or pronoun which is emphatic and expresses ‘ it is of . . .’ or ‘ it belongs to . . .’. Thus ‘ this cap is mine ’ **Ti emi ni fila yi**. There are apparently three **ni** forms: **ni** = is, **ni** = have, and perhaps another **ni** = own, but the last is doubtful. (The use of **ni** in the phrase **ni are** is interesting. **Are** is an abstract noun meaning right or justification; **ni are** means to have the right, i.e. win a case.)

One is thus in a position to look again at such a maxim as **oba lo ni ile**, often translated as ‘ the Oba owns the land ’. Whatever may be implied by the statement—and what is implied is the Yoruba property system—one cannot get out of it a precise statement that the Oba is the full and beneficial ‘ owner ’, either for his own advantage or that of his people. The concurrent claims of the land-controlling lineages; the substantial rights of individual subjects; the limitation in practice of the Oba’s powers to those of land control rather than benefit—all these points and complexities cannot be got across by relying on the word ' own ', with or without qualifications.

II

A SCHEME OF ANALYTICAL PROPRIETARY TERMS

One is left with a feeling of dissatisfaction at the inadequacies of ordinary English legal terminology, and its ineptness for presentation of the total scheme of Yoruba, or any other African, land tenure system. The immediate reaction is to turn to Hohfeld and his fundamental legal conceptions, as Lloyd (among others) does.[4] But this exercise is usually unrewarding and unilluminating so far as African land tenure is concerned. In particular, the Hohfeldian scheme does not sufficiently expose the *hierarchical* and *concurrent* aspects of African property systems, or the radical distinction between *control* and *benefit*. A new scheme seems called for.

We are talking about permitted, prescribed or forbidden modes of action in regard to the exploitation of resources. This is sometimes put as defining the relation between persons and things; but this is misleading, as legal relations subsist only between persons, though in respect of things (the subject-matter of the relationship). Classical Roman law separated the implied rights of ownership into the *jus utendi*, *jus fruendi* and *jus abutendi*: all these are what I term ' claims to benefit ', i.e. to profit from resources and their exploitation. What was omitted from the Roman scheme was the power of control, i.e. to determine who should benefit and how from the exploitation of resources. Rather artificially this was later brought in under *abusus*, which was deemed to include the power to alienate; but this was, it is submitted, a basic misunderstanding of the different orders or levels of interests in property.

At the level of BENEFIT persons are entitled by law to profit from economic resources; this claim to benefit includes rights of use, to the fruits, and of abuse. Powers of CONTROL constitute a higher-order system, which specifies how claims to benefit may be exercised. Control is the grammar of the property system, a set of meta-norms erected over the exploitative norms connoted by benefit.

An analysis of property systems must therefore be based on the fundamental dichotomy between benefit and control. Since control is at a higher level than benefit, an analysis must begin with claims to benefit.

BENEFIT

As Hohfeld correctly saw, one may fragment the claim of a person to benefit from exploitation of a thing. His atomization distinguished between claims

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[4] Op. cit., 60 et seq. For Hohfeldian terminology, see W. N. Hohfeld, *Fundamental legal conceptions as applied in judicial reasoning*, New Haven, 1923.

(or rights) and privileges (or licences). I prefer to distinguish between actions which are:

(a) permitted
(b) prescribed
(c) forbidden

An agglomeration of claims (and powers, where relevant) held by a person or persons in respect of a resource may be termed an *interest.* The person entitled to an interest is hereafter referred to as its *holder.*

A holder of a citizen's interest in Ashanti is permitted to plant cocoa on land which he has appropriated from the virgin forest; he is (or was) under a duty to pay certain customary dues to his superior chief out of the land and its produce; certain forms of use (e.g. commercial exploitation of mineral resources) were forbidden to him.

These permitted, prescribed or forbidden modes of action are protected or sanctioned by remedial claims and powers. Forfeiture of interest, action to recover tributes due, and disallowance of unauthorized dealings, are examples of such sanctioning claims and powers.

Total analysis of a claim to benefit in respect of a given resource requires an answer to the questions: Who? Over what? How? Subject to whom?

Who?

A claim to benefit may be held exclusively or non-exclusively. Non-exclusive benefits include the claim to breathe the outside air, to navigate the high seas, etc. In African systems some common rights which appear non-exclusive, such as the claim to hunt over certain territory, will be found on further investigation to be exclusive as regards strangers to the community, though non-exclusive internally in the community in which they subsist. The fact, then, that there is a large or indefinite number of co-holders of the claim or interest does not make it non-exclusive, provided that it is in principle possible to list those entitled.

An interest may be held by a single person, or by a number of persons concurrently entitled. Interests held by a single person, e.g. the holder of self-acquired property in Yoruba or Fante law, may be styled *individual interests. Plural interests* fall into several sub-categories: (i) *Joint interests*, where two or more individuals hold the same title, claim or interest for their separate and joint benefit: an example is where two brothers join to acquire land in Akan law. (ii) *Corporate or community interests*, where an organized group of individuals holds a single claim or interest in the name of and for the benefit of the entity conceived as a unit: examples from West African land law include the titles of a political stool in Ashanti, and of a corporate lineage in Yoruba law. (iii) *Common interests*, where the interest or title attaches to a community or group, but the exercise of the interest is severally and for their individual benefit by the members of the community or group (e.g. the right to hunt over community land).

One interest may be held concurrently with another in respect of the same *res*. There are many examples from African land law. The interest of a farmer may be separated from that of another person to the economic trees on his land; separation of title between rights to exploit the soil and the right to a building erected on it is common; interests of benefit are almost invariably concurrent with interests of control: thus chiefs and family-heads often have land control powers over land in the beneficial occupation of their subjects or dependants.

For the removal of doubts, it may be stated that the same categories of interest can subsist in the control as in the benefit sphere.

Over what?

Most analyses of property rights distinguish between claims to corporeal and incorporeal (or intangible or intellectual) property. The former is physically visible and tangible—land, movables; the latter is allegedly not—copyrights, choses in action. A functional analysis of property rights, it is submitted, will not support such a dichotomy. The question is what modes of action are permitted, prescribed or forbidden; always such action must emerge in perceptible form. Copyright law protects an author's claims over his intellectual productions; in reality, what it does is to inhibit various forms of contravening action by those not authorized by the copyright-holder. Such action always takes place in the physical world, whether it is impressing marks on paper or emitting sound waves from a musical instrument.

There is always therefore a *res*, a subject-matter of the interest, manipulative action in respect of which is controlled by the interest. For purposes of easy description only, and not because of a fundamental distinction in the conceptual sphere, the interests affecting different kinds of subject-matter may be grouped together. English law classically distinguishes between land and other property; some African property systems echo this distinction, though apparently distinguishing between rights to land and rights to things on the land (houses, trees), the latter being assimilated to the category of movables. A number of the pastoral societies erect a special property régime for animals, or certain types of them. These distinctions are of great importance both in the law of enjoyment *inter vivos* (e.g. women not to acquire full titles to land or cattle) and in the law of succession.

There are difficulties of classification: is adultery a species of theft?[5] Are wives in Yoruba succession law a kind of immovable property?[6] When customary law recognizes a tortious action for seduction of an unmarried daughter, is it protecting a property right, and if so, of whom and in what?

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[5] Cf. R. S. Rattray, *Ashanti law and constitution* (1st ed.), Oxford, 1929, 317.

[6] Cf. G. B. A. Coker, *Family property among the Yorubas* (2nd ed.), London, 1966, 39.

How?

The how of an interest specifies the modes of exploitative action permitted, etc., to the holder. Such specification comprises limitations by *scope* (e.g. agricultural exploitation only permitted; erecting house on farm-land forbidden; only subsistence crops to be grown; etc.), *duration* (at pleasure of grantor; for lifetime of holder; permanently; etc.), and *subjection to concurrent interests* of benefit and control (farmer not to extend his farm so as to cut across the line of advance of his neighbour; planting to begin only when local headman so orders).

Subject to whom?

Many of the classical debates of African law—is there ' ownership ' in African law? is the chief's title one of paramountcy or proprietorship? what is the nature of a family-member's interest in family land?—have been provoked by the hierarchical character of African land law systems. This aspect is discussed below under CONTROL.

CONTROL

A power of control in respect of property means that the holder of the power has the legal capacity to prescribe, permit or forbid modes of beneficial/exploitative action. Normally the holder of a beneficial interest has powers of control also: he can exclude others from his land, for instance. But he is also subject to superior control. Thus in African law an individual holder of land may get his land from a chief or family-head by allocation. The power to allocate land, and where it exists to control the use thereafter, are examples of land control. A landlord may control how his tenant uses the land, a husband may control where his wife farms, and so on.

Control, then, extends to the creation, enjoyment, transfer and termination of beneficial interests in property. An inferior land-controlling interest may be subjected to a superior controlling interest. Such hierarchies of control are common in African land tenure systems (e.g. Ashanti or Tswana).

Much confusion has been caused by this hierarchical system of land control. Obsessed by the English feudal theory that one can only grant an inferior interest out of what one possesses himself, some analysts are forced to conclude that the paramount rulers in such traditional systems as the Lozi, the Ashanti or Buganda must have possessed the plenitude of proprietary rights in land, out of which they ' carved ' the subordinate interests of sub-chiefs, lineages or individual occupiers. This confusion arises, it is suggested, from a failure to separate the control function and the benefit function, which operate in different orders. Elimination of the confusion is not assisted by asserting that the paramount ruler in such instances holds the ' allodial ' or ' absolute ' title, with his subjects holding ' inferior ', ' usufructuary ' or ' possessory ' titles. The truth is that the subject has one kind of interest, the ruler another. The subject's interest is subordinated to the control function of the ruler; but nevertheless it may be absolute within its own domain. In my own earlier writing I attempted to separate the jurisdictional and proprietary rights of chiefs in Akan law;[7] Gluckman [8] uses the terms ' administration ' and ' production ' in his own most recent analysis. It is submitted that the terms ' control ' and ' benefit ' more exactly express the different orders of operation of these functions.

CONCLUSION

Two things will not escape the reader's notice: the first is that the words ' own ' and ' ownership ' are redundant, and indeed misleading, for the description of African property systems; the second is that every property system is amenable to the same analysis and the same terminology. English law equally recognizes powers of land control in a variety of bodies: compulsory acquisition powers enable public authorities to dispossess an individual beneficial holder of his land; building regulations and planning laws prescribe what and how he may build on it. Nor is the concurrent or hierarchical aspect of African land laws absent from other systems. Even the family property system, which might seem to have no analogue in modern English law, is not entirely absent. As the legislature with one hand destroys the old family property system, so it, and the courts, proceed to erect an alternative in its place (with the Matrimonial Homes Act, 1967, and the judicially evolved rules regarding presumptions about the title of a wife in her husband's property).

An extension of this vocabulary to English and other property laws would, it is hoped, clarify the relations of those interested, and at the same time demonstrate the essential connexion of those laws with the laws which prevail in Africa. In other words, just as a universal grammar and general semantic theory have been developed in the linguistic sphere, so can a general grammar and vocabulary of property be devised in the sphere of property relations. Viewing as we do property relations as doing rather than being, as action not state, we must escape the tyranny of the nominal and conceptual, and turn our attention instead to the analysis of the verbal, the function.

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[7] E.g. in my *Akan law of property*, University of London Ph.D. thesis, 1954, unpublished.

[8] M. Gluckman, ' Property rights and status in African traditional law', [in] *Ideas and procedures in African customary law*, ed. M. Gluckman, London, 1969, at pp. 252 et seq. See also J. Vanderlinden, ' Réflexions sur l'existence du concept de propriété immobilière individuelle dans les droits africains traditionnels ', ibid., 236 et seq.

THE *ROOBDÓON* OF SHEIKH AQIB ABDULLAHI JAMA: A SOMALI PRAYER FOR RAIN

By B. W. ANDRZEJEWSKI

The prayer for rain which is the subject of this paper may be of some interest to both linguists and students of religion in Africa. It was composed by a prominent Somali sheikh from the Jigjiga region, who is a champion of Somali oral literature in all its aspects and in particular in its service to Islam. The word **roobdóon** means ' rain-seeking ' and is applied to all prayers for rain and the accompanying rites.

Among the Somali people, who with very few exceptions are Sunni Muslims [1] special ceremonies take place in time of drought, according to the instructions laid down in Arabic manuals of law and religious observance.[2]

The essence of these instructions is quite simple. The community afflicted by drought chooses a man of religion known for his piety, who convenes a meeting for an appointed time and leads the prayers. Everyone is to repent and carefully avoid sinful actions or attitudes. Old, worn-out clothes have to be put on and people march in a procession to an open place which has no shade. Old men and small children must be present, and if possible also the animals afflicted by drought. They are all exposed to the heat of the sun and suffer it patiently, asking God to forgive them their sins and send them rain which would bring relief without causing damage and devastation by flooding.

During these ceremonies Arabic is normally used, as in fact it is in most other prayers, hymns and religious rites. The reason why Arabic is preferred to Somali on such occasions is not far to seek. As the language of the Koran, the Tradition and Muslim theological scholarship, Arabic enjoys enormous prestige and is sometimes referred to in Somali as **áfka Ịlàaha** ' the language of God '. Prayers and invocations in Arabic seem to many Somali people more appropriate for worship and more efficacious than their mother tongue.

All men of religion are expected to know Arabic well and some actually achieve such a high standard that they compose literary works in it, especially poetry.[3] Among the lay public quite a number of people, particularly in towns, have a good knowledge of Arabic and the new *élite* educated in government

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[1] For information about Islam in Somali society see Cerulli, 1957, 1959, 1964; Jāma' 'Umar 'Īsā, 1965; and Lewis 1955, 1955–6, 1961, 1963, 1965(*a*) and (*b*), 1966. Note that all works mentioned throughout this paper are referred to under the name of the author and the date of publication, as given in ' Bibliographical References '.

[2] One of the commonly used manuals is that of Sharaf al-Dīn, 1933, which is particularly favoured by Sheikh Aqib. The section referring to prayers for rain is found in pp. 99–101 of the book.

[3] For an account of Somali literature in Arabic see Cerulli, 1957, 150–1, and 187–200. His bibliographical notes should be augmented by the following items: 'Abd al-Raḥmān bin shaykh 'Umar, 1954, 1964; Aḥmad bin Ḥusayn bin Muḥammad, 1945; Jāma' 'Umar 'Īsā, 1965. There is also a private collection of manuscripts in the possession of Prof. I. M. Lewis of the London School of Economics.

schools in Somalia and universities in Arab countries, usually reach high levels of proficiency. Yet the vast majority of the population has a very limited knowledge of Arabic, just sufficient to understand commonly used prayers and hymns, and this only as a result of having them translated and explained orally in Somali by men of religion during sermons and as a part of religious instruction.[4] It is mainly as a concession to such lay folk that religious poems are composed by Somali sheikhs; they form a compromise with linguistic reality, but what is lost in ritual dignity is gained in the fervour which the full understanding of the words can produce.

Although some sheikhs look upon the use of Somali in religious practices as second best, others encourage it. Among these pioneers of Somali as the language of worship of God and veneration of saints we find such prominent poets as **Hąaji ʿÁli Mąjeertéen,**[5] **Sheekh Uwèys,**[6] **Ismaaʿiil Faaráħ,**[7] **Sheekh ʿẠbdillé Isáaq,**[8] **Mąħámmed ʿẠbdillé Hasán**[9] and **Sheekh Gabyòw.**[10]

In recent years one of the most ardent champions of using Somali for religious purposes has been Sheikh Aqib Abdullahi Jama,[11] the author of the poem presented in this paper.

Sheikh Aqib was born in **Gųlúfa,** a settlement about 5 km. east of Jigjiga, some forty-eight years ago; he is a member of a well-known clan called **Bartíre** and is related on his father's side, seven generations back, to the Somali national hero **Wiilwàal.**[12]

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[4] This is done in prose which is often both imaginative and refined. The preachers constantly refer to particular passages of the sacred texts in Arabic as their authority.

[5] His full name was **Haaji ʿÁli ʿAbdiraħmáan.** He died about 150 years ago. Among his numerous poems **Alif yęnne** ' The letter Alif said ' is particularly well known. Each letter of the Arabic alphabet is personified in it, as it were, and speaks of a particular aspect of Islamic doctrine and worship.

[6] For information about this poet and preacher and his works see ʿAbd al-Raḥmān bin shaykh ʿUmar, 1954, 1964; Cerulli, 1964 (117–38); Ibn Muḥyī al-Dīn, 1955; Lewis, 1955–6.

[7] He is particularly well known for his poem which contains the phrase **Qurúħdíi nębigęenna yàa qiyáasi kárayá ?** ' Who can gauge the beauty of our Prophet ? ' See Lewis, 1958.

[8] A poet contemporary with Sheekh Uweys, of the Upper Juba region.

[9] The leader of the Dervish insurrection of 1899–1920. For information about this remarkable man and his poetry, see ʿAbd al-Ṣabūr Marzūq, 1964; Andrzejewski and Lewis, 1964; Jāmaʿ ʿUmar ʿĪsā, 1965; and Lewis, 1965(*a*).

[10] His Full name is **Sheekh Mąħamùud Mąħámmed Gabyòw.** He died towards the end of the nineteenth century. His poems are very well known, not only in the Benadir Region where he lived and worked, but also in other Somali-speaking territories.

[11] I have used an anglicized spelling of his name. The Somali pronunciation of the name is ʿ**Áaqib ʿẠbdulláahi Jaamá**ʿ. His official first name is Ibrahim (**Ibraaħiim**), but he prefers Aqib, the name given to him by his mother, according to an old Somali custom. I am greatly indebted to him for allowing me to translate his poem and for providing me with most of the background information. I am also grateful to Mr. Omar Aw Nuh (ʿ**Úmar Aw Núuħ**) of the Cultural Division of the Somali Ministry of Education for his help in the preparation of this paper.

[12] A Somali chieftain and war leader about whom many legends are narrated and to whom many wise sayings are attributed. See Laurence, 1954, pp. 106–22, and Shire Jaamac Axmed, 1967.

He became an orphan early in life and at about the age of seven joined a Koranic school where he did well and reached the middle grade earlier than other children. He then discontinued his studies and turned to the usual pastoral and agricultural pursuits of Somali youth. He became an accomplished horseman and marksman, and had a brief period of service in the Italian armed forces, which however ended with his desertion when Italy joined the war against Britain, since he saw no reason to endanger his life for a morally doubtful cause. The withdrawing Italian forces left behind them stores and equipment which the general public readily distributed among themselves. With the proceeds of what he managed to acquire in this way, he opened a café in Jigjiga which proved quite successful. It was there that he came under the influence of a contemporary poet of distinction, **'Amejé Yógol Furré**, and discovered that he himself had a poetic talent. On the advice of **'Améje** he handed over the café to his relatives to look after and returned to his family farm, where he would have more leisure and could turn his attention to the art of poetry. The themes which inspired Aqib Abdullahi were not worldly ones and this led him to resume his religious studies. He joined an itinerant theological study group [13] and after a few years he became himself a sheikh.

Towards the end of the Second World War the activities of the Somali Youth League gave a new impetus to Somali nationalism.[14] Sheikh Aqib recognized the role which both Islam and Somali poetry could play as unifying forces. Endowed with special ability as a peacemaker, he concentrated in his preaching on the evils of fratricidal raids among different clans and gathered a large following.

It was about 1948 that he saw in a dream an alphabet for writing Somali.[15] Next morning he wrote it down and was able to use it as an *aide-mémoire* device in his work as a preacher and composer of hymns. The esoteric nature of his script did not make it suitable for dissemination and general use, but provided him with a method of recording Somali oral literature, and now he has one of the largest collections of Somali poems, proverbs and stories, both religious and secular.

In 1962 Sheikh Aqib left his native region of Jigjiga and came to Mogadishu, where he soon won recognition both from the general public and from the people especially interested in Somali culture. He was invited on several occasions to broadcast on Radio Mogadishu.

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[13] For an account of such groups, called in Somali **hér**, see Andrzejewski and Musa H. I. Galaal, 1966.

[14] See Drysdale, 1964; Jāma' 'Umar 'Īsā, 1965; Lewis, 1965(*a*); and Touval, 1963.

[15] The script of Sheikh Aqib is based on the alphabetical principle and is no doubt inspired by the Arabic script, from which it differs in that it marks the vowels throughout and has signs for the Somali vowels **e** and **o**. It does not, however, mark length. The actual shapes of the letters are of Sheikh Aqib's invention. For similar new alphabets used for Somali, see Lewis, 1958, and Moreno, 1955, pp. 290–7. The motive behind the invention of new alphabets for Somali seems to arise from the deficiencies of the Arabic script when applied to Somali and the reluctance among the conservative sections of the public to use the Latin alphabet.

The poem which forms the main subject of this paper was recited during a bad drought in 1956, which was a threat both to livestock and crops. When Sheikh Aqib came with his itinerant students to a group of settlements called **Fạrħoodlèy,** near Jigjiga, the inhabitants requested him to lead them in prayers for rain. In addition to the usual prayers and scriptural readings in Arabic, he chanted his poem in Somali, in the traditional **ḍáanto** genre [16] which is often used for marching songs. Nevertheless, the poem departs in one way from the usual standards of Somali secular poetry in that the same alliteration is not carried through the whole poem, but changes in each couplet, to follow the order of the Arabic alphabet. This practice, which can be found in other religious poems, is most probably inspired by a certain type of religious poem in Arabic where, however, instead of alliteration there is rhyme, but where each line begins with a consecutive letter of the alphabet.[17]

As some Arabic consonants have no obvious Somali equivalents, the poet substitutes them by the nearest Somali sounds. The Arabic letters **sīn** and **ṣād,** for example, both correspond to the Somali consonant **s** in the alliteration of the poem. To make up for this apparent deficiency Arabic loan-words are used at certain points which, though they begin with the same consonant in Somali, have etymons which are differentiated in this respect, e.g. **satàar** (Arabic **sitār**) and **sáadiq** (Arabic **ṣādiq**).

Each couplet begins with an invocation in which the poet uses the praise names of God current in Muslim worship. It is important to observe that he gives them in the forms which have been borrowed from Arabic and not in their pure Somali equivalents.[18] These names, which from the point of view of Somali grammar are all masculine singular nouns, are listed below.

dáakir	who remembers	**maʿbùud**	who is worshipped
dáa'im	who is everlasting	**mujìib**	who answers (prayers)
dạyàan	who rewards and punishes	**kháaliq**	who creates
fatàaħ	who opens, who initiates (everything)	**náasir**	who is victorious, who grants victory
ħalìim	who is clement, who is patient	**qáadir**	who is powerful
jalìil	who is glorious	**qáni**	who is rich
jawàad	who is generous	**raħmàan**	who is merciful
kafìil	to whom (one's cares) can be entrusted, who protects	**raħìim**	see **raħmàan**
		sáadiq	who speaks the truth
karìim	who is generous, who is noble	**salàam**	who is peace, who grants peace

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[16] For an account of the genres of Somali poetry see Andrzejewski and Lewis, 1964, and Maino, 1953. For bibliographical information on Somali poetry, see Andrzejewski, 1967; and Johnson, 1967; to which Musa H. I. Galaal, 1968, should be added.

[17] For examples of such alphabetical poems see ʻAbd al-Raḥmān bin Shaykh ʻUmar, 1964, pp. 86–7 and 208–10.

[18] For an account of the praise names of God in Somali, see Lewis, 1959.

sanàaʿ	who makes, who creates	**tą́ajir**	the same meaning as **qáni**
satàar	who is a curtain or shield, who covers up (sins)	**tawàab**	who accepts repentance or penance
sháakir	who is cognizant of merit, who is appreciative	**wáaħid**	who is one
shakùur	as above ; or 'to whom thanks must be offered '	**wakìil**	the same meaning as **kafìil** ; or ' who can act on a person's behalf '
táabid	who is firm, who is immutable	**waħàab**	who provides (all)

Each invocation is followed by a petition and thus the poem resembles a litany in structure, except that both parts are recited by the same person who leads the prayers. The congregation repeats after each pair of lines the following refrain in Arabic.

Allāhu Allāh Allāhu Allāh
Allāhu, aghith lanā maṭaran !
Oh God, oh God, oh God, oh God,
Oh God, help us with rain !

The Somali text given below has been transcribed by myself under plain voice dictation from Sheikh Aqib and then checked against his chanted recitation given to a small group of Somalis interested in oral literature.[19]

1. **Įlàaha arsaaqá ùunkįisòw**
Ibáha ròobka nóo irmaanèe yèey

2. **Įlàaha badáha bįyáha kú shubòw**
Bįláaddaní nóo barwaaqèe yèey

3. **Įlàaha tawàab ee tą́ajir óhòw**
Tǫgyáasha ęngegáy ħaréedda kú tùul

4. **Įlàaha táabid éh ee tawàabka hayòw**
Sídaan jeʿéllaháy na solansìi yèey

5. **Įlàahay jalìil ee jawàad ħáq óhòw**
Jalaad na dįl ye, jį́rkíi róob èey

6. **Įlàahay ħalìim ee ħáq Lóo ʿąabudòw**
Ħayawàanka oomáy ħaréed ú lís èey

7. **Įlàahay kháaliq ee khálqiga uumòw**
Kharàab ḑaʿáy khàyr kú sóo bę́ddel èey

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[19] The system of transcription used is the same as in Musa H. I. Galaal, 1956, and my *The declensions of Somali nouns*, 1964.

8. Įlàaha dáaʾim ee dąyàanka óħòw
Dádkíi ʿąbbáy ròob ha nóo dąʾe èey

9. Įlàaħay dáakir éħ een díkrigįi badinnòw
Daruuráħa ròob ká sóo dą̀a yèey

10. Įlàaħay raħmàan ee raħìimka óħòw
Islàamka rafaadsán ròob ú lís èey

11. Įlàaħay sabàan kastá sàadka baħshèe
Sí dooná falòw, na sìi mádar eey

12. Įlàaħay salàam ee satàarka óħòw
Sídaan jeʿéllaħáy na solansìi yèey

13. Įlàaha sháakir ee shakùurka óħòw
Đijaamàa shidán ħaréed kú shúb èey

14. Įlàaha sáadiq éħ ee sanàaʿa óħòw
Sídaad tiɖáa ba kú sabúrray èey

15. Įlàaha dúrkiyo náʿfiga bál darbòw
Dálkíi ká jábnay e, darúurta lís èey

16. Įlàaha ɖúlkiyo samáda ɖisáyòw
Má ɖaansán karré e, ɖibʿáħa róob èey

17. Įlàaha dalàamka hąbèenka dǫoriyèe
Đaráar ká dambaysiiyòw, déeqda lís èey

18. Įlàaha ʿadʿéedda ʿaddàan ká ɖigèe
ʿÍlmigę̀eda ǫ́gòw, ħaréedda ʿás èey

19. Įlàaha qáni y̌éħ e qámmiga faydòw
Aghíthnaa gháythan ʿáamman, qiyáas ú lís èey

20. Įlàaha fatàaħ éħ ee arsáaqda furòw
La kala fįríɖ ye ròob fąyów kèen

21. Įlàaha qáadir éħ ee taláda qummiyòw
Arláda mádar qǫoyá noogú qúb èey

22. **Įlàaha karìim ee kafìilka óhòw**
Abáar má karré e, kàydka róob kèen èey

23. **Įlàaha láyḍḍa wadá lúlaysá ḍírtòw**
LaGugú ħąmdí yey, ladnáan róob èey

24. **Įlàaha maʿbùud ee mujìibka óhòw**
Arláda mádar gąaḍá nóo mári yèey

25. **Įlàaha náasir éh ee naʿmáda badánòw**
Nageeyé nusqáan lá' nóo kèen èey

26. **Įlàahay wáaħid éh ee wakìilka óhòw**
Wahàabow waráabi Ą́admiga èey

27. **Įlàaha fád uu hiláy hillàaʿ ká baħshòw**
Adàa hayá ròob hamiiqbáħ áh èey

28. **Įlàaha làas La qodáy bįyáha kú laḍòw**
Labeensháha róob arláda kú lís èey

29. **Įlàahay talá yàab léh yasíri jįròw**
Adàan yúsri Káa yaboohsaday èey

1. You who give sustenance to your creatures, oh God,
Put water for us in the nipples of rain !

2. You who poured water into oceans, oh God,
Make this land of ours fertile again !

3. Accepter of penance, who are wealthy, oh God,
Gather water in rivers whose beds have run dry !

4. You who are steadfast and act justly, oh God,
Provide us with what we want you to grant !

5. You who are glorious, truly bounteous, oh God,
Our cries have undone us, grant a shower of rain !

6. You who are clement, truly worshipped, oh God,
Milk water for beasts which are stricken with thirst !

7. Creator of nature who made all things, oh God,
Transmute our ruin to blessing and good !

8. Eternal rewarder of merits, oh God,
Let that rain come which people used to drink !

9. We have done much Remembrance,[20] oh God who remember,
Loosen upon us rain from the clouds !

10. You who are merciful and compassionate, oh God,
Milk rain from the sky for Muslims in need !

11. Giver of victuals at all times, oh God,
Who can do what you want, bestow on us rain !

12. You who are peace and a curtain, oh God,
Provide us with what we want you to grant !

13. Recorder of merit, who requite us, oh God,
Into scorched empty ponds pour us water of rain !

14. You who are truthful, creator, oh God,
We accept in submission whatever you say !

15. You who mete out good and evil, oh God,
In this land we are broken, milk the clouds from above !

16. The earth and the sky you constructed, oh God,
We cannot get water, bring forth drops of rain !

17. The darkness of night you transfigure, oh God,
And make daylight follow ; milk the sky lavishly !

18. You who gave brightness to sunshine, oh God,
And know its principles, give us brown water from rain !

19. You who are rich and ward off cares, oh God,
Milk temperate rain ! help us with rain everywhere !

20. You who open all and give sustenance, oh God,
People have scattered ; send forth healthy rain !

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[20] This is a ceremony called in Somali **díkri** (from Arabic **dhikr**) ‘ Remembrance (of God) ’. It consists of devout invocations repeated for a long time, accompanied by rhythmic movements of the body, clapping, stamping and sometimes also drumming. It is practiced at the meetings of the Sufi fraternities. See al-sharīf ‘Aydarūs bin al-sharīf ‘Alī, 1955 ; and Lewis, 1955–6.

21. Almighty, perfecter of counsels, oh God,
Pour for us rain which would make the land wet !

22. You who are bounteous, the protector, oh God,
We cannot survive drought, send us rain from your store !

23. You who drive the air which sways the trees, oh God,
It is you whom we praised, grant us the goodness of rain !

24. You who are worshipped and answer prayers, oh God,
Make the rain spread over the whole of the land !

25. Bestower of victories, benefactor, oh God,
Bring us faultless rain which makes us dwell where it falls !

26. You who are one and are trusted, oh God,
Provider of all, give water to man !

27. You who spark off lightning from clouds you have loaded, oh God,
It is you who have power over rain which satiates !

28. You who fill water-holes dug in wadis, oh God,
Milk rain on this land, cream-giving rain !

29. Who used to relieve the strangest plights, oh God,
It is to you that I have turned for help !

In the translation of the poem great care has been taken to preserve the imagery of the original and to avoid embellishments or omissions. At the same time no attempt has been made at a literal translation, since it is doubtful whether it would provide any insight into the nature of the original, on account of a vast difference in structure between the two languages. For readers who might be interested in identifying the meanings of the individual words, a vocabulary is provided below. It contains all words not explained so far, which cannot be found in Abraham's dictionary or in Bell's *The Somali language* or which require additional elucidation. The letters 'm' and 'f' refer to the gender of nouns [21] and the capital code letters denote the root extension class in verbs according to my system of classification.[22]

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[21] As defined in my *The declensions of Somali nouns*, 1964. This work was originally prepared as a Ph.D. thesis under the guidance and supervision of Professor Malcolm Guthrie.

[22] As presented in my articles, 1968, 1969.

Ạ́admi (m) human being or beings ; the offspring of Adam
aghíthnaa ghá̦ythan ʿáamman an Arabic phrase meaning ‘ assist us with rain which is general ’ (i.e. which spreads over the whole country)
árlo (f) country, land
arsàaq (Z) to give sustenance
arsáaq (f) sustenance
ʿạ́abud (Z) to worship
ʿáamman see under **aghíthnaa**, etc.
ʿadʿéed (f) sunshine
barwaaqèe (AYN) to render prosperous
dárab (Z) to prepare (root : **darab** ∼ **darb**)
dalàam (m) darkness
dibíʿ (f) drop
dibʿŏ (m) plur. form of **dibíʿ**
dúr (m) evil, misfortune
ɖaansó (SAN) to fetch water for oneself
ɖijaamŏ (m) plur. form of **ɖijáan**
ɖijáan (f) natural pond, reservoir
èey a particle used in poetry, without any specific meaning
fàyd (Z) to bare
fạyów (Z†) to be healthy
fíriɖ (Z) to disperse
gháythan see under **aghíthnaa**, etc.
hamiiqbáħ (m) that which satiates (poetic)
híl (Z) to fasten a cover on a water or milk vessel before loading it on to a burden beast ; to load
ħámdi (Z) to praise
ħayawàan (m) animals
íb (f) orifice of the nipple or penis
irmaanèe (Z†/AYN) to cause to be (‘ to become ’) in milk ; to cause to have water
Islàam (m) Islam, Muslims
jalàad (m) shouting, clamour
khálqi (m) creation, creatures
kharàab (m) ruin, devastation
làas (m) shallow well, usually dug in a seasonal river bed
labéenshe (m) one which gives cream (poetic)
ladnáan (f) being well, prosperity
láɖ (Z) to pour
lánaa see under **aghíthnaa**, etc.
mádar (m) rain (poetic)
náʿfi (m) profit, benefit
nagéeye (m) that which causes people to settle in a particular place for a time (poetic)

ná'mo (f) favour, benefit, grace
nusqáan (f) deficiency, defect
qámmi (m) care, worry
qǫ̀o (IN) to wet (trans.)
qiyáas (f) measure, moderation
qúmmi (IN) to straighten, to rectify
rafaadsán (Z†) to endure hardship
sábur (Z) to become patient; to accept patiently
solansìi (SIIN) to grant
shidán (AN†) to be alight
tawàab (m) reward, recompense
ùun (Z) to create (root: **uun** ~ **uum**)
ùun (m) creation, creatures
yaboohsó (SAN) to seek offers of help or gifts
yásir (Z) to relieve, to ameliorate (poetic)
yèey a positional variant of **èey**
yúsri (m) ease, relief (poetic)

Many of the words in the poem occur in their contracted forms or in their positional variants which require elucidation. In the list below the technique of explanation is the same as in the introduction and notes to Musa Galaal's *Hikmad Soomaali.* The **-ow** component in several contractions is a masculine vocative suffix, used when addressing a person.

adàa = adi + bàa
adàan = adi + bàan
'ąabudòw = 'ąabudó + ow
badánòw = badán + ow
badinnòw = badinnáy + ow
baħshèe = baħshá ee = biħiyá ee
baħshòw = baħshá + ow = biħiyá + ow
darbòw = darbá + ow
dą'e èey = dą'o èey
dambaysiiyòw = dambaysiiyá + ow
dooná falòw = doonó falòw = doonó falá + ow
dǫoriyèe = dǫoriyá ee
dúrkiyo = dúrka iyo
ɖigèe = ɖigáy ee
ɖijaamàa = ɖijaamáha
ɖírtòw = ɖírta + ow
een = ee aan = ee aannu
éh ee = áh ee
falòw = falá + ow
faydòw = faydá + ow
furòw = furá + ow
hayòw = hayá + ow
jįròw = jįráy + ow
karré e = karró e
laɖòw = laɖá + ow
ǫ́gòw = ǫ́g + ow
óhòw = áh + ow
shubòw = shubáy + ow
uumòw = uumáy + ow
ùunkįisòw = ùunkįisa + ow

When Sheikh Aqib recited his **roobdóon**, the villagers were very much moved, apparently reaching a state of religious ecstasy (**way kú jįbboodeen**). The emotional appeal of the poem, quite apart from its artistic value, is no doubt enhanced by two facts: firstly all members of the congregation could fully understand the language and, secondly, to many men the poem must have evoked memories of early childhood.

In Somali culture there is a tradition of prayers for rain recited by women who go with their small children to gatherings in isolated spots; adult men are never present. The prayers are in Somali, are very simple in structure, and contain imagery which is obviously derived from direct experience and observation and not from Muslim learning.[23] Thus for example, in a woman's prayer from the Jigjiga region the quality of the rain which they want is described as follows:

Kú rárankíi abaaréed ba nagá reebá nóo kèen !
Kú rą̀adkíi La qaadaa ba ràys yeesħó nóo kèen !
Kú rámadkíi ɖalá ba súbagga Lagá riiħó nóo kèen !
Kú ʿeesaamó giirgiirán gę̀eskǫ̀oda ħumbeeyá nóo kèen !

Bring us one which takes away from the ground the hidden embers of drought !
Bring us one which leaves every footprint wet !
Bring us one through which ghee is obtained from beasts that have calved recently !
One which puts froth on the horns of the spotted young goats !

In the same poem we find a lament on the effects of the drought on the people around:

Umuli óontay, ròob èey, Állow ròobka nóo kèen !
Ardádu gųbátay, ròob èey, Állow ròobka nóo kèen !
Aroos dąlandál, ròob èey, Állow ròobka nóo kèen !

A woman who has given birth is stricken with thirst. Rain, oh God, give us rain !
The students of the Faith are scorched. Rain, oh God, give us rain !
The bride and the bridegroom had to trudge away from the feast. Rain, oh God, give us rain !

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[23] These prayers are accompanied by certain ceremonies which seem non-Islamic in their nature. According to Mr. Musa Galaal—a recognized authority on Somali customs and oral literature—in the Northern part of the Somali-speaking territories there is a rite called **aħadáysi**: women select a particularly virtuous and pious young wife, and then dishevel her hair, throw sand at her, strike her and generally molest her. They tell her that she must pray for rain and that unless God hears her prayer they will continue tormenting her. The reasoning behind it is that a good person's prayers are most likely to be answered. Similarly, small children are harassed by being made to walk barefoot on sand hot from the sun. Cords are also tied round the little fingers on their left hands and they are told to pray for rain, or they will not be released. It may be of interest to note that it is by the little finger of the left hand that spirits are believed to leave a possessed person during the **sàar (zār)** ceremonies (see Lewis, 1961).

The small children who accompany their mothers also chant their own prayers in which they describe the plight to which the drought has reduced them:

Állahayòw fár bàa i ħiɖán,
Állahayòw, i sóo furó !
Állahayòw, ħaréed róob !
Állahayòw, bákhtàan ʿunay !
Állahayòw, bįyàan ħaday !

Oh God, my finger is tied,[24]
Oh God, release it for me !
Oh God, give us rainwater !
Oh God I have eaten carrion !
Oh God I have stolen water !

BIBLIOGRAPHICAL REFERENCES

ʻAbd al-Raḥmān bin shaykh ʻUmar, *c.* 1954. *Jalā' al-ʻaynayn fī manāqib al-shakhayn : al-shaykh al-walī ḥājj Uways al-Qādirī wa al-shaykh al-kāmil al-shaykh ʻAbd al-Raḥmān Zaylaʻī*, Maṭbaʻat al-Mas̲h̲had al-Ḥusayni, Cairo.

ʻAbd al-Raḥmān bin shaykh ʻUmar, 1964. *Al-jawhar al-nafīs fī khawāṣ al-shaykh Uways*, Maṭbaʻat al-Mas̲h̲had al-Ḥusaynī, Cairo.

ʻAbd al-Ṣabūr Marzūq, 1964. *Thā'ir min al-Ṣūmāl : al-mullā Muḥammad ʻAbd Allāh Ḥasan*, Dār al-Qawmiyya lil-Ṭabāʻa wa al-Nashr, Cairo.

Abraham, R. C., 1964. *Somali–English dictionary*, University of London Press.

Aḥmad bin Ḥusayn bin Muḥammad, 1945. *Manāqib al-ustādh al-shaykh Ismāʻīl bin Ibrāhīm al-Jabartī*, Muṣṭafā al-Bābī al-Ḥalabī, Cairo.

Andrzejewski, B. W., 1964. *The declensions of Somali nouns*, School of Oriental and African Studies, London.

Andrzejewski, B. W., 1967. ' The art of the miniature in Somali poetry ', *African Language Review*, VI, 5–16.

Andrzejewski, B. W., 1968. ' Inflectional characteristics of the so-called weak verbs in Somali ', *African Language Studies*, IX, 1–51.

Andrzejewski, B. W., 1969. ' Some observations on hybrid verbs in Somali ', *African Language Studies*, X, 47–89.

Andrzejewski, B. W., and Musa H. I. Galaal, 1966. ' The art of the verbal message in Somali society ', *Neue Afrikanistische Studien*, ed. J. Lukas, Hamburg, 29–39.

Andrzejewski, B. W., and I. M. Lewis, 1964. *Somali poetry : an introduction*, The Oxford Library of African Literature, The Clarendon Press.

al-sharīf ʻAydarūs bin al-sharīf ʻAlī al-ʻAydarūs al-Naḍīrī al-ʻAlawī, 1955. *Bughyat al-āmāl fī ta'rīkh al-Ṣūmāl*, Stamperia A.F.I.S., Mogadishu.

Bell, C. R. V., 1953. *The Somali language*, Longmans, London.

Bell, C. R. V., 1968. *The Somali language*, reprinted by Gregg International Publishers, Ltd., Farnborough.

Cerulli, Enrico, 1957, 1959, 1964. *Somalia : scritti vari editi ed inediti*, Istituto Poligrafico dello Stato, Rome, vols. I, II and III.

Drysdale, John, 1964. *The Somali dispute*, Pall Mall Press, London.

Ibn Muḥyī al-Dīn Qāsim al-Barāwī, 1955. *Majmūʻa qasā'id*, Muṣṭafā al-Bābī al-Ḥalabī, Cairo, 2nd ed.

Jāmaʻ ʻUmar ʻĪsā, 1965. *Ta'rīkh al-Ṣūmāl fī al-ʻuṣūr al-wusṭā wa al-ḥadītha*. Maṭbaʻat al-Imām, Cairo.

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[24] See note 23.

JOHNSON, JOHN WILLIAM, 1967. *A bibliography of Somali language materials*, Peace Corps, Hargeysa, Somali Republic.

LAURENCE, MARGARET, 1954. *A tree for poverty : Somali poetry and prose*, The Eagle Press, Nairobi.

LEWIS, I. M., 1955. *Peoples of the Horn of Africa : Somali, Afar and Saho*, Ethnographic Survey of Africa, Part I, International African Institute, London.

LEWIS, I. M., 1955–6. ' Sufism in Somaliland : a study in tribal Islam ', *Bulletin of the School of Oriental and African Studies*, XVII, 3, 581–602 ; XVIII, 1, 146–60.

LEWIS, I. M., 1958. ' The Gadabursi Somali script ', *Bulletin of the School of Oriental and African Studies*, XXI, 1, 134–56.

LEWIS, 1959. ' The names of God in Northern Somaliland ', *Bulletin of the School of Oriental and African Studies*, XXII, 1, 134–40.

LEWIS, I. M., 1961. *A pastoral democracy : a study of pastoralism and politics among the northern Somali of the Horn of Africa*, Oxford University Press.

LEWIS, I. M., 1963. ' Dualism in Somali notions of power ', *The Journal of the Royal Anthropological Society*, XCIII, Part I, 109–16.

LEWIS, I. M., 1965(*a*). *The modern history of Somaliland : from nation to state*, Weidenfeld and Nicolson, London.

LEWIS, I. M. 1965(*b*). ' Shaikhs and warriors in Somaliland ', *African systems of thought*, ed. M. Fortes and G. Dieterlen, Oxford University Press.

LEWIS, I. M., 1966. ' Conformity and contrast in Somali Islam ', *Islam in tropical Africa*, ed. I. M. Lewis, Oxford University Press, 253–67.

MAINO, MARIO, 1953. *La lingua somala : strumento d'insegnamento professionale*, Ferrari, Occella & C., Alessandria (Italy).

MORENO, MARTINO MARIO, 1955. *Il somalo della Somalia : grammatica e testi del Benadir, Darod e Dighil*, Istituto Poligrafico dello Stato, Rome.

MUḤAMMAD AL-ZUHṚĪ AL-GHUMRĀWĪ, 1933. *Al-sirāj al-wahāj* Muṣṭafā al-Bābī al-Ḥalabī, Cairo. A commentary on *Matn al-Minhāj* by Sharaf al-Dīn Yaḥyā al-Nawawī published together with the original text.

MUSA H. I. GALAAL, 1956. *Hikmad Soomaali*, ed. B. W. Andrzejewski, Oxford University Press.

MUSA H. I. GALAAL, 1968. *The terminology and practice of Somali weather lore, astronomy and astrology* (cyclostyled), available from New Africa Bookshop, Mogadishu (P.O. Box 897).

SHARAF AL-DĪN YAḤYĀ AL-NAWAWĪ, 1933. *Matn al-minhāj*, Muṣṭafā al-Bābī al-Ḥalabī, Cairo, published together with a commentary ; see under Muḥammad al-Zuhrī al-Ghumrawī.

SHIRE JAAMAC AXMAD, 1967. ' Wiil-waal (Garaad Faarax) sheekadiis ', *Iftiinka-Aqoonta* (*Light of Education*), VI, Mogadishu, 1–31.

TOUVAL, SAADIA, 1963. *Somali nationalism : international politics and the drive for unity in the Horn of Africa*, Harvard University Press.

1ST AND 2ND PERSON PRONOMINAL FORMS IN FULA

By D. W. Arnott

One problem which has to be faced in analysing a class language is whether pronominal forms in general, and 1st and 2nd person forms in particular, are to be treated as part of the class system, or as external to it. In many cases there is a clear correlation between 3rd person pronominal forms and concord markers of the nominal system, as well as a close syntactical link, so that there is little difficulty in including them within the system. But the position regarding 1st and 2nd person forms is often much less clear. This is so in Fula, where a detailed study of the shapes and behaviour of 1st and 2nd person forms, alongside those of 3rd person forms, is necessary before a decision can be made on the best way to treat them.

2. The problem is here examined with reference to the Gombe variety of Fula, but similar considerations would apply for all dialects. After an introductory section listing the forms and the types of construction in which they occur, they are compared first from a morphological and then from a syntactical point of view.

3. Fula pronominal forms occur in five series, exemplified in Table I, and here labelled respectively Subject Element (S.E.), Object Element (O.E.), Independent Pronoun (I.P.), Possessive Pronoun, and Possessive Suffix. For Gombe Fula each series consists of 32 forms, as described in Arnott 1970, chapters 22 and 24–6; but here a shorter list is adequate for exemplification. The forms in each of these series are in complementary distribution, and occur in comparable syntactical situations; this will be clear from the selected examples given below, which illustrate the various syntactical situations in which these pronominals can occur:

Subject Elements occur in combination with a verbal base (i.e. radical + tense suffix) to form a minimal verbal complex (Arnott 1970, §§ 28.1–4), e.g.

	General Future		*Relative Past*
mi-nodday	I will call	**noddu-mi**	I called
a-nodday	you will call	**noddu-ɗaa**	you called
o-nodday	he/she will call	**o-noddi**	he/she called
ngel-nodday	he/she/it will call (diminutive)	**ngel-noddi**	he/she/it called (diminutive)
min-nodday	we (he and I) will call	**min-noddi**	we called
en-nodday	you and I will call	**noddu-ɗen**	you and I called
on-nodday	you (pl.) will call	**noddu-ɗon**	you (pl.) called
ɓe-nodday	they will call	**ɓe-noddi**	they called
kon-nodday	they (dim.) will call	**kon-noddi**	they (dim.) called

Note that some forms vary according to tense, e.g. **mi-/-mi, a-/-ɗaa, en-/-ɗen, on-/-ɗon.**

TABLE I

Person	Subject Element	Object Element	Independent Pronoun	Possessive Pronoun	Possessive Suffix
1 sing.	**mi/-mi**	**-yam/-am**	**miin'**	**am**	**-am**
2 ,,	**a/-aa/-ɗaa**	**-ma/-maa'/-e**	**aan'**	**maaɗa/maa**	**-a**
1 pl.	**min**	**-min**	**minon**	**amin**	**-iimin**
2 pl. incl.[1]	**en/-en/-ɗen**	**-'en**	**enen**	**meeɗen/men**	**-ii'en**
2 pl. excl.	**on/-on/-ɗon**	**-'on**	**onon**	**mooɗon/mon**	**-ii'on**
3 sing.					
o class	**o/mo**	**-mo'/-moo-**	**hanko'**	**maako'**	**-iiko'**
nde ,,	**nde**	**-nde'**	**hayre'**	**maare'**	**-iire'**
ndu ,,	**ndu**	**-ndu'**	**hayru'**	**maaru'**	**-iiru'**
nge ,,	**nge**	**-nge'**	**hange'**	**maage'**	**-iige'**
ngu ,,	**ngu**	**-ngu'**	**hangu'**	**maagu'**	**-iigu'**
ngal ,,	**ngal**	**-ngal'**	**hangal'**	**maagal'**	**-iigal'**
ngel ,, (diminutive)	**ngel**	**-ngel'**	**hangel'**	**maagel'**	**-iigel'**
3 pl.					
ɓe class	**ɓe**	**-ɓe'**	**hamɓe'**	**maɓɓe'**	**-iiɓe'**
ɗe ,,	**ɗe**	**-ɗe'**	**hanje'**	**maaje'**	**-iije'**
ɗi ,,	**ɗi**	**-ɗi'**	**hanji'**	**maaji'**	**-iiji'**
kon ,, (diminutive)	**kon**	**-kon'**	**hankon'**	**maakon'**	**-iikon'**

In the above table, a final apostrophe represents Final Glottality, where the form occurs in pause.

Subject Elements also occur in Subject position in non-verbal sentences, e.g.

mi Pullo	I am a Fulani	**mi bumɗo**	I am blind
o Pullo	he/she is a Fulani	**a bumɗo na ?**	are you blind ?
min Fulɓe	we are Fulani	**min wumɓe**	we are blind
ɓe Fulɓe	they are Fulani	**on wumɓe na ?**	are you blind ?

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[1] The **en** forms, referring to the speaker and the person(s) addressed, are treated as 2nd person inclusive rather than 1st person inclusive, because their morphological structure is markedly different from that of the 1st plural **min** forms in most respects. Syntactically, too, they resemble the 2nd person forms rather than the 1st plural, since in the Relative Past, Relative Future and Subjunctive tenses the ' you and I ' S.E. **-en, -ɗen** *follows* the verbal base, like the 2 sing. and 2 pl. S.E.s **-aa, -ɗaa** and **-on, -ɗon,** whereas the 1 pl. S.E. **min** *precedes* the base in these tenses as in all others.

Semantically, too, since **en** refers to both ' you ' and ' I ' there is no particular reason why it should be labelled a first person because of the ' I ' element. If in English it is reasonable to assign ' you and I ' to the 1st person on formal grounds, because of sentences such as ' *you and I* have finished *our* work ', in Fula it is equally reasonable to assign the pronoun to the 2nd person because formally it behaves more like the other 2nd person forms than like the 1st person plural forms.

Object Elements occur in combination with a minimal complex to form an enlarged complex, e.g.

General Past	
o-noddii-yam	he called me
o-noddii-ma	he called you
o-noddii-mo	he called him/her
o-noddii-ngel	he called him/her/it
o-noddii-min	he called us
o-noddii-ɓe	he called them

Desiderative	
Alla wall-am	God help me
Alla wall-e	God help you
Alla wallu-mo	God help him/her
Alla wallu-ɓe	God help them

Relative Past	
o-noddi-yam	he called me
o-noddu-maa	he called you
o-noddi-mo	he called him/her
o-noddi-ɓe	he called them
noddu-maa-mi	I called you
noddu-moo-mi	I called him/her
noddu-mi-ngel	I called him/her/it
noddu-mi-ɓe	I called them

Note that some forms vary according to tense and other factors, viz. **-yam/-am, -ma/-maa/-e, -mo/-moo.** For details, see Arnott 1970, §§ 37.5–11.

Object Elements also occur after infinitives and participles, e.g. **nodduki mo** ‘ to call him ’, **nodduɗo mo** ‘ one who called him ’, **nodduɗo ɓe** ‘ one who called them ’.

Independent Pronouns occur in a number of different positions, including (*a*) first item in an appositional nominal group (Arnott 1966, §§ 27 ff.; 1970, §§ 6.8, 24.14), (*b*) in ‘ Prelude ’ position in a sentence (Arnott 1970, §§ 7.10–17, 24.15), or (*c*) as an ‘addendum’ at the end of a sentence (Arnott 1970, § 24.15), e.g.

(*a*)	**miin Bello**	I, Bello	**aan Bello**	you, Bello
	hanko bumɗo on	he, the blind man		
	minon Fulɓe	we Fulani	**onon Fulɓe**	you Fulani
	hanko Pullo o’o	(he,) this Fulani		
	hamɓe Fulɓe ɓen	they, the Fulani		
	hankon mbaccon kon	they, the children		
	hanji pucci ɗi’i	(they,) these horses		
also	**hanko o’o**	this one (lit. he this)		
	aan o’o	you there (lit. you this)		
	onon ɓe’e	you there (pl.)		
(*b*)	**miin mi-anndaa**	(as for) me, I don’t know		
	aan a-anndaa na ?	(as for) you, don’t you know ?		
	hanko o bumɗo	(as for) him, he is blind		
	hangel ngel bumngel	(as for) him (dim.), he is blind		
	hamɓe ɓe wumɓe	(as for) them, they are blind		
(*c*)	**mi-anndaa-mo hanko**	I don’t know *him*		
	mi-anndaa-ma aan	I don’t know *you*		

Possessive Pronouns occur as the second item in genitival complexes, while *Possessive Suffixes* occur in combination with the stems of certain kinship and other relationship terms, e.g.

Poss. Pronoun	*Poss. Suffix*	
baaba am	**jawmam**	my father, my master
baaba maaɗa/maa	**jawma**	your father, master
baaba maako	**jawmiiko**	his/her father, master
baaba maagel	**jawmiigel**	his/her/its (dim.) father, master
baaba amin	**jawmiimin**	our father, master
baaba meeɗen/men	**jawmii'en**	our father, master (yours and mine)
baaba mooɗon/mon	**jawmii'on**	your (pl.) father, master
baaba maɓɓe	**jawmiiɓe**	their father, master
baaba maakon	**jawmiikon**	their (dim.) father, master

4. While these five series are complete sets in which *all* the forms are in complementary distribution, there is an obvious initial distinction between 3rd person forms and 1st and 2nd person forms, namely in their semantic and grammatical reference. 3rd person forms in each series refer to one or more person(s) or thing(s) other than the speaker or person addressed; and the particular form used is determined by the class of the noun referred to. (The noun has usually already occurred in the linguistic context, but it may simply be the Fula word for a person or thing in the context of situation but not previously mentioned.) Thus the 3rd person forms listed in Table I could refer to nouns such as the following:

Class	
o	**laamɗo** chief; **Pullo** a Fulani; **koɗo** stranger
nde	**loonde** storage-pot; **deptere** book
ndu	**waandu** monkey; **kutiiru** dog; **harmaaru** prostitute
nge	**nagge** cow; **wiige** heifer
ngu	**linngu** fish; **puccu** horse; **mbonjokku** bag
ngal	**gertogal** hen; **cofal** pullet
ngel	**laamngel** petty chief; **baccel** child
ɓe	**laamɓe** chiefs; **Fulɓe** Fulani
ɗe	**gertooɗe** hens; **depte** books
ɗi	**baaɗi** monkeys; **pucci** horses; **bacci** children
kon	**laamkon** petty chiefs; **mbaccon** small children

1st and 2nd person forms (which refer to the speaker or person addressed or both, alone or together with others associated with them), do not refer back to a noun of any particular class in the same way as the 3rd person forms. Even in the case of 1st plural and 2nd plural exclusive forms, where a third person or thing could be included in the reference, there is no grammatical reference to any particular class. For instance **min** ' we ' could refer back to **miin e hanko** ' I and he ' (o class), **miin e hangel** ' I and he/she/it ' (**ngel** class, diminutive), or **miin e hangu** ' I and it ' (**ngu** class) ; cf. also

miin e soobaajo am, min-shomii (**soobaajo** is in the **o** class)
I and my friend are tired
miin e puccu am fuu, min-shomii (**puccu** is in the **ngu** class)
both I and my horse are tired

5. This, then, is one way in which the two groups of forms can be distinguished ; but a more detailed study is necessary, both from a morphological and from a syntactical point of view.

MORPHOLOGICAL CONSIDERATIONS

6. From a *morphological* point of view it is clear from Table I that most 1st and 2nd person forms have a different internal structure from the corresponding 3rd person forms.

(*a*) While 3rd person *Subject and Object Elements* of any one class have the same shape (with the single exception of the **o** class, which in Gombe normally has Subject Element **o**, Object Element **-mo**), 1st and 2nd sing. Object Elements have different shapes not systematically relatable to the corresponding Subject Elements. Only in the case of the plural forms, **min, en, on,**[2] is the Object Element the same shape as the more usual form of the corresponding Subject Element. Moreover (i) 1st sing. and all 2nd person Subject Elements each have two or three different shapes, some of which are suffixed to the verbal base, and not prefixed to it, as is the case with most S.E.s ; and (ii) 1st sing. and 2nd sing. O.E.s each have several shapes, found in different tenses, whereas all 3rd person forms have only one shape, constant for all tenses (again with the single anomalous exception of the **o** class, which has **-moo** with 1st sing. S.E. in certain tenses—e.g. **noddumoo-mi** given in § 3 above).

(*b*) 3rd person *Independent Pronouns* consist of an initial element **han-** [3]/**hay-** (in complementary distribution, **hay-** occurring only before **-r-**) combined with an element systematically relatable to the S.E. and O.E. of the same class, and more closely to the corresponding suffixes in nouns and adjectives ; for details, see Arnott 1970, § 24.1. 1st and 2nd person forms do not have this initial **han-/hay-** element ; they could perhaps be analysed as consisting of a final -V**n** combined with an element identical with the S.E., the V normally being identical with the vowel of the 1st element (except in the case of 1st pl.).[4] But this is a different pattern from that of the 3rd person forms.

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[2] The S.E.s **en** and **on** both have an initial glottal stop, i.e., **'en, 'on**, although this is not shown in the orthography used here (which is virtually the same as that recommeded by the UNESCO orthography meeting at Bamako in 1966).

[3] **n** = homorganic nasal. Most other dialects have **kan-/kay-**.

[4] Other dialects have S.E. **min,** I.P. **minen,** or S.E. **men,** I.P. **menen** ; this last pair is more comparable with the **enen** and **onon** pairs.

(*c*) 3rd person *Possessive Pronouns* consist of an initial element **maa-** combined with an element systematically relatable to the S.E. and O.E. of the same class, and more particularly to corresponding suffixes in nouns and adjectives (for details see Arnott 1970, § 24.1). The only exception is **maɓɓe,** in which the initial element can be stated as **maЄ-**, where Є is a consonant identical with the following consonant; this is comparable with the **maЄ-** in many possessive forms in other dialects: **makko, maggu, majje, makkon,** etc.

The uncontracted 2nd person forms have a somewhat similar structure, but the initial element is not **maa-** but **m∀∀-**, the long vowel being identical with that of the final element. (Contrast, for instance, **meeɗen** with the 3rd person form **maagel**—not ***meegel**—and **mooɗon** with the 3rd person form **maakon**—not ***mookon.**) This final element, it may be noted, resembles the third form of the S.E. **-ɗaa, -ɗen, -ɗon,** though the vowel of the 2nd sing. possessive is short, not long.

The two 1st person forms, on the other hand, have quite a different structure, with no such initial element at all.

(*d*) *Possessive Suffixes.* Only in this case is there a close parallel between 1st and 2nd person *plural* forms and 3rd person forms, all having an **-ii-** element combined with a final element systematically relatable to the corresponding S.E. and O.E. But 1st and 2nd *singular* forms do not have a comparable structure.

7. *Final Glottality.* It is noticeable that all the 3rd person forms have Final Glottality when they are in pause, indicated by the final apostrophe in Table I. (3rd person S.E.s always precede the verbal base, or the Complement in non-verbal sentences, so that they never occur in pause.) 1st and 2nd person forms, on the other hand, do not have Final Glottality, with the sole—and rather odd—exceptions of 1st and 2nd sing. Independent Pronouns, and the long-vowelled form **-maa** of the 2nd sing. O.E.

8. From the foregoing it is clear that on the whole the 1st and 2nd person forms are, morphologically, markedly different from the 3rd person forms, the exceptions being the 1st and 2nd person plural forms of O.E. and the Possessive Suffix, though even these differ from the corresponding 3rd person forms in not having Final Glottality.

9. In the five categories of pronominals considered above and illustrated in Table I, there are, as indicated in § 4, distinct 3rd person forms for each of the nominal classes, although there is no such class distinction in 1st and 2nd person forms. In addition to the pronominal forms, there are distinct forms for each nominal class in the six categories of forms illustrated in Table II, viz. Genitive Element, Relative Element, Interrogative, Far Demonstrative, Near Demonstrative and Referential; and these forms too are relatable in each case to the S.E. of the same class, as follows:

$$\left.\begin{array}{l}\text{Genitive Element}\\ \text{Relative Element}\end{array}\right\}\text{are identical with the S.E.}$$

Interrogative is identical with the S.E. + **-ye/-e** [5]
Far Demonstrative is identical with the S.E. + **-ya/-a** [5]
Referential is identical with the S.E. + **-n/ø** [6]
Near Demonstrative resembles the S.E., with reduplication of the vowel, and an intervening glottal stop, or a glide with or without glottal creak.

All these forms, varying for class, are relatable to 3rd person pronominals. It is not surprising that there are no corresponding 1st and 2nd person forms in these categories; but the absence of corresponding forms is itself a further point of contrast between 1st and 2nd person pronominals and 3rd person pronominals.

TABLE II

	Genitive and Relative Element	Interrogative	Demonstrative		Referential
			Near	Far	
3 sing.					
o class	**mo**	**moye**	**o'o**	**oya**	**on**
nde ,,	**nde**	**ndeye**	**nde'e**	**ndeya**	**nden**
ndu ,,	**ndu**	**nduye**	**ndu'u**	**nduya**	**ndun**
nge ,,	**nge**	**ngeye**	**nge'e**	**ngeya**	**ngen**
ngu ,,	**ngu**	**nguye**	**ngu'u**	**nguya**	**ngun**
ngal ,,	**ngal**	**ngale**	**nga'al**	**ngala**	**ngal**
ngel ,,	**ngel**	**ngele**	**nge'el**	**ngela**	**ngel**
3 pl.					
ɓe class	**ɓe**	**ɓeye**	**ɓe'e**	**ɓeya**	**ɓen**
ɗe ,,	**ɗe**	**ɗeye**	**ɗe'e**	**ɗeya**	**ɗen**
ɗi ,,	**ɗi**	**ɗiye**	**ɗi'i**	**ɗiya**	**ɗin**
kon ,,	**kon**	**kone**	**ko'on**	**kona**	**kon**

SYNTACTICAL CONSIDERATIONS

10. The essence of the class system, however, is agreement between forms having the same reference. And in considering whether or not 1st and 2nd person forms are to be treated as belonging to the class system we must consider how far they enter into class agreement in the same way as 3rd person forms. The constructions appropriate for this purpose are:

A. Non-verbal sentences consisting of S.E. + Complement:
    i. S.E. + Noun Complement, with or without I.P. or Demonstrative as Prelude
    ii. S.E. + Adjective or Participle Complement with or without I.P. or Demonstrative as Prelude

[5] **-ye, -ya** where the S.E. ends in a vowel, **-e, -a** where it ends in a consonant.
[6] **-n** where the S.E. ends in a vowel, zero where it ends in a consonant.

B. Nominal groups having I.P. as initial item.

For in these constructions 1st and 2nd person S.E.s and Independent Pronouns can occur in combination with adjectives, participles, nouns and specifiers, all of which contain elements which clearly show the class to which they belong.

A.i. *(Prelude +) S.E. + Noun Complement*

11. When the S.E. is a 3rd person form, there is often agreement between the S.E. and the noun, and where an Independent Pronoun or a Demonstrative occurs initially as a Prelude, it also belongs to the same class as the S.E., e.g.

o laamɗo [7]	he is a chief
hanko o laamɗo	as for him, he's a chief
o'o o laamɗo	as for this one, he's a chief
hangel/nge'el ngel baccel tan	as for it/this one, it's only a child
hange nge wiige	as for it, it's a heifer
nde'e nde Alkura'aaniire	as for this (book), it's a Koran
hangal ngal cofal	as for this (hen), it's a pullet

Very often, however, while the noun is in the appropriate class, the S.E., and the Prelude, if any, is in the **ɗum** class—the neuter class which is used rather than one of the other non-personal classes where it is desired to be non-specific, to avoid reference to any particular class, e.g.

hanjum **ɗu'um**	**ɗum**	**deptere** **nagge** **mbonjokku** **gertogal**	as for	it this	it is	a book a cow a bag a hen

As the nouns are in one of the specific classes (**nde, nge, ngu, ngal** in the above examples), there is no formal agreement between the I.P./Demonstrative and S.E. on the one hand and the noun on the other hand. It could be argued that in view of the non-specific reference of the **ɗum** class, and the fact that a **ɗum**-class form can often be used in place of a form from one of the more specific classes, there is not a complete breach of agreement. But agreement is a formal phenomenon, and in these last examples there is not in fact any formal agreement between the I.P./Demonstrative and S.E. on the one hand and the noun on the other hand.

12. We may also consider examples such as the following:

(hanko) o baccel	(as for him) he's a child
(hanko) o laamngel tan	(as for him) he's only a petty chief
(hanko/o'o) o harmaaru	(as for her/this one) she's a prostitute
(hamɓe) ɓe bacci tan	(as for them) they are only children

and even in a dependent clause

. . . saa'i o mbabba	when he (was) a donkey

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[7] The concord elements marking the class are underlined in this and subsequent paragraphs.

Here the S.E. and I.P./Demonstrative are in one of the personal classes (**o** singular, **ɓe** plural), while the nouns are in other classes—**ngel, ndu, ɗi, nga** respectively. From these it is clear that cases can occur where formally there is non-agreement in class between a 3rd person S.E. in a non-verbal sentence and the noun Complement, though in these cases at least there is agreement in number.

13. In view of the foregoing, it is not surprising that a 1st or 2nd person S.E. can be followed, in such a sentence, by a noun in *any* semantically appropriate class. Most frequently the noun is in one of the personal classes, **o** or **ɓe**, e.g.

(miin) mi moodibbo/koɗo/Pullo	(as for me) I'm a malam/stranger/Fulani
(minon) min moodiɓɓe/Fulɓe	(as for us) we're malams/Fulani
a Pullo na ?	are you a Fulani ?

But nouns in other classes are not infrequent, e.g.

miin mi laamngel non	as for me, I'm just an insignificant little chief
aan a baccel tan	as for you, you're only a child
minon min mbaccon pamaron tan	as for us, we are only little children

Similarly, in fables, where animals, birds, trees, etc., are made to speak, one encounters such sentences as

naa mi mbabba (**nga** class), **mi puccu**	I'm not a donkey, I'm a horse

A.ii. (*Prelude* +) *S.E.* + *Adjective/Participle Complement*

14. Where the Complement is an adjective or participle, however, there is a distinction between 3rd person forms and 1st and 2nd person forms. A 3rd person S.E. (and any I.P. or Demonstrative in the Prelude) and the adjective/participle Complement are always in agreement, i.e. belong to the same class, e.g.

(hanko) o bumɗo/nanaro	(he) he is blind/refractory
(hangel) ngel bumngel/nanarel	(it) it is blind/refractory
(hayru) ndu wumndu/nanardu	(it) it is blind/refractory (e.g. dog)
(hange) nge wumnge/nanare	(it) it is blind/refractory (e.g. cow)
(hamɓe) ɓe wumɓe/nanarɓe	(they) they are blind/refractory
(hankon) kon mbumkon/nanaron	(they) they are blind/refractory (e.g. children, small animals)
naa ndu rewru, ndu wordu	it (e.g. dog) is not female, it is male

Where however the S.E. is a 1st or 2nd person form, the Complement, though normally in one of the personal classes, may be in some other class. For instance, one finds not only sentences such as the following

Class		
o	**mi bumɗo**	I am blind
o	**a nanaro**	you are incorrigible

Class		
ɓe	**on yiɗaaɓe**	you (pl.) are much-loved
ɓe	**(onon moodiɓɓe) on hulniiɓe**	(you malams) you are awesome
ɓe	**enen en feere'en**	*we* are of a different kind

but also

ngel	**wakkatiire nden mi pamarel no**	at that time I was small

(**no** = formerly)

ngel	**(aan) a nanarel**	you are (an) incorrigible (little thing)

and

(aan) a gorko na a gorgel ?	are you a man or a boy? (lit. male person or male child)

To this question there could be two answers, either **mi gorko** ' I am a man ' (**o** class) or **mi gorgel** ' I am a boy ' (**ngel** class). It must be said that in some similar cases (e.g. **mi pamarel** ' I am small ') my informants, while accepting the sentence with an adjective Complement, would usually prefer to have a noun Complement with an adjective dependent on it ; e.g. they would prefer **mi baccel pamarel** ' I am a small child '. Nevertheless it is clear that with 1st and 2nd person forms there is more latitude than with 3rd person forms.

B. *Nominal groups with an Independent Pronoun in first position*

15. The pattern of agreement can be seen most clearly and consistently within certain types of nominal group, viz. appositional groups, in which an I.P. in first position is followed by a noun, adjective, participle or specifier, or a combination of these.

16. Where the I.P. is a 3rd person form, there is always agreement between it and the following nominals, e.g.

hanko Pullo o'o	he, this Fulani
hangel baccel nge'el	it, this little child
hanji bacci ɗi'i	they, these children
hankon mbaccon ko'on	they, these little children
hange nagge nge'e	it, this cow
hangu puccu ngu'u	it, this horse
hanko pamaro/noddaaɗo o'o	he, this small one/this one that was called
hangel pamarel/noddaangel nge'el	it, this small one/this one that was called
hamɓe famarɓe/noddaaɓe ɓe'e **hanji pamari/noddaaɗi ɗi'i**	they, these small ones/these that were called

or, more simply

hanko o'o ; **hangel nge'el, hanji ɗi'i, hankon ko'on** ; **hange nge'e, hangu ngu'u** ; **hamɓe ɓe'e**, etc.

17. When the I.P. is a 1st or 2nd person form, the other nominal is again frequently in one of the personal classes, but it may quite readily be in one of the other classes, the diminutive class being by no means the only non-personal class so used, e.g.

Class		
o	**aan o'o**	you there ! (lit. you this)
o	**aan Pullo o'o**	you Fulani there !
ngel	**aan nge'el**	you little one there !
ngel	**aan pamarel nge'el**	you tiny little one there !
ngum	**aan pamarum ngu'um**	you there, miserable little creature !
ndu	**hey aan ndu'u**	hi ! you there ! (dog)
ngu	**aan puccu ngu'u**	you horse there !
ɓe	**onon ɓe'e**	you there ! (pl.)
ɓe	**onon Fulɓe ɓe'e**	you Fulani there ! (pl.)
ɗi	**onon pucci ɗi'i**	you horses there !

Thus while with any given 3rd person I.P. the following nominal can only be in the same class as the I.P., with any given 1st or 2nd person form there is a much wider range of possibilities.

18. It may be added that such appositional groups can occur (*a*) in a Prelude and be recapitulated by a S.E., or as an ' addendum ' in apposition (*b*) to an O.E. or even (*c*) to a Possessive Pronoun or Possessive Suffix, e.g.

3rd person

(*a*) **hanko pamaro o'o, o-yamaaki**
this small one is unwell

hangel pamarel nge'el, ngel-walaa innde
this tiny little one has no name

hangu ngu'u, ngu yaawngu
this one is *fast*

1st person

miin nyaawɗo ni'i, mi-waawataa-ɗum
I, sick as I am, can't manage it

2nd person

aan pamarel nge'el, ko mbaawu-ɗaa?
you, so small as you are, what can you manage?

enen nayeehon ni'i, en-mbaawataa dogguki
you and I, so old and shrunk as we are, we can't run

onon moodiɓɓe, on hulniiɓe
you malams, you are awesome

3rd person

(*b*) **mi yiɗaa-mo, hanko towɗo o'o**
I don't like him, that tall one

mi-yiɗaa-ngel, hangel pamarel nge'el
I don't like it, this tiny little one

mi-soodataa-ngu, hangu puru ngu'u
I won't buy it, this dun one

2nd person

mi-yiɗaa-ma, aan towɗo o'o
I don't like you, you tall one

mi-noddaayi-ma, aan pamarel nge'el
I didn't call you, you tiny little one

3rd person

(*c*) **mi-anndaa innde maako, hanko Pullo o'o**
I don't know his name, that Fulani

mi-anndaa innde maagel, hangel pamarel nge'el
I don't know its name, that tiny little one

mi-anndaa innde jawmiigu, hangu puru ngu'u
I don't know the name of its master, that dun one

2nd person

mi-anndaa innde maaɗa {**aan Pullo o'o** / **aan pamarel nge'el**}

I don't know your name {you Fulani there / you little fellow there}

mi-anndaa innde jawma {**aan towɗo o'o** / **aan pamarel nge'el**}

I don't know the name of your master {you tall one / you little fellow}

In all these cases there is regular agreement with 3rd person pronominal forms, but variation of class is possible with 1st and 2nd person forms. Thus S.E.s, O.E.s and Possessive forms are linked to the same system of agreement, or variation in agreement, as appositional groups with an Independent Pronoun in first position.

CONCLUSION

19. Of the three types of construction just examined, A.i. is inconclusive, since there is considerable variation in the class possibilities with 3rd person as well as with 1st and 2nd person pronominals. But in constructions A.ii. and B, while 3rd person pronominals enter into close one-to-one agreement with the other nominals in question, the 1st and 2nd person forms do not enter into the same one-to-one agreement, particularly in B. They are in fact not tied to individual classes in the same way as 3rd person forms. Taking account, therefore, of their syntactical behaviour, as well as their morphological distinctiveness, discussed in §§ 6–9, we may conclude that it is appropriate to treat the 1st and 2nd person forms as being *outside* the class system, rather than within it.

BIBLIOGRAPHICAL REFERENCES

1966. D. W. ARNOTT, ' Nominal groups in Fula ', *Neue Afrikanistische Studien* (Deutsches Institut für Afrika-Forschung, Hamburg—Klingenheben Festschrift), 40–61.
1970. D. W. ARNOTT, *The nominal and verbal systems of Fula.* Clarendon Press, Oxford.

THE PROBLEM OF CLASS IN KIKUYU

By Patrick R. Bennett

A principal characteristic of Bantu languages is the ' class system '. The typically Bantu concord-based system has parallels in many non-Bantu languages. It may further be considered an analogue (though greatly expanded) of grammatical gender in certain languages. In all these cases, there exist various sets of nouns. Such sets are normally, though not invariably, distinguished by overt markers. Similar markers usually occur with other parts of speech, such as adjectives, verbs, pronominals, etc., and the choice of marker for each part of speech corresponds to, or is determined by, the set to which the noun indicated belongs; that is, the noun's gender or class.

In most languages showing such a system, the gender or class of a noun, and the behaviour of items agreeing or showing concord with it, can be predicted to some extent from the form or meaning of the noun. Only in very few, if indeed any, is this completely predictable. In some the number of distinct forms of adjectival, pronominal, and verbal markers is identical with the number of noun sets. In others, however, there is no such one-to-one correspondence, and even where it does exist the forms of the affixes indicating gender and concord reference often show great differences. In many languages nouns having formal characteristics of one gender or class show the concord behaviour of another. Even in cases where there is correlation between class affiliation and meaning, exceptions exist, names of female beings belonging to masculine or neuter genders, for example.

Besides such anomalies, in Bantu languages, because of the fairly large number of classes distinguished, there arises also the problem of establishing the various classes and the inventories of each. The main problem in establishing what classes exist is the decision whether to consider a class to consist of a singular-plural pair, or to treat each set of nouns distinguished by prefix and concord behaviour as a separate class. The latter interpretation has in its favour the fact that the number of plural forms so distinguished is usually smaller than the number of singulars. One thus does not double the number of classes by accepting this interpretation, but rather reduces the number of times one must discuss the formal and syntactic behaviour of a given plural type. Though both treatments are in common use, the latter is somewhat more frequent, though for pedagogical purposes the former may be more popular and perhaps practical. One reason for the more frequent choice of the latter is the force of tradition. The system of labelling Bantu classes first set out by Bleek (though often attributed to Meinhof) has, with very few modifications, been used as standard in comparative treatments, and even in discussions of single languages, partly to facilitate comparative interpretation of the class system described, partly as a conveniently pre-existing and generally acceptable system of numeration.

The principal objection to the Bleek class numeration is also the principal hindrance to determining the inventory of noun classes : there are very few, if any, languages where there is a simple and direct connection between nominal form, concord behaviour, and traditional classification. The most commonly used method of determining class affiliation seems to be based on three criteria. If a set of nouns can be found whose prefix and inventory seem etymologically connected with those of a Bleek-Meinhof 'class ', any noun, regardless of its prefix, showing identical concord is assumed to belong to the traditional ' class ' in question. If, however, a set of nouns is found whose prefix can be identified with a traditional ' class ', it is so identified, even if identical in concord with another set as defined above. Again, if there exists a set of nouns lacking any trace of a prefix, it will be treated separately and given a class number such as ' 1a ', the number being determined by that of the traditional class with which the set agrees in concord. Though there is much variation in practice, this represents fairly accurately the usage of most of those who employ Bleek-Meinhof numeration, and approximates the basic principles of many analyses not following this tradition.

The result is an analysis which is useful to the comparativist, but which is awkward and leaves many questions unanswered in synchronic description. This paper will attempt to illustrate some of its shortcomings and suggest a type of analysis which, though still considering the interests of the comparativist, more adequately represents the synchronic facts of the language and its differences from, as well as similarities to, the general Bantu system. This will be accomplished by describing the class system in Kikuyu, a Thagicũ dialect [1] spoken in central Kenya. At first sight, the Kikuyu system seems simple, but there are several complexities.

One must first distinguish between concord and class. Though there is a correlation, it is not exact. Herein, ' class ' will refer to a set of nouns formally and functionally distinguished in ways to be discussed. The term ' group ' will be used of a set of nouns governing identical concords, whatever the formal properties of these nouns. A maximum of fourteen such groups can be established in Kikuyu, each governing specific prefixes of three main series (each with subdivisions), namely adjectival, pronominal, and verbal. No such series, however, shows fourteen formally distinct prefixes. The adjectival shows 12, the pronominal [2] shows 13, and the verbal 12. The figure 14 is reached by considering the set of three prefixes, not the individual items, and overlooking overlaps. Thus, when some nouns with adjectival prefix **N-** govern a pronominal prefix **ĩ-**, while

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[1] For definition, see my article ' Dahl's Law and Thagicũ ', *African Language Studies*, VIII, 1967. The orthographic conventions here agree with those followed there, except that tone will only rarely be marked, as it is for the most part irrelevant to this problem. In the tables, only those few items showing low tone will be marked.

[2] Though there are various forms in each of the three series, the pronominal shows the most variation. Here, as in all cases, the preconsonantal form of each prefix is given, as being the simplest.

others take **i-**, and some nouns whose pronominal prefix is **ĩ-** take not **N-** but **mĩ-** as adjectival prefix, one recognizes two morphemically distinct (though formally identical) prefixes of shape **N-**, and two morphemically distinct prefixes (with identical shape) of form **ĩ-**, and three distinct concord groups. Columns I and II of Table I show the three basic concord prefixes of each group, together with a capital letter designating the group and a number indicating the traditional ' class ' it represents. In all cases the latter is determined by the form of the adjectival prefix, except that where overlaps in adjectival prefixes occur the pronominal concords are considered. It will be seen that, though ' classes ' 1 through 16 are found, 8 and 14 are lacking. This results from merger of 8 with 10 and 14 with 3, involving phonologic shift in pronominal and verbal prefixes, identification of the two classes in each case, and loss of one adjectival prefix. Had this not occurred, one would find two additional groups, 8 with ***i-/i-/i-** (all alternating with **ci-**), and 14 with ***ũ-/ũ-/ũ-**.

In Table I, groups A and C show identical adjectival prefixes, as do H and I. Group D shares pronominal and verbal with H. The verbal prefix of B is identical with that of F. Groups A, B, C, D, E, H, and I show adjectival prefixes differing formally from the other series. Groups A and B show different pronominal and verbal. Groups C, D, H, and I show similar though minor differences, indicated in the notes to Table I. It seems simplest to ignore such overlaps and differences as irrelevant to discussion of the concord system. Parallel differentiations exist in many Bantu languages, and many formal overlaps are due to phonologic shifts and analogic extensions. It seems most reasonable and simplest to treat the three prefix-forms as representatives of a single morpheme in each group, with one-to-one correspondence between groups and morphemes.

The problem of establishing classes, and the number of morphemically distinct nominal prefixes, is rather more difficult. Here one must at least consider the factors of form, concord, and singular-plural pairing. Derivation and semantic factors might also be considered. However, at least in Kikuyu derivation seems not to affect the form or general behaviour of a noun significantly, and cannot seriously be thought to determine class affiliation. While meaning in some cases could be said to correlate with class affiliation, it is by no means a one-to-one correspondence. All nouns in Group A (' Class I ') refer to humans, and the majority of nouns referring to humans belong to this group. However, nouns referring to humans are also found in at least groups C, E, G, H, and L, with plurals in B, D, F, I, and K. The correspondence in other semantic areas is even less complete. This therefore cannot be taken as a criterion.

As Columns III, IV, and V of Table I show, 49 sets of nouns may be distinguished on the basis of the above three factors. This does not mean 49 morphemically distinct ' classes ' must be recognized, but only that no more than 49 can be distinguished by these criteria. If one considers only nominal prefix form, there are 18 distinctions. Concord grouping alone gives 14. Prefix and singular-plural pairing give 25. A different set of 25 distinctions is given by the combination of prefix and concord group. None of these corresponds to the traditional comparatively based division of classes, where the maximum number of distinct ' classes ' is 22.

While obviously the traditional figure of 22 is unrealistic, it is equally obvious that the extremes of 14 (concord groups) and 49 (maximum differentiation) do not perfectly fit the structural situation. To revise these figures, one must establish criteria by which to determine morphemic affiliation and hence class inventory. A few principles are basic to determination of morphologic structure. One of these principles requires interpretation of two directly contrasting items as structurally distinct, where free variation and conditioning do not exist. Another allows interpretation of free or conditioned alternants as members of the same structural unit, even if dissimilar. These, however, do not suffice, and one must decide which other factors in the analysis are of primary importance.

It has already been decided to treat the groups of concord prefixes as morphologically distinct, despite formal overlaps between groups and differences within groups. Because of this, and because determination of concord may be said to be the primary, if not sole, function of class, it seems best to treat concord grouping as one of the main factors in class division. Thus two sets of nouns showing different concord, though formally identical, must be assumed to show morphologically distinct, because functionally contrasting, prefixes.

Such an analysis is supported to some extent by the fact that in all groups at least one set of nouns shows a prefix identical in form with the group's adjectival prefix. These are Aa and Ab ; Ba ; Ca ; Da ; Ea, Ed, and Ee [3] ; Fa, Fb, Fc, Fd, Fe, Ff, Fg, Fh, and Fi ; Ga, Gb, and Gc ; Ha ; Ie, Ig, Ih, and Ii ; Ja, Jb, and Jc ; Ka and Kb ; La and Lb ; Ma, Mb, and Mc ; and Na. Since the formal identity of the group A and group C adjectival prefixes, for example, is interpreted as formal overlap of distinct morphemes, the formal identity of the corresponding noun prefixes may be similarly interpreted. If one considered that the number of distinct forms, rather than the number of distinct groups, determined the number of morphologically distinct adjectival prefixes, this analysis would be more difficult to defend.

The part pluralization should play in determining class affiliation is hard to decide. Clearly this is an important factor in the noun system. In practice, it is often easier to determine the group of a noun with prefix **mũ-** by asking for its plural than to elicit a verbal subjective prefix. The irregularities of stem in Gc/Id and Jb/Ih must be described, though they in no way affect concord. The difference in plural formation between Eb and Ec, where the plural of the latter includes the singular prefix, must also be described. How relevant is this to ' class ' ?

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[3] Though Ea, Ed, and Ee are not formally identical with one another, all three may be included here because of the double form of the adjectival prefix, **i-** before consonant-initial stems, **rĩ-** before vowel-initial.

TABLE I

I	II			III	IV			V		VI
	a	*b*	*c*		*a*	*b*	*c*	*a*	*b*	
A(1)	**mũ-**	**ũ̀-**	**a-** [1]	a(1)	**mũ-**	S	Ba	**mũturi**	smith [2]	∞ [3]
				b(1)	**mũ-**	S	Ia	**mwana**	child [2]	1
				c(1a)	**0-**	S	Bb	**ithe**	father [4]	‘10’ [5]
B(2)	**a-**	**a-**	**ma-**	a(2)	**a-**	P	Aa	**aturi**	smiths [2]	∞
				b(2a)	**ma-**	P	Ac	**maithe**	fathers [4]	‘10’
C(3)	**mũ-**	**ũ-** [6]	**ũ-**	a(3)	**mũ-**	S	Da	**mũgũnda**	garden	∞
				b(14)	**ũ-**	S	Fa	**ũta**	bow [7]	∞
				c(14)	**gu-**	S	Fb	**guoya**	fur	2 [8]
				d(14a)	**0-**	S	Fc	**hinya**	strength	∞
D(4)	**mĩ-**	**ì-**	**ì-** [9]	a(4)	**mĩ-**	P	Ca	**mĩgũnda**	gardens	∞
E(5)	**i-** [10]	**rĩ-**	**rĩ-**	a(5)	**i-**	S	Fd	**itimũ**	spear [11]	∞
				b(5)	**ri-**	S	Fe	**riitho**	eye [12]	‘10’
				c(5)	**ri-**	S	Ff	**riiko**	hearth [12]	‘20’
				d(5)	**rĩ-**	S	Fg	**rĩĩthori**	tear [12]	∞
				e(5)	**rĩ-**	S	Fh	**rĩĩtwa**	name [12]	‘10’
F(6)	**ma-**	**ma-**	**ma-**	a(6)	**ma-**	P	Cb* [13]	**moota**	bows [7]	∞
				b(6)	**ma-**	P	Cc*	**maguoya**	furs, wool	2 [8]
				c(6)	**ma-**	P	Cd [14]	**mahinya**	strengths	∞
				d(6)	**ma-**	P	Ea	**matimũ**	spears [11]	∞
				e(6)	**ma-**	P	Eb	**maitho**	eyes [12]	‘10’
				f(6)	**ma-**	P	Ec*	**mariiko**	hearths [12]	‘20’
				g(6)	**ma-**	P	Ed	**maithori**	tears [12]	∞
				h(6)	**ma-**	P	Ee*	**marĩĩtwa**	names [12]	‘10’
				i(6)	**ma-**	P	Ma	**magũrũ**	legs	3 [15]
G(7)	**kĩ-**	**kĩ-**	**kĩ-**	a(7)	**kĩ-**	S	Ib	**kĩrĩma**	hill [11]	∞ [16]
				b(7)	**kĩ-**	S	Ic	**kĩũra**	frog [12]	∞ [16]
				c(7)	**kĩ-**	S	Id	**kĩndũ**	thing	1
H(9)	**N-** [17]	**ì-**	**ì-** [9]	a(9)	**N-**	S	Ie	**ndũrũme**	ram	∞
				b(9a)	**0-**	S	If	**bengi**	bank	∞ [18]
I(10)	**N-**	**i-** [19]	**i-** [20]	a(8)	**ci-**	P	Ab	**ciana**	children [2]	1
				b(8)	**i-**	P	Ga	**irĩma**	hills [11]	∞ [16]
				c(8)	**ci-**	P	Gb	**ciũra**	frogs [12]	∞ [16]
				d(8)	**i-**	P	Gc*	**indo**	things	1
				e(10)	**N-**	P	Ha	**ndũrũme**	rams	∞
				f(10a)	**0-**	P	Hb	**bengi**	banks	∞ [18]
				g(10)	**N-**	P	Ja	**ndigi**	strings	∞
				h(10)	**N-**	P	Jb*	**nĩnĩmbĩ**	flames	1
				i(10)	**N-**	P	Jc*	**ndũũĩ**	rivers	‘10’ [21]
J(11)	**rũ-**	**rũ-**	**rũ-**	a(11)	**rũ-**	S	Ig	**rũrigi**	string	∞
				b(11)	**rũ-**	S	Ih	**rũrĩrĩmbĩ**	flame	1
				c(11)	**rũ-**	S	Ii	**rũũĩ**	river	‘10’ [21]
K(12)	**tũ-**	**tũ-**	**tũ-**	a(12)	**tũ-**	P	La	**twana**	small children [22]	∞
				b(12)	**tũ-**	P	Lb	**tũmĩtĩ**	small trees [23]	‘20’
L(13)	**ka-**	**ka-**	**ka-**	a(13)	**ka-**	S	Ka	**kaana**	small child [22]	∞
				b(13)	**ka-**	S	Kb	**kamũtĩ**	small tree [23]	‘20’

TABLE I (contd.)

I	II			III	IV			V		VI
M(15)	**kũ-**	**kũ-**	**kũ-**	a(15)	**kũ-**	S	Fi	**kũgũrũ**	leg	3 [15]
				b(15)	**kũ-**	S	— [24]	**kũrĩma**	to cultivate [25]	∞
				c(17)	**kũ-**	P	Na	**kũndũ**	area	1
N(16)	**ha-**	**ha-**	**ha-**	a(16)	**ha-**	S	Mc	**handũ**	place	1

EXPLANATORY NOTES TO TABLE I

Meaning of the vertical columns

I Designation of Concord Group (traditional number in parentheses)
II *a* Adjectival Prefix
b Pronominal Prefix
c Verbal Subjective Prefix
III Designation of Noun Set (traditional number in parentheses)
IV *a* Prefix of Noun Set
b Number of most nouns in set (S = singular, P = plural)
c Designation of partner in singular-plural pairing
V *a* Example
b Gloss
VI Estimated number of nouns in set

FOOTNOTES TO TABLE I

[1] The subjective prefix has a variant **ũ̀-** used in relative constructions ; the objective prefix is **-mũ̀-**.

[2] All nouns in these sets refer to human beings, though not all such nouns are in these sets.

[3] This indicates the set is large and capable of expansion.

[4] All words for human beings, mostly kinship terms.

[5] Numbers in quotation marks are approximations only.

[6] This has the form **gu-** in certain cases when preceding **o**.

[7] Many abstract, often adjectivally derived, nouns included.

[8] The two nouns differ only in tone : **guòyá** ‘ fur ’, **guóyà** ‘ fear ’.

[9] The objective prefix has the form **-mĩ̀-**.

[10] This occurs with consonant-initial stems only ; with vowel-initial stems **rĩ-** occurs.

[11] Only consonant-initial stems are included.

[12] Only vowel-initial stems are included.

[13] The asterisk indicates the prefix of the plural is not added to the stem of the singular, but to some other form.

[14] It is a matter of subjective interpretation whether one considers this added to the stem (**ma**+**hinya**) or to the singular including prefix (**ma**+**0**+**hinya**). This is true also of Bb.

[15] All body parts ; the other two are **guoko/mooko** ‘ arm(s) ’ and **gũtũ/matũ** ‘ ear(s) ’.

[16] These include many derogatory augmentatives, some retaining the prefix of the singular base form.

[17] This represents a homorganic nasal, in some cases realized only as a lengthening of preceding vowels.

[18] Only very recent loan-words.

[19] Preconsonantal only. Before vowels a prefix **ci-** occurs.

[20] The subjective prefix behaves as in note 19 ; the objective shows only **-ci-** before vowels, and **-ci-** and **-i-** as free alternants before consonants.

[21] These often have alternative plurals in Ig.

[22] Mostly diminutives, many including the prefix of the singular base form.

[23] All diminutives, retaining the prefix of the singular base form in the singular, and that of the plural base in the plural.

[24] No corresponding plural ; pluralization is adverbial only (‘ to cultivate many times ’, rather than ‘ many cultivations ’).

[25] Verbal nouns or infinitives only.

In Kikuyu, as in other Bantu languages, pluralization is comparatively easy to predict. The only formal change is usually substitution of one noun prefix for another, with corresponding change in concord group. Except for group M (which will be discussed) each group is exclusively singular or plural, when collectives are not considered, and most nouns in one group will have a plural in a specific one of the other groups. In some descriptions of Bantu languages the concept of what is called 'gender' or 'series' has been evolved (this will here be termed 'pairing', to avoid possible misinterpretation). A 'gender' or 'pairing' is a set of noun stems belonging to one specified class and group in the singular and another in the plural. Such analyses are far from new, and many descriptions equate pairing with class, each 'class' thus including one singular form and one plural. In this type of analysis Kikuyu would have only 14 'classes', as compared with the traditional Bleek-Meinhof 22. If strictly interpreted, however, irregularities such as **kĩndũ/indo** 'thing(s)' would have to be given the status of independent pairings, giving 24 basic pairings (half the 49 sets in Table I, minus the unpaired Mb). In addition, one would be forced to recognize what have been called 'one-class genders', sets of unpaired collective or mass nouns ; as these are found in at least 18 of the noun sets listed, the description would clearly be rather cumbersome and involve much redundancy. If pairings are to be described at all, it seems best to consider them separate from class, just as classes must be distinguished from concord groups.

Another argument for this separation is the similarity of pluralization in Kikuyu to various types of derivation. Set Cb contains many derivative abstracts. Group G includes a large number of pejorative augmentatives, and group L is composed almost exclusively of diminutives. In the last two cases (and their corresponding plurals) there are many instances of retention in the derivative of the prefix of the base, exactly parallel to the situation in Fa or Ii. The processes of derivation and pluralization are formally and functionally parallel. In each, substitution or addition of a prefix is accompanied by semantic change and shift in group. Even somewhat similar irregularities of formation exist. If derivation is considered irrelevant to class, pluralization should be so considered as well. While both are important in the total description of the nominal system, they do not affect concord in any way. A noun in group F, whether plural or collective, whatever its singular, if any, whether the singular prefix is present or absent, whether the plural of a derivative abstract or otherwise, behaves exactly as do all other nouns of group F. Moreover, most modern works seem to imply that the pairing is a set of classes somehow connected, rather than a class itself. It seems best here to consider a class to be a set of nouns of a given concord group showing a given prefixed morpheme, pairing being irrelevant. It remains to determine the morphemes in question.

In cases such as group F, there is no obvious reason to recognize more than one prefix morpheme. Despite differences in pairing and occasional retention of singular prefixes, there is but one prefix form and one type of concord. In group I one finds a case of complementary distribution. The prefix **i-** (Ib/Id) occurs only before consonants, **ci-** (Ia/Ic) only prevocalically.[4] These may therefore be considered to belong to the same morpheme. Both alternants, however, contrast with **N-** (Ie/Ig/Ih/Ii) and **Ø-** (If), which contrast with one another in turn. One therefore considers group I to include three morphemically contrasting classes, with prefixes **i-/ci-**, **N-**, and **Ø-**.

Complementary distribution occurs also in E, but here interpretation is more difficult. Again, **i-** (Ea) is preconsonantal only. Both **ri-** (Eb/Ec) and **rĩ-** (Ed/Ee) are prevocalic. These two contrast directly, and only one can be morphemically linked with Ea. Comparative evidence and inventory suggest that the form **ri-** is original (as well as formally closer to **i-**) and **rĩ-** arose on the analogy of the pronominal and verbal prefixes. The more productive and closer to the prevocalic alternant of the adjectival prefix is **rĩ-**, however. For these reasons, though the decision is essentially arbitrary, one will recognize here the morphemes **i-/rĩ-** and **ri-** as separate.

Complementary distribution once existed in C. The prefix **gu-** (Cc) arose as a regular phonologic variant of **ũ-** (Cb) before the vowel **o**. Today, however, nouns such as **woru** ‘ rottenness ’ exist, showing the normal prevocalic form of **ũ-**. The two must be recognized as morphemically separate. As in the case of **ri-** (Eb/Ec), and for much the same reasons, the historically older form is treated as separate, to produce a simpler statement in view of the greater productivity of the newer form.

It is difficult to decide the best treatment of the prefixless classes Ac, Cd, Hb, and If. These are clearly morphologically distinct from other sets in their groups, and hence constitute separate classes. However, as they lack prefixes, can they said to be morphologically distinct from one another? It is in many ways unsatisfactory to treat nothingness, **Ø-**, as a morpheme, a unit in the structure of the language, yet there seems no other way to distinguish these classes morphologically. One is forced to recognize them as distinct on the basis of concord, but there is no overt or covert structural indication of this difference.

Group M poses the most difficult problem. The three noun sets are formally identical. They differ only in meaning and pairing, neither of which is allowed to affect determination of class. There is no formal reason for recognizing more than one class. However, the native speaker rejects completely the treatment of these sets as a single class. The group has been variously interpreted by investigators of other Bantu languages, in some of which formal differences are in fact found. Some label all three ‘ Class 15 ’. Some label Ma and Mb 15,

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[4] Note the parallel to the similar conditioned alternation in pronominal and verbal concords of this group.

separating Mc (' Class 17 '). Barlow [5] treats Mb as a sub-class, ' 15a ', and Ma as ' Class 15 ' ; Westphal [6] has called Mb ' Class 15 ' and Ma ' Class 15a '. Ma includes three names of body parts, and differs in no way from other noun sets. Mb includes all verbal infinitives. These have certain verbal characteristics [7] and take no plural. Mc includes one noun, considered plural [8] and referring to place. If one recognizes a single class, one must overlook these differences, which are rather greater than those between subdivisions of other classes, and reject the analysis of the native speaker ; the difference in number is an especially great stumbling-block. To recognize three formally indistinguishable classes with morphemically distinct prefixes, however, is objectively indefensible. Here the three will be treated as different classes, but it must be realized that this is basically subjective.

One class of each group is morphemically linked with the concord prefixes of that group. Normally, only one class shows any formal similarity to the adjectival prefix of the group, and that class will be assumed to have the same prefixed morpheme. Group M is again a problem, as all three classes resemble the concord prefixes. Here only Ma will be assumed to be morphemically identical with the concord prefixes. This decision is completely arbitrary.

A few problems remain. In most classes are found certain nouns having a prefix with long, not short, vowel : **mũũgĩkũyũ** ' Kikuyu person ', **aagĩkũyũ** ' Kikuyu people ', **gĩĩgĩkũyũ** ' Kikuyu language ' (all from **Gĩkũyũ**, name of the tribe's ancestor) ; **kĩĩrĩu** ' modern slang ' (from **rĩu** ' now ') ; **maaĩ** ' water ', **tũũĩ** ' little water ', **mũũriũ** ' son ', **aariũ** ' sons ', etc. This lengthening seems clearly conditioned by the stem ; in cases such as the first four examples, this may be a feature of the type of derivation, in others such as **maaĩ** it may be phonological, in some no obvious cause can be determined. In any case, there seems no reason to recognize separate classes or morphemes here. The other irregularities in derivation and plural formation must be described as well. However, on the bases established above, it is possible to determine the inventory of classes with little difficulty.

The best system of labelling must now be considered. As stated, the traditional system is inadequate. However, it is too well established to be easily replaced in comparative studies, and the existence of a system facilitating comparison of

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[5] A. Ruffell Barlow, *Studies in Kikuyu grammar and idiom*, William Blackwood and Sons, Edinburgh, 1960, 14a.

[6] E. O. J. Westphal, ' Oluŋhkumbi Vocabulary ', *African Language Studies*, II, 1961, 51.

[7] They are, for example, capable of taking objects, and indeed subjects, as well as adverbs, and may to some extent be inflected for tense.

[8] The ' plurality ' here is far from the English speaker's idea of plurality. The difference between **handũ** (place) and its ' plural ' **kũndũ** (place, area) is not so much in number as in size. The singular may occur with numerals higher than one : **handu hatatũ** ' three places '. The plural may occur with the numeral ' one ' : **kũndũ kũmwe** (one place). This being so, one assumes that no true singular-plural relationship exists. There is, however, a relationship which is sufficiently similar to that between singular and plural to convince the native speaker.

TABLE II

Class number	Prefix form	Noun sets included
01.010a	**mũ-**	Aa, Ab
01.011a	**Ø-**	Ac
02.020a	**a-**	Ba
02.021a	**ma-**	Bb
03.030a	**mũ-**	Ca
03.140a	**ũ-**	Cb
03.140b	**gu-**	Cc
03.141a	**Ø-**	Cd
04.040a	**mĩ-**	Da
05.050a	**i-/rĩ-**	Ea, Ed, Ee
05.050b	**ri-**	Eb, Ec
06.060a	**ma-**	Fa, Fb, Fc, Fd, Fe, Ff, Fg, Fh, Fi
07.070a	**kĩ-**	Ga, Gb, Gc
09.090a	**N-**	Ha
09.091a	**Ø-**	Hb
10.080a	**i-/ci-**	Ia, Ib, Ic, Id
10.100a	**N-**	Ie, Ig, Ih, Ii
10.101a	**Ø-**	If
11.110a	**rũ-**	Ja, Jb, Jc
12.120a	**tũ-**	Ka, Kb
13.130a	**ka-**	La, Lb
15.150a	**kũ-**	Ma
15.151a	**kũ-**	Mb
15.170a	**kũ-**	Mc
16.160a	**ha-**	Na

class systems is so convenient that use of an independent system in description of Kikuyu is undesirable, however more suitable such a system might be. A few changes, however, are necessary.

The traditional system, while in many ways unsatisfactory, would be acceptable in Kikuyu but for one thing. In two cases, an original prefix morpheme has given rise to two distinct morphemes, these being **gu-** (Cc) from **ũ-** (Cb), and **ri-** (Eb/Ec) from **i-/rĩ-** (Ea/Ed/Ee). The sets of nouns with these prefixes are not parallel to those traditionally distinguished by a following ' a ' (1a, etc.). However, since they have developed historically from the morphemes of ' Class 14 ' and ' Class 5 ', respectively, assignment of new numbers would hinder, rather than help, comparative study. To indicate the same type of relationship Tucker [9] has labelled one such morpheme ' 5a ', for example, another ' 5b '. While this is extremely satisfactory as a means of distinguishing such items, confusion with the more traditional derivative labels (1a, 2a, etc.) can easily arise.

Further, while there is in Kikuyu a morpheme equivalent to the traditional

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[9] A. N. Tucker, ' Notes on Konzo ', *African Language Studies*, I, 1960, 20.

‘ Class 8 ’, for example, no separate concord group exists. ‘ Class 8 ’, ‘ Class 14 ’, and some others are represented by noun prefixes only. It therefore seems best to include in the class label indication of the group to which the class belongs. The system shown in Table II is proposed as an adequate account of the Kikuyu class system, and suggested as a model for similar revisions of the class labelling of other languages. Each label gives first the traditional number of the concord group. This is followed by a modification of the traditional ‘ class ’ number of the noun prefix morpheme, ‘ Class 1 ’, ‘ Class 1a ’, and ‘ Class 14 ’ being written 010, 011, and 140, respectively. To this is added a lower-case letter, which allows one to distinguish Cb, Cc, and Cd as 03.140a, 03.140b, and 03.141a, respectively, adequately indicating the difference in relationship. Were it not for the desire to retain the advantages for comparative discussion of the traditional system, a much simpler system could be developed, but as it is this must suffice.

A few notes should be given on uses of the concord prefixes other than those described. Slips in concord are possible and indeed frequent. They can generally be explained as due to association with a semantically equivalent noun in another group, and substitution of its concord prefixes. More regular is the use of groups A and B with nouns used as personal names, regardless of prefix. This is a clear extension of the use of these with classes including only words for human beings. The non-adjectival concords of groups C, E, M, and N are often used adverbially, C of manner, E of time, and M and N of place. In C this may be due to the presence in class 03.140a of many abstract nouns derived from adjectives which, like most nouns, may be used adverbially. For example, **wega** may mean ‘ goodness ’ or ‘ well ’. This usage has been extended to pronominal and verbal concords. The similar use of E might be explained by the presence of **ihinda** ‘ time ’ in 05.050a. However, comparative evidence shows that this usage (and, indeed, that of C) derives from a far earlier period in the history of Bantu. While it may be that various time-words were found in this class in Proto-Bantu, this cannot be proven, and other explanations are possible. In M and N the locative reference is clearly connected with that of classes 15.170a and 16.160a. Here, though, the nominal usage might be derived from the adverbial, to judge by the comparative evidence. The subjective verbal prefixes of M and N are also used, as in many Bantu languages, to express impersonal subjects. Compare the English ‘ there was a man ’ with Kikuyu **nĩ kwarĩ na mũndũ.** Finally, it should be noted that the non-verbal concords of any group may be used in the first or second person to refer to the person(s) or thing(s) addressed or speaking, though special verbal prefixes are used in such cases.

While it might be desirable to discuss semantic correlations of the classes, this is impossible, in view of the limited scope of this paper. Where such exist, they seem not to affect division into classes, though of course discussion of such matters would be necessary in a complete analysis of the nominal system. As in other class systems, each class includes at least one set of nouns with common semantic characteristics, but each also includes enough exceptions to shatter any generalization.

In the preceding pages the class system of Kikuyu has been discussed and the inadequacies in this context of the traditional Bleek-Meinhof class numeration shown. By distinguishing concord group from noun class, and rejecting pluralization, derivation, and semantic features as primary criteria, it has been possible to arrive at a morphologic analysis which seems adequate. It is true that it is not the only adequate analysis, and that it is perhaps not the most satisfactory from some points of view. However, of the objectively equal alternatives this seems best on subjective grounds.

This analysis having been reached, a revised system of numeration was proposed for Kikuyu. While adequate for Kikuyu, this permits easy comparison with traditionally-based numeration systems in other Bantu languages. It thus retains the comparative advantages of the uniform, though inadequate, traditional system, while far more accurately describing the individual system.

It is suggested that if similar analyses were made of other Bantu class systems, and similar re-evaluations and reorganizations of the labelling systems undertaken, it might be possible to arrive at a more satisfactory uniform system of class numeration and description. Ideally, it seems that the traditional system, which was based on knowledge of a number of languages far smaller and far less diverse than the number known and described today, should be replaced. However, this seems improbable, at least at present.

A NOTE ON KRIO TONES

By Jack Berry

The suprasegmental phonemes of Krio have received little attention in recent descriptions and about them there still appears to be a strong conflict of opinion.[1] In a paper presented to the first Conference on Creole Languages in Jamaica some ten years ago, I gave a brief indication of what I then believed to be the phonemic structure of Sierra Leone Krio.[2] The topic of the paper and the circumstances in which it was given precluded detailed consideration of any single aspect of Krio phonology but I was at pains to adduce evidence I still believe adequate to support the claim that Krio is a tone language (albeit of a type in which word-related tone and sentence-related intonation conflict in many and special ways).[3] The present paper seeks to enlarge somewhat on my earlier brief account of the Krio prosodies.

The simplest statement is achieved by recognizing two sets of prosodically relevant features. Using P and T as cover-symbols for pitches and terminals, respectively, the full inventory of suprasegmental phonemes in Krio is

P /1, 2, 3/
T /unmarked, #, ||, =/

P(itches) All syllables have pitch. There are three contrasting levels : low /1/, mid /2/ and high /3/. Transitions to and from these levels give simple and compound glides. As many as 5 pitch phonemes may occur in a single syllable : syllables with falling-rising-falling-rising or rising-falling-rising-falling tone seem about as common, in fact, as those with level or simple gliding tone.

T(erminals) Internal juncture is not considered in this paper. Other kinds of transition phenomena associated with pause, however, require some mention, since in nearly every instance the pitch of the preceding syllable is affected.

T_1 Yes-or-no questions without exception in Krio end in /||/, that

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[1] In the *Introductory course in Krio* prepared for the Peace Corps at Indiana University in 1964, for example, the authors neglect tone almost entirely—at some cost, be it said, to their grammatical descriptions, especially perhaps in their statement of the verbal system.

Some would even deny that Krio is a tone language. In a recently republished paper ' Pronunciations of English in West Africa ', Professor Strevens, for example, suggests that ' the tonal system of Yoruba has disappeared [from Freetown Krio] but a sentence-stress and intonation pattern broadly like that of Received Pronunciation is present ' (*Papers in language and language teaching*, O.U.P., 1965).

[2] The paper was subsequently published as ' English loanwords and adaptations in Sierra Leone Krio ' in *Creole Studies*, Vol. II, London, 1961.

[3] As well as Africanisms like **kanga** (' magic ' and/versus ' type of dried fish ') and **ɔka** (' gaboon viper ' and/versus ' hydrocephalitis '), I also cited pairs of words (of unambiguous English derivation) minimally distinguished by tone.

is, with the pitch at first level then rising abruptly to an indeterminate end-point. As far as I am aware, this terminal occurs only as a feature of one type of interrogative sentence.

In simple indicative sentences, when pause of whatever length follows, it is possible to distinguish three types of ending as follows :

T_2 (Unmarked) : Phonation ceases gradually ; preceding syllable has falling, rising or level pitch.

T_3 /#/ Phonation ceases abruptly ; pitch of preceding syllable starts level then falls rapidly to well below /1/.

T_4 /=/ Phonation ceases gradually ; preceding syllable is drawled and the pitch, if a glide, levels off towards the end at /1/, /2/ or /3/.[4]

Examples of the terminals are :

T_1	$/\overset{1}{\textbf{na}}\overset{2}{\textbf{brus}}\|/$	Is it Bruce ?
T_2	$/\overset{1}{\textbf{na}}\overset{2}{\textbf{brus}}/$	It's Bruce
T_3	$/\overset{1}{\textbf{na}}\overset{2}{\textbf{fis}}\ \#/$	It's a fish
T_4	$/\overset{1}{\textbf{na}}\overset{2}{\textbf{brus}}\ =/$	It's Bruce, [but I - - -]
	$/\overset{1}{\textbf{na}}\overset{23}{\textbf{brus}}\ =/$	It's Bruce, [John and - - -]

T_1 and T_4 are unambiguously sentence features (*query* and *comma*) but T_2 and T_3 are to some extent determined lexically since in certain sentences, where they occur finally, some words ' end in ' T_2, others in T_3, though all words in given circumstances may ' end in ' in either terminal.[5]

By way of further exemplification of the pitches, transitions between pitches, and T_3, I give in the table below 63 ' tunes ' of the verb ' go ' in its simple imperative form. The citation-form of this verb is that labelled NORMAL in the inventory of intonation at the end of this paper (i.e. /go 212 #/) ; the remaining other 62 patterns available to me at this time from my field-notes are therefore considered to carry a variety of differential meanings which I have tried in each case to suggest either by rough contextualization (translations of the rest of the utterance in which

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[4] Distributionally, terminals are by definition restricted to pre-pause position ; gliding tones are not. Phonetically, T_1 and T_3 are distinguished from the somewhat similar glides /12, 13, 23 ; 31, 32, 21/ by differences in the point of onset of pitch change (middle or end of syllable *v.* beginning), in the degree of abruptness of the ' rise ' or ' fall ' (' quick ' *v.* ' gradual ') and in the end-point (indeterminate *v.* /1/, /2/ or /3/).

[5] A statement of these circumstances is beyond the scope of the present paper and is therefore reserved for a separate publication at a later date.

they occur in the corpus of texts) or by a brief descriptive comment by native speakers of Krio identifying the meaning of particular intonations for them.

It only remains here to add that of the 67 ‘ possible ’ patterns of pitch given in the table, almost all occur in either the ‘ normal ’ or ‘ shifted ’ forms of verbs as well as in the citation-forms of nouns. The verb /$\overset{3\,1}{\textbf{kam}}$/ ‘ come ’, for example, exhibits the same range of pitch patterns associated with the same differences of meaning as the verb /go 212 #/ except, of course, that the individual correlations of pattern and meaning are different : 31 ‘ go’ (reassuring), ‘ come ’ (NORMAL) ; 312 ‘ go ’ (insulting), ‘ come ’ (coaxing) ; 231 ‘ go ’ (I'm glad for you, — ’), ‘ come ’ (strong command). . . .

INVENTORY

3	‘ I know you too well, — ’	2	‘ I beg you, — ’	1	Supercilious
3 #	‘ —, its your own affair ’	2 #	‘ I'm pleased with you, — ’	1 #	Instigation to mischief
31	Reassuring	32	‘ Hurry up, — ’	21	Polite request
13	‘ —, if you like ’	23	‘ —, I don't care whether you do or not ’	12	Simple command
13 #	‘ —, get out of my sight ’	23 #	‘ —, it will be good for you ’	12 #	Very polite
131	‘ —, don't be afraid ’	232	Very polite, old-fashioned	121	‘ —, its a good idea ’
231	‘ —, I'm glad for you ’	132	Insulting		
313	‘ —, I don't need you ’	312	‘ Please, I beg you, — ’	323	—
213	‘ I don't care ’	212	Simple polite		
313 #	Very strong command	312 #	‘ —, before I lose my temper ’	323 #	‘ Hurry up, — ’
213 #	‘ If you don't like what I'm doing, — ’	212 #	NORMAL		
3131	‘ Whatever it costs you — ’	3231	‘ Don't be angry, — ’	2132	‘ I'm fed up with you ’
3132	Pleading	3232	‘ Please ! — ’	2121	‘ I forgive you, — ’
3121	‘ —, you ought to be ashamed of yourself ’			2131	‘ —, if you think you can ’
1313	‘ —, get out of my sight ’	2323	‘ Don't give up, — ’	1213	‘ —, you know what you are doing ’
1312	‘ —, God will bless you ’	2312	‘ I've warned you once already, — ’	1212	‘ —, I shan't tell you again ’

INVENTORY (contd.)

1323	‘ —, and good riddance ! ’	2313	‘ —, you have to, whatever you feel about it ’		
1313 #	‘ —, in peace ’	2323 #	‘ —, and you know why ’	1213 #	‘ —, I don’t want to see you again ’
1312 #	‘ —, you’ve caused me enough trouble ’	2312 #	‘ —, I beg you ’	1212 #	‘ I leave you to God ’
1323 #	Disgust	2313 #	Goading		
13131	—	23231	‘ Take no notice of what they say, — ’	12131	‘ Nobody wants you, — ’
13132	—	23232	‘ —, but be careful ’	12132	‘ I advise you strongly, — ’
13121	Insistent (e.g. at the same time pushing the interlocutor)	23121	‘ out of my sight, — ’	12121	Very insulting
13231	‘ I’m happy for you, — ’	23132	‘ —, I’m tired of you ! ’		
13232	‘ Don’t be afraid, — ’	23131	—		

A CLASS OF PHONAESTHETIC WORDS IN BERBER

By J. BYNON

While transcribing recordings made in 1964 of women telling folktales in the Ayt Hadiddu dialect of Tamazight, I noted the fairly frequent occurrence of words of a category not normally represented in Berber grammars, dictionaries and texts, but which nevertheless would appear to be characteristic of expressive narrative style. The words in question are of a type often described by means of such terms as *onomatopoeic*, *echoic*, *ideophonic*, *phonaesthetic*, etc., since they are felt in some way to imitate or mimic the thing to which they are applied or some aspect of it. Their apparent neglect so far by Berberists is hardly surprising, for one is unlikely to come across them in the carefully prepared written or dictated textual material which tended to serve as the principal basis of linguistic investigation previous to the adoption of the tape-recorder as a standard aid in data-collecting, and their visibly somewhat marginal position in the language may also have been a contributing factor in their exclusion. Since, however, I was attempting to deal exhaustively with the contents of the tapes I could hardly disregard forms which, whatever their grammatical status, are clearly relevant to the understanding of expressive style in discourse and narrative and which may well play a significant role in the sphere of lexical innovation. I was also struck not so much by the fact of their existence in Berber—which we may be tempted almost to take for granted since something very similar to them is probably to be found in the majority of languages, including English—as by, on the one hand, the degree of pure convention in the relationship between form and referent and, on the other, the considerable formal restriction and high level of phonemic integration which they exhibit.

Thus, while an element of mimicry is undoubtedly present in many cases, the small part played by actual acoustic identity becomes obvious when the Berber forms are compared with, for example, their corresponding English forms—where these exist—and even in those instances where the intention is clearly to ' represent ' some real and identifiable sound, this is realized almost exclusively through the employment of the normal structural elements of the language.

In order to determine something of the principles upon which the forms of these words depend and of their function and status in the language, I took the opportunity in April 1968 of asking a young man from the tribe in question,[1] who was working with me in London, to make a list of all the words of this type that he was able to assemble. The resultant document, to which he gave the title **ismawn nna nttini ʒ-udɣaɽ n-isddiɛn**, ' words that we say in place of noises ',

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[1] **zayd u-ɛbbu,** from the **ayt-ƨdiddu** village of **ayt-lɣazi** situated near Imilchil in the valley of the **asif mllull,** Central Morocco.

consists of seventy-five examples each of which is accompanied by a short explanation and one or more sentences illustrating the manner and context in which it is employed.[2] The procedure adopted is one which has its disadvantages and the material which I obtained in this way differs in certain important respects from that obtained under the more natural conditions of spontaneous employment during narration. These differences, however, are in themselves of some interest and will be taken into account in the subsequent discussion. The forms provided by the informant are listed below,[3] classed according to the structure of their stems and numbered serially for ease of reference. Opposite each will be found not so much a translation as an indication of the context or contexts in which the term is employed in the examples provided by the informant. Although many of the forms are probably of fairly restricted application, others no doubt have a wider range of use and the list of contexts should not therefore be taken as exhaustive.

Type A: stems consisting of two different consonants, separated or not by a vowel

(i) Stem pattern $\bar{C}_1V\bar{C}_2$ (seventeen examples):

Three are without reduplication.

1. **ʈʈaxx**	a cooking pot falling and breaking (= No. 40)
2. **ffaʈʈ**	a child falling over on its face while running (cf. No. 33)
3. **ssaʈʈ**	a slap on the face

Two were given without reduplication when in isolation, but with total reduplication of the stem in the illustrations.

4. **ggabb, ggabb-ggabb**	stones falling into water (cf. also No. 47)
5. **ggaww, ggaww-ggaww**	blasting with high explosives

A further eleven show total stem reduplication.

6. **qqabb-qqabb**	a mule walking
7. **ʈʈabb-ʈʈabb**	a camel running

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[2] Anyone desiring, for research purposes, a recording of the text in question should apply to the author in writing, c/o S.O.A.S., University of London, W.C.1.

[3] The phonetic values of the symbols employed in the transcription of the Berber are approximately those of the International Phonetic Alphabet with the following modifications and additions: **k** and **g** when non-geminate represent the corresponding palatal fricatives, **x** and **ɣ** are voiceless and voiced uvular fricatives, **qq** is a voiceless uvular plosive, **ƺ** and **ɛ** are voiceless and voiced pharyngal fricatives, **h** is a voiced laryngal fricative, **čč** and **ǧǧ** are voiceless and voiced alveolar affricates, **ʈʈ ɖ ʂ ʐ ɽ ʂ̌ ǧ̣ǧ̣** are emphatics, ʷ and ʸ placed after a symbol indicate labialization and palatalization respectively, gemination is indicated by doubling the symbol.

8.	**ddagg-ddagg**	henna being pounded in a mortar; someone knocking loudly on a door (= No. 41)
9.	**ğ̣ğ̣aww-ğ̣ğ̣aww**	sparrows or other small birds chirping
10.	**mmaqq-mmaqq**	water dripping
11.	**ğ̣ğ̣abb-ğ̣ğ̣abb**	children swimming in the river
12.	**kkabb-kkabb**	hens or birds eating
13.	**ddaff-ddaff**	men punching one another in a fisticuff
14.	**ččakk-ččakk**	love-making
15.	**qqamm-qqamm**	human beings eating
16.	**ttann-ttann**	a dog eating

And in one case there is perhaps incomplete reduplication (cf. Nos. 34 and 35).

17.	**bbuɛ(ɛ)-bbuɛɛ**	a camel bellowing

(ii) Stem pattern $\bar{C}_1VC_2$ (three examples):

All three have total reduplication.

18.	**mmuh-mmuh**	a cow mooing
19.	**ttax-ttax**	a person carrying out his daily work (ploughing, washing clothes, etc.) 'until it is completed' (cf. No. 71)
20.	**ddah-ddah**	house-building (using rammed earth construction)

(iii) Stem pattern $C_1V\bar{C}_2$ (fifteen examples):

Thirteen show total reduplication.

21.	**huww-huww**	a dog, fox or jackal barking
22.	**ɛaww-ɛaww**	a cat miaowing; a jackal howling; women singing
23.	**ɣaww-ɣaww**	women quarrelling
24.	**hayy-hayy**	travelling over a distance; the passage of time
25.	**ɛamm-ɛamm**	children eating
26.	**xiyy-xiyy**	corn being threshed
27.	**ʐakk^{y}-ʐakk^{y}**	a person crying **ibibibibibiw** in order to obtain help
28.	**huɽɽ-huɽɽ**	a donkey braying
29.	**farr-farr**	a bird flying
30.	**ɣaɽɽ-ɣaɽɽ**	a child dragging a metallic object (sheet-metal, empty tin) along the ground (= No. 61)

31. **ɖabb-ɖabb**	a woman slapping flat cakes of bread into shape
32. **ɛaqq-ɛaqq**	a person vomiting
33 **faʈʈ-faʈʈ**	a slaughtered beast kicking on the ground while dying (cf. No. 2)

In two instances the reduplication is incomplete, resulting in an overall pattern C_1VC_2–$C_1V\bar{C}_2$.

34. **baɛ-baɛɛ**	sheep bleating
35. **maɛ-maɛɛ**	goats bleating

(iv) Stem pattern C_1VC_2 (four examples):

All have total reduplication.

36. **hab-hab**	dogs barking
37. **waɛ-waɛ**	a small child crying
38. **gun-gun**	a person who spends his whole time sleeping
39. **ɣab-ɣab**	something being done rapidly

(v) Stem pattern $\bar{C}_1\bar{C}_2$ (eight examples):

One is without reduplication.

40. **ʈʈxx**	a cooking pot falling and breaking (= No. 1)

And seven with total reduplication.

41. **ddgg-ddgg**	henna being pounded; someone knocking on a door (= No. 8)
42. **ggʐʐ-ggʐʐ**	trees creaking and groaning in the wind; a load of wood being transported by mule-back (= No. 56)
43. **gg^{w}rr-gg^{w}rr**	turtle-doves cooing
44. **ttɽɽ-ttɽɽ**	breaking wind
45. **ttʐʐ-ttʐʐ**	breaking wind
46. **ččff-ččff**	clothes being laundered by stamping on a flat stone in the river
47. **ggbb-ggbb**	stones falling into water (= No. 4. Doubtful. Originally given as alternative to **ggabb-ggabb** in the illustrative sentence, but later omitted)

(vi) Stem pattern $\bar{C}_1C_2$ (two examples):

One was given in isolation without reduplication but reduplicated in the illustration.

48. **ttʸkʷ, ttʸkʷ-ttʸkʷ**	rifle fire

The other with reduplication.

49. **ddxʷ-ddxʷ**	milk being churned in a skin

(vii) Stem pattern $C_1\bar{C}_2$ (thirteen examples):

All show total reduplication.

50. **hrr-hrr**	a cat purring; a woman grinding corn with a handquern
51. **wʒʒ-wʒʒ**	a strong wind blowing
52. **xɽɽ-xɽɽ**	a person snoring; someone noisily sucking in hot gruel through the lips
53. **hɽɽ-hɽɽ**	water flowing in a gulley after rain
54. **brr-brr**	thread being spun by means of a spindle and whorl
55. **hʐʐ-hʐʐ**	a musical instrument being played (whether by bowing or plucking)
56. **gʸʐʐ-gʸʐʐ**	trees creaking in the wind; wood being transported on muleback (= No. 42)
57. **bzz-bzz**	the buzzing of flies, bees or wasps
58. **bxx-bxx**	heavy rainfall; a person weeping abundantly
59. **gʷrr-gʷrr**	children eating chick-peas or roasted barley grains
60. **ʒrr-ʒrr**	grass being mown or corn reaped by means of a small hand-sickle
61. **ɣɽɽ-ɣɽɽ**	a child dragging a metal object along the ground (= No. 30)
62. **ʒɽɽ-ʒɽɽ**	tea, coffee or milk being poured into a vessel from a height

(viii) Stem pattern C_1C_2 (two examples):

Both show total reduplication.

63. **tƨ-tƨ**	persons whispering or talking together in a low voice
64. **ʔh-ʔɦ**	a person moaning in grief, groaning in pain

Type B : stems consisting of the same consonant repeated, with an intervening vowel

All the members of this type show multiple partial reduplication of the stem ; the vowel is an **a** in all six examples of the corpus.

(i) Stem pattern $\bar{C}V\bar{C}$, overall pattern $(\bar{C}V)^n\bar{C}$ (four examples):

65. **dda-dda-dda-ddadd**	thunder ; an aeroplane ; a lorry
66. **nna-nna-nna-nna-nnann**	women chattering together
67. **qqa-qqa-qqa-qqaqq**	a hen cackling after having laid an egg
68. **kk^{y}a-kk^{y}a-kk^{y}a-kk^{y}a-kk^{y}akk^y**	laughter (cf. No. 70)

(ii) Stem pattern $CV\bar{C}$, overall pattern $(CV)^n\bar{C}$ (one example):

69. **ta-ta-ta-tatt**	a pot of gruel or water boiling

(iii) Stem pattern CVC, overall pattern $(CV)^nC$ (one example):

70. **ha-ha-ha-ha-hah**	laughter (cf. No. 68)

Type C : complex stems

Under this heading may be grouped for convenience five isolated cases which do not fit into either of the above two types.

In two, both of which exhibit total reduplication, the stem commences with a cluster.

(i) Stem pattern $C_1C_2VC_3$ (one example):

71. **xdam-xdam**	work being carried out (cf. No. 19)

(ii) Stem pattern $C_1C_2V\bar{C}_3$ (one example):

72. **ɛrabb-ɛrabb**	a dog lapping up milk

In another two reduplication is only partial, either because of alternance in the vowels or because of the insertion of a supplementary consonant.

(iii) Pattern $\bar{C}_1V_1\bar{C}_2V_2\text{–}\bar{C}_1V_3\bar{C}_2V_3$ (one example):

73. **qqabbu-qqibbi**	wood being chopped with an axe; blacksmith hammering a ploughshare into shape

(iv) Pattern $\bar{C}_1V\bar{C}_2C_3\text{–}\bar{C}_1V\bar{C}_2$ (one example):

74. **ddaggʒ-ddagg**	a frame drum being beaten

And finally in one unique instance the stem is made up of two entirely unrelated syllables which hold no phoneme in common.

(v) Pattern $\bar{C}_1C_2C_3V\bar{C}_4$ (one example):

75. **kkrtabb**	an animal escaping suddenly into its burrow

The sounds employed in the words of the above corpus are shown in the following table, together with their relative frequency of occurrence as expressed by the number of different stems in which each is found.

Rank	Phonemes	Stems
1	a	44
2	b/bb	17
3	ḥ ; g^y, g/gg, g^w/gg^w	11
4	ɣ/qq	10
5	t/tt, tt^y ; x/xx, x^w ; d/dd ; r/rr	8
6	ɛ/ɛɛ ; w/ww ; ṛṛ ; ḍ/ṭṭ	7
7	u ; kk, kk^y, k^w ; m/mm	6
8	f/ff ; ẓ/ẓẓ	5
9	ʒ/ʒʒ	4
10	n/nn	3
11	i ; ǧ̣ǧ̣ ; čč ; yy ; ɜ	2
12	ss ; zz ; ʔɦ	1

These sounds are, with only two exceptions, the normal ones employed by the central phonemic system of the dialect. The exceptions are the emphatic voiced affricate, ǧ̣ǧ̣, found in Nos. 9 and 11 and the glottal stop followed by voiced glottal friction with nasal release, ʔɦ, of No. 64. The first of these is hardly a major innovation, resulting as it does from the extension to an existent member of the affricate series ǧǧ, of a process already at work in the language. There are in fact other examples in Tamazight of the tendency to enlarge the emphatic series of consonants and the informant's dialect has, for instance, in addition to the grooved alveolar fricatives ʃ and ʒ, the corresponding emphatics ṣ̌ and ẓ̌ which, although of low frequency of occurrence and certainly of secondary origin,[4] must nevertheless be assigned full phonemic status.[5] The second case is perhaps

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[4] See A. Basset, *La langue berbère* (in *Handbook of African languages*), London, 1952, 5–10 ; L. Galand in *Encyclop. Isl.*, 2nd ed., 1181–2 ; P. Galand-Pernet, ' Emphase et expressivité : l'opposition ž – ẓ̌ en berbère (Maroc du sud) ' in *Communications et rapports du 1er Congrès intern. de Dialectologie générale* (*Louvain* . . ., *Bruxelles* . . ., 1960), III, Louvain, 1965, 39–47.

[5] Cf., for instance, such minimal pairs as **timaʃʃwin** ' flints ' (pl. of **timiʃʃa**) and **timaṣ̌ṣ̌win** ' female cats ' (pl. of **timiṣ̌ṣ̌ut**), **tnʒim** ' you swim ' (< verb **nʒy**) and **(ur-)tnẓ̌im** ' she is not bald ' (< verb **nẓ̌m**), etc.

a somewhat special one in that the word in which it occurs represents a sound which is itself produced by means of the human vocal organs and is perhaps not so much a formalized representation of moaning as the actual articulatory ' bearer ' of moaning in the culture.[6]

It is not unusual to find a small proportion of special sounds in the marginal areas of a language, such as its exclamations, nursery vocabulary, etc.,[7] and in the present instance the fact that in the overwhelming majority of cases the sounds employed are those of the central system is, I think, of more significance than is the presence of two deviant sounds. Judged solely from the viewpoint of the phonemic inventory there is no good reason why the members of the corpus should not be considered to be genuine lexical items of the dialect.

In the absence of any study concerning the normal combinatory restrictions affecting the phonemes in the more central areas of the language, nothing useful can be said regarding this aspect, although certain combinations do give an unusual impression. An examination of the frequency column in the table does, however, reveal what appear to be a certain number of deviations from the ' norm '.[8] For the consonants the high rank occupied by **h**, a sound not usually considered even to form part of the original phonemic inventory of Berber,[9] is noteworthy, as is the total absence of **l** and the very low frequency of the sibilants and *chuintantes*. While chance cannot be ruled out in the case of so small a sample, it is possible that some purely acoustic feature such as the intrinsic energy of the individual sounds may play a role in the distribution.

Where the vowels are concerned the very high incidence of **a** by comparison with **i** and **u** is striking, **a** appearing in forty-four words as against **u** in six and **i** in only two, that is to say it occurs more than five times as frequently as the other two vowels taken together. This can be compared with a norm for these same vowels in nominal stems probably somewhere in the region of 3 : 3 : 2.[10] The greater intrinsic energy of **a** as opposed to **u** and **i** might again be responsible.

It is clear that oppositions of vowel timbre play a very secondary role in this

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[6] It would appear that the articulatory tendencies of man are so powerful that even naturally based sounds are to some degree artificially articulated. Thus, while the vocal expression of the emotions (pain, grief, fear, surprise, amusement), as well as certain other emissions of air through the respiratory tract (sneezing, coughing), have a purely physiological basis and are largely outside the control of the individual as regards the moment and energy of their emission, they nevertheless appear to have a cultural component in the form of the articulatory pattern or patterns according to which they are released. The result is that a Berber neither groans nor laughs nor sneezes like an Englishman.

[7] Cf. the click represented graphically as ' tut-tut ', various whistles, bilabial trills, etc., in English exclamations ; for nursery vocabulary see J. Bynon, ' Berber nursery language ', in *TPS*, 1968, 116–17.

[8] For the ' norm ', in the absence of anything more comprehensive, see J. Bynon, *TPS* 1968, 121.

[9] See A. Bassett, *Lang. Berb.*, 5–6.

[10] See J. Bynon, *TPS*, 1968, 121.

class of word, the only instance in which it appears to be minimally distinctive being that of Nos. 17 and 34 while there are four examples of doublets with and without the vowel **a** (Nos. 1 and 6, 10 and 41, 32 and 59, 42 and 54). This should not perhaps be cause for surprise since in Berber lexical meaning tends to be concentrated in the consonantal framework of the stem, the vowels being relegated to a mainly grammatical role and we are here dealing with bare uninflectable stems. It is noteworthy that in those instances where words of this type have, by a process of derivation, given rise to verbs these have been fully integrated into the verbal system and internal vocalic inflexion operates in the normal way.[11]

With regard to consonant gemination, here again the ratio of geminates to non-geminates is considerably higher than might be expected from comparison with the other sectors of the vocabulary, the ratio being 65 : 35 in our corpus, whereas it is only 40 : 60 even for nursery stems and a mere 17 : 83 for the stems of the standard equivalents of these.[12] If this latter figure is taken as the norm, then the percentage of geminates is nearly four times the normal and can be said to be one of the characteristic features of the class as a whole. Gemination has phonemic status in Berber and is extensively employed by the morphology, but the function here seems to be a purely expressive one. At first sight three pairs of words appear to be opposed solely by this feature (Nos. 6 and 39, 7 and 31, 43 and 59) and, from a strictly phonemic point of view, this is so ; however, what is not immediately obvious from the transcription, in each of these three cases the fundamental phonemic opposition of non-geminate : geminate, while basically one of tension ~ duration, is here accompanied by considerable phonetic differentiation of a secondary nature, resulting in accessory oppositions of voice : voicelessness and plosion : friction, and it is clear that it is these secondary phonetic features which are basically relevant in the oppositions in question.[13] It may be noted that gemination by its very nature is accompanied by an increase in prominence and it is doubtless this factor which is responsible for its greater frequency in the class of words under consideration.[14]

If then the feature of gemination is abstracted, the stem patterns of types A and B can be represented by the simplified formulae $C_1(V)C_2$ and C_1VC_1 respectively, and these cover seventy out of the seventy-five examples of the corpus.

As has been stated already these words are invariable in form with the sole exception that they are subject to reduplication. It will be seen from the corpus

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[11] Thus the verb **sqqiqqy** ' to cackle ' has the following stems : *simple aorist* **sqqiqqy,** *intensive aorist* **sqqiqqiy,** *positive preterite* **sqqaqqy,** *negative preterite* **sqqaqqy** ; the corresponding stems of the verb **sxuɽɽ** ' to snore, snort ' are **sxuɽɽ, sxuɽɽu,** **sx^{w}aɽɽ, sx^{w}aɽɽ.**

[12] See J. Bynon, *TPS*, 1968, 121–2.

[13] Thus the geminate which corresponds to the voiced fricative **ɣ** is the voiceless plosive **qq,** voiced **ɖ** corresponds to voiceless **ʈʈ,** fricative **g^w** to plosive **gg^w.**

[14] See, for example, T. F. Mitchell, ' Long consonants in phonology and phonetics ', in *Studies in Linguistic Analysis*, The Philological Society, 1957, 182–205.

that reduplication may be absent or present and in this latter case may be partial or total. It is clear that the absence or presence of reduplication, in type A stems at least, is not directly dependent upon their pattern, and examples like Nos. 4, 5, 48 (perhaps Nos. 2 and 33) demonstrate that it is not necessarily an absolute property of a particular stem. An examination of the ‘ meanings ’, that is to say the contexts in which they are employed, shows that those stems which have been given by the informant without reduplication (Nos. 1, 2, 3, 40, 75) all represent a unitary and completed action, those given both in a simple and a reduplicated form (Nos. 4, 5, 48) all represent actions which may be either unitary or multiple, while all the remainder are reduplicated and represent what are essentially continuous or repetitive actions. This apparent correlation between reduplication and the character of the action is confirmed by their behaviour at the syntactic level so that reduplication should probably be treated not so much as a feature of their morphology as one of syntax.

Turning then from questions of morphology to those of syntax, an analysis of the illustrations provided by the informant shows these words to be employed in two quite distinct ways. In the first of these they function as nominals and can perform, for example, the role of subject of a verb, be governed by a preposition or qualified by a possessive pronoun or a genitive construction. Although there are only twenty-one examples of this nominal use out of a total of some eighty sentences, there is no obvious reason for assuming that they cannot all function in this capacity.

When subject of a verb and following it, a position in which nouns capable of doing so go into the so-called ‘ construct ’ form in Berber, they remain unchanged and the verb takes the prefix of the third person masculine singular [15] (four examples):

76. **inɣa xdam-xdam n-ku ʸass ixddamn n-flan qqiman ur-xdimn ass-ttx**	the *work-work* of every day has worn out so-and-so’s workers (and) they are staying off work to-day [16]

They often occur in a negative proposition with **xs** ‘ except ’ (twelve examples):

77. **iʃirran imʐʐyann ur-da-tn-issfɽaʐ xs ɣaɽɽ-ɣaɽɽ n-iqqzdirr d-iɣʷɽɽafn d-imsmaɽɽ**	little boys, the only thing that makes them happy is the *clatter-clatter* of sheet iron, tin cans and bits of wire, etc.

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[15] As the unmarked form ; cf. same phenomenon in Berber nursery language, J. Bynon, *TPS*, 1968, 130.

[16] No serious attempt has been made to find English equivalents for the Berber exemplifiers and the forms in italics are not intended to be taken as anything other than very approximate renderings.

When governed by a preposition requiring the construct form they are, of course, equally invariable (ten examples):

78. **ma ʃ-yaɣn a-muʂ̌ʂ̌ alliʒ tɽʐiɖ ixfawn-nnɣ s-ɛaww-ɛaww** — what's the matter with you, cat, that you split our heads with (your) *miaow-miaow*?

79. **tʐi tmʈʈutt-inw t-ti n-ɛli slliɣ-nn i-ɣaww-ɣaww-nsnt g-giʒran** — my wife quarrelled with Ali's (and) I heard their *bawl-bawl* in the fields

The possessive pronouns which they take belong to the series suffixed to nouns (two examples):

80. **ar-tɣɽɽf tmʈʈutt aɣɽum ʂʂbaƺ tsfafa-ʸi-d s-ɖabb-ɖabb-ns** — (my) wife was making bread this morning (and) she woke me up with her *tap-tap*

In this nominal use they are frequently qualified by a phrase introduced by the preposition **n-** ' of ' (twelve examples):

81. **in-asn i-yʃirran ad-ur-ttddun s-asif ad-ɛumn inɣa-tn ǧ̣ǧ̣abb-ǧ̣ǧ̣abb n-ku ʸass** — say to the children that they are not to go to the river to bathe, the *glug-glug* of every day does them harm

However, in the majority of examples (fifty-six of the total), these words fulfil quite another role, for which I would suggest the term ' exemplification '.[17] Functioning in this way as an ' exemplifier ' they do not replace any of the normal constituents of the clause the action of which is being illustrated (or ' exemplified '), but are situated immediately next to it, usually following, but very occasionally preceding.

When applied to a perfected action, the verb is in the preterite and the exemplifier is not reduplicated. There is a single example in which it precedes the clause it is exemplifying:

82. **anniɣ yan-uwtul bɽɽa dduɣ-nn ʐiɽ-s irul ḳḳrtabb ikʷʒm abuhu-ns** — I saw a hare outside (its burrow and) went towards it, it ran away (and) *plonk* it entered its burrow

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[17] ' Demonstration ' would be as satisfactory were it not for the fact that ' demonstrative ' already has a specialized meaning in grammar ; the term ' ideophone ' has been strictly avoided because of its highly specific application in Bantu languages (which does not of course mean that there may not be certain typological similarities between the Berber exemplifier and the Bantu ideophone).

But usually it follows it (three examples):

83. **tnɖɽ-as tbɽmitt i-lɛil ʒ-ufus taɣ-nn afila n-islli ʈʈaxx tɽɽʐ**	the pot fell from the boy's hand (and) landed *crash* on top of a stone (and) broke
84. **ar-ttazzlan iʃirran imiɛ irrdl yuwwn faʈʈ ikk-ᵊd ɣif-s ibnɣɽ**	the children were running, after a moment one of them fell down *plonk* (and) was covered in dust
85. **iwt-i lfqqih s-uɖmmis yat-tikklt ssaʈʈ isduɽ-i**	the school master gave me a slap once, *smack*, he/it sent me spinning

When the action is a repetitive or continuing one the exemplifier is reduplicated, usually twice in the examples given by the informant,[18] and in nearly every instance [19] the verb is in the intensive aorist. In all the examples the exemplifier follows the exemplified clause (fifty-one examples):

86. **ar-tʐʐad tmʈʈutt iɖʒamm hrr-hrr ur-ax-tuǧǧi ʸan-nʒn s-udida n-uzrʒ**	(my) wife was grinding (corn) last night *grind-grind* (and) she didn't let us get to sleep with the noise of the quern

In a large number of cases the exemplifier is followed by a clause introduced by **alliʒ** (twenty-five examples) or **ard** (four examples), words which can be approximately translated as 'and thus until, and so until':

87. **ʒrr-as iʃirran aɣu ʸi-widi ʸar-iɛllb ɛrabb-ɛrabb alliʒ iǧǧuwn izri-t**	the children gave milk to the dog, it lapped, *lap-lap*, and thus until it had had enough (and) left it
88. **da-ssiridn iʂbbann ku ʸass g-gʷasif ččff-ččff art‿tɣly**	the launderers did the washing every day at the river *stamp-stamp* and thus until (the sun) went down

One pair of examples was produced by the informant in which, in order to distinguish two different applications of the same exemplifier, this latter is qualified by a phrase introduced by the preposition **n-** in the same way as is frequently the case when they are used as nominals:

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[18] With the exception, of course, of all type B stems, but also a solitary example employing a type A stem (No. 33):

85a. **ɣɽsɣ-as i-faɖma ʸi-wfullus ar-ittfɽfiɖ faʈʈ-faʈʈ-faʈʈ alliʒ immut**	I slaughtered the chicken for Fatima (and) it struggled *kick-kick-kick* until it was dead

[19] There were a maximum of five possible exceptions in the illustrations provided by the informant.

89. **ndda s-aɣbala ^{y}ar-ɣif-nɣ-tkkat s-unʐaɽ bxx-bxx n-waman ddruɣ ay^{d} nn-ur-ngula** we set off for Aghbala (and) it poured with rain on us *splash-splash* of water (so that) we almost didn't get there

90. **ufiɣ-d ʃa n-tutmin ar-allant bxx-bxx n-imʈʈawn ɛniɣ immut-asnt ʃa tʒllinin** I came upon some women weeping *splash-splash* of tears, perhaps someone of theirs had died, poor things

And finally in quite a number of cases the exemplifier has the same root as the verb that it is exemplifying, although there is no indication as to whether this is a matter of stylistics or lexical restriction (seven examples):

91. **ku ^{y}iɖ da-yshuwwu ʃa ʒ-uqqʃʃa huww-huww ard iwɛl iddu** every night something barks on the southern slope of the mountain *woof-woof* until it tires and goes off

92. **iʒn flan ɣuɽ-ɽɣ ar-isxuɽɽu xɽɽ-xɽɽ ur-ǧǧin-nʒin alliʒ d-yuly wass** so-and-so slept at our place (and) he snored *snore-snore*, we never got to sleep, and thus until the day came up

The above is the picture that emerges from an examination of the list and illustrative examples drawn up by a single native speaker. It has the advantage that, coming from an informant whose phonemic system has already been the object of some detailed study, it has been possible to establish the forms of the stems with a relatively high degree of precision.[20] The semantic contexts in which these are employed can also probably be accepted as being adequately representative of the performance of one individual.

As has already been pointed out, however, a description based uniquely upon material obtained under such circumstances is likely to be unsatisfactory in a number of respects,[21] and this first corpus-based examination of the subject

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[20] Perhaps even with excessive precision where certain features such as gemination are concerned. I am not at all convinced that minimal differences of pattern like that which opposes No. 17 to Nos. 34 and 35 or No. 2 to No. 33 would necessarily be maintained by other informants.

[21] The most serious theoretical criticism is that the class has been set up in the first instance on the basis of the linguistic awareness of the native speaker rather than on that of a morphological or syntactic analysis by the linguist. Further, we may wonder to what extent the informant's definition 'words that we say in place of noises' may not have led him to reduce the number of examples like Nos. 19, 24, 38, 71, etc. in which noise is either a secondary factor or even totally absent. Again it is possible that, faced with the somewhat onerous task of composing numerous illustrative examples, the informant may have tended to use the earlier sentences that he created as models for the succeeding ones and in this way entire syntactic patterns may have been missed.

should, therefore, be taken as no more than a starting-point for more detailed research using material obtained under more natural conditions. Such research still remains to be undertaken, but a preliminary examination of tapes of women from neighbouring villages telling folk-tales has resulted in the following observations:

There appears to be some considerable variation in the extent to which individual speakers use exemplifiers in story telling (one woman using only half a dozen different forms over a period of several hours, whereas another used more than twenty in less than an hour) as well as in the popularity with individuals of particular exemplifiers. The ones most commonly used are those which refer to the passage of time or the action of travelling over a distance.

Many forms appear in the tapes which are not to be found in Zayd's corpus and it is clear that this latter must be taken as no more than a sample of the total in use in the dialect. As far as it has been possible to judge, however, all new examples encountered accord in structure with the patterns already set up on the basis of the corpus.[22]

While many of the forms in the tapes are used in exactly the same way as in the corpus (for example Nos. 20, 23, 24, 39, 75, etc.) this is not always the case. Thus we find No. 6 reduplicated applied to ' a person eating ' and unreduplicated to ' persons going quickly into a cavern ', ' a bird entering a house suddenly through the smoke hole ', ' a man falling into a jar of honey ', No. 16 to ' a woman being larded with stab wounds from daggers ' No. 73, to ' hunters shooting away at hares ', and so on.

Certain of our initial findings receive confirmation, such as the fact that exemplifiers are frequently followed by a clause introduced by **alliʒ** and that they can be qualified by a genitive phrase introduced by **n-**, e.g.

ar-tn-ttᵊttan ar-tn-ttᵊttan ar-tn-ttᵊttan kkbb kkbb kkbb kkbb n-tslmin	they ate them they ate them they ate them *munch munch munch munch* of little fish

Others, however, clearly require modification and, as might be expected, the most important differences concern the way in which the exemplifiers are used. No examples, for instance, of nominal use were encountered in the tapes examined, whereas there were large numbers of examples of employment for exemplification. There can be little doubt, therefore, that it is the latter function which is the fundamental one and that use as a nominal is an extension. The exaggerated importance accorded it in Zayd's corpus is presumably the result of the conditions under which the illustrations were composed—used ' cold ' they were given their most grammatically integrated application.

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[22] The rapid and often careless articulation of some of the story-tellers makes it impossible to establish new forms with any degree of precision.

The basic opposition found in Zayd's examples between non-reduplicated forms associated with unitary perfected actions and reduplicated forms with enduring or repetitive actions is confirmed by the tapes, but whereas reduplication in Zayd's examples almost invariably means repetition once only, resulting in a doubling of the stem, the number of repetitions in the texts is invariably greater than this, and quite frequently reaches a dozen or more. Here again the explanation is probably an over-formalization of the situation by the informant due to the non-expressive context in which he was operating.

Another thing that is brought out by the recordings is the fact that special supra-segmental features (of pitch, of intensity, of rate of output) are frequently associated with these words, resulting in their having much greater prominence than their immediate surroundings.

Finally, there are a number of cases in which these forms are employed in ways that are not illustrated in Zayd's examples. Two of these deserve particular mention since they demonstrate that exemplifiers can by themselves carry primary information unaided and thus must be considered to have a degree of lexical, and not merely expressive, content.

Firstly, an exemplifier can operate without the presence of any verb to express the action being exemplified, the verbal action being understood from the context and the nature of the exemplifier. Thus, employing a doublet of No. 12 and the subject being a bird, we find :

iddu s-islman kkbb kkbb kkbb kkbb kkbb kkbb kkbb kkbb alliʒ asn-d-yusy mayd tt^{ə}ttan wi-nnaɣ n-iʃirran	it went towards the fish, *peck peck peck* . . ., and thus until it carried back that which those children (could) eat

Since the exemplifier concerned usually refers specifically to hens or birds pecking, the nature of the verbal action is unambiguously conveyed.

Secondly, an exemplifier can be introduced by the verb **ini** ' to say '. Thus, speaking of women who had drawn water from a well near which a small boy was waiting :

ur-as-ʒint tmxibin tismdlt inna-nn kkrttab . . . wy-nnaɣ l-lɛil	they didn't put back the cover for it, the so-and-so's. He said *plonk*, that boy

Here again, since the exemplifier in question is one which is normally employed for things disappearing suddenly into holes, etc., the meaning is conveyed that the boy fell down the well. This latter construction is particularly interesting in view of parallels with languages outside the Berber-speaking area.

In conclusion it may be stated that there exists in the dialect of Tamazight studied (and, we can safely anticipate, in other Berber dialects as well) a class of words which we may term ' exemplifiers '. The special features displayed by these words at the morphological and syntactic levels, their tendency to undergo reduplication, the obvious phonaesthetic character of many of them, their association with special supra-segmental patterns, when taken together provide sufficient justification for putting them into a special class of their own. Except when used as nominals, certainly a secondary development,[23] they remain largely autonomous of and external to the clause with which they are associated, usually following it but occasionally preceding it, and form no essential part of its structure. Their function would appear to be that of a sort of vocal gesture which takes up and repeats the idea of the verbal action at a more expressive level, underlining its sudden or extended nature, and acting as a bearer for certain supra-segmental features of purely expressive content.

But, although the role of intensifier is undoubtedly important, and while the opposition non-reduplicate : reduplicate may be considered to carry purely grammatical meaning, the regular association of specific exemplifiers with particular sorts of action, or even particular actions, gives them some measure of content so that they are not limited to merely reinforcing the message of a verb but may actually substitute for it.

If, then, exemplifiers carry lexical meaning, are they to be considered as purely arbitrary signs or is there some detectable link between their form and their content? And if, as it seems impossible to deny, they possess a certain phonaesthetic quality for the native speaker, upon what does this depend? While an element of echoism is undoubtedly present in many cases, notably those which refer to animal cries and other natural sounds, the class as a whole cannot be dismissed simply as a form of mimicry.[24] This is not only because some exemplifiers are applied to actions with which no obvious sound is associable, but more seriously because others appear to be closely bound up with the lexical

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[23] Whereas native Berber nouns normally show inflexion for number, gender and state, exemplifiers are invariable. In this they are comparable to recent loans and can, in fact, be regarded as ' loans ' from another sector of the language only partially integrated into the nominal system.

[24] Genuine mimicry is widespread among persons who spend much of their time in close contact with nature, in particular hunters, shepherds, etc., who employ it to ' call down ' wild birds, imitate the cries of beasts, etc. But the various articulations employed are quite independent of those of the performer's language and, although the manner of their production may be traditional and therefore part of his culture, the sounds produced do not together form a system, but each is quite independent of the others. The sole aim of the mimic is to produce a sound having the maximum degree of acoustic similarity to the model, and in this he is restricted neither in the range of sounds employed nor in the structural patterns formed ; furthermore, the sounds that he produces have purely imitative and not symbolic function.

Children at play also use, in their imitations of gunshots, of internal combustion engines, etc., a form of vocal mimicry which is often quite highly institutionalized and which, while basically expressive in function, is at least partly symbolic and draws largely upon the sounds of the speaker's language. Such sounds, however, while they may be signals, are embedded not in the chain of speech but in the play sequence and cannot be considered to be part of language.

stock of the language so that the association is clearly not an acoustic one but is based upon the native speaker's feeling for roots as the bearers of semantic content. This is undoubtedly so in the case of No. 71, which must derive from the verb **xdm** ' to work ' since this is itself a loan from Arabic, but it is also at least highly likely in a number of other cases,[25] for example No. 54 (cf. **brrm** ' to spin, turn '), No. 60 (cf. **mʒr** ' to reap, mow '), No. 38 (cf. **sgunfu** ' to rest '), No. 33 (cf. **ffɽfɖ** ' to struggle ').

The relationship of exemplifiers to the lexical stock of the language appears, therefore, to be a complex one and, while they are demonstrably an important source of innovation for the central system,[26] it is also true that the process can operate in the reverse direction.

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[25] Since the majority of exemplifiers have a stem pattern based on only two consonants, whereas most Berber roots contain three or more, the loss of some of the radicals is to be expected.

[26] See footnote 11, p. 72 ; other derived verbs are : **shuɽɽ** ' to bray (donkey) ', **smmuh** ' to moo (cow) ', **sɛinɛr** ' to whinny, neigh (horse, mule) ', **sbuɛ** ' to bellow (camel) ', **sbiɛ** ' to bleat (sheep) ', **shuww** ' to bark (jackal, etc.) ', **smiqqy** ' to drip '.

CATEGORIES OF THE VERBAL PIECE IN BACHAMA

By JACK CARNOCHAN

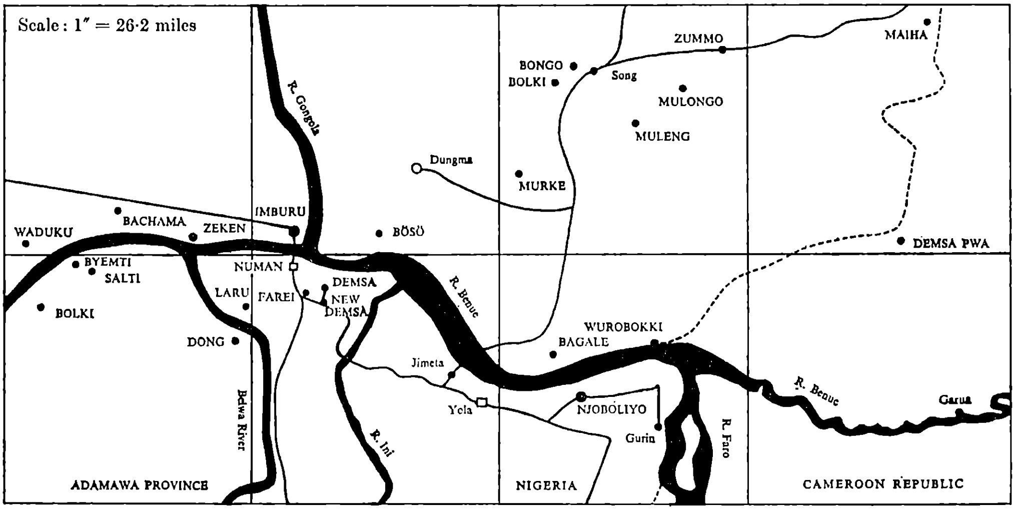
Very little has so far been written about the language usually referred to as Bachama, and called **Kwȧa-Ɓwàarė** ‘ language of the people ’ by the **Ɓwàarė** or Bachama tribe themselves. This outline of what is a little-known language is offered as a tribute to Professor Guthrie, who has done perhaps more than any other scholar to push forward the frontiers of our knowledge of African languages, particularly in the comparative field.

Before serious work in this field can be undertaken for the West African area, descriptive studies of many more of the languages are necessary to provide adequate data for the comparativist. This article is a sketch of part of the grammatical structure of one of the Chadic languages of West Africa. The accompanying map shows the area in which it is spoken.

The term ‘ verbal piece ’ is already a commonplace in linguistic studies, and needs no special comment. It enables me to deal here not only with the verb word, but also with elements corresponding to terms in categories set up for the verbal clause, phrase and group used in a technical sense. The exponents of terms in some of these categories extend beyond the verb word and are of a syntactic as well as of a morphological nature.

This article is practically the first linguistic study of Kwaa-Ɓwaare, and at this stage it is thought preferable to give an account, albeit brief, of the main categories of the verbal piece rather than to take just one category and to describe it as exhaustively as possible at all levels of analysis. Because of limitations in length, the description of the phonology has been kept to a minimum. The language has by no means been fully investigated yet, and problems such as those of word division still remain to be solved. This presentation of my findings, therefore, is not regarded as definitive.

Publications on Kwaa-Ɓwaare include a schedule of words and phrases of over one hundred and fifty items in Chapter I, ‘ The Bachama and Mbula ’, in C. K. Meek's *Tribal studies in Northern Nigeria*, Vol. I, Kegan Paul, London, 1931; an incomplete list of phonemes of ‘ Bacama ’ (*sic*) in Dr. Hans Wolff's *Nigerian orthography*, published for the North Regional Adult Education Office and printed in Nigeria by Gaskiya Corporation, Zaria, 1954; a short list of words and phrases with their German equivalents in *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, VI, Leipzig, 1852, ‘ Auszug aus einem Briefe des Dr. Barth an Dr. Beke ’, written from Kuka, 20 May 1851, 412–13. His list is of the Batta dialect, and from one item one can imagine him at work, sitting under a tree, with his informants around him. He points upwards, and gets the response, **kàdė** ‘ branches, trees ’, which he notes against ‘ Baum ’, and then adds a question mark, and in brackets: ‘ (s. Himmel) ’; did they think that he was pointing at the sky? If they had, the response would have been **pwá**.



Bachama Language Area (Bachama villages are shown in capital letters)

The Lutheran Church of Christ in the Sudan has published a collection of hymns, *Dyemshi Kwa Ḅware ka Demsi Kamu Ḅwatiye*, in the Bachama and Batta dialects, printed by the S. I. M. Niger Press, Jos, undated. *The handbook of African languages, Part II: languages of West Africa*, by Dietrich Westermann and M. A. Bryan, and published for the International African Institute by the Oxford University Press, 1952, classifies the language as Chadic and gives a few details, some of them not accurate (for example, the incomplete phonemic inventory available at that time caused the authors to call the people **gboare** instead of **ɓwàarè**) of its phonological characteristics. In his *Languages of Africa*, Mouton and Co., 1963, Joseph H. Greenberg classifies Bachama and the kindred ‘ Bata ’ under ‘ III, Afroasiatic, E, Chad ’. Some details of the language are given in the present author’s two articles, ‘ Nzeanzo and Won: a Bachama folktale ’, *Journal of the Folklore Institute*, Indiana University, IV, 2/3, published by Mouton and Co., 1967, 230–9; and ‘ The coming of the Fulani: a Bachama oral tradition ’, *BSOAS*, XXX, 3, 1967, 622–33. There appear to be no items from Bachama or from Batta in S. W. Koelle’s *Polyglotta Africana*, Fourah Bay College, The University College of Sierra Leone, 1963.

The reading transcription used here is phonemic. Seven short vowels, **i**, **e**, **a**, **o**, **ɵ**, **u**, **ʉ**, and seven long ones, **ii**, **ee**, **aa**, **oo**, **ɵɵ**, **uu**, **ʉʉ**, are differentiated. Apart from **a** and **aa**, short vowels are more open in quality than their long counterparts. It is important to note that the values of **u** and **ʉ** are reversed compared with previous usage, as are those of **o** and **ɵ**, and of the four long vowels. The unrounded close centralized vowels occur very much more frequently than the rounded close back vowels, and are now written **u** and **uu**; the letters **ʉ** and **ʉʉ** are used for the less common sounds. Similarly, o and oo are used for the centralized half-open to half-close vowels, with slight lip rounding, while ɵ and ɵɵ are reserved for the less common half-open to half-close back rounded vowels. The enormous saving in diacritics would be a strong recommendation for this principle to be adopted in an orthography for Kwaa-Ɓwaare, should it be acceptable to the people themselves, even if dotted letters were preferred to barred letters.

Among the consonants, b, p, d, t, g, k, ?, v, f, z, s, ʃ, c, m, n, ny, ŋ and h have the qualities normally associated with them in the transcription of African languages, and for the purposes of this article require no further comment. Among the rest, gb and kp are voiced and voiceless labial velars respectively; ɓ is a glottalized bilabial plosive, and ɗ is a glottalized post-alveolar plosive; r is a voiced post-alveolar flap except in final position, when it is a voiced alveolar rolled consonant. In a few words, rolled ɍ is phonemic, and is written with a barred letter. This convention in the transcription is the reverse of that used in the Kwaa-Ɓwaare text in ' The coming of the Fulani ', but has been adopted in view of the great saving in diacritical marks. There is a voiced palatal lateral, ly, as well as a voiced alveolar lateral, l; the semi-vowels w and y occur with glottalization, ?w and ?y, as well as without; there are six nasal complexes, mb, mgb, nd, ŋg, nz and nj, each of which functions as a single consonant in which the nasal element is not syllabic; w is used in digraphs, as in ɓwàare̍ ' people ', where there is an element of rounding in the articulation; similarly y is used in digraphs where there is a palatal element in the pronunciation, as in mye̍e ' persons '. The letters y and w are also used as the second element of diphthongs. Capital letters, used as the initial letters in sentences and proper names, have the same phonetic values as the corresponding small letters.

Five tones are indicated, high by an acute accent, mid by a vertical accent and low by a grave accent; rising and falling tones are indicated by a succession of different marks on the adjacent letters of long vowels and diphthongs and by ˇ or ˆ over a short vowel. In order to minimize the number of diacritical marks, a syllable which has the same tone as the preceding one is left unmarked. This means that the same word may be differently marked in different examples, according to the tonal sequences of the examples.

The Kwaa-Ɓwaare material examined includes field recordings of oral traditions, religious ceremonies, folktales, songs and narrative poems, as well as conversations collected on a research visit to the Numan area of Northern Nigeria in 1963. A great deal of additional material has been provided for me by Mr. E. B. Nadah during his time as assistant at the School of Oriental and African Studies, London. For reasons of space, it is proposed in general to limit the units presented here to sentences of one verbal clause only, leaving to another occasion discussion of the relations of one clause to another. These single clause sentences alone offer such diverse formal criteria as to require the setting up of categories of mood, transitivity, aspect, grade, polarity, tense, number, person and gender as well as necessitating the subclassification of the verbs on tonal grounds. These categories together with the systems of their terms are given at this point, and the reader may find it helpful on occasion to refer to this summary.

SUMMARY I

CATEGORIES OF THE VERBAL PIECE IN BACHAMA

CATEGORY I *Mood*

(i) Affirmative; (ii) Interrogative; (iii) Imperative

CATEGORY II *Transitivity*

(i) Intransitive; (ii) Semi-transitive; (iii) Transitive; (iv) Ditransitive

CATEGORY III *Aspect*

(i) Aspect 1, Normal; (ii) Aspect 2, Causative; (iii) Aspect 3, Benefactive; (iv) Aspect 4, Deprivative

CATEGORY IV *Grade*

(i) Grade 1, Normal; (ii) Grade 2, Adessive

CATEGORY V *Polarity*

(i) Positive; (ii) Negative

CATEGORY VI *Tense*

(i) Tense 1, Perfect; (ii) Tense 2, Past; (iii) Tense 3, Future; (iv) Tense 4, Continuous; (v) Tense 5, Habitual

CATEGORY VII *Number*

(i) Singular; (ii) Plural

CATEGORY VIII *Person*

(i) First Person Singular. Plural: (a) Exclusive, (b) Inclusive
(ii) Second Person Singular and Plural
(iii) Third Person Singular: (a) Masculine, (b) Feminine. Plural
(iv) Impersonal

CATEGORY IX *Gender*

(i) Masculine; (ii) Feminine

SUMMARY II

SUBCLASSIFICATION OF THE VERBS

1. *Monosyllabic Verbs*
   Class I with four subclasses
   Class II with six subclasses
   Class III with two subclasses
2. *Disyllabic Verbs*
   Four subclasses
3. *Trisyllabic Verbs*
   Not yet classified

CATEGORY I: MOOD

There are three terms in this category: affirmative, interrogative and imperative. It is to be noted that affirmative is used here with a different meaning from positive, which contrasts with negative in the two-term category of polarity.

Imperative mood clauses differ from the other classes in being tenseless, and in the category of person, the only term applicable is second person. Positive imperative clauses differ also in having no subject expressed, either by pronoun or by nominal phrase.

Affirmative, Positive

Hyė zùmo	You ate it	*2nd pers. sg.; normal register (NR)*
Hu̇na zòmo	You ate it	*2nd pers. pl. NR*

Interrogative, Positive

Hyė zùmo ?	Did you eat it ?	*2nd pers. sg.; high register (HR)*
Hu̇na zòmo ?	Did you eat it ?	*2nd pers. pl. HR*

Imperative, Positive

Zùmi !	Eat it !	*2nd pers. sg.; extended register (ER)*
Zòmóm !	Eat it !	*2nd pers. pl. ER*

The range of the pitch of the voice for affirmative clauses is referred to as normal register. In saying the interrogative clauses, the whole range is higher, and a final high tone syllable is said with the pitch rising from high to even higher; this is implied by high register. The pitch range for the imperative clauses is higher and has greater pitch intervals than in the case of the affirmative, but a final high tone does not have pitch rising to even higher, as in the interrogative. The intonational features of the imperative clause are characterized by the term extended register. Where it is necessary to draw attention to these general intonational characteristics of a clause, the abbreviations NR, normal register, HR, high register, and ER, extended register, will be placed against the example. The six sentences just given are all Aspect 1, and the pitch features referred to above with regard to final high tone syllables can be heard in the following Aspect 3 (benefactive) examples.

Affirmative, Positive, Aspect 3

Hyė zùmón	You ate it for him	*2nd pers. sg. NR*

Interrogative, Positive, Aspect 3

Hyė zùmón ?	Did you eat it for him ?	*2nd pers. sg. HR*

Imperative, Positive, Aspect 3

Zùmón !	Eat it for him !	*2nd pers. sg. ER*

Interrogative examples suggesting a *Yes* or *No* answer, such as those already given, sometimes have a final particle **yò** or **à**, giving rather greater emphasis.

If the question is repeated because no satisfactory response has been obtained, then both particles may be used to end the clause, in the order **yò à**.

Affirmative, Negative

Tèé zùmi	You didn't eat it	*2nd pers. sg. NR*
Hʉ́nàá zòmi	You didn't eat it	*2nd pers. pl. NR*

Interrogative, Negative

Tèé zùmi yo ?	Didn't you eat it ?	*2nd pers. sg. HR*
Hʉ́nàá zòmi yo ?	Didn't you eat it ?	*2nd pers. pl. HR*

Imperative, Negative

Ɓèé zùmi !	Don't eat it !	*2nd pers. sg. ER*
Ɓèé hʉ́nàá zòmi !	Don't eat it !	*2nd pers. pl. ER*

In the plural form, there are two tonal patterns for **Ɓee**, rising from low to high as marked above, and high level, **Ɓée**. They seem to be in free variation.

Since affirmative mood clauses will be extensively dealt with in the later sections below, there is no need to say more about them here. It is convenient, however, to add further details in this section on both interrogative and imperative clauses. Apart from the presence of the final particles **yò** and **à**, the interrogative clauses have the same word structure and order as the affirmative. They differ in intonation. There are other interrogative clauses, however, which are introduced by one of a set of special words or groups of words, as in

1. **Wə́nò ɗá ?** Who did it ? *HR*
2. **Wə́nò nda nán ?** Whom did he see ? *HR*

In both sentences an alternative intonation is **Wə́no** for the first word.

3. **Múnò nda ɗá ?** What did he do ? *HR*
   and **Múno ndà ɗá ?**
4. **Gə̀ɗí ndà ʃí ?** When did he come ? *HR*
5. **Yàá ndà ɗá ?** How did he do it ? *HR*
6. **Á ndʉ̀wáà ndà ɗá ?** How did he do it ? *HR*
7. **Gò múnò nda ɗá ?** Why did he do it ? *HR*

Here, too, there is an alternative with two high tones on **múno**.

A selection from among imperative mood clauses will show why mood figures as the highest or most general category of the grammatical hierarchy presented in this article.

1. **Zùm ɗáptò !** Eat the food ! *Transitive*
2. **Vó Pwèddon tà !** Give the money to Pweddon ! *Ditransitive*
3. **Wʉ̀dó kuɗa !** Go to-morrow ! *Intransitive*
4. **Lliyó dʉ̀wèy !** Get on the horse ! *Semi-transitive*
5. **Víi !** Hand it to me ! Give it to me ! *Aspect 1*

6.	**Víidòn !**	Make a gift of it to me ! Give it to me ! *Aspect 2*
7.	**Dùmi !**	Go out ! *Grade 1*
8.	**Dùmá !**	Come out ! *Grade 2*
9.	**Jĭk hàrá !**	Stew the meat ! *Singular*
10.	**Jèkóm hàrá !**	Stew the meat ! *Plural*
11.	**Víidòn !**	(See 6, above.) The ' it ' refers to a masculine noun
12.	**Víidò !**	Give it to me ! The ' it ' refers to a feminine noun
13.	**Nzà !**	Sit down ! *Positive*
14.	**Ɓèé nzà !**	Don't sit down ! *Negative*

These examples show that the categories of transitivity, aspect, grade, polarity (but not tense), number, person (in so far as all imperative clauses are second person) and gender, apply to imperative mood clauses as well as to those which are interrogative or affirmative mood. And the different tonal patterns of the disyllabic verbs **Lyèbi !** ' Hit it ! ' **Púrì !** ' Go in ! ' and **Wùdó !** ' Go ! ' and of the monosyllables **Gá !** ' Sing ! ' and **Bì !** ' Lie down ! ' show that a subclassification of the verbs on tonal grounds is as useful in the description of imperatives as of interrogatives and affirmatives. Further details of the forms of imperative mood clauses will be given in the sections on each of the categories, where it is relevant.

CATEGORY II: TRANSITIVITY

Kwaa-Ɓwaare material shows certain differences in the shape of the verb and of what follows it in the same clause that clearly correspond to differences in the grammatical relationship. There are four sets of relations, and these are dealt with by the four terms intransitive, semi-transitive, transitive and ditransitive in the category of transitivity. It would be unsatisfactory to classify the verbs lexically as transitive or intransitive, since the category applies to the verb stem together with its suffixes and any items that may follow it in the same clause.

1. *Intransitive*

The text of a recording by Nikodimu Sondo Bukumdi [1] begins with the clause **Bòtí-hina nzà gáarò a Gèəbír** ' When we lived over there in Gobir ', and here the verb **nzà** ' lived ' has low tone, and the following **gáarò** ' over there ' is in intransitive relation with it. If there were a transitive verb-object relation between them, then the verb would have high tone. In sentence 7 of the same text, **Dó Búrìyè**

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[1] The text of Bukumdi's recording is published in Carnochan, ' The coming of the Fulani : a Bachama oral tradition ', op. cit. The numbers refer to the numbering of the sentences in the text and translation in that article.

a ɓò nza ‘ Then the Fulani stayed ’, the verb is final and here too has low tone. This clause also is intransitive. Disyllabic verbs occur in such intransitive clauses as

1. **Dùwèy a lìiyo**	The horse jumped *Aff.*
2. **Lìiyi !**	Jump ! *Imp.*
3. **Ndà púrò**	He went in *Aff.*
4. **Púrì !**	Go in ! *Imp.*
5. **Hòmon a kànyo**	The chief stood up *Aff.*
6. **Kànyi !**	Stand up ! *Imp.*
7. **Nzèy a gíɓò**	The boy ran away *Aff.*
8. **Gíɓì !**	Run ! Run away ! *Imp.*

These examples are all Aspect 1 clauses, and the affirmatives all end with a low tone **-ò** while the imperatives all end with a low tone **-ì**. The following pair of examples shows that this is not so for all verbs, and one unresolved problem is whether or not they are Aspect 1 clauses, with verbs of yet another sub-class: **Ndà wùɗó** ‘ He went ’ and **Wùɗó !** ‘ Go ! ’ This verb also occurs as the first in a sequence of two or more imperatives, as in **Wùɗóò kɵ́nì !** ‘ Go and measure it ! ’ where it has a long final vowel with falling tone, while another verb **Zó** ‘ to come ’, exhibits neither of these features when it has a similar function, as in **Zó purì !** ‘ Do go in ! ’ Further research is necessary in this direction.

2. *Semi-transitive*

Sentence 47 of the Bukumdi text is **Ndà wùɗó à nzá haa kàn** ‘ He went and lived in that place with him ’. Here the verb **nzá** has high tone, which would be said to go with a transitive relation with the noun following. This sentence, however, has an alternative, **Ndà wùɗó à nzà à háa kàn** and this is taken as evidence that the relation of **nzà** with what follows is not purely transitive; it is considered as semi-transitive. Similar intransitive and semi-transitive relations are shown by

1. **Ndà bò**	He spent the night *Intr.*
2. **Ndà bò gáaró**	He spent the night there *Intr.*
3. **Ndà bò à háaró**	He spent the night in that place *Semi-tr.*
4. **Ndà bó haaró**	
5. **Ndà bò à Fàre**	He spent the night at Fare *Semi-tr.*
6. **Ndà bó Fare**	
7. **Ndà tùlo**	He arrived *Intr.*
8. **Ndà tùlo à Nɵmwon** and **Ndà tùló Nɵ̀mwon**	He reached Numan *Semi-tr.*

Imperative examples are **Púro à hɵ́ɗyè !** ‘ Go into the house ! ’ with its alternative **Púro hɵɗyè !** **Cípo à háɓyè !** and **Cípo haɓyè !** ‘ Dive under the water ! ’

3. *Transitive*

Transitive clauses have either a nominal or a pronominal object, as

Ndȧ ná hȯmon	He saw the chief	**Ndȧ nán**	He saw him
Ndȧ gbóo kwȧa-ha	He closed the door	**Ndȧ gbóorȯ**	He closed it (*f.*)

In Grade 1 clauses, disyllabic verbs have no final vowel before a nominal object:

Ŋgȧ ʔʉ́s daptó	She cooked the food
Tȧa bɵ́l zʉ̀mwėy	They threshed the corn
Tȧa ɓŭl bàramȧ	They killed a hippopotamus
Ndȧ ŋgŏl sàlakėy	He pulled the rope

Many verbs, like those in the four examples above, do not have a pronominal object in Grade 1 clauses, as

Ŋgȧ ʔʉ́sȯ	She cooked it
Tȧa bɵ́lȯ	They threshed it
Tȧa ɓùlo	They killed it
Ndȧ ŋgȯlo	He pulled it

The Kwaa-Ɓwaare form is thus intransitive where the English equivalent is transitive. Clauses with a final **-n** and a final high tone would have a different meaning:

Ŋgȧ ʔʉ́son	She cooked it for him
Tȧa bɵ́lon	They threshed it for him
Tȧa ɓùlón	They killed it for him
Ndȧ ŋgȯlón	He pulled it for him

and are analysed as Grade 3 (benefactive) clauses. Imperative clauses show much the same details: **ʔɄ́s ɗaptȯ** ! Cook the food ! **ʔɄ́sɨ** ! Cook it ! **ʔɄ́son** ! Cook it for him !

4. *Ditransitive*

In some examples, the verb is followed by two nouns or by two nominal phrases, and there are usually clear formal distinctions as to whether they constitute one object or two. By comparison with **Tȧa tów wėy** ' They wept for the death ', one can appreciate that the two nouns after the verb in the next example form a nominal phrase object: **Tȧa tów wȯ bȧagȯn** ' They wept for his father's death '. In the next example, the two nouns constitute two objects: **Ndȧ vó Pwèddon tȧ** ' He gave Pweddon some money '. Clauses such as this, where the verb is in relation with two objects, are classified as ditransitive. Many Aspect 2, causative, clauses are ditransitive, such as **Ndȧ ŋgȯl kwáareetȯ sȧlakėy** ' He made the donkey pull the rope '. This can be compared with **Ndȧ ŋgȯl kwáareetȧa homon** ' He pulled the chief's donkey ', which is transitive and has just one object, consisting of two nouns in genitive relation. One of the two objects of a ditransitive clause can be pronominalized, as in **Ndá kùnón haɓyé** ' He gave him some water ', or in Grade 2: **Ndá kùnán haɓyé** ' He fetched some water for him '. Both the objects can be pronominalized, and this will be illustrated by imperative clauses. The usual way of saying ' Give it to me ' is **Víi !** in which the ' it ' is not overtly expressed. One also finds the forms, however, **Víiròn !** ' Give it (m.) to me ! ' and **Víitúrò !** ' Give it (f.) to me ! ' The corresponding plural form, used either when addressing more than one person, or as a polite form when addressing one person only, is **Víimi !** ' Give it to me, (please) ! '

CATEGORY III: ASPECT

This category is set up to handle such differences as those between

Táa ɗàẃ kàdá	*Aspect 1*	They cut down the tree
Táa ɗàwdi kadá	*Aspect 2*	They made me cut down the tree
Táa ɗàwí kàdá	*Aspect 3*	They cut down the tree for me
Táa ɗàwgí kàdá	*Aspect 4*	They cut down the tree without my consent

The Aspect 1 example is transitive, the rest are ditransitive, and they are all affirmative clauses, said with normal register. A similar interrogative set, spoken with high register, could be given. Imperative contrasts are

Vó Pwèddon tá !	*Aspect 1*	Hand Pweddon the money !
Vódò Pweddon tá !	*Aspect 2*	Give Pweddon the money !
Lyèbíi !	*Aspect 3*	Play (the drum) for me !
Màɗgí !	*Aspect 4*	Get up off my lap !

Aspect 1. Normal

Intransitive and semi-transitive Grade 1 clauses have a final **-o** vowel, as in **Ndá múnò** ' He went back ', **Ndá kàŋo** ' He stood up ', **Ndá hwèélò** ' He went blind '. Transitive clauses have no final vowel in Grade 1 when the object is a nominal phrase, as in **Márka lyěɓ́ Pwèddon** ' Marka hit Pweddon '. In Grade 2 clauses, there is a final high tone **-á**, as in **Ndá múna** ' He came back ', **Ndá kàŋá gaaró** ' He went and stood over there ', **Ndá ŋgúra ɓèeméy** ' He picked up a cow's horn '.

Two particular cases may be mentioned here. The first is the reflexive form, where the noun **né** ' head ' is used in the appropriate pronominalized form, as **Ná yóɓ ná** ' I washed myself ', **Táa yóɓ nóŋron** ' They washed themselves '. ' They washed their heads ' would require a different form, **Táa yóɓ nyeemiŋron** and the two previous examples are considered as corresponding to the grammatical ' dimension ' of reflexive forms. The second case is that of the reciprocal or mutual forms, illustrated by **Tàa yóɓso** ‘ They washed each other ’, which is restricted to clauses with plural subjects. These two cases present a problem of word division, for although the verb stem has the same form as when followed by a nominal phrase object, it might be reasonable to consider the verb plus the reflexive or reciprocal suffix as one word. The examples above have been given one as one word, and the other as two words, reflecting the fact that no final decision has been taken on this matter.

Where the object is pronominal, there are various ways in which the verb stem and the suffix are joined. The differences are illustrated, but not exhaustively, by **Ndà ɗàwrí** ‘ He cut me ’, **Ndà ɗàwron** ‘ He cut him ’, and **Ndà ɓùlton** ‘ He killed him ’. Examples from monosyllabic verbs are **Ndà nán** ‘ He saw him ’, **Ndà pán** ‘ He touched him ’, both Aspect 1 ; while **Ndà nzán** ‘ He sat on him ’, and **Ndà bón** ‘ He lay on him ’, are treated as Aspect 3 clauses. Corresponding to **Ndà bò** ‘ He lay down ’ is **Ndà bòodon** ‘ He laid it down ’, which requires an Aspect 2, causative, clause, literally ‘ He caused it to be lying down ’.

Aspect 2. Causative

The Aspect 1, Grade 1, clause **Ndà dùmo** ‘ He went out ’, has a corresponding Aspect 2 form, **Ndà dùmdo nzéy** ‘ He caused the boy to go out ’, or ‘ He took the boy out ’. The noun object can be pronominalized, to give **Ndà dùmdon** ‘ He took him out ’, with corresponding forms **Ndà dùmdi** ‘ He took me out ’, and so on. Related to the transitive clause **Ndà ŋgǒl nzéy** ‘ He pulled the boy ’, are **Ndà ŋgòldo nzéy sàlakéy** ‘ He made the boy pull the rope ’, and **Ndà ŋgòldon salakéy** ‘ He made him pull the rope ’. The causative Grade 1 forms are then related to a low tone **-dò** suffix, with vowel change to **-di** for ‘ made me . . .’ and to **-da** for ‘ made you . . .’ clauses. Many of the examples have two objects and are ditransitive clauses. Grade 2, Adessive, forms are illustrated by **Ndà ŋgàláadò nzéy sàlakéy** ‘ He made the boy pull the rope towards (him) ’, and **Ndà ŋgàláadì salakéy** ‘ He made me pull the rope towards (him) ’. The Grade 2 form frequently involves a different vowel in the verb stem compared with Grade 1, and always requires a high tone **-á** or **-áa** syllable following the stem in past tense forms. As for Grade 1 clauses, there is a low tone **-dò** final syllable, with appropriate vowel changes where first and second pronouns are concerned. There are also alternative forms, illustrated by **Ndà ŋgòl nzéy sàlakéy** ‘ He made the boy pull the rope ’, where the **-dò** syllable is absent. The low tone of the verb, coupled with the relation between the two objects being clearly non-genitive in form, appears to be sufficient to mark the clause as causative. The alternative for the Grade 2 form is **Ndà ŋgàláà nzéy sàlakéy** ‘ He made the boy pull the rope towards (him) ’, and has falling pitch of the voice on the **-láà** syllable doing duty for the high to low sequence of **-láadò** in the other form. The importance of the low tone junction in the causative aspect clauses is again illustrated by the following set of examples.

1.	**Ndȧ ɓwáa**	He became tired *Aspect 1*
2.	**Lyèntȯ a ɓwáadȯ Pweddon**	The work made Pweddon tired
3.	**Lyèntȯ a ɓwáȧ Pweddon**	
4.	**Lyèntȯ a ɓwáadì**	The work made me tired
5.	**Lyèntȯ a ɓwáȧdóron**	The work made them tired

In the perfect tense, the fall is from a mid and not from a high tone, as in **Lyèntȯ ɓwaȧ Pweddon** ‘ The work has tired Pweddon ’.

Aspect 3. Benefactive

The verb **ɗàwə** ‘ cut down ’, gives the following examples:

1.	**Ndȧ ɗàẃ kàdȧ**	He cut down the tree
2.	**Ndȧ ɗàwə́ Victȯr kadȧ**	He cut down the tree for Victor
3.	**Ndȧ ɗàwə**	He cut (it) down
4.	**Ndȧ ɗàwron**	He cut him
5.	**Ndȧ ɗàwón kàdȧ**	He cut down the tree for him
6.	**Ndȧ ɗàwá Victȯr kadȧ**	He cut down the tree for Victor and returned
7.	**Ndȧ ɗàwán kàdȧ**	He cut down the tree for him and returned

Examples 2, 5, 6 and 7 illustrate Aspect 3, and the others are Aspect 1, and enable a comparison to be made. Examples 1 to 5 are Grade 1, and examples 6 and 7 are Grade 2, and this relation of the grades functioning within one aspect indicate the hierarchical relationship of the categories. Below is a comparison between Aspect 1 and Aspect 3 clauses, all of them Grade 1, past tense, and with pronominal suffixes. The Aspect 1 clauses are transitive, and the Aspect 3 ditransitive.

	Aspect 1		*Aspect 3*	
1.	**Ndȧ ɗàwrí**	He cut me	**Ndȧ ɗàwí kàdȧ**	He cut down the tree for me
2.	**Ndȧ ɗàwra**	He cut you	**Ndȧ ɗàwú kàdȧ**	. . . for you
3.	**Ndȧ ɗàwron**	He cut him	**Ndȧ ɗàwón kàdȧ**	. . . for him
4.	**Ndȧ ɗàwtúrȯ**	He cut her	**Ndȧ ɗàwə́rȯ kadȧ**	. . . for her
5.	**Ndȧ ɗàwréenȯ**	He cut us (*excl.*)	**Ndȧ ɗàwéenȯ kadȧ**	. . . for us
6.	**Ndȧ ɗàwróm**	He cut us (*incl.*)	**Ndȧ ɗàwə́m kàdȧ**	. . . for us
7.	**Ndȧ ɗàwrównȯ**	He cut you	**Ndȧ ɗàwównȯ kadȧ**	. . . for you
8.	**Ndȧ ɗàwtúrȯn**	He cut them	**Ndȧ ɗàwə́ron kàdȧ**	. . . for them

Aspect 4. Deprivative

The same verb **ɗàwə** will be used to illustrate some of the forms of Aspect 4 clauses.

1. *Grade 1, Past*
   Ndȧ ɗàwgó Pwèddon kadȧ — He cut down the tree without Pweddon's knowledge
2. *Grade 2, Past*
   Ndȧ ɗàwágo Pwèddon kadȧ — He went and cut down the tree without Pweddon's knowledge
3. *Grade 1, Past*
   Ndȧ ɗàwgí kàdȧ — He cut down the tree and deprived me of it
4. *Grade 2, Past*
   Ndȧ ɗàwági kàdȧ — He went and cut down the tree and deprived me of it

Further examples with other verbs are given below:

5. **Ndȧ mûɗgó Pwèddon** — He left Pweddon behind
6. **Ndȧ mûɗgí** — He went off without me
7. **Ndȧ màɗgó Pwèddon** — He set off without Pweddon
8. **Ndȧ màɗgí** — He set off without me
9. **Ndȧ múɗagi** — He came on and left me behind (*Grade 2*)
10. **Ndȧ màɗági** — He set off to come without me

There is a verb **gò** ' to affect ', as in **Tȧley a gí** ' The cold affected me ' or ' I felt cold ', which may be related to the Aspect 4 suffix. It is considered, however, that Aspect 4 forms cannot be treated as a verbal string, as in such cases there is a particle between the verbs, as in **Ndȧ màɗo ȧ zó ȧ pán** ' He got up and went and met him '. Some Aspect 4 clauses have rather different meanings from the ones so far given, and the name ' deprivative ' is purely tentative: **Ndȧ ʃígo Pwèddon** ' He came before Pweddon did ', **Ndȧ mbógo hàrȧ** ' He finished up the meat, so that there was none for me ', **Ndȧ mbógi** ' He finished before I did ', **Ndȧ mbògó wėy** ' He escaped death ', **Ɓàkarėy a mbògí** ' The bird escaped from me ', **Ságo lė !** ' Go on, tell me the whole thing ! '

CATEGORY IV: GRADE

Two grades have so far been set up, Grade 1, normal, and Grade 2, adessive, to deal with differences between pairs such as those given below.

Grade 1	*Grade 2*
1. **Hómon a dùmo**	2. **Hómon a dùmá**
The chief went out	The chief came out
(Low tone final **-ò**)	(High tone final **-á**)

3. **Ndȧ ŋgŏl sàlakėy**
He pulled the rope
(Verb without final vowel)

4. **Ndȧ ŋgàlá sàlakėy a ʃí hɵɗyė**
He pulled the rope home
(High tone final **-á**; change of vowel in stem to **a**)

5. **Lòri** ! (*imperative*)
Hurry up and go !
(Final low tone **-ì**)

6. **Làrá** ! (*imperative*)
Hurry up and come !
(Final high tone **-á**)

7. **Ndȧ màɗgí** (*Aspect 4*)
He set off without me
(No vowel between stem and suffix)

8. **Ndȧ màɗági** (*Aspect 4*)
He started to come without me
(High tone **-á** vowel between stem and suffix)

9. **Ndȧ ɗàwí kàdȧ** (*Aspect 3*)
He cut down the tree for me
(Final high tone **-í**)

10. **Ndȧ ɗàwée kàdȧ** (*Aspect 3*)
He cut down the tree for me and brought it
(Final high tone **-ée**)

11. **Ndȧ ɗàwú kàdȧ**
He cut down the tree for you (*sg.*)
(Final high tone **-ú**)

12. **Ndȧ ɗàwɵ́w kàdȧ**
He cut down the tree for you (*sg.*) and brought it
(Final high tone **-ɵ́w**)

The rest of the paradigms show phonological differences between the two grades, but the above examples are sufficient to establish the need for setting up the two terms (1 and 2) in the category of Grade. Grade 2 is frequently associated with movement, but there are additional ways of dealing with this semantic range in the language, such as the use of the verb **ʃí** ' to come ', and this verb does not have a final **-á** vowel. The ' motion ' or ' adessive ' element is here a lexical matter rather than a grammatical one, and is therefore not dealt with under the grammatical category of grade, except in so far as **Ndȧ ʃí** ' He came ' is a Grade 1 clause, and has nothing to do with Grade 2. The categories and their terms are established on formal criteria and not on semantic considerations, although the names given to them bear some relation to the latter.

CATEGORY V: POLARITY

There are two terms in this category: positive and negative. Since in affirmative and interrogative clauses the verb forms connected with tense and polarity are so closely related, the two categories will be dealt with together, but as tense is not a category that is set up for imperative clauses, these will be discussed first under the heading of polarity.

Polarity in imperative clauses

	Positive Singular		*Negative Singular*	
1.	**Gá !**	Sing !	**Ɓèé ga̍ !**	Don't sing !
2.	**Nzà !**	Sit !	**Ɓèé nzà !**	Don't sit down !
3.	**Gá dimsey !**	Sing a song !	**Ɓèé ga̍ dimsey !**	Don't sing a song !
4.	**ʃíni̍ !**	Go to sleep !	**Ɓèé ʃini̍ !**	Don't go to sleep !
5.	**Ŋgʉ́ri̍ !**	Take it !	**Ɓèé ŋgʉri̍**	Don't take it !
6.	**Zùmi !**	Eat it !	**Ɓèé zùmi !**	Don't eat it !
7.	**Dùmi !**	Go out !	**Ɓèé dùmi !**	Don't go out !
8.	**Dùmá !**	Come out !	**Ɓèé dùma̍ !**	Don't come out !
9.	**Wʉ̀dó !**	Go !	**Ɓèé wʉ̀do̍**	Don't go !
10.	**Ŋgʉ́r nzé !**	Take the boy !	**Ɓèé ŋgʉ́r nze !**	Don't take the boy !
11.	**Zùm ɗápto̍ !**	Eat the food !	**Ɓèé zúm ɗápto̍ !**	Don't eat the food !
12.	**Wʉ̀díi !**	Go for me !	**Ɓèé wʉ̀dii !**	Don't go for me !

Where the second syllable of the verb is high in the positive, it is mid in the negative.

Positive Plural

1.	**Gám !**	Sing, all of you !
2.	**Nzám !**	Sit down !
3.	**Gám dimsey !**	Sing a song !
4.	**ʃínom !**	Go to sleep !
5.	**Ŋgʉ́rom !**	Take it !
6.	**Zùmóm !**	Eat it !
7.	**Dùmóm !**	Go out !
8.	**Dùmám !**	Come out !
9.	**Wʉ̀dóm !**	Go !
10.	**Ŋgʉ́rom nze̍ !**	Take the boy !
11.	**Zùmóm ɗapto̍ !**	Eat the food !
12.	**Wʉ̀díimi !**	Go for me !

Negative Plural

1.	**Ɓée hʉ̍nàá ga̍ !**	Don't sing, all of you !
2.	**Ɓée hʉ̍nàá nzà !**	Don't sit down !
3.	**Ɓée hʉ̍nàá ga̍ dimsey !**	Don't sing the song !
4.	**Ɓée hʉ̍nàá ʃe̍nò !**	Don't go to sleep !
5.	**Ɓée hʉ̍nàá ŋgʉ́rò !**	Don't take it !
6.	**Ɓée hʉ̍nàá zùmo !**	Don't eat it !
7.	**Ɓée hʉ̍nàá dùmo !**	Don't go out !
8.	**Ɓée hʉ̍nàá dùma̍ !**	Don't come out !

9. **Ɓée hʉ́nàá wʉ̀dó !**	Don't go !
10. **Ɓée hʉ́nàá ŋgʉ́r nze !**	Don't take the boy !
11. **Ɓée hʉ́nàá zʉ́m ɗáptó !**	Don't eat the food !
12. **Ɓée hʉ́nàá wʉ̀dii !**	Don't go for me !

Here the **Ɓee** may have rising tone or high tone. The verb syllables are mid or low, not high.

CATEGORIES V AND VI: POLARITY AND TENSE

It is difficult to deal separately with polarity and tense in affirmative and interrogative clauses, and much more satisfactory to present them at one and the same time. The forms concerned display particular features with regard to the junction of the subject and the verb, and to the shape of the subject pronominals. Two contexts have therefore been selected for the examples, one where there is a nominal phrase subject, and the other where the subject is pronominalized. There are not distinct negative forms for the perfect and past tenses, they share a common negative tense. Similarly, the continuous and the habitual positive tenses share a common negative tense. Five tenses in positive clauses are presented, but not all of them in detail. There may well be additional tenses in the language that have not yet been recognized. Perhaps ' tense ' is not the most appropriate term to use for this dimension of the grammar, as certainly the continuous and habitual may refer to the present time or to past or future time. The term is used to name this particular dimension of the verbal piece, in contradistinction to the other categories rather than in any absolute sense.

Positive : Tense 1. Perfect

A. *Nominal Phrase Subject*

1. **Hómon ʃi Fáre**	The chief has come to Fare
2. **Pwèddon ʃi Nɵmwon**	Pweddon has come to Numan
3. **Hómon bò**	The chief has lain down
4. **Pwèddon bo**	Pweddon has lain down
5. **Hómon hiiwɵ̀**	The chief has prayed
6. **Pwèddon hiiwɵ̀**	Pweddon has prayed
7. **Hómon lìyɵ**	The chief has jumped
8. **Pwèddon liyɵ**	Pweddon has jumped
9. **Hómon wʉ̀dó**	The chief has gone
10. **Pwèddon wudó**	Pweddon has gone

These examples are all Aspect 1, Grade 1, and no high tones are involved with the verb, only mid and low tones. There is no particle separating the subject from the verb.

B. *Pronominalized Subject*

Sing. 1st pers.	**Hu̇n ʃi**	I have come
Sing. 2nd pers.	**Hyė ʃi**	You have come
Sing. 3rd pers. m.	**Ndù ʃi**	He (it, *m.*) has come
Sing. 3rd pers. f.	**Ŋgù ʃi**	She (it, *f.*) has come
Plur. 1st pers. excl.	**Hin ʃi**	We have come
Plur. 1st pers. incl.	**Hu̇m ʃim**	We have come
Plur. 2nd pers.	**Hu̇ ʃi**	You have come
Plur. 3rd pers.	**Tȯn ʃi**	They have come
Impersonal	**Myė ʃi**	One has (they have) come

The pronouns are mid tone, except for the 3rd sing. forms, which are low. The verbs are mid tone or low, according to their subclass, never high. The final **-m** in **Hu̇m ʃim** is optional.

Positive: Tense 2. Past

A. *Nominal Phrase Subject*

1.	**Hȯmon a ʃí Fare**	The chief came to Fare
2.	**Pwèddon ȧ ʃí Nə̇mwon**	Pweddon came to Numan
3.	**Hȯmon a bò**	The chief lay down
4.	**Pwèddon ȧ bò**	Pweddon lay down
5.	**Hȯmon a híiwə̀**	The chief prayed
6.	**Pwèddon ȧ híiwə̀**	Pweddon prayed
7.	**Hȯmon a lìyə**	The chief jumped
8.	**Pwèddon ȧ lìyə**	Pweddon jumped
9.	**Hȯmon a wùdó**	The chief went
10.	**Pwèddon ȧ wùdó**	Pweddon went

The verb is preceded by a mid tone particle **ȧ** and the tones of the verb are high or low, but not mid.

B. *Pronominalized Subject*

Sing. 1st pers.	**Nȧ ʃí**	I came
Sing. 2nd pers.	**Hyė ʃí**	You came
Sing. 3rd pers. m.	**Ndȧ ʃí**	He (it, *m.*) came
Sing. 3rd pers. f.	**Ŋgȧ ʃí**	She (it, *f.*) came
Plur. 1st pers. excl.	**Hina ʃí**	We came
Plur. 1st pers. incl.	**Hu̇ma ʃí**	We came
Plur. 2nd pers.	**Hu̇na ʃí**	You came
Plur. 3rd pers.	**Tȯna ʃí**	They came
Impersonal	**Myė a ʃí**	One (they) came

The tones of the verb are either high or low, but not mid. The pronouns except for **Hyė** are all different from the perfect tense forms, and may be considered to have arisen from the pronouns of the perfect plus the mid tone particle **ȧ**. Forms with verbs of other sub-classes are illustrated by **Ndȧ zùmo** ' He ate it ', and **Ndȧ wùdó** ' He went '.

Negative : Past Tense

A. *Nominal Phrase Subject*

1. **Hómon àá ʃi Fáre**	The chief did not come to Fare
2. **Pwèddon aá ʃi Nɵmwon**	Pweddon did not come to Numan
3. **Hómon àá bò**	The chief did not lie down
4. **Pwèddon aá bò**	Pweddon did not lie down
5. **Hómon àá hìiwè**	The chief did not pray
6. **Pwèddon aá hìiwɵ**	Pweddon did not pray
7. **Hómon àá lìyɵ**	The chief did not jump
8. **Pwèddon aá lìyɵ**	Pweddon did not jump
9. **Hómon àá wùdó**	The chief did not go
10. **Pwèddon aá wùdó**	Pweddon did not go

All verbs in negative past tense clauses have either low or mid tone, but not high. The verb is preceded by the particle **àá** rising from low to high.

B. *Pronominalized Subject*

Sing. 1st pers.	**Tàá ʃi**	I did not come
Sing. 2nd pers.	**Tèé ʃi**	You did not come
Sing. 3rd pers. m.	**Ndàá ʃi**	He did not come
Sing. 3rd pers. f.	**Ŋgàá ʃi**	She did not come
Plur. 1st pers. excl.	**Hinàá ʃi**	We did not come
Plur. 1st pers. incl.	**Húmàá ʃi**	We did not come
Plur. 2nd pers.	**Hʉ́nàá ʃi**	You did not come
Plur. 3rd pers.	**Tónàá ʃi**	They did not come
Impersonal	**Myė àá ʃi**	One (they) did not come

Positive : Tense 3. Future

A. *Nominal Phrase Subject*

1. **Hómon ɓáa ʃi Fare**	The chief will come to Fare
2. **Pwèddon ɓáa ʃi Nɵ́mwon**	Pweddon will come to Numan
3. **Hómon ɓáa bò**	The chief will lie down
4. **Pwèddon ɓáa bò**	Pweddon will lie down
5. **Hómon ɓáa hiiwɵ̀**	The chief will pray
6. **Pwèddon ɓáa hiiwɵ̀**	Pweddon will pray

7. **Hómon ɓáa wùdó** The chief will go
8. **Pwèddon ɓáa wùdó** Pweddon will go
9. **Hómon ɓáa ŋgŏl sàlakėy** The chief will pull the rope
10. **Pwèddon ɓáa ŋgŏl sàlakėy** Pweddon will pull the rope

The verb word behaves as in Tense 2, positive, but is preceded by the long high tone syllable particle, **ɓaa.**

B. *Pronominalized Subject*

Sing. 1st pers.	**Hún ɓáa ʃi**	I shall come
Sing. 1st pers.	**Náa ʃi**	I shall come
Sing. 2nd pers.	**Hyė ɓáa ʃi**	You will come
Sing. 3rd pers. m.	**Ndù ɓáa ʃi**	He will come
Sing. 3rd pers. f.	**Ŋgù ɓáa ʃi**	She will come
Plur. 1st pers. excl.	**Hii ɓáa ʃi**	We shall come
Plur. 1st pers. incl.	**Húm ɓáa ʃi**	We shall come
Plur. 2nd pers.	**Hʉ́ʉ ɓáa ʃi**	You will come
Plur. 3rd pers.	**Tón ɓáa ʃi**	They will come
Impersonal	**Myė ɓáa ʃi**	One will come
Impersonal	**Myáa ʃi**	One will come

Negative: Future Tense

A. *Nominal Phrase Subject*

This is illustrated by just one example

Hómon à dú ʃì kúɗa The chief will not come to-morrow

B. *Pronominalized Subject*

Sing. 1st pers.	**Tàa dú ʃì**	I shall not come
Sing. 2nd pers.	**Tèe dú ʃì**	You will not come
Sing. 3rd pers. m.	**Ndàa dú ʃì**	He will not come
Sing. 3rd pers. f.	**Ŋgàa dú ʃì**	She will not come
Plur. 1st pers. excl.	**Hinàa dú ʃì**	We shall not come
Plur. 1st pers. incl.	**Húmàa dú ʃì**	We shall not come
Plur. 2nd pers.	**Hʉ́ʉnàa dú ʃì**	You will not come
Plur. 3rd pers.	**Tónàa dú ʃì**	They will not come
Impersonal	**Myàa dú ʃì**	One will not come

Positive: Tense 4. Continuous

A. *Nominal Phrase Subject*

1. **Hómon née hiiwì** The chief is praying
2. **Pwèddon née giɓì** Pweddon is running away *Grade 1*

3. **Pwèddon née giɓa**	Pweddon is running here	*Grade 2*
4. **Nàakėy née zòmi**	The cattle are grazing	
5. **Mɵ̇rye née gì**	The men are singing	

B. *Pronominalized Subject*

Sing. 1st pers.	**Hùnée hiiwì**	I am praying
Sing. 2nd pers.	**Hyènée màɗi**	You are leaving
Sing. 3rd pers. m.	**Sùnée ŋgŏl sȧlakėy**	He is pulling the rope
Sing. 3rd pers. f.	**Kɵtée ?ʉsì**	She is cooking
Plur. 1st pers. excl.	**Hìnée zòmi**	We are eating
Plur. 1st pers. incl.	**Hùmnée ɗàẃ kàdȧ**	We are chopping down the tree
Plur. 2nd pers.	**Hùunée saɗ kàdȧ**	We are chopping wood
Plur. 3rd pers.	**Tònée fyeɗ kàdė**	They are planing wood
Impersonal	**Myènée ʃi**	Someone is coming

Positive: Tense 5. Habitual

Few details of this tense are available at present, but the following examples are included.

1. **Nȧ dú gu̇r dawye**	I keep horses
2. **Hu̇n dú gu̇rtoron**	I keep them
3. **Hu̇n dú gur ɓwèé dʉ̀wėy**	I keep a horse

The other pronouns are **hye**, **nda**, **ŋga**, **hii**, **hum**, **hʉʉ** and **ton**.

Negative: Continuous and Habitual

The positive continuous and habitual tenses seem to share one negative form, illustrated by

1. **Ndàá wȧ ŋgòlo**	He is not pulling
2. **Ndàá wȧ ŋgol sȧlakėy**	He is not pulling the rope

There are other tenses, but the details have not yet been fully investigated. Examples found include the following:

(a) *A Repetitive Tense*

1. **Ndȧ jóŋò, táa ?ùli**	He waded in and kept on searching for it
2. **Ndù táa wʉ̀dó ȧ kàlá kȯwey**	He kept on going and throwing things up at the baobab tree
3. **Ndù táa tʉwì**	He kept on weeping

(b) *A Past Anterior Tense*

This high tone **taa** appears to have another function as in

4. **Hu̇n táa tùli kɵɵmbɵ́tȯ màɗo** Before I got there, the boat left

This function is shared by **ɓée** as in

5. **Tȯn ɓée mʉɗò** They had already left

CATEGORY VII: NUMBER

The category of number, with two terms, singular and plural, is established in the analysis of Kwaa-Ɓwaare for both nominal and verbal pieces. Almost all nouns have distinct singular and plural forms, e.g. **kȁdȧ** ' a tree ', and **kȁdė** ' trees ', and such qualifying words as adjectives and deictics have appropriate singular and plural forms too; pronouns of reference also concord with the nouns in number. The pronominal forms in the polarity and tense paradigms set out above show in considerable detail the differences between singular and plural forms, and these will not be further illustrated here. There are corresponding sets for the pronominal suffixes, which are partly illustrated in the Aspect 1 and Aspect 3 paradigms, and which will not be further treated here. The important point is that in Kwaa-Ɓwaare, in the total verbal complex, the form of the pronominal subject or object suffix varies not only according to the terms in the categories of number, person and gender, but also according to the terms in other grammatical categories of the total verbal complex.

Another interesting feature of Kwaa-Ɓwaare is the fact that a large number of verbs show internal vowel changes from singular to plural forms, often correlating in intransitive clauses with a singular or plural subject, and in transitive clauses with a singular or plural object. Sometimes, however, the singular or plural form of the verb is at variance with the number of the subject or object, and appears to be independent of such concords, and to relate directly to semantic factors in the situation. For many verbs, there are distinct singular and plural forms, and the speaker has to make a choice. He does so according to whether he wishes to focus attention on unity or disparity of action or state in the situation. The examples below will illustrate these features. For verbs which have no distinct singular and plural forms, the language offers additional ways of focusing attention on such semantic differences, but presentation and discussion of this feature must be left to another occasion.

1. **Ndȧ ɗîm kɵ̀ɵmbɵ́tȯ** He sank the canoe *Aspect 2. Causative*
2. **Ndȧ ɗyêm kɵ̀ɵmbyéė** He sank the canoes *Aspect 2. Causative*
3. **Tȧa ɗîm kɵ̀ɵmbɵ́tȯ** They sank the canoe *Aspect 2. Causative*
4. **Tȧa ɗyêm kɵ̀ɵmbyéė** They sank the canoes *Aspect 2. Causative*

In these transitive clauses there is concord of number between the singular verb form **ɗîm** and the singular noun object **kèɵmbɵ́tȯ**, and between the plural verb form **ɗyêm** and the plural noun object **kèɵmbyéė**. There is no such number concord obligatory between the singular pronominal subject and the verb, nor between the plural pronominal subject and the verb.

5. **Kèɵmbɵ́tȯ a ɗímò** The canoe sank
6. **Kèɵmbyéė a ɗyémò** The canoes sank

In these intransitive clauses there is number concord between subject and verb.

7. **Ndȧ mbúra ɗìyė** He extinguished the fire *Grade 2*
8. **Ndȧ mbára ɗìyė** He beat out the fire *Grade 2*

Here the form of the verb varies, although the subject is singular and the object plural in both sentences. The choice of the singular verb form suggests that the action is regarded as unitary (' he doused the fire at one go '), whereas the plural form suggests multiplicity of action. The noun **ɗìyė** is plural in form and has no singular form in current use.

Without going fully into the phonology, the following examples illustrate the relation between the vowels in the singular and plural forms. In general, the vowel in the plural form is more open than that in the singular. There is a similar relation between the vowels in the stems of singular and plural nouns, but the final vowels of nouns show the reverse relation. In general, the plural form has a closer final vowel than the singular, as will be seen from some of the examples below.

1. **Ndȧ píirò** He thatched *Grade 1*
2. **Ndȧ pír vùnėy** He thatched the hut *Grade 1*
3. **Ndȧ pyér vȯnye** He thatched the huts *Grade 1*
4. **Tȧa píira vùnėy** They went and thatched the hut *Grade 2*
5. **Tȧa pyáara vȯnye** They went and thatched the huts *Grade 2*
6. **Kàdȧ ɓiyò** The stick has broken *Grade 1*
7. **Kàdėe ɓeyò** The sticks have broken *Grade 1*
8. **Ndȧ ɓíy kàdȧ** He broke the stick *Grade 1*
9. **Hu̇n ɓiya kàdȧ** I have broken the stick on purpose *Grade 2*
10. **Hu̇n ɓaya kàdė** I have broken the sticks and brought them *Grade 2*
11. **Ndȧ tùʉ́lò** He chewed *Grade 1*
12. **Tȧa tèɵ́lò** They chewed *Grade 1*
13. **Ndȧ tùʉlá hàrȧ** He went and chewed some meat *Grade 2*
14. **Tȧa twàalá hàrȧ** They went and chewed some meat *Grade 2*
15. **Ŋgȧ ʔʉ́sò** She cooked *Grade 1*
16. **Tȧa ʔɵ́sò** They cooked *Grade 1*
17. **Ŋgȧ ʔʉ́sa** She did the cooking and returned *Grade 2*

18. **Tȧa ʔwása** They did the cooking and returned *Grade 2*
19. **Ndȧ tʉ́wə̀** He wept *Grade 1*
20. **Tȧa tʉ́wə̀** They wept *Grade 1*
21. **Ndȧ pʉ́wə̀** He bent down *Grade 1*
22. **Tȧa pə́wə̀** They bent down *Grade 1*
23. **Ndȧ gá dimsey** He sang a song *Grade 1*
24. **Ndȧ gòó dyėmʃe tʉ́kə̀tʉ́kə̀** He sang songs all night *Grade 1*

In general, verbs with **-a-** or **-aa-** in the stem have no distinct singular and plural forms, but **ga** ' to sing ' is an exception. The relation between **-u-**, **-ʉ-**, **-o-** and **-ə-** is complicated, and can be better dealt with in terms of prosodic phonology than by a phonemic transcription.

CATEGORY VIII: PERSON

The category of person is set up for both the nominal piece and the verbal piece. In the nominal piece the forms of the terms are suffixes to the noun, and in the verbal piece they are located in both the pronominal subjects and in the pronominal suffixed objects. Resemblances of a phonological nature between the forms are such as to justify establishing a grammatical category of person, rather than considering the items as separate lexemes. The paradigms already given show the relation between the different forms, and will not be repeated here. Attention is drawn to the fact that there are two 1st person plural forms, one excluding the person or persons addressed, and the other including them, as in **Hi̇na ʃí Fare** ' We (*excl.*) came to Fare ', **Hu̇ma ʃím Fare** ' We (*incl.*) came to Fare ', the latter having an alternative form **Hu̇ma ʃí Fare**.

The impersonal form is frequently used in the future tense in the sense of ' Let us . . .' as in **Myàá wùdó** ! 'Let's go ! '

Phonemic correspondences between terms in the category of person as shown by the suffixes to verbs and nouns are illustrated below. Suffixes for the same person are not always the same, as has already been indicated in verbal pieces above; they differ for instance from Grade 1 to Grade 2. In the case of nouns, too, they are not always the same, and one classification can be made for nouns on differences in the pronominal suffixes. The total forms of the nominal pieces consisting of stem and suffixes involve not only the category of person, but also those of number and gender. Since this study is focused on the verbal piece, just sufficient examples are given below to show the need for establishing the category of person. Differences in the nominal suffixes suggest that the groupings relate to general semantic classes of inalienable and alienable, but applied not so much to the ' word ' as to the ' piece '. The word **néy** ' head ', for instance, gives **Ná** ' my head ', inalienable, as well as **Néedėe** ' my head ', alienable: ' the head of an animal that has been killed, and which it is my right to have because of my social position or relation to the hunters '.

The comparison of the person suffixes between nominal and verbal pieces, as given in the columns below, is not exhaustive, but indicative of the phonological correspondences.

COMPARISON OF SUFFIXES OF PERSON

	In the verbal piece	*In the nominal piece*
1st pers. sg.		
1.	**Ndȧ ɗàwée kàdȧ** *Aspect 3, Grade 2* He cut down the tree for me and brought it	**Vùnėedee** *Alienable, m. sg.* My room
2.	**Tȧa ɗàwí kàdȧ** *Aspect 3, Grade 1* They cut down the tree for me	**Bèéʃii** *Inalienable, m. sg.* My back
3.	**Víimi !** *Aspect 3, imp. pl.* Give it to me !	**Tèefii** *Inalienable, pl.* My hands
1st pers. pl. excl.		
4.	**Ndȧ ɗàwréenȯ** He cut us	**Hȯmeedeenȯ** Our chief
1st pers. incl.		
5.	**Ndȧ ɗàwám** He cut down the tree for us and brought it	**Hȯmeedam** Our chief
2nd pers. sg.		
6.	**Ndȧ ɗàwra** *Aspect 1* He cut you	**Tùfȧŋà** *Inalienable* Your hand
7.	**Ndȧ ɗàwú kàdȧ** *Aspect 3* He cut down the tree for you	**Bȧagú** *Inalienable* Your father
2nd pers. pl.		
8.	**Ndȧ ɗàwrównȯ** *Aspect 1* He cut you	**Bȧagȯwnȯ** Your father
3rd pers. sg. m.		
9.	**Ndȧ ɗàwron** *Aspect 1* He cut him	**Bȧagȯn** His father
3rd pers. f.		
10.	**Ndȧ ɗàwtúrȯ** He cut her	**Bȧagȯrȯ** Her father
3rd pers. pl.		
11.	**Ndȧ ɗàwtúrȯn** He cut them	**Bȧagȯron** Their father

CATEGORY IX: GENDER

Gender is a category of singular nouns in Kwaa-Ɓwaare, together with adjectives and deictics which qualify them, and with pronominals referring to the nouns. It may be said that gender does not apply at all to plural nouns, or alternatively that they are common in gender. There are two terms in the category, masculine and feminine, and where sex is relevant, grammatical gender follows it, as in **Ɓwȁarȧ** ‘ A man ’, **Ɓwȁaratȯ** ‘ A woman ’, **Sàkėy** ‘ A dog ’, **Sàktȯ** ‘ A bitch ’. Sometimes there are not two related forms as for the above pairs, e.g. **Wàníto̍** ‘ An expert singer ’, and such words make the appropriate gender concords according to the sex of the individual, as **Wànítu̇ sə̀mwė** ‘ A different man singer’, and **Wànítu̇ sə̀mtȯ** ‘ A different woman singer ’. Many words have two forms of which the feminine is used with a particular meaning and the masculine with a general meaning, e.g. **Nȧ dór kə̀əmbə́tȯ** ‘ I bought a canoe ’ (feminine), and **Myėe a dú koɗȯ kəəmbéy** ‘ People use canoes for fishing ’ (masculine). The verbal piece is involved in gender with regard to the forms of the pronominalized subjects and objects.

The independent or disjunctive pronouns are **Ndù** (*m.*) and **Ŋgù** (*f.*). In the verbal piece the shape of the subject pronouns varies from tense to tense, and from positive to negative clauses. For this reason they are perhaps better regarded as pronominal prefixes than as pronouns. The two forms of the 3rd person singular in the positive perfect and future tenses are **Ndù** (*m.*) and **Ŋgù** (*f.*), both having low tone; in the past tense **Ndȧ** (*m.*) and **Ŋgȧ** (*f.*) with mid tone, in the future negative **Ndàa** (*m.*) and **Ŋgàa** (*f.*), with low tone, and with rising tone in the past negative. In the continuous the forms are **Sùnée** (*m.*) and **Kə̀tée** (*f.*). Apart from these last, one might postulate **Nd–** and **Ŋg–** or **Ndù** and **Ŋgù** as the 3rd person singular masculine and feminine pronouns, together with low tone, and associate the particular pitch features and—where appropriate—the open central vowel quality and the short or long durations, with the terms in the tense and polarity systems.

All the pronominal suffixes vary in shape from aspect to aspect and from grade to grade. The 3rd person singular masculine suffixes share an alveolar nasal consonant, and the feminine suffixes all share a final **–o**, e.g.

1. **Ɓə̀kėy a ʔə́ərə̀n** The wound hurt him	**Ɓə̀kėy a ʔə́əturȯ** The wound hurt her
2. **Lyèntȯ a ɓwáadə̀n** The work made him tired	**Lyèŋtȯ a ɓwáadȯ** The work made her tired
3. **Ndȧ mán kaakey** He cut the grass for him	**Ndȧ márȯ káakey** He cut the grass for her
4. **Nə̀əron !** Build it (*m.*) !	**Nə̀ətúrȯ !** Build it (*f.*) !

5.	**Ndȧ hónròn** He shot it (*m.*) for him	**Ndȧ hónturò** He shot it (*f.*) for him
6.	**Ndȧ hóròron** He shot it (*m.*) for her	**Ndȧ hóròtúrò** He shot it (*f.*) for her

THE SUBCLASSIFICATION OF THE VERBS

There are verbs of one syllable, as **ɓɵ** in **Ndȧ ɓèɵ tȧ** ' He hid the money ' ; two syllables as **vʉko** in **Ndȧ vʉ̀kó** ' He fell down ' ; and three syllables, as **virʉwɵ** in **Ndȧ vìrʉ́wɵ̀** ' He turned round '. When immediately followed by a nominal phrase direct object, monosyllabic verbs in a Grade 1 clause have a final vowel, while longer verbs lose their final vowel : **nɵ** ' to build ' in **Ndȧ nèɵ vunėy** ' He built a hut ', and **ŋgolo** ' to pull ', in **Ndȧ ŋgŏl sàlakėy** ' He pulled the rope '. As has been shown in this article, each verb has a number of different shapes, which vary regularly in different grammatical structures. The differences in pitch are such that it would not be satisfactory, and it could be misleading, to give the subclasses a tonal name such as ' high tone verb ' or ' low tone verb '. Instead, each subclass is given a number, and a letter where there is further subdivision, and examples are given for each grouping. If the monosyllabic verbs are examined in examples where the verb is final, three groupings can be made on tonal distinctions, represented by

I.	**Tȧa pá**	They met *or* They fought
II.	**Ndȧ nzà**	He sat down *or* It fitted *or* He trapped
III.	**Ndȧ gbáà**	He ground (something oily or damp)

In the first of these three examples the pitch of the voice is high for the verb, in the second it is low, and in the third the pitch falls from high to low. In sentences where the verb is followed by a nominal phrase, additional differences are found, requiring further subclassification, as indicated below.

MONOSYLLABIC VERBS, CLASS I

Subclass I(a)

1.	**Tȧa pá**	They fought	**Tȧa pá kȧwàtȯ**	They fought a war
2.	**Ndȧ ɗá**	He made	**Ndȧ ɗá vùnėy**	He built a hut
3.	**Ndȧ gá**	He sang	**Ndȧ gá dimsey**	He sang a song
4.	**Ndȧ ká**	He speared	**Ndȧ ká lìyėy**	He speared a deer
5.	**Ndȧ zá**	It sprouted	**Ndȧ zá zʉ̀mwėy**	He sprouted the corn for beer
6.	**Ndȧ mbó**	He finished	**Ndȧ mbó lyèntȯ**	He finished work

Subclass I(b)

The great majority of verbs in Class I are like those given above, but there are four which have a long vowel when followed by a nominal phrase object. Verbs in I(a) and I(b) operate in transitive clauses.

1. **Tȧa pá**	They met	**Tȧa páa Pwèddon**	They met Pweddon
2. **Ndȧ ɗá**	He swore	**Ndȧ ɗáa nzėy**	He swore at the boy
3. **Ndȧ ná**	He saw	**Ndȧ náa nzėy**	He saw the boy
4. **Ndȧ ní**	He looked for	**Ndȧ níi nzėy**	He looked for the boy

Subclass I(c)

Two verbs require the particle **kà** to introduce the following nominal phrase. These examples are intransitive clauses.

1. **Ndȧ pí**	He breathed	**Ndȧ pí kà ʃinóŋùn**	He breathed through his nose
2. **Ndȧ ná**	It's full	**Ndȧ ná kà háɓyė**	It's full of water

Subclass I(d)

Two Class I verbs of motion have alternative nominal phrases following them, either with the particle **a** or without it. These clauses are semi-transitive.

1. **Ndȧ ʃí**	He came	**Ndȧ ʃí ȧ Nəmwon** **Ndȧ ʃí Nə̇mwon**	He came to Numan
2. **Ndȧ zó**	He went	**Ndȧ zó ȧ Nəmwon** **Ndȧ zó Nə̇mwon**	He went to Numan

The criteria for the above classification are not all of the same sort: the difference between the examples of I(b) and the rest is phonological, involving short and long vowels, while the difference between I(a) and I(b) and the rest is of a syntactic nature involving the clause category of transitivity.

MONOSYLLABIC VERBS, CLASS II

Subclass II(a)

1. **Ndȧ nzà**	He trapped	**Ndȧ nzàá vàakyéè**	He trapped the fish
2. **Ndȧ ʔò**	It hurt	**Ndȧ ʔòó Pwèddon**	It hurt Pweddon
3. **Ndȧ kò**	He hunted	**Ndȧ kòó li̇yėy**	He hunted deer
4. **Ndȧ ŋgà**	He set a trap	**Ndȧ ŋgàá hi̇mto**	He set a trap for the rat
5. **Ndȧ zá**	He pushed	**Ndȧ zàá nzėy**	He pushed the boy
6. **Ndȧ hò**	He fired	**Ndȧ hòó li̇yė**	He shot a deer

As is true for Class I verbs, the great majority of Class II verbs behave alike, but there are a few which differ from the pattern of the II(a) group.

Subclass II(b)

Six verbs, when followed by a nominal phrase object have the long vowel on a low tone and not on a rising tone.

1. **Nda̍ ɓè**	He hid	**Nda̍ ɓèɵ ta̍**	He hid the money
2. **Nda̍ vò**	He gave	**Nda̍ vòo ta̍**	He gave some money
3. **Nda̍ mbò**	He was saved	**Nda̍ mbòo Pweddon**	He saved Pweddon
4. **Nda̍ nzà**	He sat down	**Nda̍ nzàa nze̍y**	He sat the boy down
5. **Nda̍ là**	It swayed	**Hàwe̍y a làa kade̍**	The wind swayed the trees
6. **Nda̍ rà**	He accompanied	**Nda̍ ràa nze̍y**	He took the boy

Further investigation may show that these are Aspect 2 (causative) clauses, with the low tone prolongation of the vowel a variant of low tone **dò**.

Subclass II(c)

There is one verb like those in I(c) that has the particle **kà** introducing the nominal phrase. Unlike the examples in I(c), however, it also requires a long vowel. There is an alternative form without the **kà** and without the long vowel.

Nda̍ pò He greeted by gently clapping
Nda̍ pòo ka ho̍mon } He greeted the chief
Nda̍ pó ho̍mon }

Subclass II(d)

One verb has alternative forms, with and without the particle **a̍**.

Nda̍ bò He lay down
Nda̍ bò a̍ Nɵmwon } He spent the night at Numan
Nda̍ bó Nɵ̍mwon }

Subclass II(e)

Nda̍ nzà	It fitted	**Nda̍ nzá Pwe̍ddon**	It fitted Pweddon

This may merely be a semantic extension, according to the collocation, of **Nda̍ nzà** ‘ He sat ’, ‘ He stayed ’, ‘ He lived ’, and **Nda̍ nzá Vu̍lpi** ‘ He lived at Vulpi ’. This would lend support to the possibility of example 4 in II(b) being an Aspect 2 sentence.

Subclass II(f)

Finally, there is **Nda̍ ʔàá nze̍y** ‘ It bit the boy ’, where the verb behaves as an example of II(a), but when the verb is final, the form is **Nda̍ ʔàdo** ‘ It bit ’. For this reason, it needs separate attention.

MONOSYLLABIC VERBS, CLASS III

Subclass III(a)

1.	**Ndȧ gbáà**	**Ndȧ gbáa byȧara**
	He ground	He ground the groundnuts
	Nàakėy a gbáa zùmwėy	
	The cattle trampled the corn	
2.	**Ŋgȧ gbóò**	**Ŋgȧ gbóo jibėy**
	She cooked	She cooked some vegetables
3.	**Ndȧ póò**	**Ndȧ póo Pwèddon**
	He asked for help	He asked Pweddon for help
4.	**Ndȧ nóò**	**Ndȧ nóo tùfȯŋùn**
	It licked	It licked his hand

Subclass III(b)

1.	**Ndȧ mgbáà**	**Ndȧ mgbáà nȯŋùn**
	He leant back	He tilted his head back
2.	**Ndȧ gwáà**	**Ndȧ gwáà Pweddon**
	He helped	He helped Pweddon

It may be better to consider the two examples with nouns following as Aspect 2, causative, clauses.

THE DISYLLABIC VERBS

When final in the clause, the disyllabic verbs have a vowel ending, as **Ndȧ zùmo** ' He ate it ', even though in other grammatical constructions the final vowel is not heard, and the verb consists of a single closed syllable : **Ndȧ zùm ɗáptȯ** ' He ate the food '.

Like monosyllabic verbs, the two-syllable verbs are subclassified according to their pitch behaviour in different grammatical constructions. Only the first main grouping into four subclasses will be mentioned here.

Subclass I

These bring together those verbs which in the past tense have the stem syllable on a high tone and the ending on a low tone, as

Ndȧ ɗórȯ He bought **Ndȧ ɗór hàrȧ** He bought some meat

This group includes some hundreds of verbs. Those used in the article and a few additional ones are given below.

1.	**Puro**	go in	2.	**Giɓo**	run
3.	**Kəno**	measure	4.	**Cipo**	dive
5.	**ʔʉso**	cook	6.	**Bəlo**	thresh

7.	**Tʉwo**	weep	8.	**Muno**	return
9.	**Ŋgʉro**	pick up	10.	**Yɵɓo**	wash
11.	**Muɗo**	go	12.	**ʃino**	go to sleep
13.	**Hiiwɵ**	pray	14.	**Fyeɗo**	smooth, plane
15.	**Joŋo**	go into	16.	**Ɗimo**	sink
17.	**Mburo**	die	18.	**Piiro**	thatch
19.	**Ɓiyo**	break	20.	**Pʉwɵ**	bend down
21.	**Kɵɗo**	follow			

Additional examples are

22.	**Puso**	dig	23.	**Suro**	tear
24.	**Ɗiyo**	ask	25.	**Jino**	tend
26.	**Kipo**	be lost	27.	**Hino**	burn
28.	**Dilo**	bow	29.	**Ŋgiko**	trap
30.	**ʃino**	flay	31.	**Viiŋo**	tighten (a bow)
32.	**Fiiyo**	sweep	33.	**Liiɓo**	smooth
34.	**Riko**	blacken	35.	**Piilo**	widen
36.	**ʔifo**	subside	37.	**ʔino**	carry on the back
38.	**ʔiro**	become old	39.	**Mgbito**	take a piece
40.	**Wuno**	open	41.	**Falo**	smash
42.	**Ɗuko**	bury	43.	**Nuŋo**	taste pleasant
44.	**Suko**	overtake	45.	**Hweyo**	flee
46.	**Kuso**	hold	47.	**Pɵmo**	stink
48.	**Ɗuro**	branch	49.	**Pʉko**	put
50.	**Loko**	flock, teem			

Subclass II

Verbs in this group in the past tense have both stem and ending on a low tone. When there is a noun object (or a nominal phrase object) following, the verb is low if the object begins with a high tone syllable, but rises from low to high if the object begins with a mid or low tone syllable.

Ndà ŋgòlo	**Ndà ŋgǒl sàlakèy**
He pulled	He pulled the rope (low tone)
Ndà ŋgǒl nzèy	**Ndà ŋgòl kwáareetó**
He pulled the boy (mid tone)	He pulled the donkey (high tone)

Verbs of this class used in the article are

1.	**Zumo**	eat	2.	**Liiyo**	jump
3.	**Dumi**	go out	4.	**Jiko**	stew
5.	**Lyeɓo**	hit	6.	**Kanyo**	stand
7.	**Tʉlo**	reach	8.	**Ɓulo**	kill
9.	**Ɗawɵ**	cut down	10.	**Maɗa**	get up
11.	**Loro**	hurry			

Additional examples are

12.	**Buso**	rub	13.	**Ruɗo**	scratch
14.	**Bəyo**	speak	15.	**Səɓo**	drink
16.	**Tiyo**	bow	17.	**Biiŋo**	hit
18.	**Nyiso**	beg	19.	**Fiiso**	spray
20.	**Miso**	redden	21.	**Ɗiifo**	point
22.	**Luwo**	receive	23.	**Hulo**	pierce
24.	**Moso**	be fertile	25.	**Pəro**	carry more than one object
26.	**Jipo**	pursue	27.	**Ndulo**	turn away
28.	**Gbowo**	gather	29.	**Guɗo**	lean
30.	**Weyo**	walk	31.	**Ŋgoɗo**	change
32.	**Soɗo**	wonder	33.	**ʔulo**	search for

Subclass III

In the past tense context these verbs have rising tone in the stem syllable. They are not very numerous, and include a number whose meanings are concerned with disabilities.

1.	**Hweelo**	go blind	2.	**Gbiiŋo**	become deaf
3.	**Ciiŋo**	tie tightly	4.	**Tuulo**	chew
5.	**Kpiiro**	harvest too early	6.	**Tuuɗo**	stuff up
7.	**Kwiito**	pluck	8.	**Fiilo**	whistle

Subclass IV

In the past tense context, the first syllable is low and the second high. This, too, appears to be a subclass with few members. Only three have so far been listed. They are

1.	**Wʉɗo**	go	2.	**Vʉko**	fall down	3.	**Tʉso**	set on fire

THREE-SYLLABLE VERBS

These verbs, like the disyllabic verbs, have no final vowel before a nominal phrase object. Only a small number have so far been listed, and although they do not all have the same tone pattern they will be given together here.

1.	**Ndá mə́sorò**	He broke a piece off	2.	**Ndá mìɗíkò**	He swallowed
3.	**Ndá vìrʉ́wə̀**	He turned round	4.	**Ndá ɗyàŋgórò**	It wobbled
5.	**Ndá kyə̀ɗókò**	He laughed	6.	**Táa mbílkita**	They swarmed around

CONCLUSION

This account of the verbal piece in Kwaa-Ɓwaare has been an attempt to present the main grammatical categories together with some detailed study of the terms of each system, even though they could not all be dealt with to the same degree. There are gaps, too, since emphasis has scarcely been mentioned, and the reduplicative verbal forms have been omitted. The writer has been struck by the morphological complexity of the language and the economical way in which the language exploits combinations of tone and ending, internal vowel change and suffixes and prefixes, in effecting subtle differences of meaning over a wide range of the verb system. More categories seem to be required than for the Hausa verb, for example, but this may be because the writer has deliberately started with the larger units, and presented them in a descending order, for the purpose of throwing light on parts of the syntax of the language. Even though the material is complex and the number of categories considerable, it is hoped that this article has shown the relation of the terms in each category to each other ; and by using a hierarchical approach has given a clear picture of how the language works so far as the verbal piece is concerned.

CONSONANT REINFORCEMENT AND KONGO MORPHOLOGY

By Hazel Carter

INTRODUCTION

It is fitting that an article devoted to Kongo should find a place in a volume dedicated to Professor Guthrie, whose name has been associated with the study of the languages of the Congo for many years. It is entirely owing to his encouragement that the writer undertook the present research, to promote which Professor Guthrie gave generously of his time, advice and data collected by himself.

This study is based on information obtained over the past three years from a Kongo (Koongo) speaker of the Zoombo dialect, Sr. João Makondekwa from the Kibokolo area of Angola. His patience, good humour and deep knowledge of his own language have been a constant help. A further, and very considerable, debt of thanks is owing to Mr. Jack Carnochan, Reader in Phonetics at the School of Oriental and African Studies, University of London, who spent a great deal of time analysing examples and preparing spectrograms, some of which appear on the Plates.

This article, however, is not chiefly concerned with the phonetic aspects of reinforcement, interesting though these are, and little space has been given to them. The purpose is rather to show the place of reinforcement in the morphology of Zoombo. Adequate description of this dialect is impossible unless reinforcement is taken into account. Certain areas of the verbal tense, object infix and noun and adjective class prefix systems appear quite unsystematic if reinforcement is not recognized.

The phenomenon called here ‘ reinforcement ’ was first recognized by Bittremieux in Mayombe, where it plays a similar role in the morphology. Bittremieux describes it as a ‘ strong accentuation of the first syllable . . . which results particularly in greater length of the consonant ’.[1] It certainly exists in at least one other dialect, Ngombe, and there are indications that it is found elsewhere.

A note on spelling is necessary, since the notation adopted here has been developed to meet the special needs of Zoombo.[2]

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[1] ‘ Een krachtige beklemtoning van de eerste syllabe . . . die vooral uitkomt in het langer aanhouden van de medeklinker.’ L. Bittremieux, ‘ De weglating van het prefix in het Kikongo ’, Kongo-Overzee, IX, 1943, 67. Professor A. E. Meeussen kindly drew my attention to Bittremieux's work after having seen the first draft of this article.

[2] This orthography is slightly different from that used in a previous article, ‘ Notes on legal terminology in the Zoombo dialect of Koongo (Angola) ’, João Makondekwa and Hazel Carter, *African Language Review*, VII, 1968, 23–46. Reinforcement had not then been fully recognized, especially after nasals, and **nj** and **ng** were not distinguished.

n before velars **k**, **g**, **w** represents a velar nasal
n before palatals **j**, **y** represents a palatal nasal
n elsewhere represents an alveolar nasal
j represents a palatal voiced plosive (stop)
h indicates aspiration of the preceding consonant

Double consonants are also used and the meaning of these is explained later. Vowels written double have two functions: (i) to indicate a long vowel, as in **nkhuumbu** ' name ' and (ii) to represent a double vowel, as in **taata** ' father '. It is necessary to distinguish between long and double vowels for some purposes, but these are not relevant here.

CONTENTS

The material is arranged under the following headings:

1.0 REINFORCEMENT

Most consonants and both semi-vowels are found in a ' plain ' and a ' reinforced ' form. The phonetic features associated with reinforcement (R) are described in more detail under 1.1 ; for the moment it will merely be stated that a reinforced consonant (RC) is in general longer than its plain counterpart, but additional duration is not the only, perhaps not the most significant, feature from the point of view of auditory discrimination. There is additional tension of the articulatory organs during utterance, with often an increase of ' forcefulness ' at the beginning of the following vowel. This is heard as greater prominence of both consonant and vowel.[3]

To indicate R the notation adopted is doubling of the letter :

se (he is a) father	**sse** (it is a) colour

se has plain **s** and **sse** has reinforced **s**. This notation should not be taken to indicate ' gemination ' ; in ordinary speech at normal speeds the difference in duration of **s** and **ss** is minimal and scarcely observable.

A slightly modified notation is used for indicating C followed by RC, when C in each case is a nasal, **m** or **n**. A triple letter would be consistent, e.g.

yammmona I saw him

the first **m** standing for plain **m** and the last two for reinforced **m** (**mm**). But this entails having to ' count the minims ' while reading and could cause momentary confusion if one **m** is missed. Such combinations are therefore written with double letter only, the second underlined :

yamm̲ona I saw him

Table I shows the consonants of Zoombo ; those which are not found in reinforced form are bracketed. Reinforcement of vowels is dealt with in 1.3.

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[3] ' Long ', ' intensified ' or ' double ' consonants appear in other Bantu languages, where they seem to be syllabic. See for instance J. Jacobs, ' Long consonants and their tonal function in Tetela ', *Kongo-Overzee*, XXIII, 3–4, 1957, 200–12 ; H. P. Blok, ' Iets over de zogenaamde " geïntensiveerde " fonemen in het Ganda en Nyoro ', *Kongo-Overzee*, XVII, 3, 1951, 193–220 ; E. O. Ashton, E. M. K. Mulira, E. G. M. Ndawula and A. N. Tucker, *A Luganda grammar*, London, 1954, 10–12. Zoombo reinforced consonants are not syllabic (see section 3.0 below).

TABLE I

THE CONSONANTS OF ZOOMBO

	Bilabial/ labio-dental	Alveolar/ palato-alveolar	Palatal	Velar
Voiced plosives . .	**b**	**d**	(**j**)	(**g**)
Voiceless plosives . .	**p**	**t**		**k**, **kk***
Voiced fricatives . .	**v**/**β**	**z**/**ʒ**		
Voiceless fricatives .	**f**	**s**/**ʃ**		
Nasals	**m**	**n**	(**n**)	(**n**)
Lateral . . .		**l**		
Semi-vowels . . .			**y**	**w**

***kk** is the only RC contrasting with plain **k** in lexical items ; see 1.2
j and **g** appear only as second element in nasal combinations
β is a free variant of **v** and is found in R form
ʒ is a free variant of **z** before **i**, and **ʃ** is a free variant of **s** before **i** ; both are found in R form
n (palatal) and **n** (velar) only occur as first component of a nasal combination
Consonants in parentheses are not found reinforced

1.1 *The phonetic nature of reinforcement*

This section (1.1) is based on notes supplied by Mr. J. Carnochan.

Reinforced consonants in general are longer than plain consonants, as will be seen from the spectrograms,[4] but the variation proportionately is so great that it is hardly justifiable to regard the phenomenon as gemination. In addition, R frequently implies a firmer contact or closer approximation of the articulatory organs which is perhaps more significant than additional duration. For instance, the semi-vowels **yy** and **ww** often have audible friction, particularly when they follow a nasal. Diminution in the amplitude display, shown as a downward slope or ' valley ' in the curve, indicates this firmer contact. In some cases there is a ' push ' at the beginning of the following vowel, indicated by a ' peak ' in the amplitude display, which may be considered a feature of the release of a RC.

In the spectrograms, RC's are shown contrasted with three other types :

(i) Plain C contrasted with RC (Nos. 1–10).
(ii) Nasal (N) + RC contrasted with nasal combination containing the corresponding unreinforced C (Nos. 11–18).
(iii) Plain C + RC, contrasted with RC only (Nos. 19–20). C in this case is a nasal.

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[4] The Plates were prepared for publication by Mr. A. W. Stone, Chief Technician in the Department of Phonetics and Linguistics, School of Oriental and African Studies.

(i) Plain C/RC

b/bb	**yabaka**	I seized	(No. 1)
	yabbaka	I did seize	(No. 2)

The duration of the bilabial closure is ·1 sec. for **b** and ·2 sec. for **bb**.

k/kk	**ikono**	it is the stop/chapter	(No. 3)
	ikkono	it is the portion	(No. 4)

Duration of the closure for the velar plosive is approximately ·1 sec. for **k** and ·3 sec. for **kk**.

s/ss	**ise**	it is the father	(No. 5)
	isse	it is the colour	(No. 6)

The period of friction seen on the spectrograms shows that the sibilant is longer for **ss**, approximately ·25 sec., while **s** has approximately ·15 sec. duration.

m/mm	**yamona**	I saw	(No. 7)
	yammona	I did see	(No. 8)

The duration of the nasal is ·5 sec. for **m** and 1·0 sec. for **mm**. There is a slight increase in amplitude on the vowel to the **m**, and this consonant articulation has the maximum amplitude in the utterance ; there is no extra ‘ push ’ (peak) on its release. In **yammona**, the amplitude display shows the preceding vowel having greater amplitude ; the **mm** is lower, diminishing until the closure is released, when the amplitude increases abruptly with a push on the following vowel. This may partly correlate with differences in the pitches of the two examples. (**yámona** high-low-low ; **yámmóna** high-high-low ; but cf. Nos. 19 and 20 which have the same tone-pattern as **yámona** and extra push for the vowel following reinforced **m**.—*Author's note.*)

w/ww	**wawa**	you heard	(No. 9)
	wawwa	you did hear	(No. 10)

It is difficult to delimit the duration of the semi-vowel articulations, but **ww** is certainly longer than **w**. In addition the diminution in amplitude as indicated by the deeper valley in the curve is greater in **wawwa** than in **wawa**, with a much greater increase for the final vowel. This may partly correlate with differences in the pitches of the two examples. (**wáwa** high-low, **wáwwâ** high-high falling.—*Author's note.*)

(ii) N + RC/N + combination containing no RC

mbb/mmb	**imbbu**	it is the sea	(No. 11)
	immbu	it is the mosquito	(No. 12)

Overall durations of **mbb** and **mmb** as measured from the amplitude displays are equal, but in **mbb** the bilabial closure duration is longer than in **mmb**, and the bilabial nasal is shorter in **mbb** than in **mmb**. The difference can be seen clearly enough on the spectrograms, but the durations are only of the order of ·08 sec. for **bb** and ·04 sec. for **b**. The amplitude display shows a more marked diminution for **mm** than for plain **m**. This pair is interesting in that two contrasts are shown : **m/mm** and **bb/b**.

nkk/nkh	**inkkuumbu**	it is the time	(No. 13)
	inkhuumbu	it is the name	(No. 14)

nkk and **nkh** have almost identical durations. In both cases there is an increase in amplitude for the velar nasal after **i-** and the duration of the nasal is approximately ·1 sec. The reinforced velar plosive **kk** is released after a further ·15 sec. In **nkh** the plain **k** is released after approximately ·08 sec., but there follows a further ·09 sec. of aspiration before the voicing of the vowel.

nss/nts	**wansseva**	he laughed at him	(No. 15)
	wantseva	he laughed at me	(No. 16)

In **nss** the duration of the sibilant is approximately ·2 sec. and the diminution of amplitude during the nasal is gradual. In **nts** the diminution is more abrupt and is greater, as a stop (**t**) is made between the nasal and the sibilant. The time between the nasal and the beginning of the vowel **e** is approximately ·2 sec. in **wansseva** and approximately ·15 sec. in **wantseva**. The example with RC also shows a moment of diminution of amplitude preceding the onset of the sibilant, as though the firmness of contact made with the teeth-ridge led to a momentary alveolar closure. There is a slight dip in the amplitude display at the corresponding place for **wantseva**.

nww/ngw	**wanwwa**	you heard him	(No. 17)
	wangwa	you heard me	(No. 18)

In **ngw** there is a valley in the amplitude display, corresponding to the velar closure, and in **nww** there is a longer valley. The formant associated with nasality is stronger (darker on the spectrogram) in **ngw** than in **nww**, but its limit is clearly seen. The example with **ww** has a longer semi-vowel articulation, with also a closer articulation, as is shown by the diminution of the amplitude. In this particular case there is velar closure, although in other examples there is no closure but some voiced friction.

(iii) N + RN/RN

mm̲/mm	**yamm̲ona**	I saw him	(No. 19)
	yammona	I saw you	(No. 20)

Duration of the nasal is 1·2 sec. for **mm̲** and ·85 sec. for **mm**. In both cases there is a peak in the amplitude display showing a push in the articulation on the release of the reinforced nasal. Cf. **yammona** (No. 8) with a similar peak and

yamona (No. 7) without a peak. (Nos. 7, 19 and 20 have identical tone-pattern : high-low-low.—*Author's note.*)

Kymograph tracings (not shown here) of other examples of N + RC indicate more prominent nasality of a preceding vowel than is the case for vowels before RN, plain N and N combinations not including RC.

unṉ/unn	**ikunṉata**	I shall carry him
	ikunnata	I shall carry you

In **unṉ** the vowel has prominent nasality ; in **unn** the vowel has much less. Differences in the quality of these two vowels were also observed. In **unṉ** the vowel has almost the quality of [ə] with little or no lip-rounding, while the vowel in **unn** was [u] with lip-rounding.

1.2 *Distribution of reinforcement*

From the morphological point of view, RC's are only found when C is in C_1 position. From the phonetic point of view, they occur :

(*a*) Initially	**sse**	(it is) a colour
(*b*) Intervocalically	**yasseva**	I did laugh
(*c*) After nasals	**yansseva**	I laughed at him
(*d*) Before voiced plosives	**wammbona**	he saw me

RC's in a combination are always homorganic to the adjacent element of the combination :

mbb, mpp, mvv, mff, mm̱	(bilabial and labio-dental)
ndd, ntt, nzz, nss, nṉ, nll	(alveolar and palato-alveolar)
nyy	(palatal)
nkk, nww	(velar)

Reinforced nasals (RN's) occur before voiced plosives :

mmb, nnd (but not ***nnj, *nng**)

Plain and reinforced variants of **k** are found in lexical items :

yakala	I was (stem **-kala**), past narrative tense
yakkala	I denied (stem **-kkala**), past narrative tense

Where **kk** occurs in conditions where other consonants are subject to R, there is no contrast between plain **kk** and reinforced **kk** :

yakkala	I certainly was (stem **-kala**), past emphatic tense
yakkala	I certainly denied (stem **-kkala**), past emphatic tense

R of other consonants is nearly always associated with morpheme representation :

yaseva	I laughed
yasseva	I laughed at you (sg.)
se	father (Class 5 ; zero prefix)
sse	colour (Class 7 ; R represents class prefix)

In one other type of case, R cannot definitely be associated with morpheme representation, namely where it appears in stem augments :

ntti	trees (Class 4 ; R part of prefix)
mintti	trees (Class 4 ; prefix **mi-**)

Stem augments are further discussed under 2.3.

1.3 *Reinforcement of vowels*

Where conditions for R exist, a vowel appears with an onset consisting of the R form of the related semi-vowel :

e/yye	**kuendela**	to go for
	kuyyendela	to go for you
i/yyi	**kuizila**	to come for
	kuyyizila	to come for you
o/wwo	**-oole**	two (adjectival stem)
	nwwoole	a pair, a twosome (Class 3)

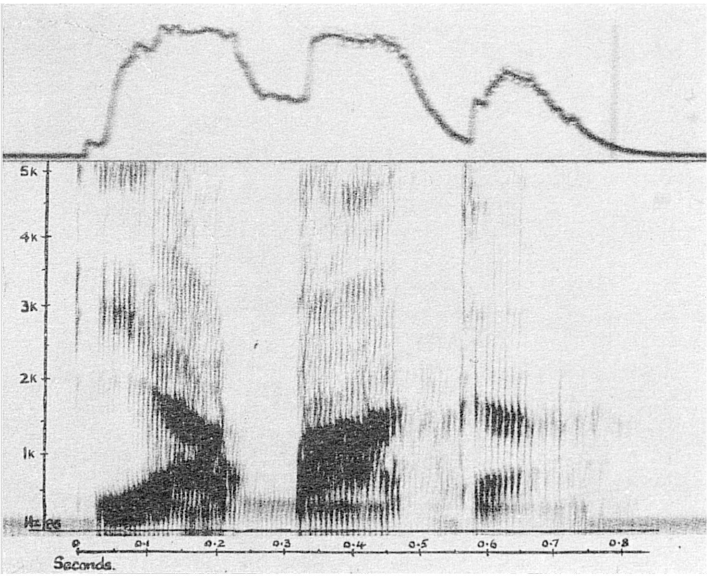
There are not many instances of vowel R, and there is usually some aspect of these examples which makes them not quite comparable with cases of consonant R. The stems **-end(el)a** ‘ go (for) ’ and **-iz(il)a** ‘ come (for) ’ can be abstracted from the infinitives, illustrated above, but in some tenses of these verbs a plain **y** appears as a glide after vocalic tense sign : **twayendela** ‘ we went for ’, **nwayizila** ‘ you came for ’. **nwwoole** is a Class 3 noun, but irregular in that the noun and adjectival prefixes of this class appear as **mu-** before all other vowel-commencing stems. So far there is no instance of R in the cases of **a** and **u**.

1.4 *Nasal combinations*

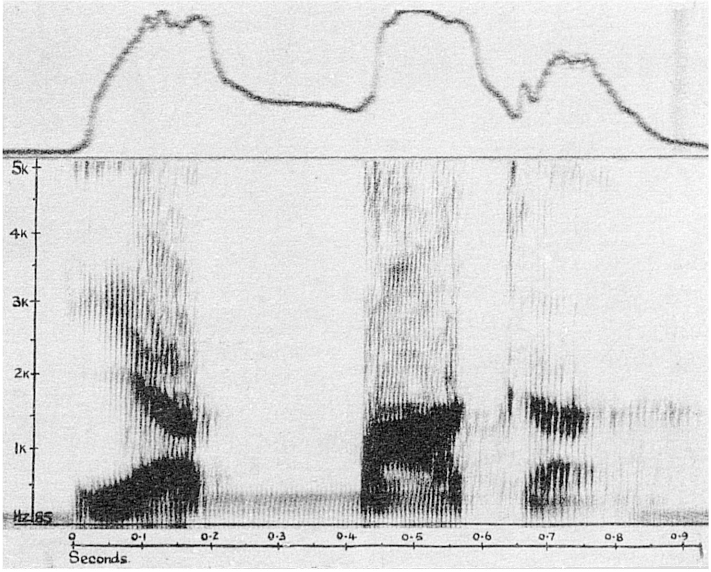
Spectrogram examples Nos. 11–18 illustrate the two sets of nasal combination involving C_1/V_1 of a nominal, adjectival or verbal stem. In both sets the nasal is homorganic to C/V. In both there is an additional feature, a third element in the combination.

In one set, N is followed by the reinforced form of the consonant :

imbbu	stem **-bu** (No. 11)
inkkuumbu	stem **-kuumbu** (No. 13)

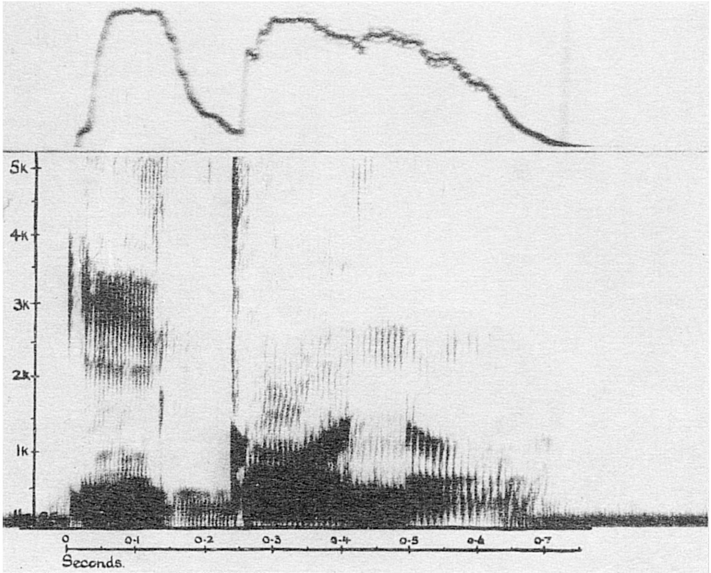


1. yabaka (I seized)

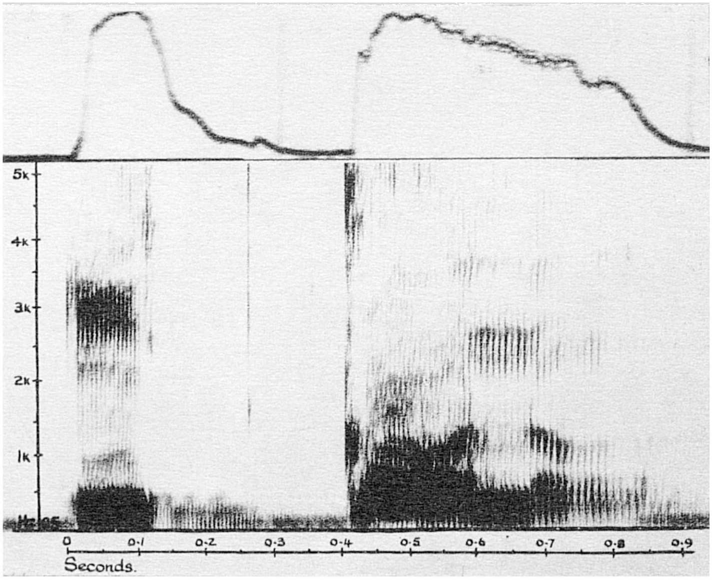


2. yabbaka (I did seize)

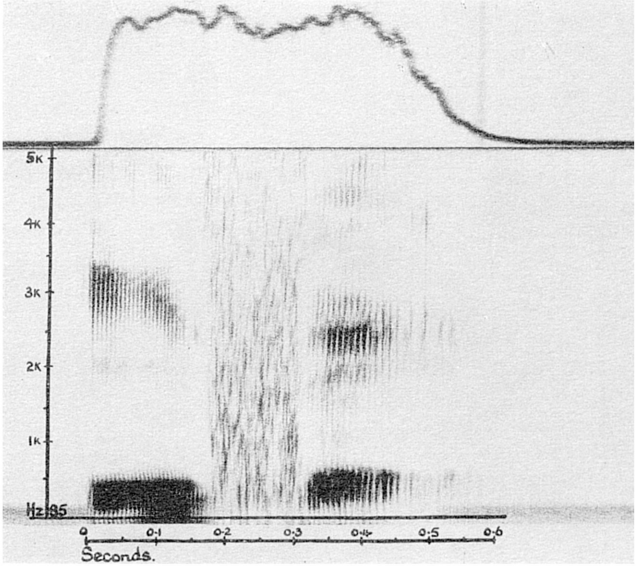
PLATE II



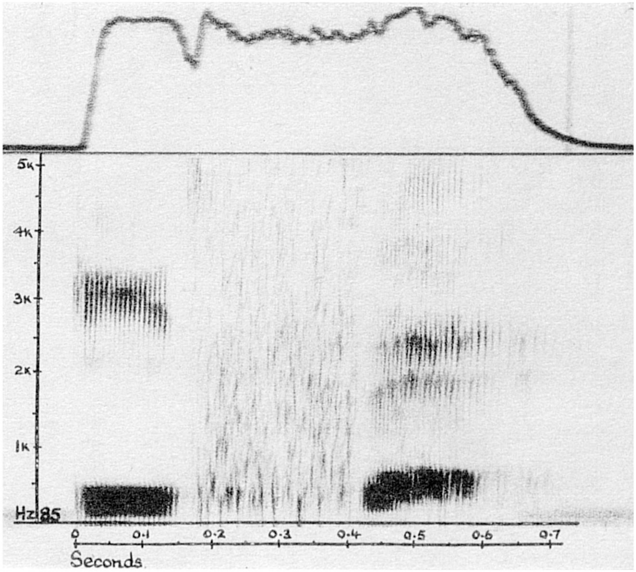
3. **ikono** (it is the stop chapter)



4. **ikkono** (it is the portion)

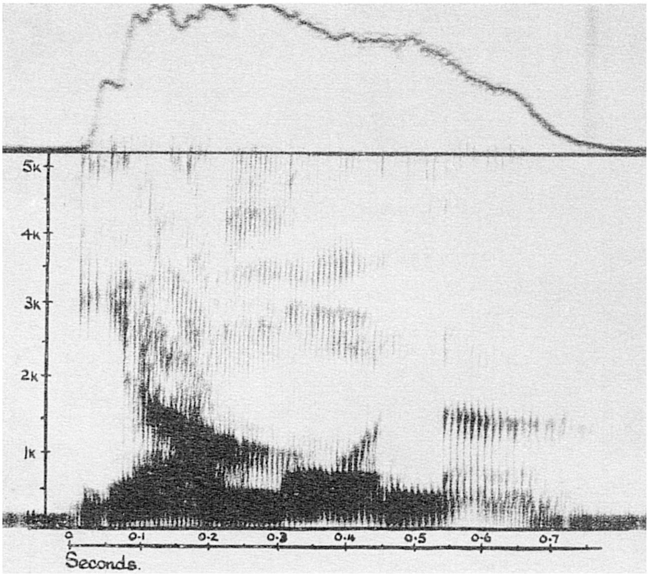


5. ise (it is the father)

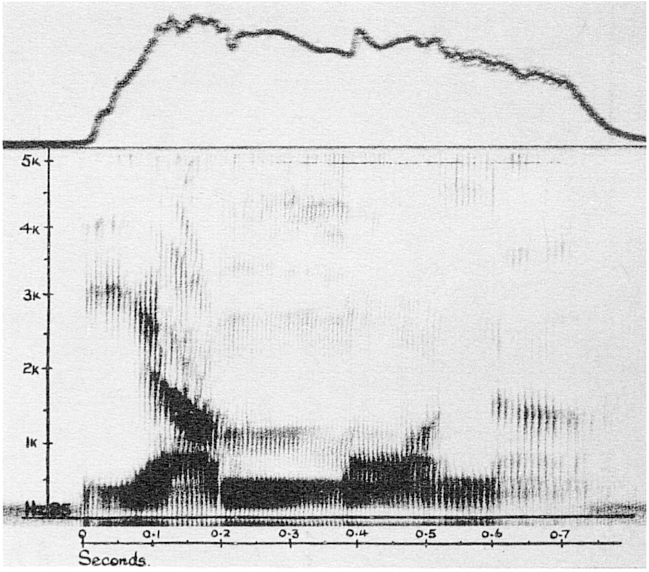


6. isse (it is the colour)

PLATE IV

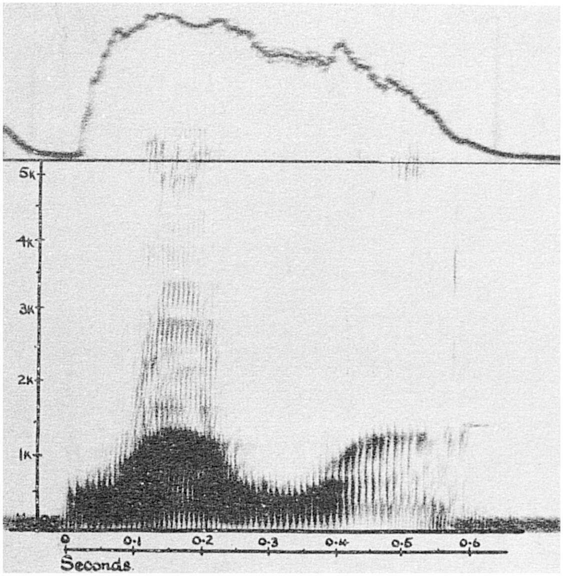


7. yamona (I saw)

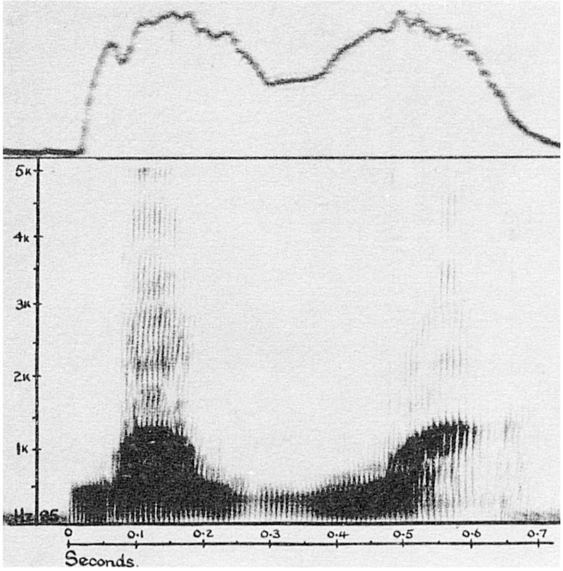


8. yammona (I did see)

PLATE V

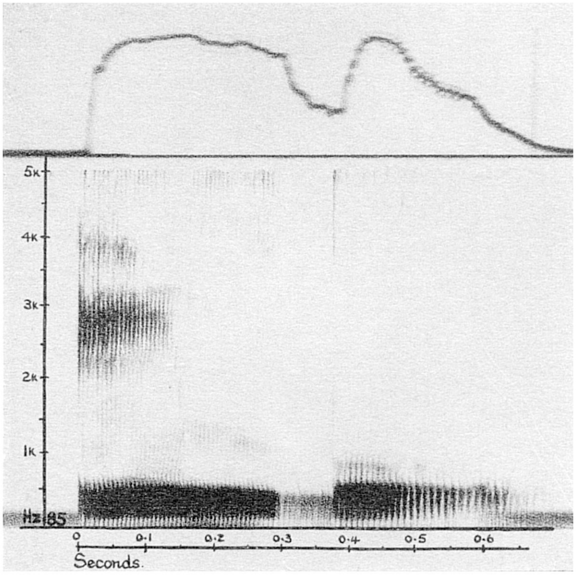


9. wawa (you heard)

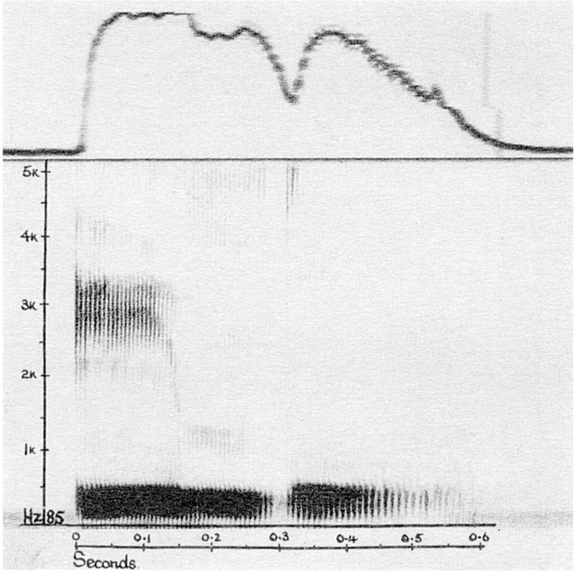


10. wawwa (you did hear)

PLATE VI

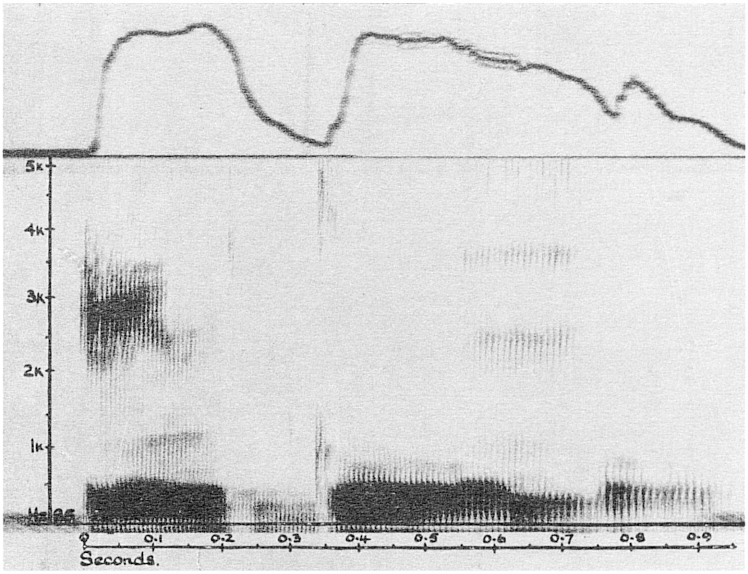


11. imbbu (it is the sea)

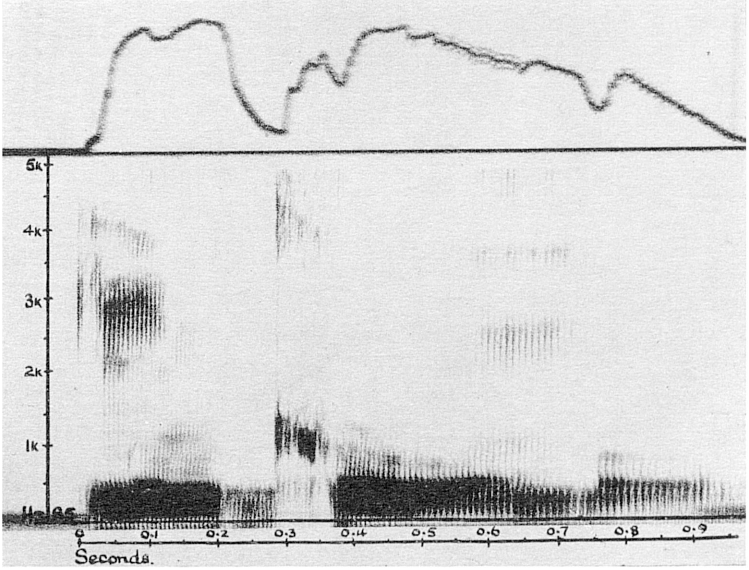


12. immbu (it is the mosquito)

PLATE VII

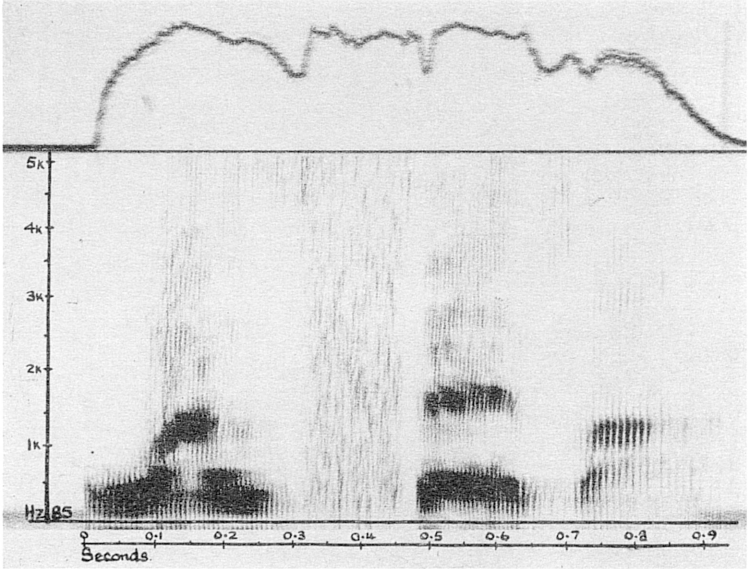


13. **inkkuumbu** (it is the time)

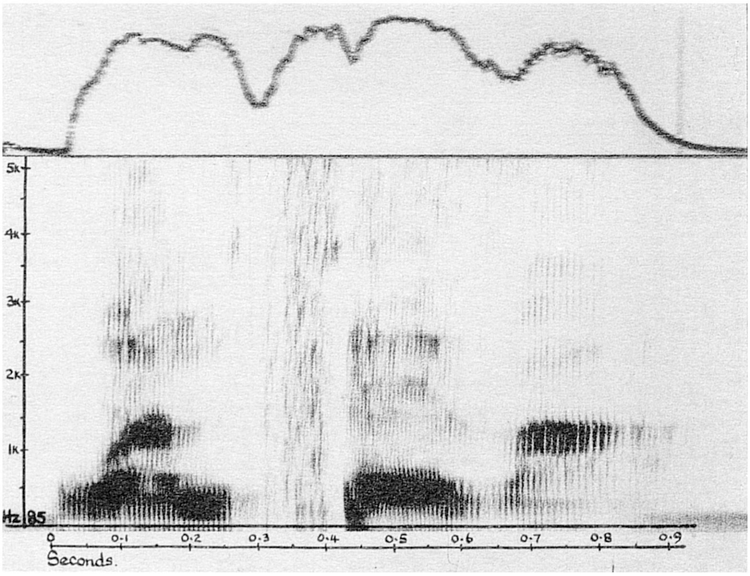


14. **inkhuumbu** (it is the name)

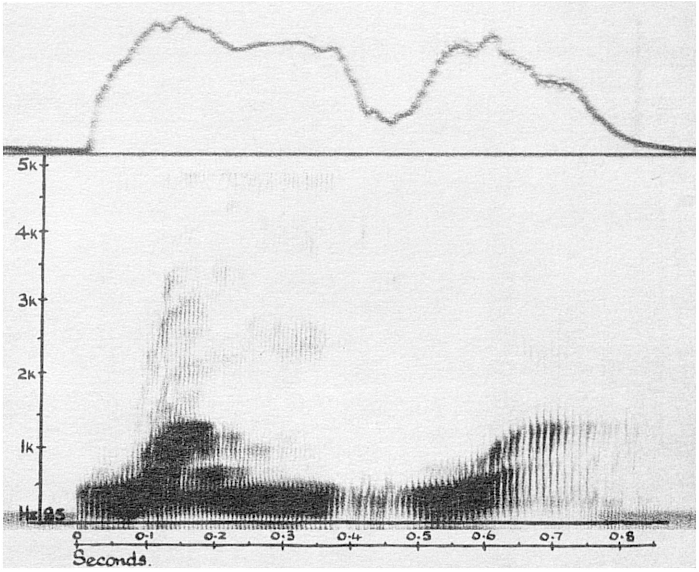
PLATE VIII



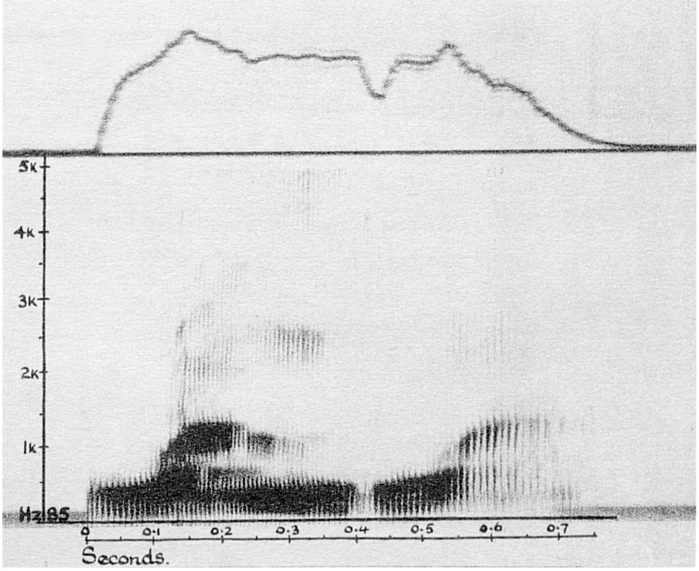
15. wansseva (he laughed at him)



16. wantseva (he laughed at me)

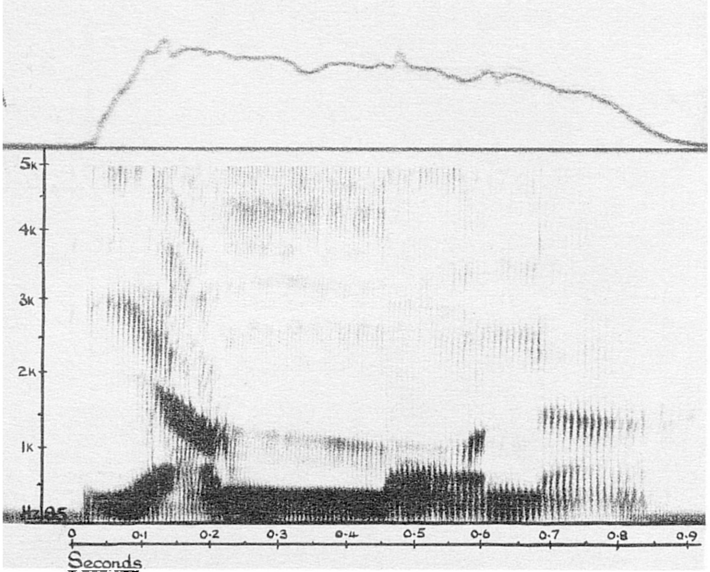


17. wanwwa (you heard him)

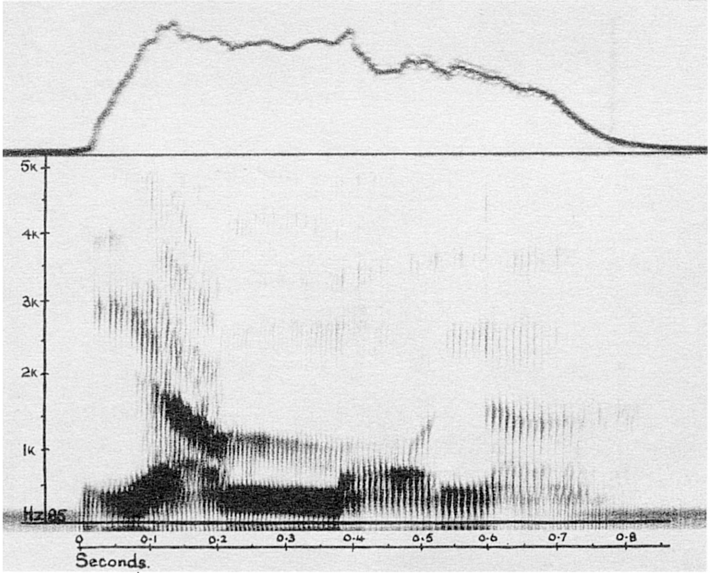


18. wangwa (you heard me)

PLATE X



19. yammona (I saw him)



20. yammona (I saw you)

wansseva	verb stem **-seva** laugh (No. 15)
wanwwa	verb stem **-wa** hear (No. 17)
yamm̱ona	verb stem **-mona** see (No. 19)

Further examples not illustrated by spectrograms are :

yanddiika	I fed him ; verb stem **-diika**
nttadi	overseer ; stem **-tadi**, cf. **-tala** see to, look at
mvvovo	expression ; stem **-vovo**, cf. **-vova** speak
nzzodi	lover ; stem **-zodi**, cf. **-zola** love
mffidi	leader ; stem **-fidi**, cf. **-fila** lead
yanṉata	I carried him ; verb stem **-nata**
nlloongi	teacher ; stem **-loongi**, cf. **-loonga** teach
nyyadi	one who spreads ; stem **-yadi**, cf. **-yala** spread
nyyendi	one who goes ; stem **-endi**, cf. **-enda** go

The ' third element ' here can be abstracted as R, and the set symbolized as NR-. NR- combinations are characterized by the distinctiveness of most realizations. The only cases of identical realization are NR + semi-vowel/vowel, where NR**ye** has the same realization as NR**e**, and NR**yi** as NR**i** ; **nwwo** represents NR**wo** as well as NR**o**.

The second set is rather more complex in structure. Not only does the third element vary greatly in phonetic character, but its position also is not fixed. Examples from the spectrograms are :

inkhuumbu	stem **-kuumbu** (No. 14)
wantseva	verb stem **-seva** (No. 16)
wangwa	verb stem **-wa** (No. 18)

immbu is another example (No. 12) but its stem is not identifiable. It may be **-bu** or **-mu**, as will shortly be seen. Further examples not illustrated by spectrograms are :

mmbaka	act of seizing ; cf. **-baka** seize
nndya	act of eating ; cf. **-dya** eat
nthala	act of looking ; cf. **-tala** look
mphova **mbvova**	act of speaking, statement ; cf. **-vova** speak
wandzola	he loved me ; cf. **-zola** love
wampfila	he led me ; cf. **-fila** lead
wammbona	he saw me ; cf. **-mona** see
wanndata	he carried me ; cf. **-nata** carry
wanndoonga	he taught me ; cf. **-loonga** teach
njenda	act of going ; cf. **-enda** go
njiza	act of coming ; cf. **-iza** come

njyala	act of spreading ; cf. **-yala** spread
ngazi	palm-nut, stem? **-azi**
ngolo	strength ; stem? **-olo**
ngudi	mother ; stem? **-udi**
ngwuta	act of giving birth ; cf. **-wuta** give birth

The third element here takes a variety of forms, e.g. :

Aspiration *after* C	**inkhuumbu, nthala**
Voiceless plosive, between N and C and homorganic to both	**wantseva, wampfila**
Voiced plosive, between N and C/V and homorganic to both	**wangwa, mbvova, wandzola, njenda, njiza, njyala, ngazi, ngolo, ngudi, ngwuta**
R of the nasal	**mmbaka, nndya**
R of the nasal, and replacement of **l** by **d**	**wanndoonga**

The combinations in **wammbona** and **wanndata** are more difficult to analyse. There are two possibilities : (i) N is reinforced and **m, n** replaced by **b, d,** or (ii) N + **m, n** is realized as RN and voiced plosive added. (i) is similar to the case of **l** : **nnd,** where the nasal is reinforced and the continuant replaced by plosive. (ii) has no parallel. The only other case of an additional element occurring *after* C is that of **k** and **t** in **nkhuumbu** and **nthala,** but here the third element is aspiration. N + C does not appear as RC in any other case. For these reasons, and for the further one that **m** and **n** are voiced continuants like **l,** the first analysis is chosen. The third element is then R of the nasal which is first component, and replacement of **m, n** by a homorganic voiced plosive.

If we abstract the third element as A (additional element), the set can be symbolized by NA-. NA- combinations are characterized by the number of identical realizations :

NA + **b, m** : **mmb,** cf. NR + **b** : **mbb** ; NR + **m** : **mm̱**
NA + **d, n, l** : **nnd,** cf. NR + **d** : **ndd** ; NR + **n** : **nṉ** ; NR + **l** : **nll**

It must be admitted that the distinctions between **njyi/nji, njye/nje, ngwu/ngu, ngwo/ngo** are minimal and further spectrogram analysis may show that they are unsupported by evidence from this source.

We now have two sets of nasal combination, NR- and NA-. A full list of NA- realizations is given in Table II, with notes on the A realization for each group.

In other dialects there are two sets of nasal combinations corresponding to NR- and NA- in Zoombo, but they are described as contrasting in a rather different way. The set corresponding to NR- is sometimes said to have a ' syllabic nasal ', while NA- by implication has a nasal which is not syllabic.[5] My own view is that

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[5] E.g. J. Vandyck, *Etude du Kikongo*, Tumba, undated, p. 8. Vandyck calls the nasal equivalent to N of NR- ' nasale forte . . . Cette nasale porte l'accent dynamique et forme syllabe '. Also A. Seidel and I. Struyf, *La langue congolaise*, Paris, 1910, p. 10 : ' *m* et *n*, quand

TABLE II

NA- COMBINATIONS

(i) NA + voiced plosive : A realized as R of the nasal

NA + **b** : **mmb**
d : **nnd**

(ii) NA + voiceless plosive : A realized as aspiration after C

NA + **p** : **mph**
t : **nth**
k : **nkh**
kk : **nkh**

(iii) NA + fricative, semi-vowel, vowel : A realized as plosive after nasal, homorganic to the following sound and harmonizing with it in voice

NA + **v** : **mbv**/**mph** (see note)
z : **ndz**
f : **mpf**
s : **nts**
y : **njy**
i : **nji**
e : **nje**
w : **ngw**
a : **nga**
o : **ngo**
u : **ngu**

(iv) NA + nasal, lateral : A realized as R of nasal and C replaced by voiced homorganic plosive

NA + **m** : **mmb**
n : **nnd**
l : **nnd**

Note.—**mbv** has an alternative **mph**. In most words this is a free variant : **mbvova**/**mphova** ' act of speaking ', but in some words one is preferred to the other, usually **mph**, cf. **-vova** ' speak ', **mphovelo** ' way of speaking '. ***mbvovelo** was not accepted.

in Zoombo *neither nasal is syllabic*, but the arguments supporting this conclusion will be more readily followed when the place of R in the morphology has been described. The evidence is put forward in 3.0, where the ' syllabicity ' of R as well as of N in combinations is considered.

ils se trouvent au commencement d'un mot devant une autre consonne, forment, à eux seules, une syllabe particulière'. It is not quite clear which type of nasal combination is meant here. The language described by Seidel and Struyf is very close to Zoombo. In modern works, K. E. Laman, *Dictionnaire kikongo-français*, Brussels, 1936, terms NR- nasals ' accentué ' (p. xlii) and ' syllabique . . . plus longue et plus accentuée ' than NA- nasals (p. xliv) ; K. van den Eynde, *Eléments de grammaire yaka*, Lovanium, 1968, p. 8, writes of ' une nasale isolée, qui est appelée alors *nasale syllabique* ' and cites **n-kísi** (the corresponding form in Zoombo is **nkkisi** with NR- prefix). J. Daeleman, *Morfologie van naamwoord en werkwoord in het Kongo* (*Ntandu*), Leuven, 1966, p. 18, para. 1.6, writes of the nasal of the set equivalent to NR- as ' syllabische '.

There is a further distinguishing feature of each type of combination. The nasal of NR- may sometimes be replaced by nasalization of the preceding vowel :

wansseva he laughed at him (sometimes pronounced **wãsseva**)

The vowel nasalization varies in prominence, being greater when the nasal consonant is absent and less when the nasal can still be heard as a consonant. There is always, however, a greater nasality of the vowel before a NR- combination than before a NA- combination.

The nasal of a NA- combination tends to disappear in initial position:

nkhuumbu name (sometimes pronounced **khuumbu**)

This tendency is more marked in the case of combinations with voiceless plosives **p, t, k** and voiceless fricatives **f, s.** It has not been recorded at all for combinations in which the palatal and velar plosives **j** and **g** appears.

Finally, it should be emphasized that what has been said here does *not* apply to nasal combinations in C_{2+} positions, e.g. **mb** in **-laamba** ' cook ' and **mb** in **llamba** ' purse '. Such combinations require separate treatment, although it is true that there appear to be two sets in this position, to some extent parallel with the sets described above. NR- and NA- combinations only appear with C_1 and V_1.

2.0 THE ROLE OF REINFORCEMENT IN ZOOMBO MORPHOLOGY

The recognition of R is crucial in the description of Zoombo, in that R is very often the representation, or part representation, of a morpheme. Failure to observe the phenomenon caused the present writer for a long time to confuse forms in which RC contrasts with plain C and which are not otherwise distinguished. Two pairs of tenses were regarded as homophonous except in tone ; no less than six noun classes were credited with zero prefixes, whereas only two of them have zero prefix in fact (Classes 1a and 5) ; one object infix was also taken as zero and some forms containing it were not distinguished from corresponding infix-less forms. Where NR- was involved, there was less possibility of confusion with NA-, owing to the large number of very different realizations of the two sets, but even here there was failure to distinguish between, e.g. **mbb/mmb**, with the result that some realizations of noun class prefixes were considered identical. The last failure concerned another five noun classes. This meant that nine of the noun classes were incorrectly described : almost fifty per cent, since there are twenty classes in Zoombo. The failure in the description of the tense system led to several forms being classified as ' irregular ' which are nothing of the kind. Many problems of description remain, but once R is recognized, the structure of Zoombo presents a much more systematic appearance than formerly.

Most aspects of the role of R are illustrated by spectrogram examples.

Nos. 7 and 8 show two tenses, one with R as part of the tense sign and the other without R :

yamona	I saw (past narrative tense, sign **-a-** **-a**)
yammona	I did see (past emphatic tense, sign -aR- **-a**)
	verb stem **-mona** see

Similarly Nos. 9 and 10 :

wawa	you heard (past narrative, sign **-a-** **-a**)
wawwa	you did hear (past emphatic, sign **-a**R- **-a**)
	verb stem **-wa** hear

R proved to be an allomorph of the second element of the tense sign of the past emphatic tense ; the other allomorph is **-ku-** which appears before vowel stems and infixes :

yayenda	I went (past narrative)
yakuenda	I did go (past emphatic)
yammona	I did see (past emphatic, no object infix)
yakunumona	I did see you (pl.) (past emphatic, object infix **-nu-** ' you (pl.) ')

The allomorphs were previously given as zero/**-ku-**.

Nos. 7 and 20 show comparable forms, the first example with no object infix and the second with the object infix of the 2nd person singular :

yamona	I saw
yammona	I saw you (sg.) (infix -R-)

These have the same tone-pattern and were formerly considered identical. -R- is the sole representative of the 2nd person singular infix ; there are no allomorphs.

The term ' allomorph ' is used here in the following way : -R- and **-ku-** are allomorphs of (part of) the tense sign, past emphatic tense. **-ku-** is not an allomorph of -R- ; and the various realizations of -R- (**mm**, **ww**, etc.) are not allomorphs of -R- either. This can be illustrated by comparing forms with (i) -R- as sole representative of morpheme (2nd sg. infix) and (ii) R/**ku** as allomorphs (past emphatic tense sign) :

(i)		(ii)	
yayyendela	I went for you	**yakuendela**	I did go for
yawwa	I heard you	**yawwa**	I did hear

-ku- clearly is not a realization of -R-, since R**e** is **yye**. The term allomorph is reserved for cases like that of R/**ku**. This has to be borne in mind when other writers' analyses of similar material is compared with mine, e.g. in 4.0.

Nos. 3 and 4 show two nouns, the first belonging to a class which has zero prefix and the second from a class where the prefix is R- when the stem begins with a consonant :

ikono	it is the stop/chapter (**kono** Class 5, zero prefix)
ikkono	it is the portion (**kkono** Class 8, prefix R-)

These have the same tone-pattern and provide another instance of forms regarded as homophonous before R was recognized. A similar pair are Nos. 5 and 6, illustrating the same two classes :

ise	it is the father (**se** Class 5, zero prefix)
isse	it is the colour (**sse** Class 7, prefix R-)

Both these classes have totally different prefix allomorphs before V stems :

diambu	word (Class 5, prefix **di-**)
kiana	garden (Class 7, prefix **ki-**)

R- is here an allomorph of the Class 7 prefix.

Nos. 11 and 12 show nouns of two classes, one with NR- prefix and the other with NA- prefix :

imbbu	it is the sea (Class 3, prefix NR-)
immbu	it is the mosquito (Class 9, prefix NA-)

Nouns of these two classes are often distinguishable by features not involving R, as in Nos. 13 and 14 :

inkkuumbu	it is the time (Class 3, prefix NR-)
inkhuumbu	it is the name (Class 9, prefix NA-)

These are distinguishable even when R is not recognized, because of the aspiration in **nkh**, not present in **nkk**. Class 3 is like Classes 5 and 7 in that there is a V stem prefix allomorph of totally different shape :

muenze	virgin (Class 3, prefix **mu-**)

so that R here is part of a prefix allomorph, NR-. Class 9 has no such allomorphs, the prefix being NA- throughout : [6]

njenda	act of going, cf. **-enda** go

Failure to distinguish between **m**, **mm** and **mm̲** led to confusion of two of the object infixes and inability to distinguish either from the infix-less form in some

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[6] This statement is not quite true. Loans from, e.g., Portuguese are sometimes found taking Class 9/10 agreements, but with no prefix, e.g. **sikoola** ' school ' (Port. **escola**) and **laamina** ' razor-blade ' (Port. **lâmina**). I have one similar example which does not appear to be a loan : **vumbamena** ' blanket-/sweat-bath '.

cases : Nos. 7, 19 and 20 illustrate three forms of this kind formerly taken to be homophonous :

yamona	I saw (no object infix)
yammona	I saw you (2nd pers. sg. object infix -R-)
yamm̱ona	I saw him (3rd pers. sg. object infix -NR-)

This particular confusion was only possible in the case of verbs with a nasal as C_1. In other cases the form without infix and that containing the 3rd sg. infix were distinct without recognition of R, as in Nos. 9 and 17 :

wawa	you heard (no object infix)
wanwwa	you heard him (3rd pers. sg. object infix -NR-)

But for some time the difference between forms such as Nos. 17 and 18 was not understood :

wanwwa	you heard him (3rd pers. sg. object infix -NR-)
wangwa	you heard me (1st pers. sg. object infix -NA-)

Again, -NA- and -NR- confusion was limited to realizations with fairly similar phonetic features. -NR- is the only form of the 3rd person singular (Class 1) object infix and there are no allomorphs.

There are no spectrogram examples of R outside its morphological role. **k** and **kk** were confused for a very long time in lexical items such as **-kala** ' be ' and **-kkala** ' deny ', even when R had been recognized in pairs such as **kono/kkono**. This was because of the special peculiarity of **kk** in having no phonetically different R form. Further, the two verbs are from the same tone-class, so that, e.g. **wakkala** can be :

Past emphatic of **-kala** be
and
Past emphatic of **-kkala** deny

Non-recognition of R did not matter quite so much in the case of stem augments. Classification of a stem as ' augmented ' depends as much on the shape of the preceding prefix as on the phonetic character of the augment. Augments are not illustrated by spectrogram examples and the whole question is given more detailed consideration in 2.3. It is doubtful whether there are any stem augments consisting of R only, though there is a possible case among adjectival stems (**-kke,** see 2.4). Most cases are of R in a nasal combination :

ntti	trees (Class 4, prefix NR-)
mintti	trees (Class 4, prefix **mi-**, augment -NR-)

The morphological functions of R will now be more fully described under the headings of the several grammatical categories involved.

2.1 *Verbal tense signs*

-R- is the allomorph of a tense sign, or part of a tense sign, in the future, present continuative, past emphatic and past emphatic continuative tense. In all these it is in complementary distribution with **-ku-**, which appears before V stems and object infixes. -R- appears with C stems only, when there is no object infix.

2.11 *Future*

The structure of this tense is sp-R/**ku-** **-a**. sp = subject prefix of person or class.

Examples

-R- tense sign, C stems :

ibbaka	I shall seize ; **-baka** seize
owwa	he will hear ; **-wa** hear
tusseva	we shall laugh ; **-seva** laugh
nummona	you (pl.) will see ; **-mona** see

-ku- tense sign, V stems :

ikuenda	I shall go ; **-enda** go
okuiza	he will come ; **-iza** come

-ku- tense sign, before object infix :

ikunubaka	I shall seize you (pl.) ; infix **-nu-**
okutuwa	he will hear us ; infix **-tu-**
tukusseva	we shall laugh at you (sg.) ; infix -R-
nukumm̱ona	you will see him ; infix -NR-
ikubayizila/ikuayizila	I shall come for them ; infix **-ba-/-a-**
okunjendela	he will go for me ; infix -NA-

tukusseva is an interesting example of a form containing two morphemes, one with -R- as its sole representative (the infix of the 2nd pers. sg.) and the other which has an -R- allomorph (the tense sign, which appears here as **-ku-**). It is a fact that R never appears twice in the same word as representative of a morpheme.

2.12 *Present continuative*

This tense has a structure similar to that of the future and therefore requires less illustration.

The structure is sp-R/**ku-** **-aanga**.

Examples

-R- tense sign, C stem :	**ibbakaanga** I seize ; **-baka** seize
-ku- tense sign, V stem :	**ikuendaanga** I go ; **-enda** go
-ku- tense sign, before object infix :	**ikunubakaanga** I seize you (pl.) ; infix **-nu-**

2.13 *Past emphatic*

The structure of this tense is sp-**a**R/**ku-** **-a**. It may be contrasted with the past narrative tense, whose structure is sp-**a-** **-a**. There are further differences in the subject prefix of the 3rd person sg. (Class 1) which is **k-** in the emphatic and **w-** in the narrative. Contrasting examples from the narrative tense are shown in brackets.

Examples

-aR- tense sign, C stems :

yabbaka	I did seize (**yabaka** I seized)
kawwa	he did hear (**wawa** he heard)
twasseva	we did laugh (**twaseva** we laughed)
nwammona	you did see (**nwamona** you saw)

-aku- -a tense sign, V stems :

yakuenda	I did go (**yayenda** I went)
kakuiza	he did come (**wayiza** he came)

-aku- tense sign, before infixes :

yakunubaka	I did seize you (pl.) (**yanubaka** I seized you)
kakutuwa	he did hear us (**watuwa** he heard us)
twakusseva	we did hear you (sg.) (**twasseva** we heard you)
nwakumm̱ona	you did see him (**nwamm̱ona** you saw him)
yakubayizila/yakuayizila	I did come for them (**yabayizila/yaayizila** I came for them)
kakunjendela	he did go for me (**wanjendela** he went for me)

2.14 *Past emphatic continuative*

The structure of the past emphatic continuative is sp-aR/**ku- -aanga** which may be contrasted with that of the past narrative continuative, sp-**a- -aanga**. Examples of the latter are given in brackets.

Examples

-aR- tense sign, C stems :	**yabbakaanga** I certainly used to seize (**yabakaanga** I used to seize)
-aku- tense sign, V stems :	**yakuendaanga** I certainly used to go (**yayendaanga** I used to go)
-aku- tense sign, before object infixes :	**yakunubakaanga** I certainly used to seize you (**yanubakaanga** I used to seize you)

2.2. *Object infixes*

The plural person and reflexive infixes are all of -CV- shape, one with two free variants :

-tu-	us	**-ki-** **-yi-**	self
-nu-	you (pl.)		
-a-/-ba-	them (Class 2)		

Mr. Makondekwa considered that **-ba-** was a loan from other dialects such as Ndibu, now gaining currency. **-ki-** and **-yi-** seem to be completely interchangeable and preference for one or the other largely a matter of idiolect (but see 2.31 under Class 15).

The singular person object infixes do not contain a vowel.

-NA-	me
-R-	you (sg.)
-NR-	him/her

Other classes do not have object infixes, but a series of object substitutes of the general pattern ' concordial element **-o** ' ; Class 3 **wo**, Class 4 **myo**, Class 7 **kyo**, etc.

2.21 *2nd person singular*

This is -R- only. In the examples it is contrasted with absence of infix and infix of the 2nd person pl., given in brackets in that order.

Examples

yabbaka	I seized you (**yabaka** I seized ; **yanubaka** I seized you)
wawwa	he heard you (**wawa** he heard ; **wanuwa** he heard you)
twasseva	we laughed at you (**twaseva** we laughed, **twanuseva** we laughed at you)
wammona	he saw you (**wamona** he saw ; **wanumona** he saw you)
yayyendela	I went for you (**yayendela** I went for ; **yanuyendela** I went for you)
tuyyiziidi	we have come for you, pres. perfect (**tuiziidi** we have come for ; **tunuiziidi** we have come for you)
ikummona	I shall see you (**immona** I shall see ; **ikunumona** I shall see you)

In the last three examples, **mm** in **ikummona** results from -R- as 2nd pers. sg. infix and **mm** in **immona** results from -R- as a tense sign (see 2.11).

2.22 *3rd person singular* (*Class 1*)

The object infix of the 3rd person singular, Class 1, is -NR- and has no allomorphs. It may be contrasted with the infix of the 1st person singular, which is -NA-, examples of the latter being shown in brackets.

Examples

nwambbaka	you seized him (**nwammbaka** you seized me)
wanwwa	he heard him (**wangwa** he heard me)
wansseva	he laughed at him (**wantseva** he laughed at me)
wamm̲ona	he saw me (**wammbona** he saw me)
wanyyendela	he went for him (**wanjendela** he went for me)
nunyyiziidi	you have come for him (**nunjiziidi** you have come for me)
okunttala	he will look at him (**okunthala** he will look at me)
kakunwwa	he did hear him (**kakungwa** he did hear me)

2.3 *Noun class prefixes*

Before considering the particular noun classes where R appears in the prefix ranges, it is necessary to give a brief outline of the noun class prefix system in general.

All noun prefixes in Zoombo, including zero prefixes, appear in two forms : as double prefixes (with initial vowel) and as single prefixes (without IV). The IV may appear as **e-** or **o-** :

emuana/omuana	child (double prefix **emu-/omu-**)

With some classes one of these IV's is more often found than the other. There are sometimes implications in the choice of one rather than the other, too. These questions are irrelevant here, so to avoid having to quote an IV, nouns are given in their single prefix form, e.g. **muana** ' child '. This gloss is grammatically incorrect out of a context, as use of the single prefix is confined to unstable nouns as object of a verb in a negative clause or when indefinite.

ke twamona muana ko	we didn't see a/the child
twamona muana	we saw a child

and nouns with an element prefixed :

meeso mamuana	eyes of a child
imuana	it is the child

Use of the single prefix form outside these contexts implies stabilization :

muana twamona	it is a child (that) we saw
muana wabwa	it is a child (who) fell down
muana	it/he/she is a child

Where the noun is unstable and definite, the double prefix is normally used :

omuana wabwa	the child fell down
twamon' omuana	we saw the child

Single prefix forms often have different tone-patterns from corresponding double prefix forms. It is convenient to quote the single rather than the double prefix form, but not to give the correct gloss ' it is (a) . . .' every time, so the single prefix form is quoted with the grammatically incorrect gloss.

Basically there are eighteen noun classes, numbered 1–19. Class 12 is omitted [7] and in addition there are Classes 1a and 2a controlling agreements of Classes 1 and 2 but having different noun prefixes.

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[7] There is no system of concordial agreement corresponding to Class 12 in other Bantu languages, of which the class prefix is **ka-** or similar. There are however suggestive forms like **kala** ' already, long since ', cf. **vala** ' far away '.

There is a possible range of four prefixes for any noun class :

(*a*) C stem prefix : before stems beginning with a consonant
(*b*) V stem prefix : before stems beginning with a vowel
(*c*) Extra prefix
(*d*) Augment prefix

(*c*) and (*d*) will be explained shortly.

The C and V stem prefixes are sometimes dramatically different :

Class 5 : C stem prefix zero **vata** village
V stem prefix **di-** **diambu** word (stem **-ambu**)

The V stem prefix is often of CV- or V- shape, and the vowel is subject to various distortions :

Assimilation : **vuuma** place, Class 16 ; prefix **va-**, stem **-uma**, **va-u** to **vuu**

Coalescence : **meeso** eyes, Class 6 ; prefix **ma-**, stem **-isu** (cf. sg. **diisu** Class 5) ; **ma-i** to **mee**

Elision : **lose** face, Class 11 ; prefix **lu-**, stem **-ose** ; **lu-o** to **lo**

Contraction : (*a*) **mwalakazi** nursing mother, Class 3 ; prefix **mu-**, stem **-alakazi** ; **mu-** + four-syllable V stem to **mw-**

(*b*) **mambu-maya** four words, cf. **maambu** words ; vowel contraction in first component of a compound

These distortions are *not* included in the statement of the V stem prefix shape, though some examples may contain them.[8]

When a prefix is attached to a complete noun in another class, i.e. when the result can control agreement in both classes, the first prefix is said to be an *extra prefix* :

kuzaandu dyannene at a market of greatness (a big market)

ku- is a Class 17 prefix ; **zaandu** is a Class 5 noun (zero prefix) ; **dya-** is the possessive prefix of Class 5.

kuzaandu kwamoneka vo at the market (it) appeared that . . .

Here the subject prefix of the verb, **kw-**, is in Class 17.

An augment prefix is more difficult to define. There exist many sets of related nouns such as the following :

lloka	to bewitch (stem **-loka**), Class 15
nndoki	witch, Class 9
kinndoki	witchcraft, Class 7

ki- in **kinndoki** looks like an extra prefix, since **nndoki** exists as a separate word, but **kinndoki** only controls prefixes of Class 7, never of Class 9. The element identical

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[8] A different method of citation is used for adjectival prefixes, see section 2.4.

in shape with the Class 9 prefix is here called by Professor Guthrie's term, an ' augment ', and prefixes occurring before such elements are called *augment prefixes.*

There are very many other nouns where the prefix is followed by an element resembling a prefix, but for which no other words exist supporting a relationship of the **kinndoki/nndoki** kind. Two cases in point are :

kimbvumina milk **madioko** cassava

mbv looks like Class 9 prefix NA- + **v**, but ***mbvumina** does not exist ; **di** looks like Class 5 V stem prefix **di-**, but although **dioko** ' piece of cassava ' does exist, **di-** cannot be considered a prefix in either class. The pairing is **di-/ma-**, not **di-/madi-**. It so happens that the prefix before stems of this kind which look as if they have an augment, is always identical in shape with the augment prefix, and they are therefore treated here as augmented stems. This decision is open to objection, but certainly simplifies the task of description.

Two classes present further problems.

Classes 4 and 10, both plural classes, have an additional prefix which is attached to what is apparently a noun in the same class as the prefix. It so happens that the corresponding singular class in each case has C stem prefix identical with that of the plural class.

ntti	tree ; Class 3, prefix NR-, stem **-ti**
ntti	trees ; Class 4, prefix NR-, stem **-ti**
mintti	trees ; Class 4, prefix **mi-**, stem **-ntti**

ndzo	house ; Class 9, prefix NA-, stem **-zo**
ndzo	houses ; Class 10, prefix NA-, stem **-zo**
zindzo	houses ; Class 10, prefix **zi-**, stem **-ndzo**

mintti and **zindzo** are found only when there is no item immediately following which contains a concord :

ntti myayiingi	many trees (**mya-** Class 4 possessive prefix)
twazeenga mintti	we cut down some trees (no item with concord follows)

In a later part of the context there may be an item in concordial agreement :

Twazeenga mintti. Nwanata myo e ? (**myo** object substitute of Class 4)	We cut down some trees. Did you carry them ?

The question is : are **mi-** and **zi-** extra or augment prefixes ? **mi-** appears as augment prefix of Class 4 in, e.g., **minkhiti** ' traders ', cf. **nkhiti** ' tradesman ', Class 9 ; but Class 10 has no augment prefix otherwise. The pattern of agreement tells us nothing : an extra prefix is defined as one which does not destroy the pattern of agreement of the class of the noun to which it is attached, and in **mintti** and **zindzo** it is impossible to see whether the first prefix is controlling the agreement, or the second prefix-like element. If the latter is a prefix of the plural class, it will control the same agreements. If it is an augment, it will not control agreements, but the end result in this case is the same. To avoid setting up yet another type of prefix, these additional prefixes of Classes 4 and 10 are counted as augment prefixes. As will be seen, no class has extra *and* augment prefixes, and in a different type of description they might be subsumed into one category. That a third and perhaps fourth category for extra and augment prefixes is needed is shown by Classes 5 and 2 :

Class 5

C stem prefix	zero	**vata**	village, pl. **mavata** (Class 6)
V stem prefix	**di-**	**diambu**	word, pl. **maambu** (Class 6)
Augment prefix	**di-**	**dinkhondo**	plantain, pl. **mankhondo** (Class 6)

dinkhondo cannot be included under C stems, although the prefix is followed by C, since **di-** is not found before the majority of stems with single C at commencement of stem. Here the augment prefix is the same as for the V stem.

Class 2

C stem prefix	**a-**	**atadi**	overseers, sg. **nttadi** (Class 1)
V stem prefix	**wa-**	**waana**	children, sg. **muana** (Class 1)
Extra prefix	**a-**	**ammbuta**	elders, cf. **mmbuta** elders (Class 10, prefix NA-)

Here the extra prefix is the same as for C stems, but cannot be called a C stem prefix, because **mmbuta** still controls Class 10 agreements :

ammbuta zeeto bavovaanga our ancestors used to say

zeeto ' our ' has Class 10 agreement, **ba-** is the subject prefix of Class 2.

The full range of prefixes for classes not including R in any of their prefixes is shown in Table III.

TABLE III

NOUN CLASS PREFIXES NOT CONTAINING R

Class no.	C stem prefix	V stem prefix	Extra prefix	Augment prefix
1a	zero	unrecorded	none	none
2	**a-**	**wa-**	**a-**	none
2a	**aki-**	unrecorded	none	**aki-**
5	zero	**di-**	none	**di-**
6	**ma-**	**ma-**	none	**ma-**
9	NA-	NA-	none	none
10	NA-	MA-	none	**zi-**
11	**lu-**	**lu-**	none	none
13	**tu-**	**tu-**	none	none
16	**va-**	**va-**	**va-**	none
17	**ku-**	**ku-**	**ku-**	none
18	**mu-**	**mu-**	**mu-**	none
19	unrecorded	**fi-**	none	**fi-**

2.31 *Classes 7, 8, 14, 15*

These classes all have R- as the C stem prefix, with V stem and augment prefixes of (C)V- shape.

Class 7 C stem prefix R-
V stem prefix **ki-**
Augment prefix **ki-**

Examples may be shown contrasting with Class 5 nouns which have zero prefix, or verb stems in the case of derivatives.

Examples

C stem prefix R- :

ddiya	delay
ffu	custom
kkwa	yam (**kwa** a few, Class 5)
kkono	portion (**kono** stop/chapter)
llumbu	day
mmoko	conversation (**-mokena** converse)
nnoona	example
sse	colour (**se** father)
tteevo	breath
vvaangu	creature (**vaangu** action ; **-vaanga** make, do)
wwiisa	influence
yyitu	relative, kinsman
zziingu	life (**-ziinga** live)

V stem prefix **ki-** :

kiana	garden
kielo	door
kiozi	cold
kiufuta	sweat
kyalakazi	nursing-place/period

Augment prefix **ki-** :

kinndoki	witchcraft (**nndoki** witch, Class 9 ; **-loka** bewitch)
kinndende	child, infant
kimuanda	spirituality (**muanda** spirit, Class 3)
kinkhuikizi	belief (**-kuikila** believe)
kingudi	motherly position/behaviour (**ngudi** mother, Class 9)
kimbvumina	milk
kinyya	challenge

The last example, **kinyya**, shows R in a -NR- augment.

Class 8 C stem prefix R-
V stem prefix **yi-**
Augment prefix **yi-**

Class 8 is the plural class for nouns in Class 7, though in many cases there is no corresponding plural, e.g. **tteevo** ' breath ' is Class 7 only. Some Class 6 plurals of Class 5 items are shown for comparison.

C stem prefix R- :

ffu	customs
kkono	portions (**makono** chapters)
sse	colours (**mase** fathers)
vvaangu	creatures (**mavaangu** actions)
yyitu	relatives, kinsmen

V stem prefix **yi-** :

yiana	gardens
yielo	doors

Augment prefix **yi-** :

yinndende	children/infants
yinyya	challenges

Class 14 C stem prefix R-
V stem prefix **u-**
Augment prefix **u-**

Few Class 14 nouns have plurals ; where these exist they are usually in Class 6.

Examples

C stem prefix R- :

ttadi	mineral (**tadi** stone, Class 5)
vviimpi	health (pl. **maviimpi**, Class 6)
nnene	greatness
kkaka	otherness (e.g. **muana wakkaka** child of otherness, i.e. another child)
lleemvo	obedience
zzayi	knowledge (**-zaaya** know)

V stem prefix **w-** :

woonga	fear
walakazi	tender care, as of a nursing mother for her child

Augment prefix **u-** :

unkhabu	courage
unlleeka	gentleness
ungudi	motherly care (**ngudi** mother, Class 9)
ummbakuuzi	understanding (**-bakula** understand)
ulolo	number (large)

unlleeka shows R in an augment -NR-.

It may be asked what is the justification for including **ulolo** among augmented stem forms. Augments are prefix-like elements, and there are zero prefixes, so the possibility of zero augments cannot be excluded. There is no proof for this, but clearly the overwhelming number of C stems with R- prefix justifies the setting up of R- and not **u-** as the C stem prefix ; further, **ulolo** has a prefix identical with the augment prefix.

Class 15 C stem prefix R-
V stem prefix **ku-**
Augment prefix **ku-**

This class contains only verbal infinitives.[9] The term ' augment prefix ' has a special interpretation here : the augment prefix occurs only before *object infixes.* It so happens that all save one of the object infixes has shapes identical with one or more class prefixes :

-NA- 1st pers. sg., cf. C stem prefix Classes 9 and 10
-R- 2nd pers. sg., cf. C stem prefix Classes 7, 8, 14, 15
-NR- 3rd pers. sg. (Class 1), cf. C stem prefix Classes 1, 3, 4 (see 2.32)
-tu- 1st pers. pl., cf. C stem prefix Class 11
-a- 3rd pers. pl. (Class 2), cf. C stem prefix Class 2

The 3rd person pl. infix has an alternative, **-ba-**.

-ki- reflexive, cf. V stem prefix Class 7
-yi- reflexive, cf. V stem prefix Class 8

The exception is the 2nd person pl. infix **-nu-**.

Examples may be contrasted with the imperative of the verb, where this has the structure R-**a**, or with Class 5 nouns having zero prefix.

Examples

C stem prefix R- :

bbaka	to seize (**baka** ! seize !)
ddya	to eat (**dya** ! eat !)
ffuunda	to complain (**fuunda** a thousand)
kkala	to be (stem **-kala**)
kkala	to deny (stem **-kkala**)
lloonga	to learn (**loonga** dish)

---

[9] Three other nouns are sometimes assigned to this class :

kutu	ear, pl. **matu** (Class 6)
kuulu	foot, leg, pl. **maalu** (Class 6)
kooko	hand, arm, pl. **mooko** (Class 6)

kutu does not fit into the prefix range set up for Class 15, since it has C stem but prefix **ku-**. I see no reason to postulate a zero augment here, since Class 17 lies ready to hand, with C stem prefix **ku-**, e.g. **kula** ' far away '. The three form a semantic group which is non-verbal and for these reasons I have assigned them to Class 17.

mmona	to see (**mona** a view)
nnwa	to drink (**nn̲wa** mouth, Class 3 ; see 2.32)
ssoneka	to write (**sonekeno** writing-place)
ttala	to look at (**tala** ! look !)
vvata	to cultivate (**vata** village)
wwuta	to give birth (**wuta** birth-event)
zzola	to love (**zola** ! love !)

V stem prefix **ku-** :

kuenda	to go
kuiza	to come

Augment (infix) prefix **ku-** :

kummbaka	to seize me ; infix -NA-
kubbaka	to seize you (sg.) ; infix -R-
kumbbaka	to seize him ; infix -NR-
kutubaka	to seize us ; infix **-tu-**
kunubaka	to seize you (pl.) ; infix **-nu-**
kuabaka/kubabaka	to seize them ; infix **-a-/-ba-**
kuyibaka	to seize oneself ; infix **-yi-**

There is one peculiarity. With infix **-ki-** as reflexive, there is frequently but not invariably zero prefix :

(ku)kibaka	to seize oneself

2.32 *Classes 1, 3, 4*

These three classes have NR- as the C stem prefix.

There is a problem in the identification of some nouns in Classes 1 and 3. These two classes have almost identical prefixes and most of their agreements are identical also :

onkkeento wabwa	the woman fell down (Class 1)
ontti wabwa	the tree fell down (Class 3)

Class 3 differs from Class 1 in having an object substitute **wo** instead of an infix -NR-, but this is often not much help in deciding to which class a noun belongs. Firstly, there are many ' ambivalent ' nouns of this kind which have plurals in Class 2 *and* in Class 4. The usual singular/plural pairing is 1/2 and 3/4.

nttadi	overseer (Class 1 ? Class 3 ?)
atadi	overseers (Class 2)
(mi)nttadi	overseers (Class 4)

Secondly, Zoombo operates a ' logical ' agreement, whereby nouns in any class, if they denote human beings, can control Class 1/2 concords as well as those of their own class :

se dyamuana wavova the father of the child spoke (**se** Class 5 ; **dya-** Class 5 possessive prefix ; **w-** Class 1 sp)

It may be objected that this is no different from the double control exerted by a noun with extra prefix, but if this argument is followed, zero extra prefixes will have to be established for almost every class. This particular pattern is semantically limited, only nouns denoting persons (and sometimes animals) being concerned. One might surmount the difficulty by regarding sentences of this kind as having a break or hiatus, paralleled in English by, e.g., ' the father of the child, he spoke '.[10]

The solution adopted here is to regard **nttadi/atadi** as instances of Classes 1/2 and **nttadi/(mi)nttadi** are assigned to Classes 3/4 ; **nttadi** (Class 1) and **nttadi** (Class 3) are homophonous.

Class 1 C stem prefix NR-
V stem prefix **mu-**
No augment or extra prefix recorded

Examples are compared with corresponding plurals in Class 2 and sometimes with related verbs.

Examples

C stem prefix NR- :

mbbuunzi	younger sister (**abuunzi**)
mffidi	leader (**afidi** ; **-fila** lead)
nkkeento	woman (**akeento** ; also **makeento** Class 6 ; cf. **nkheento** (Class 9) female animal)
nkkuundi	friend (**akuundi**)
nlloongi	teacher (**aloongi** ; **-loonga** teach)
nṉati	porter (**anati** ; **-nata** carry)
nttadi	overseer (**atadi** ; **-tala** look at, see to)
nwwuti	woman giving birth (**awuti** ; **-wuta** give birth)
nzzodi	lover (**azodi** ; **-zola** love)

V stem prefix **mu-** :

muana	child (**waana**)
mwalakazi	nursing mother (**walakazi**)

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[10] See Malcolm Guthrie, *Bantu sentence structure*, School of Oriental and African Studies, University of London, 1961, p. 20, Kongo sentence 15. The example given shows a sentence rendered as ' the birds we caught yesterday we have sold ', ' the . . . yesterday ' being the section in hiatus relationship, since it ' plays no part in the structure of the last . . . items, which by themselves form a complete sentence. It is simplest therefore to regard such a section as being supported by the sentence it precedes '. Although Guthrie's example has an ' object ' in hiatus relationship, and mine has a ' subject ', the two are I think comparable.

Class 3 C stem prefix NR-
V stem prefix **mu-**
Augment prefix **mu-**

Examples may be compared with Class 9 nouns having same C_1 and with related verbs. Class 9 has prefix NA-.

Examples

C stem prefix NR- :

mbbu	sea (**mmbu** mosquito)
mffunu	necessity (**mpfumu** chief)
nkkuumbu	time, occasion (**nkhuumbu** name)
nkkalu	denial (**-kkala** deny ; **nkhalu** calabash)
nlluunzu	pain
nn̲wa	mouth (**nndwa** act of drinking, **-nwa** drink, **nnwa** to drink, Class 15)
mppata	unit of currency (**mphatu** field)
nsse	race, type (**ntse** rawness)
nttadi	overseer (**nthala** act of looking, **-tala** look at)
mvvovo	expression (**mbvova** act of speaking, **mphovelo** way of speaking, **-vova** speak)
nzzobo	paste (**ndzoba** act of making into paste, **zoba** make into paste)
nyya	a foursome (**-ya** adjective stem)

V stem prefix **mu-** :

muini	sunlight
muenze	virgin
muanda	spirit
moolo	lazy person (stem **-olo**)

Augment prefix **mu-** :

munndele	European
munkhoondwa	one who lacks (**-koondwa** lack)
munkhuikizi	believer (**-kuikila** believe)
mumphodi	one who draws down (on himself) (**-vola** draw down)
muntse	sweet-cane

One noun apparently has the C stem prefix before a V stem : **nwwoole** ‘ a pair ’, cf. **-oole** ‘ two ’, adjective stem.

Class 4 C stem prefix NR-
V stem prefix **mi-**
Augment prefix **mi-**

Class 4 nouns are often plurals of Class 3 nouns, with which they are compared here.

C stem prefix NR- :

nkkuumbu	times (**nkkuumbu**)
nsse	races, types (**nsse**)
nttadi	overseers (**nttadi**)
mvvovo	expressions (**mvvovo**)

V stem prefix **mi-** :

miina	natural laws
mienze	virgins (**muenze**)
mianda	spirits (**muanda**)
miolo	lazy people (**moolo**)

Augment prefix **mi-** :

minkkuumbu	times (**nkkuumbu** Classes 3 and 4)
minsse	races, types (**nsse** Classes 3 and 4)
minttadi	overseers (**nttadi** Classes 3 and 4)
minndele	Europeans (**munndele**)
minkhoondwa	people who lack (**munkhoondwa**)
mintse	sweet-canes (**muntse**)

2.4 *Adjective* (*long series*) *class prefixes*

Adjectives (long series stems) form a very small group and the class prefixes are abstracted from material much less ample than that for nouns. There are also restrictions of co-occurrence : **-kwa** ' few ', ' how many ? ' is confined to agreement with countables and never appears with a singular class or a noun denoting an uncountable quantity.

-kke ' too small ' only occurs stabilized, e.g. **kiana kikke** ' the garden is too small '.

The classes display prefix ranges similar to those for nouns. There are C stem, V stem and augment prefixes. Particularly common are augment prefixes before elements of the same shape as C or V stem prefix, in some classes but not in others, for the numerals ' one ' to ' five '; **-mosi** ' one, same ' and **-kke** ' too small ' present special problems (see below).

Examples from Classes 2, 4 and 10 serve to illustrate the prefix ranges ; V stem prefixes are never found uncontracted so are shown in contracted form :

Class 2

C stem prefix **a-** :	**atatu**	three (stem **-tatu**)
V stem prefix **w-** :	**woole**	two (stem **-oole**)
	waaka	other (stem **-aaka**)
Augment prefix **a-** :	**awoole**	two (cf. **woole**)

Class 4

C stem prefix NR- :	**nttatu**	three
V stem prefix **my-** :	**myoole**	two
	myaaka	other
Augment prefix **mi-** :	**mimyoole**	two (cf. **myoole**)
	minttatu	three (cf. **nttatu**)

Class 10

C stem prefix zero :	**tatu**	three
V stem prefix **z-** :	**zoole**	two
	zaaka	other
Augment prefix **zi-** :	**zizoole**	two (cf. **zoole**)
	zitatu	three (cf. **tatu**)

Augment prefix forms occur when there is no controlling noun immediately preceding and are termed ' pronominal forms ' in some grammars. They may be compared with the use of the Class 10 noun augment prefix (see 2.3).

A problem arises when the forms for **-mosi** ' one, same ' and **-kke** ' too small ' are examined.

Class 4

mm̱osi, C stem prefix NR-	
mimosi, augment prefix **mi-**	**mikke**, augment prefix **mi-**

but there is no augment of -NR- shape as one might expect, to parallel **minttatu**, for either of the forms with augment prefix. The absence of a C stem prefix form for **-kke** suggests that this stem should be regarded as an augmented stem (? zero augment, ? -R- augment) ; the presence of a typical C stem prefix for **-mosi** suggests that this a C stem, and has zero augment in **mimosi**.

Class 2

amosi	**akke**

This class has **a-** as C stem prefix and augment prefix. There is nothing to parallel either **woole/awoole** or **mm̱osi/mimosi**. We may have one or two pairs of homophones here, and this does not help to identify **-mosi** and **-kke** as either C stems or augmented stems.

Class 1

mm̱osi, C stem prefix NR-	**nkke**, C stem prefix NR-
umm̱osi, augment prefix **u-**	

-mosi and **-kke** are both treated as C stems ; **umm̱osi** has an augment of the shape of the C stem prefix, NR-.

Class 10

zimosi, augment prefix **zi-**	**zikke**, augment prefix **zi-**

Here there is no alternative but to regard both stems as augmented, with zero augment. The C stem prefix is also zero, so this is not impossible.

This problem has been aired at some length to show the dubious status of **-mosi** and **-kke.** They are sometimes treated as C stems, sometimes as augmented stems. This fact becomes of importance when we come to consider classes where R- has appeared as a noun class prefix allomorph. In view of the general resemblance of noun and adjective class prefixes, we might expect to find a similar situation ; on the other hand, the position for Class 10 warns us that these expectations may not necessarily be fulfilled. If evidence from **-mosi** and **-kke** is all we have to go upon, then nothing is proved. In fact these two stems are the only possibilities for C stem agreement with some classes ; if we expect R- and do not find it, this does not imply that the C stem prefix is other than R-, the class may simply be using an augment prefix before **-mosi** and **-kke,** as does Class 10. The condition for R- may not exist, and the C stem prefix has to go as unrecorded.

This is the case with Classes 7, 14 and 15, and here I have chosen (in a rather cowardly way) to side-step the issue and term the **-mosi/-kke** prefix ' other prefix '.

Class 7

V stem prefix **ky-** :	**kyaaka**	other
Other prefix **ki-** :	**kimosi**	one, same
	kikke	too small

Class 14

V stem prefix **w-** :	**waaka**	other
Other prefix **u-** :	**umosi**	one, same
	ukke	too small

Class 15

V stem prefix **kw-** :	**kwaaka**	other
Other prefix **ku** :	**kumosi**	one, same
		(**-kke** form unrecorded)

However, R- does occur as the prefix allomorph of one class, and in NR-prefixes for other classes.

2.41 *Class 8*

C stem prefix R- :	**ttatu**	three (stem **-tatu**)
	yya	four (stem **-ya**)
	kkwa ?	how many ? (stem **-kwa**)
V stem prefix **y-** :	**yoole**	two
	yaaka	other
Augment prefix **yi** :	**yiyoole**	two
	yikkwa ?	how many ?
	yimosi	same
	yikke	too small

-kke and **-mosi** are treated as augmented stems. There is an interesting variant of the augmented form for ‘ two ’, **yiyyoole.** This looks like a double augment, -R- + **-y-**.

2.42 *Classes 1, 3, 4*

All these classes have NR- as C stem prefix.

Class 1

C stem prefix NR- :	**mm̲osi**	one, same
	nkke	too small
V stem prefix **w-** :	**waaka**	other
Augment prefix **u-** :	**umm̲osi**	one (cf. **mm̲osi**)

-mosi and **-kke** have C stem prefix here ; or rather, the C stem prefix is set up on the basis of these two forms.

Class 3

C stem prefix NR- :	**mm̲osi**	one, same
V stem prefix **w-** :	**waaka**	other
Augment prefix **u-** :	**umm̲osi**	one, same (cf. **mm̲osi**)
	ukke	too small

-mosi in this class is a C stem and **-kke** is an augmented stem.

Class 4

C stem prefix NR- :	**mm̲osi**	one, same
	nttatu	three
	nyya	four
V stem prefix **my-** :	**myoole**	two
	myaaka	other
Augment prefix **mi-** :	**mimyoole**	two (cf. **myoole**)
	mimosi	same
	mikke	too small

-mosi is a C stem, but in **mimosi** has to be taken as an augmented stem ; **-kke** is an augmented stem.

Thus R enters into the adjective prefix system in much the same way as into the noun prefix system, but its occurrences are more limited.

3.0 SYLLABICITY OF REINFORCED CONSONANTS AND NASALS IN COMBINATIONS

Judgment as to whether any element is syllabic or not depends upon the definition chosen for ‘ syllable ’. In Zoombo the only workable definition is ‘ tone-bearing element ’.

It is necessary to distinguish between *tone* and *pitch* in this context. A high pitch is the exponent of a high tone, analogous to the way in which a specific nasal consonant, say **m**, is an exponent of N. In Zoombo a high pitch can be spread over a vowel and the following consonant—but this does not necessarily imply that the ' two ' high pitches are the exponents of two tones.

Examples from the past narrative tense will illustrate this. There are two tone-classes of verbs in Zoombo, here simply numbered I and II.

I		II	
áwa	they heard	——	(no corresponding example)
ábaka	they seized	**anáta**	they carried
ásadisa	they helped	**amókena**	they conversed
ázayakana	they became known	**avílakana**	they forgot

In Set I the high pitch of **á-** is spread over the following **w, b, s, z** and in Set II the low pitch of **a-** is spread over the following **n, m, v**. Similarly the high pitch of **-í-** in **avílakana** is spread over the following **l**, though a corresponding spread is almost impossible to detect when the following consonant is voiceless, as in **anáta, amókena**. A vowel following a consonant with a high ' spread ' of this kind may often have a slight high-fall at the beginning. In each set, however, there is only one high *tone*. It can be described for Set I as ' high tone on the pre-stem syllable ' and for Set II as ' high tone on the first stem syllable '. If this is not accepted, the following arguments will not be convincing.

Conveniently, the elements -R-, -NA- and -NR- all occur in a comparable context, that of verb with object infix. Using verbs from Set I above, and the same past narrative tense, we can compare forms having infix containing a vowel with those having vowel-less infix.

Infix -(C)V-		*Infix without vowel*	
atúbaka	they seized us	**ábbaka**	they seized you (sg.)
anúbaka	they seized you (pl.)	**ámmbaka**	they seized me
aábaka	they seized them	**ámbbaka**	they seized him
abábaka		**ã́bbaka**	

These can be described as before for Set I without infix : high tone on the pre-stem syllable. The infixes without vowels cannot bear this high *tone*, though they all have high *pitch* spread over them from the preceding **á-**. If they were syllabic according to the definition being used, they would have high pitch—but **a-** would not, as when **a-** is followed by an infix containing a vowel.

If the infixed elements without vowels are taken as syllabic, the **-b-** of **-baka** in the left-hand column must be taken as syllabic too ; it also has high pitch. I find also great difficulty in talking of a ' syllabic nasal ' for a case like **ã́bbaka** where there is no nasal consonant, only nasalization of the vowel !

The conclusion seems inescapable that in Zoombo at least there are no syllabic nasals, nor are reinforced consonants syllabic.

4.0 REINFORCEMENT IN OTHER DIALECTS

In Mayombe, -R- is an allomorph of the class prefix of Classes 7, 8, 14, and 15, of the 2nd pers. sg. infix, and of the **-ku-** infix of tenses, though it is not recorded after nasals except where the context is incomparable. Bittremieux uses the Kongo term **ki'katila ki ngolo** 'strong stretching' for -R-, the apostrophe indicating reinforcement. In Ngombe data the -NR- combination is attested.

llekwa	thing; Class 7
ffiimpa	to examine; Class 15, stem **-fiimpa**

But the Ngombe noun class prefix system differs in many respects from Zoombo and a full description cannot be given here.

Some information given in published work suggests that there may be parallels to R elsewhere in Koongo, if not of exactly the same nature. For instance, K. van den Eynde[11] quotes instances of a 'syllabic consonant or semi-vowel' as a prefix:

'y-ya	four
'v-vwa	nine

This is reminiscent of the Class 8 adjective prefix R- illustrated in 2.41 (**yya**, stem **-ya**). ('Nine' is not an adjective stem in Zoombo.)

However for Laadi, Jacquot[12] states that reinforcement is definitely not found. The 2nd pers. sg. infix, for instance, is analysed by Jacquot as **-u-**, which always appears in combination with 'Class 20' zero/**ku-** (= my tense sign, which in Zoombo is -R-/**-ku-**). Apparently zero + **-u-** is realized as zero, while **-ku-** + **-u-** is realized as **-ku-**. In Zoombo cases comparable to those which he cites, **-ku-** is an allomorph of the tense sign, but the infix is represented as -R-:

Laadi		*Zoombo*	
nikukuba (ni-ku-u-kuba)	I hit you	**ikukkuba (i-ku-R-kuba)**	I shall hit you

R is only proved for three dialects, but suggested for another and definitely absent from yet another. It is hoped, however, that the appearance of this article may stimulate workers in other parts of the Koongo field to bring forward any evidence they may have of parallels to reinforcement in their material.

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[11] *Eléments de grammaire yaka* (cited in n. 5, above), p. 8.

[12] A. Jacquot, personal communication; see also 'Forme du pronom objet de 2ème personne du singulier en "Kikongo"', *JAL*, VI, 1, 1968, 58–60.

REFLECTIONS ON THE CLASSIFICATION OF AFRICAN LANGUAGES

WITH SPECIAL REFERENCE TO THE WORK OF SIGISMUND WILHELM KOELLE AND MALCOLM GUTHRIE

By DAVID DALBY

Introduction

The publication of Malcolm Guthrie's *Comparative Bantu*[1] has not only marked an important stage in the development of Bantu philology, but has also brought us to the point where we need to reassess our approach to linguistic comparison and classification in Africa as a whole. The comparative study of Bantu languages has been developed and refined over a period of more than a century, and Bantu has become one of the most important and successful areas of philological enquiry outside Indo-European. As a result of this development, the present level of Bantu philology stands in marked contrast to the relatively unsophisticated techniques which are still often applied elsewhere in the African field.

The present paper is devoted to a consideration of the principles which need to underlie any sound classification of African languages, and attention is directed especially to the classificational work of two scholars : Sigismund Wilhelm Koelle and Malcolm Guthrie. The pragmatic approach of Koelle and Guthrie is contrasted with the historical approach of Joseph H. Greenberg, and reference is also made to the work of Diedrich Westermann, standing in some ways as a link between the classifications of Koelle and Greenberg. The paper concludes with the presentation of an experimental framework for the referential classification of African languages.

Sub-Saharan Africa is linguistically one of the most complex and fragmented areas in the world, and the detailed recording of all its languages, approaching one thousand, still represents a major task for descriptive linguists. Scholarly curiosity made it inevitable, however, that the comparison and classification of these languages should have begun long before the availability of adequate descriptive data, the first attempt having been made at the beginning of the nineteenth century.[2] Since then a whole series of classifications and reclassifications has been published, from which an important feature has emerged : certain broad continental groupings have been more readily discernable than the intermediate (sub-)groupings of which they are composed. Thus it was that the unity of the Bantu languages was recognized over a century ago,[3] whereas we are still without any detailed historical sub-classification of those languages. Similarly, the

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[1] Malcolm Guthrie, *Comparative Bantu*, Farnborough, 1967–70.

[2] J. S. Vater, *Mithridates*, IV, 1814.

[3] See C. M. Doke, 'The growth of comparative Bantu philology', in C. M. Doke and D. T. Cole, *Contributions to the History of Bantu Linguistics*, Johannesburg, 1961, 55 ff.

structural basis of the two most extensive of Greenberg's continental groupings, namely Niger-Congo (including Bantu)[4] and Afro-Asiatic,[5] was recognized in the nineteenth century, whereas his current sub-classification of the sub-Saharan languages within these groupings remains dubious.

Both Guthrie and Greenberg have been well aware of the difficulties of sub-classification. In his *Classification of the Bantu Languages*,[6] Guthrie took care to emphasize its tentative and experimental nature, just as twenty years later, in the four-volume work which he has sub-titled ' an introduction ', he has drawn attention to the great amount of work which remains to be undertaken in the Comparative Bantu field (' the work does no more than lay the foundation for what must be an ever-expanding subject . . .'). Greenberg has likewise stated the tentative nature of his sub-classification of Niger-Congo, and it is unfortunate that some scholars should have overlooked this caveat.[7] They have perhaps misinterpreted the opening sentence of Greenberg's first chapter (' The present volume contains a complete genetic classification of the languages of Africa '), in which the word ' complete ' was clearly intended to be quantitative rather than qualitative.

Guthrie and Greenberg, like Koelle and Westermann before them, have recognized the need to employ structural as well as lexical criteria in any form of linguistic comparison or classification. Such criteria may be used to establish either the ' inclusivity ' or the ' exclusivity ' of any linguistic grouping, and—since this distinction between inclusive and exclusive classification has been inadequately dealt with in the literature—it is important to emphasize the dichotomy. The validity of any linguistic grouping, assuming that the criteria are themselves purely linguistic, depends on its establishment not only as an inclusive unity but also as an exclusive unity. In other words, there should not only be a demonstrable relationship among all languages within the grouping, but this relationship, as it affects *any* pair of included languages, should be closer than that existing between any language within the grouping and any language that has been specifically excluded, i.e. classified elsewhere. It is this need to establish both inclusive and exclusive unity that has made it generally easier to establish the extremes of linguistic classification in Africa, at the ultimate and the immediate levels, than to establish *intermediate* levels. At the continental level, structural criteria (including grammatical morphemes) have figured more prominently than lexical criteria, and it has been relatively straightforward to recognize certain maximal groupings on this basis. The occurrence of noun-class

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[4] See P. E. H. Hair, ' Temne and African language classification before 1864 ', *Journal of African Languages*, IV, 1, 1965, 46 ff.

[5] R. Lepsius, *Nubische Grammatik mit einer Einleitung über die Völker und Sprachen Afrikas*, Berlin, 1880, xv–xviii.

[6] Malcolm Guthrie, *Classification of the Bantu Languages*, London, 1948.

[7] Joseph H. Greenberg, *Languages of Africa*, Bloomington, 1963, 8.

systems (or of apparent vestiges or rudiments of such systems) has been one of the main distinguishing criteria for the concentric Bantu/Niger-Congo/Congo-Kordofanian groupings, for example, just as the co-occurrence of grammatical gender and internal flexion has been one of the main distinguishing criteria for the Afro-Asiatic or Erythraic (alias ' Hamito-Semitic ') grouping. At the immediate local level, it has often been possible to deal with the totality of the structural systems and lexical stock of the languages involved, and it has been relatively easy to set up minimal groupings which are apparent to speakers of the languages themselves : the Akan languages of West Africa and the Nguni languages of South Africa might be cited as examples. Much less simple, however, has been the establishment of the intermediate groupings which may be assumed to lie between these immediate and ultimate levels, and it is in their attitude to this problem of ' middle-range ' classification that Koelle and Guthrie can be seen to have adopted a quite different—and more pragmatic—approach from that adopted by Westermann and Greenberg.

Sigismund Wilhelm Koelle

S. W. Koelle compiled his famous *Polyglotta Africana* [8] in the early 1850's. He was notable not only for his exceptional energy and accomplishments (completing the *Polyglotta* and three other major works on African languages by the time he was thirty) but also for his scholarly caution as a comparative linguist. Unfortunately, Koelle included no methodological discussion in his introductory remarks to the *Polyglotta*, and the haste with which it was published in England, at the same time as his other volumes and immediately after his return from West Africa and subsequent marriage, led to a number of editorial omissions and inconsistencies in layout. In spite of this, however, it is possible to reconstruct Koelle's methodological procedure by examining the overall structure of his volume and his remarks on individual sections of the work. It is important for us to do this, since the subsequent misinterpretation of the *Polyglotta* appears to have been a major factor in the faulty sub-classification of what are now termed Niger-Congo languages.

Koelle collected vocabularies from a total of two hundred African languages and ' dialects ', which he subdivided into two main parts. Part I included eighteen diverse West and ' Central ' African language ' groups ', comprising members of three of Greenberg's four current African ' families ' and without any implication by Koelle that the eighteen groups were interrelated. Part II, on the other hand, included nine so-called ' South African ' language ' groups ' (from the area between Nigeria and Malawi), confined entirely to Bantu and Semi-Bantu [9]

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[8] S. W. Koelle, *Polyglotta Africana*, London, 1854 (reprinted 1963).

[9] The terms ' Bantu ' and ' Semi-Bantu ' were not yet in use when Koelle compiled the *Polyglotta*. ' Semi-Bantu ' is used here to denote the non-Bantu class-languages of Nigeria and Cameroun (both Bantoid and non-Bantoid).

Table I
Koelle's Principles of Classification

	Geographical Criteria	Structural Criterion	Lexical (*glossarial*) Criteria	
		[presence of noun-class inflection]	*groups* of classified languages (comprising two or more languages each)	*unclassified and isolated languages* (each language having *no striking glossarial affinity* with other languages recorded)
PART I [WEST & CENTRAL AFRICAN]	(*NORTH-*)*WEST ATLANTIC*	*distinguishing themselves, like those of South Africa, by prefixal changes, or an initial inflection*	4 *groups, I A–I D*	5 *languages, XII A. b*
		with final inflection		4 *languages, XII A. a*
	NORTH-WESTERN HIGH-SUDAN		1 *family* (*Mandenga*), *II*	
	UPPER GUINEA/MIDDLE COAST *spoken on Pepper, Ivory, Gold and Slave Coasts*		3 [groups], *III A–III C*	
	(*NORTH-EASTERN*) *HIGH-SUDAN*	[with initial and/or final inflection]	4 *groups, IV A–IV D*	3 *languages, XII B*
	NIGER-DELTA		3 *groups, V A–V C*	1 *language, XII D*
	NIGER-DSHADDA [Niger-Benue]		1 *group* or *family* (*Nupe*), *VI*	
	CENTRAL AFRICAN		2 *groups, VII A–VII B*	6 *languages, XII C*
PART II: SOUTH AFRICAN	*SOUTH AFRICAN* [a] spoken by the *Atam tribes*	*distinguished by an initial inflection*	3 *groups, VIII A–VIII C*	24 *languages, XII E*
	[b] spoken by the *Moko tribes*		2 *groups* (or 1 *family*), *IX A–IX B*	
	[c] *spoken in the countries Kongo and Ngola and in the countries farther inland* (by the *Kongo* tribes)		3 *groups, X A–X C*	
	[d] *South-Eastern*		1 [group], *XI*	
	NATURALIZED IN AFRICA			*Arabic, XII F*

noun-class languages among which Koelle recognized a common structural relationship. As a supplement to these two parts, he then listed a total of forty-three individual ' unclassified ' and ' isolated ' languages [10] ' which do not evince a striking glossarial affinity with any of the languages above enumerated, or with one another, but many of which will probably show themselves members of larger or smaller families, as our knowledge of African philology increases '. From this citation, and from other points in his discussion, it is clear that Koelle's interpretation of ' classified ' depended on whether or not he felt able to assign a particular language to the same group as one or more other languages. ' Group ' emerges as the only level of relationship for which he was prepared to posit a clear ' glossarial affinity ', and the term ' family ' was used by him—with one exception—as a synonym of ' group ', especially when referring to a numerically large group of languages.[11] The sole exception, significantly, is in the case of his ' South African ' languages in Part II, where he used the term ' family ' to denote a level of relationship embracing more than one ' group '.[12] In the case of his West and ' Central ' African languages in Part I, on the other hand, there is clear evidence that he intended ' group ' (like ' family ') to represent his ultimate level of established affinity.[13] This is not of course to suggest that Koelle did not recognize the probable existence of wider affinities, ' glossarial ' *and* structural, but he remained consistent in presenting only an assessment of ' striking ' affinities and in leaving the elaboration of any wider relationships to subsequent philologists.

Since Koelle did not provide us with an overall summary of his criteria and resulting categories of classification, Table I is presented here as a key.[14] From this it can be seen that the further arrangement of his twenty-seven classified groups and forty-three unclassified and isolated languages (plus Arabic) was based upon geographical criteria, correlated with a single structural criterion, namely the presence (or absence) of noun-class inflection. The resulting geographical-structural categories were applied by Koelle to classified and unclassified languages alike, and—since he attached no ' genetic ' or historical unity to these categories—it will be appropriate for us to describe them as ' zones '. This is not Koelle's term, but it serves to emphasize the geographical rather than historical basis of his ultimate classification.

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[10] Together with four dialects of Africanized Arabic.

[11] Viz. ' North-western High-Sudan *Family*, or Mandén·ga *Family* of Languages ' ; and ' Niger-Dshadda Languages, or Nûpe Group ', referred to in text (p. 6) as ' Nûpe *family* '.

[12] I.e. in text (p. 11) to cover two groups of ' Mókō Languages '.

[13] The best evidence for this is provided by his remarks on the ' first group ' of his ' Central African languages ', where—against his own better judgment—he was persuaded to place Búdūma (a Chadic language) in the same group as Bórnu (an East Saharan language) : ' I . . . intended to rank both languages among the *unclassified*. But when I learned from . . . Mr. Norris . . . that he had been led to believe there was an affinity between them, I thought it better to place them together into one *Group* ', *Polyglotta*, p. 9 [my italics].

[14] Actual citations from the *Polyglotta* are distinguished on Table I by the use of italics.

Malcolm Guthrie

In tackling the classification of Bantu languages, Malcolm Guthrie was dealing with a more coherent linguistic area than Koelle had been, but the problems which faced the two scholars were in many ways comparable. It was possible for Guthrie to delineate a large number of immediate ' groups ', utilising linguistic criteria alone, and he was also able to establish a linguistic definition for the Bantu languages as a whole. In the latter case, the first of his two ' principal criteria ' was structural, and identical to Koelle's structural criterion, i.e. the presence of a noun-class system (' prefixal inflection ' in Koelle's terms and ' a system of grammatical genders ' in his own). Guthrie elaborated this criterion in more detail than Koelle, and also introduced a second principal criterion distinguishing his Bantu languages from the class-languages of West Africa (especially the adjacent class-languages of Nigeria and Cameroun). This second criterion, namely ' a vocabulary, part of which can be related by fixed rules to a set of hypothetical common roots ', was not of course available to Koelle, since it was dependent, by definition, on the prior establishment of hypothetical common roots by philological techniques (a task first undertaken at the end of the nineteenth century by Carl Meinhof, and subsequently extended and improved upon by Guthrie himself). The difficulty of establishing intermediate groupings within Bantu was no less great, however, than it had been for Koelle within the wider context of the *Polyglotta*, and—like Koelle—Guthrie adopted for this purpose the principle of contiguous zoning, setting the boundaries of his contiguous zones on the basis of the geographical occurrence of selected linguistic criteria : ' By *zone*, therefore, is to be understood primarily a set of groups which have a certain geographical contiguity and which display a number of common linguistic features as well '.[15] Fortunately, Guthrie provided us with a more adequate introduction to the methodology of his classification than had Koelle, and in this he emphasized the essentially *practical* nature of his approach. Both scholars were concerned to present a pragmatic classificational framework for further comparative study without in any way prejudging the results of that study.

In the introduction to his 1948 volume,[16] Guthrie discussed alternative methods of classification, and began by dismissing the ' geographical ' method employed by Cust, on the grounds that it had little or no linguistic basis. There was no

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[15] *Classification of the Bantu Languages*, p. 28 ; cf. also p. 59 : '. . . this zone [M] probably illustrates more clearly than others the basic fact that the sorting of groups into zones is primarily geographical, though with as much linguistic justification as possible ' ; and p. 73 : '. . . the group is a unit with a purely linguistic significance, whereas the zone is not '.

It should be noted that the minor geographical discontiguities which do occur in the boundaries of some zones are mainly a reflection of discontiguities within their individual constituent groups or along the overall Northern Bantu Borderline.

[16] *Classification*, 20 ff.

contradiction here with Guthrie's own use of contiguous zones, since the objection was to Cust's failure to utilize linguistic criteria in determining the boundaries of his geographical subdivisions.

Guthrie then contrasted three other approaches to linguistic classification, which may be summarized as follows :

1. *The historical method,* involving ' the establishing of a genealogical table for the language family '.
2. *The empirical method,* involving ' the drawing of isoglosses on the map in order to show the distribution of various linguistic features '.
3. *The practical method,* involving a ' modification of the empirical method ' (i.e. by the ' arbitrary ' selection of differentiating features).

Guthrie rejected the first, so-called ' historical ' method, as advocated by Carl Meinhof, and considered it unnecessary to discuss its implications and merits ' since the likelihood of its being able to produce results is so remote '. It will, nevertheless, be useful for us to return to a consideration of the historical approach to the classification of African languages later in the present paper.

The main part of Guthrie's chapter on methods of classification is devoted to the ' empirical ' and ' practical ' methods. Under the first of these, Guthrie subsumed the mapping of linguistic differentiae, including the establishment of lexical, grammatical, phonological, phonetic and tonal isoglosses. He pointed out, however, the impossibility of establishing a straightforward classification of Bantu languages on the basis of specific isoglosses, since the co-occurrence and divergence of individual isoglosses are by no means regular throughout the field : an isogloss which may coincide with others in marking a major division between language groups in one area may occur in isolation elsewhere, bisecting a single language. Guthrie consequently found it necessary to advance his practical method (presented as a ' modification ' of the empirical method), whereby flexibility would be allowed in the choice of differentiae from area to area. At the immediate level of classification, this flexibility of choice is less arbitrary, since individual languages and/or language groups are frequently demarcated by a bunching of isoglosses, especially lexical isoglosses.[17] At the intermediate level of classification, on the other hand, the selection of relevant isoglosses becomes far more arbitrary, and increasingly dependent upon the personal judgment of the classifier. Between the bunching of isoglosses at the ultimate level (distinguishing languages of apparently unrelated origin), and the bunching of isoglosses at the immediate level, there is often a staggering of isoglosses on what might be termed the ' intermediate cline '. It is this spacing out of linguistic differentiae at the intermediate level which invalidates any simple genealogical table, either for

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[17] Although difficulties may arise in distinguishing closely related languages or ' dialects ' : see Guthrie, *Classification*, 29.

the Bantu languages or for any other extensive grouping of African languages.[18] On the other hand, the rejection of this so-called ' historical ' method should not lead us to dismiss the whole concept of historical classification. The results of Guthrie's own more recent comparative work help to confirm the ultimate potential of both empirical *and* historical methods of classification in the African field.

If Guthrie's listing of the three methods of classification is reversed, then it will represent the order in which these methods may be applied. Firstly, and most urgently, there is need for a *practical* classification which will provide members of all disciplines with a straightforward and *stable* frame of reference—for a classification, in other words, which will not be subject to revision whenever a new historical hypothesis is advanced. Koelle and Guthrie, although separated by a century, were both concerned to provide such a classification for part of the African language field, and an attempt is made at the end of this paper to extend the formula for a practical classification to the continent as a whole. Once such a frame of reference has been established, it becomes possible for linguists to superimpose upon it the intricate and frequently divergent classifications which arise from an *empirical* study of specific linguistic features and their geographic distribution : the topological treatment of Guthrie's comparative data is currently providing new horizons in this direction. The third and final stage, namely an attempt at a genuine *historical* classification, can only proceed on the basis of data generated by these empirical classifications : here also Guthrie has provided a lead with his historical conclusions regarding Proto-Bantu A and B (i.e. Western and Eastern proto-dialects), based on the regional classification of his Common Bantu vocabulary.

The historical classification of African languages

In endeavouring to assess the historical (or rather pre-historical) development of African languages, we are almost entirely limited to modern, synchronic data, and—as with all pre-historical reconstructions—we can never aim at more than a partial picture. A genuine historical classification cannot aspire to the completeness or coherence of a practical classification, and we must recognize that the so-called ' historical ' or ' genetic ' classification of modern languages is a contradiction in terms. We cannot classify any modern language as an historical entity, since every language has acquired material from different sources. What we are endeavouring to do is to isolate the *inherited* material in any language (i.e. material which has been conveyed diachronically through a direct line of speakers) from material which has been acquired from other languages, or newly created, during a comparable span of time. As one's diachronic perspective is

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[18] Cf. David Dalby, ' Levels of relationship in the classification of African languages ', *African Language Studies*, VII, 1966, 171–9.

extended, so the ' core of direct retention ' within each language narrows and the ' lines of accretion ' widen, thus making the task of tracing each of these increasingly difficult. The philological method, i.e. the establishment of regular sound-correspondences and consequent isolation of commonly inherited material in related languages, is the traditional way of tackling this task, although of course not infallible. The method can only be applied satisfactorily where there is still a relatively broad core of direct retention among the relevant languages, as in the case of Bantu, although even here the traceable core of direct retention from Proto-Bantu is considerably narrower in the lexicon of any modern Bantu language than its lines of subsequent accretion. We may use the philological method to trace cores of direct retention among related languages, as they converge on a presumed ancestor language, but normally the method will transport us direct from A to Z, as from modern Bantu languages to Proto-Bantu, without throwing much light on the detailed ramifications which have intervened. To study these ramifications we need to move our sights forward and, ideally, to isolate broader cores of direct retention as they converge on presumed intermediate ancestors. In practice, however, this is no easy task, since we are then faced with the ' intermediate cline ' of linguistic relationships, where the frequent non-coincidence of linguistic differentiae hampers attempts at detailed historical interpretation.

It is customary to regard related languages as diverging increasingly with the passage of time, and the process of tracing the historical sequence of linguistic developments might be easier if this were always the case. When two related speech-communities lose contact with one another, then subsequent development within their languages can only tend in the direction of divergence (apart perhaps from fortuitous developments, such as parallel sound-shifts). If close contact is restored at a later date, however, the tendency towards divergence is likely to be reversed, and, with the establishment of a community of bilingual speakers, there will be increasing *convergence* between the two languages (represented by lines of lexical and often structural accretion, passing from one language to the other). Convergence can take place even between neighbouring languages of unrelated origin, but in this case differences in their overall structure may make it easier to separate cores of direct retention from lines ofs ubsequent accretion ; in the case of a complex of related languages like Bantu, on the other hand, we have to admit that we are unlikely ever to sort out all the overlapping effects of convergence and divergence during their history. Synchronic comparative data, and resulting topological maps, show us the distribution of isoglosses as they are *to-day*, resulting from the combined effects of linguistic convergence, divergence and retention, and of geographical displacement and stability. Since we are now acquiring a solid corpus of data in the Bantu field, it is important for us to give priority to the elaboration of techniques for its historical interpretation, even though we may recognize that such interpretation is unlikely to be definitive. It is appropriate that Guthrie should have made the first essay in the historical interpretation of his own comparative data, but the task is still only beginning : much experimentation is now required, especially statistically,[19] and it will be necessary to study the implications of similar comparative data in other linguistic areas, both inside and outside Africa.

From the point of view of reconstructing some form of historical classification for a complex of related languages, and of throwing light on ethno-linguistic movements and divergences in the course of their development, we need to pay especial attention to *irregularities* in the modern topological distribution of linguistic features. Some of Guthrie's topograms [20] display a geographical *regularity* that can best be explained in terms of the intermediate cline, i.e. the spacing out of linguistic differentiae as a result of prolonged and stable contact. But they also display a number of intervening irregularities of distribution which warrant further investigation,[21] and in directing our attention to these we are following a procedure comparable to that of the archaeologist who is guided to profitable areas of investigation by irregularities of ground-surface or of vegetation. In analysing the occurrence of these irregularities, it will of course be necessary to extend the range of data (by establishing a test-language within each group) [22] and to experiment with varying presentations of the data. As a result, one will hope to uncover intermediate, non-contiguous relationships which have been obscured by subsequent geographical displacement, and to throw light in particular on the historical relationships of the North-Western Bantu languages, where not only the historical sub-classification but also the outer demarcation of the Bantu languages remains problematical.

Any discussion of the historical classification of African languages, and of Bantu and West African languages in particular, would be incomplete without reference also to the work of Diedrich Westermann and Joseph H. Greenberg. Greenberg's first and most extensive African language ' family ', Niger-Congo, is of special importance in any theoretical discussion, not only because of the methodology which he advances for the establishment of historical or ' genetic ' relationships, but also because of the history of the ' Niger-Congo ' concept itself and of its relationship to the earlier classifications of Koelle and Westermann. In evaluating such concepts as Niger-Congo we need to bear in mind not only the

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[19] Cf. Malcolm Guthrie, ' Some uses of arithmetical computation in comparative Bantu studies ', *Transactions of the Philological Society 1964*, 1965, 108–28. See also Michael Mann, ' Internal relationships of the Bantu languages : prospects for topological research ', in David Dalby (ed.), *Language and History in Africa*, London, 1970 (in press).

[20] *Comparative Bantu*, I.

[21] E.g. the fairly sharp ' North-western line ' on Topograms T.1–T.4 (p. 102), dividing N.W. Bantu from the rest of the field ; or the closer index of relationship between A.24 and E51/E55 than between A.24 and the intervening D, E and F test-languages.

[22] Since their basis is not entirely linguistic, the zones are not of course well suited for statistical purposes, nor for the purpose of compiling distributional maps.

possible linguistic history of Africa but also the *actual* history of Western scholarship in this field. We must consider closely the way in which ideas and theories have passed from scholar to scholar, and the way in which they have sometimes become distorted in the process.

An American historian, Philip D. Curtin, has already drawn attention to the close correspondence between Koelle's classification of West African and Bantu languages and the ' recent and authoritative classification of J. H. Greenberg '.[23] Koelle consequently earns praise from Curtin as ' the pioneer classifier of West African languages, laying the base on which others were to build '. Although Curtin has noted Koelle's caution in staying clear of ' broad historical conclusions', he has nevertheless interpreted the *Polyglotta* as an *historical* classification, referring to Koelle's geographical-structural groupings as language ' families ' (at points where Koelle did *not* use the term, cf. Table I, above). As we have shown, these groupings would be better described as ' zones ', for which Koelle nowhere claims any ' striking glossarial affinity ' above the level of his constituent ' groups ' (or ' families '). It is remarkable, therefore, that the ' genetic sub-families ' of Greenberg's Niger-Congo should tally so closely with Koelle's geographical-structural zones (to use our term), and it is even more remarkable that these highly disparate ' sub-families ' (which have presumably been diverging, externally and internally, over a long period of time) should have remained in such conveniently contiguous areas. Since Koelle advanced no evidence for their general ' genetic ' status, it is reasonable for us to require subsequent justification for their promotion to the rank of ' genetic sub-families ' of Niger-Congo. For this, however, we find that Greenberg has thrown responsibility onto Diedrich Westermann : ' In his second study, Westermann . . . showed that almost all the languages of the western Sudan (i.e. the area west of Lake Chad) formed a *real unity* within which he distinguished a number of *genetic subfamilies* [my italics]. . . . The proofs presented by Westermann for the interconnection of the bulk of the languages of the western Sudan . . . is [*sic*] adequate, and the references have already been given to Westermann's material to which those may refer who wish to convince themselves first-hand ' (*Languages of Africa*, 6). Greenberg's Niger-Congo is in fact based on Westermann's West Sudanic grouping of 1927, except that Fula and Bantu have been included and Songhai excluded.

Historically, Westermann is a key figure in the development of African language studies, standing midway between the pioneer scholars of the nineteenth century, including Koelle and Meinhof, and the scholars of the mid-twentieth century, including Guthrie and Greenberg. In his early comparative work, Westermann was strongly influenced by Meinhof,[24] who had prompted him to attempt to establish the historical unity of the so-called ' Sudanic ' languages in

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[23] Philip D. Curtin, *The Image of Africa*, Madison, 1964, 399.

[24] See Diedrich Westermann, *Die Sudansprachen*, Hamburg, 1911, 5–6.

the same way that he had himself established the historical unity of the Bantu languages and was currently endeavouring to do for the so-called ' Hamitic ' languages. Unfortunately, the comparative work of Meinhof and Westermann in the Hamitic and Sudanic fields was far less successful than Meinhof's philological research among the Bantu languages, and was also marred by the racial, and even racialist, hypotheses which Greenberg has so justifiably attacked. In his original work on the ' Sudansprachen ', Westermann set out boldly to prove the existence of a ' genetically coherent language family ',[25] extending from Senegambia to East Africa, and it is significant that his subsequent comparative work represents a retreat from this over-ambitious and over-simplified approach of his earlier years. By 1927 he was restricting himself to the more obvious relationship existing among his *western* ' Sudansprachen ', and was also more cautious about the possibility of being able to establish this as a clear genetic relationship : ' In this work it is therefore *not* a question of proving that the present-day languages and language-groups have grown directly out of a previously undivided *unity*, but rather that they possess, from a phonological, morphological, etymological and grammatical point of view, a commonly inherited stock '.[26] In describing the characteristics of his western ' Sudansprachen ', and in comparing their structures and vocabularies, Westermann set up a number of constituent ' Gruppen ', but failed to explain how he had arrived at these particular groupings. He did not describe them as ' genetic sub-families ', as Greenberg implied, and at several points in his detailed discussion Westermann indicated that he was aware of the many ambiguities of relationship which existed both between and within his individual ' Gruppen '.[27] Comparison with the *Polyglotta* (which Westermann cited as one of his sources) makes it clear that Koelle's main structural-geographical groupings were used by Westermann as the basis for his ' Gruppen ', and hence by Greenberg, via Westermann, as the basis for his 'genetic sub-families'. Both Westermann and Greenberg were of course covering more languages than Koelle had had access to, and they also classified a number of languages which Koelle had left ' unclassified '. If one takes their main numerical headings, however, one finds that they correspond closely to the numerical headings originally established by Koelle : cf. Table II.

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[25] Op. cit., p. 1 : ' eine genetisch zusammenhängende Sprachfamilie '.

[26] Diedrich Westermann, *Die westlichen Sudansprachen und ihre Beziehungen zum Bantu*, Berlin, 1927, 5 : ' Es handelt sich also in dieser Arbeit nicht um den Nachweis, dass die heutigen Sprachen und Gruppen unmittelbar aus einer früher ungeteilten Einheit erwachsen sind, sondern darum, dass sie in lautlicher, morphologischer, etymologischer und grammatischer Hinsicht einen altererbten Gemeinbesitz haben '.

[27] E.g. p. 52 (close relationship of the Kru languages not only with Ga and Ewe, but also with Togo Remnant languages and with Senufo) ; p. 83 (many Cross River languages on border between Sudanic and N.W. Bantu languages) ; p. 127 (Senufo as greatly divergent branch of Gur) ; p. 207 (Songhai not really a Gur-language, but isolated ; clear relationship with Gur and with Central Sudanic, incl. Kanuri) ; p. 145 (close etymological links between Mande-tan and Togo Remnant/Gur ; and between Mande-fu and Kwa).

TABLE II

DEVELOPMENT OF KOELLE'S GEOGRAPHICAL-STRUCTURAL ZONES INTO WESTERMANN'S 'GRUPPEN' AND GREENBERG'S 'GENETIC SUB-FAMILIES (OF NIGER-CONGO)' [28]

KOELLE (1854)		WESTERMAN (1927)		GREENBERG (1963)	
I	N.W. Atlantic	V	Westatlantisch	1	W. Atlantic
II	N.W. High Sudan (or Mandenga)	VI	Mandingo (or Mande)	2	Mande
III	Upper Guinea	I a–d	Kwa	4 a–c	Kwa
IV	N.E. High Sudan	IV	Gur	3	Gur
V	Niger-Delta	I f–h	Kwa	4 e–h	Kwa
VI	Niger-Dschadda (or Nupe)	I e	Kwa	4 d	Kwa
VIII	S. African (Atam)	II	Benue-Cross	5A–5C	Benue-Congo
IX–XI	S. African		Bantu	5D	Benue-Congo

The main differences from Koelle's original presentation lie in the fact that Westermann had numbered his 'Gruppen' roughly from east to west (reversed again by Greenberg, from west to east), and that Westermann (followed by Greenberg) had included three of Koelle's zonal groupings under the heading of 'Kwa': part of the justification for this seems to lie in the fact that numerous 'Kwa' languages have apparent vestiges or rudiments of noun-class affixes (a structural criterion which was not observed by Koelle).

Only in one instance does a main heading of the Westermann/Greenberg classification correspond to a grouping for which Koelle had established a 'glossarial affinity', namely the Mande (or Mandingo) languages. This was one of the two cases in West Africa where Koelle had made one of his geographical-structural zones co-terminous with a single 'group' or 'family' (the other having been Nupe, submerged by Westermann and Greenberg within Kwa). It is a tribute to Koelle's original caution, therefore, that the Mande languages should be the only 'sub-family' of Greenberg's Niger-Congo which has not been disputed as a valid historical entity (although their actual membership of Niger-Congo *has* been

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[28] Koelle's VII (Central African) is excluded, since these languages were not included among Westermann's western 'Sudansprachen' or Greenberg's Niger-Congo; Westermann's III (Togo-Restsprachen) and Greenberg's 6 (Adamawa-Eastern) are excluded also, since none of the relevant languages was recorded by Koelle.

questioned [29]). That the ‘ genetic ’ unity of each of the other so-called ‘ sub-families ’ should have been called into doubt is scarcely surprising, since no adequate attempt has ever been made to establish such a unity for them.[30] In assembling his ‘ complete genetic classification of the languages of Africa ’, Greenberg was content to take over Westermann's West African groupings, apparently without checking their pedigree, and to give them a status which even Westermann did not attach to them. Greenberg's statement that Westermann had established ‘ a real unity within which he distinguished a number of genetic subfamilies ’ contrasts with Westermann's actual words, where he was at pains to state that he was *not* attempting to demonstrate the direct development of modern languages and language-groups from a previously undivided *unity*.

In the opening chapter of *Languages of Africa*, as also in his earlier essay on ‘ Genetic relationship among languages ’,[31] Greenberg made great play of his method of ‘ mass comparison ’, which, as he demonstrated convincingly, may serve to eliminate the effect of any fortuitous, non-historical resemblances among individual languages. In practice, however, Greenberg did not use his own method of mass comparison, but used instead Westermann's far less rigorous method of ‘ group comparison ’ (Vergleichung der Gruppen). To have applied his own method, it would have been necessary for Greenberg to have cited examples of comparison from *every* member of a constant set of languages ; this he did not attempt, but instead selected his examples—as Westermann had done before him—from *any* language or languages within each of a number of predetermined sub-groupings. In the case of Niger-Congo, these are the largely unsubstantiated ‘ sub-families ’ we have already discussed, and the grouping of his examples according to these ‘ sub-families ’ is therefore largely irrelevant. The examples do little more than confirm the existence of some fairly widespread items of

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[29] See H. G. Mukarovsky, ‘ Über die Stellung der Mandesprachen ’, *Anthropos*, LXI, 3/4, 1966.

[30] For the case against ‘ West Atlantic ’, see David Dalby, ‘ The Mel languages : a reclassification of southern " West Atlantic " ’, *African Language Studies*, VI, 1965, 1–17. For doubts about ‘ Gur ’, see G. Manessy, ‘ Rapport sur les langues voltaïques ’, *Actes du second colloque international de linguistique négro-africaine*, Dakar, 1963, 242 : ‘ Il est prudent . . . de n'accorder au terme " voltaïque " ou " gur " d'autre contenu que l'affirmation d'une communauté de structure et de vocabulaire, et de lui refuser provisoirement toute motivation d'ordre génétique ’ ; also Wm. E. Welmers's review of Greenberg's *Languages of Africa*, in *Word*, XIX, 1963, 411 : ‘ Among the Gur languages, in spite of widespread typological similarity in noun-class systems, I believe there may well be such great divergence as to demand an ultimate division into several major branches of the Niger-Congo (sub-)family ’. For similar doubts about ‘ Kwa ’, see J. H. Greenberg, ‘ History and status of the Kwa-problem ’, *Actes* . . . (op. cit.), 217 : ‘ Welmers, Wescott, Armstrong and others have privately expressed doubts as to whether Kwa is really a distinct group within Niger-Congo. Possibly it has been distinguished on typological grounds from the Benue-Congo group to which it seems most closely related ’ [although, strangely, both Greenberg and Armstrong were prepared in the same context to speak of ‘ the proto-Kwa language ’].

[31] Joseph H. Greenberg, *Essays in Linguistics*, Chicago, 1957, 42 ff.

common vocabulary among his Niger-Congo languages *as a whole*, as had already been demonstrated by Westermann. As far as West African languages were concerned, both Greenberg and Westermann were hampered by their own classificational framework, which determined the treatment of their own comparative data rather than being determined by it, and which therefore prevented them from making a careful assessment of the *actual* topological distribution of individual items. Westermann's extensive comparative word-lists indicate that such distribution is usually at a level either broader or narrower than his supposed ' Gruppen ', and the philological and topological re-analysis of these word-lists—regardless of any classificational boundaries—should now be a priority.

It is unfortunate that the misapplication of the original Koelle classification by Westermann and Greenberg should have passed unchallenged for so long, and that the scientific comparison and classification of West African languages should have been hampered for several decades as a result. Historically significant sub-groupings, like that of the Mel languages, have been submerged beneath disparate conglomerations like ' West Atlantic ', and striking non-contiguous relationships, like the close lexical correspondences existing between the Mel and Akan languages, have been obscured by intervening classificational boundaries (in this case by the boundary between ' West Atlantic ' and ' Kwa '). In the International African Institute's *Handbook of African Languages*, the languages of West Africa were presented by Westermann and Bryan [32] under a classificational framework almost identical with that in Westermann's study of twenty-five years before : they thus escaped the cautious reappraisal which Tucker and Bryan devoted later in the same series to the Non-Bantu languages of North-Eastern Africa.[33] That the International African Institute should lately have been advised to republish the Westermann and Bryan volume without revision can only be regretted. Equally regrettable is the fact that Greenberg and Berry should have chosen, as editors, to impose the same classificational framework in their current volume on the languages of sub-Saharan Africa.[34] There can be little real progress in the comparative study of West African languages until this much abused pseudo-historical classification is abandoned.

The practical (referential) classification of African languages

In contrasting favourably the practical objectives of the Koelle and Guthrie classifications with the ' historical ' objectives of the Greenberg classification, we do not of course deny the existence of far-reaching historical relationships among the languages of Africa. Outside Bantu, however, we are still at a relatively

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[32] Diedrich Westermann and M. A. Bryan, *Languages of West Africa*, I.A.I. (Handbook of African Languages, Part II), 1952.

[33] A. N. Tucker and M. A. Bryan, *The Non-Bantu Languages of North-Eastern Africa*, I.A.I. (Handbook, Part III), 1956 ; with companion volume of *Linguistic Analyses*, 1966.

[34] To be published as Volume VII in the Indiana University series *Current Trends in Linguistics*.

primitive stage in the comparative study of African languages, and the debate hinges not so much on the outcome of the historical problem as on how we can best tackle it. The absence of any practical, referential system of classification for the continent as a whole has been a considerable drawback, and has led to the acceptance of hypothetical ' historical ' classifications as actual frameworks of reference. So it is that the old Bantu/Sudanic/Hamitic language-map is now being gradually replaced in reference-works by the new Greenberg language-map. So also, in many recent works on individual African languages, descriptive linguists have chosen to ' locate ' their languages by reference to their status in Greenberg's classification. In this situation, any future historical assessments of linguistic relationships in Africa are liable to be unduly influenced by Greenberg's theories, just as Greenberg's sub-classification of Niger-Congo had in turn been predetermined by Westermann's.

In considering a possible framework for the referential classification of African languages, it is worth summarizing the principles adopted in practice by Koelle and Guthrie :

(i) the establishment of immediate ' groups ', on the basis of close linguistic affinity

(ii) the establishment of wider ' zones of reference ', on the basis of a combination of geographical convenience and selected linguistic criteria

The application of these principles to the entire language map of Africa is of course not easy, and some experimentation and debate will be required before an adequate referential classification can be arrived at for the continent as a whole. For such a complex linguistic area as Africa, the success of any referential classification will depend upon its simplicity and flexibility, and upon the ease of its correlation with previous ' historical ' classifications. If a classification of this nature can be established, replacing our previously shifting frameworks of classification with a stable referential framework, then its benefits will be comparable to those of metric conversion in other fields. Not only will it be an aid to the genuine historical study of African languages, freeing future researchers from the preconceptions of the past, but it will also facilitate the practical organization of linguistic materials. Librarians and bibliographers in particular will no longer be at the mercy of changing currents of linguistic opinion.[35]

As a suitable conclusion to this paper, an attempt has been made to suggest an experimental framework for the referential classification of African languages : details of this are set out in Table III and on the accompanying diagrammatic map. The experiment has the advantage of spotlighting some of the issues

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[35] Cf. David Dalby, ' A note on African language bibliography ', in J. D. Pearson and Ruth Jones (eds.), *The Bibliography of Africa* (Proceedings of the Nairobi Conference on African Bibliography, 1967), London, 1970. The benefit of a referential classification to scholars in non-linguistic disciplines should also not be underestimated.

involved, and it is hoped that the criticism and suggestions of other scholars will contribute to the refinement and further elaboration of this framework.[36]

The first stage of the proposed referential classification depends on the establishment of basic ' units of classification ', these being convenient units for both descriptive and comparative purposes : ideally, the member languages of each such unit should demonstrate an overall lexical and structural affinity, and should constitute an external as well as an internal unity. The 'unit of classification' so defined corresponds generally to the ultimate level of the International African Institute system of classification as employed in practice by Tucker and Bryan (although *not* by Westermann and Bryan).[37] It may thus be correlated, according to the level of its internal complexity, with Tucker and Bryan's larger unit or isolated language group (involving a number of languages) or with their isolated unit (involving a single language or dialect-cluster). For the former level the term ' complex-unit ' is here proposed, and for the latter level ' simple-unit '.[38] This two-way division is preferred to the more complicated hierarchy of the International African Institute system since it reduces the area of arbitrary personal judgment : personal judgment cannot be eliminated entirely from any classification, but its role necessarily increases with any increase in the complexity of the system employed. It is proposed to establish a simple-unit wherever an individual language cannot be conveniently grouped with one or more other languages in the terms described above, where its external relationships appear ambiguous, or where there is insufficient data for it to be classified at all. A generally conservative approach needs to be followed, so that in case of doubt two or more smaller units of classification are to be preferred to one uncertain unit.

In establishing an inventory of such units of classification, a salient feature of the African language map emerges clearly. From a total of approximately ninety complex-units and simple-units, all but about a dozen are located within a single belt extending across Africa from the coast of Senegal in the west to the Ethiopian and East African Highlands in the east. This belt, some 3,500 miles in length but only 700 miles in average width, runs immediately to the south of and parallel to the Saharan desert, and, in terms of its location and linguistic complexity, may be usefully termed the ' Sub-Saharan Fragmentation Belt '.

The existence of this trans-continental Fragmentation Belt provides a useful three-way division for a referential classification of African languages, i.e. the languages spoken to the *north* (and north-east) of the Belt, those spoken *within* the Belt, and those spoken to the *south* of the Belt.[39]

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[36] The proposed referential framework was originally evolved as part of a course on the language-map of Africa, taught by the writer at S.O.A.S. and at Indiana University.

[37] See n. 32, above.

[38] These terms have been chosen to avoid any confusion with the terms of the International African Institute system.

[39] For a similar three-way discussion of African languages, almost a century ago, see Lepsius, op. cit., xiii ff.

The question then arises of how one may correlate this three-way division with useful linguistic criteria. In practice, as already demonstrated by Koelle and Guthrie, the most useful structural differentiae for Africa are those relating to the nominal system, and these can be used to establish convenient sub-divisions of the continental zones of reference already established. For Northern Africa, the most useful isogloss is that dividing gender-languages from non-gender-languages, i.e. Berber, African Semitic and ' Cushitic '[40] from East Saharan and Nubian (Arabic and the extinct Egyptian/Coptic could be included with the first set, but have been excluded from the present framework of classification). For Southern Africa, on the other hand, the most useful isogloss is that dividing class-languages from non-class-languages, i.e. Bantu and Mbugu from the languages known collectively as ' Khoisan ', i.e. Nama-Kwe (' Hottentot '), Bush and Kwadi[41] (these being further sub-divided by a gender-isogloss).

Outside the Fragmentation Belt, the definition of the terms ' gender-language ' and ' class-language ' is relatively straightforward. A ' gender-language ' is one in which the distinction between male and female is expressed grammatically in the third (and usually also second) person, and in which a parallel masculine-feminine distinction operates in the nominal system (among inanimate as well as animate nouns). A ' class-language ' is a non-gender-language in which individual nouns are assigned to single classes or to pairs of singular/plural classes, distinguished by nominal affixes and dependent grammatical concord (frequently alliterative), certain of these class-affixes having a formative, including deverbal, function.

Within the Fragmentation Belt, however, the definition of these terms is less

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[40] The validity of ' Cushitic ' as a linguistic unity is in some doubt : see Tucker and Bryan, *Linguistic Analyses* (op. cit.), 495 ff., and A. N. Tucker, ' Fringe Cushitic : an experiment in typological comparison ', *Bull. S.O.A.S.*, XXX, 3, 1967, 655–80. For purposes of the present experimental framework, the ' Orthodox ' Cushitic languages *less* Beja (i.e. Agau, Saho-Afar, Sidamo, Somali and Galla, plus Waat, Boni and Aweera) have been included within Northern Africa as a complex-unit, here labelled ' Core ' Cushitic, while Beja and Dahalo (' Sanye ') have each been treated as a tentative single-unit within the same zone of reference, thus reflecting their relative lexical—as opposed to structural—isolation (based on personal discussions with Dr. B. W. Andrzejewski, see also his ' The position of Galla in the Cushitic language group ', *Journal of Semitic Studies*, IX, 1, 1964, 135–138, and ' The study of the Bedauye language . . .', African Studies Seminar paper no. 4, Sudan Research Unit, University of Khartoum, 1968; also A. N. Tucker, ' Sanye and Boni ', in *Wort und Religion : Kalima na Dini* (Ernst Dammann zum 65. Geburtstag), Stuttgart, 1969). Tucker's ' Fringe ' Cushitic languages, on the other hand, can be most conveniently treated as part of the Fragmentation Belt (i.e. Ometo-Kaffa, Iraqw-Burunge, Tepes-Teuso (Ik), Hadza, Mogogodo and Konso-Geleba ; with Mbugu being treated here as a Southern African class-language) : this arrangement appears to make sense geographically as well as linguistically.

[41] The Bush (or Bushman) languages have been treated in the present framework as a complex-unit, but may need to be broken down further : cf. E. O. J. Westphal, ' The linguistic prehistory of Southern Africa : Bush, Kwadi, Hottentot, and Bantu linguistic relationships ', *Africa*, XXXIII, 3, 1963, 237–65.

straightforward.[42] There are languages which fulfil the above definitions (e.g. Hausa as a gender-language and Temne as a class-language) but there is also a variety of ' partial ' gender- and class-languages, and even some ' mixed ' gender/class-languages. Shatt and Sila, for example, distinguish grammatical gender (masculine, feminine and neuter) in the pronominal system only. Twi, on the other hand, has a partial ' class ' system of pairs of nominal affixes, indicating singular and plural, but no dependent concord apart from a notional distinction between personal and non-personal. Typologically, Zande lies between the two, with a distinction between male and female in personal pronouns, and between animal and inanimate in non-personal pronouns : it has a system of formative affixes (and traces of a ' body-class ' affix), but no singular/plural pairing of affixes. The neighbouring Mba language has a similar male/female+animal/inanimate distinction in the pronominal system, but is otherwise a conventional class-language. In such a situation, the application of any precise differentiating criterion would give an unnecessarily confused picture, and would be unsuitable for the type of classification we have in mind. Any resulting isogloss would be fragmented and discontinuous, and would sometimes even divide languages within the same complex-unit (e.g. Guang, which is a conventional class-language, and Twi, which is not).

A practical solution to this problem is suggested by the situation within Bantu. Although the vast majority of Bantu languages are class-languages in the defined sense, there are a few which are not, Guthrie having classified them as ' incompletely ' Bantu on the basis of their lexical affinity with other Bantu languages. These are his ' Sub-Bantu ' languages, comprising a string of small languages on the fringe of the Fragmentation Belt and one or two trade languages. The distinguishing characteristic of these languages is the ' reduction ' of their class-system, either in terms of their prefix pairing or in terms of their dependent concord. By analogy with his term ' Sub-Bantu ', therefore, it would seem useful to employ the term ' sub-class-language ' to describe a language which is not a conventional class-language but which has one or more of the characteristics of a class-language.[43] Such a loose definition could of course be applied to a wide variety of languages around the world, and for our present purposes it will be necessary to employ it with some circumspection. It is therefore suggested that it should be restricted to those ' sub-class ' languages which appear to have at least a partial affinity with one or more conventional class-languages, especially in terms of the actual morphemes employed in the nominal (incl. pronominal) system. The Sub-Bantu sub-class-languages may thus be included with Bantu class-languages as far as our classification of Southern African languages is

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[42] Cf. Tucker and Bryan, op. cit., 11–14. For a terminological discussion see C.N.R.S., *La classification nominale dans les langues négro-africaines* (Colloque d'Aix-en-Provence, 1967), Paris, 1967, débat sur ' classe et genre ', 391–7.

[43] Esp. pairs of singular/plural affixes and/or pronominal (non-gender) concord.

Table III

Experimental Framework for the Referential Classification of Modern African Languages (excluding Arabic and Languages of European Origin)

Continental zones of reference	Units of classification	
	Complex-units	Simple-units (incl. unclassified languages)
Northern Africa **0** *Peripheral:* gender-languages	01 Berber 02 Afr. Semitic 03 'Core' Cushitic	**001** Beja **002** Dahalo
1 *Central:* non-gender-languages	11 E. Saharan 12 Nubian	
Sub-Saharan Fragmentation Belt	units to be numbered from W. to E. within the following sequences :	
2 **3** **4** *Northern and Eastern:* sundry (largely non-class-)languages	21 to 49	201 to 409
5 **6** **7** *Western and Central:* class/sub-class-languages	51 to 79	501 to 709
Southern Africa **8** *Central and South-Eastern:* class/sub-class-languages	81 Bantu	**801** Mbugu
9 *South-Western:* non-class-languages	91 Nama-Kwe 92 Bush	**901** Kwadi

concerned, and a similar grouping together of class and sub-class-languages may also be established within the Fragmentation Belt. A more or less continuous isogloss can be traced roughly along the centre of the Fragmentation Belt, dividing class- and sub-class-languages to the west and south from a sundry collection of largely non-class-languages [44] to the north and east. The line is most easily defined in terms of the units which adjoin it on the non-class side : from west to east, these are Mande, Songhai, Chadic, Bongo-Bagirmi, Nilotic and Moru-

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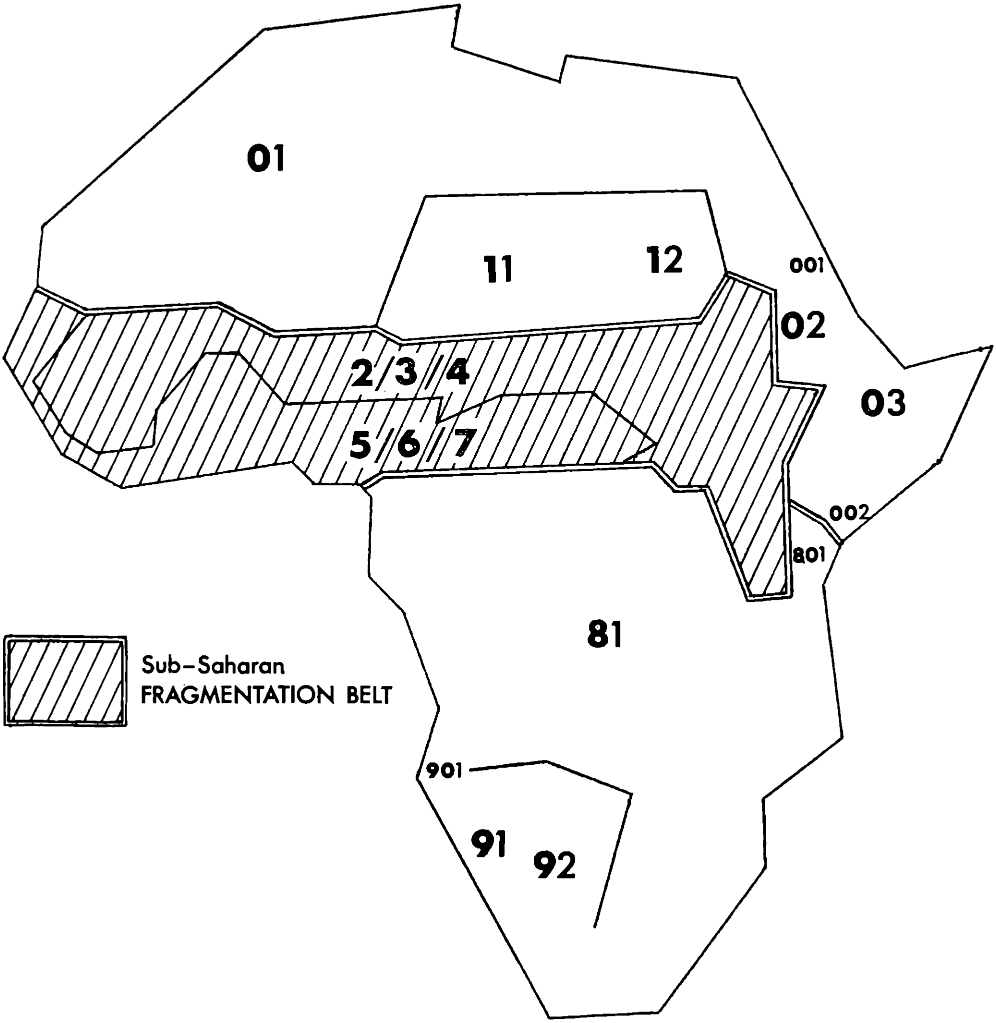
[44] A small pocket of class-languages in the Nuba Hills (Koalib-Tagoi) is isolated within the otherwise 'non-class' area. See Tucker and Bryan, op. cit., 11, incl. a note on the possible historical relationship between class-languages and the so-called *T/*K languages, a subdivision of the *N/*K languages discussed in the footnote below.

Diagrammatic Map to Illustrate Table III

Boundaries are stylized and approximate only, and do not take account of linguistic overlapping or of unpopulated areas



Mangbetu.[45] Along the eastern half of its course this line is also coterminous with the isogloss delimiting the so-called *N/*K languages to its north and south-east (incl. Bongo-Bagirmi, Nilotic and Moru-Mangbetu).[46]

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[45] The line has been crossed by Fula, a class-language which has spread eastward in relatively recent times across the northern (non-class) area of the Fragmentation Belt ; for the purpose of the accompanying diagrammatic map, this geographical extension of Fula has been ignored.

[46] I.e. languages which display an opposition (in pronominals and verbals) between a singular

Our experimental framework thus consists of three continental zones of reference, each divided into two sub-zones on structural grounds. It is suggested that reference digits should be allocated to each of these sub-zones, as indicated by the bold figures on Table III, and that complex-units within each sub-zone should be indicated by the addition of a second digit. Simple-units would be distinguished from complex-units by the use of a three-figure number in which the middle digit would always be zero. The actual units in the northern and southern zones are listed and numbered according to this system on Table III, but the much more complicated listing and numbering of units within the Fragmentation Belt is left open at this stage. An experimental list has already been worked out for these, but it would not be practicable to introduce this here. Much debate and consultation will need to precede the finalization of any such list, not only in the West African region, where the Handbook by Westermann and Bryan is now so grossly out-of-date, but even more so in the confused and ill-documented Nigerian/Camerounian area (which has to some extent fallen between the stools of different volumes of the I.A.I. Handbook). It will almost certainly be necessary to allow for around eighty complex-units and simple-units within the Fragmentation Belt, and a total of three primary reference digits has therefore been allocated to each of the two sub-zones in the Belt ; it is proposed that complex-units and simple-units should each be numbered geographically within each sub-zone, from west to east.

Since stability will be one of the chief merits of such a classification, it will be important to devote as much care as possible to the initial delineation of the units of classification. Inevitably, some modification in the arrangement of these units is bound to be required subsequently, but the numerical system will enable such changes to be incorporated with a minimum of disturbance to the overall classification.[47] For sub-divisions *within* individual complex-units it is proposed that upper-case Roman letters should be used, thereby avoiding confusion with the purely numerical notation of the units themselves, and also dove-tailing the system with Guthrie's zonal letters A-S as referential sub-divisions of Bantu.

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alveolar element (*N) and a plural velar element (*K), manifested either as affixes or as alternations within the actual stem. For a discussion of this feature and of its distribution, see M. A. Bryan, ' The *N/*K languages ', *Journal of African Languages*, forthcoming. The area covered by the *N/*K languages is largely co-terminous with the eastern half of the northern/eastern sub-zone of the Fragmentation Belt, as already delimited by other criteria, and this sub-zone could thus be divided conveniently, for more detailed reference purposes, into a West African non-*N/*K area, including Mande, Songhai and Chadic, and an East African *N/*K area, within which all but a small number of units display *N/*K opposition. (Yet a further structural subdivision could be arrived at in both cases by separating gender-languages from non-gender languages.)

[47] In the case of a complex-unit having to be *split*, new reference numbers could be created by the addition of a third digit to the original number ; if two or more units were to be *combined*, including at least one original complex-unit, then the units would be merged under one of the original numbers.

Although this experimental system is non-historical, it will need to be correlated for reference purposes with pre-existing ' historical ' classifications. From this point of view, the presently suggested framework has the advantage that all but one of its six sub-zones may be correlated with individual ' families ' not only of the current Greenberg classification of African languages, but also of the ' traditional ' pre-Greenberg classification :

TABLE IV

PROPOSED ZONAL CLASSIFICATION	GREENBERG CLASSIFICATION	PRE-GREENBERG CLASSIFICATION
0	Afro-Asiatic (Tucker's Erythraic)	Hamito-Semitic (or Hamitic + Semitic)
1	Nilo-Saharan	Sudanic
2/3/4	[see discussion below]	
5/6/7	Niger-Congo (within Congo-Kordofanian)	Sudanic
8		Bantu (related to W. Sudanic) [48]
9	Khoisan	Khoisan (or Hamitic + Bushman)

The only sub-zone which cannot be conveniently correlated with previous ' historical ' classifications is the northern and eastern section of the Fragmentation Belt (2/3/4), which, as we have seen, is also the most problematical from the viewpoint of establishing structural isoglosses. The proposed zonal classification serves to focus attention on this area without prejudging the problematical relationships existing not only among languages within this sub-zone, but also between such languages and languages within each of the five remaining sub-zones. It is significant that the languages of each of these five, distinguished in terms of a single structural criterion in each case, should fall entirely within one of the ' families ' of previous classifications, whereas the languages of the 2/3/4 sub-zone should be divided among three of the four major ' families ' of the pre-Greenberg classification, and among all four of Greenberg's major families. It is almost a platitude to state that this sub-zone, particularly at its more fragmented eastern

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[48] Cf. Westermann, *Die westlichen Sudansprachen*, 12 ; also Westermann, ' African linguistic classification ', *Africa*, XXII, 1952, 252.

end, needs to be the pivotal area for any future historical study of linguistic relationships in Africa.

Conclusion

In this paper, consideration has been devoted to the principles underlying the pragmatic classifications of Koelle and Guthrie, and an attempt has been made to extend comparable principles to the referential classification of African languages as a whole. It is hoped that the establishment of such a classification will eliminate the preconceptions which have resulted in the past from the use of so-called ' historical ' classifications. The provision of a scientific frame of reference, together with the compilation of a detailed base-map of African languages (at present in preparation at S.O.A.S. and Indiana University), should do much to stimulate the professional analysis of comparative linguistic data, both at the reconstructional level and at the word-geographical (or topological) level. In this way, one may hope to extend the application of philological techniques to the non-Bantu languages of Africa, and to escape from the largely amateur approach which has characterized much African comparative work in the past. Alongside a new referential classification and a linguistic base-map we require most urgently an extension of the comparative survey-work initiated in the I.A.I. Handbook of African Languages, especially in the pair of volumes by Tucker and Bryan on the non-Bantu languages of north-eastern Africa. This format, of an inventory plus a volume of linguistic analyses, needs to be supplemented for each area by a collection of comparative vocabularies. In this latter respect, as also in the preparation of a referential classification, we have made remarkably little progress since the pioneering work of Koelle.

For historians as well as linguists there is also need to reconsider the implications of the *geographical* distribution of African languages, as a separate issue from the question of their detailed inter-relationships. The existence of the Sub-Saharan Fragmentation Belt has for long been obvious, but its possible historical significance has been overshadowed by linguists' greater concern with the real or supposed relationships of its constituent languages. Is it a coincidence, for example, that the Fragmentation Belt, one of the most complex linguistic areas in the world, should run parallel to the largest desert in the world, an area which is known to have become increasingly uninhabitable in prehistoric times ? If it is not a coincidence, and if massive climatic and ethno-linguistic pressures have been the main cause of this belt of linguistic fragmentation, then we may need to rethink our traditional hypotheses about the ethnic prehistory of Africa. It has been generally assumed that the far more uniform linguistic situation in the Bantu area has resulted from relatively recent and rapid expansion, and that the divergences and confused relationships of the Fragmentation Belt have resulted from natural processes of change over long periods of time. Could it be, however, that the Bantu area was merely far enough south to have escaped the ethno-linguistic turbulence which gave rise to the Fragmentation Belt ? [49]

In concluding this paper, one may observe that Guthrie's *Comparative Bantu* marks the acquisition of a new status for the comparative study of African languages. This field can now begin to serve as a valuable training-ground for comparative linguists in general, and can begin to contribute seriously to the reconstruction of African prehistory. It is to be hoped that the educational as well as the scientific value of this area of research will be realized on both sides of the Atlantic, and that teamwork between academic staff and research students will provide a practical means for achieving the priorities already outlined.[50]

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[49] In this respect, it is of interest to note that both the Bantu languages and the Cushitic languages become increasingly fragmented, both geographically and structurally, at points where they meet the Fragmentation Belt (i.e. the Bantoid, sub-Bantu and even N.W. Bantu languages in the former case, and the ' Fringe ' or ' partial ' Cushitic languages in the latter).

[50] I wish to express my indebtedness to colleagues in the Department of Africa at S.O.A.S., for their advice and criticism, while accepting full responsibility for any errors or misconceptions which may remain. I am particularly grateful to Dr. B. W. Andrzejewski, Miss M. A. Bryan, Mr. W. M. Mann, Professor A. N. Tucker and Mr. F. D. D. Winston.

SOME SPEECH STYLES IN SHONA*

By G. Fortune

There are a number of relationships in Shona society which carry with them, as part of the prescribed and appropriate pattern of behaviour, a special type of speech and a certain degree of licence or restraint. This behaviour ranges from the licence which is an obligatory element in the relationship binding people who are **vásahwira** (funeral friends) to the constraint which is a necessary feature in the behaviour of people who are **vanyáríkáni** (those who are shy of one another). Between these two extremes, both of which may involve embarrassment of different kinds, there are relationships and correlative styles of speech which are easier and perhaps more congenial and which temper familiarity and respect in varying proportions. As typical examples which illustrate this parameter, which stretches from licence to constraint, we may mention the following :

I.	**Chisáhwíra**	(speech and behaviour between funeral friends)
II.	**Chizukúrú**	(speech and behaviour between kin with whom one can relax)
III.	**Chishámwarí**	(speech and behaviour between personal friends)
IV.	**Chitórwa**	(speech and behaviour between ordinary, unrelated folk)
V.	**Chinyáríkáni**	(speech and behaviour in the presence of relatives who are shy of one another)

I

CHISÁHWÍRA

Among the Korekore and Zezuru groups of the Shona, the ruling lineage of an area is related to a number of people of different lineages who are called **sáhwíra** or ' funeral friend '. For example, the Mutumba lineage of Madziwa Reserve, with clan totem **Tembo** ' zebra ', and chief praise name **Mazvímbákupá** ' those who yearn to give—the very generous ones ', have this relationship to members of the lineage of the sub-chief Matope whose totem is **Humbá** ' wild pig ', and whose chief praise name is **Nyanguru**.

The Mutumba and Matope lineages are **sáhwíra** to one another and the main expression of this relationship is the responsibility of burying members of one another's lineages. Speech and behaviour between **vásahwira** is very uninhibited and should be taken in good part. For example, a member of the Matope clan may go into Mutumba's court and address him in what, in other relationships, would be most abusive language, calling on the people to kill him, accusing him as a sorcerer, referring to his bodily parts and functions and to his private life.

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* I am indebted to Mr. Aaron Hodza of the Department of African Languages, University College of Rhodesia, for most of the information contained in this paper.

Mutumba, being a chief, cannot in court reply in kind as a more junior member of the lineage might, but he should reply good-humouredly. Meanwhile the people who owe respect to Mutumba should not laugh too openly. They can **-sek-er- muhapwá** ' laugh in their armpits ', not **pachená** (openly). The **sáhwíra** may take away a goat or a pot of beer and no one may restrain him. Its equivalent can be recovered by Mutumba after the lapse of a year or two.

Vásahwira who are more equal in rank in their respective lineages, both men and women, can push this licenced familiarity quite far. They may, in joke, accuse one another of witchcraft, of eating human flesh, of robbing graves and of other heinous offences. There need be no attempt to be roundabout or circumspect in choice of language. It is in conformity with this style to be literal and explicit in one's comments. For example, **Saka úrí pédyo névhu** ' and that is why you are so short '. Singular forms of address and reference are used and there is no consideration made on the basis of age. The husbands and wives of **sáhwíra** cannot interfere in the relationship even though it involves horseplay.

The **sáhwíra** will handle his funeral obligations quite seriously and responsibly even though considerable distaste or hardship may be involved. But, a year later, at the ceremony of **kuróvá gúvá** ' the beating of the grave ', which brings the spirit of the deceased back once more into the community, the **sáhwíra** may voice his complaints in the hearing of the survivors (and the departed, but now returned, funeral friend). He may enlarge on how much the corpse stank, what evidences of witchcraft, e.g. **nyangá** ' horns ', **zvikono** ' witches' torches ', were found coming out of the body. This is in fun. The exaggerated humour is appropriate to the relationship and everyone laughs. He and the other **sáhwíra** are allowed to take a good share of the funeral feast, for example two legs of beef and five pots of beer. There is the same licenced abuse towards the heir. The **sáhwíra** may call on the spirit of the deceased to kill his heir who has already lived too long. The **dunzvi**, the deceased's sister's son or daughter, who is the official responsible for the inheritance arrangements, may counter this with a plea to his deceased mother's brother, **Chengétá rúdzi !** ' safeguard the lineage ! ', and reply in kind. **Kúfadza mudzímú nevánhu** ' it is to entertain the spirit and the people '.

The **sáhwíra** relationship finds hardly any expression in modern urban conditions. The fact that things cost money, which is in short supply, inhibits the **sáhwíra**'s right to help himself. The work of burying is done by undertakers through burial societies and the joking abuse is much muted. The licence which might be prescribed in the country would be regarded as barbarous and truly out of place in town. Although, for example, a **sáhwíra** from town might be doused with flour or water on a visit to his co-**sáhwíra** (**kuti árámbwé návasíkaná**) ' so that he might be turned down by the girls ', this would not be tolerated in town.

The **sáhwíra** can go too far in certain situations. He would be exceeding the limit (**-pfúúrídz-** or **-nyany-**) if, for example, he used obscene abuse (**chitútsi**) against his co-**sáhwíra** in the presence of the latter's father- and mother-in-law. This would be a situation requiring licence and constraint at the same time and is extremely incongruous and amusing to others. The in-laws may not flee from the scene as that would be beneath their dignity. Other **vanyárikáni**, with whom there is less constraint, for example the victim's mothers and sisters, would be obliged to quit the scene. The **sáhwíra** who is being subjected to the abuse must take it in good part even though he is conscious that his joking-partner is going too far. He is precluded from pointing out that his in-laws are present as any direct reference to them is usually extremely bad form. It would seem that the most the victim can do in this predicament is some mild or general rebuke like **Haútsígewó heré?** ' don't you control yourself? '. Others may come to the embarrassed man's help by calling off the too zealous **sáhwíra** on some pretext but again not by referring to the presence of the in-laws, e.g. **Síyá wáúya kúnó** ! ' leave there and come here! '. Out of earshot, the offending **sáhwíra** can be told, **Pána tézvára wáké, wamúnyadzisa kwázvo** ! ' you have put him to shame in the presence of his father-in-law! '. The offending **sáhwíra** will heed the rebuke and go away or call over his joking-partner, saying, **Ndakúrutsa, handíchakútúkaká** ! ' I have vomited you out, I won't " rag " you any more! ' and by a bit of horseplay and the gift of some beer make up for his offence. **Sáhwíra wákó ndirí benzi** ' your funeral friend is a fool!'. His friend may agree. **Sáhwíra, wandítsvitsa kutsíme** ' friend, you took me to the well ', viz. ' you went too far '.

II

CHIZUKÚRÚ

This is the type of speech and behaviour between a man and his sister's children and indeed with all relations with whom one can relax and speak freely. One may relax with one's mother's brothers and indeed with all the males of one's mother's lineage. They are all termed **sékúru**. One is not so free with the women of her lineage, however, as they are one's mothers and called **amái**. Hence one is free with one's mother's brothers and their sons, but not with their daughters. One is free with one's sister's children and children's children, since they are all **vazukúrú** and one is their **sékúru**. One is also at ease with one's father's sister (**teté**), one's wife and her sisters, but not, of course, with the male members of her lineage or her mother (**vátezvara, vámbuya**).

In these relationships there is no bar on topics of conversation, topics otherwise referred to as **zvinónyádzá** ' embarrassing topics ' being allowed. However, the fact that brothers and sisters are **vanyárikáni** is a restraint when they are both present and politeness demands avoidance of what could cause embarrassment through the presence of the sisters or brothers of other people as much as through the presence of one's own. With either sex alone—either men or boys or women or girls—one is free. **Takátambarara somúnyemba** ' we are stretched out like a bean plant '. **Kanosárá káne mudzímú wákené** ' what doesn't come out surely has some spirit to prevent it '. One's sister's children (**matunzvi**) are the ones who offer the sacrifices to one's ancestors and who may scold their dead grandfather in the interest of their uncle and his family because they likewise are **vazukúrú** and **sékúru**. A mother's brother may prompt his sister's son to say things to his dead father which he would not be allowed to say himself. For example in the following seven lines of speech

> **Zviripi, gará apa. Ití kuná sekuru :**
> Zviripi, sit down here. Say to your grandfather :
>
> **' Zvió zvényú izvo**
> ' There is your finger-millet
>
> **zvokúti tínyíké tígóbika hwahwá**
> for us to steep in water and then brew beer
>
> **hwokúti tíkúdzorérei kúmushá.**
> for us to bring you back home again.
>
> **Múúdzewó nevámwe vatísingázíve, varí pámberí**
> Further you must tell the others as well, whom we do not know, who are before you
>
> **páshάyé anóti, " Handíná kuúdzwá ".**
> so that there may not be anyone to say, " I wasn't told ".
>
> **Musáfúkátire mhuri ! '**
> Do not turn your back on the family ! '

As the sample shows, a **muzukúrú** respects the seniority of his **sékúru** by using the plural of address and reference and by his choice of phrase. The special status of the dead **sékúru** is marked by the use of a special liturgical intonation which we can refer to as the **kutéúrá** (sacrificial) intonation. Utterances in this intonation have a heightened pitch and final stress though the normal penultimate length accent is not moved. The **dunzvi** enjoys a certain amount of licence and may move between persuasion and scolding. But he should not be too pointed or direct. In the prayer just quoted it would be too direct to say :

> **Mhuri ígáré zvakánáka pánó**
> Let the family enjoy peace here

A **sékúru** is at home in the village of his **muzukúrú**. The **muzukúrú** also enjoys much freedom at his **sékúru**'s village. He may help himself to his **sékúru**'s clothes and, in jest, threaten to run away with his wife, who is his **ambúya**. He relies on his **sékúru** and **teté** (father's sister) for help in courtship and for advice on sexual matters and married life. The **sékúru** and **teté** are entitled and obliged to reprehend their nephews and this may involve detailed comment on their loose behaviour, if it exists, in a way it would be improper or undignified for parents to do. The **sékúru** plays a highly important part in the education and correction of the children in a friendly and jocular way. He may take the part of the children against their parents and they value his friendship and feel confident and welcome at his home.

The **muzukúrú** enjoys a certain licence or indulgence in speaking to his **sékúru**. A chief's **sáhwíra** or **muzukúrú** may represent the grievances of commoners to him and show him where he has gone wrong. This latter relationship is one which is not affected by urbanization.

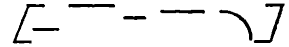
The **ambúya**, especially the mother's brother's wife, is expected to entertain a joking relationship with her **muzukúrú**. This includes making pointed and critical remarks about his appearance and, after his marriage, that of his wife. These words are known as **mazwí okúshora, ókunyángádzíra** (insulting, critical words) and they would be so in another context. Further, they may not be objective. For example, **Unongóti mhuno yakátí pwasha pwasha** ' your nose is as flat as a pancake ', even though it be **twi, semútsi** ' straight and narrow as a pestle '. She may say **Nzevé dzinénge ndíro dzekwávámwené** ' your ears which are as wide as your husband's mother's plates ', even though they be small; **Mipímbíri inénge yákondo** ' your shins which are as thin as the hamerkop's '; or **Kutsvuka, wakátsvúka zvákó, zvínó haúshámbé** ' your skin is fair enough but you don't wash '. This is taken with laughter and great good humour by the nephew and his wife, or by the niece and her husband. The occasion for this licenced and conventional banter is especially the visit after marriage to the **sékúru**'s home to show off the new spouse. They try within the limits of their status and competence to give her or them—for it is often a chorus which gives vent to the **utúkwa** (licenced abuse)—as good as they are getting, but it will be done gently (**zvakáréruka**). For example, **Vásekuru vákánga váshayá vakádzí pavákázonhóngá imí** ' uncle was hard up for a wife when he eventually picked you up '. This is the welcome the young people get. **Ambúya vári kúsomora kana kutúká utúkwa** '*Ambúya* is commenting on our appearance with licenced abuse '. If this were not done, the **muzukúrú** would not feel at home. He would feel **ákasúngiká** (constrained) and think there was something wrong. Once he has been scolded, he feels at home, able to help himself to anything at the homestead and to give his **ambúya** a present, for example money for sugar or soap. The **ambúya** will acknowledge the gift and thought of her **vazukúrú** with dancing and clapping, perhaps saying

Taténda, varúmé védú
Thank you, our husband

Ndó zvatínorídíra zvédú bénzí rédú riri
That is why we love this dear fool of ours

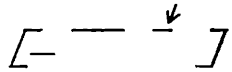
The intonation is that used for clan praises and for thanking and acknowledging services (**kutenda**). It is characterized by a lengthened final syllable at the end of each phrase which carries a high falling tone.

e.g. **varúmé védú**



Of the **ambúya**'s intonation it is said, **Kumberí kwákarérúká : Múne kúseka kana kunyemwerera** ' it is light at the end : there is laughter or smiling in it '. Of the style used by the **dunzvi** during sacrifice it is said **Kumberí kwákárêma, kwákátsíga** ' it is heavy or firm at the end '. This refers to the strong final stress at the end of each phrase.

e.g. **Inzwái**



The **utúkwa** (licence) allowed to the **ambúya** is also used for correction and the promotion of harmonious social relations, e.g. in bringing a **muzukúrú** to his senses in his behaviour with his father. But there are limits to her particular freedom, for example in the subjects about which she would feel it proper to speak.

III

CHISHÁMWARÍ

Shámwarí are friends made by personal choice, among one's age-mates, and not on a lineage basis. One expression of this relationship lies in **kutúkídzána**, the freedom which friends enjoy to comment freely on the **shámwarí** and his relations in terms which would be fighting words outside the relationship. These references are direct, not veiled, but not, of course, made irrespective of the company present.

An example of this sort of ' ragging ' or banter might be the following, which is rather a mild case

> ' **Saka hámá dzákó dzichíkurévá. Mateya anénge emúnhu aíridza ngoma !** '
> ' Your relatives talk about you behind your back because of the person you are. Old Bandy-legs, just like someone given to playing drums ! '

This banter has a serious function, for **shámwarí** are held to be responsible for one another, and these relationships are the proper context for rubbing the awkward corners off one another's characters. Friends who cannot take this banter and criticism are looked on as immature. They treat one another as equals, using the singular forms of address and reference. They are free with one another's property and may help themselves to one another's beer or clothing. Confidences between friends are respected, for example in the absorbing topic of one's love affairs, though here, as in other societies, one's confidence may be misplaced and a friend may turn out to be a rival who may supplant one. Men have **shámwarí** of their own sex and women of theirs. It is a relationship which flourishes very widely in urban conditions since it is based on personal choice and compatibility, not on lineage or customary services.

In the three types of relationship which have been outlined, one is expected to be open, direct, pointed and personal, and to be tolerant and open to the same sort of style in return. In other relationships, for example with people who are not related by kinship (**dzisíri hámá**), and people of whom one is shy (**vanyáríkáni**), the proper style is circumspect, roundabout, veiled and more metaphorical. Failure here gives great offence. Criticism of a man's work or person is a gratuitous insult. It is here particularly that a foreigner, used to a different inventory and distribution of styles within his own culture, may give offence without meaning to, through being too casual or pointed or personal. A random example that comes to mind is that of the medium of a famous spirit. When the direct question **Makázvarwa séi?** (how were you born?) was put to him, he replied **Urí kúbvunza séi? Waíta séi? Kubva wáda kundíóná népadákó pésé** ' what sort of questions are you asking? What sort of conduct is this? Perhaps you would like to see my arse as well '.

IV

CHITÓRWA

This term could be used to characterize speech and behaviour between people who are not **vásahwira, shámwarí** or **hámá**. These are **vatórwa** (unrelated people). **Vatórwa vánoremekedzana** ' unrelated people show proper respect to one another ' on the occasions when they meet and cooperate, for example when they meet on a journey, at a work party, at a funeral when they come to help with the mourning, at a feast or beer party or at a court case. They can offer advice to one another. Scurrilous or obscene words cannot normally be exchanged in banter and can cause fighting. **Havátúkánídzane** ' they do not take liberties with one another '. The guide to behaviour with a stranger is his **mutúpó** (totem) and **chidáó** (praise name). These distinguish **hámá** (kin) from **vanhu vanhu zvávó** (ordinary people unrelated to oneself).

Charéhwá mutúpó cháéra ' once the totem has been pronounced, one knows what is sacred '. In the country, very interesting forms of greeting, address and farewell between people are to be found which do not survive the very different conditions of the town. Here, for example, is a greeting between two people who have met on the road and whose praise names are known.

Chumá : **Kazíwáiká, Mazvímbákupá !**
Greetings, Mazvimbakupa !

Mazvímbákupá : **Kazíwáí, Chumá !**
Greetings, Chuma !

Chumá :	**Ko, makádiiko nhái, Mazvímbákupá?** Tell me, how are you, Mazvimbakupa?
Mazvímbákupá :	**Áiwa, tirí wadí zvédú, Chumá. Ko, marwáráusikú ánotaurwa chere? Tísingázívewóka kwamábva, Chumá** Thank you, we are well for our part, Chuma. Ailments of the night are not worth mentioning, are they? But, indeed, we do not know how things are where you are from, Chuma
Chumá :	**Áa, vánokósórawó zvávó vachísvípá, nhái Témbó yángu yiyi** Ah, they cough and spit out like others, my dear Tembo (Zebra)
Mazvímbákupá :	**Kubva tapfúura isú, Chumá** So we are passing on, Chuma
Chumá :	**Murí kutándá pápiko?** Where are you chasing off to?
Mazvímbákupá :	**A, ndirí kúenda kundoóná babá pápurázi pavári kushándá** Oh, I'm going to see my father at the farm where he is working
Chumá :	**Zvínó kúnodzokwa rínhi íkoko?** And when will the return be from there?
Mazvímbákupá :	**Áa, ndinóngorárá rwéhope chéte ndichídzóká mangwáná** Ah, I will just be spending one night there and come away tomorrow
Chumá :	**Nhái, kubva pfúúráiká, nhái Mazvímbákupá. Mukasvika kuná babá, mútí, ' Zvánzí kubúdá '** Well, pass on then, Mazvimbakupa. When you get to your father, tell him we sent our good wishes
Mazvímbákupá :	**Zvákánákai, Chumá. Muromo ítsapo, tinósvikopúngúrá** Very well, Chuma. The mouth is a bag. I'll pour out the contents on my arrival

A passing greeting like this is suited to the relationships and tempo of the country. There are several aspects to be noted. First, its mutuality, which is expressed also in the ordinary greetings of morning, midday and evening, e.g. ' I have slept well if you have ', ' I have had a good day if you have '. Then there is the use of honorific plural forms and of clan names and praise names, not the personal names of individuals. The proper treatment of strangers and elders, which necessitated the juniors sitting down while addressing their seniors, the use of plural forms and hand clapping, survive to some extent in the country, especially at the villages of chiefs and headmen. This is not the case in the towns where they say **Chává chírungu** ' European ways have taken over '. One's own fellow clansmen may be called by the clan name but others in town are **shámwarí** and paralanguage is taken from English, the stance, posture, the tempo, even the intonation instead of the long involved dialogues. People rush by each other with hurried greetings. But where life allows it, people like to enjoy one another's company, and allowance will be made by sensitive townsmen for the susceptibilities and bewilderment of visiting relatives from the country. Otherwise a mother, for example, would complain **Urí kundíita shámwarí wákó** ' you are treating me as you would a friend, being too casual '. People in the country show a legitimate and expected interest in one another's comings and goings, as well as the health and concerns of their families. But queries are conventionalized and softened with a number of particles and interjections which are conciliatory in aim.

V

CHINYÁRÍKÁNI

This is the speech and behaviour customary between people in whose presence one is shy or constrained. These include the persons one addresses or refers to as **babá** (father), **amái** (mother), **hanzvádzi** (sisters of men, brothers of women), **mwaná** (one's children and those of one's siblings of the same sex as oneself), **mukuwásha** (the husbands of one's sisters or daughters), **tézvára** (one's wife's father or brother), and **vámbuya** (one's wife's mother). All these are **vanyáríkáni.** One cannot speak freely in their presence because of one's own relationship to them. One must also observe this restraint in the presence of people who may be related in this way in order to spare them the embarrassment of something said or done which could cause them to feel shame merely from their both witnessing the same thing together. In this situation, the expression **Takáíta mbira dzáMunyóngwa** ' we are like the xylophones of Mr. Mixed-up ' would be appropriate. This means that in most environments, possible ' mixed company ' in the Shona sense, one must be restrained. The only one who need not restrain himself is the **sáhwira.** One can understand the meaning of the Shona saying that among one's mother's brother's people one can relax like a rambling bean plant.

As an example of a style appropriate to the presence of **vanyáríkáni,** here is a dialogue between a son-in-law and his mother-in-law. He has met her coming to his homestead as he was on his way to find some strayed cattle. They are on either side of the narrow path, she kneeling and he squatting on one heel. They both clap, with hollowed palms one against the other, she with one hand across the other and he with finger-tips meeting. They use the **kutenda** intonation with long-drawn-out final syllable, marked by either a high-falling or a low-falling tone, depending on the toneme of the syllable. This indicates peace between them and ease within the prescribed, very formal relationship. The son-in-law (**mukuwásha**) commences and the mother-in-law (**vámbuya**) replies.

Mukuwásha : **Mangánanií Némátombó**
Good morning, Nematombo (praise name of the **Moyo** (heart) totem)

Vámbuya : **Mangwánanií, Mufákose**
Good morning, Mufakose (praise name of the **Shava** (eland) totem)

Mukuwásha : **Marára zvakádiíko, Némátombó?**
How have you slept, Nematombo?

Vámbuya : **Tarára Mufákose, kana márárawó**
We have slept, Mufákose, if you have slept as well

Mukuwásha : **Tarára zvédú. Varúmé vényú ndívo varárá vachíchémédzéka**
We slept. Your husband is the one who spent the night crying (referring to her grandson; he will call her **ambúya** and she **muzukúrú**)

Vámbuya : **Ko, vánonzwéiko?**
What is wrong with him?

Mukuwásha : **A, madzihwá, Némátombó. Varúmé vényú, kutétá rínenge bere**
Oh, just a cold, Nematombo. Your husband is like a hyena when it comes to making a fuss

Vámbuya : **A, vánotéteíko? Vánozvínzwá, zvínenge zvichívarwádzá**
He is not fussing for nothing. He must feel something, perhaps something is paining him

Mukuwásha : **A, zvínó vánochémeí? Kana vakachémá, ndíko kuti zvípóré heré nhái, amái?**
What's the point of crying then? If he cries, is it in order to get better, mother?

Vámbuya : **A, regái kupótá muchíndídariró varúmé vángu**
Well, don't keep making light of my young man in my presence. **Vánoseka** (they laugh)

Mukuwásha : **Ko, vaná babá várara zvávó zvakánáka heré?**
Tell me, did father-in-law sleep well?

Vámbuya : **A, várara zvávó zvakánáka, mwanángu. Ko, mafúmírepíko?**
Yes, he slept well enough, my child. Where are you off to so early?

Mukuwásha : **A, ndirí kútsvaga mombe dzarárá musángó. Kubva ndózokúónái kumbá, amái**
Oh, I am looking for some cattle which have spent the night in the veld. So I'll be seeing you at home, mother

Vámbuya : **Zvákánákai, Mufákose**
Very well, Mufakose

This exchange is very reminiscent of **chitórwa** but is more correct and careful. Plurals of address and reference are used on both sides. But the formality does not forbid humour of the right sort.

Beer is often a solvent of shyness and shame, and over-indulgence may lead people to offend against the proprieties. It is invoked very effectively, however, and legitimately, in the institution known as **kubhisa nyádzi** (removing shame). A father may want to convey something to his children which it would not be proper for him to say directly and the means of conveying it to them may not be to hand. For example, he may disapprove of the young men whom his daughters are attracting to his homestead, and his married sister (who would be the right person to deal with the matter) may be too far away. In order to get the **nhúna** (grievances) out of his heart he may warn his children, while still sober, that he is about to turn to beer. **Ndichákunwírái hwahwá. Musí wandínohúti svutú, munónzwá zvinóbúdá múmuromo** ' I am going to drink beer to deal with you. The day I swallow it, you'll hear what I have to say '. So he will go to a beer drink and come back yodelling and, his shame allayed, begin speaking his mind as he approaches the homestead.

The licence-ease-respect-constraint parameter is one along which one may arrange several styles of speech for reference. There are others which suggest themselves and which would also be useful for providing a frame of reference, if only provisional. These are the parameters which stretch from (1) exaggeration through objective statement to understatement or euphemism ; (2) from metaphor to literal statement ; (3) in speech addressed to the public indiscriminately, ranging from styles which are intelligible to all down to styles with a hidden message for a few or for a single person ; (4) from styles which are strictly limited within a prescribed form to those which are free in form and construction. These parameters may not bear much relation to one another, but they do offer a preliminary scheme against which to list and describe the total repertoire of speech-styles and their social contexts.

MAIWUTSIYA: THE COMET MYTH AMONG THE HAUSA

By C. G. B. Gidley

The belief that a comet is a sign of coming disaster was reinforced among the Hausa by Ikeya-Seki, a comet detected by Japanese astronomers with the aid of instruments on 18th September, 1965. Later in that year it became visible to the naked eye for about two hours before sunrise from 25th October to 8th November.

A Hausa observer's commentary on the comet makes it possible to estimate local reaction in an area where the Hausa saying **tauraruwa maiwutsiya ganinki ba alheri ba ne**—' star with a tail, seeing you is not a good omen '—was frequently heard in town and countryside. At the same time the comet revived a memory of a former comet said to have been seen before a cattle plague about eighty years previously. This memory, related to the new phenomenon and the events which followed, confirmed the belief that comets are ill-omened. By making reference to extracts from letters sent to me, it is possible to examine this belief at a precise moment of reinforcement, and also to test the recollections of a respected old man whose testimony about the former comet was locally accepted.

IKEYA SEKI, 1965

The commentary is contained in letters from a Hausa observer, a person of local importance, and extracts follow in sequence with a free translation.

6th November, 1965

Ga wani babban labari a halin yanzu; muna cikin ganin tauraruwa mai wutsiya yanzu birni da ƙauye; ana cikin tsoron ganin baƙon abu. Misali ta fara fitowa wajen 25 Oktoba, har zuwa yau muna ganinta a kan kusurwa; lokacin fitowarta 3.45 da safe, ta ɓata 5.30 da safe. Yanzu ina cikin rubuta maka labari duka. Allah ya sa mu ga alheri. Allah ya kiyaye mu daga sharrin abin. Amin. Mutane a yanzu suka taɓa gani, amma Audu Allah ya ba shi ganinta na biyu.

Here is some important news at the present time. A comet[1] is now visible in the walled city and in the villages. People are awestruck at the strange sight. To give you an idea of it, it started to appear about the 25th October [1965] and it can still be seen in a corner of the sky. It comes out about 3.45 a.m. and disappears about 5.30 a.m. I am now writing a full account of it for you. May Allah decree that no evil befall us. May Allah protect us from its evil influence.

[1] Literally ' star with a tail '. **Maiwutsiya** ' the possessor of a tail '.

Amen. People are now seeing it for the first time but Allah has granted the Old One, Audu,[2] *a second sight of it.*

A full account soon followed this information :

12th November, 1965

Labarin wani baƙon abu da ya faru cikin ikon Ubangiji a nan ƙasar Nigeriya ; wasu mutane har suna cewa tauraruwa mai wutsiya ne ; wannan abu ya baiyana mana wajen ƙarshen Oktoba ne ya ƙare ranar littinin 8 Nuwamba, ya yi mako biyu ana ganinsa.

News of a strange thing which happened in this country of Nigeria according to the will of Allah. Some people even venture to say it was a comet. This thing appeared to us about the end of October and vanished on Monday 8th November. It was visible for two weeks.

Wani haske ne Allah ya baiyana shi a gabas ; lokacin da ya ke fitowa kamar ƙarfe uku da rabi da asuba kowace rana ; sai a ga wani haske tun daga ƙasa ya tokara da al'arshi. Wannan mutane da yawa suna ganinsa birni da ƙauye. Ana ko ta maganar wannan abu ; wasu suna cewa tauraruwa ne maiwutsiya, wasu suna cewa ba ita ba ne ; wannan dai kuma sarautar Allah ne haka nan. Farkon fitowarsa sai ya yi kamar wata ya yi shara zai fito, sai haske ya rufe wurin sa'an nan a ga kunnowar wata. To, shi babu fitowar wata, sai dai hasken kawai ; tasowarsa da ya kwana biyar ya yi daidai da rana ta cira ta kai ƙarfe takwas da safe. Da ya ƙara cirawa bisa zuwa kwana fuɗu sai ya yi kamar rana ta cira sama ƙarfe tara da rabi da safe, watau hantsin ban ruwan doki ke nan ; hasken ya miƙa sama zuwa Al'arshi. Da aka yi kwanaki sai kuma daga ƙasa zuwa tsakiyarsa babu hasken sai daga rabinsa zuwa Al'arshi ne a ke ganin hasken ya miƙa bisa. Na kuma lura da wannan haske daga inda ya fara a ranar farko, sai yana ƙara komowa kusurwa kusurwa gabas da kudu har ƙarewarsa. Ranar littinin 8 Oktoba ne ƙarshen fitowar wannan haske ; daga nan ba a sake ganinsa ba.

There was a light which Allah showed in the east. The time of its appearance was about 3.30 a.m. at the time of the first sign of dawn each day. It was then that a strange kind of light seemed to be propped up from the ground towards the vault of heaven. Many people in the walled city and in the countryside saw it, and everybody was continually talking about it. Some said it was a star with a tail while others said it was not, it was merely something wondrous created by Allah. When it first appeared it looked like the spread of moonlight when the moon is about to rise ; a part of the sky was full of light as if the moon was on the point of appearing. Well, it was not the rising of the moon—just the light. Five days after its appearance, its height above the horizon was about where the sun is at

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[2] An eye-witness who claimed to be about ten years old in 1883 is here called Audu, the Old One. He was a source of much information about the past.

half-past nine—the time when the horses are given water. Then the light stretched straight up to heaven. After a few more days there was no light visible from the lower end to its middle part, but the light stretched up from a point halfway up. I made careful observation of it, and where it first appeared on the first day, and it kept on retreating roughly to the south-east until it eventually disappeared. On Monday 8th October it appeared for the last time and was never seen again.

At this stage the observer consulted a mallam whose opinion is summed up in the following extract:

13th November, 1965

Wannan abu da ya faru aka riƙa ganinsa a gabas ba tauraruwa ba ne, wani dai sarautar Allah ne haka. Yanzu ba ya ɓata ne ba, hasken wata ya dushe shi.

This thing which has come to pass and which people saw in the east is not a star; it is an unusual phenomenon created by Allah; and it is probably still there, but its light has been dimmed by the light of the moon.

The observer then went to a person of the first importance in the area who expressed this opinion:

4th December, 1965

Idan aka duba da kyau za a gani akwai tauraruwa daga ƙashiyan wannan haske. Farkon fitowarta ta fito kamar fitowar wata ne, sa'an nan wutsiyarta ta miƙa Al'arshi.

Supposing you were to take a good look at it, you would see in its lower end a star. When the star first appeared it was like moonrise; then its tail stretched up to heaven.

This confirmed the observer's belief that the light was that of a comet which, so mallams foretold, was a herald of disaster.

Malamai su kan ce akwai wata masiba ke nan. Abin da malaman sunna su kan ce shi ne kowa gwargwadon ikonsa mace da namiji, sai a yi ta sadaka, cikin haka nan kome zai zo sai ya zo da sauƙi bisa yardar Allah.

Mallams generally say that a disaster is going to happen. The orthodox mallams advise everyone, men and women, to give as much alms as they can afford; then, whatever befalls, it will not be so hard to bear, if Allah wills.

A FORMER COMET

In the first account of the comet's appearance dated 6th November, the observer mentioned that Audu was granted a second sight of it. Thus Audu's memory became a vehicle for the comet myth at this particular time. Now it so happened that the observer had written down an account of a former comet verbatim from Audu about six months previously, and after consultation with him, headed his story with the following introduction:

18th April, 1965

Labarin tauraruwa mai wutsiya wadda ta baiyana a 1883 zamanin da Sarkin Kano Muhammadu Bello ya ke sarautar Kano; kuma a lokacin nan Sarkin Musulmi Umoru ya ke sarautar Sokoto.

News of a star with a tail which appeared in 1883 in the time of the Emir of Kano Muhammadu Bello, and simultaneously Umoru was the Sultan of Sokoto.[3]

Audu's story then begins:

Lokacin da wannan tauraruwa mai wutsiya ta baiyana ina zaune a garinmu; yadda ta faru ana zaune da magariba misalin ƙarfe bakwai sai aka ga wani abu mai haske ya baiyana a gabas dam, duk ya haske duniya, haskenta ya rufe hasken wata. Duk yara da manya, maza da mata, kowa idonsa yana bisa aka firgita. Sai malamai suka ɗauki tasbi suka shiga masallatai suna ta roƙon Allah ya kawas da wannan baƙon abu da ba a taɓa ganinsa ba. Yara maza suka ɗauki ihu da kaɗe kaɗe sai sun gaji; da aka yi kiran asalatu, watau garin yana shirin wayewa, sai aka ga haskenta yana ɓacewa kuma gari ya waye. Sai kuma mutane suna ta yi ma juna barka da ɓacewar wannan abin tsoro, suna cewa ko ta ɓace ke nan ? Da yin magariba kuma duk idanun jama'a yana duban gabas a bisa ana tsammani ko za a gan ta ko ba za a gan ta ba. Sai kuma a ga ta fito kamar farko. Sai malamai su kama roƙo a cikin masallatai, yara kuma su ɗauki ihu da kaɗe kaɗe cikin dare. Haka aka dosa har kwana arbain ɗaya babu. Bayan kwanakin nan sai kuma ba a sake ganinta ba. Sai mutane suka ɗauki murna ana ta yi ma juna barka da arziki rabuwa da wannan tauraruwa maiwutsiya da ba a taɓa ganinta ba. Malamai masu sani suka riƙa cewa kun ga abin nan, bayan shi akwai wani tashin hankali a duniya, kowa idan zai tafi daji ya riƙa tafiya tare da wuƙa; namomin daji za su riƙa mutuwa. Idan mutum ya ga dabba na shure shure za ta mutu sai ya yanka ya ɗauki nama da zai iya ci. Ashe mutuwar shanu ne ke zuwa kuma ana kiransa rangaza. Tsakanin daringo da tauraruwa mai wutsiya kamar wata uku ne ko kuwa fuɗu. Siffar tauraruwa mai wutsiya kuwa kamar jirgin sama ne tana da wutsiyoyi biyu masu kamar da sandan waya, kanta ya yi kamar jirgin sama da mu ke hangowa daga sama, haskenta kuwa ya dushe hasken wata, ana ganin hasken wata amma dushe dushe dim, hasken ya yi kama da hasken sinima.

When this star with a tail appeared, I was living in our town. What happened was this, people were sitting down at sunset about seven, when they saw something

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[3] A footnote on p. 236 of *Emirates of Northern Nigeria* by S. J. Hogben and A. H. M. Kirk-Greene, O.U.P., 1966, suggests that much research still needs to be done by historians before the exact dates of reigns can be known.

with a light appear, plain to see in the east. The light lit up the whole sky and dimmed the light of the moon. Everyone, young and old, men and women, gazed up at it in terror. Then the mallams went to the mosques with their beads, beseeching Allah to remove the strange thing which they had never seen before. Young men started shouting and drumming until they were weary. At the time of the call to prayer, just as the sky was clearing, the day dawned and the light of the star became less. Then everyone congratulated each other on the disappearance of this awful thing and asked whether it had really vanished. At sunset all eyes were on the east again, and everyone wondered whether the star would be seen or not. Then there it was again as before. It came out in just the same way as on the first occasion. Then once again the mallams began to pray in the mosques, the young men started shouting and drumming in the night, and so it went on for thirty-nine days; and after that it was not seen again. Everyone was overjoyed and kept telling each other how lucky they were to be rid of the star with a tail, the like of which had never been seen before. Then mallams who were learned kept making predictions, saying now this thing has appeared there will be trouble in the world. Anyone going to the bush will go with a knife and animals will die there. Whenever an animal is seen kicking in the throes of death, it will be slaughtered to get edible meat. Marvellous to relate, the cattle plague was on its way—the one called **rangaza**[4]; *and the interval between the great cattle plague* **daringo**[5] *and the star with a tail was about three to four months.*

The shape of the star with a tail was like an aeroplane; the star had two tails and resembled a telegraph pole. The head was like an aeroplane which we see up in the sky and the light of the moon was dimmed by it. You could see the moonlight, but it was turned down low, like the light in the cinema.

This account of Audu's is exaggerated. Such stories are interspersed with elaborate fiction in Hausa storytelling. The storyteller intends to transport his listener to the scene, horrify him, and entertain him suitably, rather than provide an account of what occurred. It is no wonder that astronomers decry such evidence. However, it is my own opinion that Audu saw the Great Comet of 1882 when he was about ten years old.

The cattle plague which Audu mentions was called **Daringo** or **Darigo.**[6] It was also called **Ottel** in Gwandu, and was generally known as **Sannu** ' sorry '—a Hausa expression of sympathy. In Sokoto it was called **Kadabere** ' hard dry stiff leather '—perhaps due to its effect on the cattle. It is said that the nomad Fulani went mad as a people and fired arrows at the sky. The following song was sung at that time

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[4] Contagious bovine pleuro-pneumonia.

[5] The great cattle plague: **darigo** in Bargery's dictionary.

[6] Occurring between 1887 and 1891, according to C. Edward Hopen quoting F. W. de St. Croix. See C. E. Hopen, *Pastoral Fulbe in Gwandu*, London, 1959. See also G. Curasson, *Peste bovine*, Vigot Frères Editeurs, Paris, 1932, *passim*.

by the Hausa and it indicates the tension which then existed between Hausa and Fulani:

Bana kun ci ƙarera, kun ci tumbi,	*During the present year you have feasted on fried meat and also on the stomach of cows,*
Bana kwa sha dandakan Filani,	*Likewise you are probably going to suffer from the punches of the Fulani.*
Ayye yaraye,	
Gaba dai ba baya ba kaiyama,	*Hi-hi-humbledy-forward-for-ever,*
Sa waƙar Biringizau, Tanko dillali,	*Sing a song of cowrie shells, Tanko the broker,*
Tanko ba da kai na ke ba.	*Nay, Tanko, my reference was not meant for thee.*[7]

In this song the reference 'not meant for [Tanko]' is obscure, but it is probable that he would not have been pleased to hear it; he probably made some profit when over ninety per cent of the Fulani cattle died during the great cattle plague.

DISASTER, 1966

19th January

Ga fa abin da a ke tsammani ya abku.

Now that thing which we thought would happen has happened.

Thus the observer announced that on the 15th January, 1966, the soldiery had taken over the Government and killed the Sardauna of Sokoto, the Premier of the North. He commented

Tauraruwa mai wutsiya ba dama.

Star with a tail there is no hope against you.

In a later letter he related that the festival at the end of the Fast had been observed in the shadow of 'terrible news', 'just think of the killing of so many great men'—*remember the epithet of the star with a tail. . . .*

To, ka tuna da kirarin tauraruwa maiwutsiya. . . . Mu sai roƙon Allah, shi ma babban makami ne. Amma soja ba dama. Bindiga ita ce sha yanzu maganin yanzu. . . .

As for us, we do nothing but call on Allah for help—and that too is a powerful weapon. There is no chance against the soldiers; the gun is the rough and ready medicine taking instant effect.

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[7] The Ministry of Information, Kaduna, sent details of the cattle plague in Argungu with this song. In Sokoto men date events from this year of *mutuwar shanu* 'the death of the cows'.

RETROSPECT

The dates of the letters containing the first extracts make it clear that the star with a tail was Ikeya-Seki, observed in Pretoria as early as 23rd October, 1965.[8] The extracts reveal Hausa concern at its appearance during a period of about two weeks when it was widely discussed **birni da ƙauye** ‘ in town and countryside ’. Everyone was talking about it—**ana ko ta maganar wannan abu** ; the later extracts show that the observer and his circle of friends connected the events in January directly with it.

The cattle plague to which Audu referred is said by historians to have occurred between 1887 and 1891. At first the most likely comet might appear to be the Great Comet of 1882, but this would make the interval of three to four months between the comet and **daringo** in Audu's story, on the face of it, very inaccurate. But what accuracy should be expected in such an old memory ? It is an essential part of Audu's dramatic presentation that his comet was in the east, when it was continually seen at sunset. If it had been in the east, it would have changed position rapidly from day to day, and could not possibly have been seen for thirty-nine days.

In fact the Great Comet was discovered as an object visible to the naked eye on 6th September, 1882, and, like Ikeya-Seki, moved towards the sun after its first appearance *in the east before sunrise.* It was visible in daylight on 17th September. It was not till January 1883—and miraculously this is set down as the year of Audu's observation of it—that it was above the horizon all night, but it could no longer be seen because it was then too faint for observation without a telescope.[9]

There was another comet in 1887—the Great Southern Comet—which is still remembered in East Africa as the herald of the plague,[10] but (according to records in the Royal Observatory Cape, South Africa) it consisted of a pale narrow band of light, with no nucleus, and it was only visible for about a week.[11] This comet also does not fit details given by Audu with the intention of entertaining his audience. Told of my opinion that Audu's story was arranged primarily to entertain his audience during **hira** ‘ evening conversation ’, the observer replied :

> **To, mu Hausawa abin da ya rage mana samun sahihin labari ko tarihi domin galibi duk manyan da sai su riƙe abu da kai ba a rubuce ba ; shi ya kan sa ma'anarsa da Hausa abin da**

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[8] Based on information supplied by the Smithsonian Astrophysical Laboratory Observatory, Massachusetts. I am particularly indebted to Brian Marsden for his help.

[9] Based on information supplied by the Royal Greenwich Observatory.

[10] Sture Lagercrantz, ‘ Traditional beliefs in Africa concerning meteors, comets, and shootings stars ’ in *Festschrift für Ad. E. Jensen*, Vol. I, Klaus Renner, München, 1964, 322.

[11] Correspondence received at the Royal Observatory Cape in 1887 from Mr. John Tebbutt of Windsor, New South Wales, Australia, makes it clear that its position was in the south-west in the evening, but nothing could be seen of the nucleus. As soon as it was thoroughly dark the tail could be seen faintly extending over many degrees.

a ke riƙe shi da rubutu shi ne tabatacce, amma abin da aka riƙe shi a kai kawai babu rubutu sai ya ɓace.

Well, we Hausa, what reduces our chance of getting truthful news or history is this: most important people in the old days used to keep things in their heads and not write them down. That is what is implied in Hausa when someone says that what is written down is sure to survive but what is merely kept in mind is sure to get lost.

To sum up, the account of Ikeya-seki is reasonably accurate, while that of the former comet is a mixture of fact and fiction intended to hold the attention of an audience. Fantasy is in every such story, when drama is heightened to horrify and entertain. With such stories, and upheld by the traditional saying ‘ star with a tail—seeing you is not a good omen ’, the comet myth is still carried on among the Hausa. It is sad to relate that the last period of its reinforcement ended in tragedy.

THE PHRASAL PREDICATE IN SWAHILI

By LYNDON HARRIES

An important feature of Swahili sentence structure in verbal sentences is the occurrence of members of different word classes expounding a syntactic unit corresponding to Predicate (P) and called Phrasal Predicate (PP). Within the general concept of verb phrase there are relationships between Predicate (P) or Phrasal Predicate (PP) and Subject (S), Object (O) or/and Complement (C), and where these relationships occur they are an integral feature of the sentence structure. The syntactic unit called Adjunct (A) functions as ad-verbal modifier. Obligatory relationships show a type of phrasality in which the syntactic units remain identifiable, but the phrasal relationship between members of word classes expounding PP expresses a single predicative function.

The component of P is a one-word verb. A verb is defined as a word capable of taking more than two affixes and which has a subject. The subject prefix is the true subject since it occurs in some contexts with no group expounding S. The ' customary ' **hu-** tense is an exception to this rule, for with this tense the group expounding S must occur, but most grammars relate this tense to an earlier copulative construction with copula **ni** followed by the infinitive. In representing the structure the letter P stands for S P, i.e. a verb with subject prefix expounding Predicate. The syntactic unit Object consists of object infix and the group which is its referent. When both occur, Predicate-Object relationships is indicated as P O, but in the absence of the referent-group, the object infix is shown in parentheses, viz. P(O). Obligatory relationship is indicated by the use of a plus sign, e.g. P +O, or P(+O).

The declarative sentence is the norm for establishing syntactic categories, so that imperatives with no subject, questions, response patterns have separate treatment.

The components of PP are as follows :

(I) Verb and nominal
(II) Verb and two different independent nominals
(III) Verb and verb
(IV) Nominal and verb

I

PHRASAL PREDICATE : VERB AND NOMINAL

In sentences with O the use or omission of object infix is a way of giving definiteness or indefiniteness to the object, e.g.

alileta ndizi he brought bananas	P O
alizileta ndizi he brought *the* bananas	P O

A sentence with O is restatable by assigning to O the function of S. This is the test for establishing the occurrence of O, e.g.

Juma alileta ndizi S P O
Juma brought bananas

ndizi zililetwa na Juma S P A
bananas were brought by Juma

The nominal component of PP must be distinguished from the group expounding O when there is no object infix. The components of PP do not relate to each other as syntactic units, for PP is itself a unit. The nominal component of PP is never represented in the verb by an object infix, e.g.

alipiga mbio PP
he ran

alizipiga mbio P O
he ran very fast

Even though the nominal **mbio** cannot be given a separate meaning without the stem **-piga** or **-enda**, the occurrence of object infix **-zi-** results in the classification P O. But in sentences with no object infix, the surface structure may hide two contrasting deep structures, e.g.

Juma alipiga risasi S PP or S P O
Juma shot
or Juma shot (a) bullet/s

As component of PP, the nominal **risasi** cannot precede the verb. This will be found to be true of all nominal components of PP and distinguishes them from any group expounding Object or Complement. This factor is not formally apparent in the last sentence, but is of great importance in identifying PPs.

The components of PP do not relate to each other as syntactic units. Verbs that as P do not support an object may do so as component of PP, e.g.

alivunjika mguu PP
he broke his leg (he was broken—leg)

alikufa maji PP
he was drowned (he died—water)

Identification of the separate function of the nominal component of PP is irrelevant, because PP is a unit with a single grammatical function. It is important, however, that separate syntactic units should not be confused with nominal components of PP, e.g.

(a) **nchi imeenea maji** S PP
the country is covered by water

(b) **maji yameenea nchi** S P A
water covers the country

In terms of syntactic units, sentence (b) is not a restatement of sentence (a). In (b) the word **nchi** occurs alternatively with locative extra suffix **-ni**, viz. **nchini**, or with the word **katika** in its own group. These alternates establish that **nchi** in (b) expounds Adjunct and is not an integral part of the sentence structure. Whereas **maji yameenea** is a complete sentence meaning ‘water is spread’, **nchi imeenea** is incomplete.

The occurrence of PP is a grammatical feature. The usual practice of including verb and nominal as a single lexical item in dictionaries is not satisfactory, especially because PPs have different meanings according to whether they take Object or not. Similarly, in verb-nominal relationships PP and P O do not have the same meaning even though the separate lexical items are the same, e.g.

(a) **tulivunja jungu mwisho wa Ramadhani** PP A
we had a big celebration at the end of Ramadhan

(b) **tulilivunja jungu mwisho wa Ramadhani** P O A
we broke the big cooking-pot at the end of Ramadhan

PP in (a) has a unitary meaning different from the meaning of the separate components when used as components of separate syntactic units, as in (b). In (a) the unitary meaning is different from the meaning of *both* components in P O of (b). In the majority of PPs the unitary meaning is different from the meaning of *only one* component, usually the verb, as compared to the meaning of the verb in sentences with no unitary meaning at all, i.e. in sentences with P O. For example :

alipiga kilemba PP or P O **-pig-** hit, **kilemba** turban
he wore a turban

alikata shauri PP or P O **-kat-** cut, **shauri** matter, affair
he made a decision

While the non-unitary meaning of the nominals **kilemba** and **shauri** is discernible in the translation of these sentences, their occurrence is necessary to give a particular meaning to the combination of verb and noun. Yet reference to the lexical interdependence of verb and noun is not by itself the criterion for identifying PP, for the same interdependent meaning occurs when the nominal functions as Object, e.g.

alikipiga kilemba Busaidia P O A
he wore the turban in the Al-Busaid manner

amelikata shauri P O
he has made the decision

PP and Object Relationships

PPs consisting of verb and nominal can be classified according to their capacity or otherwise to take Object :

(i) PP (no Object)
(ii) PP (minimal radical)—no Object
(iii) PP (obligatory Object)
(iv) PP (with and without Object)

(*i*) *PP* (*no Object*)

PPs with the meaning of both nominal components different from the unitary meaning do not take O, and in PPs of this type there is no dual structure beneath the surface structure, i.e. no possibility of P O, e.g.

alivunja kichwa he got over his hangover	PP	**-vunj-** break, **kichwa** head
alipiga mtindi he drank/boozed (alcohol)	PP	**-pig-** hit, **mtindi** whey
alipiga chuku he exaggerated	PP	**chuku** cupping-horn

In the majority of PPs the unitary meaning is associated with the meaning of one or both of the component words, and most PPs with such associated meaning take O either with minimal radical in the verb or with the Applicative extension only. The following PPs in which there is a relationship of meaning between the component words and the unitary meaning do not take Object :

tulikula laifu we had a good time	PP	**-l-** eat, **laifu** life
amevunja ungo she has pubertized	PP	**-vunj-** break, **ungo** a joining
tumefungua kinywa we have broken our fast	PP	**-fungu-** open, **kinywa** mouth
alikata roho he died	PP	**-kat-** cut, **roho** spirit

In PPs of this type which do not take Object, the nominal component is not expandable by a dependent long-series word. The word order is fixed. An expanded nominal group is classified as Object or Complement according to whether it can be represented in the verb by an object infix in ' statement ', e.g.

tuliona baridi
we were cold/we found it cold

The structure is ambivalent, either PP or P C. The unit Complement cannot be represented in the verb by object infix, but may precede the verb, a factor distinguishing it from nominal component of PP. Object infix occurs for O only in response pattern :

Q. **mliona baridi?** PP or P C
were you cold, *or*, did you find it cold?

A. **tuliona baridi** PP or P C
we were cold

or **baridi tuliiona** O P
we experienced the cold

A nominal expounding C is expandable, and such is the case here :

tuliona baridi kali P C
we were very cold

The word order is no longer fixed, and Adjunct can be interpolated :

tuliona jana baridi kali P A C
we found it very cold yesterday

or **baridi kali tuliona jana** C P A
or **tuliona baridi kali jana** P C A

again **aliona furaha** PP or P C
he was happy

aliona furaha nyingi P C
he was very happy

aliona mashaka PP or P C
he was doubtful

aliona mashaka mengi P C
he was very doubtful

Nominal component with fixed prefix:

When PP does not take Object, its nominal component may have a fixed prefix, e.g.

alikaa kitako PP **-ka-** sit, remain, **tako** buttock
he sat down/he squatted

walikaa kitako PP
they sat down/they squatted

The alternance in the subject prefix, **a-/wa-** is not matched by a similar alternance in the prefix of the nominal component. Compare PPs in which the nominal component has a free prefix :

alipiga kilemba PP
he wore a turban

walipiga vilemba PP
they wore turbans

The prefix of **-lemba** is free within recognized limits, i.e. it is in a controlled position and is not, as component of this type of PP, able to control agreements in other words.

With a fixed prefix in nominal component of PP, the nominal stem is that normally associated with a short-series nominal. The fixed prefixes are **ki-** and **u-**, e.g.

With fixed prefix **ki-**

alikaa kitawa he lived holily/in seclusion	**mtawa** holy man, recluse
alikufa kikondoo he died peacefully	**kondoo** sheep
alilala kigogo he slept like a log	**gogo** log
alifanya kitoto he behaved childishly	**mtoto** child

With fixed prefix **u-**

alikuja ujusi it died a natural death (of an animal)	**ujusi** unpleasant animal smell
alifanya ushenzi he behaved in an uncivilized way	**mshenzi** uncivilized person
unafanya ukungu it is becoming mildewed (of **mkate** bread)	**kungu** or **ukungu** damp, mildew
yanakwenda upande they are going awry (of **mambo** affairs, things)	**kipande** piece, etc.

Fixed prefix **ki-** also occurs before reduplicated stems, before stems usually associated with a long-series word, and as an extra prefix, but such nominals do not fulfil the criteria of components of PP, e.g.

alilala kichalichali he lay on his back	P A
alilala kitandani kichalichali he lay on the bed on his back	P A A

The interpolation of Adjunct between verb and nominal component of PP is an impossible sequence, establishing that **kichalichali** expounds A and not component of PP. Similarly with nominals having fixed prefix as an extra prefix, e.g.

anakaa kinyumba she is living like a married woman (but is not married)	P A	**nyumba** house
anakaa na yule bwana kinyumba she is living with that man unmarried	P A A	

The occurrence of the Link Adjunct **na yule bwana** establishes that **kinyumba** is Adjunct and not component of PP. Again, with stems usually associated with long-series words, the nominal occurs also in pre-verbal position and this is an impossible sequence for nominal component of PP :

alicheka kidogo P A
or **kidogo alicheka** A P
he laughed a little

The short-series nominals **kitambo** a little (usually of time), and **kiasi** amount (of time, distance, etc.) function as Adjunct in this type of sentence, e.g.

alikwenda kitambo P A
he went some time ago

also **kitambo alikwenda** A P
he's been gone some time

alikwenda kiasi P A reversible to A P
he went a little way

alikwenda kiasi cha maili tatu P A reversible to A P
he went about three miles

kiasi cha maili tatu kutoka Nairobi tulimwona Juma A P O
about three miles from Nairobi he saw Juma

Similarly, sentences of the type **alikwenda safari** ' he went a journey ', are classified as P A on the grounds that the nominal expounding A can be expanded, e.g. **alikwenda safari ya saa tatu** ' he went a journey of three hours '. The unit A can be introduced by the marker of A, **kwa**.

With radical **-chuku-** carry, a construction occurs with an eccentric type of Complement that does not precede the verb, e.g.

safari yetu ilichukua saa tatu S P C
our journey took three hours

The radical **-chuku-** has obligatory Object when it means ' carry ', but here the nominal group **saa tatu** cannot be represented by an object infix. Even when preceded by what is usually a marker for Adjunct, **kama**, the group does not behave as Adjunct, for unlike Adjunct, its position is fixed after the verb, e.g.

safari yetu ilichukua kama saa tatu S P C
our journey took about three hours

cf. **safari yetu ilichukua muda wa saa tatu** S P C
our journey took a period of three hours

In this sentence the marker **kwa** of Adjunct is not permissible.

cf. **safari yetu iliendelea kwa muda wa saa tatu** S P A
our journey continued for a period of three hours

With **kwa** retained, the order A S P occurs, and with the order S P A the marker **kwa** can be omitted.

again **kitabu hiki kimechukua habari ya kupiga vita** S P C
this book is about war

(ii) PP (minimal radical)—no Object

Included in the category of PP (no Object) are PPs which do not take Object if the verb radical is minimal. These take Object only with the Applicative extension to the radical, viz. **-i-** or **-e-** according to the law of vowel harmony. This is a large class of PPs, and it is important to note that the Applicative use in verbs of PP is not identical with its use in verbs expounding P. Not all verbs expounding P are in fact applicative in function even though they employ the applicative extension. They may not relate or apply to any other syntactic unit, e.g.

alizimia P **-zim-** extinguish
she fainted

amelegea P **-leg-** waver, be loose
he has weakened

The majority of Applicatives expounding P have obligatory relationship either to Object or to Adjunct. Without the nominal group expounding O or A, or without the object infix expounding O, the Applicative verb is not a complete utterance, e.g.

alimwendea rafiki yake P +O
he went to his friend

There is no optional occurrence without the Applicative extension **-e-** in relation to O. Compare :

alikwenda kwa rafiki yake P A
he went to his friend's (place)

similarly **alimwolea dada yangu kwa ajili ya pesa zake** P O +A
he married my sister for her money

There is no optional occurrence of the Applicative without the Adjunct, for **alimwolea dada yangu** is not by itself a complete or meaningful utterance. The Applicative verb is in obligatory relationship to Adjunct.

In PPs the Applicative verb is in obligatory relationship only to Object and never to Adjunct. The invariable occurrence of the object infix in PP Applicatives is an indication of the absence of any obligatory relationship to Adjunct. This rule applies also to P Applicatives where the object infix for inanimates occurs, i.e. the relationship to Adjunct is no longer obligatory, e.g.

alinolea kwa kinoo P +A **-no-** sharpen
he used a whetstone for sharpening

Obligatory relationship to A, for **alinolea** without **kwa kinoo** is not a complete or meaningful utterance.

alikinolea kisu kwa kinoo P O A
he sharpened the knife on a whetstone

With object infix in the verb, the group expounding Adjunct, viz. **kwa kinoo** can be omitted, and the resulting sentence is the equivalent of the corresponding sentence without the extension, **alikinoa kisu** ' he sharpened the knife '.

again **alichochea kwa kiberiti** P +A **-choch-** poke, prod
he used a match for poking

aliuchochea utambi kwa kiberiti P O A
he poked the wick with a match

aliuchochea utambi P O
or **aliuchocha utambi**
he poked the wick

PPs which relate to O with minimal radical in the verb behave syntactically the same as P with reference to the use of the Applicative extension, e.g.

alizipiga pasi nguo zangu PP O
he ironed my clothes

alinipigia pasi nguo zangu PP(+O) C
he ironed my clothes for me

Compare with P

alikisoma kitabu P O
he read the book

alinisomea kitabu P(+O) C
he read a book to/for me

In the sentence with Applicative extension the groups **nguo zangu** ' my clothes ', and **kitabu** ' book ', expound Complement and can precede the verb.

PPs which relate to O only with Applicative extension in the verb have no corresponding structure with Complement. The group expounding O in sentences with minimal radical and which have the structure PP O retains its status as O in sentences in which PP Applicatives relate only to O, e.g.

alipiga simu PP
he rang up, he phoned

alimpigia simu PP(+O)
he rang him up

alimpigia baba simu kwa ajili yangu PP +O A
he rang my father up for me

The normal function of the Applicative extension to express something other than direct object relationship is subordinated in this type of PP, and the indirect object relationship is expressed by the use of an optional Adjunct.

Further examples of PP which relate to O only by the use of the Applicative extension :

alipiga kelele	PP
he made a noise	
alitupigia kelele	PP(+O)
he made a noise at us	
alikata bei	PP
he decided on a price	
alitukatia bei	PP(+O)
he agreed with us on a price	
alifunga safari	PP
he prepared his journey, i.e. by packing	
alitufungia safari	PP(+O)
he prepared our journey	

(*iii*) *PP* (*obligatory Object*)

In declarative statement PPs occur which have obligatory relationship to O, e.g.

alimsonga roho	PP(+O)	**-song-** squeeze, **roho** spirit
he throttled him		
alimvunja uso	PP(+O)	**-vunj-** break, **uso** face
he put him to shame		
ametuacha mkono	PP(+O)	**-ach-** leave, **mkono** hand
or **ametutupa mkono**	PP(+O)	**-tup-** throw away
he has passed away		

Included in this category of PP (obligatory O) are PPs in which the nominal is of Arabic derivation, e.g. **huru** ' free ', **wazi** ' open ', **rahisi** ' cheap ', **ghali** ' dear ', etc. In traditional terminology these are adverbs, and of course their adverbial use in expounding Adjunct in other structures is not excluded. Like all nominal components of PP they are associated with specific radicals, e.g. **rahisi** ' cheap ', is associated in this category with radicals **-uz-** ' sell ', and **-nunu-** ' buy ', and the associated meaning is not confined to this type of construction, e.g.

nitauza rahisi vitu hivi	PP +O
I will sell these things cheaply	
cf. **nitaona rahisi kufanya kazi hii**	P Comp
I will find it easy to do this work	
but note **nitaona sahali kuuza vitu hivi**	P Comp
I will find it easy to sell these things	

The nominal **rahisi** is not acceptable in the last sentence because of its association of meaning with **kuuza** ' to buy '. Unlike the sentence with PP +O, the last two sentences have latent words, the marker word **kwamba** or **ya kwamba** of a Complementing clause and the copula **ni**, as follows :

nitaona kwamba ni rahisi kufanya kazi hii P Comp
I will find that it is easy to do this work

nitaona kwamba ni sahali kuuza vitu hivi P Comp
I will find that it is easy to sell these things

In PPs (obligatory Object) use of object infix is obligatory for Cl.1, but for all other classes the object infix can be omitted if the nominal group expounding O occurs :

walimwacha huru mfungwa wao PP +O
they set free their prisoner

walimwacha yule mtoto yatima PP +O
they left that child orphaned

tuli(u)acha wazi mlango wa mbele PP +O
we left the front door open

ali(zi)tia sahihi barua zake PP +O
he signed his letters

wame(li)piga marufuku jambo lile PP +O
they have prohibited that matter

(*iv*) *PP* (*with and without Object*)

In this category of PPs the occurrence of object infix results in a different sentence from the corresponding sentence without O. Examples of sentence pairs with and without O :

ametia aibu PP
he has acted shamefully

ametutia aibu PP(O)
he has disgraced us

alishika mimba PP
she became pregnant

walimshika Juma mimba PP O
they made Juma responsible for the pregnancy

alifunga kamba PP
he used a rope for tying

alimfunga Juma kamba PP O
he tied Juma with a rope

alipiga fundo PP
he tied a knot

alimpiga Juma fundo PP O
he muddled Juma

maji yalimpiga fundo S PP(O)
the water choked him

alifumba macho PP
he shut his eyes

alinifumba macho PP(O)
he shut my eyes

In PP (no Object) the nominal component is not expandable by dependent words. In PP (with Object) the nominal component is expandable, e.g.

walimshika Juma mimba ya dada yangu PP O
they made Juma responsible for my sister's pregnancy

The expanded nominal component **mimba ya dada yangu** is in fixed post-verbal position, a feature distinguishing it from Complement. Compare the following sentence with C :

walimpa Juma zawadi ya saa nzuri P O C
they gave Juma a present of a nice watch

or **zawadi ya saa nzuri walimpa Juma** C P O
a present of a nice watch they gave to Juma

In PP O the components of PP are discontinuous in some sentences, for the O group comes between verb and nominal component of PP. The position of PP nominal component and of the group expounding O is in most sentences interchangeable, though O of Cl.1 and Cl.2 usually has its group immediately after the verb. Examples :

alizipiga pasi nguo zangu PP O
or **alizipiga nguo zangu pasi** PP O
he ironed my clothes

alimfunga ndugu yangu kamba ndefu PP O
he tied up my brother with a long rope

alimpiga Juma mawe mengi PP O
he threw a lot of stones at Juma

baba alinifumba macho yote mawili S PP O
father shut both of my eyes

baba alimfukuza Juma kazi ya kupika S PP O
father dismissed Juma from his work as a cook

The nominal component of PP does not have the same function as Adjunct. This is true in the sense that they are not substitutable, nor in some instances if a substitution is made is the meaning the same. Compare :

alikufa maji PP
he was drowned

alikufa kwa maji P A
he died of drink

Juma alimshika mtoto mkono wa kuume S PP O
Juma held the child's right arm

Juma alimshika mtoto kwa mkono wa kuume S P O A
Juma held the child with his (Juma's) right arm

II

PHRASAL PREDICATE : VERB AND TWO NOMINALS

The verb of PP may form a single syntactic unit with two nominal components, i.e. two different short-series nominals.

In PPs of this type the verb has minimal radical. Only one example has been observed in which PP of this type does not take an Object, as follows :

alipiga moyo konde PP **moyo** heart, **konde** fist
he took courage

A variant form of this sentence occurs with the reflexive infix **-ji-** as O, but with no variation in the object infix :

alijipiga moyo konde PP(O)
he took courage

cf. **alijipiga konde** PP(O)
he struck himself with his fist

Sentences occur with variation of person in the object infix, but it is not possible to generate similar sentences automatically based on this construction. There is a tendency to reject the use of a nominal group expounding O and to confine the construction only to sentences with the object infix, e.g.

alimchapa matako fimbo PP(O)
he beat him on the bottom with a stick

but **alimchapa mtoto wake fimbo matakoni** PP O A
he beat his child with a stick on the bottom

Two sentences have been observed in this category with unitary meaning, and probably because the association of the relevant nominals is so well established with that special meaning, the O nominal group is permissible in final, not medial position in the sentence :

Juma alimpaka uso mavi babake Juma disgraced his father	S PP O	**-pak-** smear, apply **uso** face, **mavi** dung
cf. **alimpaka mavi usoni** he smeared dung on his face	PP(O) A	
Juma alimpaka uso mafuta babake Juma made his father feel proud/happy	S PP O	**mafuta** oil
cf. **alimpaka mafuta usoni** he anointed him on the face	PP(O) A	

Where the two nominals of PP occur, their position is fixed. The second nominal together with the verb may constitute PP in a different sentence, but not the first nominal. No general rule can be made from this, since what appears to be a distinction, semantically at least, between objectival and adverbal relationship cannot be sustained. Compare :

alimkata kichwa he cut off his head	PP(O)
alimkata kichwani he cut him on the head	P(O) A
alimchoma kisu he stabbed him with a knife	PP(O)

The form **alimkata kisu** is not acceptable for ' he cut him with a knife ', but only **alimkata kwa kisu**. This is further indication of the semantic restrictions in this type of construction.

III

PHRASAL PREDICATE : VERB AND VERB

Adjacent verbs occur, each with the same subject referent. The traditional grammars refer to ' compound tenses ' or ' compound verbs ', implying that the compound forms a syntactic unit. A different approach is needed to establish the identity of PP.

The verb **-w-** ' be ', occurs as auxiliary in all of its tenses except the negative **-ja-** tense. It is a time marker for the second verb which is functionally a verbal complement corresponding to a nominal complement or to a copulative complement, as follows :

(a) **alikuwa amechoka** he was tired	P with verbal C
(b) **alikuwa mgonjwa** he was ill	P with nominal C
(c) **alikuwa ni mgonjwa** he was a sick person	P with copulative C

In the general analysis the term Complement applies to a syntactic unit expounded by a nominal group, so that sentence (b) is classified as P C. The verbal and copulative complements are each a type of Complementing clause (Comp). In the case of the verbal complement, the Comp clause is expounded in sentence (a) by Predicate. In other sentences P of Comp following a tense of **-w-** ' be ', can take O and/or be modified by A, e.g.

alikuwa amemfukuza mkewe P Comp (P O)
he had driven his wife away

alikuwa amekamatwa ghafula P Comp (P A)
he had been arrested suddenly

The verb **-w-** ' be ', in sentences of this type is classified as Clause Auxiliary (CA) and so as P(CA). Positive P(CA) can be followed by a negative verb in Comp, and vice versa. The sentence **alikuwa hawezi** ' he was unwell ', does not, however, reverse to negative-positive. The tenses of Comp after P(CA) have in the positive the pre-radical tense signs **-na-**, **-ki-** and **-me-**, and in the negative the present negative tense and the negative **-ja-** tense. Examples :

atakuwa anamkataza mkewe P(CA) Comp(P O)
he will be refusing his wife

alikuwa akimpiga mkewe P(CA) Comp(P O)
he used to beat his wife/he was beating his wife

alikuwa amemkubali mkewe P(CA) Comp(P O)
he had accepted his wife

alikuwa hasomi tena P(CA) Comp(P A)
he had given up studying/he was not studying any more

hakuwa akisoma tena P(CA) Comp(P A)
he was not studying any more

The second verb in sentences of this type is classified as Comp whether or not it relates to O and A. Comp with the negative **-ja-** tense is illustrated as follows :

tulikuwa hatujaonana P(CA) Comp(P)
we had not yet met

tulikuwa hatujamwona Juma P(CA) Comp(P O)
we had not yet seen Juma

In describing Complementing clauses, and in representing the structure, it is necessary to indicate whether they complement a verb expounding P or P(CA).

Certain verbs occur in relation to a verbo-nominal. These include **-end-** ' go ', **-ish-** ' finish ', **-pat-** ' get ', **-tak-** ' want ', and **-wez-** ' be able '. The traditional grammars treat them as auxiliaries in what is generally considered to be a unitary verbal construction. A true compound allows for no interpolation between the items, but none of these verbs is so closely bound to the verbo-nominal as to fulfil in all contexts this criterion. The hybrid character of the verbo-nominal mitigates against its classification either as a Complementing clause or simply as Complement, for it is neither Predicate nor simply a nominal group. It is a nominal group with verbal characteristics, e.g. it can take O and can be modified by A, but has no subject prefix. If it is classified as a complement, which of course it is, then it must be represented as a special kind of complement, viz. Complement (Verbo-nominal) or C-vn. With A in fixed position after C-vn, the combination C-vn A is enclosed in brackets, for the distinction between free and bound A in this connection is significant. Examples :

maji yamekwenda kuletwa water is now being fetched	S P C-vn
amekwenda kuitwa he is now being called	P C-vn
amekwisha kula he has finished eating/he has already eaten	P C-vn
sijapata kumwona Rais I have never seen the President	P C-vn O
nimepata mara kwa mara kufika Nairobi	P A (C-vn A)
or **nimepata kufika Nairobi mara kwa mara** I have been occasionally to Nairobi	P (C-vn A) A
alitaka kurudi tena he wanted to come back again, i.e. he has been before	P (C-vn A)
alitaka tena kurudi he wanted again to come back, i.e. he may not have been at all	P A C-vn
aliweza kuwaonyesha ufundi wake he was able to show them his skill	P C-vn(O) C
hakuweza kumkataza kabisa he couldn't forbid him altogether	P (C-vn(O) A)
hakuweza kabisa kumkataza he was absolutely incapable of forbidding him	P A C-vn(O)

The preceding analysis of P Comp and of P C-vn sentences is necessary to show that they are not based on the occurrence of PP. The occurrence of PP with components verb and verb is restricted in matrix sentences to the use of **-j-** ' come ', in the first verb. Both verbs have the same subject prefix, and the occurrence is limited to the use of the future **-ta-** positive tense in both verbals, e.g.

tutakuja tutajuta we will eventually regret it	PP
atakuja atajichosha bure he will eventually tire himself out for nothing	PP(O) A

In Conditioning clauses subjunctives may occur in consecutive sequence with the same subject prefix. With initial radical **-j-** the sequence of two verbs constitutes PP provided that no word can be interpolated, e.g.

funga mlango kwanza tuje tule
shut the door first so that then we may eat

PP is **tuje tule.**

cf. **fungua mlango tuje tukale**
open the door so that we may come and eat

tuje is a Conditioning clause capable in its own right of expansion, and followed by a Consecutive clause which is also expandable, e.g.

fungua mlango tuje mara moja tukale chakula ulichotupikia
open the door so that we may come at once and eat the food you have cooked for us

PP again **sikiliza sana uje uwaeleze wanao mambo haya yote**
listen well so that then you may explain all these matters to your children

The stretch **uje . . . yote** expounds a Conditioning clause with syntactic units PP O C.

nitafanya bidii nije nimalize kazi yangu
I will be diligent so that then I may finish my work

The stretch **nije . . . yangu** expounds a Conditioning clause with units PP O. Clauses of this type in dependent position are not restatable by assigning to O the function of S. The negative subjunctive of **-j-** occurs followed by a consecutive verb with tense sign **-ka- -a** in a Conditioning clause, e.g.

nakuambia leo nisije nikasahau kesho
I tell you today in case I forget tomorrow

The word **kesho** can be interpolated after **nisije**, thus establishing that **nikasahau** is P of an embedded consecutive clause and not verbal component of PP.

IV

PHRASAL PREDICATE : NOMINAL AND VERB

The co-occurrence of one of the following nominals of Arabic origin followed by a positive or negative verb in the subjunctive constitutes PP : **afadhali, heri, bora, lazima, sharti.** Examples :

afadhali unyamaze PP
you had better keep quiet

bora tukiri PP
we had better confess

heri usiende PP
you had better not go

lazima tusimkasirishe baba PP O
we must not make father angry

sharti tujaribu kwanza PP A
we have to try first

Substitution of a verbo-nominal for the verb with subject prefix results in what is classified as neutral PP. The negative form of the verbo-nominal occurs. Examples :

afadhali kunyamaza neutral PP
better to keep quiet

bora kukiri neutral PP
better to confess

heri kutokwenda neutral PP
better not go

lazima kutokumkasirisha baba neutral PP O
father must not be angered

sharti kujaribu kwanza neutral PP A
an initial attempt must be made

There is no latent word between nominal and verb in this category of PP. If, however, the nominal is stabilized by the copula **ni** or its negative **si**, the copulative construction introduces a Complementing clause corresponding to Topic in normal non-verbal sentences. The latent marker-word **kwamba** or **ya kwamba** is employed :

ni afadhali unyamaze
or **ni afadhali kwamba unyamaze**
it is better that you should keep quiet

ni lazima (kwamba) tusimkasirishe baba
it is essential that we shouldn't anger father

ya kwamba tusimkasirishe baba ni lazima
that we should not anger father is essential

ni bora kukiri
or **kukiri ni bora**
it is better to confess/to confess is better

The last example is a non-verbal sentence with basically the same construction as in the preceding sentences of this group. Copulative sentences are classified as consisting of Topic, e.g. as **kukiri**, and Comment, as **ni bora** in the last sentence.

The Complementing clauses in the above examples expound Topic in relation to the copulative Comment.

The above sentences in this section (IV) are stable sentences. In Conditioning clauses the co-occurrence of nominal or invariable word with a verb constitutes PP. The first component is usually classified as an adverb, or as a noun functioning as adverb, but this says nothing about the adverbial relationship. The fixed preverbal position of these words indicates a special relationship to the verb. Corresponding sentences exist without them, but they are not the same sentences, and in some instances the verb cannot occur without the previous word, e.g.

kabla hajasema vile, walianza kumcheka PP A / P C-vn(O)
before he said that, they began to laugh at him

The verb **hajasema** can occur as a stable sentence, but not in this context without **kabla.**

tangu azaliwe, hakupata kumwona mzungu PP / P C-vn O
from his birth, he had never seen a white man

The verb **azaliwe** can occur without **tangu** in a different context to expound P, but not in this sentence. The status of syntactic unit Adjunct cannot be given to **kabla** or **tangu**, for it forms a unit with the verb. Such PP components are not expandable.

wakati aliporudi, ilikuwa ikipiga mvua PP / P(CA) Comp(PP)
while he was coming back, it rained

cf. **aliporudi, ilikuwa ikipiga mvua** P / P(CA) Comp(PP)
when he got back, it was raining

hata akisema vile, watamcheka tu PP A / P(O) A
even if he says that, they will just laugh at him

cf. **akisema vile, watamcheka tu** P / P(O) A
if he says that, they will just laugh at him

tangu aliposema vile, hawakumcheka tena PP A / P(O) A
ever since he spoke like that, they did not laugh at him again

The component **kwa vile** followed by a verb with relative affix **-vyo-**, but with no antecedent, is the only example observed in which the omission of the initial component of PPs of this type does not modify the meaning. This has an alternative form with **kwa vile** but without the relative affix **-vyo-**, a recent use that occurs frequently in the Swahili press, e.g.

kwa vile alivyosema maneno yale, walianza kumcheka PP O / P C-vn(O)
because of how he spoke those words, they began to laugh at him
or **alivyosema maneno yale . . .**
or **kwa vile alisema maneno yale . . .**

Of much less frequent occurrence is the use of **ngaa** or **anga** followed by subjunctive to expound PP in Conditioning clauses :

alinipa chakula, anga nipate nguvu kidogo P(+O) C / PP O A
he gave me food, so that at least I might get a little strength

tuliwaombea, ngaa waone mahali pa salama P / PP O
we prayed for them, that at least they might find a place of safety

The special advantage of identifying the combinations of words as PP in the above description is that objectival relationships in the general sense are clarified. It provides a method of classifying the immediate constituents of the verb phrase into identifiable units of structure.

MAMMAN KONNI: AN ECCENTRIC POET AND HOLY MAN FROM BOƊINGA

By Mervyn Hiskett

Details of the life of Mamman Konni, together with the *ajami* manuscript of the poem presented below, were given to me in the course of field work in Sokoto during 1967 by Alhaji Malam Junaidu, Wazirin Sokoto.

Mamman Konni was a *walī* or holy man and a contemporary of the poet Sa'idu ɗan Bello. He is therefore likely to have flourished during the middle period of the nineteenth century and he lived at Boɗinga, a little village near to Sokoto. In his day he was credited with great piety and the power to work miracles ; and also with a sardonic wit and an irreverence for authority. It is for his wit that he is chiefly remembered and many stories still circulate in Sokoto about him, of which the following are typical :

> A certain butcher was fattening his bull for the Salla festival but on the eve of Salla it died of natural causes. The butcher, in distress, went to Mamman Konni to seek a *fatwā* or legal ruling as to whether he might sell the meat of the bull. The holy man told him, ' Go, sell the meat but sell it only to those who wish to buy for more than 2,000 cowries. On no account must you sell to those who wish to buy for 2,000 cowries or less '. The butcher went and did as he was told and in a short time had disposed of all his meat. But soon rumours began to circulate that the bull had not been properly slaughtered and they came to the ears of the chief of Boɗinga. He at once summoned the butcher to account. The butcher told his story and in amazement the chief called Mamman Konni and demanded to know whether he had really authorized something so flagrantly against the law. Mamman Konni replied, ' Yes, I authorized the butcher to sell his meat ; for anyone who has more than 2,000 cowries to spend on meat, his money has been gotten as illegally as the meat of that bull ! '

And another well-known story :

> One day a man who knew of Mamman Konni's power to work miracles came to him and complained that he had married a wife who would have nothing to do with him. He begged the holy man to prepare him a charm that would win the lady's favours. Mamman Konni pondered for a moment and then said, ' I will do as you wish, but you must do whatever I tell you without question '. The man agreed. Mamman Konni pointed to a brazier full of glowing charcoal and said, ' Stretch out your hand and seize the largest and reddest coal you can see '. The man reached out and picked up a large

hot coal and immediately dropped it with a howl of pain. ‘ There,’ said the holy man, ‘ you cannot bear the heat of the Fire for a single minute, yet you would have me endure it for all eternity. Go home to your wife and make the best of what God has given you ! ’

A third story records his great self-esteem :

> When the Sultan died it was the custom of the councillors to summon all learned and pious malams in the district to Sokoto and consult them as to who was best fitted to succeed to the throne. On the death of Abubakar Atiƙu (1837–42), Mamman Konni was among those summoned. A long discussion took place, during the course of which the claims of rival candidates were pressed. Mamman Konni took no part in this, but sat silently listening. Eventually he got to his feet and addressed the company : ‘ God Most High has said that you should appoint the most learned among you to be your emir. I am more learned than you and all your candidates, and it is I who should be the Commander of the Believers ’. When the councillors demurred he stalked out of the council chamber.

The poem by Mamman Konni which is presented below was composed to punish a wife who had displeased him by telling tales about him to her Gobir kinsfolk, and it illustrates his stinging wit and considerable erudition. The poem is known as *Lisān al-ḥāli* (Ar.) from the twenty-fourth verse, and is probably an echo from the *Jawāhir al-maʿānī* of ʿAlī Ḥarāzim :

Fa qāla lisānu ’l-ḥāli kaifa bi-dhā wa qad
    ghadā qalbahu marsā bi-hi maẓharu ’l-amri [1]

The spokesman said, ‘ How can that be,
    Now that his heart is firmly anchored, showing the appearance of authority ’

which in turn may indicate that the holy man had Tijānist leanings.

Unlike many Hausa poems, even the highly literary compositions of the Islamic malams, Mamman Konni’s work is neatly organized in eight parts, each of which follows naturally upon the last and effectively fulfils the poet’s dual purpose—to display his own learning and to ridicule his wife and her kinsmen. They are as follows :

(i) Verse 1. A brief doxology.

(ii) Verses 2–8. A eulogy of the Prophet Muḥammad, thus observing the convention of the Arabic *qaṣīda* which must open with a *nasīb* or amatory prelude, formalized by Islamic practice into praise of the Prophet. But the poet uses this eulogy as a vehicle for listing the mystic names of the Prophet, thus establishing his claim to piety and displaying erudite familiarity not only with the Koran but

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[1] Cairo, n.d., vol. I, 67.

with such works as the *Dalā'il al-khairāt* of al-Jazūlī[2] and *al-Shifā'* of the Qāḍī ʿIyāḍ.[3]

(iii) Verses 9–16. This passage is a further indirect boast, for he associates himself with the Prophet's name and claims special sanctity in a learned quotation from *al-ʿIshrīnīyāt* of al-Fāzāzī[4] cleverly inserted into a macaronic verse, and in a reference to the *Muwaṭṭa* of Anas b. Mālik.[5]

(iv) Verses 17–22. Here he continues to emphasize his own piety by listing his pious teachers and relatives, claims familiarity with the work of the North African theologian al-Waghlisī[6] and hints at a sufic background.

(v) Verses 23–41. He now turns to satirizing his wife and her Gobir relatives, and this passage is wholly in the tradition of Hausa **zambo**, i.e. direct satire.

(vi) Verses 42–56. He continues his satire but reinforces it with a further demonstration of learning, for in praising a new wife at the expense of her disgraced rival, he echoes the famous *Dīwān*[7] of the pre-Islamic poet Ṭarafa, whose stylized descriptions of the beauties of his mistress are famous in Arabic literature, and adds a reference to the well-known early Islamic romance of *Majnūn Laila.*

(vii) Verses 57–93. This long passage continues the satire in a more generalized form. The poet uses his knowledge of Islamic folkloristic literature and history to mount an attack on women in general. This he does by references to the accretional versions of Koranic stories which are to be found in the *Qiṣaṣ al-anbiyā'* of al-Thaʿlabī,[8] a work well known in Northern Nigeria, with which he was almost certainly familiar.

(viii) Verses 98–100. Here he closes with a final doxology and pious colophon.

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[2] Tunis, 1964.

[3] Cairo, n.d.

[4] *al-Wasā'il al-mutaqabbala*, known as *al-ʿIshrīnīyāt*, Cairo, n.d.

[5] GAL.S.I, 297.

[6] GAL.S.II, 351.

[7] Edited Max Seligsohn, Paris, 1901.

[8] Cairo, n.d.

THE HAUSA TEXT

Ṣallā 'llāhu ʿalā 'l-nabī 'l-karīmi

1. A mu gode Rabbu Ubangiji
Don ya azo muna godiyan na
2. A mu yo salati da sallama
Bisa Annabimmu Maɗaukakin na
3. Shi na Muhammadu mai daraj-
-ja Hammaɗaya [9] Munhamin [10] na
4. Shi Ɗaha [11] shi Yasina [12] Ba-
-raƙalidu [13] Mahi [14] Ahmadun na
5. Shi Ɗaba-Ɗaba [15] da anka ba
Fikon isa bisa martaban na
6. Shi Maza-Maza [16] da yaf fi ko-
-wa ɗaukaka ga Ubangiji na
7. Dominsa anka yi duniya
har lahira ba don wanin na
8. Shi anka ba babban rabo
Don shi ka ceto rats tsayin na
9. Sunan Muhammadu ad da fiko
Mai yawa mun shaidi wanna
10. Sunan Muhammadu ya ishe
Ni tabarruki da farin cikin na
11. *Wa'nwi 'l-tabarruka bismihi* [17]
Na can ga mai *ʿIs͟hrīnīyan* **na**
12. Ɗubaya [18] in ji Muhammadu
Kuɗbi [19] imami arifin [20] na
13. Koway yi suna Ahmadu
Da Muhammadu ana kai shi janna
14. Jannati Adnin [21] an nufa-
-ta inda jannati Ma'awan [22] na

[9] حمطايا
[10] المنحمينّا
[11] طه
[12] يس
[13] البارقليط
[14] ماح
[15] طيّب طيّب
[16] ماذ ماذ
[17] تيمّن به وانو التبرك باسمه
[18] طوباى
[19] قطب
[20] عارف
[21] جنّات عدن
[22] ماوى

ENGLISH TRANSLATION

In the name of God, the Merciful, the Compassionate,
May God bless the noble Prophet.

1. Let us thank the Lord God
   For He has made this thanks obligatory upon us.
2. Let us invoke blessing and peace
   Upon our Prophet, this glorious one.
3. He is Muḥammad, the one ranking as
   Ḥimaṭāyā,[72] Munhamīnā,[73]
4. He is Ṭaha,[74] he is Yāsīn,[75] the
   Comforter,[76] Māḥi,[77] this Aḥmad,
5. He is Ṭayyib Ṭayyib [78] who has been given
   Excellence to reach this rank,
6. He is Mādhun Mādhun,[79] who exceeds all
   In glory in the sight of the Lord God.
7. Because of him the world was created,
   And also the hereafter, not because of any other.
8. To him was given a great destiny
   For it is he who saves upon the Day of Resurrection.
9. The name of Muḥammad is possessed
   Of great glory, we bear witness to this.
10. The name of Muḥammad suffices me
    In respect of blessing and of happiness
11. ‘ And intend blessing by his name ’ [80]
    Is there in the words of the author of *al-ʿIshrīnīyāt*
12. ‘ How happy am I ’—thus spoke Muḥammad,
    Pole, Imām and initiate.
13. Whoever has the name Aḥmad
    And Muḥammad, he will be taken to Paradise,
14. The Paradise of Eden is the one I mean,
    There in the Garden of Ma’wā.

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[72] *al-Shifā’*, ed. cit., vol. I, 190. This and the following names are the mystic names of the Prophet Muḥammad, some of which are probably of Greek or Hebrew origin ; others are the *fawātiḥ* or opening letters of certain Koran chapters.

[73] ib., 190.

[74] *Koran*, 20:1.

[75] ib., 36:1.

[76] *al-Shifā’*, 190. The word occurs in the Arabic version of John, 14:26, as ‘ the Comforter ’.

[77] *Dalā’il al-khairāt*, ed. cit., 85.

[78] *al-Shifā’*, 190.

[79] ib., 190.

[80] This is a quotation from *al-Wasā’il al-mutaqabbala* of al-Fāzāzī, commonly known as *al-ʿIshrīnīyāt*—‘ The Twenties ’—because it consists of sets of twenty pentastichs, each fifth hemistich of which ends in the same letter of the Arabic alphabet. This quotation comes from *Ḥarf al-tā’*, verse 6, and the complete hemistich means :

Draw good augury from him and intend blessing by his name.

15. Duba Anas ɗan Maliki
Shi yar ruwaito musnadin [23] na
16. Na gode Allah wanga su-
-na ya isam mini arzikin na
17. Na gode Allah ni da Um-
-mil mu'minina [24] A'aishatan na
18. Mun sami Alkurani in-
-da ubammu Malam Hamidun na
19. Har mun ƙaranto Waglisi
Bisa walidimmu [25] da walidan na
20. Na sami gadon Annaba-
-wa inda ko Aba hafizin [26] na
21. Na sami wurdin Shaihu Gaus-
-ul Arifina [27] ga salihan na
22. Na sadu ko da mazan ƙwarai
Na gode Allah haliƙin [28] na
23. Ya kai abokina jiya
In bayyana maka mas'alan [29] na
24. Ga ko lisanul hali [30] shi
Yab bayyana muna gaskiyan na
25. Ya ce ka tashi ka tambaya
Mini in akwai su da mu'mina na
26. In ba ta zambar arba'i-
-na da arba'ina da rigunan na
27. Ta maye ma wagga da anka ce
Ta zo ga Musa katiban na
28. Ta zo ga baitin nari [31] ta
Rego cikin ɗakin wutan na
29. Ta zo gidajen tai gama-
-ni tana gamani inda ban na
30. Ƙarya takai, ƙarya sukai
Mu, mun sami mun shaida wanna

[23] مسند
[24] أمّ المؤمنين
[25] والد
[26] حافظ
[27] غوث العارفين
[28] خالق
[29] مسألة
[30] لسان الحال
[31] بيت النار

15. See Anas b. Mālik [81]
He is the one who related the authentic tradition.
16. I thank God that this name,
Is sufficient riches for me.
17. I thank God, I and the mother of the Believers,
(My sister) A'ishatu.
18. We learned the Koran
From our father Hamidu,
19. And we studied al-Waghlisī [82]
Under our father and our mother.
20. I have obtained the heritage of the prophets
From Aba, the Koran reciter,
21. I have obtained the *wird* [83] of the Shaikh, the Succour
Of the initiates from a certain pious woman.
22. I have kept company with men of excellence,[84]
I thank the Creator.
23. O my friend, listen
While I explain this affair to you.
24. Here is the spokesman,[85] he will
Explain to us the truth
25. He said : Arise and ask
On my behalf, whether there is among them a believing woman.
26. That I may give her forty thousand cowries
And another forty (thousand), and these gowns,
27. That she may replace that one of whom it was said,
She went to Musa, that scribe,
28. She went to the House of Fire,[86] she
Peeped into that House of Fire,[86]
29. She went to the compounds, she made mischief,
She was stirring up trouble where I was not.
30. She lied ; they lied,
As for us, we know, we bear witness to this.

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[81] The author of *al-Muwaṭṭa*.

[82] Probably Abū Zaid ʿAbd al-raḥmān al-Waghlīsī (see n. 6), author of *al-ʿAqāʾida al-Waghlīsī.*

[83] A section of the Koran recited privately as a sufic prayer.

[84] The Hausa **maza** is probably the equivalent of the Arabic *al-nās*—' the people '—but with the special meaning of ' the learned scholars and religious authorities '. See Hunwick, *BSOAS*, XXVII, 3, 1964, 587, n. 190, who refers to this usage of the word in the context of the Western Sudan in the late sixteenth century.

[85] *Jawāhir al-maʿānī*, ed. cit., 67.

[86] The word-play is lost in translation. The poet renders ' the House of Fire ' in Arabic in the first hemistich and in Hausa in the second hemistich. See n. 87.

31. Ta zo gidan Modibbo A-
-li tana gaya musu diddigin na
32. Ta ce kaza da kaza kaza
Bisa Gobirawan gobaran na
33. Ita ko da su taka taƙama
Dangin Mayaƙi Na Yaƙuban na
34. Mu ko muna da maƙamnaci
Sarkin Musulmi makayen na
35. Shi arifi [32] ɗan arifi
Nuruz zamani [33] ga zamanin na
36. Ta ce tana tuba tana
Kamna ta koma mai gidan na
37. Ta ce cikin hali shi ke
Bai bayyana mata zahirin na
38. Salla shi kai, ko mi shi kai ?
Ni, ban sanam ma Muhammadun na
39. Na tuba ni na koma tu-
-ba sa a kai ni ga malamin na
40. Na ce salamun nai jawa-
-bi don kalamin jahilan na
41. Ni mir ruwana ba ni jin
Gigi na mai i'inniyan na
42. Boɗinga inda mazan ƙwarai
Nish shimfiɗa mata bargunan na
43. Wai don mu zamna lafiya
Sai taz zamo shaiɗaniyan na
44. Don ta gani ga mahasada
Sun bayyana muna hasadan na

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[32] عارف

[33] نور الزمان

31. She went to the house of Modibbo Ali,
Telling them her gossip.
32. She said this and that and the other,
On account of these Gobir people, men of Fire.[87]
33. As for her, she walks proudly on their account,
The kinsmen of Mayaƙi Na Yaƙuba.[88]
34. As for us, we have one who loves us,
The Commander of the Believers, the Conqueror.
35. He is an initiate, the son of an initiate,
Light of the time in these times,
36. She said she repented, she wanted
To return to her husband's house,
37. She said he was in a bad mood,
He did not explain to her the reason for this.
38. Was it praying he was ? Or what was he doing ?
I know nothing of this Muhammadu,
39. I have repented and I repent again,
Let me be taken back to this malam.[89]
40. I said ' Farewell ', I answered thus
On account of what the ignorant woman had said,
41. What concern is it of mine ! I did not listen
To the meddlesome talk of the stammerer.
42. At Boɗinga, where there are men of excellence,
I spread blankets for her,
43. That perchance we might live there in peace,
Then she turned into a she-devil,
44. Because she saw that the envious ones
Showed their envy openly against us.[90]

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[87] Because she is a Gobir woman. The poet puns on **Gobirawa**—' Gobir people ' and **gobara**—' a conflagration ' and the pun links back to ' House of Fire ' in a previous verse. See n. 86.

[88] Mayaƙi was a chief of Gobir, descended from Yaƙuba ɗan Babari (1795–1801) who offered to assist the people of Kwatakwashi against Sultan Aliyu Babba of Sokoto (1842–59). When he asked the chief of Kwatakwashi to have sand spread on the floors of his tents, girls were sent to spread the sand. He seized them and carried them off as slaves. Sultan Bello is also said to have prophesied that Aliyu Babba would defeat him in battle and when he met Aliyu on the battle-field, he turned tail and fled. The poet's reference to him is therefore a considerable insult to the Gobir people.

[89] The poet is mimicking the woman's words. The reciter rendered this passage in a whining tone.

[90] He is suggesting that her kinsmen had turned her against him because they were jealous that he had married a beautiful young wife.

45. A'a sukai Allah Ta'a-
-la ya gama ni da bargazan [34] na
46. Ita ad da kyawon lu-ulu'i
Da zumurruzi [35] da zabarjadin [36] na
47. Kyawon ƙafafu hannuwa
Ni ka la'ajabi da wuya da nonna
48. Kyawon idanu ag gare
Ta awa idanun marayan na
49. Da ka gane ta ka hakkake
Haskenta ya fi na walƙiyan na
50. Tamraruwa ta ɗai da ɗai
Ta nan cikin ad da'iran na
51. Ga la'ajabi ya bayyano
Bisa masu kyawon dariyan na
52. Allahu akbar ni fa ma-
-maki ni kai bisa ta'ajibin na
53. Majnuni Laila [37] niz zamo
Ita taz zamo shaiɗaniyan na
54. Don wagga ta fita ba ni jin
Komi ina da amaliyan na
55. Na san ina da barahrati [38]
Aina [39] da taz zama raliyan [40] na
56. Astagfiru 'llaha azi-
-ma [41] shi agajemu da gafaran na
57. Kai ko aboki haziƙi [42]
Na ce ka tuba ka bar abin na
58. Na ce ka shaida ka bar biɗar
Mata miyagu masu ɓanna
59. Zamba kaɗai su ka wa maza
Don ba su kumyar ko mazan na

[34] تخلس الطرف بعينى برغز وبخدى رشاء آدم غر
[35] زمرّذ
[36] زبرجد
[37] مجنون ليلة
[38] برهرهة
[39] عيناء
[40] راضى
[41] استغفر الله العظيم
[42] حاذق

45. What did they do ? God Almighty
Had caused me to be joined to this sweet young calf,[91]
46. She it is who has the beauty of pearls
And emeralds and chrysolithes.[92]
47. It is the beauty of her feet and hands
That I admire, and of her neck and bosom.
48. Lovely eyes she has,
Like the eyes of the wild cob.
49. If you saw her you would affirm
That her brightness outshines the lightning,
50. She is a star, she is unique
Here in this country.
51. See how admiration shines forth
For those whose laughter is beautiful.[93]
52. God is great ! As for me, I am myself amazed
At this very admiration !
53. ‘ Mad for love of Laila ’ [94] I have become,
While she, that other, she has become a she-devil.
54. Because that other one has left me, I feel nothing,
For I have a fine she-camel,
55. I know I have my lovely lass [95]
With fine large eyes [95] and pleasing face.[95]
56. I ask forgiveness of Almighty God (for what I am about to say)
May He help us with forgiveness.
57. And you, my learned friend,
I say you should repent and stop what you are doing.
58. I say you should testify and stop seeking
Evil women, makers of mischief.
59. Only deceit do they practise on men,
For they are not modest towards men.

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[91] *burghuz* (Ar.)—‘ a calf ’—highly complimentary in Arabic. The reference is to a line of Tarafa, one of the poets of the *Muʿallaqāt* and the whole verse in Seligsohn's translation is as follows :

> Elle lançait des regards dérobés ; ses yeux ressemblaient à ceux du petit d'une chamelle et ses joues à celles d'une jeune gazelle brune.

Dīwān de Tarafa ibn al-ʿAbd al-Bakri, Seligsohn, page 47 of the Arabic text, page 39 of the French translation.

[92] Also a reference to the *Muʿallaqāt*, Seligsohn, ed. cit., Arabic text, 6.

[93] He compliments her on her fine teeth which flash when she laughs.

[94] A reference to the well-known romance of early Islam. The poet Qais b. al-Mulawwaḥ loved Laila, a woman of his tribe, who returned his love but was betrothed to another. Crazed by despair he spent his life wandering in Najd and singing of her beauty and his longing. He thus became known as *Majnūn Laila*—‘ Mad for love of Laila ’.

[95] All these are said to be echoes of the *Muʿallaqāt* but I have not been able to find the verses in which they occur.

60. Kada ko ka ce sun so ka kai,
 Karya su kai ma babu wanna
61. Bisa hankali ni ka bayyana
 Maka su ka lura da hankalin na
62. Sababinsu af farkon fita
 Kakammu Adamu jannatan na
63. Har anka ce mai ‘ ihbiɗu ’ [43]
 Su fito da su da macijiyan na
64. Sun rarrabo ba su gangamo
 Sai nan ga Jiddata ai ƙasan na
65. Kabila [44] don wata fasiƙa
 Yab bar Labuda [45] salihan na
66. Har yak kashe Habila [46] bai
 San aƙiba bisa muttaƙin [47] na
67. An ce ilam [48] ɗufana [49] sun
 Taso sabilin Wa’ilan [50] na
68. Halakam mutanen Luɗu [51] yai
 Sababi ga Wahila [52] kafiran na
69. An sare naƙata [53] Salihin
 Don macce tash shiga shawaran na
70. Duba Sulaimanun Nabiy
 Shi anka ba duka mallakan na
71. Sababin a tuɓe mai sarau-
 -ta macce ta da makissacen na
72. Sun ce Jaradatu ko Ami-
 -na anka ba alhatimin [54] na

[43] قال اهبطوا بعضكم لبعض عدوّ [44] قابيل [45] لبودا [46] هابيل [47] متّق
[48] Fulfulde.
[49] طوفان [50] واعل [51] لوط [52] واهل [53] ناقة [54] الخاتم

60. You cannot say that they love you, you alone,
It's lying to you they are, there is no love.
61. Carefully will I explain to you about them,
That you may pay careful attention.
62. Because of them it was, that our ancestor(s)
Adam (and Eve) first left Paradise,
63. So that God said to him, ' Go forth ',[96]
Telling them to go forth, they and that serpent.
64. They separated and they did not meet again
Until (they came to) Jidda, there in that country.[97]
65. Cain, because of a certain sinful woman,
He left Labūda, that pious one,
66. And slew Abel, not knowing
The consequences of killing that virtuous man.[98]
67. It is said the waters of the Flood
Rose up because of a certain (woman called) Wa'īla.[99]
68. The destruction of the people of Lot was brought about
Because of Wahīla, that unbelieving woman.[100]
69. The she-camel of Ṣāliḥ was slain
Because a certain woman entered the council.[101]
70. Look at Soloman, the Prophet,
To him was given all dominion.
71. The reason for stripping him of his kingship
Was a certain woman together with that intriguer (Satan).
72. They say it was Jarāda or Amīna
To whom his signet ring was given,

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[96] *Koran*, 7:24 : ' He said : Go forth—some of you the enemies of others. And there is for you in the earth an abode and a provision for a time.' See also the *Qiṣaṣ al-anbiyā'* of al-Thaʿlabī, ed. cit., where the long accretional story of the Fall is given.

[97] *Qiṣaṣ*, 22, where this detail is recorded.

[98] ib., 26 ff. The Muslim version tells that Adam was commanded by God to marry Abel to Iqlimā, the beautiful twin sister of Cain, Cain to Labūda, the plain but virtuous twin of Abel. But Cain desired his own beautiful twin and in jealousy slew Abel.

[99] ib., 34, does not contain the reference to the woman. A version circulating locally in Northern Nigeria tells how a man was talking to a certain woman, Wa'ila, who told him why Noah was building the ark. Mockingly the man struck the ground with the butt of his spear and said, ' This is where the water will come out '—and it did!

[100] ib., 61 ff.

[101] *Koran*, 54:27, is the origin of the story, which is greatly expanded in *Qiṣaṣ*, 39. God sent the Prophet Ṣāliḥ to the tribe of Thamūd, but they disbelieved in him and demanded a sign. Therefore God sent a miraculous she-camel whose milk supplied the whole tribe. But the she-camel was thirsty and drank the well dry and so the flocks suffered. Two women, ʿAnīza and Ṣadūq, angry because their flocks had diminished, bribed a man to cut the she-camel's throat and thus brought destruction on Thamūd.

73. Har yay yi kwana arba'i-
-na shina fitacce lokacin na
74. Sababin Zaliha [55] anka ɗam-
-re mai jamala Yusufan na
75. Musa kalamul Lahi [56] ya
san ɗaukaka bisa kaziban [57] na
76. Yahaya da yaf faɗi gaskiya
Wata macce ta hana gaskiyan na
77. Sababin da anka kashe shi ke
Nan inda sarkin zamanin na
78. Wannan hadisi mun ganai
Ga Aba Hurairata [58] sahibin na
79. Harutu [59] ƙaƙe anka yo
Mai bai yi laifi ko ƙadan na
80. Maratu [60] ko hakana zama
Malakaini [61] ba su da ma'asiyan na
81. An sa ma yarinya dafi
Sababin kashin Iskandarin na
82. An ce ma Zul-Karnaini [62] An-
-nabi wansu sun ce mai walin na
83. Ɗo alwalijo wana yo an-
-nabi kanko Zul-Karnaini on na [63]
84. Wata macce tai sababin kashin
Zakin fiyayye zarumin na

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[55] ذليحة [56] كلام الله [57] كاذب [58] ابو هريرة

[59] هاروت [60] ماروت [61] ملكين [62] ذو القرنين

[63] This whole verse is Fulfulde.

73. So that he spent forty days,
De-throned for all that time.[102]
74. Because of Zalīha,[103] Joseph,
The beautiful one, was imprisoned.
75. Moses, the ‘ Word of God ’,[104] obtained
Glory over that lying woman.
76. John the Baptist, who spoke the truth,
A certain woman it was who withheld the truth,
77. That was why he was slain
In the presence of the king of those times.[105]
78. This tradition, we have learned it
On the authority of Abū Huraira, who was a Companion.
79. Hārūt, it was a lie that was told about him,
He committed no sin, none at all,
80. And also Mārūt, because
Two angels cannot sin.[106]
81. Poison was given to a certain girl,
It was the cause of the killing of Alexander the Great.
82. Some say of Alexander that he was a prophet;
But others say he was only a holy man.
83. He was a holy man, not a prophet,
He, Alexander, this very one.[107]
84. It was a certain woman who was the cause of the killing
Of (ʿAlī) the Lion of the Most Excellent, that champion,

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[102] *Qiṣaṣ*, 162 ff. One day Soloman was bathing and left his signet ring with his slave-girl Jarāda. But the devil came disguised as Soloman and the girl gave him the ring. In consequence the Devil usurped Soloman's throne for forty days and ruled in his place.

[103] The wife of Potipher in the Islamic version of the Joseph story.

[104] In the Islamic tradition Moses is known as ‘ The Word of God ’ because God spoke to him directly.

[105] See *Qiṣaṣ*, 212 ff.

[106] According to the story in *Qiṣaṣ*, 30 ff., the two angels Hārūt and Mārūt were jealous of God's favour to men. God explained that men were exposed to temptation, but the angels averred that they could resist temptation. So they were sent down to earth to judge justly between men and forbidden to drink wine, commit murder or fornication. They were tempted by Venus (Ar. Zuhra) and in no time at all had committed all three sins. For this they are punished until the Day of Judgment. The poet's interpretation of the story is interesting. Contrary to the accepted version, he insists that two angels could not have sinned, and by implication blames it all on the woman. This may reflect a particular theological doctrine current in his day. The work **ƙaƙe** (قاقبي in the MS.), which appears in verse 79 of the Hausa text is not listed in Bargery or Abraham. It was explained to me by my informants as the equivalent of **ƙarya**.

[107] There are many versions of the Alexander cycle in Islamic folklore, all stemming from *Koran*, 18:83 ff. *Qiṣaṣ*, 200–6, gives the accretional version as it had developed by the eleventh century A.D.

85. Shi shugaban shuhada'u na
Haka anka ce bisa Zirbijin [64] na
86. Sababin Kudami [65] da tay yi am-
-ren Ibnu Muljami [66] makirin na
87. Yak kas Amirul Mu'mini-
-na [67] Aliyyu Haidara [68] shugaban na
88. Matar sharifi ta kashe
Babban sharifi Alhasan na
89. Sunanta Ja'adatu anka ce
Ta la'anu ta shiga tasarin na
90. Duba Fiyayyen talikai
Wata macce ta sa mai guban na
91. Wata ko dafi wata ko ƙaya
Wata ko ƙiyayya hasadan na
92. Mata makida ag gare
Su ku duba ma'anar ' Kaidakunna ' [69]
93. Allah shi sa mu cikin tsari
Allah shi la'ani irin waɗanna
94. Allah shi ba mu farin ciki
Mutuwa ta kyauta ga lokacin na
95. Allah shi ba mu riƙon jawa-
-bi gun Nakiri da Munkirin na
96. Mu ga shimfiɗa bisa shimfiɗa
A shimfiɗa muna lafiyan na
97. Ran alƙiyama ko mu ta-
-shi cikin bushara mahsharin [70] na
98. Mu ga Annabimmu maɗaukaki
Sarkin Musulmi rats tsayin na
99. Ran nan mu gode Ubangiji
Ko bai azo muna godiyan na
100. Mun roƙi Jalla muwafaƙa [71]
Mu gano Muhammadu rats tsayin na

Al-ḥamdu lillāhi rabbi 'l-ʿālamīna wa 'l-ṣalātu
wa 'l-salāmu ʿalā 'l-nabī wa ālihi
wa ṣaḥbihi

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[64] زبرج
[65] قطام
[66] ابن ملجم
[67] امير المؤمنين
[68] علىّ حيدرة
[69] قال انّه من كيدكنّ
[70] محشر
[71] موفّق

85. He was the leader of the martyrs,
Thus it is said in Zibrīj.[108]
86. (It was) because of Quṭām who married
Ibn Muljam, that the deceitful one
87. Slew the Commander of the Believers,
ʿAlī the Lion, the leader.[109]
88. The wife of the Sharīf slew the
Great Sharīf, al-Ḥasan,
89. Her name was Jaʿda. It is said
That she is accursed, that she has entered perdition.[110]
90. See the Best of all mankind,
A certain woman gave him poison.[111]
91. Another also gave him poison and yet another put thorns in his way.[112]
Another hated him because of envy.
92. Women are deceitful.
Look at the meaning of (the verse of the Koran) ' Verily your deceitfulness is great '.[113]
93. May God place us in His protection,
May God curse such women as these.
94. May God give us happiness
And a death in the Faith when the time comes.
95. May God grant that we remember the right answers
In the presence of Nakīr and Munkir.
96. May we see carpet upon carpet
Upon carpet and may we be at peace.
97. And on the Day of Resurrection may we rise up
Amidst good tidings in the place of assembly.
98. May we see the glorious Prophet,
The Commander of the Muslims on the Day of Resurrection.
99. On that Day may we thank the Lord,
Although He has not made thanks obligatory upon us (at that time).
100. We pray God Almighty for a fit place,
That we may see Muḥammad on the Day of Resurrection.

Praise be to God, Lord of the Worlds and blessing
and peace be upon the Prophet and his
family and his Companions.

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[108] Possibly the work mentioned in GAL.S.I, 181.

[109] ʿAlī b. Abī Ṭālib, the fourth Caliph, assassinated by the Kharijite Ibn Muljam in A.D. 661, allegedly at the instigation of the woman Quṭām.

[110] al-Ḥasan, the son of ʿAlī b. Abī Ṭālib (d. 669), is said to have been poisoned as the result of a harem intrigue.

Footnotes 111 to 113 are on page 228.

The metre

The metre of this poem is *Kāmil muraffal*, that is *Kāmil* having a final long ' trailing ' syllable in the second hemistich of each verse, thus :

˘ ⏓ – ˘ –/˘ ⏓ – ˘ –//˘ ⏓ – ˘ –/˘ ⏓ – ˘ –/–

Kāmil muraffal is a rather rare metre in Hausa verse and this is perhaps also in keeping with the poet's show of erudition. The scansion is very regular and only revealed one fault, in verse 31 :

Tā d̲h̲ū g̲h̲ĭdān/mūdībbŭ ʿā//lī tănā g̲h̲ăyā/mŭsŭ dīddĭg̲h̲īn/nā

which, however, can be corrected by reading *ʿālĭ*. Verse 51 is an interesting example of how the metre could be corrupted by the modern **boko** spelling of words of Arabic origin where in the scribe's *ajami* spelling it would remain correct, thus :

G̲h̲ā lāʿjĭbī/yā bāyyănū//bĭsa māsŭ kā/wōn dārĭyān/nā

which is sound ; but if the closed syllable of *laʿjibi* is opened, as in **la'ajibi**, which is what would normally occur in spoken Hausa and in the modern orthography, then the foot becomes - ˘ ˘ ˘ -, showing a resolution of one long syllable into two shorts in a position where this is not permissible according to the rules of classical Arabic prosody.

The final **na** which forms the *qāfiya* (Ar. end-rhyme) is interesting. It is clearly introduced for the sake of the rhyme and appears sometimes to be equivalent to **nan** and at other times to **ne**.

Conclusion

Lisān al-ḥāli is well known and highly thought of in Sokoto. I heard it recited by Alhaji Junaidu to a group of friends who had come to pay him an evening call, and his recitation was accompanied by constant chuckles of enjoyment and outright laughter on the part of his audience. My inquiries as to why the poem was enjoyed drew the explanation that, above all, it was realistic. The sentiments expressed were, so the audience felt, a genuine expression of the poet's indignation and a man indignant at a wife's impudence is a constant source of merriment to the polygamous Hausa. Moreover, the way in which he brought his erudition to the aid of his satire was much appreciated, for it was felt to be a properly crushing response to the impertinent gossiping of the wayward woman. Finally, the poet's conceit was considered to be outrageous and thus amusing.

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[111] After the expulsion of the Jews of K̲h̲aibar, the Jewess Zainab is said to have tried to poison the Prophet Muḥammad.

[112] A reference to the wife of Abū Lahab, *Koran*, 111:4.

[113] *Koran*, 12:28 : ' Surely it is a trick of you women. Verily your deceitfulness is great ! '

Seen in the context of the development of Hausa verse, Mamman Konni's poem is rather atypical. It has in it much of the **zambo** or satire of traditional Haɓe verse ; but apart from one passage (vv. 23–41) its imagery is remote from traditional song. Its dependence upon the author's Islamic scholarship is evident and it must be considered as having sprung from the background of Islamic culture and education in Hausaland ; yet it is in no way religious in purpose and is therefore essentially different from the usual run of Hausa Islamic verse which is homiletic or worshipful.

So far, this is the only poem by Mamman Konni to come to light. It seems unlikely that so fluent a poet composed only once, and the discovery of further works by this interesting and colourful personality is to be looked forward to.

THE ORIGIN OF THE TERM 'BANTU'

By Jan Knappert

The inventor of the term ' Bantu ' to denote all the classifying languages of sub-equatorial Africa, was Wilhelm Heinrich Immanuel Bleek, who was born in Berlin in 1827 and died in Cape Town in 1875.[1] How did Bleek arrive at this term? Which factors influenced him to accept it?

The most important single factor was undoubtedly the fact that Bleek was educated in Germany, the land of Alexander von Humboldt, whose great work has had a powerful influence on many generations of German linguists and was recently re-issued.[2] Another famous German linguist who influenced Bleek was Karl Richard Lepsius (1810–84), who taught him Ancient Egyptian and encouraged him to study African languages.[3] Lepsius was the inventor of the first phonetic alphabet, which was used enthusiastically by missionaries, the first of whom was Grout in his Zulu Grammar, published in 1859;[4] the last one was Lepsius's other great Bantuist pupil, Carl Meinhof, who advocated it at the International Congress of Linguistics and Phonetics in 1925 [5] and used it throughout his life,[6] training his students through it.

Wilhelm Bleek's father, Friedrich Bleek, who died in 1859, was a well-known theologian and professor of theology in Berlin, later in Bonn. This may explain Wilhelm's interest in Hebrew, but it may also have been his background of theology which led him to take an interest in South African languages, since the first grammars had just appeared. We know that Tswana was the first Bantu language Bleek learned:[7] the grammar he studied was the first Tswana grammar ever written, that by James Archbell, published in 1837.[8] Later he studied Appleyard's *The Kafir language* (1850) and possibly Boyce's Grammar of 1834; Boyce was the discoverer of the alliterative concord in Xhosa, which William Davies later called ' the key to the etymological structure of the language '.[9] Appleyard is the first one to classify the ' South African dialects ' into ' the click class ' (meaning Bushman and Hottentot) and the ' alliteral class '. The alliteral class was divided

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[1] O. H. Spohr, *The Natal diaries of Dr. W. H. I. Bleek*, Cape Town, 1965, 1 and 99.

[2] C. W. von Humboldt, *Über die Verschiedenheit des menschlichen Sprachbaus*, Darmstadt, 1949.

[3] O. H. Spohr, *The Natal diaries*, 1.

[4] C. M. Doke in C. M. Doke and D. T. Cole, *Contributions to the history of Bantu linguistics*, Johannesburg, 1961, 63–4.

[5] Cf. *Proposals to the Copenhagen conference on phonetic transcription and transliteration*, April 1925, Oxford, 1926.

[6] Carl Meinhof, *Introduction to the phonology of the Bantu languages*, Berlin, 1932, 7(n.) and 10–11.

[7] O. H. Spohr, *The Natal diaries*, 2.

[8] C. M. Doke, *Contributions*, 36.

[9] ibid., 34 and 38.

by Appleyard into four families: Congo, Damara (= Herero), Sechuana and Kafir.[10] It is quite possible that Bleek's first interest in the comparative study of the South African languages was aroused by an article by A. F. Pott in the *Zeitschrift der Deutschen Morgenländischen Gesellschaft.*[11] It followed an article by the well-known linguist H. C. von der Gabelentz in the first issue of the same journal, entitled *On the language of the Suaheli.*[12] Von der Gabelentz gave the first comparative word list that connected Southern and Eastern African languages. His work, like that of Pott (and probably Bleek), was inspired by Krapf's correspondence which was from time to time published in the *Zeitschrift.*[13]

Bleek repeatedly mentions Krapf, Archbell and Appleyard; yet there was a German professor who preceded all of them in the same subject; I do not know to what extent Bleek was influenced by him. He was Martin Heinrich Karl Lichtenstein, born in Hamburg in 1780, professor at Berlin since 1811, after the appearance of his *Travels in Southern Africa.* It was Doke who saved from oblivion this remarkable linguist and explorer, who published the first comparative vocabularies of South African languages in 1811.[14] Lichtenstein was the first to point out (1808) that the ‘ inhabitants of Southern Africa may be divided into two principal races, viz. the Hottentots and the Kaffirs . . . all the inhabitants of the East Coast of Africa from 10° or 12° S. to the frontiers of the Dutch colony, as one nation . . . to which further research may perhaps compel us to add the inhabitants of the South-West Coast ’.[15] Lichtenstein was professor in the University of Berlin until his death in 1857, so that Bleek may have met him there during his study years 1849–50. In Bleek's doctor's thesis *On the noun genders of the languages of South Africa, Coptic, Semitic and some other sexual languages*[16] we find for the first time the tabulation of the Bantu classes as we still use it today. Here is his list for Herero :[17]

1. **omu**	3. **omu**	5. **e**	7. **otji**	9. **on**	11. **oru**	13. **ou**	14. **oka**	15. **oku**
2. **ova**	4. **omi**	6. **oma**	8. **ovi**	10. **ozon**	12. **otu**	6. **oma**		16. **opa**

So, apart from 13 and 14 which changed places later, all the classes 1–16 are there in the order in which we still use them. It is the fact that this table of class prefixes, as well as their functions for the indication of singular, plural, or place,

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[10] ibid., 38.

[11] A. F. Pott, ‘Verwandtschaftliches Verhältniss der Sprachen vom Kaffer- und Kongo-Stamme ’, *ZDMG*, II, 1848, 5–25 and 129–58.

[12] H. C. von der Gabelentz, ‘ Über die Sprachen der Suaheli ’, *ZDMG*, I, 1847, 238.

[13] Cf. J. Knappert, *Traditional Swahili poetry*, Leiden, 1947, 1–2.

[14] C. M. Doke, *Contributions*, 29, 30, 55.

[15] ibid., 55.

[16] W. H. I. Bleek, *De nominum generibus linguarum Africae Australis, Copticae, Semiticarum aliarumque sexualium*, Bonn, 1851.

[17] ibid., 13.

coincides with that of Xhosa (called *lingua Cafirica aut Amaxosarum*) and of Tswana (*Cuanica lingua*), that causes Bleek to feel justified in speaking of a *familia australis*, ' a southern family '.

In Bleek's *The languages of Mosambique* [18] in which he did little more than editing Dr. W. M. Peters's vocabularies of nine languages—Tsonga, Nyambani (Inhambane), Tete, Sena, Maravi (Malawi) and those of Kilimani (Quelimane), Sofala and Cabo Delgado—adding some of the words Kölle had recorded from slaves in Sierra Leone,[19] we find the classes 17 and 18 now added to the list with their present numbers.[20] In this work Bleek still speaks of ' the Great African Family '. In 1856 the term Bantu had still not been conceived. One passage catches the attention of the student of the history of African comparative linguistics: ' The languages of these vocabularies all belong to that great family which with the exception of the Hottentot dialects includes the whole of South Africa, and most of the tongues of Western Africa; certainly the Otṣi, or Ashantee, the Bullom, and the Timneh of Sierra Leone. The Gor family, which includes the widespread Fulah, the Accra, and the Wolof, may be considered as related to these; as may also the Ukuafi, spoken near the source of the White Nile, and the Tumale in Darfur '.[21] Otṣi is the same as Tswi, Ukuafi was Krapf's name for the Masai; the modern Kwavi in Tanzania speak a Bantu language. In 1856 the sources of the White Nile had not yet been discovered, hence the misleading location.

Up to the present day, Greenberg and his school still uphold this idea of relationship between all the class languages of Africa.[22] It was from his West African linguistic studies that Bleek got his idea for the term Ba-ntu. Bleek believed that in principle all the languages of the earth were related, and so, in his doctor's thesis, he sets out the family tree [23] with reference to his table of language genealogy.[24] In doing so, he confuses Language with Race: he is really giving us the dynasty of the Family of Man—Kafirs, Hottentots, Berbers—while ostensibly speaking about the *lingua mater*. The races are divided on the basis of the types of languages they speak, the essential criterion being that of gender versus class distinctions. Bleek believed that the Mother of all languages possessed pronouns which were derived from nouns, so that, e.g., ' they ' was derived from ' people ' or perhaps ' creatures ' or ' beings ', or some other collective noun. Bleek gives no evidence for this assumption, nor why he postulated the existence of a *lingua mater*, nor does he name the period of history in

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[18] W. H. I. Bleek, *The languages of Mosambique*, London, 1856.

[19] O. H. Spohr, *The Natal diaries*, 2–3.

[20] W. H. I. Bleek, *The languages of Mosambique*, (vi)–(vii).

[21] ibid., 5.

[22] D. Dalby, ' The comparative study of African languages ', *African Language Studies*, VII, 1966, 178.

[23] W. H. I. Bleek, *De nominum*, 60.

[24] Cf. my article in *Études congolaises*, 1970 (forthcoming).

which this supposed language might have been spoken. Yet on that one page we find two leading concepts that were taken for granted throughout the century and were later worked out by Trombetti,[25] who designed a world family tree of languages and invented a special term for this science: ' glottologia '. Even Meinhof believed that some of the ' structureless ' languages of West Africa still today show the ancient features of lack of sex-distinction in the noun, a sure sign of primitivity.

In his ' Comparative Grammar ' [26] Bleek refers in a note to Vidal's introduction to Crowther's ' Yoruba Grammar ', where Vidal quotes Krapf with approval, when Krapf says that ' the South African mind, in the formation of its language, was guided by the impression of life which pervades the whole creation in various gradations or modifications '. Vidal then goes on: ' This mental distinction, thus described by Dr. Krapf, developed itself in a general classification of nouns substantive, by means of a system of formative prefixes. And the entire absence of any such classification in the Yoruba is fully sufficient to exclude it from the extensive family of languages which occupies the whole of Africa south of the line, and of which I have recently discovered the Temneh

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[25] Alfredo Trombetti, *Elementi di glottologia*, Bologna, 1922. Cf. n. 24, above.

[26] W. H. I. Bleek, *A comparative grammar of South African languages*, Vol. I : Phonology, London, 1862, (viii).

Too late for inclusion in the body of this paper, I found a reference which makes it clear that the term ' Bantu ' (' Bántu ') first appeared in print in 1858 :

Dr. P. E. H. Hair, in his article ' Temne and African language classification before 1864 ', *Journal of African Languages*, IV, 1, 1965, 47, writes : ' the term Bantu was not coined till 1857 ', but gives no reference. On pp. 54–5, Dr. Hair notes that Bleek used the term Bâ-ntu in 1858, in his *The library of His Excellency Sir George Grey, K.C.B. : Philology*, Vol. I, Part 1, *South Africa*, Leipzig, 1858, 204, remarking that it is the earliest use in print of the term Bantu. Bleek uses the term Bántu (already without hyphen but still with the acute accent) on p. 35 of the same work, where he introduces the Bantu section of his catalogue. On p. 37, it would seem he is implying a semantic reason for his choice of the term Bantu : '. . . of those sixteen (classes) only two have a decided reference to distinctions observed in nature, being restricted to nouns denoting reasonable beings, the one in the singular, the other in the plural number. That the form of the latter . . . is either actually *ba-*, or contracted or in some other way changed from it, is one of the characteristics of the Bá-ntu family of languages '.

On p. 36, Bleek writes : ' The Otshi dialect of Ashanti-land, and the Bullom and Timneh of Sierra Leone, have been recognized as members of the West-African division of this family '. Bleek here refers the reader to Norris-Prichard's *Natural history of man*, 1855 (see Hair, op. cit., p. 48, n. 1.

On p. 44 Bleek mentions the manuscript of his Comparative Grammar, which was to appear in 1862, as part of the Grey collection (no. 41), adding : ' This is the translation of part of a manuscript written in 1853, a copy of which is at Paris in the Library of the Institut de France. The title of the Original is : Wm. Bleek, *Darstellung des Entwicklungsganges des Gross-südafrikanischen Sprachstamms*, Erster Theil '. It would seem to follow from this German title of 1853, that Bleek had not yet, at that date, conceived the term Bantu, but that in 1858 he had. Again from his publication in the Transactions of the Philological Society in 1855 (Hair, op. cit., 50), which Bleek lists on the same page as no. 42, adding some corrections, it appears that he had not yet coined the term Bantu in 1855.

(with its two cognates, the Sherbro and the Bullom) to be a branch '.[27] Bleek in turn refers to this passage with approval, and so we can here see the ideology building up that dominated so much of the conception of ' primitive languages ' during the nineteenth and a large part of the twentieth centuries. In his preface,[28] Bleek continues the line of thinking he set out in his thesis and simply classifies all the languages of Africa in three groups, those which have classification, those which have sex-denotation, and those which have neither. But since the latter are clearly no more than the most primitive form of the classifying languages (a line which Meinhof pursued in his *Die Entstehung flektierender Sprachen*),[29] there are in reality only two major language families in Africa.

Is the criterion for categorizing the classifying languages together none other than the typological phenomenon of classification? No, there is one more criterion, viz. the one morpheme they all have in common, be it prefix or suffix; it denotes people and its shape always resembles **ba** or **wa**. It was apparently taken for granted that this particle was ' originally ' a separate word in that most primitive of linguistic stadia, the isolating type. It is interesting to note that it was indeed seen as a classificatory principle; and that its function to distinguish plural or singular was seen as secondary.

' Their main distinctive feature is a concord of the pronouns and of every part of speech . . . e.g. adjectives and verbs, with the nouns to which they respectively refer, and the hereby caused distribution of the nouns into classes or genders. This concord is evidently produced through the original identity of the pronouns with the . . . prefix or suffix of the nouns which may be represented by it . . . the prefix and pronouns of the personal nouns in the plural are either actually **ba-**, or contracted, or in some other manner changed from it, is one of the characteristics of the Bâ-ntu family of languages, which have on this account been called *Ba*-languages by Dr. Barth '.[30]

It might have been more prudent if Bleek had not simply identified his Ba-ntu languages with Barth's West African *Ba*-languages but classified them in a larger class together. It shows that although Bleek quotes Barth, he did not read him carefully enough to realize that the meaning as well as the function of the West African morpheme **Ba** is different from that of the **Ba** in Ba-ntu. But it was Barth himself who had already come to the conclusion that his *Ba*-languages must be related to the ' South-African languages '.[31]

It took me some considerable time to trace the passage in Barth's works where

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[27] The Rev. Samuel Crowther, *A grammar and vocabulary of the Yoruba language*, with introductory remarks by O. E. Vidal, Bishop of Sierra Leone, London, 1852, 7.

[28] W. H. I. Bleek, *A comparative grammar*, (viii).

[29] Carl Meinhof, *Die Entstehung flektierender Sprachen*, Hamburg, 1911.

[30] W. H. I. Bleek, *A comparative grammar*, 2–3.

[31] Although he tried hard, Bleek never met Dr. Barth, for as soon as he landed on the Nigerian coast he had an attack of fever and had to be taken back to London. Cf. O. H. Spohr, *The Natal diaries*, 6.

he actually uses the term *Ba*-languages. It occurs only once, in a work which appeared in 1862,[32] the same year in which Bleek published his Comparative Grammar. Barth says on p. xlvii that ‘ the Kanuri term **ma**, pl. **bu**, as far as it represents relations of tribes or nationalities, reminds one very strikingly of the Kafir root **mo**, plural **ba** or **be**, the difference being that the latter is only used as a prefix, as in the name **motšuāna**, “ an individual of the Tsuana tribe ”, plural **be tšuāna**, while the Kanuri **ma** is a suffix ’.

When discussing the Wandala language on p. ccxxxi, Barth returns to this point while explaining the forms **bá-ya**, **bá-nga-rē**, **bá-ka**, etc. ‘. . . that to the real characteristic sign designating the distinct person in question, the syllable **ba** meaning “ individual ” has been prefixed, identical as it appears with the Hausa-term **ba** prefixed to national terms, such as **ba-Hausa**, **ba-Fellantši**, just as we have seen that in Kanuri **ma** is added to the full pronominal form, as for instance **ū-ma**, **ni-ma**, and so on ; but the difference is that the simple pronominal form in the latter language is frequently used, while in Logone the **ba** does not seem to be separated from the pronominal form, except when the pronoun is closely joined to the verb or is used as a suffix. The true nature of this prefix **ba** will be better understood, when we take into account that it is frequently added to adjectives, nay even to particles. Thus it seems to form a link with the Bati language ’.

On p. ccxxxv, finally, Barth uses the term *Ba*-languages when discussing the verb in Wandala : ‘ Characteristic is the apparently redundant **we** or **wa** (the very same **ba** spoken of before) and is puzzling in such phrases where the verb itself is **we** “ to like ” ; and this again reminds one of the forms of speech occurring in the *Ba*-languages ’.

It seems that Barth does not think it necessary to define more explicitly what he means by the *Ba*-languages. They comprise the Bantu languages and all the West African class languages which in some part of their morphological systems have the morpheme **ba** or **wa**, as prefix or suffix, for singular or plural, with a meaning that may refer to an individual person, a particular people, or people collectively.

Barth already had these ideas when he was still busy travelling through Africa. In his *Travels and discoveries in Central Africa*,[33] Barth discusses the Marghi language, which ‘ is only a dialect of the Batta language which is spread over a large part of Adamawa or Fumbina, and has many points of connection with the Musgu language, while in certain general principles it approaches the great South African family ’. Unfortunately, neither Marghi nor Musgo is discussed in Barth's *Central African languages* of 1862, so that we have no clue as to what

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[32] Heinrich Barth, *Collection of vocabularies of Central African languages*, Vol. I, Gotha, 1862 (ccxxxv).

[33] Dr. H. Barth, *Travels and discoveries in Central Africa*, Vol. II, London, 1857, 385–6.

led Barth to this conclusion. In the Journal of the German Oriental Society, Barth published a short vocabulary of the Batta language, but without etymologies.[34] He does state there that the languages in the area are very different from one another.

CONCLUSION

Although Bleek found the word **Abantu**, ‘ people ’, in the Nguni dialects he studied, as well as in Tswana in the form of **bato**, yet for him it remained a compound word. The element **ntu** was for him a typically Bantu formative and, as such, a useful denominator for the ‘South African Family’, i.e. the present Bantu languages. The element **Ba-**, however, which we would describe as a dependent morpheme, was for Bleek not only a lexeme with a definite meaning of its own, something like ‘ human ’, but it was also a shibboleth for a group of languages which he wanted to categorize together because of this particle, and because of the classificatory principle found in all of them. So there were two underlying (but incompatible) criteria, one taxonomic: the classifying nominal structure; and the other based on the occurrence of a lexeme which could be applied either enclitically or proclitically. Bleek took it for granted that if this ‘ particle ’ was encountered in any given West African class language, it could without question be identified with the Bantu prefix of class 2. In all this he followed Barth, who first conceived the term *Ba*-languages, and applied it to a number of class languages spoken in what is now Nigeria.

Furthermore, Bleek accepted Vidal’s inclusion of Temne and Bullom in this classifying family. All of these early ethnolinguists accepted Krapf’s statement that the classificatory principle reflected the attitude towards nature of the primitive mind. I am not sure that this idea has entirely died out.

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[34] *ZDMG*, VI, 1852, 412–13. Bata or Batta is a dialect cluster to which Bachama belongs (communication by Mr. J. Carnochan).

GUTHRIE'S LINGUISTIC TERMINOLOGY AND ITS APPLICATION TO BEMBA

By W. Michael Mann

PREFATORY NOTE

Professor Malcolm Guthrie and Bemba studies at S.O.A.S.

After joining the School in 1942, Malcolm Guthrie made an extensive tour of Bantu Africa, collecting data for the classification of the Bantu languages and carrying out duties on behalf of the British Council, returning to London in 1944. During this period he made a special study of Bemba,[1] on the basis of which he presented his thesis for the degree of Ph.D. in 1945 (*Bibl.* **8**). He continued to study Bemba, with interruptions, until the session 1955–6, with help first from African students studying at the School, and later from Bemba appointed to the staff of the School as Assistants.[2] During the period 1947–9, when the Devonshire courses for Colonial Service probationers brought large numbers to the School, he had the help of Mr. F. H. Crittenden for the teaching of Bemba.

He had hoped at one time to produce a Handbook of Bemba Grammar, but found himself prevented by the increasing attention he was giving to comparative studies. To make up for this, he was always eager to pass on his knowledge to others who might be encouraged to continue the study. These have included Mr. J. C. Sharman,[3] Dr. Irvine Richardson (already a lecturer at the School when

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[1] Spoken in the Northern and Luapula Provinces of Zambia and on the Copperbelt, M.42 in Guthrie's classification. The initial consonant is a voiced bilabial fricative, sometimes indicated by underlining, but the conventional spelling is retained here for typographical convenience.

References in this paper to Guthrie's writings will be made by means of bold numerals that refer to the bibliography at the beginning of the volume.

[2] Mr. Safeli Chileshe and Mr. Braim Nkonde studied their own language at S.O.A.S. between 1945 and 1947. Bemba Assistants at the School who worked with Guthrie were Mr. E. Kasonde (1947), Mr. Fabian Mpandashulu (1948) and Mr. Chama Ngala-ya-Mwamba (1953–57).

[3] Sharman has written several considerable articles, principally on Bemba morphotonology : J. C. Sharman and A. E. Meeussen, ' The representation of structural tones, with special reference to the tonal behaviour of the verb, in Bemba ', *Africa*, XV, 4, 1955, 393–404 ; J. C. Sharman, ' The tabulation of tenses in a Bantu language ', *Africa*, XXVI, 1, 1956, 29–46 ; ' Nominal and pronominal prefixes in Bemba ', *ALS*, IV, 1963, 98–127.

He contributed substantially to the editing of the best published grammar of Bemba (J. van Sambeek, *A Bemba grammar*, London and Cape Town, 1955), and was awarded the Ph.D. degree of the University of South Africa in 1963 for a dissertation on *Morphology, morphophonology and meaning in the single word verb forms in Bemba.*

he turned his attention to Bemba in 1956),[4] Mr. Derek Fivaz of the University College of Rhodesia and Nyasaland, and the present writer.

Most of Guthrie's considerable work on Bemba has remained unpublished, although he has drawn on it for his comparative studies. During his first visit to Zambia, he collected a considerable vocabulary with full tonal data. This exists in manuscript only, but from it with the help of Bemba assistants he prepared a thorough teaching vocabulary of some 2,500 items, which was cyclostyled. Also in manuscript is a collection of some 600 Bemba zoological and botanical terms.

Teaching material developed for English students included a cyclostyled and almost programmed course, leading the student to infer the rules of the language by a controlled presentation of data ; and a course of oral Bemba using gramophone records. A feature of his approach was to define (in English or Bemba) the context of situation in which each sentence in the course might plausibly be spoken. This material is exceedingly useful for an objective study of the language, but the intimately rural flavour of much of the dialogue makes it unsuited to the practical requirements of present students.

He prepared a considerable amount of cyclostyled material on Bemba morphology, principally for use in teaching. Characteristic of his approach was to present a general rule only after pointing out the relevant regularities in a set of carefully framed examples.

He made a special study of verbal radicals and radical extensions in Bemba, on which he drew for his article on radical extensions (*Bibl.* 23). The manuscript lists some 1,500 simple and extended radicals with semantic and formal classification.

A number of manuscript texts written by Bemba at the School have never been published, although Guthrie began work on them with a view to publishing with annotations. Recordings made in the field by Sharman are preserved at the School and have been transcribed by Mr. Ngala-ya-Mwamba.

Various assistants at the School contributed to a collection of ' fixed formulae ', especially proverbs. Guthrie worked on the analysis and classification of these, which it is hoped may eventually be published.

When comparison is made between his approaches and other approaches to linguistic description and especially Bantu studies current when he came to the School, his contribution stands out for its flexibility and clarity. In place of the phonemic inventory, he investigates sound contrasts operating at defined positions of word and syllable structure. He requires formal rather than notional definitions

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[4] Richardson continued to study Bemba at S.O.A.S. until 1964, when he was appointed to a Chair of African Languages at Michigan State University. His publications include ' Some observations on the status of Town Bemba in Northern Rhodesia ', *ALS*, II, 1961, 25–36 ; ' Linguistic change in Africa, with special reference to the Bemba-speaking area of Northern Rhodesia ', in ' Proceedings of the CCTA/CSA colloquium on multilingualism in Africa held at Brazzaville ', 1962 ; ' Examples of deviation and innovation in Bemba ', *ALS*, IV, 1963, 128–145.

for his word categories. In syntactical description he distinguishes clause structure and group structure—although the group is for him an ' expansion ' of the word ' slot ' rather than a unit intermediate in rank. (Negatively, he renounces the search for semantic correlations of the Bantu classes.) This is not to mention the refreshing quality of his approach to comparative linguistics. Certainly these approaches must owe much to his background in science : he graduated at Imperial College, London, in 1923 with a B.Sc. in Engineering (Metallurgy).

He has also acknowledged debts to colleagues and associates, but the many influences diffused within an institution such as S.O.A.S. by informal discussion make it impossible to evaluate these specifically, though one may sometimes suppose one detects similarities of approach. It can only be recorded that among Guthrie's early colleagues were Professor J. R. Firth and Professor Ida Ward, and among his later associates many of the contributors to this volume.

INTRODUCTION

The descriptive terminology which Guthrie has used in the majority of his writings he first evolved for the description of Bemba (M.42 in his classification). Having been privileged to study Bemba under him, I have recently been preparing an *Outline of Bemba grammar* [5] intended to make the understanding of Bemba developed at S.O.A.S. more widely accessible.

I preferred in the *Outline* to use terminology familiar to the layman wherever possible, while attempting to preserve academic standards of clarity and accuracy, with the result that the indebtedness to Guthrie's work may not always be apparent. In this paper I wish to refer to some features of the description of Bemba and to discuss the categories and terminology Guthrie has used to handle them.

The orthography used in the *Outline* and in the present paper differs in some points from that used by Guthrie.[6] In quoting from his writings I have transcribed citations into the present orthography to avoid confusion. With regard to word-division, I have followed his approach (*Bibl.* **10**, where examples are drawn from Bemba) but simplified orthographically, retaining only the hyphen in addition to

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[5] The *Outline* excludes syntax but includes tonology. It is substantially complete in manuscript but requires some revision. Details of publication have yet to be arranged.

[6] The orthography used here is phonologically unambiguous, but departs from a strict phonemic transcription in a few concessions to the conventional (Zambian) orthography. **sh** is structurally an allophone of /s/ occurring before /i/ and /y/ (but this analysis is unsatisfactory for the speech of some bilinguals), and **d** is an allophone of /l/ occurring after /n/. It is morphophonemic to the extent that where the final vowel of one word fuses with the initial vowel of the next, it is the tone and quality of the constituent vowels that is represented, and not that of the fusion. Guthrie has for some purposes followed this practice also at morpheme-junctures, but in this case I have represented the phonological realization. I have preserved Guthrie's use of initial capitals for terms like ' Independent Nominal ', etc.

For a description of Bemba phonology, see Mubanga E. Kashoki, *A phonemic analysis of Bemba*, Zambian Papers No. 3, Institute for Social Research, University of Zambia, Manchester, 1968.

word-space and punctuation as a junction-marker. The resulting segmentation does not differ markedly from that adopted by Sharman or Doke,[7] but differs in a number of points from the usage current in Zambia.

For readers not familiar with the structure of a Bantu language, a brief note is appropriate on the concord system and on tone-groups. Concord is a system whereby two or more words in a phrase or clause are brought into syntactical relation by selecting corresponding affixes (usually prefixes) from the series appropriate to each category of word. Affixes that correspond in this way are said to belong to the same ' class '. Each noun (or ' Independent Nominal ') occurs only in a limited range of classes (the available choice serving to differentiate number and certain relations such as relative size), and it is the class selected by this word-category that normally determines the class of other affixes.

Secondly, words of similar phonological structure and identical function may differ in tonal behaviour. Word-roots (nominal stems or verbal radicals) that always enter into words of similar tonal behaviour are said to belong to the same ' tone-group '. Making generalizations that permit us to associate roots of different phonological structure, the number of tone-groups in Bemba is reduced to two for verbals and four for nominals.

BEMBA WORD-CATEGORIES

The major word-categories distinguished by Guthrie in the Bantu languages are nominal, verbal and particle. Later in this paper we shall discuss some of the ways in which he has attempted to define these categories, but for the present we shall be concerned with some general properties of the separate categories and their respective sub-categories.

I

NOMINALS

Guthrie's category of nominals includes Independent and Dependent Nominals (roughly corresponding to nouns and adjectives), Personal Nominals and any kind of word derived from them by affixation (Extra Independent and Dependent Prefixes—*aliter* Locatives and Genitives/Possessives/Class Prepositions ; Proclitics, e.g. **na-**, **nga-** ; Enclitics, e.g. **-ꜝpó**, **-ꜝkó**, **-ꜝfyé**). Certain co-referents (' substitutes ' is the nearest standard term) while strictly *sui generis*, are most conveniently treated with the nominals.[8]

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[7] I have made comparisons with the approaches of Sharman (for Bemba) and of C. M. Doke (for the description of the Bantu languages generally). For Sharman's work, see note 3, above. For Doke's work I have referred especially to *Bantu linguistic terminology*, London, 1935, and *Textbook of Lamba grammar*, University of the Witwatersrand, 1938. Lamba (M.54) is closely related to Bemba.

[8] For the terms ' proclitic ' and ' enclitic ' (introduced to the description of Bemba by the present writer), cf. Doke, *Lamba*, 395 and 398. For the term ' co-referent ', cf. *Bibl.* **21**, preface.

A characteristic of most nominals is an invariable stem, generally preceded by a prefix (or several). Some Independent Nominals have zero prefixes. A few nominals, however, do not fit into this pattern, and have been called Stemless Nominals by Guthrie, or more generally, contoured items.[9] These are nominals that belong to a series with a member for each concord class (and sometimes each person) displaying some common pattern that can be expressed by a formula or ' contour '. Co-referents often belong to such a contoured series. Here for instance are members of four series for selected classes in Bemba (part of a Dependent Prefix series is quoted for comparison) :

	I	II	III	IV	V
	2nd selector (demonstrative)	3rd selector (demonstrative)	**na-** co-referent	possessive co-referent stem	Single Dependent Prefix
Class 5	**ilí**	**ilyó**	**nalyó**	**-alíko**	**li-**
Class 6	**ayá**	**ayó**	**nayó**	**-ayáko**	**ya-**
Class 7	**icí**	**icó**	**nacó**	**-acíko**	**ci-**
Class 8	**ifí**	**ifyó**	**nafyó**	**-afíko**	**fi-**
Contour	VCV	VCV-o	**na**-CV-**o**	**-a**-CV-**ko**	CV-

If the values of C and V are defined for each class, these forms are regularly derived from the contours by the morphophonological rules of the language. The contours often fail to provide the members in Classes 1 and 2 (anomalous items are asterisked) :

	I	II	III	IV	V
Class 1	***uyú**	***uyó**	**naó/*nankwé**	***-ákwé**	**øu-**
Class 2	**abá**	**abó**	**nabó/*naabó**	***-ábó**	**ba-**

Forms for the persons (co-referents only) are all anomalous.

For this reason I have preferred a label ' fused nominal ' instead of ' contoured ' or ' stemless '. A ' fused ' element is a piece that does not lend itself to segmentation, but which closely parallels in function other pieces in the language which are analysable into two (or more) elements of structure, such as in this case prefix and stem. The concept is needed at several points in the description of the verbal.[10]

Prefixal variants

For any nominal in any given class there are normally from three to five variants selected according to syntactic function, differing in the form of the

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[9] For the term ' contoured ', cf. *Bibl.* **31**, para. 37.11.

[10] See note 27, below. The term has been adopted from an analogy in phonology, where two juxtaposed vowels belonging to different morphemes are realized in speech as a single ' fused ' vowel—for instance **ama-inshí** is realized **ámenshí**.

prefix. Two of these are familiar in the literature as forms with and without the Initial Vowel; I have called them full and short variants.[11] For categories of nominal for which this opposition is not found, the variant occurring in comparable syntactic environments is known as the unstable variant.

The remaining stable variants are all stable forms, i.e. having a predicative function. They have also been known as ' copulatives '. Two that occur with every category of nominal are the emphatic and negative stable variants. A third occurs with most categories and may be called the positive stable variant.[12]

Variants are here given for one Independent Nominal and one Nominal with Extra Independent Prefix :

	IN ' fisherman '	EIN ' at the meeting-place '
Full variant	**umúlondo**	
Unstable variant		**pánsaká**
Short variant	**mulondó**	
Positive stable variant	**múúlondó**	**nípánsaká**
Emphatic stable variant	**emúlondó**	**epánsaká**
Negative stable variant	**teemúlondó**	**teepánsaká**

For nominals with stems of one tone-group only, there are two possible tone-patterns for each variant according to the closeness of the bond with the following word. The pattern that Guthrie has called ' close ' and Sharman ' strong ' bond occurs characteristically in a ' nominal complex ' where the following nominal has the short variant, or where the nominal is antecedent to a relative clause with no intervening Relative Headword. The ' open ' or ' weak ' bond patterns are related to the others by a tonal feature Sharman has called diatony—the final low-tone or sequence of low-tones is raised to high. Thus **-bala** 5/6 ' field ' :

	close/strong bond	open/weak bond
Full variant	**amábala**	**amábálá**
Positive stable variant	**máábala**	**máábálá**
Emphatic stable variant	**emábala**	**emábálá**
Negative stable variant	**teemábala**	**teemábálá**

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[11] This must be clearly distinguished from the opposition double/single (prefix), as in Guthrie, *Bibl.* **10**, 22, which distinguishes categories of nominal capable of exhibiting the Initial Vowel—and hence of displaying this opposition—from categories that cannot display the Initial Vowel.

[12] The emphatic stable variant is also positive, but ' positive ' seems preferable to neutral terms such as ' standard '. Sharman's other term ' copulative ' for the positive stable variant would be satisfactory were it not for the generic use of the term by Doke. Sharman's term ' presentative ' is perhaps preferable to Guthrie's ' emphatic '.

In the case of the short variant only, the final tone of the preceding word has to be taken into account. In the open pattern the tone of all syllables continues the final tone-level of the preceding word. For instance :

takúli matipa kulyá	there is no mud there
takwâlí mátípá kulyá	there was no mud there

Similar tonal behaviour is exhibited by Independent Nominals with zero prefix (or with a single prefix), e.g.

takúli fwaka	there is no tobacco
takwâlí fwáká	there was no tobacco

It does not occur, however, in contexts where other nominals would have the full variant :

nînkwátá fwaka	I have some tobacco
(cf. **nînkwátá umúséké**	I have a basket)

For this tone-group, therefore, the opposition full/short variant has to be extended analogically to nominals not displaying any variation in prefix shape in unstable contexts.

Gender and class

Guthrie enumerates the concord classes (designating distinct patterns of agreement rather than a characteristic of one type of word) according to the system of Bleek, with the reversal of Classes 12 and 13.[13] The short series of classes (whether or not manifested by a prefix) associated with a particular Independent Nominal stem he called a ' gender '. For instance **ícipúna/ífipúná/ákapúná/útupúná** ' stool/stools/little stool/little stools ' is an instance of an **ici-/ifi-/aka-/utu-** or 7/8/12/13 gender. He considered that the genders of a Bantu language should be assigned to the lexical structure and not considered as part of the grammatical system.

I have differed from Guthrie in distinguishing primary genders and systems of derived genders. Thus **ícipúná/ífipúná** alone instance the primary gender 7/8, while **ákapúná/útupúná** instance the derived ' diminutive ' gender 12/13. The generalizations that can be made about the derived genders are such that they should be discussed in the grammar. It is the primary genders alone that should be assigned to the lexicon.[14]

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[13] Cf. Guthrie, *Bibl.* **31**, paras. 35.03, 35.16–17.

[14] The primary genders may be one-class, two-class or three-class. One-class genders are such as 4 (**ímibééle** ' character '), 6 (**ámenshí** ' water ') or 1z (**fwánta** ' bottle of orange drink ') ; two-class genders typically represent the singular/plural opposition, e.g. 15/6 (**úkutwí/ámatwí** ' ear/ears '), but the meaning attaching to the opposition is not fully predictable, cf. **ícaaní/ífyaní** ' grass/kinds of grass ' (7/8). Three-class genders are represented only vestigially in Bemba, e.g. 9/10/6 (**íŋŋandá/íŋŋandá/amáyandá** ' hut/huts/cluster of huts '); 11/10/6 (**ulúpílí/impílí/amápílí** ' hill/hills/hilly area '); but are illustrated for Kongo (H.16) and Ngombe (C.31)—Guthrie, *Bibl.* **12**, 852.

Two formal considerations favour separating the derived genders in this way, in addition to their obvious productivity. Firstly, while prefixes of the derived genders may in many cases be prefixed directly to the stem, it also happens that the prefix of a primary gender is retained as an augment between them. Thus beside the forms quoted above we find **akácipúná/utúfipúná** 12 + 7/13 + 8. There is no comparable use of prefixes of derived genders as augments.

Secondly, while the primary genders are confined to Independent Nominals, derived genders determine concord prefixes also for some dependent series. **ulúsumá** indicates ' a good thing ' (Class 11), and is not used without an Independent Nominal of Class 11 in the context which is its referent. But **ubúsumá** (Class 14) ' goodness, beauty ' may be used without any Class 14 referent, being an exponent of the derived abstract gender 14. Similarly there is a change of class in the sentence below from **-shi-** (Class 10, referring to **ínꜝkálámó** ' lions ') to **fi-** (Class 8, expounding the derived augmentative gender) :

nga twashísánga takúli wáákubútúká neelyo fíngáŋóntóka sháaní
if we find them, there is no one who would run away however much the (great beasts) growl [15]

The derived genders occurring in Bemba are 5 : of something grotesquely large ; 7/8 : augmentative ; 12/13 : diminutive ; 14 : abstract (denoting a role or state). 8 (augmentative) and 13 (diminutive) are the corresponding one-class genders for uncountables.[16] We should perhaps consider as a further two derived genders 1/2 (of persons), 7/8 (of things), applying to dependent series only. This obviates the need for supposing that anything is suppressed or deleted in a sentence like **abásumá ébacéépélé múnó-nꜝshíkú** ' it is good men who are in short supply these days '.

Independent Nominal prefix series

Independent Nominals controlling identical agreements in dependent words sometimes differ in the form of prefix they display. Where this difference is correlatable with a phonetic feature of the stem, Guthrie refers to a ' prefix unit ' or ' prefix cluster '. Where there is no such correlation, i.e. where the choice of prefix is a lexical matter, Guthrie speaks of classes with subsidiary sections (*Bibl.* **16**). I have followed this treatment, except that I have grouped the subsidiary sections of different classes together into subsidiary series, according to the syllabic shape of the prefix. Thus in the full variant series ' a ' has prefixes of the shape CVV- ; series ' b ' VCVV- ; series ' x ' VCV- ; series ' z ' zero prefix ;

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[15] Cf. Sharman 1963, 126 (first example under (*d*)).

[16] Sharman also records the genders 9 : of something representing its kind *par excellence*, and 11 : denoting especial attractiveness (1963, 124).

while the standard series has prefixes typically VCV-, but in some classes VC- or V-. For instance :

7 (standard series)	**ícipúná**	stool
7a	**ciikolwé**	large monkey
7b	**icíímutí**	stick
7x	**ícinwá**	large mouth

Series ' z ' has to be illustrated from another class :

3	**úmukúsáo**	twig-broom
3z (or 1z or 9z according to speaker) [17]	**móótoka**	motor vehicle

Class 1z could alternatively be labelled 1a, since there is no prefix of the shape CVV- controlling the agreements of Class 1, and this is the more usual treatment in Bantu descriptions, because of the commonness of a gender 1z/2a (e.g. **kolwé/ baakolwé** ' monkey(s) '). I preferred the first course because the tabulation of tone-patterns required a distinction according to prefix-shape. It is in any case not the rule that genders are drawn only from one series, since a gender 1z/6 (e.g. **bééti/ ámabééti** ' bed/beds ') has become common in contemporary Bemba.

Series ' x ' has been set up for prefixes of the derived genders of stems whose primary gender is in the standard series. The only difference in shape between prefixes of the two series is in Class 5, where series ' x ' has a prefix **ili-**, while the standard series has a prefix cluster **i- : ili-**, for example **ibéndé** (5) ' mortar ', **ilíbéndé** (5x) ' impractically large mortar '. Stems with a primary gender in series ' z ' or ' a ' have derived genders in series ' a '.

Series ' b ' has been set up to account for only one stem. A derived diminutive gender is in the same series : **icíímutí** ' stick ', **akáámutí** ' little stick, twig '. I have been reluctant to set up a further series for the anomalous plural **íshamfúmú** of **ím!fúmú** (Class 9) ' chief ', which has the form of a Class 10 nominal with Extra Dependent (' genitive ') Prefix.

Reference was made above to the augment which sometimes appears between the prefix of a derived gender and the stem. The occurrence of such an augment is indicated by ' + ' (thus **icíímutí** 7b + 3 instances series ' b + '), and allowance has to be made for such forms in the tonal tabulations. Another augment appears in **in-dú-pé** 10 + 11 ' winnowing baskets ', cf. the singular **ulú-pé** Class 11. This augment is regular for monosyllabic stems with a singular in Class 11 (but not for Class 10 plurals with a Class 9 singular). The gender is accordingly noted 11/10 +.[18]

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[17] Stems with zero prefix, frequently loan-words, often fluctuate in the class of the agreements they control, even in the speech of one individual. It seems possible that this was originally dialectal variation, with agreements of Class 1 in Central and Eastern Bemba, Class 3 in Western Bemba and Class 9 in the mining towns.

[18] A problem is presented by a number of loan-words, otherwise displaying regular behaviour of Class 5, when preceded by an Extra Independent Prefix, where beside the expected **mwí!óófeshi**

Personal Nominals

Personal Nominals are in many ways formally akin to Independent Nominals of series ' z ' ; however, the formation of their stable variants demands that they be treated as a distinct category.

The ' short ' Personal Nominal that occurs in expressions like **mwé-baaícé** ' you children ' and **né-mulandá** ' unhappy me ' is treated by Guthrie as a distinct word, but by Sharman and Doke as part of the following word. (The hyphen is here used to avoid prejudging the nature of the junction.) The occurrence of alternative forms such as **mwé-baaícé-mwé** perhaps favours Guthrie, but the final **-mwé** cannot be used in the absence of the initial one. On the other hand, personal forms of the Relative Headword (e.g. **mwébo** ' you who ') and of one Dependent Nominal stem (e.g. **fwéka** ' we alone ') perhaps afford a structural parallel for the other view. If the latter view is adopted, **né-**, **fwé-**, **wé-** and **mwé-** will be treated as Extra Personal Prefixes.

Dependent Nominals and Relative Headwords

Dependent Nominals present no serious problems of description. There are two series, distinguished by Guthrie as possessing Single Prefix and Double Prefix (examples in Class 7 : **ci-lyá** ' that thing ', **icí-sumá** ' something good ').[19] Other terminology has reference to the semantic content of one or other series, e.g. the labels Numerals and Quasi-Numerals for the Single series. Such terminology can have useful mnemonic value in popular descriptions of a single language, but may result in unnecessary or inexact distinctions if terminology devised for one language is transferred to another.

(' in the office '), **múóófeshi** also occurs in free variation. This is not the same as the treatment of loan-words in series ' z ' (i.e. without prefix), where a link-element **-li-** occurs : **múlimóótoka** ' in the vehicle '. No such variation has been observed for inherited Bemba words, although there is a parallel in the treatment of some place-names, e.g. **múSámbia** ' in Zambia '. Since indication of foreign provenance has no place in the synchronic description of a single language, a special category must be set up for words showing this behaviour.

[19] The numerals 6–9 could be treated as a special category of invariable (prefixless) Dependent Nominals, since numerals 1–5 are unambiguously Dependent Nominals :

ábalúméndo bábílí	two young men
ábalúméndo mutanda	six young men

However, numerals for 10, 100 and 1,000 are unambiguously Independent Nominals :

ábalúméndo íꜝkúmí límó	ten young men
ábalúméndo ámakúmí yábílí	twenty young men

and a similar juxtaposition of Independent Nominals occurs with other units of measurement, e.g.

ubwálí ifípé fíbílí	two baskets of cereal

It seems best, therefore, to regard these numerals as Independent Nominals of series ' z ', even though they cannot be quoted controlling a dependent agreement.

A more delicate differentiation of categories will be necessary for the description of the structure of the word-group (phrase), but the resulting categories will not be distinguished by any further characteristics of internal structure.

There are three series of Relative Headwords, exemplified in Class 1 by the unstable variants **úo**, **u'úntu**, **untu**. Only the last could fit into a Dependent Nominal series. The second diverges from the Dependent Nominals with Double Prefix in Class 1, while the first is a fused (' contoured ') nominal. They are similar in function to one another, the preference probably being dialectal. It seems best to treat them as a category on their own, as Guthrie has done.

Extra Prefixes

The Extra Independent (' locative ') and Dependent (' genitive ') prefixes present few problems of description not common to the Bantu languages.[20] In addition to the simple locative prefixes, a locative-possessive prefix (e.g. **kwá-kafúla** ' at the blacksmith's ') and a locative-demonstrative prefix (e.g. **múnó-múshí** ' here in the village ') are affixed to Independent Nominals.

Some other elements of the language display behaviour resembling that of the Extra Prefixes. Expressions like **mwé-baaícé** are perhaps to be analysed as having Extra Personal Prefix. Prefixes of the derived genders also sometimes show such behaviour : Sharman (1963, 126) quotes **buunnamfúmú wéésú** ' queenship over us ' (the agreement is with the primary gender 1z of **nnamfúmú**) in contrast to **buunnamfúmú bwésú** ' our position as queen(s) '. Compare **pácishikí cilyá** ' on that stump ', where the Dependent Nominal likewise agrees with the Independent Nominal Prefix and not the Class 16 Extra Prefix (**pácishikí palyá** would mean ' there on the stump ').[21]

Proclitics

The Proclitics **na-**, **nga-** (' like ') and **ńga-** (' what about . . . ? ') can be prefixed to the full (or unstable) variant of any category of nominal (**na-** alone may also be prefixed to the short variant, in circumstances similar to those determining the use of the short variant for the nominal without proclitic). The elements have been grouped together only because of the similarity of their position in word-structure,

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[20] For the non-Bantuist, it may be observed that the Extra Independent Prefix relates to the location of an object—for instance (using hyphens to indicate morpheme-junctures) : **umú-shí úú-kalambá** ' the village is large ', but **kú-mú-shí kúú-tali** ' the village is distant '. The Extra Dependent Prefix supplies the means by which one nominal may modify another, e.g. **i-tépe lyá-bw-alwá** ' a drum of beer '.

[21] The same behaviour is even shown by the Independent Class 2a Prefix **baa-**, both in its honorific and its plural function, e.g. **baakatééka wáácááló bábílí** ' two rulers of a country ' (in reference to Kaunda and Nyerere). This resembles the cases quoted by Guthrie for Bobangi and Lunda (C.32 and L.52 : *Bibl.* **16**, 555) which he referred to as cases of multiple prefixes. Cf. further **nkáshí yándí nááfiká/baankáshí shándí náabáfiká** ' my sister/sisters have arrived ', where the gender of **nkáshí** may be cited as 1z/2a(∼9/ ∼10)—the tilde serves to show that this concord pattern is restricted to the nominal complex (word-group).

and because no two can be used together ; each will have to be treated separately in a syntax.

There are some grounds for supposing that in **na-** we are dealing with two distinct but homophonous proclitics. The reasons lie partly in syntactical analysis, partly in a distinction that arises in the corresponding co-referent series. In cases where **na-** is used to link two words or clauses (i.e. where it may be translated ' and ' or ' also '), the occurrence is immaterial to the syntax—we may say **bááúma úmulúméndo** or **bááúma nóómulúméndo** ' they beat the youth (as well) ', but the second word is in either case equally direct object to **bááúma**. On the other hand if we say **báákúmána nóómulúméndo** ' he (*or* they) met the youth ', the proclitic cannot be omitted, and the second word has to be described syntactically as ' associative object ' to **báákúmána**. If we use co-referents in place of the second word in each case, the sentences become **báámúúma naó** ' they beat him too ' and **báákúmána nankwé** ' he/they met him '. As well as the difference of co-referent, we may note in the first case the use of the infix **-mu-** (also a co-referent), which may only represent the *direct* object. The series to which **naó** and **nankwé** respectively belong are distinct only in Classes 1 and 2, and probably in some dialects also in the personal forms.

Co-referents

The term ' co-referent ' is applied to elements of series which represent (have the same reference as) a nominal or person with which they agree. They may be used in lieu of the nominal, or in some cases they may be used additionally to give emphasis, but the term is not applied to elements that must be present whether or not the nominal to which they refer is expressed.

Two such series in Bemba are verbal affixes : the concord (object) infix, which represents the direct object (**báámúúma** ' they beat him ', **bááshítámfya** ' they chased them off ', sc. **ínꜝkálámó** ' lions '), and the enclitic concord suffix which may represent a nominal in one of the locative classes 16–18 (**báléésendelamó tuute** ' they are carrying cassava in them ', sc. **múmíséké** ' in the baskets '), although some uses do not fit into this pattern.

Another series consists of stems which may replace a nominal after the Extra Dependent (' genitive ') Prefix : **ábafyáshi báákaaícé** ' the small child's parents ', **ábafyáshi báákákó** ' his parents '. This series has been widely known as the ' possessive ' stem.

The two remaining series are those exemplified in the preceding section, constituting distinct words. Guthrie has described them as ' **na-** co-referents '. Alternative terminology might be the ' conjunctive ' and ' associative ' co-referents.

Autonomous genders

Guthrie has described a limited category of forms in Bemba as Semi-Dependent Nominals (personal communication: Guthrie does not regard the term as altogether satisfactory). The same forms figure among those Sharman describes as 'class-inert' (1963, 125, (*c*): (iv), (vi) and (vii)). All are identical in form to Dependent Nominals of some category or Relative Headwords in a limited number of classes (Class 5, 7 and 8 in Sharman; Guthrie would add Class 16, 17 and 18). They therefore present no problems of formal categorization. The difficulty arises because these forms are not Independent Nominals, since they control no agreements,[22] but neither do they satisfy any of the normal definitions of Dependent Nominal. Rather, their concord is determined by an inherent meaning of the class.

To illustrate, we find in Class 5 (representing 'time, occasion') **líbílí** 'twice', **ílingí** 'often', **lilyá** 'then' (cf. the stems **-bílí** 'two', **-ingí** 'many', **-lyá** 'that'), in Class 7 (representing 'manner') **filyá** 'thus', **ífyo** 'how' (the form is that of a Relative Headword), in Class 16 (representing 'cause') **pantu** 'because' (a Relative Headword of another series).

The type of class-determination operating here resembles that of the Nominal with Extra Independent ('locative') Prefix, where selection between the available prefixes is determined with reference to inherent meanings of the classes (roughly: 17 'approximate location', contrasting with 16 'exact location', and 18 'bounded location'), and not by any property of the stem. I prefer to treat all these cases as 'autonomous' genders—a three-class 'locative' gender and various one-class genders, including the separate genders 16, 17 and 18, which determine the concords wherever substitution of one class for another is excluded grammatically (or would completely change the sense).[23] Guthrie's treatment would restrict the term 'Semi-Dependent' to these one-class genders, and probably to cases where they are expounded by Dependent Nominals or Relative Headwords. The description is in any case untidy, since there are differences in the categories of word that can expound each gender—the Class 7 gender 'reason' is expounded only by demonstratives and Relative Headwords, the Class 5 gender 'time/occasion' by these and other kinds of Dependent Nominal, but not the nominal with Extra Dependent ('genitive') Prefix, while the locative gender (Classes 16/17/18) can be expounded by any kind of nominal in those classes, or by a verbal co-referent affix. Greater clarity must await detailed research into the syntax of Bemba.

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[22] The only possible exception to this is provided by the Dependent Nominal stem **-iné**, which commonly agrees with a preceding Semi-Dependent Nominal, for instance **filyá fiiné** 'in exactly that way', **ílingí liiné** 'very many times'. However, it is equally possible to say that the concord of **-iné**, like that of the preceding word, is determined by an inherent meaning of the class.

[23] One justification for the separation of one-class genders and a three-class gender for Classes 16, 17 and 18 is found in conservative Bemba, but not among younger speakers. The former would say **yáalílémbwá kúliimwé** 'it is written by you' (one-class instrumental gender), but expounding the three-class locative gender they would say **bááilé úko múlí** 'they went to you', using a periphrasis with the literal meaning 'where you are'.

Question nominals

There seems no adequate ground for setting up a category of question nominals or interrogatives in a description of word-structure, though the category may be necessary in discussing the syntax of the sentence or some larger unit. Most question-words belong clearly to other form-categories. For instance **-ǹgá** ' how many ? ' is a Dependent Nominal stem, **-ꜝnshí** ' what (sort of a) ? which ? ' is an enclitic, and **liiláli** ' when ? ' is not susceptible of any internal analysis and is therefore a particle. Some items are more doubtful. **-nshi** ' what ? ' is probably a Dependent Nominal (with single prefix)—although it normally occurs with prefixes of Class 7 or 8, it can be used in other classes if the prefix has been heard but the stem queried (e.g. ' **njashimééníꜝkó úlukasu.**' ' **Lúnshi ?** ' ' Lend me a hoe.' ' A what ? '). The different forms meaning ' who ? ' can be regarded as Independent Nominals (of gender 1z/2a) **áni** and **nááni**, with the stable forms **níáni**, **nínááni**. EDP-**kwáni**/EDP-**bááni** ' whose ? ' and **pááni/kwáni/mwáni** ' at whose house ', etc., would be regularly formed from **áni**. Confirmation is required from a syntactic study that the distribution of stable and unstable forms corresponds to that of Independent Nominals.

The question-words **píi/kwíi/mwíi** ' where ? ', together with the indefinite words **páá/kúú/múú** ' somewhere ', are probably to be treated as nominals rather than particles. The former at least have stable forms **nipíi/nikwíi/nimwíi**, and syntactically they belong to the same substitution class as nominals with Extra Independent Prefix.[24] Structurally they are contoured items—see note 9, above. It seems unnecessary to decide whether they are independent or dependent.

II

VERBALS AND NOMINO-VERBALS

Verbals[25] display considerable complexity of structure, but present relatively few problems of categorization. In the *Outline* I found it convenient to distinguish the different types of element (morpheme-classes) occurring in verbals (concord, tense and negative elements and radical ; in a few circumstances also various kinds of aspect elements), to define their relative order by matrices (for positive and negative tenses, imperative, ' compound base '[26] and two kinds of nomino-verbal),

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[24] On the other hand, no other nominals have a long final syllable, although this is common in particles.

[25] There does not seem to be any real necessity requiring ' verbal ' instead of ' verb ', but it avoids the loose use of the latter to refer indifferently to verb-form or verb-root.

[26] The place of a one-word verbal may be taken by a verbal cluster or a verbal compound (or a sequence of particle and verbal called a particle-headed verbal cluster). Except in the last case a verbal with one of a short range of ' auxiliary ' radicals is followed by a form containing another radical. In the case of the cluster, this form is itself a verbal (e.g. **bácílii báléeángálá** ' they are still relaxing ') ; in the compound, the second member, known as the ' compound base ', is without Concord Prefix, and can select only one of two forms according to aspect (e.g. **bááiléé-fwaya** ' they went and looked for ', **abákáánáa-lááyáꜝkó** ' if they didn't keep going there '). The compound base has also been known as the ' short infinitive '.

to assign arbitrary numbers to combinations of tense-elements (constituting tenses), and finally to analyse the function of the tenses in terms of systems (operating in different types of clause—major, dependent/subjunctive, hypothetical, narrative, suppositional) and within each system according to time-reference, aspect and context (i.e. the opposition Sharman has described as strong bond/weak bond).[27]

Two radicals yield verbals without tense suffix : **-li** and **-ti**. Both are part of suppletive systems, forming some tenses from the radicals **-b′-** and **-tiil-** respectively, and each has one tense peculiar to it (CP + **li**, **a** + CP + **ti**). Each has syntactic properties special to it. The first, referred to as the Copula, should strictly be glossed ' become ' ; [28] the second, referred to as the Leader, can introduce direct or indirect speech, and combines with verbals in various tenses to form ' verbal clusters ' (more specifically ' Leader clusters ') or two-word tenses.

The imperative or ' verbal interjection ' alone among verbals has no Concord Prefix. This correlates with the absence of a syntactic ' subject ', and requires the imperative to be set in a category apart from other verbals. An ' aspect suffix ' **-iní**, commonly held to form a plural imperative, rather ' adds respect '—the form without **-iní** may, for instance, be addressed to a plurality of small children. The same **-iní** may be attached to particles (**alé/aléénı́, bátı́/bátı́ínı́**), but is also (rarely) attached to verbals in other tenses, e.g. **naaı́sééní** ' I'm just coming. All right ? '

Two categories of form are associated with relative clauses in Bemba. One is a true verbal, differing from verbals occurring in main clauses only by a change in the tone-pattern. The other likewise resembles main-clause verbals, substituting a double prefix-series for the Concord Prefix, but is a nomino-verbal, since it possesses full and short variants as well as two kinds of stable variant, and is capable of receiving Extra Prefixes and Proclitics. The categories have been distinguished as Object Relative and Subject Relative, since the latter is principally used when the antecedent acts as subject to the relative clause. This is, however, not always the case—for instance **ı́fisósá ábaanákáshı́ fyábúweeléweelé** ' things which women say are useless ', where **ábaanákáshı́** would be subject of the verbal in a main clause and the gossip would be object. Here I prefer Doke's distinction of direct relative/indirect relative, where ' direct ' indicates that the prefix of the relative

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[27] Cf. Sharman 1955–6 ; and 1963, 100. A difficulty that arises at several points in the description of the verbal is that two elements, occurring in most circumstances consecutively, in others are ' fused '. For instance Tense 25 has for most classes of the Concord Prefix a form **naa** + CP + Radical + **a**, e.g. **náabábútúká** ' they have run away '. The corresponding forms for the first and second persons singular are **nîmbútúká** and **núubútúká**. **nim-** (or morphophonemically **nin-**) and **nuu-** are therefore quoted as fused elements representing the Tense Prefix of Tense 25 and Concord Prefixes of the first and second persons singular. A similar case of fusion occurs between the radical and one Tense Suffix. The importance of this fusion is such that the radical and Tense Suffix are generally referred to together as the ' base '.

[28] That is, it is a stative verb, adopting the perfective aspect for the meaning ' be '. Glosses are conventionally given for the simple aspect.

form is in agreement with the antecedent. I would therefore characterize these two categories as ‘ indirect relative verbal tense ’ and ‘ direct relative nomino-verbal ’. Guthrie's term for the latter is Dependent Nomino-Verbal.

A second category of nomino-verbal is called by Guthrie the Independent Nomino-Verbal, and by many others the infinitive. It has a Class 15 prefix with all the properties of an Independent Nominal, but retains verbal features such as a distinction of aspect, the possibility of Concord Infix and Suffix and the ability to support a clause.

The processes of radical extension, treated by Guthrie in 1962 (*Bibl.* **23**) are discussed in the *Outline*, but they are not relevant to this article.

III

PARTICLES

A large number of words in Bemba are not susceptible of morphological analysis and appear in only one form. Guthrie has referred to these as Particles, and defined them as playing no part in the concord system. The definition is a negative one, and syntactic description will require a much finer differentiation of categories, which will include a category of ideophones or ‘ phonaesthetic particles ’.

SOME KEY TERMS OF GUTHRIE'S DESCRIPTION

Strictly speaking, in a complete description of a language no category-definitions are required, since a category is defined by the totality of what is said about it in the description (including the category-labels in the lexicon). However, Guthrie has generally attempted some definition of his terms, and discussion will permit us to review the various generalizations which are the justification for the major categories he has established.

Nominal and verbal

Guthrie originally distinguished the verbal as having a ‘ base ’, consisting of the radical and a morphological suffix, in contrast to the nominal, where the suffix concluding the ‘stem’ is purely lexical (*Bibl.* **11** and earlier in *Bibl.* **8**). Later, but not so far as I know in print, he suggested alternative definitions : nominals are capable of displaying ‘ extra ’ prefixes,[29] while verbals are capable of supporting

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[29] Nominals with Extra Prefixes themselves satisfy this criterion, since Extra Prefixes may be added cumulatively—if we have in mind **ifípushí** (8) ‘ pumpkins ’ and **ulúpé** (11) ‘ flat basket ’, **ífyamúlwápálúkúngú** would mean ‘ the ones in the one on the verandah ’.

words without the operation of concord : [30] nomino-verbals and verbo-nominals satisfy both criteria. Most recently (in *Bibl.* **31**, para. 14.12) Guthrie has eschewed formal definition, but indicated that adequate definitions would have reference to all these features, and additionally the potentiality of radical extensions in the verbal.

Definition by reference to the stem/base distinction alone would fail to include any contoured items, and some reference would need to be made to fusion. Reference to the potentiality of extra prefixes might exclude some items (such as the indefinite locative words **páá/kúú/múú**) whose inclusion could be argued for analogically. The absence of any potentiality in a particular case must be accounted for in the grammar, but only at a relatively refined level.

Guthrie's category of nominal embraces several categories used by other writers : the popular ‘ noun ’ and ‘ adjective ’, Doke's ‘ substantive ’ and ‘ qualificative ’, and some forms assigned to other categories. The primary justification for this is the number of generalizations applying to the whole category, such as processes of stabilization and the affixation of extra prefixes and proclitics. A further justification is the ability of different kinds of nominal to function at the same place in clause structure (in the same ‘ slot ’). For instance :

úmulúnshí nááisá	the hunter has come
umúsumá nááisá	a good one has come
uyú nááisá	this one has come
úwaamfúti nááisá	the one with the rifle has come
ú'ucénjéélé nááisá	the clever one has come

These illustrate respectively : an Independent Nominal ; a Dependent Nominal ; a Stemless (‘ fused ’) Nominal ; a Nominal with Extra Dependent (‘ genitive ’) Prefix ; and a Dependent (‘ direct relative ’) Nomino-Verbal. Similarly in a locative class :

bééꜝkéélé pánsaká	they are sitting at the meeting-place
bééꜝkéélé apásumá	they are sitting in a good place
bééꜝkéélé ápataléélé	they are sitting somewhere cool

These illustrate respectively : a Nominal with Extra Independent (‘ locative ’) Prefix ; a Dependent Nominal ; and a Dependent (‘ direct relative ’) Nomino-Verbal. Contexts in which exponents of the locative gender commute with exponents of other genders are rarer, but may be illustrated thus :

nîmbééshíbá baaMulenga	I know him, Mr. Mulenga
nîmpééshíbá pámasansá	I know the place, by the cross-roads

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[30] ‘ Support ’ is used in the sense developed in Guthrie, *Bibl.* **21** ; in other terms the verbal can constitute a complete utterance (*a*) by itself and (*b*) in combination with a word-group with which it displays no concord relationship (optionally also with word-groups which do display concord relationship. The definition perhaps needs refinement : ‘ The verbal belongs to a form-class some (formally undifferentiated) members of which, etc.’, since cases could be found in which either (*a*) or (*b*) failed.

illustrating an Independent Nominal and a Nominal with Extra Independent (‘ locative ’) Prefix.[31]

Independent and Dependent

Guthrie in 1948 (*Bibl.* 12) glossed ‘ independent ’ as ‘ controlling the agreement of other words ’ and ‘ dependent ’ as ‘ having agreement controlled by words of the first type ’. More recently he has used ‘ independent ’ to indicate that a stem is associated with a restricted series of classes only, while ‘ dependent ’ is applied to series of affixes or words displaying agreements of every class. The same definition is behind the terminology Short-series nominal/Long-series nominal, adopted for instance by Professor Whiteley.[32] The categories denoted by the terms are the same in each case.

Some difficulties arise over the category Guthrie called Semi-Dependent Nominals—see above, pp. 248–9. As, however, no stem or series is involved that does not, in other syntactic contexts, display agreements of all classes, it can be said that structurally all such words belong to different categories of Dependent Nominal or Relative Headword, but that in these usages they expound not the relationship called dependent concord but autonomous gender.

In addition to distinguishing two categories of nominal, the terms ‘ independent ’ and ‘ dependent ’ are used in the description to distinguish two kinds of extra prefix and two kinds of nomino-verbal. It is a question whether this terminology is wholly satisfactory. While ‘ dependent ’ indicates in each case a series of Classes 1–18 inclusive, ‘ independent ’ indicates in the first case any of a finite number of short series drawn from Classes 1–15; in the second, Classes 16–18; and in the third, Class 15 only. Further, there may sometimes be putative categories other than those Guthrie intends, that have descriptively an equal claim to Guthrie’s labels ; and, in any case, equal satisfaction of the criteria implied by the labels would be no guarantee that categories in different languages were comparable.

The distinction Independent/Dependent Nominal presents few problems. Occasionally a stem appears to be associated both with an independent gender and a dependent prefix series. For instance **ínꜝtúngúlushi** ‘guide’, used independently controls agreements of Classes 9/10, but displays dependent concord in nominal groups like **ínꜝkómbé itúngúlushi** or **kapááso mutúngúlushi** ‘messenger acting as guide ’. As these cases are few, it is simplest to note the double potentiality in the lexicon—e.g. **-túngúlushi** 9/10 *or* DDP. We could follow a similar treatment for a case like **úmwanákáshí/ábaanákáshí** ‘ woman ’ beside **-anákáshí** DDP ‘ female ’,

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[31] Cf. E. Westphal’s comments, reviewing Doke’s *Southern Bantu languages* (*BSOAS*, XVIII, 1, 1956, 200–2), on Doke’s separation of noun and adverb (i.e. the locative classes).

[32] W. H. Whiteley, ‘ Some problems of the syntax of sentences in a Bantu language of East Africa ’, *Lingua*, IX, 1960.

but as the Double Dependent Prefixes are identical with Independent Prefixes for Classes 1/2, it is better to consider **-anákáshi** solely a Dependent Nominal stem, with prefixes of Classes 1 and 2 expounding the personal 1/2 gender set up for Dependent Nominals (see p. 244 above).

The Extra Independent and Dependent Prefixes are perhaps not the only Extra Prefixes in Bemba, as we noted above (p. 247). Of the further putative series, the one exemplified by **mwé-baaícé** ' you children ', we called tentatively the Extra Personal Prefix ; the other exemplified by **buunnamfúmú wéésú** ' role of queen over us ' consists of prefixes of the derived independent genders, and so could equally be called an Extra Independent Prefix, the term otherwise pre-empted by the locative prefixes. One solution might be to refer to the latter as Extra Autonomous Prefixes. Terms which relate to the meaning (in some context) of a word category are never fully satisfactory, but Extra Locative Prefix would be satisfactory if understood wholly as a conventional term.

No compelling reasons demand reconsideration of the term Extra Dependent Prefix, but Genitive, Possessive or Linking [33] would be satisfactory replacements for Dependent. The term ' Extra ' is retained in each case as an indication of the concord potentialities in nominal groups.

Sharman (1963, 119 ff.) discusses various categories of ' verbo-nominals ' and ' verbo-pronominals ', including several categories additional to Guthrie's Independent and Dependent Nomino-Verbals. If any of these further categories proved to be nomino-verbals in Guthrie's sense, the uniqueness of his designations would have disappeared. The first groups of such categories (para. 3.12) consist of forms with Independent Nominal prefixes, verbal radical and suffix, two categories at least being fully productive : (*a*) exemplified by **imílandíle** ' way of talking ', **ímibééle** ' way of being, behaviour ', and (*c*) exemplified by **icílandélandé** ' talking rubbish ' and **icíyeeyééye** ' disorderly progress '. I have not recorded any such forms satisfying Guthrie's condition for verbal or nomino-verbal (that they should control words without the operation of concord) : they could therefore appropriately be described as deverbative nominals. If, however, a form is attested followed, for example, by a direct object, we should have to accept that category as a nomino-verbal. A label such as Infinitive Nomino-Verbal would serve for Guthrie's category in contrast, for instance, to Modal Nomino-Verbal (Sharman's category (*a*)).

Sharman speaks of a finite-verb type verbo-pronominal and an infinitive-type verbo-pronominal (ibid., para. 3.2), of which the first type corresponds to Guthrie's Dependent Nomino-Verbal. His second type, exemplified by **ú!wáákutápa** ' someone to draw (water) ', consists of the infinitive (nomino-verbal) with Extra Dependent Prefix. Although in the syntax a study will be necessary of the special

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[33] ' Linking ' recalls Sharman's term ' linked ' (1963, 110), there applied to the nominal rather than the prefix.

type of ' rank-shifted ' or ' entailed ' clause based on this formation, there is no need to treat it as a special form-category. Guthrie's ' Dependent Nomino-Verbal ' therefore has a unique reference, although I argued above (p. 251) that ' direct relative nomino-verbal ' would more exactly categorize its function. A label ' participle ' for short reference seems open to few objections.

CONCLUSIONS

We have discussed Guthrie's categories for the description of word-structure ; we found little cause to modify his categories, although some criticism was made of the labels applied to the categories. His treatment of syntax (outlined in 1961, *Bibl.* 21) lay outside the main interest of this article. However, it may be noted that the terminology that Guthrie introduces for classes of item operating at places of clause and sentence structure does not coincide with the category labels given to word-form categories, although membership of these classes (' substitution classes ') is described in terms of the word-categories.

Doke's terminology, on the other hand, categorizes words ' according to the kind of idea or relation (they) denote in the sentence '.[34] His labels sometimes distinguish classes operating at places of clause-structure (substantive/predicative/descriptive/conjunction), sometimes classes operating at places of group-structure (substantive/qualificative) ; some of his sub-categories are differentiated by their form (adjective/relative/numeral/possessive).[35]

It seems probable that what may appear unsatisfactory in Guthrie's choice of terminology has arisen from a need to emphasize the departure from his predecessors, firstly in the distinction of form categories and function classes, and then in a rigorous view of function in terms of substitution classes, in contrast to the notionally defined categories of Doke (current in much Bantu description of the period). The importance of the first distinction, underlined by the neo-Firthians, is lasting, and there should be no turning back in serious description to the confused categories of Doke.

Finally, in my own research into Bemba syntax, I have experimented with applying the ' Scale and Category ' model of description developed by Professor M. A. K. Halliday.[36] Although Guthrie has always proclaimed his methods to be pragmatic, I have found no need to modify (to any substantial extent) either his categories or his general approach when applying Halliday's model—with the sole exception that Guthrie has no adequate device to correspond to Halliday's rank-shift.

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[34] *Bantu linguistic terminology*, s.v. Part of Speech.

[35] Cf. *Bantu linguistic terminology*, s.v. Qualificative.

[36] M. A. K. Halliday, ' Categories of the theory of grammar ', *Word*, XVII, 3, 1961, 241–92.

SOME PROBLEMS IN SWAHILI CLAUSE STRUCTURE

By Joan Maw

In attempting to make a description of Swahili, one of the most difficult problems to decide is how many elements of clause structure are needed and what are the relationships between the different elements. At least three if not four elements have always been implicitly, if not explicitly, recognized; although there is little doubt that these elements were isolated by analogy with the existing (and at times naïve) notions about the structure of English or other European languages held by the pioneer writers on Swahili. However, even when elements were isolated (e.g. ' subject ', ' object ') no criteria other than notional ones were adduced, and this in spite of the fact that (*a*) Swahili displays a complex system of concord which could be made use of; and (*b*) that notions such as that the subject is what the sentence is about, or the subject is the doer of the action, plainly are often not true and still more often cannot be substantiated.

However, if one takes a structural viewpoint and attempts to make deductions from within the grammatical possibilities of the language itself, there are still plenty of problems, some of them raised by the very making of the attempt. For example, take the Subject relationship, which one might say was generally characterized by the presence of a subject concord in the Predicator.[1] The term ' Predicator ' is used to cover rather more than items classified as verbs. Apart from the fact that some items which function as Predicators (including some verb forms) are not capable of showing this concord, there are also other problems. Some Subjects may consist of items in apposition or in a linked relationship; the first is not different from the case in English, but the second may give trouble. For example, one may say:

Hamisi na mkewe walikwenda mjini	Hamisi and his wife went to town

Here **Hamisi** and **mkewe** are linked and both constitute the Subject, with a plural verbal concord, **wa-**. Or one may say:

Hamisi alikwenda mjini na mkewe	Hamisi went to town with his wife

Here the groups **Hamisi** and **mkewe** are linked in the same way, but only **Hamisi** is the Subject, with a singular verbal concord, **a-**. Furthermore, one could also say:

Walikwenda mjini na mkewe	(X) and his wife went to town

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[1] Throughout this article technical terms such as ' subject ' are written with initial capitals when the grammatical relationship is being referred to. Lower case initials are used when the relationship is notional. (This distinction may or may not correspond with that between surface and deep structure grammar.)

Here **mkewe** is linked to zero, but nevertheless constitutes part of the Subject in some sense. The verbal concord is plural. What constitutes the Subject in this sentence? And what status has **na mkewe**? (I should add that although these are the most usual word orders, others are possible.) In order to be consistent with the criterion of subject concord agreement one would have to say that **na mkewe** is not the Subject; on the other hand one would not want to class it with the same group in a passive clause, e.g.

Aliambiwa na mkewe	He was told by his wife

because of the possibility of the entailed clause in the latter case:

Mkewe alimwambia	His wife told him

Clearly then the subject concord is something which manifests a Subject to Predicator relationship but is not a criterion, and in order to include clauses such as

Walikwenda mjini na mkewe

in the grammar one would have to say that groups such as **na mkewe**, of the structure linker + nominal group, can function as the Subject, in which case they are associated with a plural subject concord. (It seems likely that only the linkers **na** and **pamoja na** 'together with' are involved, although one would not like to be dogmatic on this.) This would effect a compromise between a surface grammar which would tend to exclude **na mkewe** as a subject at all, and a (postulated) deep grammar which would make it only a part of the Subject.

Another problem arises with one of the possession relationships. Here two groups are linked in this way, either of which may be the concordial subject, e.g.

Mtoto yule mambo yake yamenichosha	That child's goings-on make me tired
Mtoto yule mambo yake amenichosha	That child makes me tired with his goings-on

The problem is whether to regard these two groups as manifesting different elements of clause structure (e.g. Subject, Adjunct); as different sub-classes of the same element of clause structure (e.g. two types of Subject, rather on the lines of direct and indirect object); or whether to attempt to describe them as a single group—although such a group would be quite different from other existing nominal groups in having more than one set of concords which were not predictable. (As distinct, for example, from groups containing items such as **kipofu** 'blind man' which has a class 7 prefix but which is normally associated with class 1 agreements.) The order of the groups may be reversed, but this makes no difference to the concord possibilities. A passive transform proves nothing either.

Leaving these problems for the moment, we can define 'Complement' (a term which I use to cover rather more than the traditional object) as characterized by an optional object prefix in the Predicator; and Adjunct as a fourth element in clause structure characterized by having no subject or object concord possibility in the Predicator. This would give a nice cline Subject-Complement-Adjunct, characterized respectively by obligatorily present, optional, and obligatorily absent concord with the item at Predicator where choice is appropriate. But in fact such a distinction between Complement and Adjunct is very difficult to maintain, since the presence or absence of the object prefix is partly a matter of marking and partly bound up with the transitivity system (see W. H. Whiteley, *Some problems of transitivity in Swahili*, S.O.A.S., 1968; and W. H. Whiteley and J. D. Mganga, ' Focus and entailment, further problems of transitivity in Swahili ', *African Language Review*, forthcoming). But however Complement and Adjunct may be defined, the possessive structure outlined in the previous paragraph may function for any of them, although of course where an object prefix is not present, or cannot be present, it is not possible to say which group is, as it were, the primary one to sustain the relationship with the Predicator. This might seem to be an argument for regarding them as complex groups rather than as two separate groups, in different relationships within the clause.

Nevertheless, from the comments of informants it seems likely that in a notional sense those related groups which do *not* manifest Subject or Object concord with the item at Predicator are in a deep sense the ' subject ' of the discourse. That is to say that in a sentence such as:

Mtu huyu uzalendo wake amejitolea afe kwa ajili ya nchi yake	Such was this man's patriotism that he offered to die for his country

it is the group **uzalendo wake** ' his patriotism ' which is the notional subject, whilst **mtu huyu** ' this man ' is the grammatical Subject. Similarly, in the sentence:

Yule tajiri hakutaka kumsaidia mwenzake umaskini wake	The rich man did not want to help his friend in poverty

the group **umaskini wake** ' his poverty ' is what we are talking about, rather than **mwenzake** ' his friend ' which has the grammatical object concord. In the case of groups which are not related to the Predicator, a superficial enquiry suggests that it may be the second of the two groups that is the notional ' subject ', e.g.

Kweli wengi katika hao gharama zao tunasaidiwa na nchi za kigeni walio marafiki zetu	Of course, many of them, as to their expenses, we are helped by friendly foreign countries

gharama zao ' their expenses ' depends grammatically on **wengi katika hao** ' many of them ', nevertheless it appears to be the topic of the discourse. A number of sentences follow (provided by Mr. J. D. Mganga) which will make the point clear, I think. (Note that in the sentences where an object prefix is involved, the

Complement is front-shifted.) A rather literal translation is given in an attempt to avoid prejudging the issue for the reader.

Chakula hiki ladha yake siwezi kukila	This food its taste I can't eat it
Mahali hapa kutisha kwake hapakaliki	This place its frightening quality it is uninhabitable
Ndugu yangu bidii yake amejenga nyumba kubwa	My brother his diligence he has built a big house
Smith tabia yake hapatani na Uingereza	Smith his disposition he does not come to an agreement with Britain
Nyumba hii ubovu wake haikaliki	This house its dilapidation it is uninhabitable
Wazee hawa uzembe wao wataona cha mtema kuni	These elders their idleness they will be made into matchwood
Bwana huyu upelelezi wake atapata taabu	This fellow his inquisitiveness he will get into trouble
Watu hawa kazi yao wanalima mpunga	These people their work they cultivate rice
Sisi shida yetu tunataka uhuru	We our need we want independence
Msichana huyu ukimya wake hanielei	This girl her silence she does not explain to me
Mtoto huyu utundu wake amefanya nini ?	This child his precociousness what has he done ?
Watu hawa tabia yao wamekaaje ?	These people their habits how do they live ?
Mji huu machafuko yake utaangamia	This town its disorganization it will be destroyed
Mtoto huyu maisha yake nampenda sana	This child her life I like her very much
Mbwa huyu wema wake nampenda sana	This dog its goodness I like it (dog) very much
Mtu huyu ujanja wake mwache aone	This man his wiliness leave him be, he'll see !
Mgonjwa huyu udhaifu wake natumaini hataishi	This invalid his weakness I think he won't live

Although this phenomenon is most common with possessives of this type, it can also occur with the more simple type of possessives (what Mrs. Ashton calls the ' -a of association '), where but for this fact the group could easily be regarded as a single item, e.g.

Kazi ya baba jana alifanya nini ?	Father's work, what did he do yesterday ?

Here we have a more complex situation in that **kazi ya baba** ' father's work ' is the notional subject, but **baba** ' father ' alone is the grammatical Subject. Further examples :

Utulivu wa mtoto huyu anapendwa na watu wengi	This child's gentleness he is loved by many
Maisha ya watu hawa hawapendi wenzao	The life of these people they do not love their neighbours
Udogo wa vidudu hawa hawawezi kuonekana bila ya darubini kali	The smallness of these germs they can't be seen except with a powerful microscope
Gharama ya kitabu hiki sisi hatuwezi kukinunua	The cost of this book *we* can't possibly buy it

Indeed, these notional subjects may be connected with the Predicator in a still more distant way, as in the following examples, where the unstated ' possessor ' of the notional subject group ' is ' the grammatical Subject.

Woga wake hakuweza kutoka nyumbani simba alipokuwa ananguruma	His cowardice he would not leave the house when a lion roared
Kutoaminika kwao wamefukuzwa katika kazi waliokuwa wanaifanya	Their untrustworthiness they have been sacked from their jobs
Kutoaminika kwake sasa anaona mambo yamemkalia sivyo	His untrustworthiness he now sees his chickens have come home to roost—haven't they ?
Ujanja wake ameingia katika mtego sasa	His slyness he has been caught out now
Udhaifu wangu siku hizi siwezi kutembea vizuri	My weakness these days I can't get about properly

In the next example the ' possessor ' of the notional subject does not appear until the subject prefix of the verb in the second clause :

Ukame wa mashamba yetu sidhani mwaka huu tutapata mavuno safi	The barrenness of our smallholdings I don't think that this year we shall get a good crop

And in the next example the ' possessor ' of the notional subject is somehow *part* only of the grammatical Subject as expressed by the concordial subject prefix :

Fujo yako siku hizi tutagombana	Your fuss these days we shall quarrel

Even such tenuous links do not exist in the following sentences:

Giza hili tutafanya nini leo?	This gloomy weather what shall we do to-day?
Kuchagiza kwa mvua leo sidhani kuna mtu atakayetoka nje	Persistent rain like stair-rods to-day I don't think anyone will go out
Ukamili wa jembe nenda shambani	The quality of the hoe, go to the fields (The proof of the pudding is in the eating)

Yet even in these last three sentences there is certainly a feeling that the opening groups constitute the notional subject, and as far as I can see there is no means of connecting them with the grammatical Subject. Plainly a deep grammar is needed to deal with this problem, but as yet we have not got even an adequate surface grammar.

It is often very difficult indeed to reformulate the ideas expressed in such sentences into other grammatical structures. Sometimes it is possible with the first possessive type to use the other possessive construction, and in this case the ' notional subject ' becomes the head of the possessive structure, e.g.

Watu hawa kazi yao wanalima mpunga

could be re-formulated as

Kazi ya watu hawa ni kulima mpunga	The job of these people is growing rice

In other cases one needs a compound sentence, e.g.

Nyumba hii ubovu wake haikaliki	
Nyumba hii mbovu mno hata haikaliki	This house is so dilapidated that it is uninhabitable

Here the ' notional subject ' is now the Complement of the first clause.

Or one may make use of an Adjunct, e.g.

	Mahali hapa kutisha kwake hapakaliki	
or	**Mahali hapa hapakaliki kwa kutisha kwake**	This place is uninhabitable for its eeriness

In other cases there are a number of possibilities but all are difficult and none have the neat and succinct quality of the original. This suggests to me that these structures must be included in the basic grammar of the language and cannot be regarded as nonce-formations reflecting some other structure.

In an earlier study (*Sentences in Swahili*, S.O.A.S., 1969) I have argued for a fifth element of clause structure, R (Referent) to deal with groups in the possessive relationship like **ladha yake** in the sentence

Chakula hiki ladha yake siwezi kukila This food its taste I can't eat it

In this example the Referent would be related to the Complement, whereas in the following example it would be related to the Subject:

Watu hawa tabia yao wamekaaje? These people their habits how do they live?

(**tabia yao** is the Referent.) The advantage of this analysis over the alternative of somehow regarding the whole stretch (**chakula hiki ladha yake ; watu hawa tabia yao**) as Complement or Subject respectively, is that the Referent groups are then classed together, as well as being related to Subject or Complement, in an attempt to reflect what may be the case in the deep grammar. A Referent may similarly be associated with an Adjunct.

Clauses with the second possessive type, e.g.

Utulivu wa mtoto huyu anapendwa na watu wengi This child's gentleness he is loved by many

could be dealt with as having no Subject, and classing **utulivu wa mtoto huyu** as an Adjunct. This was the view I took earlier but I am less and less satisfied with it. Moreover now that the tyranny of the Subject prefix has already been shaken off in the case of clauses like:

Wamekwenda mjini na mkewe He has gone to town with his wife

(discussed earlier), I think one might say that a complex group of the structure of two or more nominal groups related by **-a** (whether or not one cares to call this rank-shift, as I have done, op. cit.) may constitute the Subject and in this case the subject concord may relate to *any* nominal group in the complex.

These suggestions are tentative, however, and at the moment it is still more difficult to see how to deal with the other structures quoted, viz. e.g.

Ujanja wake ameingia katika mtego sasa His slyness he has been caught out

and

Ukamili wa jembe nenda shambani The quality of the hoe, go to the fields (The proof of the pudding is in the eating)

other than by regarding **ujanja wake** and **ukamili wa jembe** as Adjuncts. I feel sure, however, that further work ought to enable us to produce some more satisfactory overall solution to include these structures as well.

Another problem in clause structure involves something of what Mrs. Ashton (E. O. Ashton, *Swahili grammar*, Longmans, 1947) calls ' nominal constructions ' but which I prefer to think of as involving Predicator and possibly Complement. Some of the difficulties may be resolved by Professor Whiteley's work on transitivity (op. cit.), but where there is a possibility of two or even more Complements being involved, there seems at the moment no direct way out. In any case it is plain that if one is to speak of Direct and Indirect Object in Swahili, the roles are reversed, e.g.

Walimpa mtoto chakula	They gave the child some food

where **mtoto** ' child ', not **chakula** ' food ' is the Direct Object, and is associated with the object concord. However, in most sentences with two complements the extended verb is also involved, e.g.

Wazee waliinunua shati	The parents bought the shirt
Wazee walimnunulia mtoto shati	The parents bought the child a shirt

The problem now arises of the status of **shati** in the second sentence, since here there is no possibility of its being associated with an object prefix in this sentence. On the other hand it could be associated with a relative prefix in the Predicator, e.g.

Shati niliyomnunulia mtoto	The shirt which I bought (for) the child

So far, however, we have not brought the question of relative into the clause structure system, as it seems to belong more properly to sentence structure—i.e. that a relative marker in the Predicator or elsewhere is frequently a sign of a dependent clause, regardless of whether the class marker associated with the relative indicates an item at Subject, Complement or Adjunct in the clause in question or in the main clause. At the moment, therefore, the relative concord does not seem helpful.

The next three sentences may be considered together:

(*a*) **Niliipiga fimbo**	I struck the stick
(*b*) **Nilimpiga fimbo nyoka**	I struck the snake (with a) stick
(*c*) **Niliwapigia fimbo nyoka watoto**	I struck the snake (with a) stick (for the) children

We have to ask what status have **fimbo** ' stick ' and **nyoka** ' snake ' in sentences (*b*) and (*c*)? I would like to regard these sentences as illustrating a cline with a sort of push-down system for Complement, with **fimbo** and **nyoka** being successively replaced but retaining their status as Complements, i.e. in sentence (*a*) **fimbo** is C1, in sentence (*b*) it is C2, and in sentence (*c*) it is C3. **Nyoka** is C1 in sentence (*b*), and C2 in sentence (*c*). **Watoto** is C1 in sentence (*c*). Some people would not like to regard **fimbo** as a Complement in sentences (*b*) and (*c*), but would regard it as forming a phrasal verb with the Predicator. Personally I do not like this solution, partly because it ignores sentence (*a*), and partly because I fear that the decision as to what is or is not a phrasal verb seems so often to depend (though subconsciously) on translation.

The difficulty of using object prefix occurrence as a guide is illustrated by the fact that many of the structures in Professor Whiteley's more recent article on transitivity (op. cit.) contain items which seem to be able to be at either Subject or Complement (by entailment), but when at Complement cannot have object prefixes, e.g.

Maji yamejaa mto	The water fills the river
Mto umejaa maji	The river is full of water
	(No object prefix possible)
Mgeni wetu amefika nyumbani	Our visitor has arrived at the house
Nyumbani pamefika mgeni wetu	At the house has arrived our visitor
	(No object prefix possible)

There are also sentences such as:

Mzee amekufa njaa	The old man died (of) hunger

where **njaa** 'hunger' cannot be Subject, nor can there be an object prefix. Moreover there is the question of the status of the nominal groups (other than that at Subject) in sentences such as:

Nyumba imeezekwa chumba kimoja bati	The house was roofed (as to) one room (with) sheet-iron

Plainly the criterion of possibility of co-occurrence with subject or object prefix does not go far enough in helping us to sort out the structure of Swahili clauses; nor does reformulation, although a combination of the two gets us perhaps somewhat further. What one wants to avoid is setting up grammatical categories which only account for a small part of the language. 'All grammars leak', says Sapir, but our present grammars of Swahili leak so badly that much of the most interesting material is not contained at all.

TONE TYPOLOGIES FOR WEST AFRICAN LANGUAGES

By A. E. Meeussen

It was Professor Guthrie—as I stated in my Bangubangu grammar—[1] who first showed me how to handle tonal complications and who taught me to look for grammatical unity in phonological diversity. It will be ultimately due to him if the present essay makes a useful contribution to a better understanding of tonal phenomena.

A cursory examination of recent descriptive studies proved to be a sufficient starting point in prospecting the tactics of tone typology in the field of West African languages.[2] As could be expected, the West African languages proved to belong to the register type, as opposed to the contour type (Pike 1948), although in Grebo there seem to be some contour features (Innes 1960). Another tentative conclusion was, that there is perhaps more than one possibility of tone typology, and that each can have its importance. The main division would depend on whether one bases typology on generative accounts of language or not.

1. *Generative approach*

Within the generative approach (normally also transformational), there is a difference according to the relationship between the tonal rules and the rest of the rules : the tone rules may be an integrated part of a reasonably full set of rules intended to cover most of the structure of the language under study, or the tone rules may have been programmed especially to account for the tonal features observed in sentences, no other rules being worked out.

1.1. *Integrated*

Typology is possible here by classifying languages according to when and how tonal units or features are being introduced and operated upon by rules. In actual fact, not much work can be done as yet, since the analyses are few : Williamson (1965) for Ijo ; Boadi (1965) for Twi ; Dunstan (1966) for Ngwe ; Carrell (1966) for Igbo ; Bird (1966, 1968) for Bambara. Since generative accounts are always provisional proposals, a typology based on them will be equally provisional, but better after each move in the direction of greater adequacy.

1.2. *Programmed*

If generative rules are set up only to account for surface tonal characteristics, as was done by Voorhoeve (1967) for Bamileke, Hausa and Igbo, it is possible to arrive at results more quickly. A typology based on programmed rules may in the end prove to coincide with one based on integrated rules. However this may

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[1] *Linguistische schets van het Bangubangu* . . . , Tervuren, 1954, 1.

[2] Slightly revised version of a paper given at the 8th Congress of the West African Linguistic Society, Abidjan, 1969.

be, it will be useful first to have a short review of the surface phenomena, starting from the purely phonetic level, and gradually progressing to higher levels of analysis. This will be tried in section 2.

2. *Progressive approach*

The crucial point here is the claim that it is possible in description to set up not only a phonetic level, with free *and* conditioned variation, but also a strictly phonological level, identified solely by distinctiveness of minimal units in unsegmented sentences under neutral intonation, and distinct from the (higher) morphophonologic level (in which account is taken of morphemes, etc.).

2.1. *Tonetics*

Accentual features (pitch and/or stress) can be observed either as a study in itself or by way of revisiting the phonetic field after setting up the phonological system. At least three special problems require attention : the general question of downdrift, the more restricted question of depressor consonants, and the incidence of stress as distinct from tone. Few languages without downdrift in the strict sense have come to notice : Arago-Idoma-Yala (exc. Ikom, Armstrong 1968) ; Bamileke (Bangangte variety, Voorhoeve) ; Mbala (Bantu, personal notes), and probably also the languages having four or five toneme levels, as Bwamu, Dan. As far as two levels can be discerned, there can be downdrift in the upper level only, or in both levels. The feature of constant low level, important in the technique of programmed generative rules (1.2.), is reported for a few languages : Igbo (Igwe and Green) ; Gurenne (Rapp) ; Kabre (Delord) ; Ijo (Williamson) ; Yala-Ikom (Armstrong).

Depressor consonants, usually voiced consonants with unvoiced counterpart, are reported for Ewe (Ansre 1961, quoted by Ladefoged) ; Bassa (Hobley 1964) ; and Nupe (Smith 1967 : rising frequent after voiced, very rare after voiceless). Absence of this feature is sometimes given in a (useful) negative statement : Manessy (1960) for Bwamu ; Bearth and Zemp (1967) for Dan.

Stress as distinct from tone is described as phonologically predictable for Kpele (Welmers 1962) ; and K.-Ijo (Williamson 1965). Absence of stress is noted for Mbum (Hagège 1968). For non-predictable stress, see 2.2.1.

2.2. *Tonology*

For those who work with a tonological level of analysis, as intermediate between a phonetic and a morphophonological level, the main criterion is not phonetic identity, nor distribution, nor system symmetry, nor adaptability to higher level characteristics, but distinctiveness. Several questions must be examined here : the degree of distinctiveness, the number of levels, the relationship between accentual unit and syllable, and the possible existence of additional features.

2.2.1. *Degree of distinctiveness*

Without making any *a priori* assumption about a difference between tone and stress, both referred to here by the term ‘ accent ’, one can examine in each language the number of accentual possibilities for any short stretch in unanalysed sentences, say (the first) four syllables. One group of languages has at best half a dozen possibilities (or less) for four syllables, whereas another group has easily sixteen possibilities (the theoretical number for four syllables with a two-way accentual difference each), or more. Moreover, the distinctions in the first group are less stable, and more subject to shift and replacement as soon as intonation or tempo is a trifle different. Here it seems we have a criterion for distinguishing, at this low level, between what we usually call non-tonal and tonal languages.

In the first group, with a low degree of accentual distinctiveness, there are : Wolof, Fula, Diola-Fogny, Serer, Mankany and Manjaku, all in (or from) the West. A precise description of accentual features is difficult here, and it has to be integrated in a broader description of intonation (Arnott 1965) ; it is also difficult to make general statements without referring to morphemes, e.g. a definable stem syllable (Arnott) or stem initial (Sapir, Sauvageot). It is a surprising fact that for these languages a few specific cases of firm accentual contrast are found (Arnott, Sapir, Doneux ; Voorhoeve for Safwa and Nyiha in Bantu). The importance for general diachronic study of such ‘ erratic ’ contrasts is obvious.

The other languages under review all have highly distinctive accentual features which are, moreover, clearly features of tone (pitch), whereas stress, as far as observable here, is phonologically predictable. Only for three of these tonal languages is there a mention of unpredictable stress, independent from tone : Balanta (Wilson 1961) ; Dagara (Girault 1967) ; Jarawa (Lukas and Willms 1961) ; no examples of contrast are given. Kpele is a special case, requiring specification of stress if the toneme is set up as syllabic (Welmers 1962).

2.2.2. *Number of levels*

If we can leave out of account the phenomenon of register shift (downstep, etc.) for the moment, it can be stated that there are, in the main, either three or two registers. More than three have been reported for Bini, Dan, Bwamu, Egidi and Grebo. Bini is described by Wescott (1962) as having six, five or four levels, according to idiolect. For one dialect of Dan five levels are set up by Bearth and Zemp (1967), Doneux (1968) giving three for another dialect. Riccitelli (1965) gives convincing evidence for four registers in Bwamu, whereas the reduction to three by Manessy (1960) seems to belong to a higher level of analysis (through reliance on the morphological status of enclitics). Grebo has four registers, as shown by Innes (1960, 1962); also Egidi (Armstrong, unpublished); Bassa may belong to this type (Hobley 1964).

The distribution of the other types will have to be given in the form of provisional short lists. Two levels are the majority, except in Kwa (and Chadic ?) :

Temne ; Mandinka, Maninka, Bambara, Susu, Mende, Loko, Tougan Samogo ; Sissala, Kabre, Gurenne ; Esako, Gã, Twi, Igbo, Izi, Ijo ; Kambari, Lokö, Efik, Tiv, Mbe, Ekoi, Bamileke, Wori, Basa ; Mbum ; Hausa, Margi. With three levels : Bedik, Basari, Konyagi ; Kpele, Dan (dial.), Sembla ' Samogo ' ; Dagara, Gurma ; Bassa (4 ?), Adangme, Baule, Yoruba, Igala, Nupe, Idoma, Yala, Etulo, Oron ; Eloyi, Jarawa, Birom, Aten, Ogoni ; Galke, Banda, Ngbaka ; Angas, Sura, Tera, Musey.

It is not clear yet to what extent this feature will be found to occur in areal grouping (correlated or not with genetic (sub-)grouping) ; but see 2.2.4.

2.2.3. *Toneme and syllable*

Most tonal languages seem to have the possibility of two or more tonemes to the syllable, low plus high (' rising '), and high plus low (' falling '). Some languages however show a restriction on ' rising ', or even have no ' rising ' : Kpele, Esako, Nupe, Degema (Edo), Kambari, (Galke), Mbum, Hausa. This may prove to be an important feature in typology, since it bears some relationship to downstep (2.2.4.). Also the absence of ' rising ' after high could be relevant. In Margi it is high-low which is extremely rare ; Dagara has neither low-high nor high-low.

In the other direction, a non-cosegmental (or intersyllabic) toneme, e.g. a low between high and high without downdrift, requires special attention, but it is too rarely attested (Mbala . . .) to be made use of in typology now.

There is a tendency to regard as the scope of the toneme not the syllable or a part of the syllable, but some longer stretch. This has been suggested for Mandinka, Maninka, Bambara, Mende, Ijo and Ekoi (Etung variety). It would appear that in these cases the difference is mainly in the approach, which has its own virtues, but in fact incorporates morphophonologic relationships in phonology. The only clear exception is Kpele, where Welmers (1962) presents strong evidence for a pluri-syllabic toneme set up on purely phonological grounds.

2.2.4. *Intermediate register*

Downstep can often be reduced to the fixation of a high subject to downdrift either through non-realization of a preceding asyllabic low or through upward assimilation of an adjacent syllabic low if we make an appeal to what is given in higher or lower levels of analysis, or in a diachronic approach ; but in a strictly phonological view downstep appears to be something on its own. Just as tonemes can be handled better if taken apart (' suprasegmental ') from the rest (' segmental ') of the minimal stretches, so downstep is best taken as a step further—as a phonological unit which occurs between two suprasegmentals (' inter-suprasegmental '). If so, it follows that heavy restrictions on occurrence are inevitable, without this endangering the phonematic status of the unit itself. In fact, downstep practically always occurs between high and high only. It would be relatively easy to use absence or presence of downstep for typological purposes, at least in the case of well-documented languages, if there were no further complications. But before we set up downstep for a given language we should make sure, as follows from the discussion by J. Thomas (1968), whether downstep plus high is different from ' rising ' : if the language has no rising after high, or no rising at all, then downstep can be reduced to rising by a simple application of normal phonological procedures.

Among the languages with two toneme levels, surprisingly few are reported not to have downstep : Maninka (noun phrases only), ' Samogo ', Sissala, Nembe and Kolokuma (dialects of Ijo), Kambari, Lokö, Ekoi (?), Mbum, Margi and Hausa. Downstep which is not in contrast with ' rising ' is attested for Mende, Esako and Degema. On the other hand, downstep is rarely found in languages with three toneme levels : Yoruba (?), Yala-Ikom (Armstrong 1968). It thus appears that there is a fair degree of complementarity between ' two levels and downstep ' and ' three levels '.

There seems to be a phenomenon which could be called ' total downstep ', in which a high is not lowered just a little, but all the way to the next lower register. This is suggested by Bwamu (in Riccitelli's presentation), by Bamileke (Bang., in one type of analysis), and perhaps by Kaje (personal notes), these languages having four, two and three (?) levels respectively.

Among the rarer phenomena there is downstep in the lower level, as in Nembe Ijo (Rowlands 1960) or in Zande (personal notes) ; and upstep, as perhaps in Temne (Dalby 1966, Wilson 1968) and in Izi (Bendor-Samuel 1968). Another restricted type, apparently regional, is absence of downdrift in a sequence HLH contrasting with its presence, as in Ngwe (Dunstan 1966) ; Wori (Hagège 1967) ; Ewondo (Angenot, unpubl.) and probably Bulu (Alexandre 1966) ; a low in such a sequence is often interpreted as a mid (subject to heavy restrictions), and these languages mostly have no downstep as a toneme.

2.3. *Morphotonology*

As soon as morphemes and grammatical complexes are taken into account, the picture becomes more complicated. Still there are a number of characteristics which can be used in typology. In this section, however, only some examples can be given, without a real attempt at typologizing.

2.3.1. *The types and domains of tonological representation*

Tonal representations can tentatively be divided into adding, substracting and shifting types, according to whether (*a*) they add a tonological unit (e.g. downstep) to the expected inventory (e.g. L and H tonemes representing L and H morphotonemes), or (*b*) simply suppress distinctions, or (*c*) determine a toneme on one or more syllables adjacent to the syllable which corresponds to the morphotoneme. Here, at least in the case of two levels, it is often useful to treat high as marked, low as unmarked. Another criterion is the distinction between persistence (e.g. Mande, Ijo) and anticipation (e.g. Igbo) in morphotoneme representation. A third criterion is the range—measured by number of syllables or morphemes—of the representation, and the grammatical status of the elements involved. In particular, where the word is a sufficiently clear-cut unit, such domain phenomena may usefully be divided into morphologic (' epimorphic tone ', Guthrie) and syntactic types.

2.3.2. *The number, types and location of morphotonemes*

This highest phonic level will probably yield the most crucial criteria for typology. The first is a division into systems with two, three or more morphotonemes. Sometimes it is necessary to set up a special additional morphotoneme, as in the languages showing irreducible tone contrast (but tone harmony and neutral tone appear to be reducible in most cases, especially if use is made of ' unmarked '). Peculiar cases may be found where the morphotoneme is rather fundamental lowering (or downstep) than fundamental tone (Bantu : Shi and Mbala). Or a given analysis (e.g. Williamson 1968 for Ijo) may set up abstract features as highest units.

An equally crucial division will be according to the tie between morphotoneme and morpheme : (*a*) there may be a direct link between each morphotoneme and (the nucleus) of a ' morphosyllable ' ; (*b*) some morphotonemes may be without syllabic support, as in third position of Mende dissyllabic morphemes ; (*c*) morphotonemes may be linked, not to ' morphosyllables ', but to more general parts of morphemes—just beginning and end of a morpheme, as in Ijo (in one analysis), or beginning only, as in Mandinka.

A third division will depend on the particular lexical or grammatical status of the units to which the morphotonemes belong : one category, e.g. the verb, may lack distinctiveness. No example of this was found for West Africa, but such criteria are used by Guthrie (1948, 1967) in Bantu.

It is not clear yet to what extent it will be possible to unify the different kinds of typology obtained at each of the descriptive levels into one overall system.

REFERENCES

Most of the material was taken from contributions published in *ALS*, *AuÜ*, *Bull. IFAN*, *Bull. SELAF*, *Doc. Ling. Dakar*, *JAL*, *JWAL*, *Mém. IFAN*, *WALM*, *WALR*. Owing to library limitations it was not possible to consult STEWART, J.M., ' The typology of the Twi tone system ', *Bull. Inst. Afr. St.*, I, 1966.

Other references are :—

HOFFMANN, C., *A grammar of the Margi language*, Int. Afr. Inst., London, 1963.
MANESSY, G., *La morphologie du nom en bwamu*, Publ. S.L.L. 4, Dakar, 1960.
PIKE, K. L., *Tone languages*, Ann Arbor, 1948.
RAPP, E. L., *Die Gurenne-Sprache in Nordghana*, Leipzig, 1966.
RICCITELLI, J. M., ' Tone analysis : a practical approach ', *The Bible Translator*, XVI, 1965, 54–73.
ROWLANDS, E. C., *A grammar of Gambian Mandinka*, London, 1959.
THOMAS, J., ' Considérations sur le système des tons en twi ', *La Linguistique*, I, 1965, 123–8.
VOORHOEVE, J., *Toontypen*, 's-Gravenhage, 1967.

IS HAUSA REALLY A CHADIC LANGUAGE? SOME PROBLEMS OF COMPARATIVE PHONOLOGY

By F. W. Parsons

I suppose that if one were to single out Professor Malcolm Guthrie's greatest contribution to posterity in the field of scholarship, one would say that it lay, not in his extension of the frontiers of knowledge by the vast corpus of facts about Bantu languages that he has assembled and organized, but rather in the rigorous scientific methodology that he has applied to their classification : in other words, that he will be remembered more as a great comparative linguist than as a great Bantuist or Africanist. He has brought into the field of African language study that truly scientific approach, which had hitherto been confined to Indo-European and other fields and set a standard by which the work of future comparativists in the African field must inevitably be judged. No longer will the citing of a few random resemblances in their vocabularies be deemed sufficient grounds for the postulation of genetic relationship between languages : there must be proved to be an overall and consistent relationship, not only between their phonological systems, but also between the morphology, meanings and grammatical functions of those items of vocabulary that are adduced as evidence of the languages deriving from a common stock.

Bantuists, however, are fortunate among Africanists in the immediately obvious homogeneity of the great majority of Bantu languages, notably in their common possession of a concordial class system. Less fortunate are those working comparatively with other African languages, which are on the whole more conspicuous for their differences than for their resemblances. Indeed the paucity of apparently common items of vocabulary in the other main groupings of African languages is demonstrated in Greenberg's ' Studies in African linguistic classification—IV : Hamito-Semitic '.[1] Of the forty-five sets of cognates given in the comparative word-list at the end of this article, only one (' what ? ') is represented in all the five branches he sets up for the family, viz. Chadic, Cushitic, Ancient Egyptian, Berber and Semitic ; and fifteen of the other forty-four are represented in only two branches. Nor has any serious attempt been made to work out laws of sound change for the family as a whole, and the cognates cited are simply based on impressionistic speculation.[2] Faced with such a situation,

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[1] *Southwestern Journal of Anthropology*, VI, 1950, 47–63.

[2] All too frequently too, through insufficient knowledge of the morphology of individual languages, words are cited as cognates some of whose component sounds are affixes. Newman and Ma (cited in note 3, below) have been guilty of this with the Hausa citations under 26 : ' egg ', and 27 : ' elephant ', both of which (**gwai-wā** and **gī-wā**) contain the feminative suffix **-wā**. The words cited should have here been **ƙwai** (or **ƙwāyī**) and **giye**. The sound parallelism is not affected here (except for the **ƙ** of **ƙwai**—see p. 279), but it was less venial to cite **wānēnē** as the Hausa for ' who ? ' (no. 118), when this is a whole sentence meaning ' Who

most African comparativists, in London at least, feel that efforts at the moment should be concentrated rather on establishing genuine genetic relation (on Guthrian lines) among smaller groups of languages, and only then perhaps proceeding to the establishment of larger groups and families by the same strict methodology.

In this context the article by Paul Newman and Roxana Ma entitled ' Comparative Chadic : Phonology and Lexicon ', which appeared in 1966,[3] is of particular interest. The avowed aim of this article was, in the words of its authors, ' to demonstrate conclusively that the Chad family as postulated by Greenberg does indeed constitute a valid linguistic unit ' by ' the establishment of regular phonological correspondences between the two major divisions within Chad (which the authors have called " Plateau-Sahel " and " Biu-Mandara ") and the subsequent reconstruction of nearly 150 Proto-Chadic lexical items '.

How far the authors have succeeded in their aim is a matter of opinion. One obvious criticism is that the phonological correspondences are confined to consonants, and no account has been taken of the vowels. Thus all the Proto-Chadic starred forms are cited simply as ' *g-m-k- ', ' *ɓ-r- ', etc. From this one of two assumptions can be drawn, either (a) that in Chadic, as in Semitic languages, the vowels have no lexical significance, but are simply morphemes ; or (b) that the authors tried to establish a comparative scheme for vowel sounds too, but failed in the attempt. The first assumption falls down at once by reason both of all that is known about individual Chadic languages, wherein vowels (other than terminal vowels) are almost invariably phonemic, and also of the extreme unlikelihood of a proto-language whose roots are for the most part biconsonantal only, and which according to Newman and Ma had but sixteen consonant phonemes,[4] not utilizing distinctions of vowel quality as well to convey lexical meaning ; if it did not, unless it had tonal distinctions as well,[5] the number of homonyms in it must have been uncomfortably large ! The second assumption, therefore, is the more likely one, and we are then

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is it ? ' and the **nē-nē** is well known to be a reduplicated stabilizer (it is disjunctively written in the modern orthography). Its inclusion at once casts doubts upon the status of **-ni** in the first two Biu-Mandara cognates, and in any case *w- is all that need be set up for ' who ', as by Greenberg. Conversely in no. 21 ' dog ' the Hausa form should have been cited as **karnē**, which form is still current dialectally and the **-n-** is attested by the regular plural **karnuka**. This may not help the overall cognate set, but it brings the Hausa word closer to the Tuburi citation **karaŋ**.

[3] *Journal of African Languages*, V, 3, 1966, 218–51.

[4] Op. cit., 223. In fairness to the authors, they add ' The above does not purport to be a complete Proto-Chadic consonant chart ; it includes only those consonants which we can reconstruct with confidence '. But one questions their judgment when they go on to say ' However, the chart *is* quite rich '.

[5] Newman and Ma make no reference at all to tone, presumably as it goes with the missing vowels. I have likewise for the most part ignored the tones of Hausa words cited in this article, though in the majority of pairs cited for minimal phonemic contrast the words cited are homotonic as well.

left with a most incomplete picture of Proto-Chadic phonology, and one that is in no way comparable to the full reconstruction of Common Bantu radicals made by Guthrie, consonants, vowels and tones, and the systematic reflexes of all these three components in present-day Bantu languages on which the reconstructed forms are based. Thus, to take some examples from the cognates postulated for the most cited representative languages of the two groups Plateau-Sahel and Biu-Mandara, viz. Hausa and Tera, Hausa /a/ is equated with Tera /a/ in set 39, H. **zakara**, T. **kara** ; with Tera /ā/ in set 64, H. **gamu**, T. **gāma** ; with Tera /ə/ in set 8, H. **fasā**, T. **pətl** ; with Tera /i/ in set 19, H. **kada**, T. **jiran** ; with Tera /ī/ in set 21, H. **karē**, T. **yīɗa** ; with Tera /o/ in set 37, H. **mantā**, T. **mona** ; and with Tera /u/ in set 98, H. **tanɗe**, T. **turɗa**. Conversely, Tera /ə/ is equated with Hausa /a/ in set 8, H. **fasā**, T. **pətl**, with Hausa /i/ in set 114, H. **ɗimī**, T. **ɗəma**, with Hausa /u/ in set 52, H. **surukī**, T. **sərvəkī**, and with Hausa /ū/ in set 70, H. **sūnā**, T. **dləm**. How arbitrary in fact the distribution of vowels is throughout the list is well shown by set 127 ' bone ', where the supposed reflexes of *'W̳-s- include **ƙashī**, **gətl**, **'ule**, **'oso** and **sese**.

What I am here concerned with, however, is not the general validity of the Chadic hypothesis, but, assuming that this hypothesis rests upon adequate evidence, the inclusion of Hausa as a Chadic language. It is true that this classification has long been accepted by most Africanists and anyone who questions it will be thought to be idiosyncratic. Counter-arguments will require to be very strong ones. Moreover my knowledge of other so-called Chadic languages is superficial and entirely secondhand, i.e. derived from the communications of others who have studied them at first hand. But, if I do not succeed in converting other scholars to my way of thinking, I shall at least pose some basic questions with regard to the status of Hausa which have up to now been almost entirely evaded by the proponents of the Chadic hypothesis, and which need to be answered. My arguments fall under three heads : (1) phonology, (2) morphology and (3) vocabulary or lexicon. Syntax I leave out of consideration, because (i) this aspect of language is notoriously unstable and unsatisfactory for basing genetic assumptions upon ; (ii) little as yet is known about the syntax of any ' Chadic ' language other than Hausa, so no proper comparisons can be made. In this present article I shall be dealing only with the phonological arguments, leaving the morphological and lexical arguments, together with my general conclusions to follow later.

The strongest impression gained by anyone who has studied the phonology of Hausa is that here is a language which has an almost unnaturally tidy and symmetrical system of sound differentiation, distribution and utilization. In a ' metaphonemic ' analysis [6] all the sounds of Hausa can be reduced to a basic

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[6] Some years ago I made an intensive study of Hausa phonology, the results of which were embodied in an unfinished MS. monograph entitled ' The vowel system of the radical in

system of ten consonantal units, which may be designated /P/, /T/, /K/, /S/, /M/, /N/, /L/, /R/, /H/ and /Y/W/, and two vowel units, /A/ and /I/U/. The consonants are divisible into two series, viz. (i) the obstruents /P/, /T/, /K/, /S/, /H/ ; (ii) the nasals and liquids /M/, /N/, /L/, /R/,[7] the semi-vowel /Y/W/ occupying a special position in the system.[8] Additional phonemic distinctions are given to the obstruents in syllable initial position by a trinary differentiation of (a) aspiration or voicelessness ; (b) voicing ; (c) glottality, producing the phonemes /f(p)/h/,[9] /b/, /ɓ/ ; /t/, /d/, /ɗ/ ; /k/, /g/, /ƙ/ ; /s/, /z/, /ts/ ;[10] and /h/, /ʔ/.[11] In word initial position there is a further trinary system of differentiation operating for all the obstruents but /H/, and sporadically also for the liquids and nasals,[12] viz. (d) neutral or Ǝ-coloration ; (e) palatalization

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Hausa ', which has had some private circulation in America. I am here giving a very condensed summary of this. I was led to adopt a metaphonemic (i.e. ' going beyond phonemic ') approach through the increasingly apparent inapplicability of a conventional segmental phoneme analysis to a ' harmonic ' language such as Hausa, in which the syllable is the minimum stretch that can be profitably handled at the phonetic level, and more often one must take the whole word or word-group. To give but two instances, a synchronic segmental phoneme approach necessitates making such curious and inelegant statements as (i) /i/ and /u/ are never inter-contrastive except after a velar, (ii) the principal member of the /a/ phoneme (or the ' pure A ' sound, cardinal vowel 4½) occurs only after a pharyngeal, /h/ or /ʔ/.

[7] Unlike many who have written on Hausa phonology, I am not in the least worried by the distinction between the flapped and the trilled /r/ of Hausa, since this distinction is phonemic in only some half a dozen pairs of words. The two /r/ sounds are often interchangeable, and both of them too with /l/, but this last is clearly a distinct phoneme.

[8] /y/ and /w/ present the biggest problem in all Hausa phonology, and one that I cannot claim to have solved ! In both positions in CVC- roots the two sounds are either in complementary distribution, sometimes depending upon word tone-pattern (e.g. **ƙayàa** ' thorn ', **ƙawaa** ' woman's woman friend '), or they are interchangeable. (An apparent exception is **hayoo** ' cross hither ' and **hawoo** ' climb or ride hither ', but this is a comparatively modern distinction—like the two verbs ' second ' in English—**hayàa** ' cross ' and **hau** (<***hàwa**) ' mount ', representing two grades of the same verb **hay/w-** with the basic meaning of ' bestraddle '.) The same is true of them in coda position. But in both positions in C-(VC) and CVCC- roots they are usually inter-contrastive, e.g. **waà** ' elder brother ', **yaà** ' elder sister ' (but **waa/yaa** ' species of tree ') ; **wank-** ' wash ', **yank-** ' cut ' ; **baawaa** ' slave ', **baayaa** ' back ' ; **waawaa** ' fool ', **waay-** ' (en)lighten ' ; **yaaw-** ' wander ', **yaay-** ' wean, etc.'.

[9] This phoneme has a number of allophones and diaphones. It must not be confused with the phoneme /h/, which has no allophones or diaphones.

[10] This phoneme too has a number of diaphones, e.g. /'s/, and in some dialects an allophone /'c/.

[11] It would be possible to postulate the alternant /y/w/ as the voiced member of this series, and the phonemic /y/ and /w/ (see note 8) as Y- and W-coloured modifications of this. But one hesitates to do this on phonetic grounds. Peter Ladefoged in *A phonetic study of West African Languages* (C.U.P., 1964, table 1) gives no examples of a voiced /h/. Furthermore, both /y/w/ and /y/ and /w/ are distributionally freer than /h/ and /ʔ/.

[12] The distribution of these sounds is rather uneven. Thus Y-coloration is fairly common with the alveolars (particularly /sh/), but less common with velars, and rare and/or dialectal only with labials. W-coloration on the other hand is common with the velars, but rare and dialectal only with the other obstruents. /mw/, /nw/, /ny/, /rw/, /lw/ occur in not more than one or two words each, mostly dialectal. /ly/ needs to be postulated only to account for the pronunciation **leɓɓaa** for the plural of **leeɓee** : contrast **rassaa**, plural of **reeshee**.

or Y-coloration ; (f) labio-velarization or W-coloration, producing in combination with the other differentiation system a maximum dialectal total of forty-six word-initial phonemes, a specimen set—for the /T/ unit—being /t/, /c/, /tw/ ; /d/, /j/, /dw/ ; /ɗ/, /ɗw/. In medial position (except in ideophones and loanwords) the second degree differentiation is allophonic only and linked to the quality of the following vowel, viz. (d) before /a/, (e) before /e/ and /i/,[13] and (f) before /o/ and /u/ (e.g. **saat-aa, saac-ee, saat(w)-oo**). In coda or syllable-final position, there are no subsidiary systems of differentiation at all, the basic units being the phonemes and all further distinctions being allophonic, e.g. **kaf, tsit, sak, cas, kam, tintin(ŋ), ƙwal, wur, taf(p)kii, tsabgaa, ʔiskaa, ʔizgaa.**[14]

The phonetic manifestation of the two vowel phonemes (open and close)[15] is extremely varied, being conditioned by a whole complex of environmental

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[13] A minor problem of interpretation is presented by some basic (and apparently otherwise native Hausa) nouns and verbs in which /d/ does not become palatalized in this context, e.g. **gindii** (of which there are two forms) and **goodee**. (**Bantee** ' loincloth' is probably a loanword, ultimately from Portuguese ' avante ' (?).) One hesitates to postulate a second Proto-Hausa /d/ phoneme, which would upset the balance of the system.

[14] Both intra-verbally and inter-verbally in close groups (contrast English) these coda consonants tend historically more and more to assimilate to the following consonant, producing for /N/ a whole range of homorganic nasal allophones, with complete assimilation (i.e. /l/) before /L/, and with some speakers too before /y/. /K/ becomes /w/, and /T/ becomes /r/, and /S/ also becomes /r/ except before a labial or velar, in all dialects. With most words in Eastern dialects, /P/ becomes /w/, and /M/ becomes /w/ before /N/, /L/ and /R/, and /n/ (homorganic) before all other units except /P/. In the common speech of Kano (at least), /R/ and /r/ (< /T/ or /S/) both assimilate completely before /N/ and /t/ (but not as a rule before /d/ or /ɗ/, except in verbal forms like **fitad da**), e.g. **birnii** > **binnii**, ***ɓatnaa** > **ɓarnaa** > **ɓannaa**, **ƙaznii** > **ƙarnii** > **ƙannii**, **Ɗambarta** > **Ɗambatta**, **barcii** > **baccii**. /ʔ/ might also be treated as a coda sound disappearing in juncture, since all ' short ' vowels are glottalized in pause (cf. J. Carnochan, ' A study of quantity in Hausa ', *BSOAS*, XII, 4, 1951, *passim*). And this would give a single type of syllable structure, CVC, to Hausa. But (i) it would involve giving /H/, alone of the units, two phonemically distinct coda manifestations, (ii) several of the CVC syllables (e.g. CV/P/ and CV/N/) are followed by a glottal stop in pause, which would mean regarding them as CVCC. So it is preferable to treat this final glottality as a conditional extra-phonemic, or prosodic, feature of pause. (In an early article of mine, ' Abstract nouns of sensory quality and their derivatives in Hausa ', *Afrikanistische Studien*, Berlin, 1955, 390, I had treated the coda sounds as syllable final prosodies (e.g. nasalization), and had erroneously conflated /m/ and /b/, which are distinct in some at least of their reflexes, e.g. **ƙamshii** > **ƙanshii**, but **tabshii** > **taushii**. Nevertheless, these two phonemes are interchangeable in a good many words, e.g. **samroo/sabroo/sauroo** ' mosquito '. Orthographic ' b ', note, represents both a voiced allophone of /f/, as in **tsabgaa** and **gwabzaa**, and the voiceless, unspiranted diaphone of /f/, as in **tafkii/tabkii** and **tsab**, which latter word has with most speakers the same final voiceless stop sound—really /p/—as have **kaf, cif, wuf**, etc. A final obstruent in pause position is never voiced in Hausa, nor is it either glottalized (except as a pause prosody—see above), or palatalized ; the ideophones **kats** and **rits**, and the exclamation **kash** are extra-systematic.)

[15] These two vowel phonemes are interchangeable in a good many words, e.g. **daamanaa/daaminaa/daamunaa**. When combined with (homorganic or homoprosodic) interchange of consonants and morphophonemic changes, this can produce a remarkable range of manifestation for the same lexeme, e.g. **kwantaa/kwintaa/kuntaa/swantaa/santaa/suntaa** ' untie '.

factors,[16] including the nature of the preceding consonant, the nature of the following consonant(s)—i.e. both initial and coda—and the quality of the terminal (morphemic), or—in the case of trisyllables—the preceding (phonemic) vowel. In the case of the /I/U/ vowel it is further subject to diaphonic variation. The long vowels /aa/, /ii/ and /uu/ can be interpreted as VC, the C in the case of the last two being (as in Arabic) /Y/W/, as it also is in the diphthongs /ai/ and /au/, and, since there is no phonemic distinction between /i/ and /u/, nor, as a rule, between coda /y/ and /w/, there is no phonemic distinction either between /ii/ and /uu/, nor between /ai/ and /au/,[17] the pairs being in complementary distribution in contrastive relation to the following consonant (e.g. **kiifii**, **riigaa**, **riimii**, **saiɓii**, **kaifii**, **taikii**, **ƙaimii**, but **guurii**, **kuutsaa**, **buuɗee**, **muujiyaa**, **duunaa**, **kaurii**, **kaushii**, **bauɗee**, **laujee**, **saunaa**).[18] The C in /aa/ may be postulated as /h/, which is borne out by the fact that in no native Hausa words do the syllables /haa/ and /ʔaa/ occur (but see my ‘ Abstract nouns ’, 388, n. 82), these being

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[16] It is this of course that makes Hausa such a difficult language to ‘ speak like a native ’! My colleague A. N. Tucker, who collaborated in some lengthy phonetic researches with a Hausa speaker, was at a loss to find enough symbols to make a narrow phonetic transcription of the vowel sounds of Hausa, and the **-a-** of **yawaa** defeated him ! ‘ Rules ’ there undoubtedly are, but they are extremely complex, and plain fronting or backing (according to inherent consonant qualities), partial nasalization (before /n/), centralizing (before /r/), tensing (before or after a glottalized consonant—see Carnochan—or before any geminate consonant), and umlauting (both Y and W) from the following vowel, all play—and may simultaneously play—a part in the pronunciation of Hausa /a/. This can be readily detected by getting a Hausa to say in succession a series of words such as **haka** — **bakaa** — **baƙaa** — **baƙii** — **bankaa** — **bankii** — **barka** — **ɓarkaa** — **ɓarkii** — **sakaa** — **tsaka** — **saki** — **sakoo** — **sankaa** — **sanƙee** — **sanƙoo** — **sarƙaa** — **sarkii** — **tsarkii**.

[17] This does not apply (i) where either /uu/ or /au/ is a reflex of something other than /i/uw/ or /aw/ (see note 14), e.g. **taikii** ‘ leather sack ’, **taukii** < **tafkii** ‘ pond, lake ’, or (ii) where /ii/ and /uu/ are morphophonemes occurring in ablaut verbo-nominal forms, e.g. **ruuɗaa** ‘ perplex ’, **riiɗaa**, v.n. of **reeɗaa** ‘ pare ’ ; **jiikaa** (< ***diikaa**) ‘ grandchild ’, **duukaa** v.n. of **dookaa** ‘ beat ’ ; **tsiifaa**, v.n. of **tseefee** ‘ comb ’, **tsuufaa** ‘ old age ’, ablauted form of **tsoofoo** ‘ old ’, etc. The phonetic manifestation of both /ai/ and /au/ is very varied, but this is simply a function of the /a/ component (see previous note), their ‘ purest ’ versions, which occur after /H/ (see note 6), having approximately the same qualities as have /ai/ and /au/ in German (but starting from cardinal 4½ not 5), e.g. **ʔaikaa**, **Hausa**. Their more fronted allophones are often interchangeable with the monophthongs /ee/ and /oo/ respectively, e.g. **rainaa/reenaa**, **laumaa/loomaa**. (The reversed distribution of /ai/ and /au/ here suggests that the latter alternatives are the original shapes. In **daina/deenaa** *both* shapes are phonologically aberrant, and this suggests that it may be a loanword.) Conversely, the long vowels—including /ii/ and /uu/—are the most stable vowel sounds in Hausa, except that /aa/ and /oo/ are subject to Y-umlauting before /y/ or velar C plus front vowel, e.g. **kaayaa**, **kooyaa**, **saakee**, **dookii**. (The vowel sounds in **taikii** and **taaki(i)** approximate to those of English ‘ take ’ and ‘ tyke ’ respectively.)

[18] There are, however, a fair number of exceptions to this rule, especially among the more phonaesthetic words, e.g. **ruugaa** ‘ rush ’, **ƙuugii** ‘ bellowing, etc.’, **tsiinii** ‘ sharp point ’, and the little class of diminutive adjectives like **siiriirii**, **fiitiitii**. /ii/ and /uu/ are dialectally interchangeable in a few words, e.g. **diibaa/duubaa** ‘ look ’, **tsiiree/tsuuree** ‘ pierce, impale ’ (contrast **tsiiraa**, ablauted v.n. of **tseeree** ‘ escape ’).

precluded by that same ' law of the apophonic buffer sound ' which precludes both the occurrence of syllables */faf/, */baf/, */sas/, */tsas/, */mam/, */rar/, etc., and of words of patterns like ***fafaa**, ***bafaa**, ***fabaa**, ***babaa**, ***sasaa**, ***satsaa**, ***tsasaa**, ***tsatsaa**.[19] The long vowel sounds /ee/ and /oo/ present more of a problem of metaphonemic interpretation. The best solution I have found for them at present is to regard the syllables in which they occur as being composed basically of C plus /a/ plus /h/ (i.e. identical with /Caa/) with an additional phonemic *overall* syllabic Y- and W-coloration respectively,[20] this being borne out by the fact that only /cee/, /shee/, /jee/ occur in native words, never /tee/, /see/, /dee/, /zee/, and words like **koomaa** and **soomaa** are, in some dialects at least, distinctly heard as **kwoomaa** and **swoomaa**.

Indeed the only gaps in an otherwise completely symmetrical system are : (i) the absence of /ɗy/ and /tsy/ in the modified glottal series /ɓy/, /ɓw/ ; */ɗy/, /ɗw/ ; /ƙy/, /ƙw/ ; */tsy/, /tsw/ ; [21] (ii) the restriction of /H/ to word initial (except in Arabic loanwords like **rahaa**, **daahir**, **saʔaa** and **saaʔaa**) ; [22] (iii) the restriction of /h/ (but not /ʔ/), both as initial and as coda, to syllables having the vowel /a/ (initially, except again in loanwords like **himmaa**, **hinji**, **hurumii**) ; and (iv) the restriction of /ʔ/ when initiating a CVC syllable (but not a CV syllable)

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[19] Exceptions are ideophones, the neo-loanword **sista** ' nursing sister ', and the unique word **tsatsoo** ' loins '.

The final /n/ of **nan** is the deictic referential morpheme (cf. **yanzu(n)**), and the law does not apply to such affixes : cf. **ma-macii** and **Ba-barbaree**.

For further implications of this law, see my ' Further observations on the " causative " grade of the verb in Hausa ', *JAL*, I, 3, 1962, 263–4.

[20] In other words Y- and W-coloration is here, like tone, a suprasegmental phoneme. Phonetic evidence of the differing origins of /ee/ and /oo/ on the one hand and /ii/ and /uu/ on the other is to be found in the fact that, at normal speed, a Hausa speaker will diphthongize the former before /r/ (though not quite as much as in English) but *never* the latter. (I once heard a Hausa whose English was otherwise perfect mispronounce the two words ' period ' and ' bureau ' and cf. the loanwords **sitiyaari** ' steering(-wheel) ' and **ʔinshuwara/ʔinshawara** ' insurance '.) Similarly /ai/ and /au/ are never triphthongized before /r/ : hence **sauroo** (< **samroo**) ' mosquito ' is never confused with **sooroo** ' mud-topped building '. Further, the syllables /hee/, /hoo/, /ʔee/, /ʔoo/ are as non-occurrent in native words as are /haa/ and /ʔaa/.

[21] It is just possible that /ɗy/ and /tsy/ did occur in Proto-Hausa, but became neutralized with /ɗ/ and /ts/, possibly because—unlike /ɓy/ and /ƙy/, etc.—the alveolar is inherently Y-coloured. There is some evidence for this in a few words having only /ɗi/ and /tsi/ in all dialects, never /ɗu/ and /tsu/, e.g. **ɗiga** ' drip ' (contrast **ɗinkaa/ɗuŋkaa** ' sew '), **tsibirii** ' island ' (contrast **tsimaa/tsumaa** ' soak '). /ɗy/ is common in at least one small Chadic language, Dangaléat, spoken in the Chad Republic (J. Fédry—personal communication).

[22] Before a medial /ʔ/ the coda element of /aa/—and this is further proof of its origin as /h/—assimilates to produce a geminate, i.e. prolonged, glottal stop, and this prolongation of the glottal stop is in fact the only thing that distinguishes these last two nouns (of identical Arabic origin, but meaning respectively ' co-eval, contemporary ' and ' hour, time, propitious hour, luck '). The same feature alone distinguishes the aorist and perfect of a verb like **ʔaunaa**, i.e. **ya ʔaunaa** and **yaa ʔaunaa** > **yaʔ ʔaunaa**.

to those having /a/ as V, e.g. **?amree**, **?askaa**, **?aunaa** (except again in loanwords, e.g. **?inci**, **?ingarmaa**, **?izgilii**, **?ung(u)waa**, **?ungoozooma**, **?Usman**).[23]

The question now is, how is this very symmetrical phonological system of Hausa to be related to the much less symmetrical systems displayed by the other Chadic languages, and to the Proto-Chadic system postulated by Newman and Ma? Leaving aside for the moment the vexed question of the vowels and semi-vowels, we are faced with at least two major problems to be solved, viz. (1) the origin of the Hausa phonemes /ƙ/ and /ts/ ; and (2) the phonemic status, word-initially in almost all words and medially in ideophones and loanwords, of the palatalized series /fy/, /by/, /ɓy/ ; /c/, /j/ ;[24] /ky/, /gy/, /ƙy/ ; /sh/, /j/.[24]

With regard to (1), so far as I am aware, there is no attestation for either of these phonemes occurring as such in any other Chadic language. Indeed I am not aware of their occurrence in contrast with a simple unaspirated /k/ and /s/ in any other African language [25] whereas /ɓ/ and /ɗ/ are widespread, not only in Chadic languages. Four explanations would seem to be possible for their occurrence in Hausa, viz. (i) they are the result of a deliberate decision on the part of speakers of Hausa, at some stage, to increase the vocabulary by creating two new phonemes on the phonetic analogy of /ɓ/ and /ɗ/ ; (ii) they are the result of an internal, environmentally conditioned split of /k/ and /s/, similar to the split of /s/ into /s/ and /tl/ postulated by Newman and Ma for the Biu-Mandara group ; [26] (iii) they were imported into the language with Arabic loanwords and later spread to purely native Hausa vocabulary, as e.g. the click sounds in Zulu, initial /v/ in ' vane ' (earlier ' fane ') and ' vixen ' (earlier ' fyxen ') and initial /z/ in phonaesthetic neologisms like ' zip ', ' zing ' and ' zoom ' in English ; (iv) they represent Proto-Chadic phonemes that have disappeared, through neutralization or other causes, in all the other Chadic languages.

The first explanation may be ruled out at once, such artificial word-building

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[23] **?izgaa** derives from **yazgaa**, and **?iskaa** from **yaskaa**, a shape that I had detected in the rare compound **jaawaskaa** ' pinion feathers of a bird's wing ' (lit. ' draw the air ') and which has been attested by P. Zima as still extant in one small dialect in Niger (cf. **?igiyaa** from **yagiyaa**).

Most of the words in /'ing/ and /'ung/ are loans from languages having pre-nasalized consonants, the vowel in Hausa being epenthetic.

[24] So far as I am aware, the phonetic manifestation of palatalized /d/ and of palatalized /z/ is identical in all dialects. Normally this is an affricate /dʒ/, but there are speakers in all dialects who make little, if any, palatal contact with the sound (the same speakers also tending to substitute /?s/ for /ts/). I have not gone far into the question, but I fancy there is also a tendency with some speakers to de-affricate /c/, possibly distinguishing this phoneme from /sh/ only by making the friction between the tongue-tip and the *lower* teeth.

[25] Westermann and Ward in *Practical phonetics for students of African languages* (O.U.P., 1933, 97) mention /ƙ/ and /ts/ as occurring in Suto-Chwana and Zulu, but there in opposition to aspirates, not to simple plosives.

[26] Newman and Ma, op. cit., 225–6.

being without precedent in any natural language. The second explanation is just possible, but it poses serious problems, for (a) /ƙ/ and /ts/ are minimally contrastive in all environments, i.e. there is no complementary distribution as between them and either /k/ and /s/, or /g/ and /z/; (b) to postulate the influence of a neighbouring vowel would imply setting up a special series of Proto-Chadic glottalized or ' creaky ' vowels, i.e. paralleling the influence of front vowels palatalizing preceding alveolar consonants; and to postulate influence from a neighbouring /ɓ/ or /ɗ/ is quite untenable, since (i) /ƙ/ and /ts/ occur in *any* non-homorganic sequence of consonants, (ii) it is the case in Hausa that (except in a very few loanwords like **ɗaaɓaa** and **ƙaaʔidaa**) two heterorganic glottalized consonants (including /ʔ/) never co-occur in the same word.[27]

The third explanation is on the face of it the most likely one, since both /ƙ/ and /ts/ occur very frequently in Arabic loanwords. *But*, whereas /ƙ/ always represents Arabic **ḳāf**, /ts/ never represents, as might be expected, Arabic **ṣād** (which is represented, like **sīn**, by /s/, e.g. **sanaʔaa, sallaa, nasaraa, albasaa, fasalii, harsaashii, Masar**),[28] but is representative *alternatively* with /ɗ/ of Arabic **ṭā**, as in **tsi/ubbuu/ɗi/ubbuu, hatsarii/haɗarii, tsabiiʔaa/ɗabiiʔaa**. Further, in a number of words from Arabic, /ƙ/ alternates with /k/, e.g. **haƙiiƙa/hakiika, ʔalƙaalii/ʔalkaalii**. This I think proves conclusively that the sounds /ƙ/ and /ts/ pre-existed the importation of Arabic loanwords into the language, and there is no need to cite any of the very many patently old Hausa words in which these sounds occur.[29] Moreover, I am in full agreement with Gregersen when he says, in the course of a tentative but most suggestive paper (' Linguistic seriation as a dating device for loanwords, with special reference to West Africa ', *ALR*, VI, 1967, 103), ' If new phonemes are introduced in foreign words, they probably represent in most instances the phonemicization of already existing allophones '. (There are

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[27] Homorganic glottalized and non-glottalized consonants do co-occur, though rarely except for the sequence **d** . . . **ɗ** . . . (**daɗaa, daaɗii, dauɗaa, dunɗee**, etc.), the glottalized consonant always coming second. (**g** . . . **ƙ** . . . does occur, but not **k** . . . **ƙ** . . .).

[28] For the varied reflexes of Arabic **ẓā** see Greenberg ' Arabic loan-words in Hausa ', *Word*, III, 1, 1947, 88. But these do not include /ts/.

[20] In a paper presented at the Congress of Semitic and Hamito-Semitic Linguistics, Paris, 1969, on contacts between Hausa and Tuareg, C. Gouffé suggested a connection between Hausa **fitsaarii** and Tuareg **faẓẓ**, both meaning ' urine '. If the Hausa word is to be regarded as a loan from Tuareg, it presumably antedates the politer loanword **bawalii** (as ' piss ' antedates ' urine ' in English), and might perhaps give us a *raison d'être* for Hausa /ts/. But in that case why was not /ts/ also used to represent /ẓ/ in subsequent Arabic loanwords (see note 28)? On the other hand, if the two words are regarded as cognates, this raises a much more fundamental question of wider genetic import, viz. is Hausa the representative of *another*, non-Chadic, branch of the Hamitic/Hamito-Semitic/Afro-Asiatic/Erythraic family of languages? I am not attempting to go into this question here, but would simply suggest that in order to substantiate the ' Hamitic ' hypothesis much work remains to be done in equating the widely divergent phonologies of, on the one hand, the Chadic languages, comparatively rich in vowels but meagre in consonants, and, on the other hand, Berber and Cushitic, poor in vowels but rich in consonants—with Hausa occupying a position somewhere between these two extremes.

of course exceptions, e.g. the click sounds in Zulu and the word ' Dschungel ' (jungle) in German.)

There remains the fourth explanation. Diachronic neutralization of earlier phonemic distinctions is of course a common phenomenon in language, indeed it occurs within Hausa itself as between the eastern (e.g. Kano) and the western (e.g. Katsina and Sokoto) dialects, e.g. W.H. (1) **saaƙ-** ' weave ', (2) **swaaƙ-** ' insert between adjacent surfaces ' > E.H. (1)/(2) **saaƙ-** ; or partially in Kano/Sok. **faaɗ-** (= Kats./Gobir **hwaaɗ-**) ' fall ', **fyaaɗ-** ' flog ', but Kano **faaɗee**, Sok./Kats./ Gobir **fyaaɗee** ' rape ', and Kano **farfaaɗiyaa**, S./K./G. **fyarfyaaɗiyaa** ' epilepsy '. But I know of no other case where an original phoneme (or its descendant) has been preserved in *one* modern language of the group or family only. Furthermore, if the distinctive feature of glottality has been carefully preserved by almost all the Chadic languages with /ɓ/ and /ɗ/, one would on *a priori* phonetic grounds expect it to have been likewise preserved with /ƙ/ and /ts/.[30]

To be fair to Newman and Ma, they do add to their statement about the well-established nature of /ɓ/ and /ɗ/, ' We believe that Proto-Chadic probably also had some kind of glottalized velar (perhaps ***'w**) due to the fact that many present-day Chadic languages do have at least one other glottalized consonant in addition to **ɓ** and **ɗ** '. But, they add, ' we are not able to establish them on the basis of regular correspondences ', and nowhere do they mention the possibility of a glottalized sibilant as well.

There is, however, I think one other possible explanation, viz. that /ƙ/ and /ts/ are reflexes of Proto-Chadic /nk/ or /ng/, and /ns/ or /nz/ respectively. Newman and Ma (pp. 223–4) have a good deal to say about the possibility of a set of pre-nasalized consonants existing in Proto-Chadic, which has also been postulated by Greenberg, and one of their sets of cognates is rather suggestive, viz. no. 26 ' egg '. The Hausa word cited here is **gwaiwaa** ' testicle ', and this may well—as Abraham says—be a feminative form of **ƙwai** ' egg ' (i.e. with homorganic C_1 substitution).[31] But **ƙwai** then has as its suggested cognates four other words, three of which exhibit pre-nasalization, viz. Gerka **nkie**, and the two Biu-Mandara words **ngardli** (Tera) and **ngya** (Bata). The question then arises, do we postulate all four glottalized consonants in Hausa arising from pre-nasalized ones, i.e. /mb/, /nd/, /ng/, /nz/, or only /ƙ/ and /ts/ ? And, if all of them, then what has become of Proto-Chadic /ɓ/ and /ɗ/ ? Or, again, are some of the Hausa words with /ɓ/ and /ɗ/ derived from Proto-Chadic /mb/ and /nd/, and others from Proto-Chadic /ɓ/ and /ɗ/ ? In this last case one would expect some homonyms with /ɓ/ and /ɗ/, but I cannot think of any, unless it be among

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[30] It might however be argued that, whilst implosion has been retained as a distinctive feature, ejection has disappeared.

[31] Many words in Hausa signifying round objects have /kw/, /gw/ or /ƙw/ as their initial. See C. Gouffé, ' Noms d'objets " ronds " en haoussa ', *Comptes Rendus du Groupe Linguistique d'Études Chamito-Sémitiques* (' GLECS '), X, 1966, 104–13.

the various meanings of **ɗim-/ɗum-**, viz. ‘ beat ’, ‘ pile on ’, ‘ warm(th) ’, ‘ noise ’.[32]

The problem of the palatalized (and by inference also the labio-velarized) consonants is a more complex one, for here there is the obvious possibility of diachronic development through the influence of following vowels, which, as Newman and Ma remark, ‘ is such a common phenomenon throughout the world ’. And, as they go on to say, ‘ even where they (the palatalized consonants) are phonemically distinct, it may be impossible to isolate the change historically to a particular group at a particular time, since the ease with which palatalization occurs always leaves open the possibility of independent parallel change ’. It is not, however, very clear what the authors mean by ‘ independent parallel change ’. Do they mean that the change occurs in two languages independently of one another, but under the same conditions and at approximately the same time ; or do they mean that in the same language first, say, all the words with /te/ change this to /ce/ under the influence of front vowel articulation, and then later on some words with /ta/ also change this to /ca/ ? If the latter, then this might be argued to be the case in Hausa, were /ce/, /ta/ and /ca/ all co-occurent in the language. But they are not, for there is no /ce/ except in terminal syllables, and the terminal vowels of Hausa are clearly morphemic and in a different system from radical vowels, which are by and large phonemic. Further, if some words only in /ta/ have changed this to /ca/, how comes it that /t/ and /c/ are minimally distinctive in a number of pairs of words ?—e.g. **tafoo** ‘ come ’, **cafoo** ‘ snatch and bring ’ ; **taraa** ‘ go to meet ’, **caraa** ‘ throw missile at ’ ; **tak**, ideophone emphasizing limitation (**ɗaya tak** ‘ one only ’) ; **cak**, ideophone emphasizing fullness or completion (**kamaa da shii cak** ‘ exactly like him ’). The same applies to /d/ or /z/ and /j/, and to /s/ and /sh/, e.g. **dakaa** ‘ pound ’, **jakaa** ‘ bag ’ ; **zauraa** ‘ type of corn ’, **jauraa** ‘ peddling ’ ; **sassautaa** ‘ slacken ’, **shasshautaa** ‘ scarify ’. Furthermore this would imply a deliberate phoneme split to increase vocabulary, such as we rejected as an explanation for /ƙ/ and /ts/.

A subtler explanation of the presence of phonemic /c/, /j/, etc., in Hausa has been suggested by Gregersen. He thinks that originally Hausa must have had a five-vowel system like the majority of Chadic languages in all positions in the word, and the two front vowels /e/ and /i/ induced palatalization of the preceding consonant, markedly so in the case of alveolars. Then at a later stage the vowel /e/ shifted its pronunciation, merging with that of /a/, but the palatalized consonant remained, giving a new syllabic opposition /ta/ $\sim$ /ca/.[33] This

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[32] J. Carnochan (personal communication) has suggested a possible connection between Hausa **ɗaa** and Bachama **nze**, both meaning ‘ child ’. But this is further confusing, in that—on this hypothesis—Bachama /nz/ should correlate with Hausa /ts/, not /ɗ/.

[33] See Edgar A. Gregersen, ‘ The palatal consonants in Hausa ’, *Journal of African Languages*, VI, 2, 1967, 170–84. This is a very interesting article which deserves longer comment than it can be given here. Some of the author's statements however must not pass unchallenged : (i) ‘ The palatals contrast with corresponding alveolars in practically all environments ’. This

explanation is very plausible, especially in the light of what is known about the phonetic manifestation of terminal /e/ in a closed syllable or non-pausal position in the speech of Kano (**macen ?Audu** > **macan ?Audu**, **mace cee** > **maca cee**, etc.),[34] but for the fact that in present-day Hausa there is a *four*fold opposition, viz. /ta/:/ca/::/taa/:/caa/, etc. Indeed minimal contrasts of the latter pair are far commoner than the former, e.g. **taaɓee** ' force apart ', **caaɓee** ' make notchy or slushy ' ; **daajii** ' bush ', **jaajii** ' caravan leader ' ; **zaakii** ' lion ', **jaakii** ' donkey ' ; **saaraa** ' cut ', **shaaraa** ' sweep '. Moreover we have a *fifth* opposition to take into account, viz. the syllables /cee/, /jee/, /shee/, contrastively exemplified by **saaƙaa** ' weave ', **shaaƙaa** ' choke ', **sheeƙaa** ' winnow ', and this poses a real dilemma. For, if we postulate /ca/ < */te/, and /caa/ < */tee/ (phonetically unlikely as the latter development is), how then do we account for /cee/? And, if we postulate /ca/ < */te/, and /cee/ < */tee/, how then do we account for /caa/? [35]

Exactly the same dilemma arises with the labio-velarized consonants/tw/, /kw/, etc. Here I must refer to the most illuminating article ' Some problems in Hausa phonology ' written by Greenberg as long ago as 1941.[36] In accounting for /kwa/ as < */ko/ he has neglected to account for /kwaa/, which is in

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is not true. /c/, /j/ and /sh/ (no more than /ky/, etc.) never initiate syllables with /oo/ except in one or two loanwords like **cookalii** and **joojii** and they only initiate syllables with /uu/ (< /ib/, /im/, */ik/, /iw/), not with /u/, except again in loanwords and ideophones, e.g. **cuku**, **cukuu-cukuu**, **jugum**, **shu?umii**, **shunku**. (ii) ' The major reason for the expanded distribution of the palatals was probably the introduction of a considerable number of loanwords, particularly Arabic.' This may perhaps be true for /j/ and /sh/, but what Arabic sound did /c/ represent ?

[34] There is, however, also a converse tendency in spoken Hausa (though not so much in Kano) with the less strongly palatalized consonants /ky/, /gy/ and /ƙy/ to shift all the Y-coloration on to the vowel, thereby producing a ' sub-phoneme ' /e/ in root syllables, which corresponds exactly to the ' sub-phoneme ' /i/ that results from /kyi/u/, etc. (see below). This process is reflected in sub-standard spellings such as **kenwa** for **kyanwa** and **geɗa** for **gyaɗa**. In Sokoto in fact the compound word **'yandoka** was regularly (in my time at least) pronounced and written as **'endoka**. (For the exceptional initial cluster /?y/—*not* a true phoneme—see Parsons, op. cit., in note 14). The same tendency may be observed with /kw/, etc., e.g. **kobo** for **kwabo**, which corresponds again to /kwi/u/ > /ku/ (see below). This speech tendency was no doubt helped by the ubiquitous occurrence of /e/ and (less commonly) /o/—both short—in word-final position, and it became virtually stabilized in at least two ideophones, **fes** (which contrasts with **fas**) and **horoo** (which contrasts with the verbal form **haroo**), and some plural noun forms like **leɓɓaa** and **zoɓɓaa**. More recently it has received a fresh impetus with the introduction of English loanwords like **bel** ' belt ' (which contrasts with **bal**), **fenti** ' paint ', **fensho** ' pension ', **bos** ' bus ' (which contrasts with **bas**), **hob** ' hub ', **kulob** ' club ', etc. (the last three probably via Yoruba). Phonologically, however, there is no question of this /e/ and /o/ deriving from Proto-Hausa phonemes ; all the examples can be explained in terms of initial Y- or W-coloration.

[35] There is, admittedly, a certain amount of interchangeability between these five syllable types, e.g. **zaarumii/jaarumii** ' brave ', **daajii/jeejii** ' bush ', **sauraa/shauraa** ' remainder ', **taɓoo/caɓoo** ' mud ', **kakkaawaa/kyakkyeewaa** ' loud laughter ', **gaatsinee/gyaatsinee** ' grimace ', but this is no more than occurs with any of the phonemes in Hausa.

[36] *Language*, XVIII, 4, 1941, 316–23.

opposition, not only to /kwa/ and /koo/, but also to /kaa/ and /ka/, as is almost minimally exemplified by the set of verbs **kwaɓaa** ‘ knock in/out ’, **kwaaɓaa** ‘ wet mix ’, **kwaaɗaa** ‘ do on a large scale ’, **kooɗaa** ‘ whet ’, **kaɗaa** ‘ agitate, spin (cotton) ’, **kaaɗaa** ‘ tease (cotton) ’. My own solution to this twofold problem, as stated above, is to postulate a twin series of modified (palatalized and labio-velarized) consonant phonemes, albeit restricted to word initial position,[37] but having exactly the same combinational potential with both /a/ and /aa/ as the unmodified consonants. Admittedly this still leaves me with the problem of /Cee/ and /Coo/ and this I can only explain by postulating a static (i.e. significant or phonemic) overall syllabic (Y- or W-) coloration or prosody, which differs from all the other colorations in having no segmental point of origin.[38]

This treatment further enables one to handle satisfactorily the oppositions /ti/tu/—/ci/, /si/su/—/shi/, etc., which occur in the language (e.g. **tiraa/turaa** ‘ dye by application ’, **ciraa** ‘ lift up ’ ; **ziraa/zuraa** ‘ put in/through hole ’, **jiraa** ‘ await ’), for by postulating a single vowel, but two consonantal phonemes one can then state the rule that a Y-coloured consonant such as /c/ or /j/ induces an /i/ manifestation of the /I/U/ vowel in all dialects, whereas a neutral consonant leaves its manifestation free to dialectal and diaphonic variation. Conversely of course we might postulate two vowels and one consonant and

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[37] Except in ideophones and loanwords, e.g. **kacaa-kacaa**, **bajaa-bajaa**, **bakyaa**, **ligyaa-ligyaa**, **sakwaf**, **fanca**, **lacca**, **soojaa**, **tashaa**, **rashawaa**, **?abaakwaa**, **?akwaati/u**, **?igwaa**, **?agwaagwa**, and the numerals **bakwai** and **takwas**. There is also a minor problem I have not yet succeeded in solving, viz. the occurrence of modified *velars* (but no others) in the second syllable of polysyllabic derivative forms, often—but not always—alternatively to an unmodified velar, e.g. the verbs **dankwafaa**, **danƙwafaa**, **ɗankwaraa**, **dangwaraa**, **ɗangyasaa**, **rangwaɗaa**, **tanƙwaraa**, **tanƙwasaa**, and plural noun forms like **doog(w)aayee**, **zank(w)aayee**, **ɓak(w)aanee**. In some instances it seems to echo an **-o(o)** or **-e(e)** termination in the parent form, e.g. **doogoo** and **zankoo**, **baaƙwancii** from **baaƙoo** and the verbs **sakwarkwace** from ideophone **sako-sako** (cf. **cukwiikwiyee** from **cuku-cuku**) and **rigyangyantoo** = **rigee**. But this is by no means always so, e.g. the extended verbs cited above, whose simplex forms (if extant) could have any vowel termination, and the singular of **ɓak(w)aanee**, which is **ɓaunaa** (< ***ɓaknaa**) with the colorationally neutral termination **-aa**. In fact it would seem that we have here a case of a phoneme having spread beyond its original domain to positions in the word where such modification has no significance simply because the speakers of the language had a liking for these labio-velarized, and to a lesser extent palatalized, velar sounds. Compare, perhaps, the use of emphatic consonants in loanwords in Arabic, which has been copied in Hausa in **diimoo/uu-ƙuradiyyaa** ‘ democracy ’.

[38] In analysing these many colorations in Hausa, it is important to distinguish carefully between ‘ point of origin ’, which is a phonological term, and ‘ point of onset ’, which is a phonetic term. I find the headlamp of a motor-car and the beam of light it projects a useful analogy.

It would appear from the recent article by Renate Lukas, ‘ Das Nomen in Bǎde ’, *Afrika und Uebersee*, LI, 3, 1969, 91–116 and 198–224, that there is a similar situation in Bade, another ‘ Plateau-Sahel ’ language not mentioned by Newman and Ma (belonging to the Ngizim or to the Bolewa cluster ?), with palatalized and labio-velarized consonants both phonemic initially, e.g. **caŋgarən** ‘ louse ’, **caakamaan** ‘ weaver ’, **kwaamən** ‘ ox ’ (contrast **kooron** ‘ donkey ’). So the problem of Proto-Chadic phonological identification is not confined to Hausa.

state that vowel /i/ induces Y-coloration in a preceding consonant, whereas vowel /u/ does not, but the pronunciation of the latter vowel tends to become fronted with certain speakers in certain dialects to the extent of its becoming identical with that of /i/. Both these explanations are also possible in the one case where /i/ and /u/ are contrastive, viz. after a velar consonant, e.g. **kirɓaa** ‘ pound ’, **kurɓaa** ‘ sip ’ ; **gidaa** ‘ house ’, **gudaa** ‘ lump, unit ’. Here there is no inter-dialectal variation, but the phonetic fact of what I term ‘ inherent W-coloration ’ of velar consonants [39] can be adduced to account for the stability of /ku/, /gu/ and /ƙu/, whether these be derived from /K/ plus /I/U/ or /K/ plus /U/, whereas /ki/, /gi/ and /ƙi/ may be derived either from /K/ plus /I/, or from /Ky/ plus /I/, or from /Ky/ plus /I/U/.[40] In the latter two cases the phonemic Y-coloration, originating in the consonant, may be said to have either been absorbed into, or shifted on to, the vowel. Indeed such a shift is partially manifested in the opposite case of /Kw/ initial, where many words such as **ʔakwiyaa/ʔakuyaa, kwiyaafaa/kuyaafaa, gwiyaayuu/guwaawuu, ƙwincii/ƙuncii** manifest varying pronunciation.[41]

One thing is quite clear here. Whatever is true for /Cy/ plus /i/ must equally be true for /Cy/ plus /a/ : in other words, *either* ‘ Proto-Hausa ’ had a *five*-vowel

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[39] For certain purposes, e.g. to account for the complementary distribution of /w/ and /y/ initial in CVC-roots, and of /i/ and /u/ with /ʔ/ initial, it is necessary to divide all the consonants into those that are inherently Y-coloured (i.e. the alveolars, palatals, liquids, /n/ and /y/) and those that are inherently W-coloured (i.e. the labials, velars, /m/ and /w/) ; /H/ being neutral. But velars are more W-coloured than the others, and so to a lesser extent is /m/ (there are few words with a /mi/mu/ alternation, most have simply /mu/, */my/ being non-occurrent). Conversely /r/ seems to be more inherently Y-coloured than the other Y-coloured consonants, witness the large number of words with only /ri/ in all dialects (unless the C_2 is W-coloured, e.g. **riɓa/ruɓa, rima/ruma, rufa**, but **rigaa** only), */ry/ too being non-occurrent.

[40] In one highly phonaesthetic word, **ƙyiftaa** ‘ blink, wink ’, Y-coloration is with most speakers clearly audible in the initial consonant too. So too there are one or two exceptional words with /Kyee/, e.g. **kyakkyeewaa** (cited above), **ƙyeeyaa** ‘ occiput ’ (contrast **ƙyaayaa** ‘ louse ’), and dialectically in **g(y)eegaa**.

[41] Compare the loanwords **kunii** ‘ quinine ’ and **ʔusur** ‘ whistle ’. Actually the enforced orthographic choice between ‘ i ’ and ‘ u ’ gives a much over-simplified picture of Hausa pronunciation. Although there is naturally a smaller range of vowel quality for the /I/U/ than for the /A/ phoneme, since a smaller segment of the oral cavity is involved, it is not true to suggest as Gregersen does (op. cit., p. 178) that there is only one /i/ and one /u/. Both manifestations of /I/U/ are further conditioned by the same environmental factors as /A/, both Y- and W-umlaut being clearly discernible in e.g. **rufaa** — **rufee** — **rufu**, only the last having a ‘ pure ’ /u/ sound, and **rufee** having a mid sound very close to that of e.g. the /i/ in **ciku**. Under the influence of an /r/ coda again /i/ and /u/—*and* /a/—can come very close to one another, as e.g. in **sirdii, surkii, sarkii**. Furthermore the Hausa dictionaries are by no means complete as regards their alternative ‘ /i/ = /u/ ’ entries, at least in so far as they claim to reflect the speech of Kano. There, at least, the general fronting tendency is by no means confined to root vowels, but can be heard in morphemes too, e.g. **si tafi** (subj.) and **sika tafi** (aor.), and there is a clear dichotomy among plurals of the **-unaa** type, giving **-unaa** after W-coloured consonants (e.g. **riigunaa, keekunaa, rumbunaa**), but **-inaa** after Y-coloured consonants (e.g. **bantinaa, wandinaa, goorinaa**). (Both Bargery and Abraham actually give **gindinaa** as the plural of **gindii**, though **ginduna** is the standard orthographic form.)

(a, e, i, o, u) system in radicals with *no* modified consonants, *or* it had a *two*-vowel (A and I/U) system *with* modified consonants. It cannot have had a *three*-vowel (a, i, u) system with no modified consonants—tempting as such a postulate is to ' Afro-Asiaticists '—for in that case we cannot satisfactorily account for /ca/, /sha/, /ja/, /kya/, etc., nor a three-vowel system with modified consonants, for in that case we should have words—which we do not, other than a few loanwords and ideophones—with /cu/, /shu/, /ju/, /kyu/, etc.[42] And the argument that convinces me personally in favour of a two-vowel system with modified consonants is that, given so many words in which /ca/(? < */te/) contrasts with /ta/, and /ci/(? < */ti/) with /ti/tu/ (? < */tu/), one would expect a considerable number of homophones in those cases where the initial consonant is less susceptible to palatalization or labio-velarization, e.g. words with /ba/ deriving from /ba/ falling together with words in /ba/ deriving from both */be/ and */bo/, and also words with /bi/ only alongside words with a /bi/bu/ option ; but I know of none such except for the two English loanwords **birki** ' brick ' and **birki/burki** ' brake ', which are perfectly consistent with the general Hausa principle of preserving foreign sounds intact where they are coincident with native phonemes *or* allophones, but substituting native phonemes (the choice of which is often arbitrary) for unfamiliar foreign sounds—cf. **'inci** ' inch ', **futbol** ' football ', but **siminti/sumunti** ' cement '.[43]

In two contexts alone must a palatalized initial consonant be considered allophonic. One is where /Cy/ plus /i/ (i.e. /I/U/) is followed by /y/, either as C_2 or as coda. This can be proved by the distributional non-equation */tiy/, */diy/, */siy/, */ziy/:/ciy/, /jiy/, /shiy/, /jiy/::/tay/, /day/, /say/, /zay/: */cay/, */jay/, */shay/, */jay/. The last set—as also */yay/, */waw/, */kwaw/, */kyay/, etc.—is precluded by one of those many ' apophonic ' rules of Hausa, viz. non-combination of Y-coloration with /y/, and of W-coloration with /w/ ; [44]

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[42] And there are no words at all with /kwu/, /gwu/, /ƙwu/.

[43] It is true that a few Arabic loanwords manifest varying pronunciations with /i/ or /u/, e.g. **silikii/sulukii** ' silk ', but this may reflect variant dialectal shapes in Arabic, or indirect loaning. The general picture with regard to /i/ and /u/ (and also the difference between the phonemes /f/ and /h/) is well illustrated by the set of homotonic words : **sifirii/sufurii/suhurii** (native) ' hiring, renting ', **sifirii** (Ar.) ' cypher ', **sihirii** (Ar.) ' magic '.

[44] There are exceptions again where /au/ is derivative, e.g. **gwabroo/gwamroo/gwauroo**, **ƙwabrii/ƙwamrii/ƙwaurii**, or where /au/ and /ai/ are the result of contractions, e.g. **wautaa** ' folly ' (from **waawaa** ' fool '), colloquial **yai tafiyaa** < **ya(a) yi tafiyaa**. /(C)wuu/, however, never occurs, even in loanwords (e.g. ' wool ' is **ʔuuluu**). The rule of apophony is only partially applicable to the phoneme /y/w/, in as much as this phoneme can occur in *both* positions in a CVC-root simultaneously, but the two consonants must display dissonant manifestations of the phoneme, e.g. **yawaa** ' quantity ', which now contrasts with the loanword **wayaa** ' wire ', etc. (Compare the juxtapositionally metathesized forms **bauyaa/baiwaa**, etc.—**mayyaa** is a rare exception.) The verb **yi(i)** ' make, do ' derives from an original native root **way-**, which is still manifest in its (rare) grade 4 form **wanyee/yinyee** (with adventitious /n/), and I suspect **yawaa** to have originated as a verbal noun from the same root. Morphophonemic Y-coloration of this root (see below) has produced **yiy-** in defiance of the apophonic rule : contrast **wiyàa** ' neck '

therefore the second set must be derivative, not original, and manifest a progressive backspread of Y-coloration throughout the syllable.[45] Collateral synchronic evidence for this is to be found in e.g. the pronominal form **shi(i)** alongside **sa**, and the word **tuwoo**, which must be derived from the root ***ti/uy-** ' eat ' and which incidentally shows that regressive W-coloration originating from the terminal vowel in Hausa must have antedated regressive Y-coloration within the root itself—contrast the more recently derived forms **ciyoo/ciwoo** and **ciyòo/ciiwòo**, and the still later secondary derivative **cuutaa** (< ***ci(i)w-t-aa**) with its plural **ciwirwitaa/ciwurwutaa/cuwurwutaa**, which exhibit an unstabilized conflict between Y- and W-coloration.[46]

The other context where the initial palatal must be regarded as an allophone is where there is a morphophonemic change in the vowel of the (first or second) root syllable of a word to produce a variant form of the word. This change may be simply a substitution of the /I/U/ for the /A/ vowel phoneme, as in **daamanaa/daaminaa/daamunaa**, cited above, or in **markaa/murkaa** ' heavy rain '. But, where the preceding consonant is an obstruent, this appears as the corresponding palatalized consonant in the by-form and the vowel is invariably /i/, e.g. the by-form of **danganaa** (in this case with slightly divergent meanings) is, not ***dinginaa/dungunaa**, but **jinginaa**,[47] and the by-form of **damree/dauree** is **jimree/juuree** and of **sakaa** is **shikaa**, and of **sanii** is **shinaa**. So too with the ideophone **jimɓir**,[47] another form of **damɓar**, emphasizing ' heaviness ', and with those (few) ablauted verbal nouns from CaC-roots, e.g. **shiɓaa**, from **saɓ-** ; **kisaa** from **kas-** ; and **kiɗaa/kiɗii** from **kaɗ-**. In such cases it seems best to regard the by-form as exhibiting a suprasegmental Y-coloration change, like that which turns **daajii** into **jeejii**, rather than a concurrent and interdependent change of two phonemes, the C and the V. The same sort of change, however, may also occur where the C_1 is already palatalized in the /a/ form, or even where it is labio-velarized, e.g. **cancanta/cincinta, jakaa/jikaa, ?alkyabbaa/?alkibbaa, (gajeeree) gyat/git, kwancee/kwincee/kuncee.** So that it is difficult to state a satisfactory overall morphophonemic rule. And, it must be emphasized, these cases where /Cyi/ is morphophonemic in Hausa are far fewer than those where it is not, and where both vowel and

and **wiyaa** ' difficulty ' (so pronounced, but misspelt ' wuya '), in which there is an original phonemic contrast in the vowel. Here, as so often in Hausa phonology, the anomalous loanwords and ideophones serve to highlight the rules, e.g. **tiyaata, diyyaa, siyaasaa, ziyaaraa, tiitii, siisii, tiilas, siiriirii, d/ziinaariyaa, ziinaa, shaidaa, Shaiɗ/tsan.** There are also two exceptional ideophones which avoid terminal consonance by combining both Y- and W-coloration simultaneously in the initial consonant, viz. **cwai** and **jwai**, which are sometimes manifested as **coi** and **joi**.

[45] Unlike /cee/, etc., note this Y-coloration has a segmental point of origin in the final /y/.

[46] Such an unstabilized conflict is seen too in the variants **ƙiwuyaa/ƙiiwaa/ƙyuuyaa** ' sloth ', which is not derived from **ƙi wiyaa** ' shirk hardship ', as the dictionaries suggest, but is a feminative verbal noun of **ƙi(i)**, root ***ƙi/uy-** : cf. **jiwaa** ' giddiness ', whence verb **jiwuyaa/juuyaa** ' turn '.

[47] The second (non-terminal) vowel in every case is harmonically determined.

consonant partake in minimal oppositions, e.g. **cakaa** ‘ stab ’, **cikaa** ‘ fill ’ ; **daƙoo** ‘ clayey soil ’, **jiƙoo** ‘ infusion ’ ; **zama** ‘ become ’, **zimaa/zumaa** ‘ honey ’, **jimaa** ‘ spend some time ’ ; **safcee** ‘ hoe lightly ’, **shafcee/shifcee** ‘ cut deeply ’, **sufcee** (< **suɓucee**) ‘ slip off ’.[48]

Newman and Ma concede in a footnote that ‘ we are in no way implying that distinct palatal phonemes were not present in Proto-Chadic ’, and to that extent their—to my mind proven—presence in Proto-Hausa does not exclude the latter from being a Chadic language. But my contention here is that the whole question of these palatalized consonants needs much more research, both intensive (as I have tried to do for Hausa) and extensive, before any valid conclusions can be reached. And this applies equally to labio-velarized consonants, about which Newman and Ma are strangely (and significantly ?) silent. Moreover research in these two directions must inevitably be linked with some attempt to establish a Proto-Chadic vowel system.

[48] In contracted forms a voiced or glottalized C_2 is replaced by the corresponding voiceless coda : cf. **faɗaka** > ***fatka** > **farka** ‘ awake ’.

IDEOPHONES IN YORUBA

By E. C. Rowlands

1. It is widely accepted that many African languages include in their vocabulary a number of particularly expressive words, marked off from the rest of the vocabulary by similar special phono-semantic characteristics, to which it has been found convenient to give the name of ideophones. Recently W. J. Samarin [1] has argued that ideophones are to be identified primarily on the basis of syntactic behaviour rather than phono-semantic criteria, but Paul Newman [2] maintains that the two questions ' what are the ideophones ? ' and ' how do the ideophones function ? ' must be kept distinct. The first question assumes that there is a special type of word which can be recognized as present in many languages, while the second implies that their syntactic function may vary from one language to another. Newman recognizes, however, that not all members of the set of ideophones in a language necessarily have the full phonological distinctiveness which we may associate with the set as a whole. Words which lack this distinctiveness will obviously be identified as ideophones because they fit into the same slots as the phonologically distinctive words, while at the same time they cannot be related to any word in the non-ideophonic part of the vocabulary. To this extent, at least, Samarin's argument holds good ; a number of ideophones in Yoruba can be identified in the first place in this way, but as ideophones they do at least have the potentiality of that type of expressive pronunciation associated with these words in final position (§ 15). Newman further argues that the ideophones of any given language do not necessarily conform to one single pattern either in their phonology or in their syntactic behaviour and illustrates his argument by a comparison of Hausa and Tera. It will be evident later that on the syntactic side this point is very relevant for Yoruba, too.

2. Professor Ayọ Bamgboṣe in his *A grammar of Yoruba* [3] includes ideophones in the ' open class of adverbs ' which ' expound the adjunct in clause structure '. As he does not discuss ideophones in detail it is not clear whether he considers that this is the only position they can occupy. An examination of his examples of ' adverbs ' reveals that there is no formal criterion, e.g. an affix or some special phonological or tonal patterning, which marks off this class of words and that, in fact, the only reason for labelling them in this way is their occupation of the adjunct position. It seems superfluous to set up a separate word class in this way since, as is shown in the following sections, all ideophones and some of the rather small number of non-ideophonic ' adverbs ' can be regarded as a sub-class of nominals

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[1] W. J. Samarin, ' Determining the meanings of ideophones ', *J.W.A.L.*, IV, 2, 1967, 35–41.

[2] Paul Newman, ' Ideophones from a syntactic point of view ', *J.W.A.L.*, V, 2, 1968, 107–17. This article contains a good bibliography on the subject of ideophones, so none is given here.

[3] Ayọ Bamgboṣe, *A grammar of Yoruba*. Cambridge, 1966, 127.

which can occur in the adjunct position, while the remainder can be regarded as verbs, with the exception of a few whose status is doubtful. This simplification finds some support in Bamgboṣe's own description, since he notes (p. 132) that an item may sometimes be an adjective as well as an adverb and he further recognizes (pp. 127, 128) that nominal groups may also function as adjuncts.

3. We describe here the various syntactic relationships of ideophones which can occur in the adjunct position and then give some account of the phonological and tonological characteristics of this type of words as a whole, which raises the question whether ideophonic characteristics are found elsewhere in the vocabulary. In an appendix we examine the syntactic functions of other words which occur in the adjunct position.

4. The ideophones under discussion can be divided into two groups :

(i) Those that can follow the ' operator ' verb **rí** ' to be ', e.g. **ó rí rìgìdì** ' it is big ' (of a morsel of food).

(ii) Those that can follow stative or adjectival verbs, e.g. **dùn** ' to be tasty ' as **ó dùn ṣinṣin** ' it is extremely sweet/rich ', or verbs denoting action or movement, e.g. **ó ńrìn tàgétàgé** ' he is walking unsteadily ' (of a small child), **ó jí mi pẹ́pẹ́** ' he woke me lightly ' (with a light tap).

5. No phonological or tonological distinction exists between the two groups nor are they altogether mutually exclusive, e.g. **ó rí kìrìbìtì** ' it is round and big ', **ó tóbi kìrìbìtì** ' it is big in a round and big way '.

6. The construction **rí** plus ideophone supplements the two other ways of predicating a quality found in Yoruba. These are (1) the use of an adjectival verb, e.g. **ó tóbi** ' it is big ' ; (2) the use of **ní** ' to have ' plus a noun, e.g. **ó lágbára** (= **ó ní agbára**) ' he has strength, is strong '. Leaving aside for the moment the question of the actual function of ideophones when they follow **rí** we find that these words have a clearly nominal function in the following contexts :

7. (i) They may be placed after a head noun as a qualifying adjective, e.g. **yàrá yǐ rí wúruwùru** ' this room is untidy ', **yàrá wúruwùru** ' untidy room '. In similar contexts adjectival verbs have the derived reduplicated nominal form, e.g. **agbádá yǐ tóbi** ' this gown is big ', **agbádá títóbi** ' big gown ', while with verbs of the type of **lágbára** ' to have strength ', a nominal formed by prefix is used, e.g. **ọkùnrin alágbára** ' strong man '.

(ii) They may be placed after the verb **di** ' to become ', e.g. **ó rí pẹlẹbẹ** ' it is flat ', **ó ti di pẹlẹbẹ** ' it has become flat ', **ó rí rédérède** ' it is useless, good-for-nothing '. **ó sọ ọ́ di rédérède** ' it caused it to become useless '. **di** is widely used with nominals, e.g. **ó di títóbi** ' it became big ', **ó di alágbára** ' he became a powerful man ', **ó di ejò** ' it became a snake ', **ó di ilé** ' it became home ' (= off we went home).

(iii) The ideophone may be followed by a relative clause, e.g. **èékánná rẹ̀ rí ṣọ̀bọ̀lọ̀-ṣọbọlọ** ' his nails are very long ', **ṣọ̀bọ̀lọ̀-ṣọbọlọ tí èékánná rẹ̀ rí l'ó jẹ́kí aṣọ yẹn ya** ' the length that his nails are it is it caused cloth that tear '. This use resembles the construction in which a reduplicated verb-noun followed by a relative clause is used to intensify a verb, e.g. **títì tí nwọ́n tì mí l'ó fà á** ' the pushing that they pushed me it is caused it ', **jíjáde tí mo jáde** ' the going out that I went out ' (= just as I went out).

(iv) Some of these ideophones may be followed by a possessive pronoun, e.g. **ó rí tónítóní** ' he is clean and neat ' (as well as **ó mọ́ tónítóní** with the adjectival verb **mọ́** ' to be clean '), **tónítóní rẹ̀ l'ó jẹ́kí a gbà á sí ibi iṣẹ́** ' his neatness it is it caused that we took him to place of work (gave him employment) '.

8. Having established the nominal character of these ideophones it remains to discuss their function after the verb **rí**. After the verb **di** it would be a needless complication to argue that they are anything but the complement of the verb and therefore part of the verbal group. After **rí** the situation is less clear since this verb can be followed only by ideophones or by nominal groups formed with **bí** ' as, like ' (and some related forms), e.g. **ó rí bí(i) tèmi** ' it is like mine ', **ó rí báyǐ** ' it is like this '. As Bamgboṣe observes,[4] a clear distinction between complement and adjunct in this type of construction is apparent only when the verb has lexical low tone. In that case the verb has low tone when followed by an adjunct but mid tone when followed by a nominal complement, e.g. **ó dùn púpò** ' it is tasty much ' (= it is very tasty), **ó mọ púpọ̀** ' he knows much ' (**mọ̀** ' to know '). Ideophones and other nominals following adjectival verbs are adjuncts on this test, cf. **ó dùn púpọ̀** (above) and **ó dùn ṣinṣin** ' it is extremely sweet/rich '. On this analogy one might argue that the nominal following **rí** (ideophonic or otherwise) is an adjunct and not a complement, but the strength of this argument is somewhat weakened by the fact that ideophones of the second group, described in the following sections, do not function in all respects like those which follow **rí**. It seems that this context must be accepted as ambiguous.

9. Ideophones of the second group modify the meanings of the verbs they follow in various ways. With adjectival verbs their effect is to make the meaning more specific, e.g. **ó dúdú** ' he/she/it is dark ', **ó dúdú kẹlẹkẹlẹ** ' it has the colour of indigo ', **ó dúdú mirinmirin** ' it is dark-green ', **ó dúdú kirikiri** ' it is jet-black ', **ó dúdú fafa** ' he is dark in an unpleasant and dirty way '. With verbs which denote action in a generalized way the effect is similar, e.g. **ta** ' to move in a rather sudden way ', **ó ta giri** ' he was startled ', **ó ta gbọ̀ọ́ngbọ̀ọ́n** ' he staggered ', **ó ta fìtàfìtà** ' he scuttled about '. Where the action denoted by the verb is already fairly specific the ideophone adds further qualifying detail, e.g. **ó dìde** ' he got up ', **ó dìde fùú** ' he got up sharply ', **ó dà á síta** ' he poured it out ', **ó dà á síta yàà** ' he poured it out altogether in a flood '. Such ideophones are not necessarily restricted to one verb, e.g. while **fùú** cannot qualify any other verb but **dìde**, **yàà** could also be used with **ó tú jáde** ' it gushed out ' (e.g. from inside a bottle). It could also be used of children all rushing out together from school. Three ideophones, viz. **pátápátá**, **gaan**, **gbáà**,

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[4] Op. cit., 131.

which may be roughly glossed ' completely, really, absolutely ', colligate with a large number of verbs.

The specifically nominal functions of these ideophones are :

10. They can be qualified by a relative clause, e.g. **ó ńwò fòtìfòtì** ' he is looking about furtively ', **fòtìfòtì tí ó ńwò jọ ti olè** ' the furtiveness which he is looking about resembles a thief's ', **ojú rẹ̀ pọ́n kankan** ' his eyes are blood-red ', **kankan tí ojú rẹ̀ pọ́n l'ó jẹ́kí àwọn ọmọdé sá fún u** ' the blood-redness that his eyes are red it is it caused the children (lit. them children) to run from him '.

11. Some of them can be qualified by a possessive, e.g. **kẹlẹkẹlẹ rẹ̀ tún dúdú ju ti aró lọ** ' his blue-blackness even is dark surpass that of indigo ' (= surpasses that of indigo), **fòtìfòtì rẹ̀ jọ ti olè** ' his furtiveness resembles that of a thief '.

12. Some of them can be used as adjectives, e.g. **òkùnkùn ṣú bìrìbìrì** ' darkness is dark blackly ', **òkùnkùn bìrìbìrì** ' thick darkness ', **ó yọ́ kẹ́lẹ́kẹ́lẹ́** ' he crept along stealthily ', **ohùn kẹ́lẹ́kẹ́lẹ́** ' a stealthy voice ', **òtítọ́ gbáà ni** ' it is the absolute truth ', **iṣẹ́ gaan ni** ' it is real work '.

13. It should be noted that the derived nominal forms of a verb can be followed by any ideophones which can follow the verb, e.g. **ó pupa fòò** ' she is red in a fair way ' (= is light skinned), **pípupa fòò rẹ̀ l'ó wù mí** ' her being light skinned it is it attracts me ', **ó funfun báláú** ' it is snow-white ', **aṣọ funfun báláú** ' snow-white clothes ' (with **funfun** and a few other verbs the adjectival form is the same as the predicative), **ó ńrìn rédèrède** ' she is walking about in a useless way ' (= is behaving stupidly), **ìrìn rédèrède rẹ̀** ' her behaving stupidly '. The position of the possessives in the first and third examples must lead to the conclusion that the ideophones here are not to be regarded as adjectives qualifying nouns but as adjuncts qualifying verb stems which have been nominalized, since the general rule of order is that an adjective follows a possessive, e.g. **ọmọ mi kékeré** ' my small child '. The reverse order can only occur when noun and adjective form a closely knit group, e.g. **ọmọ kékeré mi** ' my small-boy ' (junior servant).

14. A special problem is posed by three ideophones which can qualify only numerals,[5] a class of noun qualifiers which have no predicative form. These are **ṣọṣọ** ' only a single ', **péré** ' only ' and **gbáko** ' whole, complete ' (referring to time). They can be used whether the numeral is used absolutely or qualifies a noun, e.g. **ọ̀kan ṣọṣọ** ' only a single one ', **ènìà kan ṣọṣọ** ' only one single person ', **méjì péré** ' only two ', **ọsàn méjì péré** ' only two oranges ', **mẹ́ta gbáko** ' a full three ', **ọdún mẹ́ta gbáko** ' a full three years '. These ideophones have to be assigned a status on the analogy of ideophones qualifying adjectives derived from adjectival verbs. These we labelled in the first place as a sub-class of nominals which can function in the adjunct position in clause structure, but we must now add that they can also function in a nominal group as qualifiers of nominals derived from verbs and that there is in addition a small analogous set which qualify only numerals.

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[5] Cf. Bamgboṣe, 120.

Characteristic features of ideophones

15. When they are the final word of an utterance they are frequently pronounced in what may be called a more expressive way than the preceding words, shown in one or more of the following features : greater loudness, more careful articulation, greatly increased duration of long vowels and the raising of the pitch of high tone syllables above the preceding high tone level. These features may, however, be present to some extent in other words functioning as adjuncts, e.g. **dáadáa** ‘ well ’ and **rárá** ‘ at all ’ (although **rárá** itself may be taken as an ideophone, see § 27 below).

16. Syllables with consonant initial and a long vowel on level tone, rare in the rest of the vocabulary, are common both as monosyllabic words and as parts of longer words :

ó wò féé	he looked rather startled
ó pọ̀ lọ suu	it is in abundance, extending over a wide area
ó tú jáde yàà	it gushed out in a flood
ó mọ́ gaara	it is clear and transparent
ó gùn gbọọrọ	it is long and rather thin
ó rí tẹ́ẹ́rẹ́	he is slender
ó lọ tààràtà	he went straight ahead
ó ńlọ geerege	it is going on smoothly

In the non-ideophonic vocabulary, syllables of this type can be formed by the fusion of a verb and its noun complement, e.g. **taagun** ‘ to be burly ’ (**ta** ‘ to shoot out ’ and **eegun** ‘ bone ’), **haanrun** ‘ to snore ’ (**han** ‘ to make a noise ’ and **oorun** ‘ sleep ’), **l’aago** ‘ to strike a bell ’ (**lù** and **aago**). There is also the adjectival verb **gbòòrò** ‘ to be broad ’.

17. There is frequent repetition of vowels in words of two, three or four syllables (unreduplicated ideophones of more than four syllables do not seem to occur) :

ó já fáfá	he is smart and alert
ó mú mi gírí	he caught me tightly
ó dán kooro	it is shiny and smooth
ó rí tínrín	it is narrow
ó rí rubutu	it is short and round (yam)
ó rí rọ̀gbọ̀dọ̀	she is well-built
ó rí fẹ̀rẹ̀gẹ̀dẹ̀	it is broad (man’s chest)

18. There is a considerable number of words in which the high front and back vowels **i** and **u**, preceded or followed by the glide consonants **y** and **w** respectively, combine with vowels of lower tongue position :

nwọ́n lọ kíyákíyá	they went quickly
ó rí tàyìtàyì	it is rough (cloth)

ó ńrìn gọ̀yìgọ̀yì	he is walking sluggishly
ó ńṣiṣẹ́ súwẹ́súwẹ́	he is working without enthusiasm
ó ga fíofío	it is very lofty
ó mọ́ láúláú	it is spotlessly clean
nwọ́n dà riyẹriyẹ lọ	they surged away
ó pọ́n kùọ̀kùọ̀	it is filthy dirty

It should be noted that in these words there is no well-established rule about the writing in or the omission of the glide consonants ; no contrastive pronunciation is possible.

19. Reduplication, tied to some characteristic tone patterns, is frequent. Words with the tone pattern high-mid-low-mid generally have a pejorative meaning of untidy, disordered, stupid, unpleasant, etc., e.g. **rédederède**, **jágbajàgba**, **kántankàntan**, **wúruwùru**. A few, however, seem to express no more than profusion, e.g. **fálafàla**, **rẹ́kẹrẹ̀kẹ**. The pejorative words can be intensified by further reduplication with the pattern low-low-mid-low, e.g. **ó ńrìn hẹ́bẹhẹ̀bẹ-hẹ̀bẹ̀hẹbẹ̀** ' he is waddling along '.

20. Where level low tone syllables are reduplicated on a mid tone the effect is usually derogatory, e.g. **gbàgìdì** ' big ', **gbàgìdì-gbagidi** ' big but good for nothing ', **ṣọ̀bọ̀lọ̀** ' long ' (of finger-nails), **ṣọ̀bọ̀lọ̀-ṣọbọlọ** ' unpleasantly long ' ; but sometimes it may merely be intensifying, e.g. **sílíkì yí rí mìnìjọ̀-minijọ** ' this silk is very smooth '.

21. Other reduplications are either an integral part of the word pattern with no clearly isolatable meaning or, if optional, have an intensifying effect :

(i) **fíofío** ' lofty ', **tíyantíyan** ' distant ', **ràkọ̀ràkọ̀** ' blotched ', **ṣẹ́ṣẹ́** ' in a nodding way ', **fafa** ' unpleasantly black ', **tàgétàgé** ' unsteadily ', **gbògagbòga** ' broad ' (of leaves), **kẹ́lẹ́kẹ́lẹ́** ' furtively ', **gbẹrúgbẹrú** ' like mist '.

(ii) **wéré**, **wéréwéré** ' quickly ', **kíyá**, **kíyákíyá** ' speedily ', **hẹlẹ**, **hẹlẹhẹlẹ** ' pantingly '.

Ideophonic traits in the general vocabulary

22. The term ' ideophone ' has been used up to this point in the discussion to denote a sub-class of nominals, hitherto called ' adverbs ', occurring in the adjunct position. The question must be raised whether any other nominals, not occurring in this position, have any association of patterning with meaning of the type we sometimes find in these words. (The simple CV structure of most verbs [6] obviously precludes this possibility, so we need not take them into consideration.)

23. There appear to be two groups of nouns which display this feature :

(i) A group of four nouns of reduplicated form with the tone pattern low-low-high-low have about them an aura of unpleasant messiness, viz. **pẹ̀tẹ̀pẹ́tẹ̀** ' mud ',

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[6] Some adjectival verbs have a CVCV structure but have no ideophonic features ; a few verbs of CVCVCV structure, e.g. **ó kàmàmà** ' it is wonderful ' should perhaps be taken into consideration.

gẹ̀dẹ̀gẹ́dẹ̀ ' lees, sediment ', **mùdùnmúdùn** ' brains ', **fùkùfúkù** ' lungs '. To these we may add **Kòbòkóbò** ' Ibo ' (derogatory term).

(ii) A noun denoting the doer of an action is frequently formed by reduplicating a combination of verb plus complement, e.g. **wolé** ' to inspect houses ' (**wò** ' to look at ', **ilé** ' house '), **woléwolé** ' sanitary inspector ', **kólé** ' to burgle a house ' (**kó** ' to gather up '), **kólékólé** ' burglar '. A few nouns of this type contrast to some extent with ' actor ' nouns formed by prefixing **a-** to such combinations, e.g. **apẹja** ' fisherman ' (**pa** ' to kill ', **ẹja** ' fish '), **pẹjapẹja** ' type of sea-bird which feeds on fish ', **akọrin** ' choir-boy ' (**kọ** ' to sing ', **orin** ' song '), **kọrinkọrin** ' one who is always singing '. The reduplicated form denotes an ' actor ' who is seen or is known to be repeatedly performing the action described and to that extent is more expressive than the prefixed form.

24. The situation in Yoruba is therefore that while the bulk of words displaying in general the phono-semantic characteristics commonly associated with the name ' ideophone ' constitute a sub-class of nominals which occur in the adjunct position (ignoring at this point the ambiguousness of the **rí** context), some nominals displaying these characteristics do not so occur. An attempt at a purely syntactic definition of ' ideophones ' in this language would inevitably ignore this second group.

Appendix on non-ideophonic ' adverbs '

25. These words fall into two groups.

(i) Words which can be classified as nominals :

díẹ̀ ' some, a little '. This can occur as an adjunct, subject, complement or adjective, e.g.

ó dùn díẹ̀	it is fairly tasty
díẹ̀ nínú wọn mọ̀ ọ́	some of them know it
mo jẹ díẹ̀ nínú rẹ̀	I ate some of it
owó díẹ̀ ni mo ná	a little money it is I spent

The reduplicated form **díẹ̀díẹ̀** has a distributive meaning ' little by little, gradually ', e.g. **mo ńjẹ ẹ́ díẹ̀díẹ̀** ' I am eating it little by little '. The nominal function of this form comes out in the emphatic construction **díẹ̀díẹ̀ ni mo fi ńjẹ ẹ́** ' it is little by little I put am eating it ' (= it is only in very small quantities I am eating it), cf. **ọ̀bẹ ni fi mo ńgé e** ' it is a knife I put am cutting it ' (= it is a knife I am cutting it with).

púpọ̀ ' much ' : this is a nominal derived from the adjectival verb **pọ̀** ' to be much '. (The **u** of **púpọ̀** instead of **i**—but the regular **pípọ̀** also occurs—is presumably an assimilation due to the phonetic environment.) It can occur as adjunct, subject, complement or adjective, e.g.

ó dùn púpọ̀	it is very tasty
púpọ̀ nínú wọn kò mọ̀wé	many of them do not know-book

mo jẹ púpọ̀ nínú rẹ̀	I ate a lot of it
owó púpọ̀ ni mo ná	it was a lot of money I spent

dáadáa ' well, nicely ' is a nominal formed by complete reduplication from the adjectival verb **dáa** (**dára**) ' to be good, nice '. It can occur as adjunct or adjective, e.g.

ó dùn dáadáa	it is nicely tasty
ọmọ dáadáa ni	he is a good boy

This adjective, like other adjectives, can be used absolutely, e.g. **dáadáa náà ni** ' it is a good thing even so '.

The deictic and post-deictic qualifiers [7] **yǐ** ' this ', **yẹn** ' that ', **náà** ' the referred to ' with their variants, and also **gbogbo** ' all ' can similarly function as adjuncts, e.g.

Ìbàdàn l'a dé yǐ	it is Ibadan we have arrived at this (= now)
kíl'ó wí yẹn ?	what did he say that ? (= then)
ó dáa náà	it is good even so
kíl'ẹ ńṣe gbogbo ?	what are you doing altogether ?

wàyí ' as things are now ' can occur only in the adjunct position, e.g. **mo rí i kedere wàyí** ' I see it clearly as things are now ', but it appears to contain the nominal qualifier (deictic) **yǐ** ' this ' and so may reasonably be treated as a nominal form with restricted use.

(ii) Words which can be classified as verbs, viz. **mọ́** ' any more ', **ná** ' first ', **rí** ' formerly ', **rí** (at the end of a question) ' I wonder ', **ṣá** ' at any rate ', **sẹ́** (indicates emphasis), **bí** (indicates a question).

kò dára mọ́	it is not good any more
dúró ná	wait a moment (before going on to do something else)
mo ti gbé Ìbàdàn rí	I have lived at Ibadan formerly
ó wúlò ṣá	it is useful at any rate
mo ti rí i sẹ́	I *have* seen it, I tell you
o ti rí i bí ?	have you seen it ?

The CV structure of these words suggests that they should be regarded as bound verbs (in the general sense, not in the restricted sense in which Bamgboṣe uses the term) and added to the list of ' post-verbs ' [8] enumerated by him. On this view they would form part of the verbal group and would not come within the purview of the adjunct at all.

26. The dialectal **ndan** (indicating a question) can equally be regarded as a verb on the analogy of **ǹde**, variant of **dìde** ' to arise ', and **ǹṣó** ' to get on with something ', as in **máa ǹṣó** ' be going on ahead '.

27. The word **rárá** ' at all ' modifies the meaning of a preceding verb in a way

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[7] Cf. Bamgboṣe, 114.

[8] Op. cit., 78.

similar to **mọ́** ‘ any more ’, e.g. **kò dára rárá** ‘ it is not good at all ’, but its reduplicated form and the fact that it can be used in isolation as an answer to a question or as a comment, e.g. **rárá o** ! ‘ not at all ! ’, suggest that it is best taken as an ideophone, though with very restricted functions.

28. The reduplicated forms **káríkárí** ‘ going round all in turn ’ (**ká** ‘ to go round ’, **orí** ‘ head ’), **kárakára** ‘ keenly, enthusiastically, strenuously ’ (**ara** ‘ body ’), **dájúdájú** ‘ quite certainly ’ (**dá** ‘ operator ’, **ojú** ‘ face ’), **tẹ́lẹ̀tẹ́lẹ̀** ‘ previously ’ (**tẹ́** ‘ ? ’, **ilẹ̀** ‘ ground ’), **síbẹ̀síbẹ̀** ‘ nevertheless ’ (**sí** ‘ to ’, **ibẹ̀** ‘ there ’) are ambiguous in function. The simple forms function as free or bound verbs, e.g.

ire á kárí	good luck will go round all
ó dọ̀bálẹ̀ fún gbogbo wọn kárí	he prostrated to all of them going round all
ó dájú pé yió wǎ	it is certain that he will come
mo mọ̀ dájú pé . . .	I know for certain that . . .
duro síbẹ̀	stand to where you are (**sí** ‘ to ’ and **ibẹ̀** ‘ there ’)
iṣẹ́ àṣekára	work that is done strenuously
ogun àwítẹ́lẹ̀	war announced beforehand

29. In the place of **-kára** and **-tẹ́lẹ̀** in the last two examples we can substitute other verbs but not the reduplicated forms. On the other hand we can say **ó dọ̀bálẹ̀ fún gbogbo wọn káríkárí** and **mo mọ̀ dájúdájú pé** . . . . A possible solution is to regard the simple forms as verbs and therefore as forming part of the verbal group, while the reduplicated forms are regarded as adjuncts. On the analogy of the reduplicated nominals of the type **wolẹ́wolẹ́** ‘ sanitary inspector ’, these forms could be regarded as another sub-class of nominals, formed in the same way, functioning in the two positions exemplified in **yió wǎ dájúdájú** ‘ he will come for certain ’ and **dájúdájú yió wǎ** ‘ quite certainly he will come ’. There is, however, the complication that the simple forms **tẹ́lẹ̀** and **síbẹ̀** are also found in the fronted position : **tẹ́lẹ̀** usually in conjunction with **rí** ‘ formerly ’ (see § 25 (ii)) and **síbẹ̀** with **náà** ‘ the aforementioned ’ (see § 25 (i)), e.g.

tẹ́lẹ̀rí/tẹ́lẹ̀tẹ́lẹ̀rí ng kò mọ̀ pé . . .	previously I did not know that . . .
síbẹ̀náà/síbẹ̀síbẹ̀náà ng ó lọ	nevertheless I shall go

The simplest solution would probably be to take these as examples of the verbal group functioning as an adjunct and regard the reduplicated forms in either position as a small sub-class of the verbal group with restricted functions.

30. It is not, of course, unusual to find in the grammatical analysis of natural languages that there is a small residue of forms which defy classification. The absence of a completely satisfactory solution in the above case in Yoruba does not seriously weaken the general argument that the category of ‘ adverb ’ in this language may well be eliminated.

THE NATIONAL ANTHEM OF SWAZILAND

By DAVID RYCROFT

> 'To Mr. David Rycroft, ethnomusicologist and teacher of Zulu and siSwati at the School of Oriental and African Studies in London, has fallen the honour of being the composer of the national anthem of Swaziland. . . .' *The Times*, 5th September, 1968.

The former British Protectorate of Swaziland became independent on 6th September, 1968.[1] In planning for the future, the Swaziland Legislative Council had not overlooked the fact that, as from that date, the Union Jack and ' God Save the Queen ' would be in need of immediate replacement.[2] A new flag was designed and adopted, and it was decided to set up an Anthem Committee, and hold a ' National Anthem Competition '. First, a local competition was conducted, for a suitable text written in the vernacular. Secondly, an advertisement was placed in *The Musical Times*, London, early in 1967, offering a prize for the best musical setting. Composers were invited to apply to the Ministry of Local Administration, Swaziland, for a copy of the text.

Ten months elapsed, however, before applicants received their copies of the texts. And they were in for a surprise—there was not *one* text, but two. Apparently, the judges had been unable to reach agreement over the words for the anthem and, with only two months remaining until the closing date for the music, the Ministry issued a circular, dated 1st November, stating that ' the search for a suitable verse has been narrowed down to two possibilities and it has been decided to go ahead with the musical part of the competition. . . . A final choice between the two verses will be made when the musical settings are judged. A competitor may submit a musical setting for one or both verses '. The rules of the competition were then stated.[3]

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[1] Bordered on the east by Moçambique and on all other sides by the Republic of South Africa, Swaziland was administered by the British Government between 1903 and 1968. The inhabitants refer to themselves as **emaSwati**, and to their language as **siSwati**. The name ' Swazi ', more commonly known to outsiders, derives from the Zulu-ized form of the stem **-Swati**. SiSwati is a South-Eastern Bantu language of the Nguni Group, numbered as S.43 in M. Guthrie's revised Bantu classification. It is closely akin to Zulu (S.42) and less closely to Xhosa (S.41).

[2] Roberts (1900), 60, quotes a Zulu translation of ' God Save the Queen ' (**Tixo yilonde Inkosikazi**) which, he claims, appeared in print in 1879. He gives no instance of this version ever having been sung, however.

In ' British Swaziland ' the British National Anthem, when not played by a military band, was always sung in English as far as is known, but without widespread participation.

A choral hymn *Nkosi sikelel' iAfrika*, composed by the Rev. Enoch Sontonga in 1897—originally in Xhosa, but now sung in many different languages—has for many years been regarded as a kind of unofficial pan-national anthem by educated Africans throughout Southern Africa.

[3] Rules of the Competition :

' Settings should be for four voices (soprano, alto, tenor, bass) and may be written in either

When setting out to compose the music it was disconcerting to have to choose between the two texts since it seemed not inconceivable that the words might influence the final judgment to some extent. Here below are the two texts.[4] The English translations are not intended for singing.

TEXT A

Nkulunkulu, mnikati wetibusiso temaSwati,	O God, bestower of the blessings of the Swazi,
Siyatibonga tonkhe tinhlanhla;	We are thankful for all our good fortune;
Sibonga iNggwenyama yetfhu,	We give praise and thanks for our King,
Live, netintshaba, nemifula.	And for our country, its hills and rivers.
Busisa tiphatshimandla takaNggwane;	Bless those in authority in our land;
Nguwe wedvwa Somandla wetfhu.	Thou only art our Almighty,
Sinike kuhlakanipha lokungenabucili;	Give us wisdom without guile;
Simise, usicinise, Simakadze.	Establish and strengthen us, Thou Everlasting.

TEXT B

Somandla busis' inkhosi yetfhu;	God bless our King;
Ulibusise nelive letfhu;	Bless also our country;
Sihol' emisebentini yetfhu.	Lead us in our tasks.
Sandzisele konkhe lokuhle;	Cause all that is good to increase for us;
Siph' inhlalo lejabulisako,	Give us pleasant life,
Nekutfhula lokungapheliko;	And unceasing peace;
Wahlule titsha letihluphako.	Subdue enemies that are troublesome.

About a hundred musical settings were submitted, mostly from England and other European countries. From among these, the Anthem Committee selected

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staff notation or tonic solfa, preferably the former. No independent accompaniment is necessary. The closing date is 31st December, 1967. A prize of £100 will be awarded to the winning entry. All rights in the winning anthem will belong exclusively to the Swaziland Government. The Government's decision will be final. The Government reserves the right to make no selection from the entries submitted. No correspondence can be entered into in connection with the competition nor will any manuscripts be returned'.

[4] The latest official siSwati orthography, approved in November 1967, has here been employed. For a detailed description, see Rycroft (1970). As a rough guide to pronunciation: **p**, **t**, and stem-initial **k** are ejective, but **k** elsewhere is like **g**; **ng** is a pure velar nasal; **ngg** is as in 'anger'; **hl** is a lateral fricative like Welsh 'll', with **dl** as a voiced counterpart; **tfh** and **tsh** are alveolar plosives with brief labialized and sibilized aspiration, respectively (note: **tsh** is not as English 'ch'); **dv** and **dz** are their voiced counterparts; **c** is a dental click; all voiced fricatives and stops (except **b** and 'voiced **k**') are 'tone-lowering', affecting the onset of the following vowel.

four which they considered the most suitable. These were then performed and recorded by the choir of the Ionian Music Society of Johannesburg.[5] It was intended that the Swaziland Cabinet should pronounce judgment after listening to these recordings. But members of the Cabinet insisted that a ' live performance ' by a local choir was necessary. The choir of Waterford School, Mbabane, was thereupon requested to sing these four settings, before the assembled Cabinet, on 9th July. The outcome was that ' Rycroft's setting of Verse A ' was chosen as the winning anthem. *The Times of Swaziland* of 16th August, 1968, reports:

> ' The Deputy Prime Minister, Mr. Mfundza Sukati, announced that a choral version of the Swaziland National Anthem . . . would be broadcast on Radio Swaziland . . . each day up to Independence Day to give everyone in the country a chance to learn the anthem, which would be sung in siSwati. . . . Mr. Sukati said that the words were . . . written by Mrs. A. F. Kukies Simelane of Jerusalem School near Hlatikulu. A musical score, from the setting by David Rycroft, had been arranged by a member of the Royal Military School of Music in Britain [6] and . . . then recorded by the Band of the Irish Guards. . . . A South African record company is to produce a seven-inch single record with the music by the Irish Guards on the one side and the vocal by the Waterford choir on the other.[7]

The anthem has been published in the third edition of *National Anthems of the World.*[8]

PROBLEMS OF COMPOSITION

Providing a musical setting for a Swazi text was a particularly welcome exercise, since I was familiar with the language and had made a study of traditional Swazi music, and taken sound recordings, while visiting the territory on study leave in 1964.[9]

I decided to set both the texts to music, keeping very close to the traditional Swazi musical style in the one case, and departing from it to a greater extent in the other. It was the latter attempt that was successful. My neo-traditional entry failed even to reach the short list.

The winning ' Text A ' setting, though it is less closely bound to Swazi musical

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[5] Under their conductor, Mr. Khabi Mngoma, the Ionian Choir and Orchestra are widely recognized as the foremost all-African (non-traditional) musical body in Southern Africa.

[6] Mr. Reginald Sanders.

[7] E.M.I., South Africa Pty., Ltd. The number of the record is SNA 1.

[8] Martin Shaw and Henry Coleman (see Bibliography).

[9] This study-leave project, partly linguistic and partly ethnomusicological, was made possible by the School of Oriental and African Studies, University of London. I am indebted to Prince Masitsela Dlamini, Mr. James S. M. Matsebula and Mr. John Wilson for valuable assistance with Swazi musical investigation.

For published material resulting from this field work, in 1964, cf. Rycroft (1967), 88–103; and Rycroft (1968).

traditions, nevertheless still embodies a number of typically Swazi features. These include the principle of ' non-simultaneous entry ' of voice parts; certain melodic and harmonic allusions to traditional practice; and relatively strict fidelity to Swazi prosodic conventions regarding the setting of words to music—that is, concerning the treatment of speech-tones, length, and stress.

Traditional musical features

In common with Zulu and Xhosa peoples, the Swazi have concentrated on vocal rather than instrumental performance in their communal music.[10] The traditional choral repertoire, which is still a ' living ' art form in Swaziland to-day, ranges from serious ceremonial music and formal dance-songs (in which the performers dance to their own singing), to numerous occupational and recreational forms.

An outstanding formal feature of this music is the multi-part organization of voices. In any choral song there are at least two voice-parts, singing non-identical texts. The temporal relationship between these parts observes the principle of ' non-simultaneous entry '. In a few songs this is achieved through simple ' antiphony ': a solo ' leading ' phrase alternates with a choral ' response '.

Simple antiphony

The diagram on p. 302 shows this species of temporal relationship between solo and chorus parts in a traditional Swazi **simekezo** (bridal lament).

But ' overlapping ' phrases are more common, resulting from re-entry of the leading part *before* the end of the chorus.

Overlapping vocal phrases

Fig. 2 on p. 303 represents the first leading phrase and the chorus of a simple traditional hunting song (**inggoma yebutimba**). The leader commences at point (a), singing alone, until—coinciding with his final syllable—the two-part chorus first enters at point (b). The leader re-enters at (a) and thereafter the solo and chorus lines continue in an ' overlapping ' relationship. There are two additional variants, not shown here, which may replace the first leading phrase, but the chorus remains fixed throughout. This is one of the simplest examples. Some of their ceremonial dance-songs are far more elaborate, with additional chromaticism

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[10] Drums appear never to have been used, apart from one small variety employed in connection with exorcism, and even this is regarded as having been an importation. Horns, whistles and flutes and—particularly—several varieties of musical bow were formerly used for individual music-making. But these never featured in communal performances and are to-day almost obsolete. For a detailed account of Swazi musical instruments, cf. Kirby (1934).

and more varied chording, but all are based on this species of overlapping solo/chorus form.[11]

Circular rather than linear representation appears to be most suitable here. These songs have no definite ending. At some chosen point in each phrase, re-entry of the complementary part is required. Since the two or more parts never begin or end their respective phrases simultaneously, there are no coincident points of prolongation analogous with ' collective resolution ', which has the implication of terminal cadence in European music.[12]

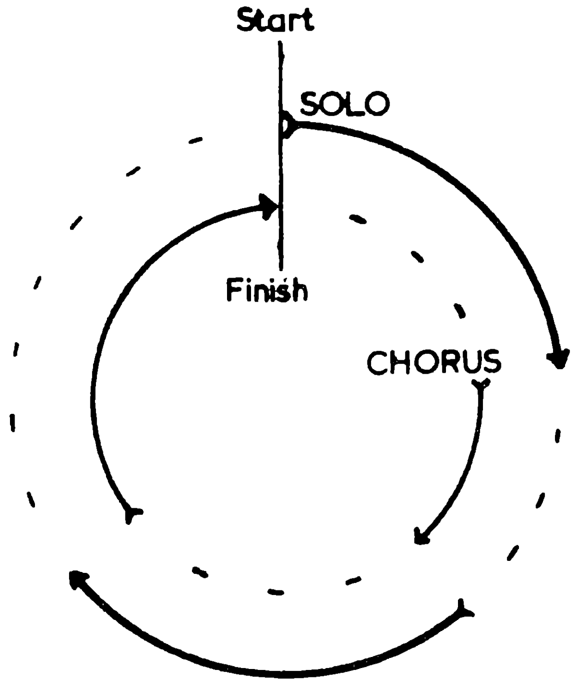

FIG. 1. Swazi bridal lament, cf. Rycroft (1968)

A national anthem must have a definite ending, so it was not possible to incorporate this ' circular ' principle without modification. Also, a four-part

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[11] For transcription and analysis of representative items, cf. Rycroft (1967). Sound recordings of such music, including the two songs referred to in figures 1 and 2 above, are available on a published disc. Cf. Rycroft (1968). Regarding earlier Swazi musical recordings by Hugh Tracey, cf. Tracey (1959).

[12] Rather than the resolution of discord by concord, the Nguni artistic intention would seem to be to maintain an ever-changing state of balance between the constituents—through contrastive chording (in addition to other features of their relationship)—without any definite implications of finality being expressed.

setting had been stipulated for the anthem, and neither of the specified texts made any provision for separate solo and chorus-phrase treatment. As a compromise, it seemed feasible to cause the voice parts to *enter* separately, as a concession to the traditional ' non-simultaneous entry ' principle, but to terminate their phrases simultaneously: thus providing cadences of the Western type. This necessitated shortening the lines of text for the alto, tenor and bass parts

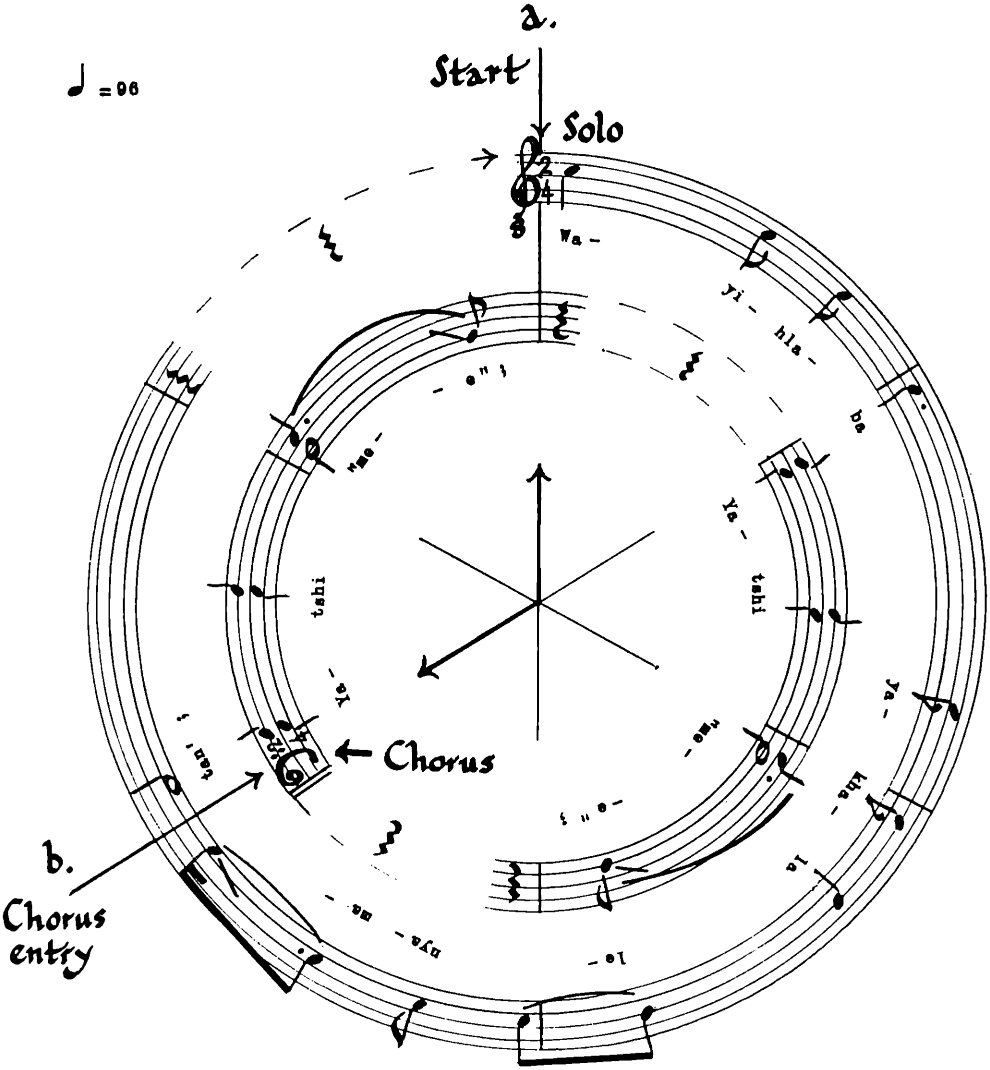

FIG. 2. Swazi hunting song, cf. Rycroft (1968)

in some cases, while taking care that these still made sense. Here, for instance, is the first line as apportioned to the respective voices:

Soprano:	**Nkulunkulu, mnikati wetibusiso temaSwati** O God, bestower of the blessings of the Swazi
Tenor:	**Nkulunkulu, busisa emaSwati** O God, bless the Swazi
Alto and Bass:	**Nkulunkulu** O God

Amendments were made only to the three lower parts. The soprano voice sings the original text in full throughout. The resultant layout of parts in the score looks, of course, very much like a typical example of European four-part vocal polyphony of any period from the sixteenth century onwards. But this was not arrived at merely through direct adoption of a traditional Western form.

There was another, fundamental reason for applying the non-simultaneous entry principle in the anthem and for making changes in the text. In a ' tone language ' like siSwati, the speech-tone patterns of the words have a strong influence on melody in traditional song. They determine broadly whether the pitch shall rise or fall or remain the same for successive syllables, though there is latitude in the size of the intervals. If different voices were to sing the same lines of text simultaneously, it would be impossible to avoid ' parallel ' movement of the ' organum ' type (either strict or ' imperfect '). But in traditional Nguni choral music, parallelism of that kind is to a large extent avoided, both through the non-simultaneous entry of voices and through having non-identical lines of text sung by the overlapping solo and chorus.

While this prevents parallel chording between leader and chorus, a certain amount of ' imperfect ' parallelism may nevertheless occur within the chorus itself, when the chorus phrase is not sung in unison but is divided into two or more simultaneous voice parts. A simple example of such a multi-part chorus may be seen in figure 2. This effect has been incorporated into the Anthem at various points, where voices share the same text simultaneously. This occurs notably in the fourth and sixth lines of the text between certain voices, for the words:

Live netintshaba nemifula and **Nguwe wedvwa Somandla wetfhu**

Musically, the setting for these two lines draws upon typical Swazi melodic sequences and employs the principle of ' root progression ' between two harmonic roots, a semitone apart. The most common Swazi scale or mode (if one abstracts the ' tonal phonemes ' from a body of their traditional songs, transposed to a common ' tonic ', and sets them out in descending order of pitch) could be notated as the musical notes (F)E C B A F E. There are five notes to the octave, but it is not the ' common pentatonic ' scale (like the black notes on the piano).

It contains two semitone intervals. In most traditional songs, a system of dual tonality is used, based upon two harmonic ' roots ' a semitone apart. These could be represented (through transposition, if necessary) as the notes F and E. Notes F, A and C commonly occur together, based on the F root (like a Western major triad), and E and B occur above the root E. These two tonalities are used contrastively, serving somewhat similar functions to those of the Tonic and Dominant in European music. The notable difference is that our Dominant lies at an interval of a fourth below the Tonic, while the Swazi roots are only a semitone apart. The operation of this dual tonality system and its apparent relation to former use of the **ligubhu** musical bow for solo song accompaniment, has been described in previous papers.[13] The hunting song shown in figure 2 employs it in rudimentary form : measures 1, 2, 4 and 5 are based on the F tonality, measures 3 and 6 on the E.

In some of their more complex choral music the notes A or C, or both of these, serve as additional harmonic roots besides E and F. If the anthem were transposed down by a minor third to the key of F, for comparison, it would be seen that these four roots feature prominently throughout the music. Owing to the need for terminal cadences, however, two additional roots were occasionally introduced.

The typical Swazi five-note scale, described above, serves as the main basis of the anthem. For five out of the eight lines the soprano part is confined entirely to these notes. Additional ones are introduced only in the first line and the last two.

Speech-tones

The speech-tone requirements of the anthem text were followed to the extent of imitating observed traditional practice as closely as possible in all the voice parts. In traditional songs the melodic line is not just an imitation of the tonal contours of normal speech.[14] A certain amount of latitude is possible. Tone patterns are sometimes directly violated in chorus parts, but this happens less frequently in solo phrases. Generally speaking, high, low and falling speech-tones do have a definite influence on the direction of melodic movement, inasmuch as they determine whether the tune should rise or fall from syllable to syllable. Pitch intervals vary considerably in size, however, and there is no necessary conformity with speech in that respect.

Liberties are also taken, in song, with those tonal features which in speech appear to be imposed by ' intonation '. In speech, many words take one tone pattern when occurring finally (or in pre-pausal position) but a different one when non-final ; and there are associated ' length ' features also. In song it seems that

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[13] Rycroft (1967) and (1969). A Swazi 'semitone' equals *c.* 90–150 cents.

[14] Concerning speech-tones, cf. Preface to Rycroft (1970).

either of these patterns can be adopted, regardless of the position of the word. ' Intonation ' features may apparently be applied *ad libitum* without any of their demarcative implications.

In the third line of the anthem the tenor and bass part settings for the word **netintshaba** derive from the non-final speech-tone pattern for this word. In the soprano part, however, the utterance-final speech-tone pattern for **netintshaba** has been followed, in which the penultimate syllable takes low tone but commences with an assimilatory falling on-glide. To ensure that glides of this kind would be performed in the Swazi manner, with longer duration on the pitch-glide than is customary with European *portamento*, a note to that effect was added in the prefatory ' Note on performance ' submitted with the music:

' Those whose language is siSwati will find that each voice part largely follows the inherent rhythm and speech-tone sequence of the text. *Parlando* glides, indicated by a slur and a straight line connecting two notes (or, in the Solfa notation, by underlining) should be rendered exactly as in traditional Swati music '.

In spoken siSwati (Swazi) the same varieties of tonal glide occur as those found in Zulu.[15] It is very common for these glides, of various kinds, to be carried over from speech into song. They are often stylized or exaggerated for musical effect. Or a falling glide may sometimes be introduced in song, on a syllable that does not take such a glide in speech.[16] One variety of rising on-glide appears to be mechanically conditioned by certain voiced consonants in both speech and song.[17] This is true of all the Nguni languages and the effect is present even when Nguni speakers sing in another language, such as English.

It was anticipated that the latter type of rising on-glide, as well as assimilatory falling ones, would occur automatically with certain syllables when the anthem was sung by siSwati speakers, and mention of this was accordingly made in the prefatory ' Note on performance ':

' Brief rising or falling " on-glides " which arise naturally in words like **nguye** (initially, rising) and **tintshaba** (medially, falling) have not been indicated in the Solfa,[18] but are marked as *acciaccatura* (i.e. unaccented grace-notes) in the staff notation parts, for the benefit of non-Swati singers '.

Length and stress

An inherently metrical text, like that of ' God Save the Queen ', was not to be expected for the Swaziland anthem. The number of syllables in the seven lines

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[15] For a detailed description, cf. Rycroft (1963), 58.

[16] Such non-speech-derived down-glides often cover intervals which suggest that Blacking's principle of ' harmonic equivalence ' (cited for Venda music) might possibly apply: cf. Blacking (1967), 168.

[17] See end of note 4. A fuller description of these tone-lowering consonants appears in the Preface to Rycroft (1970).

[18] For **tintshaba** this refers to parts other than the soprano.

of ' God Save the Queen ' are, respectively, 6, 6, 4; 6, 6, 6, 4. By comparison, the Swaziland anthem has 16, 10, 9, 10, 12, 9, 15, 12. Similar irregularity in the number of syllables is typical of the *solo lines* in traditional Nguni choral songs [19] and also in their praise poetry. Chorus parts of course are more stereotyped, the same one or two lines being repeated constantly throughout.

Swazi choral songs generally observe a very slow tempo, somewhere between 50 and 80 beats per minute, in duple or triple grouping. The chorus largely maintains the basic main-beat structure. This may also be expressed in dance-steps, gestures or work movements, while the soloist's lines have a looser connection with this main metre, and display a semblance of rhythmic freedom from it. Instead of the word accents always falling on strong beats, which is the general European rule, there is a subtle shifting interplay between intensity stress, length and the metrical main-beats. Unlike many other African peoples, hand-clapping is *not* normally used to provide an accompaniment or to regulate the rhythm of the words.[20]

In traditional songs the order of long and short syllables found in normal speech is often altered or may be completely reversed.[21] Here is the main leading

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[19] This irregularity tallies with A. M. Jones's findings elsewhere in Africa. Jones cites a Hunters' Song of the Ila tribe (Zambia) with ' apparently irrational numbers of syllables, namely 10, 18, 9 and 26 '. Extending his observation to ' the whole of the continent south of the Sahara ' he says: ' one could quote dozens of such apparently unmetrical texts—in fact it is difficult to find a text which is clearly metrical except, perhaps, in some simple children's songs . . .' (Jones, 1964, 6). Jones nevertheless goes on to pronounce them to be ' metrical lyrics ' after all, since ' any song which can be sung during dancing must, *ipso facto*, be metrical ' (ibid., 7). Personally, I prefer to consider such texts to be inherently unmetrical in themselves, and to regard their metrical organization as something imposed upon them.

[20] In this respect Swazi and Zulu practice does *not* fall within the general statement by A. M. Jones that ' all African songs which can be sung to a regularly recurring rhythmic pulse can also be accompanied by hand-clapping: and it is the hand-clapping which is the basis both of their melodic and of their textual content . . . it has nothing whatever to do with stress. . . . The claps exist purely as a pattern or grid on which the tune and words are built ' (Jones, 1964, 7). This definitely does not apply to Swazi or Zulu song, though I have cited evidence of it among the Xhosa (Rycroft, 1962, 83–4). John Blacking appears to confirm this evident *lack* of a non-stressed clapping concept among the Zulu (Blacking, 1967, 158–9).

[21] Missionaries have often been blamed for distorting the ' accentuation ' in African languages when introducing hymns in the vernacular. This point was stressed particularly in Weman (1960), 141–3. But this complaint is not new. J. W. Colenso, when Bishop of Natal, voiced similar criticism as long ago as 1871: ' Missionaries too often compel the natives to offend against all the laws of accentuation, and force the rhythm of their own words, not once or twice, but constantly, in singing, in order to accommodate our favourite tunes. Let any Englishman attempt to sing the line " O'er the gloomy hills of darkness " to any L.M. or C.M. tune, and he will soon be convinced of the frightful effect which the singing of words to such tunes must have upon the ear of the natives, until by degrees the taste becomes wholly perverted ' (Colenso, 1871, 9).

Had Colenso and Weman both made a closer study of actual traditional music, however, they would have found that ' native taste ' was already ' perverted ': distortions of length are in fact tolerated in Nguni music to an extent that would have alarmed them. It is not at all *accentual* distortion that violates Nguni tradition: it is *speech-tone* distortion that does so.

phrase of the traditional Swazi hunting song of figure 2: first as spoken, secondly as sung. Vowel length is marked by a colon.

Spoken:	**wa:yihla:ba**	**yakha:la**	**le:nyamata:n(e)** [22]
Sung:	**wa:yihlaba:**	**yakhala:**	**le:nyama:ta:n'**
	he is stabbed	it cried	this buck

Despite such alterations of the length patterning in song, the position of intensity stress in each word appears to remain unaltered. This occurs on the root syllables **-hlab-**, **-khal-** and **-nyam-**, as well as on the demonstrative **le** in the above example.[23]

In connection with Zulu song it was remarked in a previous paper that intensity stress in the words often bore a syncopated or off-beat relation to the metrical down-beat of the dance-steps.[24] This appears to occur also in Swazi. In the first word of the hunting song, the metrical down-beat coincides with the first and last syllables, while **-hla-**, which bears intensity stress, falls on an off-beat. In the second word, however, the stressed syllable **-kha-** *does* coincide with the down-beat, while the long final syllable is *off* the beat.

From this and other examples it appears that syllables bearing ‘ prominence ’, either by length or by stress, need not necessarily fall on a metrical down-beat. Their placement in relation to the latter is frequently varied. It seems likely that such variation is deliberately contrived, in traditional Nguni music, in order to achieve contrast.

Contrastive accentual treatment of this kind has been introduced in the anthem, to some extent, from the third line of text onwards. To guard against its possible

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This was unfortunately overlooked by the missionaries—as well as by their critics—and the intelligibility of many hymns has suffered in consequence; though it seems that African congregations through the years have come to accept and even jealously to uphold the perpetuation of many such mystical ‘ nonsense chants ’, as if it were the enactment of some essential ritual.

[22] Elision of the final vowel, which is optional for this word, commonly takes place in speech.

[23] One hesitates to make dogmatic assertions concerning intensity stress. This is a subjective impression and tallies with my previous impressions for Zulu (cf. Rycroft, 1957). Instruments such as the kymograph, oscilloscope, etc., often fail to register significant peaks of amplitude at points where the investigator (or even the speaker himself) subjectively feels dynamic stress in these languages. Since different speech sounds are inherently unequal in the amount of breath force and energy required in their production, a direct ‘ stress graph ’ cannot of course be expected. Whether or not positive results emerge from more controlled tests in the future, it seems feasible to suggest that—in Bantu languages generally—the listener may tend to project, conceptually, a kind of ‘ lexical prominence ’ on to root syllables by reason of their semantic importance, whether or not they happen to be actually louder.

[24] Ibid. Weman quotes from this paper with acknowledgement (Weman, 1960, 56–7). But he has seriously misquoted one sentence concerning stress-placement in a Zulu **isigekle** dance-song. The mistake is evident if one studies my transcription of the music, which he also reproduces. Weman's quotation: ‘ The next syllable, which is a root, receives its due stress of the heavy dance step ’ should, correctly, have read as follows: ‘ The next syllable, which is a root, receives its due stress despite shortened length, but does *not* coincide with the metrical stress of the heavy dance step ’ (Rycroft, 1962, 727; italics original).

obliteration, by non-Swazi singers or by over-zealous school choirmasters through a mechanical stressing of the first and third beats of every bar measure, a clause was inserted in the ' Note on Performance ' to the effect that ' off-beat accents should be expressed freely wherever they arise in the text '.

Although apparent abnormalities of length-patterning occur frequently in song, this is not obligatory. In many cases length values do not radically depart from those of normal speech. There appears, at first sight, to be considerable latitude in this matter.[25] But closer inspection suggests that Lanham's distinction between ' inherent ' and ' imposed ' length in Nguni languages may be relevant here.[26] Syllables with an ' inherent ' length feature (like initial **wa-:** and **le:-** in the first and third words of the hunting song phrase) appear to be less subject to alteration in song. On the other hand ' imposed ' length, a syntactically demarcative terminal or pre-pausal feature generally occurring on the penultimate syllable, is very frequently either displaced, or ' lifted off ', or may be applied *ad libitum* without any demarcative implications.[27] An association between ' imposed ' length and tonal features imposed by intonation is evident here, as suggested earlier.

All three of these possibilities for length patterning, namely displacement, ' lifting off ', and non-implicative retention, were freely employed in the anthem. In the setting of the first word (among others) there has been intentional displacement of the imposed length feature from the penultimate to the final syllable [28]:

Spoken: **Nkulunku:lu**
Sung: **Nkulunkulu:**
O God

Imposed length (plus final intonation) has been ' lifted off ' in **temaSwati**

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[25] Ziervogel (1952), 17, states that ' in songs the stress fluctuates according to the music '. This is an understandable view, provided that ' length ' is meant rather than intensity stress.

[26] Lanham (1960), 146 et seq., has dealt with length and stress in considerable detail. Suffice it here to say that ' inherent ' length seems to pertain to certain affixes and concords, demonstratives, ideophones and interjections. Elsewhere extra length appears to be an ' imposed ' feature.

[27] It is in this respect that earlier complaints of ' metrical violation ' have been misdirected (cf. note 21). Both Colenso and Weman are primarily concerned about keeping ' the regular fall of the accent on the penultimate ' (Colenso, 1871, 9), Weman refers to Bantu languages being ' trochaic in construction ' as a general rule (Weman, 1960, 141). Both had been misled here by the ' imposed ' penultimate length feature which, though binding in speech, is certainly not obligatory in traditional Nguni song.

The third circular issued to composers by the Swaziland Anthem Committee, containing the texts, showed more enlightenment in this respect, by stating that ' the stress in each word is on the penultimate syllable but this need not be adhered to in composing a musical setting in siSwati any more than in English '. (By ' stress ' one must here understand ' length ' of course.)

[28] Weman cites this word and prescribes that its ' correct ' metrical setting should be **Nkulunku:lu**, i.e. exactly as in speech (Weman, 1960, 143).

(soprano, first line) despite its final position. Suspension of penultimate length occurs similarly in many other words.

In **netintshaba** (soprano part, third line) the normal sentence-terminal features from speech have been applied, but without any demarcative implication. Extra length has been imposed on the penultimate syllable. Tonal features, also, are typically utterance-final.

Many other words have been treated in the same way as **netintshaba**, including the final word in the anthem. Here, however, it was intended that terminal features should for once serve their normal speech function, if that were possible, and signify unmistakable finality. Penultimate lengthening was therefore applied in an exaggerated manner, being sustained for the duration of four full beats by all voices simultaneously, in an attempt to secure a climactic cadential effect: linguistically as well as musically. This was a departure from tradition, since no indigenous terminal formula for Swazi song appears to exist. Nevertheless, in the reciting of traditional Swazi praises and royal eulogies (**tibongo**) the exaggerated and stylized prolongation of a penultimate syllable does indeed serve as the typical stanza-final feature. Its adoption as a national anthem final feature therefore seems not altogether inappropriate.

NKULUNKULU, MNIKATI WETIBUSISO TEMASWATI [29]

(The National Anthem of Swaziland)

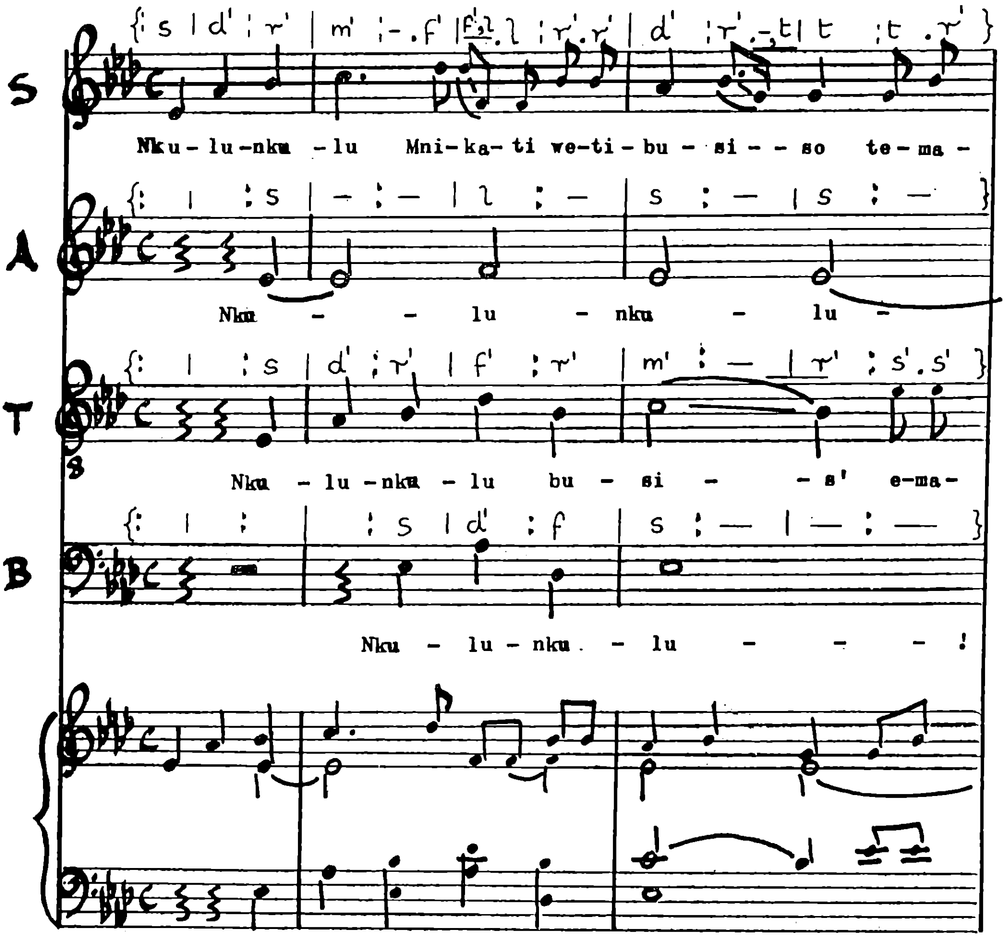
Words by
Mrs. A. F. K. Simelane

Musical
Setting by
David Rycroft
1967

♩= 88 -96

Doh is A♭

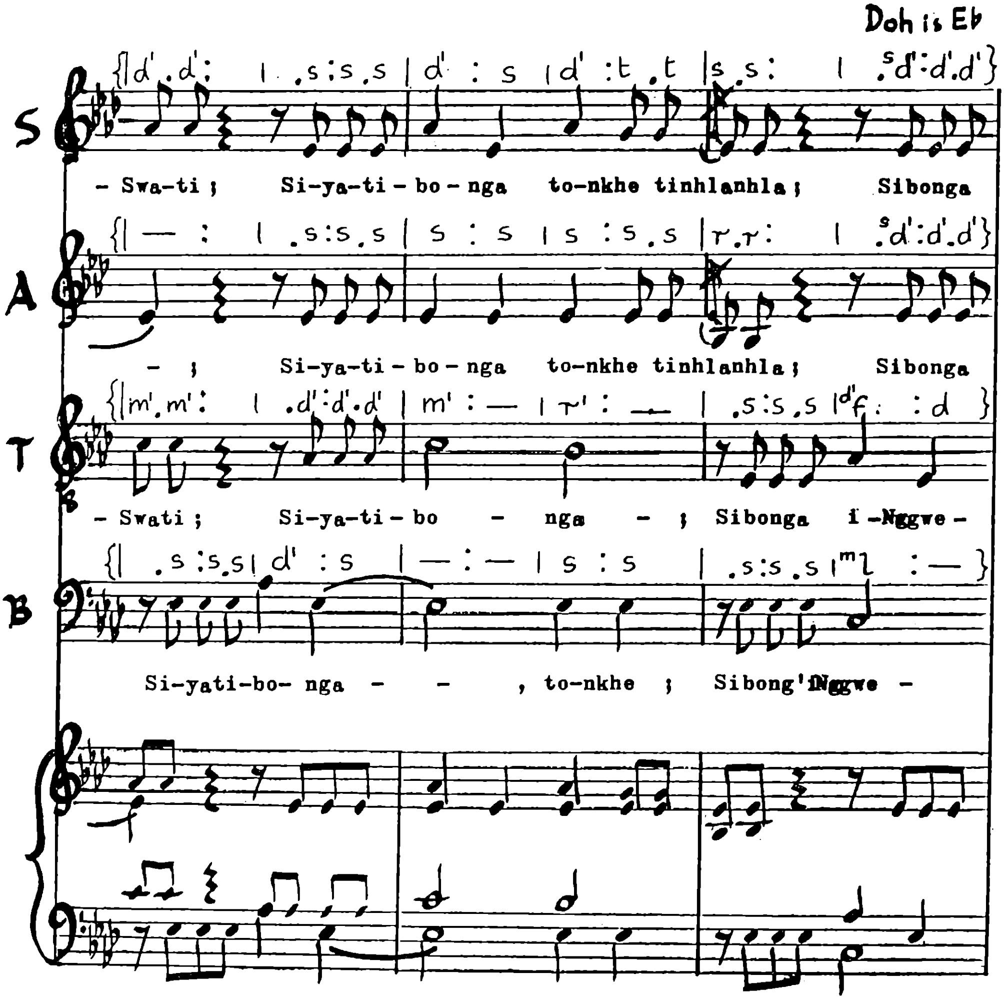
Legato, con Portamento


{: s | d' : r' | m' :-.f' | f'.l : r'.r' | d' :r' .-,t | t :t .r' }
S
Nku - lu -nku -lu Mni- ka- ti we-ti - bu - si - - so te - ma -
{: | : s | - : - | l : - | s : - | s : - }
A
Nku - - lu - nku - lu -
{: | : s | d' : r' | f' : r' | m' : - | r' : s'.s' }
T
8
Nku - lu -nku - lu bu - si - - s' e-ma-
{: | : | : s | d' : f | s : - | - : - }
B
Nku - lu - nku - lu - - - !

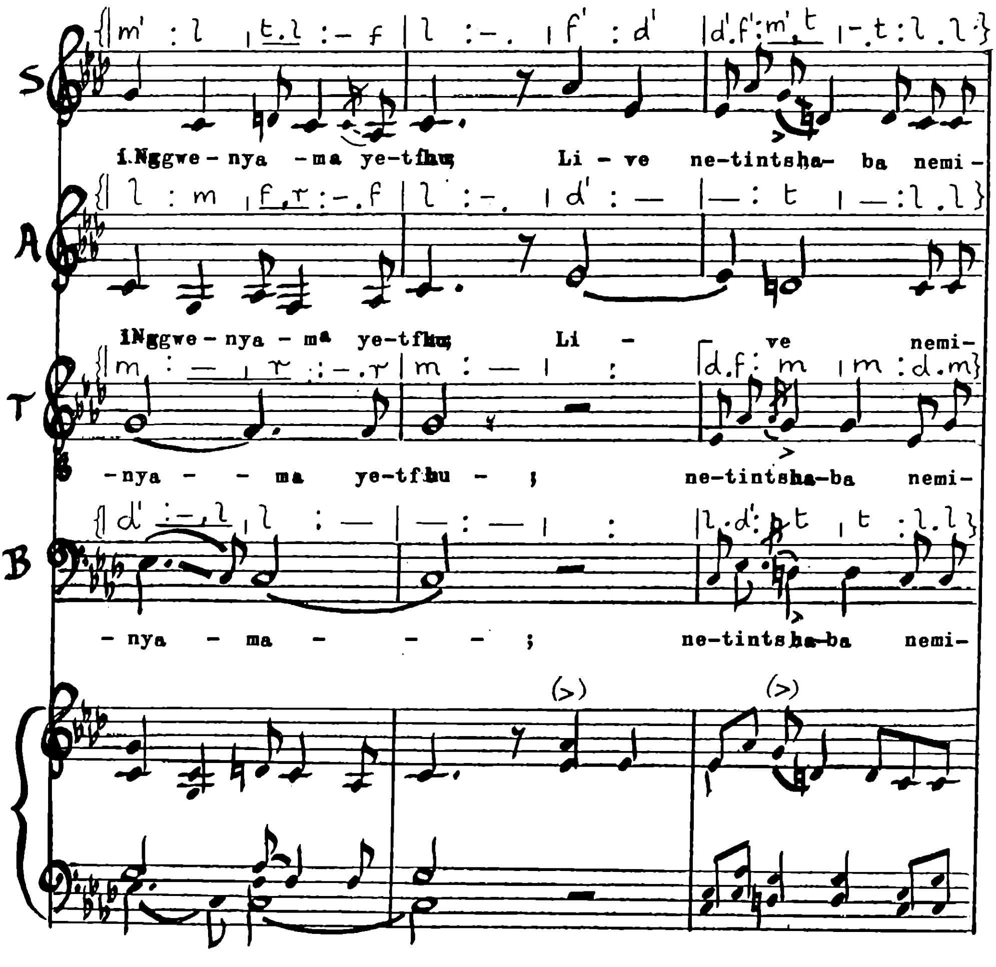
---

[29] Cf. ' Note on Performance ', p. 318. For a brief guide to pronunciation the reader is referred to note 4.

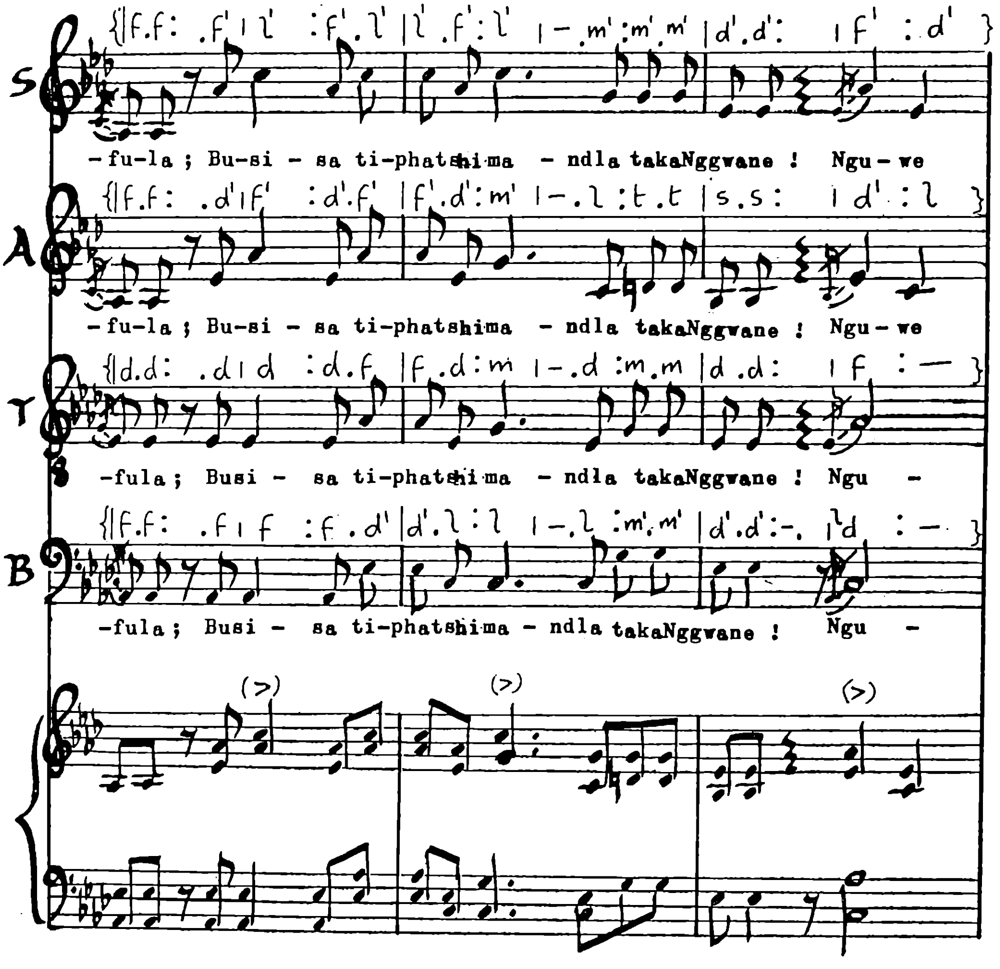
2.


Doh is E♭
S
{|d'.d': | .s:s.s |d' : s |d' :t .t |s.s: | .ˢd':d'.d'}
- Swa-ti ; Si-ya-ti - bo - nga to-nkhe tinhlanhla ; Sibonga
A
{| — : | .s:s.s | s : s | s :s.s |r.r: | .ˢd':d'.d'}
- ; Si-ya-ti - bo - nga to-nkhe tinhlanhla ; Sibonga
T
{|m'.m': | .d':d'.d' | m' : — | r' : — | .s:s.s |ᵈ'f : :d }
- Swati ; Si-ya-ti - bo - nga - ; Sibonga i -Ngwe -
B
{| .s:s.s| d' : s | — : — | s : s | .s:s.s |ᵐl : — }
Si-yati-bo- nga - - , to-nkhe ; Sibong'iNgwe -

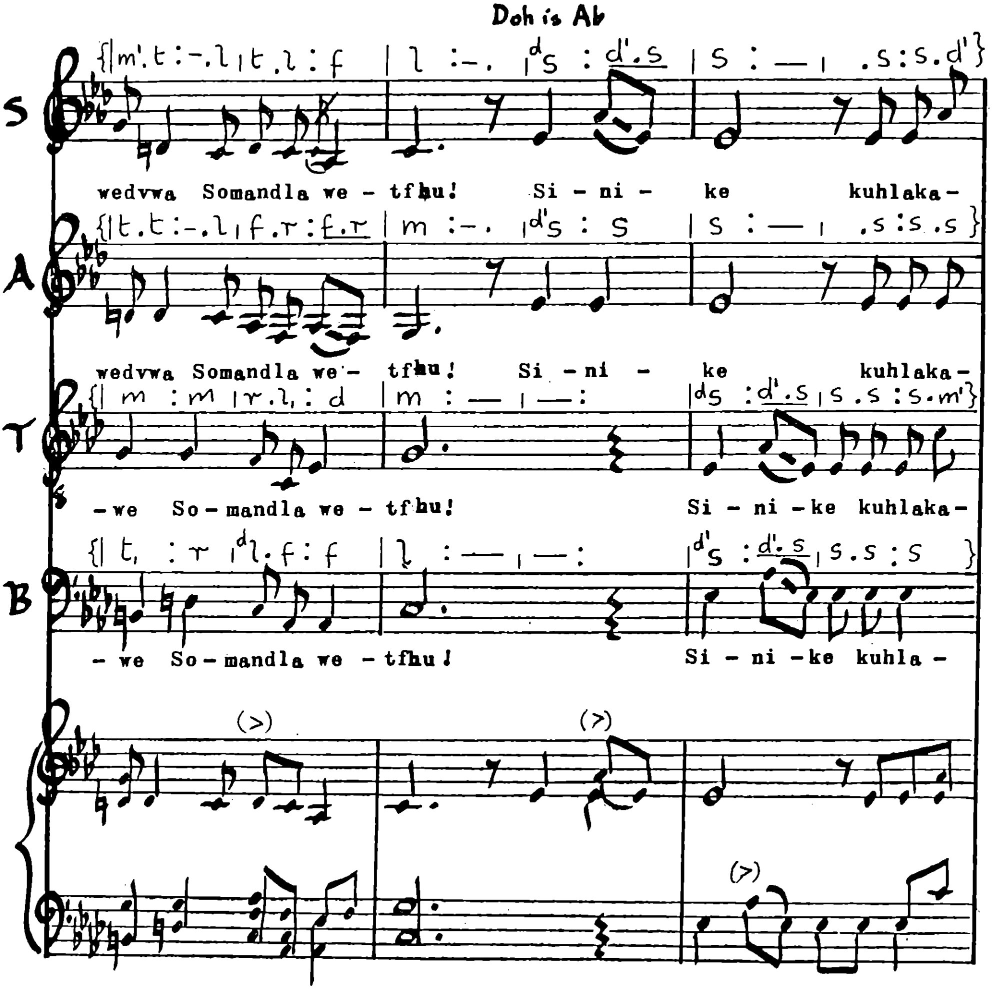
3.


S
A
T
B
1.Nggwe - nya - ma ye-tfhu; Li - ve ne-tintsha- ba nemi -
1Nggwe - nya - ma ye-tfhu; Li - ve nemi-
-nya - - ma ye-tfhu - ; ne-tintsha-ba nemi-
- nya - ma - - - ; ne-tintsha-ba nemi-
(>)
(>)

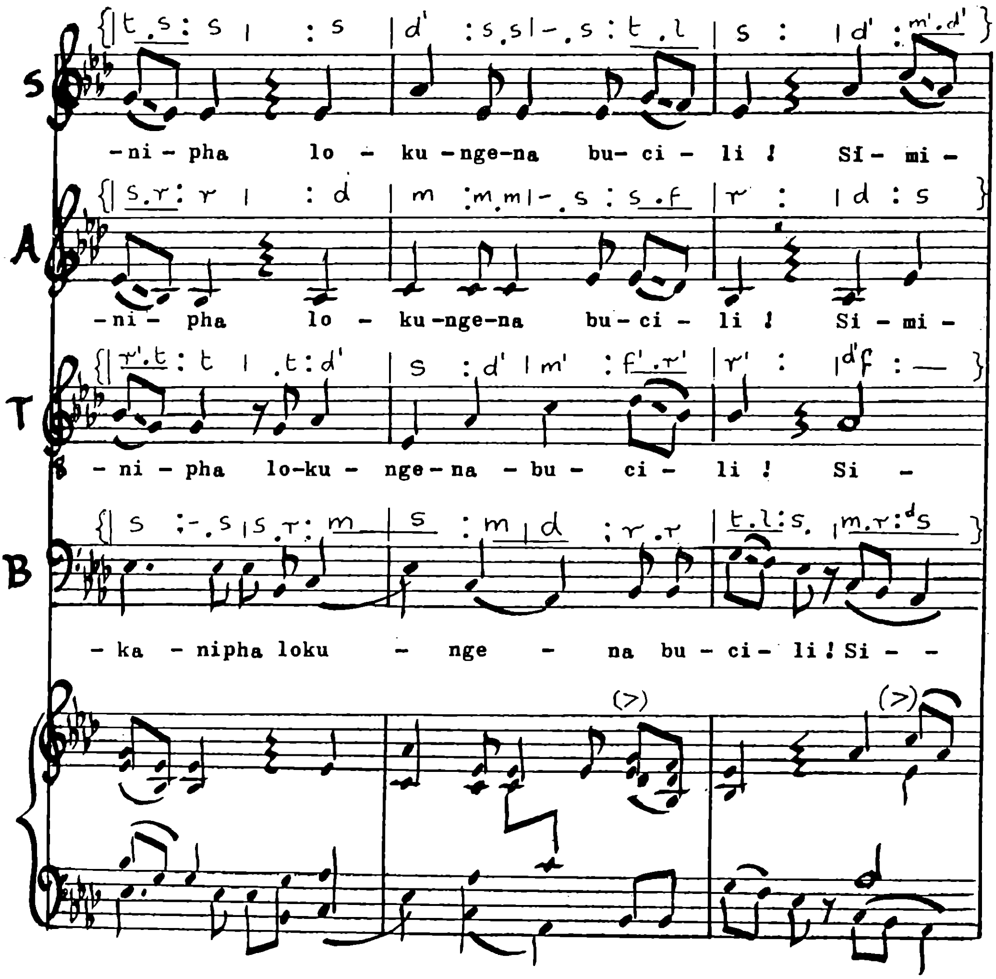
4.


S
{|f.f: .f'|l' :f'.l' |l'.f':l' |-.m':m'.m' |d'.d': |f' :d' }
-fu-la ; Bu-si - sa ti-phatshima - ndla takaNggwane ! Ngu-we
A
{|f.f: .d'|f' :d'.f' |f'.d':m' |-.l :t.t |s.s: |d' :l }
-fu-la ; Bu-si - sa ti-phatshima - ndla takaNggwane ! Ngu-we
T
{|d.d: .d|d :d.f |f.d:m |-.d :m.m |d.d: |f :— }
-fula ; Busi - sa ti-phatshima - ndla takaNggwane ! Ngu -
B
{|f.f: .f|f :f.d' |d'.l:l |-.l :m'.m' |d'.d':-. |d :— }
-fula ; Busi - sa ti-phatshima - ndla takaNggwane ! Ngu -
(>)
(>)
(>)

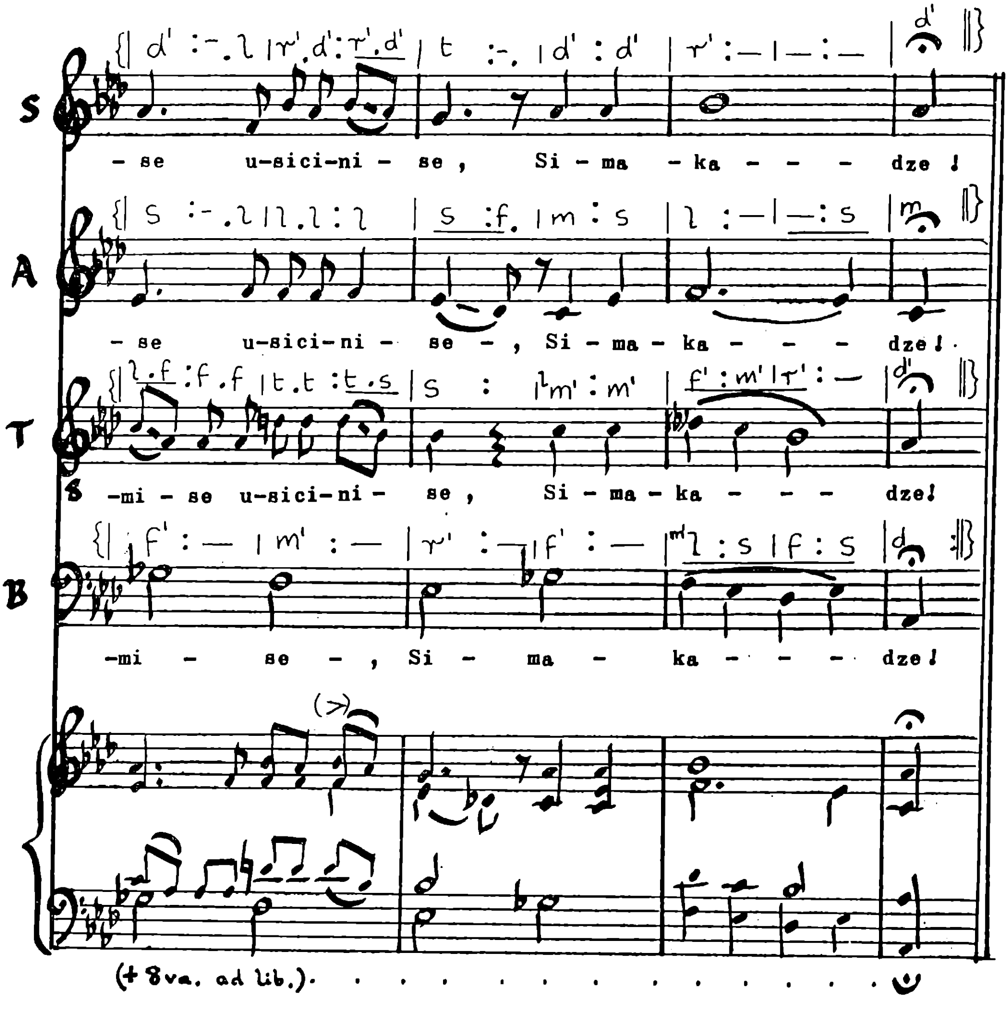
5.


Doh is A♭
S
wedvwa Somandla we - tfhu! Si - ni - ke kuhlaka -
A
wedvwa Somandla we - tfhu! Si - ni - ke kuhlaka -
T
- we So - mandla we - tfhu! Si - ni - ke kuhlaka -
B
- we So - mandla we - tfhu! Si - ni - ke kuhla -
(>)
(>)
(>)

6.


S
{| t.s : s | : s | d' : s.s | - .s : t.l | s : | d' : m'.d' }
-ni - pha lo - ku -nge-na bu- ci - li ! Si - mi -
A
{| s.r : r | : d | m : m.m | - .s : s.f | r : | d : s }
-ni - pha lo - ku -nge-na bu - ci - li ! Si - mi -
T
{| r'.t : t | .t : d' | s : d' | m' : f'.r' | r' : | d'f : — }
- ni - pha lo-ku - nge - na - bu - ci - li ! Si -
B
{| s : - .s | s .r : m | s : m | d : r .r | t.l : s, | m.r : ds }
- ka - nipha loku - nge - na bu - ci - li ! Si - -
(>)
(>)

7.


S
d' :-.l |r'.d':r'.d' | t :-, |d' : d' | r' :— | — :— | d'
- se u-sici-ni - se , Si - ma - ka - - - dze !
A
s :-.l | l.l : l | s :f. | m : s | l :— | —: s | m
- se u-sici-ni - se - , Si - ma - ka - - - dze !
T
l.f :f.f | t.t :t.s | s : | l m' : m' | f' : m' | r' : — | d'
-mi - se u-sici-ni - se , Si - ma - ka - - - dze!
B
f' : — | m' : — | r' : — | f' : — | m l : s | f : s | d
-mi - se - , Si - ma - ka - - - dze !
(>)
(+ 8va. ad lib.)

NOTE ON PERFORMANCE

(Submitted with the Anthem)

Those whose language is siSwati will find that each voice part largely follows the inherent rhythm and speech-tone sequence of the text. *Parlando* glides, indicated by a slur and a straight line connecting two notes (or, in the Solfa notation, by underlining) should be rendered exactly as in traditional Swati music. (Certain of these glides have purposely been omitted from the keyboard version, since the required effect cannot be obtained.) Normal slurs, as in the second-last measure, should be rendered in the European manner.

Brief rising or falling ' on-glides ' which arise naturally in words like **nguye** (initially, rising) and **tintshaba** (medially, falling) have not been indicated in the Solfa, but are marked as *acciaccatura* (i.e. unaccented grace-notes) in the staff notation parts, for the benefit of non-Swati singers.

Off-beat accents should be expressed freely wherever they arise in the text—as in **Busisa tiphatshimandla** . . . and elsewhere. (These accents are indicated, in parenthesis, in the keyboard version, but they should not be overdone.)

As will be noted by those familiar with the National **tinggoma** repertoire, the idiom of traditional music is further reflected in the non-simultaneous entry of voice parts, and in the typically Swati harmonic progressions and parallel movement of measures 8–10 and 12–14. Elsewhere, European features have been introduced to some extent, particularly in the final line, to secure a climactic cadence instead of a traditional D.C.

BIBLIOGRAPHY

(Works quoted in the article)

Blacking, John, *Venda children's songs*, Witwatersrand, 1967.

Colenso, J. W., *First steps in Zulu-Kafir*, 2nd ed., Maritzburg, 1871.

Jones, A. M., ' African metrical lyrics ', *African Music*, III, 3, 1964, 6–14.

Kirby, P. R., *The musical instruments of native races of South Africa*, Oxford, 1934.

Lanham, L. W., *The comparative phonology of Nguni*, Johannesburg, 1960 (unpublished typescript of a doctoral thesis).

Roberts, C., *Zulu Vade Mecum*, Kegan Paul, London, 1900.

Rycroft, D., ' Linguistic and melodic interaction in Zulu song ', *Akten des XXIV Internationalen Orientalisten-Kongresses*, München, 1957, 726–9.

Rycroft, D., ' Zulu and Xhosa praise-poetry and song ', *African Music*, III, 1, 1962, 79–85.

Rycroft, D., ' Tone in Zulu nouns ', *African Language Studies*, IV, 1963, 43–68.

Rycroft, D., ' Nguni vocal polyphony ', *Journal of the International Folk Music Council*, XIX, 1967, 88–103.

Rycroft, D., *Swazi music* (monograph in English, French, Dutch and German, with a 12-in. LP disc), Musée Royal de l'Afrique Centrale, Tervuren, and Belgische Radio en Televisie, Brussels, 1968.

Rycroft, D., *Zulu, Swazi and Xhosa instrumental and vocal music* (monograph and L.P. disc as above), 1969.

Rycroft, D., *A siSwati-English dictionary*, London, 1970 (in press).

Shaw, Martin, and Coleman, Henry (eds.), *National anthems of the world*, 3rd ed., Blandford, London, 1969.

Tracey, Hugh, *Swati music* (sound recordings on 12-in. discs), in ' The sound of Africa ' series, TR 68-73 and TR 75, International Library of African Music, Roodeport, South Africa, 1959.

Weman, H., *African music and the Church in Africa*, Svenska Institutet för Missionsforskning, Uppsala, 1960.

Ziervogel, D., *A grammar of Swazi*, Witwatersrand, 1952.

REPETITION OF THE VERB IN NUPE

By N. V. Smith

In Nupe [1] any construction containing a monosyllabic intransitive verb can normally be paralleled by a comparable construction with that verb repeated.[2] For instance:

1. **bise è tí** — the fowl is squawking
fowl T cry
(T is a marker of tense-aspect)

has an emphatic paraphrase [3]

2. **bise è tí tí** — the fowl really is squawking

Similarly:

3. **kútí ge** — the juju is good
juju be good

has the congener:

4. **kútí ge ge** — the juju is just good

We can express this correspondence by the rule [4]

$$\begin{array}{llll} T_1 & X & V & Y \\ & 1 & 2 & 3 \rightarrow 1\ 2 + 2\ 3 \end{array}$$

where X and Y are variables, possibly null,[5] and V is any monosyllabic intransitive verb.

With polysyllables only the first syllable of the verb is repeated, after the rest of the verb, e.g.

5. **u taya** — he slipped
he slip

6. **u taya ta** — he did slip

7. **wũ è tàyìgbě** — he's dozing
he T doze

8. **wũ è tàyìgbě tà** — he is dozing

---

[1] Cf. items by Smith in the references for earlier work on Nupe in a different theoretical framework. I am grateful to Rodney Huddleston for his comments on an early version of this paper.

[2] Cf. Smith (1969) where the phenomenon treated in this paper is given an incomplete and essentially incorrect analysis.

[3] The different uses and meanings of this repeated construction can best be inferred from the translations of the examples; basically it is emphatic (and presumably the constituent *emph* would be one trigger for its occurrence), repetitive or durative, aspectivally imperfective (except with **bé** 'to come'), and indicative of a contradiction or reaffirmation of a point denied or ignored.

[4] For a brief summary of the Phrase Structure rules presupposed for the transformations discussed here, *vide infra*, Appendix.

[5] *Vide infra*, under ex. 45, for an argument that X may never be null.

Elsewhere [6] it has been shown that all polysyllabic verbs can be analysed into two elements:[7] an initial, monosyllabic verbal element, and a final, mono-, di- or tri-syllabic element which may be verbal or nominal. That is, the structure of the polysyllabic verb is:

$$\underset{V}{\Big[}\mathrm{Vb} = \begin{Bmatrix}\mathrm{Nom} \\ \mathrm{Vb}\end{Bmatrix}\underset{V}{\Big]}$$

(**taya**, example 5, is of the structure [Vb = Vb] and **tàyìgbě**, example 7, is of the structure [Vb = Nom].)
T_1 can now be extended to take care of all intransitive verbs, thus:

$$\begin{array}{llllll} T_2 & X & \underset{V}{\Big[}\mathrm{Vb} & \left(= \begin{Bmatrix}\mathrm{Vb} \\ \mathrm{Nom}\end{Bmatrix} \right) & \underset{V}{\Big]} & Y \\ & 1 & 2 & (3) & & 4 \rightarrow 1\ 2\ (3) + 2\ 4 \end{array}$$

where Vb is a verbal element which may or may not be a complete verb (V), Nom is a bound nominal element, and = is a morpheme boundary.[8]

With transitive verbs the whole of a monosyllable or the first syllable only of a polysyllable is repeated immediately after the object NP, e.g.

9.	**u ba cigbằ** he cut wood	he cut wood
10.	**u ba cigbằ ba**	he cut wood all day
11.	**u bé bĭdă** [9] come	he came to Bida
12.	**u bé bĭdă bě** [10]	he finally came to Bida
13.	**u gŭ̀ kata o** [11] skulk room	he's skulking in the room
14.	**u gŭ̀ kata o gŭ̀**	he is skulking in the room
15.	**u yébó mî** love me	he loves me
16.	**u yébó mi yě**	he does love me

---

[6] Smith (1969), 98 ff.

[7] There are seven exceptions to this generalization (cf. Smith, 1969, 103) which must be analysed into three elements. These verbs are rare and are ignored in this paper.

[8] Cf. Chomsky and Halle, 66–8 *et passim*, for a discussion of boundaries.

[9] Place names function as objects rather than adverbials except that they do not pronominalize.

[10] The tonal sandhi is regular; cf. Smith (1969), 49 f.

[11] The final **o** is a feature of locative verbs (cf. Smith, 1967a, 40 f.). These behave perfectly regularly with respect to the repetition transformations.

We can formulate this correspondence in T_3:

$$\begin{array}{llllll} T_3 & X & \underset{V}{\Big[}\mathrm{Vb}\Big(=\begin{Bmatrix}\mathrm{Vb}\\ \mathrm{Nom}\end{Bmatrix}\Big)\underset{V}{\Big]} & NP & Y & \\ & 1 & 2 \qquad (3) & 4 & 5 \rightarrow 1\ 2\ (3)\ 4+2\ 5 & \end{array}$$

which, clearly, must be conflated with T_2 to give T_4:

$$\begin{array}{llllll} T_4 & X & \underset{V}{\Big[}\mathrm{Vb}\Big(=\begin{Bmatrix}\mathrm{Vb}\\ \mathrm{Nom}\end{Bmatrix}\Big)\underset{V}{\Big]} & (NP) & Y & \\ & 1 & 2 \qquad (3) & (4) & 5 \rightarrow 1\ 2\ (3)\ (4)+2\ 5 & \end{array}$$

All the above examples contain only one verb, and the variable Y is null. In 17 there are two verbs and, accordingly, two ways in which the SD of T_4 can be met:

17. **wũ è tú dòkò bě bǐdǎ** he comes to Bida on horseback
ride horse

This may be analysed either as:

wũ è	**tú**	**dòkò**	**bě bǐdǎ**
X	V	NP	Y
1	2	4	5

(' 3 ' is absent as the verb is monosyllabic)

in which case T_4 will generate:

18. **wũ è tú dòkò tú bě bǐdǎ** he always rides to Bida on horseback

or it may be analysed as:

wũ è tú dòkò	**bě**	**bǐdǎ**	Ø
X	V	NP	Y
1	2	4	5

in which case T_4 produces the awkward, but grammatical

19. **wũ è tú dòkò bě bǐdǎ bě** he does come to Bida on horseback

Note that, as predicted, we do not get

20. ***wũ è tú dòkò bě bǐdǎ tú**

where the V is copied to the right of the variable Y. In fact the verb can never be copied to the right of Y; compare:

21. **u bé bǐdǎ tsúwó** he came to Bida yesterday
yesterday

22. **u yà mi syawara gã̌ min daa** he advised me to go
give advice that I go

23. **u bé bǐdǎ bě tsúwó** he finally came to Bida yesterday

24. **u yà mi syawara yà gã̌ min daa** he actually advised me to go

25. ***u bé bǐdǎ tsúwó bě**

26. ***u yà mi syawara gã̌ min daa yà**

Note that when there are two NP's after the verb, as in 22, the repeated verb occurs after the second of them, as in 24, and not after the first, as in 27:

27. ***u yà mi yà syawara gã̌ min daa**

In other words, a second NP cannot form part of Y. Accordingly, T_4 must be extended to include a further NP, viz.

$$\begin{array}{lllllll} T_5 & X & \underset{V}{\Big[} Vb\left(=\begin{Bmatrix}Vb\\ Nom\end{Bmatrix}\right)\underset{V}{\Big]} & (NP) & (NP) & Y & \\ & 1 & 2 \quad (3) & (4) & (5) & 6 & \rightarrow 1\ 2\ (3)\ (4)\ (5) + 2\ 6 \end{array}$$

(This transformation will be referred to as T_{VT} (verb repeat).)

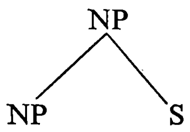
If the NP dominated by VP is followed by an adverbial element, however, even if this is within the VP, the repeated verb is adjoined immediately to the right of this NP and before the adverbial, e.g.

28. **u ba cigbã̀ bè kágbó ī** he cut the wood energetically
with force

29. **u ba cigbã̀ ba bè kágbó ī** he cut the wood energetically all day

30. ***u ba cigbã̀ bè kágbó ī ba**

If the object NP is complex, i.e. is of the form



T_{VT} applies only to the dominating NP and not the dominated NP,[12] e.g.

---

[12] In accordance with Chomsky's A/A principle. Cf. Chomsky (1962), 931, and Ross (1967) *passim*, for a detailed critique of this concept.

31. **u ba cigbả̀ na mi leyé tsúwó na** he cut the wood I saw yesterday
that see

32. **u ba cigbả̀ na mi leyé tsúwó na ba** he cut up the wood I saw yesterday

33. ***u ba cigbả̀ ba na mi leyé tsúwó na**

In other words the potential analysis of 31 as:

u	**ba**	**cigbả̀**	**na mi leyé tsúwó na**
X	V	NP	Y

instead of the correct:

u	**ba**	**cigbả̀ na mi leyé tsúwó na**	Ø
X	V	NP	Y

is ruled out by universal convention.

With a number of polysyllabic verbs the direct object NP is inserted between the first element of the verb and the final element. For instance, **leyé** ' to see ' appears as **le . . . yé**; e.g.

34. **mi le u yé** [13] I saw him

with a repeated congener:

35. **mi le u yé le** I could see him

Contrast 35 with 15 and 16 and the impossible:

36. ***mi leyé u**

37. ***mi yé u bó**

There appears to be no way of predicting whether a polysyllabic verb is separable (the more common case) or inseparable.

It is assumed that the direct object of all verbs is generated in the same position (cf. the PS rules in the Appendix) and reach their intercalated position with separable verbs by means of an ' object shift ' transformation, formulated roughly as:

$$\begin{array}{cccccc} T_{\mathrm{OS}} & X & \Big[\mathrm{Vb} = & \left\{\begin{matrix}\mathrm{Vb}\\ \mathrm{Nom}\end{matrix}\right\}\Big] & \mathrm{NP} & Y \\ & & V_{[+\,\mathrm{SEP}]} & V_{[+\,\mathrm{SEP}]} & & \\ & 1 & 2 & 3 & 4 & 5 \rightarrow 1\ 2\ 4\ 3\ \emptyset\ 5 \end{array}$$

Clearly, if we are going to avoid the necessity of specifying different environments for the application of T_{VR}, it must precede T_{OS}. Thus 35 would originate as **mi leyé u**; it would become **mi leyé u le** by T_{VR} and **mi le u yé le** by T_{OS}.

---

[13] This occurs irrespective of the length of the NP, e.g. **mi *le* baagi wǔcì na bé bǐdǎ tsúwó na *yé*** ' I saw the man who came to Bida yesterday '.

There are a number of restrictions on the applicability of T_{vr}, some of which appear to be general (as, for instance, the impossibility of permuting around Y mentioned above), and others either dialectal or idiosyncratic. First T_{vr} is universally inapplicable in the environment of the imperative, so we have:

38.	**ba cigbả**	cut the wood !
39.	**bé**	come !
40.	**u ba cigbả**	he cut wood (= 9)
41.	**u bé**	he came

but no

42. ***ba cigbả ba**

43. ***bé bě**

to parallel

44.	**u ba cigbả ba**	he cut wood all day (= 10)
45.	**u bé bě**	he finally came

To state this restriction we need to add the condition that X does not contain ' Imperative ' to T_{vr}. The alternative of including a subject NP in the SD of the transformation is not adopted as, in certain cases, this subject is not deleted by the imperative transformation. That is, we have an optional form:

46.	**o bé**	you, come ! (homophonous with 'you came ')

beside the more usual 39.

It is probable that this restriction is partly a reflection of a more general constraint which excludes the co-occurrence of Imperative and ' Imperfective ' aspect, as most of the sentences containing a repeated verb are imperfective.[14] However, as there are a few cases of repeated verbs co-occurring with perfective aspect (cf. 6, 12) the restriction is left as a condition on X.

A similar, though less clear-cut, restriction obtains with negative sentences.[15] For some speakers no negative sentences [16] allow of a repeated verb, so we have:

47.	**mi à lo dzukó** T go market	I shall go to market
48.	**mǐ à lo dzukó à** neg	I shall not go to market
49.	**mi à lo dzukó lo**	I shall be going to market
50.	***mǐ à lo dzukó lo à**	

---

[14] Cf. Smith (1969), 125 f.

[15] Note that negative sentences are inherently imperfective (ibid.).

[16] Except in certain subordinate clauses.

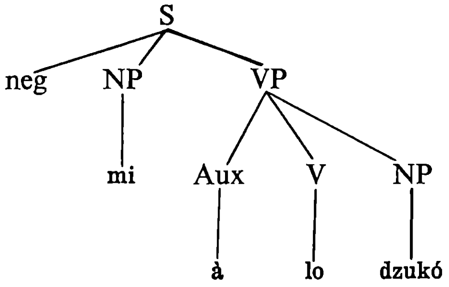
Other speakers find nothing wrong with 50, and yet others accept it only with a temporal adverbial or restrictive clause:

51. **mǐ à lo dzukó lo èsũ à** I shall not be going to market to-morrow
to-morrow

52. **mǐ à lo dzukó lo à, àmâ èyà** I shall not be going to market but
but
wòcècècizī à bě àbo traders will come here
traders here

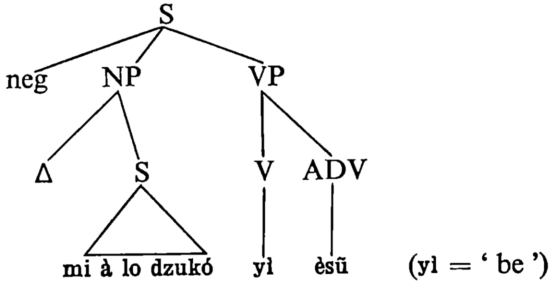
For those speakers who have any constraints on negative sentences at all, these can be formalized by reference to the position of the negative element in the underlying structure. Specifically, that T_{vr} cannot apply to a sentence immediately dominating neg, though there may be an occurrence of neg dominated by a different S higher up the tree.[17] Thus, in 53, which underlies 50:

53.



T_{vr} would block, but in 54, which underlies 51, T_{vr} would operate, at least for some speakers.

54.



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[17] This presupposes a sentential derivation for, *inter alia*, temporal adverbials, as has been suggested for English (and putatively universally) by Lakoff, App. F.

That is, we have three classes of reaction from speakers:

(a) Those who reject any negative sentence on which T_{vr} has operated, i.e. for whom 50–52 are all out.
(b) Those who accept any negative sentence on which T_{vr} has operated, i.e. for whom 50–52 are all in.
(c) Those who accept only those negative sentences in which T_{vr} has operated on an S not immediately dominating neg, i.e. for whom the examples are as marked.

For one speaker at least, T_{vr} blocks when the object NP is co-ordinate in structure, if the co-ordinate nouns are place names, though for other nouns there is no restriction. Thus:

55. **mi bé bĭdă** I came to Bida
56. **mi bé bĭdă bĕ** I've come to Bida at last
57. **mi bé bĭdă tò doko** I came to Bida and Doko
58. ***mi bé bĭdă tò doko bĕ**
59. **mi è ba nakã̀ tò cigbã̀** I'm cutting meat and wood
60. **mi è ba nakã̀ tò cigbã̀ ba** I am cutting meat and wood

For other speakers 58 is alright. More investigation of this phenomenon is needed.

Another problem is provided by the possible alternative to 60:

61. **mi è ba nakã̀ ba tò cigbã̀** I am cutting meat and wood

which should be excluded by the A/A principle mentioned earlier [18] whether **ba** is moved into the conjunct or **tò cigbã̀** is later extraposed out. It seems that this corresponds to such English sentences as 63:

62. I had Weetabix and toast for breakfast
63. I had Weetabix for breakfast and toast

which is acceptable for some speakers when the peculiarity of the construction is markedly intonationally. In Nupe, however, there is no intonational evidence available.

In general T_{vr} can only apply once to any S, although a sentence containing embedded S's may have more than one repeated verb in its final output. Specifically, T_{vr} may operate once on every cycle of the transformational rules.[19] So in

64. **baagi na bé bĕ na dã mi yã dã** the man who finally came really hit me
man R hit

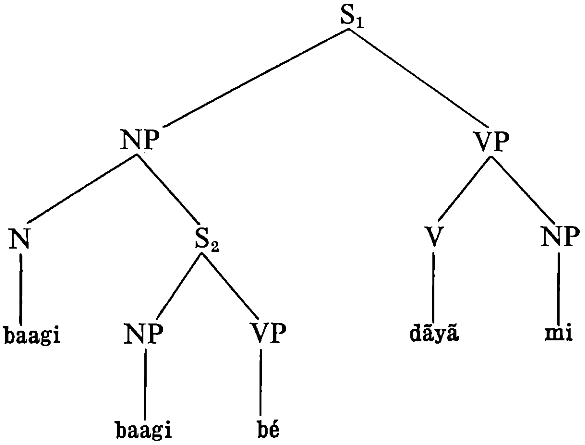
---

[18] Or comparably by Ross's co-ordinate structure constraint. Cf. Ross (1967), 161.

[19] For the principle of the transformational cycle, cf. Chomsky (1965), 29 *et passim*; (1968), 38; and Ross (1968).

(R is a relative marker; **dãyã** is a disyllabic separable verb) with the underlying structure:

65.



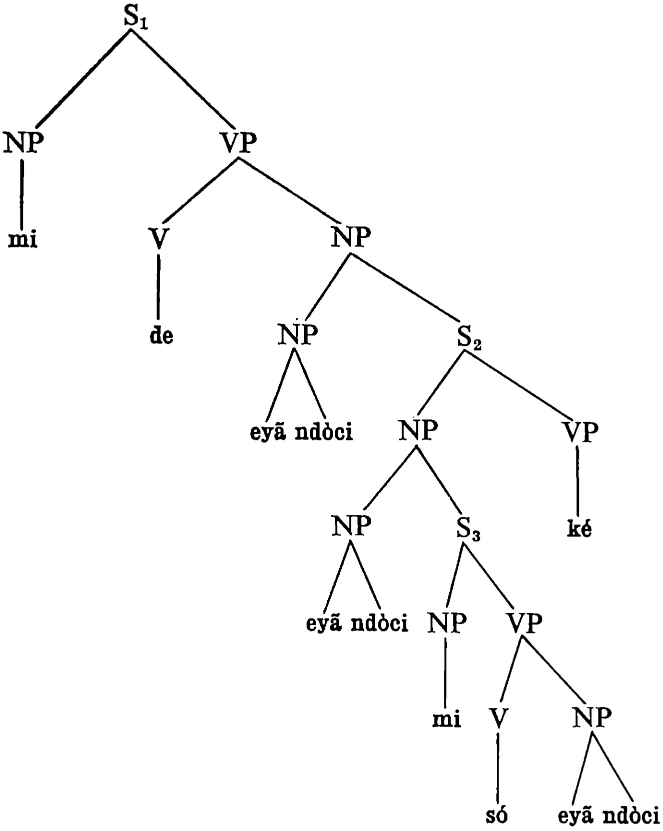
T_{vr} operates on S_2 in the first cycle, giving (with the relativization transformation which inserts **na . . . na** assumed) **baagi na bé bě na**, and then operates on S_1 in the second cycle to give **dãyã mi dã**, which becomes **dã mi yã dã** by the object shift transformation.

It would seem, however, that some further restriction must be placed on T_{vr} to account for the following data exemplifying serial constructions:

66. **mi de eyã ndòci só** — I have something hidden
have something hide
67. **mi de eyã ndòci ké** — I have something left
leave
68. **mi de eyã ndòci só só** — I have something hidden away
69. **mi de eyã ndòci ké ké** — I have something left over
70. **mi de eyã ndòci só ké** — I have something hidden left
71. **mi de eyã ndòci ké só** — I have something left hidden
72. **mi de eyã ndòci só só ké** — I have something hidden away left
73. **mi de eyã ndòci só ké ké** — I have something hidden left over
74. **mi de eyã ndòci ké só só** — I have something left hidden away
75. **mi de eyã ndòci ké ké só** — I have something left over hidden
76. ***mi de eyã ndòci ké ké só só**
77. ***mi de eyã ndòci só só ké ké**

The underlying structure of 70, for example, is roughly:

78.



which, by relativization in S_3 and S_2 gives

79. **mi de eyã ndòci na mi só na na ké na** I have something which I hid which is left

and then generates 70 by relative reduction, deleting the discontinuous **na . . . na** and the personal pronoun **mi.**[20] This, however, should make possible 77 (*mutatis mutandis* the same arguments apply for the other examples) which is excluded by all informants.

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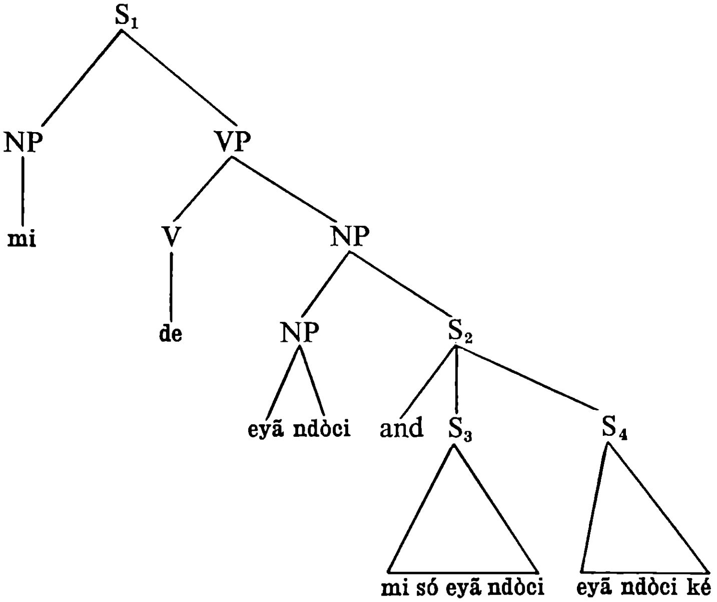
[20] Either, both or neither of the sets of relative markers may be deleted, giving in addition to 70 and 79 :

80. **mi de eyã ndòci na mi só na ké**
81. **mi de eyã ndòci só na ké na**

Informant response varies as to the acceptability of sentences with more than one **na . . . na.**

One alternative would appear to be to derive **ké** and **só** from co-ordinated sentences, so the underlying structure of 70 would be 82 rather than 78 :

82.



This is supported by the possibility of having the co-ordinate enclitic conjunction **ci** in e.g.

83. **mi de eyā ndòci na ké na na mi ci só na** [21] I have something which is left over and which I have hidden

We still, however, have the problem of why only one of S_3 and S_4 can have T_{vr} apply to it. This would be explicable if we ordered T_{vr} after conjunction reduction, equi-NP deletion and relative clause reduction, because S_3 and S_4 would then not branch and so be deleted by Ross's rule of tree-pruning.[22] However, as paraphrastic relative and non-relative clauses allow of repeated verbs, T_{vr} should clearly precede relative clause reduction. This problem seems insoluble even if relative clause reduction were last-cyclic,[23] as in this case the embedded S's would never become eligible for pruning. A second alternative, namely of allowing co-ordinate VP's, also fails to work, as the internal structure of S_3 and S_4

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[21] Example 83 in fact underlies 71 not 70. The **ci** co-ordinator can only be enclitic to a noun phrase (here the pronoun **mi**) and not the relative marker **na**, so the example underlying 70, viz. ***mi de eyā ndòci na mi só na na ci ké na** is ungrammatical as it stands, as it must undergo obligatory **ci** deletion.

[22] Cf. Ross (1966).

[23] Cf. Rosenbaum and the references in n. 19.

is radically different, in that they have different subjects. The only apparent ways of blocking the deviant sentences 76 and 77 seem to be (i) imposing some kind of output condition [24] on the juxtaposition of repeated verbs, or (ii) marking the rule T_{vr} as applying to the dominating S and not the dominated S's where the latter are co-ordinate. Both of these are unsatisfactory, and I leave the matter open.

It should be noted that there is no limit to the number of verbs which can appear in serial construction; but only one of them can ever be repeated; compare:

84. **mi de eyì ké só kű**   I have corn left hidden to sell
corn sell
85. **mi de eyì ké ké só kű**   I have corn left over hidden to sell
86. **mi de eyì ké só só kű**   I have corn left hidden away to sell
87. ***mi de eyì ké ké só só kű**

In fact, for reasons I don't understand

88. ***mi de eyì ké só kű kű**

is also out.

Examples such as these tend to be on the borders of acceptability even if grammatical, and it may be this, allied with semantic improbability, which excludes 88.

An apparent counter-example to the claim that T_{vr} can only apply once to a given S is provided by the following:

89. **musa bé sa yi mi**   Musa came to greet us
(**sami** is a separable verb meaning ' to greet ')
90. **musa bé sa yi mi sa**   Musa did come to greet us
91. **musa bé sa yi mi sa sa**   all Musa did was come to greet us
92. **mi è wǎ eci**   I want yam
want yam
93. **mi è wǎ eci wǎ**   I do want yam
94. **mi è wǎ eci wá wǎ ni**   all I want is yam
(**ni** is an emphatic particle).

But in those examples where the verb is repeated twice, the status of the last occurrence (call it V_3) is different from that of the first two occurrences (V_1 and V_2) in that V_1 and V_2 remain ' verbs ' for the purpose of subsequent transformation, whereas V_3, while not obviously assignable to any specific non-verbal category, is not a verb in the same way.

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[24] Cf. Perlmutter.

It has been described elsewhere [25] how, in certain subordinate clauses, a copy of the subject pronominal element must be adjoined to the left of every verbal element, be this free verb, preverb or auxiliary. Typically this happens after verbs or conjunctions which govern the ‘ subjunctive ’ in other languages. Thus the form

95. **yi gãdã** we entered
enter

corresponds to the subjunctive form

96. **(yi è wǎ) yi gã yi dã** (we wish) to enter

(Note that **gãdã** is of the structure $[\underset{V}{Vb} = \underset{V}{Vb}]$, the second syllable of verbs of structure $[\underset{V}{Vb} - \underset{V}{Nom}]$, e.g. **boyé** below, do not take the copied subject element).

Likewise

97. **u lá mi boyé** he impressed me
Prev impress

corresponds to the subjunctive form

98. **u bé ebó u lá u bo mi yé** [26] he came in order to impress me

We can formalize this relation as :

$$\begin{array}{lllllll} T_{copy} & X & NP_{[\alpha]} & [+V] & Y & ([+V] & W)^{*} \\ & 1 & 2 & 3 & 4 & 5 & 6 \rightarrow 1\ 2\ \mathrm{Pro}\ \alpha + 3\ 4\ \mathrm{Pro}\ \alpha + 5\ 6 \end{array}$$ [27]

where X contains the feature subjunctive,
α represents the features of person and number necessary to characterize the pronominal correlate of the NP copied.
(If the NP is already a pronoun a subsequent transformation will delete the second of two identical contiguous pronouns.)

With the construction resulting from T_{vr} it is obligatory to have this copied pronominal element before V_1 and V_2. Thus :

99. **u ba cigbǎ̃ ba** he cut wood all day (= 10)

corresponds to :

100. **(mi dzĩ musa tílè) u ba cigbǎ̃ u ba** I forced Musa to cut wood all day
do force

101. ***mi dzĩ musa tílè u ba cigbǎ̃ ba**

whereas with V_3 it is impossible to have this pronominal :

---

[25] Smith (1967a), 9 f.

[26] The variation in the position of the object (**mi**) in the environment of the preverb **lá** is regular. **ebó** = ‘ in order to ’ and **wá** = ‘ to wish ’ both govern the subjunctive.

[27] The asterisk indicates an unlimited number of repetitions of the bracketed sequence. Cf. Chomsky and Halle, 344.

102. **u ba cigbằ ba ba** all he did was cut wood

103. **mi dzī musa tílè u ba cigbằ u ba ba** I forced Musa to cut just wood

104. ***mi dzī musa tílè u ba cigbằ u ba u ba**

To account for these examples it is necessary to order T_{vr} before the transformation copying rule and then have another transformation T_{vr_2} after T_{copy}.

$$\begin{array}{llllllll} T_{vr_2} & X & \underset{V}{\Big[}\mathrm{Vb}\left(=\begin{Bmatrix}\mathrm{Vb}\\ \mathrm{Nom}\end{Bmatrix}\right)\underset{V}{\Big]} & (NP) & Vb & Y & & \\ & 1 & \;2 \qquad\quad 3 & 4 & 5 & 6 \rightarrow 1\ 2\ 3\ 4\ 5 + 5\ 6 \\ & \multicolumn{5}{l}{\text{Condition}: \ 2 = 5} \end{array}$$

There is no evidence for the precise formulation of T_{vr_2}, whose SC could equally well be: $1 \ldots 6 \rightarrow 1\ 2\ 3\ 4\ 5 + 2\ 6$
or: $1 \ldots 6 \rightarrow 1\ 2\ 3\ 4\ 2 + 5\ 6$, etc.
but there is some semantic and phonological evidence, as well as the syntactic evidence given, in favour of having two repeat transformations which might appear conflatable. Although in some cases the meaning of a construction with two repetitions of Vb is the same as one with one, or only stylistically different (cf. 90, 91 and 139, 140), there is also usually the added nuance of ' all that happened was . . .' or some kind of derision. In other words, in a complete grammar, T_{vr_1} and T_{vr_2} would have SD's potentially differentiated by the presence or absence of presentential attitude markers such as ' Derision ', etc.

There is tonal evidence that V_2 is verbal when final, but non-verbal when pre-final, and that V_3 is verbal, even though syntactically it is non-verbal.

Verbs beginning with a voiced consonant and having inherently high tone, regularly change this high tone to rising in a number of environments.[28] One such case is when the verb is not the first verb in the sentence. Thus we have:

105. **u bé** he came

106. **u zí** he returned

107. **u bé zǐ** he came and returned

where the inherent high tone of **zí** changes to a rise after **bé**. Similarly in 108 (= 12) **bé** becomes **bĕ** in its repeated form.

108. **u bé bidă bĕ** he finally came to Bida

(cf. also example 93, etc.)

However, with a second repetition of this verb there is no change in the tone of V_2, but V_3 behaves like a normal non-initial verb. Cf. example 94 above, and also:

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[28] Cf. Smith (1969) for a detailed treatment of this phenomenon.

109. **u gbí mi gǎ** he asked me

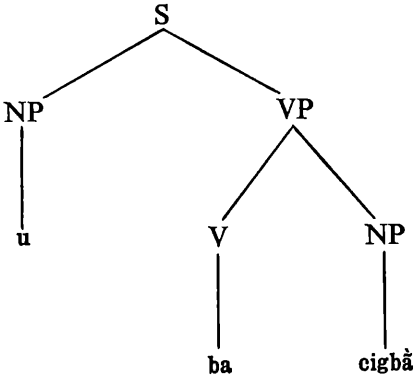
(**gbígǎ** is a separable verb meaning ' to ask ')

110. **u gbí mi gǎ gbǐ** he did ask me

111. **u gbí mi gǎ gbí gbǐ** all he did was ask me

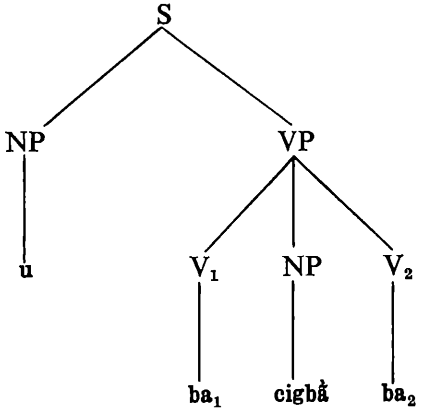
Given T_{vr_2} as the origin for e.g. 111, we shall have to formulate an *ad hoc* readjustment rule [29] to exempt V_2 from the tone-shift rule in the environment before V_3. But the alternative of conflating T_{vr_1} and T_{vr_2}, or of having them both before T_{copy} would necessitate setting up a highly counter-intuitive d.c.s. and/or formulating readjustment rules to apply both to V_2 and to V_3. Specifically, given the underlying structure 112 for 9:

112.



T_{vr_1} would give the d.c.s. 113 for 10 (= 99):

113.



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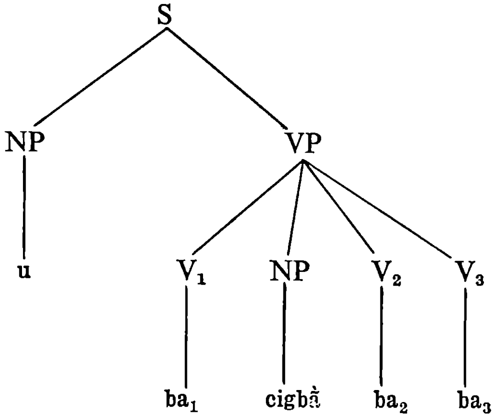
[29] Cf. Chomsky and Halle, 9–11.

which would then be subject to T_{copy} in the relevant environment, to provide 100, and T_{vr_2} would give the d.c.s. 114 for 102:

114.



which, because of the ordering of the rules, would not be subject to T_{copy} but would still allow V_3 to behave like a verb in the phonology. This seems entirely preferable to setting up some d.c.s. parallel to 114 but with **ba**$_3$ dominated by, say, N, or adjoined quite differently.

In general T_{vr_1} is optional, but in certain circumstances it becomes obligatory. This is the case in subordinate clauses introduced by **àfàce**—' even if ', **àfè(dé)**—introducing the apodosis of a sentence whose protasis begins with **gòmà** ' rather ', and some others.[30] Thus we have:

115. **mǐ à lo àfàce ele à wu mi wu** I'll go even if I get soaked
rain beat

116. ***mi à lo àfàce ele à wu mî**

117. **mǐ à gǐ edzè à àfàce madã** I shall not eat even if I'm hungry
eat food not hunger
à gũ̀ mi gũ̀
gnaw

118. ***mǐ à gǐ edzè à àfàce madã à gũ̀ mî**

119. **gòmà na mi à zè wuzì na** rather than become a slave I shall die
become slave
àfè dé mi à, tsu tsu
die

120. ***gòmà na mi à zè wuzì na**
àfè dé mi à tsu

There are two exceptions to this obligatory repetition: first, if the clause

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[30] Usage varies with the other examples, so I shall restrict myself to those given.

introduced by **àfàce** is initial, the repetition appears to be optional; second, if the clause introduced by **àfè dé** is negative, the repetition is also optional. Thus, beside 115 and 116, we have:

121. **àfàce ele à wu mî, mi à lo** — even if I get soaked I'll go

122. **àfàce ele à wu mi wu, mi à lo** — (same meaning)

and beside 119 and 120 we have:

123. **gòmà na mi à lă evo yà musa na,** — rather than give the calabash to Musa,
calabash
àfè dé mi à gĭ edzè gĭ à — I'll not eat

124. **gòmà na mi à lă evo yà musa na,** — (same meaning)
àfè dé mi à gĭ edzè à

The first of these restrictions can be accounted for by ordering the transformation which front-shifts the subordinate clause containing **àfàce** (call it T_{fs}) before T_{vr}, and placing the condition on T_{vr} that if T_{fs} has applied T_{vr} is optional, and if T_{fs} has not applied T_{vr} is obligatory.[31] The second restriction can be accounted for by a simple condition on T_{vr}.

A similar interaction is seen with front-shifted adverbials, but in this case the optionality of the subsequent application of T_{vr} is different.

125. **mi dzũ̀ bàbo karayí** — I appeared here quietly
appear quietly

126. **mi dzũ̀ dzũ̀ bàbo karayí** — I did appear here quietly

127. **karayí mi dzũ̀ bàbo** — I appeared here *quietly*

128. ***karayí mi dzũ̀ dzũ̀ bàbo**

That is, if the transformation front-shifting the adverbial (T_{topic}) applies, T_{vr} is impossible, if it does not apply T_{vr} is optional. In certain discourse environments, and for certain speakers, T_{vr} is obligatory if T_{topic} has not applied. For instance, 125 is possible as a simple statement, but in reply to

129. **ke wo dzũ̀ dzũ̀ bàbo na o** — how *did* you appear here?
how

only 126 or 127 is possible.

In general, though not invariably, a question containing a repeated verb elicits a reply also containing a repeated verb. Thus:

130. **wũ è lotũ tòsí:** — is he working now?
work now

---

[31] In fact the correct output could also be achieved by ordering T_{vr} before T_{fs} and reversing the conditions.

(where the mark of the question is lengthening of the final vowel) would elicit the reply:

131. **ẽẽ, wũ è lotũ tòsí** yes, he's working now

but not the otherwise grammatical

132. **ẽẽ, wũ è lotũ lo tòsí** yes, he's really working now

whereas

133. **wũ è lotũ lo tòsí:** is he really working now?

would elicit 132 but not 131.

There also appears to be some connection with a ' given ' versus ' new ' function, e.g.

134. **musa ma gbí o gả dê** did Musa ask you anything?

(**ma** and **dê** are contrastive and exclamatory particles respectively) would elicit the reply:

135. **ẽẽ, u gbí mi gả** yes, he did

but not 136 or 137:

136. ***ẽẽ, u gbí mi gả gbǐ**

137. ***ẽẽ, u gbí mi gả gbí gbǐ**

whereas the question

138. **ke musa bé yī dzī zì èbǎ o bo** what did Musa come to you for?

(**ke** = ' what ', **yī** is an infinitival particle, **zì** is a purposive particle, **èbǎ o bo** is a locative adverbial meaning literally ' place your at ')
would elicit the replies:

139. **u bé gbí mi gả gbǐ** he came to ask me a question

140. **u bé gbí mi gả gbí gbǐ** he just came to ask me a question

but not

141. ***u bé gbí mi gả**

Further investigation of these phenomena is necessary.

With regard to 129, it should also be noted that the presence in a construction of **ke . . . na** ' how ' almost always acts as a trigger for T_{vr}. There is thus no equivalent sentence:

142. ***ke wo dzủ bàbo na o**

and while

143. **ke musa è lotũ na o** how does Musa work?

is just acceptable, the unmarked form is

144. **ke musa è lotũ lo na o** how does Musa work?

By contrast with **ke . . . na** which normally requires T_{vr} to operate, the periphrastic form **ki lá . . .** 'why?' (lit. 'what made . . . ?') normally precludes the operation of T_{vr}. Thus:

145. **ki lá wo ci dzũ̀ bàbo** why did you appear here?

146. ***ki lá wo ci dzũ̀ dzũ̀ bàbo**

One further restriction needs to be mentioned, namely that a verb functioning as a 'preposition'[32] cannot repeat, even though it is clearly related to its homophonous free verb, and is verbal in function by the criterion of adjunction by a copied pronominal element.

147. **u yà mi evo** he gave me a calabash

148. **u yà mi evo yà** he just gave me a calabash

149. **u lá evo yà mî** he gave me a calabash
take

150. **u lá evo lă yà mî** he took a calabash and gave it me

151. ***u lá evo yà mi yà**

152. **mi dzĩ musa tílè u lá evo u yà mî** I forced Musa to give me a calabash

Other, lexical, exceptions to T_{vr} exist. Thus:

153. **u bá** he is diligent

is homophonous with

154. **u bá** it is sour

but the repeated form

155. **u bá bă**

can only mean 'it is just sour' and not 'he is just diligent'. As all the subclasses of verb hitherto recognized[33] appear in general to allow T_{vr} the only way of treating such cases seems to be by marking them as exceptions to this rule in the lexicon.

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[32] Cf. Ansre.

[33] Cf. Smith (1969) and the examples cited above.

APPENDIX

Simplified Phrase Structure rules presupposed in the preceding discussion

$$\text{S} \rightarrow \left(\left\{\begin{matrix}\text{Q} \\ \text{Imp}\end{matrix}\right\}\right) \text{ (neg) (emph) NP VP (Adv)}$$

$$\text{VP} \rightarrow \text{V (NP) (NP) (Adverb)}$$

$$\text{NP} \rightarrow \left\{\begin{matrix}\text{NP S} \\ \text{N (S)}\end{matrix}\right\}$$

$$\text{V} \rightarrow \left[\text{Vb}\left(=\left\{\begin{matrix}\text{Vb} \\ \text{Nom}\end{matrix}\right\}\right)\right]$$ [34]

Ordered list of transformations (not formalized) discussed in the text

1. Adverb preposing
2. Subordinate clause switch
3. Verb repeat 1
4. Subordinate clause pronoun copying
5. Verb repeat 2
6. Object shift

Final form of T_{vr1}

$$\begin{array}{cccccl} \text{X} & {}_{\text{V}}\!\left[\text{Vb}\right. & \left.\left(=\left\{\begin{matrix}\text{Vb} \\ \text{Nom}\end{matrix}\right\}\right)\right]_{\text{V}} & \text{(NP)} & \text{(NP)} & \text{Y} \\ 1 & 2 & (3) & (4) & (5) & 6 \rightarrow 1\ 2\ (3)\ (4)\ (5) + 2\ 6 \end{array}$$

Conditions: where X does not contain Imp
where X does not contain neg (for some speakers)
optional unless X contains **àfàce** and T_2 has not applied (and for **àfèdé** if X does not contain neg)
impossible if T_1 has applied.

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[34] Cf. Chomsky (1965), 187–8, for the problem of branching rules applying to complex symbols.

REFERENCES

ANSRE, G., 1966, ' The verbid—a caveat to *serial verbs* ', *JWAL*, III, 29–32.

CHOMSKY, N., 1962, ' Logical basis of linguistic theory ', in Proceedings IX International Congress of Linguistics, Mouton, The Hague.

CHOMSKY, N., 1965, *Aspects of the theory of syntax*, M.I.T. Press, New York.

CHOMSKY, N., 1968, *Language and mind*, Harcourt, Brace and World, New York.

CHOMSKY, N., and M. HALLE, 1968, *The sound pattern of English*, Harper and Row, New York.

LAKOFF, G., 1965, *On the nature of syntactic irregularity*, Indiana Ph.D. thesis, Report no. NSF-16 to the National Science Foundation, Cambridge, Mass. : The Computation Laboratory of Harvard University.

PERLMUTTER, D., 1968, *Deep and surface structure constraints in grammar*, M.I.T. Ph.D. thesis.

ROSENBAUM, P., 1967, *The grammar of English predicate complement constructions*, M.I.T. Press.

ROSS, J., 1966, *A proposed rule of tree-pruning*, in Report no. NSF-17 to the National Science Foundation, Cambridge, Mass. : The Computation Laboratory of Harvard University.

ROSS, J., 1967, *Constraints on variables in syntax*, M.I.T. Ph.D. thesis.

ROSS, J., 1968, ' On the cyclic nature of English pronominalisation ', in *To honor Roman Jakobson*, Vol. III, 1669–82, Janua Linguarum : Series Maior, Vols. XXXI–XXXIII.

SMITH, N., 1964, *A phonological and grammatical study of the verb in Nupe*, London Ph.D. thesis.

SMITH, N., 1967a, *Outline grammar of Nupe*, S.O.A.S., London.

SMITH, N., 1967b, ' The phonology of Nupe ', *JAL*, VI, 153–69.

SMITH, N., 1969, ' The verb in Nupe ', *ALS*, X, 90–160.

TONGUE ROOT POSITION IN THE VOLTA-COMOE LANGUAGES

AND ITS SIGNIFICANCE FOR THE RECONSTRUCTION OF THE ORIGINAL BANTU VOWEL SOUNDS

By JOHN STEWART

As Professor Guthrie points out,[1] the original set of realizations of Common Bantu ***i**, ***u** [2] was most probably either (1) **i**, **u** or (2) **ẹ**, **ọ**,[3] as these are the two principal sets of realizations which occur in those present-day Bantu languages in which Common Bantu ***i**, ***u** have not merged with ***į**, ***ų**.

The purpose of the present article is to attempt, in the light of recent work on tongue root position in the languages of the Volta-Comoe group, to choose between (1) **i**, **u** and (2) **ẹ**, **ọ** on the basis of the relative plausibility of the two sound-shifts they respectively imply, namely (1) **i**, **u** → **ẹ**, **ọ** and (2) **ẹ**, **ọ** → **i**, **u**.

The Volta-Comoe languages

The Volta-Comoe languages (Greenberg's ' Akan ' [4]) constitute an apparent ancestral group. The present study is based on ten languages or dialects investigated by the writer at first hand, and on the Akuapem dialect of Akan as described by Christaller.[5] Table I shows these eleven languages or dialects and their classification by apparent ancestral subgroups.

A study of the regular phonetic correspondences which operate across the eleven selected languages or dialects provides strong evidence for the unity of the Tano and Guan subgroups. The languages or dialects of each of these subgroups appear to have undergone a considerable number of common phonetic innovations, and the common Tano innovations appear to be almost completely different from the common Guan innovations. Only one convincing phonetic innovation, however, has so far been found as evidence for the unity of the Ono subgroup.

Within the Guan group, the phonetic evidence for the Nkonya-Krachi subgroup is quite strong, but that for the Awutu-Larteh subgroup is weak.

Within the Tano group, Anyi-Bawule and Akan are not language groups but individual languages. Within Akan, the phonetic evidence for the Southern subgroup, which includes the Fante and Akuapem dialects, is weak.

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[1] M. Guthrie, *Comparative Bantu*, Vol. I, Gregg, Farnborough, 1967, 61.

[2] All quotations of Professor Guthrie's Common Bantu are in the original transcription.

[3] The phonetic symbols **i**, **u**, **ẹ**, **ọ** as used here are equivalent to the IPA symbols **ɩ**, **ω**, **e**, **o** respectively; see under ' Tongue root position ' in the present article.

[4] J. H. Greenberg, *The languages of Africa*, Mouton, The Hague, 1963, 8.

[5] J. G. Christaller, *A grammar of the Asante and Fante language called Tshi* and *A dictionary of the Asante and Fante language called Tshi*, Basel Evangelical Missionary Society, Basel, 1875 and 1881 respectively.

TABLE I

1. Ono (O)	Betibe	(Be)
	Abure	(Ab)
2. Tano (T)		
(*a*) Anyi-Bawule (AB)	Anyi	(An)
	Bawule	(Ba)
(*b*) Akan (AK)		
(i) Southern (SN)	Fante	(Fa)
	Akuapem	(Ak)
(ii) Asante	Asante	(As)
3. Guan (G)		
(*a*) Awutu-Larteh (AL)	Awutu	(Aw)
	Larteh	(La)
(*b*) Nkonya-Krachi (NK)	Nkonya	(Nk)
	Krachi	(Kr)

Table I shows the eleven languages or dialects on which the present study is based, classified by apparent ancestral subgroups. Akan and Betibe are Greenberg's ' Twi ' and ' Metyibo ' respectively.

Tongue root position

Table II shows in Cannell's transcription [6] the most important of the oral vowel sounds which occur in the Volta-Comoe languages. Cannell's system of vowel transcription is used throughout this article except in quotations of Professor Guthrie's Common Bantu.

The unadvanced/advanced terminology in Table II refers to the position of the

TABLE II

	front		non-front non-back	back	
	close	non-close non-open	open	non-close non-open	close
unadvanced	i [ɩ]	e [ɛ]	a	o [ɔ]	u [ɷ]
advanced	ị [i]	ẹ [e]		ọ [o]	ụ [u]

Table II gives the main oral vowel sounds of the Volta-Comoe languages. The transcription is Cannell's ; the IPA transcription, where different, is shown in brackets.

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[6] W. M. Cannell, *A concise Fante–English dictionary*, Woolmer, London, 1886.

tongue root. As the subscript dot which is used to mark the advancing suggests, the advanced sounds are closer than their unadvanced counterparts ; this is due to the advancing of the root of the tongue pushing the dorsum higher.

All but two of the eleven selected languages or dialects have vowel harmony based on the unadvanced/advanced opposition : as a general rule words consisting of a one-morpheme stem with or without affixes have either unadvanced or advanced sounds throughout, e.g. Asante **tú**, put; **tụ́**, pull out; **wúbétú**, you will put; **wụ́bẹ́tụ́**, you will pull out. If it had not been for this vowel harmony no objection might ever have been seen to taking the secondary differences in aperture as the basic differences between the unadvanced and the advanced vowel sounds and it might never have been thought necessary to look for any third dimension such as unadvanced/advanced. It would have been surprising, however, for neither of the harmonizing sets of vowels to have had any common articulatory feature, and neither the unadvanced vowels nor the advanced vowels have a common place either on the close/open scale or on the front/back scale.

Tongue root position is discussed in some detail by Stewart [7] and Pike.[8] The unadvanced and advanced sounds are Chomsky and Halle's ' covered ' and ' noncovered ' sounds respectively.[9]

Vowel shifts in the Volta-Comoe unsuffixed monosyllabic stem

This section gives the original vowel system which it appears necessary to postulate in order to account for the regular vowel correspondences which have so far been observed in unsuffixed monosyllabic stems in the eleven languages or dialects examined, and the vowel shifts which relate the postulated original vowels to the regular vowel correspondences.

In the list of shifts the apparent ancestral subgroups are treated in turn, in the order in which they are given in Table I. Each shift is designated by a number which gives the subgroup or language or dialect which it affects and the place of the shift in the series of shifts affecting the same subgroup or language or dialect ; the shift *G.NK.2*, for instance, is the second shift affecting the Nkonya-Krachi subgroup of the Guan subgroup. In the case of a shift which is the last to apply to any one of the eleven terminal languages or dialects, and which thus yields the vowel system postulated for the inherited Volta-Comoe stock in that language or dialect, the name of the language or dialect is added in brackets after the number ; the shift *G.NK.Kr.2* (Krachi), for instance, yields the vowel system postulated for the inherited Volta-Comoe stock in present-day Krachi. Other conventions adopted in the presentation of the shifts are explained as they are introduced.

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[7] J. M. Stewart, ' Tongue root position in Akan vowel harmony ', *Phonetica*, XVI, 1967, 185–204.

[8] K. L. Pike, ' Tongue root position in practical phonetics ', *Phonetica*, XVII, 1967, 129–40.

[9] N. Chomsky and M. Halle, *The sound pattern of English*, Harper and Row, New York, 1968, 314–5.

The postulated original Volta-Comoe vowel system is as follows :

i e a o u
ị ẹ ọ ụ
ĩ ã ũ
ị̃ ụ̃

The postulated subsequent vowel shifts, and, where relevant, the modified vowel systems which they imply, are as follows :

O.Be.1.
In any context.

$$\begin{tikzcd}
\text{(i)} \arrow[dr] & \text{e} & \text{a} & \text{o} & \text{(u)} \arrow[dl] \\
\text{ị} & \text{ẹ} & & \text{ọ} & \text{ụ} \\
\text{ĩ} & & \text{ã} & & \text{ũ} \\
\text{ị̃} & & & & \text{ụ̃}
\end{tikzcd}$$

Note : The parentheses indicate that the sounds enclosed are presumed not to have continued to occur in unsuffixed monosyllabic stems after the shift.

O.Be.2 (Betibe).
Only after nasal consonant.

$$\begin{tikzcd}
 & \text{e} & \text{a} & \text{o} & \\
\text{ị} & \text{ẹ} & & \text{ọ} & \text{ụ} \\
\text{ĩ} \arrow[r] & |\text{ẽ}| & \text{ã} & |\text{õ}| & \text{ũ} \arrow[l] \\
\text{ị̃} & & & & \text{ụ̃}
\end{tikzcd}$$

Note : The vertical bars indicate that the sounds enclosed are presumed not to have occurred in unsuffixed monosyllabic stems immediately prior to the shift.

O.Ab.1 (Abure).
Only before nasal consonant.

$$\begin{tikzcd}
\text{i} & \text{e} \arrow[dd, bend right] & \text{a} \arrow[dd] & \text{o} \arrow[dd, bend left] & \text{u} \\
\text{ị} & \text{ẹ} & & \text{ọ} & \text{ụ} \\
\text{ĩ} & |\text{ẽ}| & \text{ã} & |\text{õ}| & \text{ũ} \\
\text{ị̃} & & & & \text{ụ̃}
\end{tikzcd}$$

T.1.
Only before nasal consonant.

i, u, ị, ụ → ĩ, ũ, ị̃, ụ̃

T.AB.1.
Only in final position.

$$\begin{tikzcd}
\text{i} & \text{e} & \text{a} & \text{o} & \text{u} \\
\text{ị} & \text{ẹ} & & \text{ọ} & \text{ụ} \\
\text{ĩ} \arrow[r] & |\text{ẽ}| & \text{ã} & |\text{õ}| & \text{ũ} \arrow[l] \\
\text{ị̃} & & & & \text{ụ̃}
\end{tikzcd}$$

T.AB.An.1 (Anyi).
In any context.

$$\begin{tikzcd}
\text{i} & \text{e} & \text{a} & \text{o} & \text{u} \\
\text{ị} & \text{ẹ} & & \text{ọ} & \text{ụ} \\
\text{(ĩ)} \arrow[r] & \text{ẽ} & \text{ã} & \text{õ} & \text{(ũ)} \arrow[l] \\
\text{ị̃} & & & & \text{ụ̃}
\end{tikzcd}$$

T.AB.Ba.1.
Only between preceding oral and following nasal consonant.

ũ, ụ̃ → u, ụ
õ --→ o

Note : The broken arrow indicates that the shift is presumed to have had no effect ; *T.AB.Ba.1* is thus presumed to have affected all back nasal vowels in the context specified, but all the nasal vowels occurring in that context immediately prior to the shift are presumed to have been close.

T.AB.Ba.2.
Only after voiced non-dorsal (i.e. labial or apical) consonant.

i	e	a	o	u
ị	ẹ		ọ	ụ
ĩ →	ẽ	ã	õ	←(ũ)
ị̃				ụ̃

T.AB.Ba.3.
Only after oral voiced non-dorsal (i.e. labial or apical) consonant.

ĩ, ị̃, ẽ → i, ị, e
ã, õ, ụ̃ --> a, o, ụ

T.AB.Ba.4 (Bawule).
In any context.

(i)	e	a	o	(u)
↓				↓
ị	ẹ		ọ	ụ
(ĩ)	ẽ	ã	õ	
↓				
ị̃				ụ̃

T.AK.1.
Except where the syllable begins with a voiceless continuant consonant.

ẹ, ọ → e, o

T.AK.2.
Only after **g**, **gy**, **gw**.

i, e, o, u, ĩ, ũ → ị, ẹ, ọ, ụ, ị̃, ụ̃

T.AK.SN.1.
Only after ‘ palatal ’ (front dorsal) consonant.

o, u, ọ, ụ, ũ, ụ̃ → e, i, ẹ, ị, ĩ, ị̃

T.AK.SN.2 (Akuapem).
Only between preceding ‘ palatal ’ (front dorsal) consonant and following **w**.

i, e, ị, ẹ → u, o, ụ, ọ
ĩ, ị̃ --> ũ, ụ̃

Note : Christaller does not represent this shift in his written form of the Akuapem dialect ; he observes that ‘ **ew**, **iw**, **ịw** pass over into **ow**, **uw**, **ụw** ; but we usually retain the palatal vowels, when the Akem dialect has them without the final **w** ’.[10]

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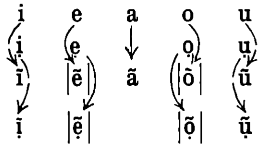
[10] *Grammar* (see n. 5, above), 11. The vowel symbols are not Christaller’s ; see under ‘ Tongue root position ’ in the present article.

T.AK.SN.Fa.1.
Only before w.

i, e, ị, ẹ → u, o, ụ, ọ
ĩ, ị̃ - -→ ũ, ụ̃

T.AK.SN.Fa.2.
Only before nasal consonant.



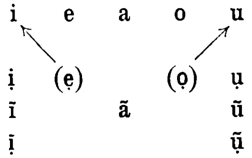
T.AK.SN.Fa.3.
Only after gw̃.

ẹ, ọ, ẹ̃, ọ̃ → i, u, ĩ, ũ

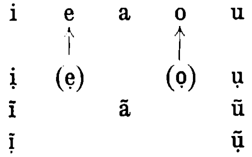
T.AK.SN.Fa.4 (Fante).
Only between preceding rounded 'palatal' (front dorsal) consonant and following ỹ (which latter is simultaneously replaced with w̃).

ẽ, ẹ̃ → õ, ọ̃
e, ẹ - -→ o, ọ

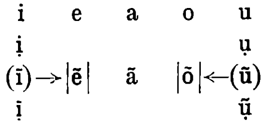
T.AK.As.1 (Asante).
In any context.



G.1.
In any context.



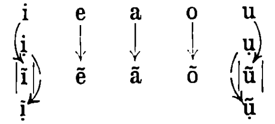
G.2.
In any context.



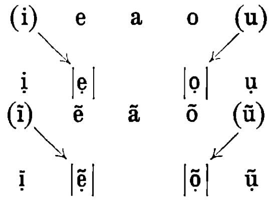
G.AL.1.
Only before nasal consonant.

ị, ụ → ị̃, ụ̃

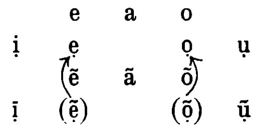
G.AL.Aw.1.
Only before nasal consonant.



G.AL.Aw.2.
In any context.



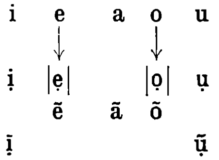
G.AL.Aw.3 (Awutu).
In any context.



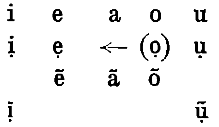
G.AL.La.1.
Only before y.

a → e

G.AL.La.2.
Only in final position.



G.AL.La.3.
In any context.



G.AL.La.4.
Only in final position.

a, ã → e, ẽ

G.AL.La.5 (Larteh).
Only before r.

i, u → e, o

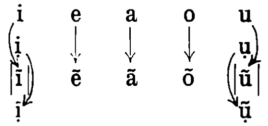
G.NK.1.
Only after oral consonant.

ẽ, ã, õ, ị̃, ụ̃ → e, a, o, ị, ụ

G.NK.2.
Only before r.

o, u, ụ → e, i, ị
õ, ụ̃ → ẽ, ị̃

G.NK.3.
Only before nasal consonant.



G.NK.4 (Nkonya).
Only before m.

ẽ, ã, õ → ĩ, ĩ, ũ
e, a, o → i, i, u

G.NK.Kr.1. a, ã → e, ẽ
Only in final position.

G.NK.Kr.2 (Krachi).
Only before ŋ.
i e a o u
ị ụ
ĩ ẽ |ə̃| ← ã õ ũ
ị̃ ụ̃

The regular vowel correspondences on which this reconstruction is based are illustrated in Table III, which shows sixteen stems each of which displays one of the regular correspondences presumed to be descended from an original unadvanced close vowel (i.e. i or u or ĩ or ũ). Some of the entries in the table include hyphens, e.g. Larteh **o-si**, father ; in such cases the stem under consideration is represented by the part of the entry which follows the last hyphen ; the remainder of the entry represents in most cases either a class-like nominal prefix or a reduplication. Three of the Abure entries are enclosed in brackets ; in these the vowel is e or o where the usual correspondences, and consequently the above reconstruction, lead one to expect i or u respectively ; the deviation is almost certainly the result of a regular shift which occurred in circumstances which have not yet been determined. All the consonant correspondences displayed by the stems are completely regular. No tones are shown ; the reconstruction of the original tones has been greatly hampered by the widespread neutralization of tonal contrasts ; Akuapem, for instance, which is by far the best documented of all the languages or dialects, has no tonal contrasts whatsoever in verbal or nominal monosyllabic stems except in a small subclass of noun stems (the ' inalienable possessions ' subclass). Under each entry in which the stem vowel differs from the postulated original Volta-Comoe vowel, the shifts which account for the differences are listed.

Most of the source material on the four Guan languages and on Asante will be found in the writer's *Awutu, Larteh, Nkonya and Krachi with glosses in English and Twi*, Comparative African Wordlists, No. 1, Legon, University of Ghana, Institute of African Studies, 1966 ; and much of that on Fante in his *An analysis of the structure of the Fante verb*, Ph.D. thesis, University of London, 1963. The source material on the remaining four of the ten languages or dialects investigated at first hand, namely Betibe, Abure, Anyi and Bawule, is unpublished.

Shifts between unadvanced close and advanced non-close

It will be seen that it has been found necessary to postulate two shifts in each direction between i, u and ẹ, ọ, as follows :

O.Be.1. (i, u) → ẹ, ọ
T.AK.SN.Fa.3. ẹ, ọ, ẹ̃, ọ̃ → i, u, ĩ, ũ after gẅ
T.AK.As.1. (ẹ, ọ) → i, u
G.AL.Aw.2. (i, u, ĩ, ũ) → |ẹ, ọ, ẹ̃, ọ̃|

TABLE III

	father	under	innocence	be cooked	on	ear	be drunk	wash	sink	swallow	pass	dawn (v)	two	drink	fight	roast
Proto-Volta-Comoe	*si	*si	*bĩm	*biỹ	*su	*su	*bur	*fur	*mĩm	*mĩn	*sĩn	*kĩ	*ỹũ	*nũm	*kũ	*tũ
Betibe *O.Be.*	ẹ-hẹ *O.Be.1.*		bẹ *O.Be.1.*			o-họ *O.Be.1.*					hĩ		a-ỹũ		kũ	tũ-tũ
Abure *O.Ab.*	(e-ye)			vi	(wo)	(o-wo)	vu			ṽĩ	ỹĩ		l̃ũ	hũ	tu-tũ
Anyi *T.AB.An.*	si		bẽ *T.1.* *T.AB.An.1.*	bẽ *T.1.* *T.AB.An.1.*	su	su	bu		mẽ *T.AB.An.1.*	mẽ *T.AB.An.1.*	sẽ *T.AB.An.1.*		ỹõ *T.AB.1.*	nõ *T.AB.An.1.*	kõ *T.AB.1.*	
Bawule *T.AB.Ba.*	sị *T.AB.Ba.4.*		be *T.1.* *T.AB.Ba.2.* *T.AB.Ba.3.*		sụ *T.AB.Ba.4.*	sụ *T.AB.Ba.4.*			mẽ *T.AB.Ba.2.*	mẽ *T.AB.Ba.2.*	sị *T.AB.Ba.4.*	cẽ *T.AB.1.*	ỹõ *T.AB.1.*	nõ *T.AB.Ba.2.*		tõ *T.AB.1.*
Fante *T.AK.SN.Fa.*		a-si	bĩm *T.1.*	bĩn *T.1.*				hur	mĩm	mĩn	sĩn	cĩ		nũm	kũ	tũ
Akuapem *T.AK.SN.Ak.*	o-si	a-si	bĩm *T.1.*	bĩŋ *T.1.*	su			huru	mĩm	mĩnĩ		cĩ		nũm	kũ	tũ
Asante *T.AK.As.*	o-si	a-si	bĩm *T.1.*	bĩỹ *T.1.*	su		buru	huru	mĩm	mĩnĩ	sĩnĩ	cĩ	e-nũ	nũm	kũ	tũ
Awutu *G.AL.Aw.*	sẹ *G.AL.Aw.2.*	a-ịn-sẹ *G.AL.Aw.2.*	bẹ *G.AL.Aw.2.*		ẹ-sọ *G.AL.Aw.2.*		bọ *G.AL.Aw.2.*	fọ *G.AL.Aw.2.*	mẽ *G.2.*	mẽ *G.2.*		kẽ *G.2.*	ẹ-ỹõ *G.2.*		kõ *G.2.*	
Lartch *G.AL.La.*	o-si	a-si			su	su	bo *G.AL.La.5.*	fo *G.AL.La.5.*		mẽ *G.2.*		kẽ *G.2.*	ỹõ *G.2.*		kõ *G.2.*	tõ *G.2.*
Nkonya *G.NK.Nk.*	o-si	a-ya-si			su			fwi *G.NK.2.*	mẽ *G.2.*	mẽ *G.2.*		ke *G.2.* *G.NK.1.*	a-ỹõ *G.2.*		ko *G.2.* *G.NK.1.*	to *G.2.* *G.NK.1.*
Krachi *G.NK.Kr.*	si	ke-si			su-su	ku-su		fwi *G.NK.2.*		mẽ *G.2.*		ke *G.2.* *G.NK.1.*	a-ỹõ *G.2.*		ko *G.2.* *G.NK.1.*	to *G.2.* *G.NK.1.*

Table III sets out sixteen Volta-Comoe stems in their reconstructed original forms and in the forms in which they occur in the languages and dialects in which they have been found to be represented.

The first three of these four shifts are mergers and are therefore not fully comparable with the two possible post-Bantu shifts which we are seeking to choose between. The fourth shift, however, the post-Awutu-Larteh shift, is not a merger, and further resembles the two possible post-Bantu shifts in that it applies in all contexts; moreover, if the Awutu-Larteh nasal vowels are disregarded, the post-Awutu-Larteh shift is the same as one of the possible post-Bantu shifts in that it replaces the system **ị, i, e, a, o, u, ụ** with the system **ị, ẹ, e, a, o, ọ, ụ**.

The possible post-Bantu shift (**i, u**) → |**ẹ, ọ**| therefore seems plausible, provided of course that there are good reasons for suggesting that the original Volta-Comoe sounds were actually **i, u** as postulated and not **ẹ, ọ**. There are in fact two good reasons. Firstly, as can be seen from Table III, eight of the attested languages and dialects, including at least one in each of the three main subgroups, generally have **i, u**, while only two (Awutu and Betibe) generally have **ẹ, ọ**. Secondly, four of the eight languages and dialects which generally have **i, u** (Abure, Anyi, Fante and Akuapem) have **ẹ, ọ** (which we have assumed to be generally inherited unchanged from Proto-Volta-Comoe) in contrast with the **i, u** in at least some contexts, whereas neither of the two languages which generally have **ẹ, ọ** appears to have **i, u** in contrast with the **ẹ, ọ** in any context.

It will be seen that the post-Ono shift *O.Be.1*, namely (**i, u**) → **ẹ, ọ**, differs from the post-Awutu-Larteh shift *G.AL.Aw.2* only in that it is a merger and in that it does not apply to nasal vowels. As Betibe and Awutu are remote from each other both ancestrally and geographically, it is virtually certain that the two shifts were independent of each other. The shift *O.Be.1* thus strengthens the case for the plausibility of the possible post-Bantu shift (**i, u**) → |**ẹ, ọ**|.

The two post-Volta-Comoe shifts in the opposite direction, on the other hand, have very little in common with the possible post-Bantu shift (**ẹ, ọ**) → |**i, u**|. Both are post-Akan shifts, and it appears that in Proto-Akan, as in Christaller's Akuapem, there were large numbers of monosyllabic stems with **i, u** but only a few with **ẹ, ọ**,[11] and that the few with **ẹ, ọ** were wholly eliminated in pre-Asante by *T.AK.As.1*, namely (**ẹ, ọ**) → **i, u**, and partly eliminated in pre-Fante by *T.AK.SN.Fa.3*, namely **ẹ, ọ, ẹ̃, ọ̃** → **i, u, ĩ, ũ** after **gẅ**. Both of these shifts thus differ radically from the possible post-Bantu shift (**ẹ, ọ**) → |**i, u**| in that they both apparently served to eliminate either wholly or partly a distinction with a very low functional load.

The situation in the Volta-Comoe languages thus provides strong evidence for the plausibility of the possible post-Bantu shift (**i, u**) → |**ẹ, ọ**| but none for the plausibility of the possible post-Bantu shift (**ẹ, ọ**) → |**i, u**|.

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[11] The presumed occurrence of only a few monosyllabic stems with **ẹ, ọ** in Proto-Akan is accounted for by shift *T.AK.1*, which is presumed to have replaced **ẹ, ọ** with **e, o** except where the syllable began with a voiceless continuant consonant. It may be noted, however, that the number of monosyllabic stems with **ẹ, ọ** is presumed to have been slightly increased by the subsequent shift *T.AK.2*.

Shifts eliminating unadvanced close vowels

It has been seen that there are good reasons for suggesting that Proto-Volta-Comoe had the unadvanced close vowels i, u, and that in eight of the eleven attested languages and dialects these vowels generally survived unchanged, while in two others they were generally replaced with ẹ, ọ. In Bawule, the remaining dialect, they were generally replaced with ị, ụ by the post-Anyi-Bawule shift *T.AB.Ba.4*, namely (i, u, ī) → ị, ụ, ị̄, as Table III illustrates.

The shifts postulated as having replaced the postulated original Volta-Comoe i, u with ẹ, ọ in pre-Awutu and pre-Betibe and with ị, ụ in pre-Bawule seem to reflect a general tendency for the unadvanced close vowels i, u and the advanced open vowel ạ to be eliminated by soundshifts. These vowels incorporate the most awkward combinations of points on the close/open scale with points on the unadvanced/advanced scale ; the root of the tongue naturally tends to be pushed backwards (as for unadvanced vowels) when the dorsum is low (as for open vowels) and pulled forwards (as for advanced vowels) when the dorsum is high (as for close vowels). In Volta-Comoe languages with vowel harmony based on the unadvanced/advanced opposition, one very frequently finds that a prefix which has the vowel a before a stem with an unadvanced vowel has not the vowel ạ before a stem with an advanced vowel as one might expect, but some other vowel instead ; in Fante, for instance, it is ẹ, while in Abure it is e or o according to whether the nearest stem vowel is front or back. The general tendency for i, u and ạ to be eliminated may well explain why so many West African languages have the seven-vowel system ị, ẹ, e, a, o, ọ, ụ.

This same general tendency would also account for the replacement of an original Bantu seven-vowel system ị, i, e, a, o, u, ụ not only (1) with an alternative seven-vowel system ị, ẹ, e, a, o, ọ, ụ in some languages and dialects by a shift (i, u) → |ẹ, ọ|, but also (2) with a five-vowel system ị, e, a, o, ụ in other languages and dialects by a shift (i, u) → ị, ụ.[12] Now the three vowel systems mentioned are in fact the three which occur most widely among the Bantu languages, and the main correspondences reflecting Professor Guthrie's Common Bantu *i, *u which operate across these systems are in fact i, u = ẹ, ọ = ị, ụ.[13] It is concluded, therefore, that the original realizations of Common Bantu *i, *u were most probably i, u.[14]

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[12] Such a shift would, of course, be almost identical with the post-Anyi-Bawule shift *T.AB.Ba.4*, namely (i, u, ī) → ị, ụ, ị̄.

[13] These correspondences are, of course, identical with the main correspondences reflecting Proto-Volta-Comoe *i, *u.

[14] It is worth pointing out that, in the light of this, Professor Guthrie's use of the symbols į, i, e, a, o, u, ų rather than i, e, ɛ, a, ɔ, o, u in his Common Bantu starred forms is most fortunate.

TONAL CLASSIFICATION OF NOUNS IN NGAZIJA

By A. N. Tucker and M. A. Bryan

1. Swahili being a non-tonal language, any information on closely related languages or dialects in which tone is a distinctive feature cannot but have historical value. In 1965 we were fortunate enough to come upon M. Abdou Bakari Boima, a Comoro Islander recently arrived in Dar-es-Salaam, who gave us much information on his mother tongue. The following notes are based on this information and tape recordings, also taken from him.

PHONETIC INTRODUCTION

Vowels

2. There are five vowel phonemes, **a**, **e**, **i**, **o**, **u**, with values roughly equivalent to those in Swahili, except that in many instances it was found difficult to determine whether a final vowel was **-o** or **-u**.

Vowel length is not significant, but two vowels may be juxtaposed, e.g.

muuɗì	mason	cf. **fundì**	expert
baamɓà	fish scale		
mooto	child	cf. **watoto**	children
βooβoò	areca nut		

Stress, combined with a certain degree of length, is usually to be found, as in Swahili, on the penultimate syllable of a word or phrase. The tone marking is explained in § 11.

Consonants

3. The following sounds have been heard :

	Bilabial	Labio-dental	Dental	Alveolar	Alveolar	Post-alveolar	Palatal	Velar	Laryngal
Explosive . .	p b		t̪ d̪	t d	ts dz	tʃ dʒ		k g	
Implosive . . .	ɓ			ɗ					
Fricative . .	β	f v	(ð = z)		s z	ʃ			h
Liquid, etc. . .	w			l, r			y		
Nasal . . .	m			n			ny		
Nasal compound .	mp mb mɓ	mv	nt̪ nd̪	nt nd nɗ ndr	nts ndz nz	ntʃ ndʒ		ŋk ŋg	

4. The behaviour of nasal consonants, in and out of combinations, is of importance, and centres largely round the study of the Prefixes of Classes 9 and 10, also Classes 1 and 3.

The Prefix of Noun Classes 9 and 10 is homorganic with the consonant it precedes and is syllabic before a monosyllabic stem (as in Swahili) :

m̱bwe type of fish **m̱ɓe** head of cattle **m̱vi** [= ɱ̱vi] grey hair
ṉtsi country **ṉ(d)zì** fly

except (apparently optionally) when preceded by a deictic Initial Vowel :

entsi the country
emvi or **ẽvi** grey hair

The Prefix is non-syllabic before voiced consonants in polysyllabic stems, though often still capable of bearing a tone value.

mɓónò castor oil fruit **mbaɓúù** small piece of baobab tree [1]
mvuà rain **n(d)zayà** offspring **ŋgano** flour **mbu(w)à** nose

In the above examples a Mid tone is discernible on the Prefix.

Where there is a deictic Initial Vowel, the tone of the Prefix is merged with this :

emɓónò, embu(w)à, emvuà [**eɱvuà** or **ẽvuà**]

5. The nasal Prefix is latent before unvoiced consonants in polysyllabic stems, i.e. not heard in the simple form but heard after the Initial Vowel in the deictic form :

	Simple form	*Deictic form*	
(m)p	**pundrà**	**empundrà**	donkey
(n)ţ	**ţepè**	**enţepè**	stripes
(n)t	**teɗe**	**enteɗe**	date
(n)ts	**tsihù**	**entsihù**	day
(ŋ)k	**kurà**	**eŋkurà**	walls

Note also :

(m)f	**fi**	**ẽfi**	fish

This last is somewhat of a break-away example, as **fi** is a monosyllabic stem.

6. Where the nasal element is not derived from a Prefix, it is syllabic or non-syllabic when initial, according to the foregoing rules :

ṉdzo come ! **ndʒí(y)à** enter !

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[1] In **m̱ɓaɓúù** fruit of baobab, it is apparently syllabic, except after the deictic Initial Vowel : **emɓaɓúù**. This is probably a compound noun.

and non-syllabic in the body of the word :

uzimɓà to swell
wandru waránɖaru six people
idʒoŋgò hunchback
kwembe red and white cow
tunɗà fruit
m̱ɓeṉtʃe cow (i.e. female head of cattle)

7. The Prefix of Noun Classes 1 and 3 and the 3rd Person Object Prefix may be realized as **mu-**, **mo-** or **mw-** before a vowel :

muunɗì mason **mooto** child **mwezì** month **mwalimù** marabout

Before a consonant it is realized as syllabic **m̱-**, no matter the context :

Class 1 : **m̱drù** person **m̱levi** drunkard **m̱waɗè** invalid
Class 3 : **m̱dri** tree **m̱mónò** castor oil plant **m̱waŋgo** door
m̱ɓĭɓò cashew nut tree **m̱bo(o)βoò** areca nut palm
3rd Person Object : **m̱be** offer him ! **tsim̱ɓaà** I have shut him in
owam̱zayà his begettors (lit. those who begot him)

Compare the plural forms :

Class 2 : **wa(w)unɗì, watoto, walimù**
wandrù, walevi, wawaɗè
Class 4 : **meézì, miri, miɓónò, miβoβoò, miwaŋgo**
3rd Person Object : **wabe, tsiwaɓaà, owawazayà**

Other phonetic points

8. The semi-vowels **w** and **y** are often to be heard as glide sounds after **u** and **i**. Here we have frequently had difficulty in deciding whether to write them or not :

mbu(w)à nose **ndzi(y)à** road

9. The sound **-dr-** occurs only after a nasal—but it may be any nasal :

pundrà donkey **wandrù** people
m̱dri (pl. **miri**) tree **m̱dro** (pl. **miro**) river

10. Traces of the ' Luganda Law ' and the ' Kwanyama Law ' are also to be found :

' Luganda Law ' : **m̱mónò** (pl. **miɓónò**) castor oil plant
' Kwanyama Law ' (usually after latent nasal compounds in Class 9) :

(n)t	**teɗe**	date	cf. Sw. **tende**
(ŋ)k	**koɗe**	fist	cf. Sw. **konde**
	koɗò	war	cf. Sw. **kondo** (archaic)

Compare also :

(m)p in Class 9 :	**paɗe**	side	
p in Class 11 :	**upanɗe**	side	cf. Sw. **upande**

Compare also :

wandru waránɖaru	six people
pundra nɗáɖaru	six donkeys

Tone

11. The following tones have been noted :

á High level tone ;
a (unmarked) Mid level tone ;
à Low level tone ;
â Falling tone, from High or Mid as the case may be ;
ǎ Rising tone, from Mid.

These marks must be regarded as tentative ; research time did not allow for the firm establishment of tonemes.

The sign ꜝ indicates ' Down Step ', i.e. all subsequent tones are now in a lower ' key '.

TONE CLASS IN NOUNS

12. Whereas in most tonal languages, words in their isolated forms show tonal distinction, in Ngazija this is only partly the case, and tonal distinction is to be sought in other contexts as well.

The following Tonal Patterns have been observed in nouns when spoken in isolation :

I	Level Tone Pattern :	[-] [- -] or [- ′]	[- - -] [- - - -], etc.
II	Mid + Low Tone Pattern :	[- _]	[- - _] [- - - _], etc.
III	High + Low Tone Pattern :[2]	[¯ _] or [′ _]	[- ¯ _] or [- \ _]

13. In listing nouns, it has been found useful, in view of what follows, to add where possible the corresponding Common Bantu starred forms for reference.[3] These starred forms are used more loosely here than by their author, and refer to

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[2] Membership here is only tentative, dependent in the first instance on our ability to distinguish a ' High ' from a ' Mid ' tone in words spoken in isolation by one informant who, from time to time, varied his intervals !

[3] M. Guthrie, *Comparative Bantu.* It must be clearly understood that Guthrie's tone marks do not indicate absolute pitch, but tonal relationships.

both complete reflexes and partial reflexes. In fact, five levels of correspondence are used here :

(1) True correspondence in shape, tone and meaning
(2) Correspondence in shape and tone, but with a different shade of meaning
(3) Correspondence in tone but not altogether in shape
(4) Correspondence in shape but not in tone
(5) Reference to a probably connected starred form

Examples :

C.B. ***-té** (1)	**mare**	saliva
C.B. ***-bìyá** (2) pot	**iβi(y)a**	ladle
C.B. ***-yùndò** (3)	**nyendò**	hammer
C.B. ***-dèdų̀** (4)	**nɗévù**	beard
C.B. ***-dób-** (5) to catch fish	**m̲lozı**	fisherman

Monosyllabic stems

Tone Pattern I

14. This pattern is mainly a reflex of C.B. *-CV́ or *-CV́V́ :

***-tí** (1)	**m̲dri**	pl. **miri**	tree
***-tí** (1)	**hiri**	pl. **ziri**	chair
***-bį́** (1)	**m̲vi**		grey hair
***-bų́** (1)	**vu**		ash
***-té** (1)	**mare**		saliva
***-bį́** (1)	**madzǐ** [4]		excrement
***-cí** (1)	**n̲tsi**	pl. **n̲tsi**	country
***-ké** (1)	**uʃe**		femininity
***-tá** (3)	**uta**	pl. **nyita**	bow
***-bį́** (3)	**uwii, uyii**		badness
***-dí-** (5)	**zi(y)o**		victuals
***-cų́į́** (1)	**fi**	pl. **fi**	fish
***-búá** (1)	**m̲ɓwa**	pl. **m̲ɓwa**	dog

But note :

***-tį́ò** (4)	**uso**	pl. **nyiso**	face
***-tú(è)** (4)	**hitswa**	pl. **zitswa**	head
***-kų̀à** (4)	**ufa**	pl. **nyifa**	crack

---

[4] Note rising tone here ; this is not usual.

Other examples :

m̱dro	pl. **miro**	river
m̱ɗu	pl. **minɗu**	foot
uɓu	pl. **nyiɓu**	porridge

Tone Pattern II

15. This pattern is a reflex of C.B. *-CV̀ or *-CV̀V̀.

***-ntù** (1)	**m̱drù**	pl. **wandrù**	person
***-ntù** (1)	**hindrù**	pl. **zindrù**	thing
***-jì** (1)	**m̱dʒì**	pl. **midʒì**	village
***-gį** (1)	**ndzì**	pl. **ṉdzì**	fly
***-bùè** (1)	**ɓwe** [5]	pl. **mawè**	stone

Exception :

***-jí** (4)	**madʒì**	water

Other examples :

m̱tsì	pl. **mitsì**	pestle
m̱ɓè	pl. **m̱ɓè**	head of cattle

Tone Pattern III

16. This pattern is a reflex of C.B. *-CV́CV̀ contracted.

***-yótò** (3)	**ḿ̱drò**	fire
***-yįdù** (3)	**úɗù, ǔɗù**	blackness

Note also, however : [6]

***-dè** (4)	**úlè**	length

Disyllabic stems

Tone Pattern I

17. This pattern is mainly a reflex of C.B. *-CV̀CV́.

***-bùyú** (1)	**ɓuu**	pl. **maɓuu**	baobab
***-yùmbá** (1)	**nyumɓa**	pl. **nyumɓa**	house
***-pàndé** (1)	**(m)paɗe**	pl. **(m)paɗe**	side
***-pàndé** (3)	**upanɗe**	pl. **nyipanɗe**	side
***-bìyá** (2)	**iβi(y)a**	pl. **ziβi(y)a**	ladle

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[5] The singular form here has *Mid* tone, but this is probably owing to the absence of a prefix. In all other respects it behaves as a Tone Pattern II noun.

[6] Tone of Prefix needs checking ; this may be a Tone Pattern II noun after all.

But note also :

***-yáyí, -jáyí** (4)	**dzwa(y)i**	pl. **madzwa(y)i**	egg
***-kúápà** (4)	**kapwa** [7]	pl. **mahapwa**	armpit
***-bògà** (4)	**mɓoga**	pl. **mɓoga**	vegetable

Other examples :

***-kònt-** (5) (to knock)	**(ŋ)koɗe**	pl. **(ŋ)koɗe**	fist
	m̱levi	pl. **walevi**	drunkard
	ɗema	pl. **malema**	fish trap
	ikoho, íkoho	pl. **zikoho**	dove
	mooto	pl. **watoto**	child
	ndʒiri		honey

Tone Pattern II

18. This pattern is a reflex of two distinct C.B. patterns. In view of what is discussed later in the article, it is best set out under three heads :

IIA which is mainly a reflex of C.B. *-CV́CV̀ :

***-júŋgù** (1)	**m̱zuŋgù**	pl. **wazuŋgù**	European
***-yánà** (1)	**mwanà**	pl. **wanà**	child
***-dób-** (5)	**m̱lozì**	pl. **walozì**	fisher
***-yédį̀** (1)	**mwezì**	pl. **meézì**	moon
***-yákà** (1)	**mwahà**	pl. **maahà**	year
***-yímbò** (1)	**dʒimɓò**	pl. **madʒimɓò**	song
***-yį́nò** (3)	**dzinyò**	pl. **madzinyò**	tooth
***-dį́bà** (1/3)	**dziwà**	pl. **madziwà**	milk
***-dábò *-dágò** (3)	**ɗahò**	pl. **malahò**	home site
***-kų́bà** (1/3)	**ifuɓà**	pl. **zifuɓà**	chest
***-búdį̀** (1)	**mɓuzì**	pl. **mɓuzì**	goat
***-bų́dà** (1)	**mvu(w)à**		rain
***-yótà** (1)		pl. **nyorà**	thirst
***-yótò** (3)	**nyorà**	pl. **nyorà**	star
***-kúnì** (1)	**uhuní**	pl. **(ŋ)kunì**	firewood
***-límì** (3)	**ulimè**	pl. **ndimè**	tongue
***-kúdù** (1)	**uhuù**		bigness

But note :

***-yádá** (4)	**ʃaà**	pl. **zaà, maà**	finger
***-yìyì, *-jí** (4)		**madʒì**	water

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[7] Note metathesis.

***-dòmò** (4)	**ɗomò**	pl. **malomò**	lip
***-yùnį** (4)	**nyunyì**	pl. **nyunyì**	bird
***-yèdų̀** (4)	**weù**		whiteness

Other examples :

***-dí-** (5) (to eat)		**malonì**	pasture
	βahanù	pl. **mahalà**	place
	guŋgunò	pl. **maguŋgunò**	knee
	ʃiʃi(y)ò	pl. **maʃiʃi(y)ò**	ear

IIB which is mainly a reflex of C.B. *-CV̀CV̀ :

***-gènį** (1)	**m̱dʒenì**	pl. **wadʒenì**	foreigner
***-gànjà** (3)	**dʒandzà**	pl. **madʒandzà**	palm of hand
***-dùbà** (3)	**ɓau(w)à**	pl. **mau(w)à**	flower
***-dįbà** (1)	**dziwà**	pl. **madziwà**	lake
***-tàmà** (1)	**tamà**		maize
***-jàdà** (1)	**nzaà**		hunger
***-bàdų̀** (1)	**uwavù**	pl. **nyiwavù**	rib
***-dįtò** (1)	**udzirò**		weight

But note :

***-càgų́** (3)	**tavù**	pl. **maravù**	cheek
***-bámbá** (4)		pl. **maamɓà**	fish scales

Other examples :

***-mèd-** (5)	**m̱me(y)à**	pl. **mime(y)à**	plant
(to plant)	**muunɗì**	pl. **waunɗì**	mason
	tunɗà	pl. **marunɗà**	fruit
	ʃi(y)ò	pl. **zi(y)ò**	book
	uɓa(w)ò	pl. **mɓa(w)ò**	plank

IIC which appears to be an aberrant reflex of C.B. -CV́CV̀ :

***-tį́tù** (1)	**m̱sirù**	pl. **misirù**	forest
***-kómbè** (3)	**ikomɓè**	pl. **zikomɓè**	cup

Other examples :

***-bíád-** (5)	**ndzayà**		child-bearing
	ɗunɗì	pl. **maunɗì**	mosquito
	ndrovì	pl. **ndrovì**	banana

Tone Pattern III

19. This Pattern is the most difficult to sort out, as it is very difficult to distinguish, by ear alone, from Pattern II. The allocation of words here is therefore only tentative, and may again be set out under three heads :

IIIA which is a reflex of C.B. *-CV́CV̀ : [8]

***-kónò** (1)	**m̲hónò**	pl. **mihónò**	arm
***-yį́cò** (1)	**dzítsò**	pl. **maatsò**	eye
***-kádà** (1)	**kǎà**	pl. **mahaà**	charcoal
	gísì	pl. **magísì**	goose

IIIB which is a reflex of C.B. *-CV̀CV̀ : [9]

***-bìdì** (4)	**mwǐlì**	pl. **miílì**	body
***-dèdų̀** (4)	**nɗévù**	pl. **nɗévù**	beard
***-dèdų̀**	**ilévù, ilevù**	pl. **zilévù, zilevù**	chin
***-dìm-** (5)	**m̲límì**	pl. **walímì**	farmer

Other examples :

	pérà	pl. **maβerà**	guava
	wěmɓè	pl. **nyemɓè**	razor

IIIC which is a reflex of C.B. *-CV́CV́ :

***-kúŋgá** (1)	**m̲húŋgà**	pl. **mihúŋgà**	eel [10]

Other examples :

	m̲hógò	pl. **mihógò**	cassava
	m̲hádʒù	pl. **mihádʒù**	tamarind tree
	uhádʒù		tamarind fruit
	uŋkóɓè	pl. **(nyiŋ)koɓè**	spoon
	uʃâʃì		scarcity

But note :

***-yį́ŋgì** (1)	**wîndʒì**		plentitude
***-pìkò** (1)	**pího**	pl. **maβíhò, maβihò**	wing

Compound nouns

20. Little can be said here beyond the fact that the Tone Pattern is not necessarily the same as in the constituent parts. The following have been recorded :

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[8] Note that some of the plural forms have Pattern IIA ; re-examination is obviously necessary.

[9] Note that some of the plural forms have Pattern IIB ; again re-examination is necessary.

[10] This is unfortunately the only example to hand, but it seems to be very significant. See n. 15.

I	**m̱drum̱ʃe**	pl. **wandruwaʃe**	woman
	m̱ɓeṉtʃe	pl. **m̱ɓeṉtʃe**	cow
	mwandzihazi	pl. **wandzihazi**	workman
II	**paŋganyilè**	pl. **maβaŋganyilè**	shark
III	**m̱ɓaɓúù**	pl. **m̱ɓaɓúù**	baobab fruit
	mbaaɓúù	pl. **mbaaɓúù**	piece of baobab
	mbaúhùnì **mbááhùnì**	pl. **mbaizáŋkúnì**	piece of firewood
	itswáɗahò	pl. **zitswáɗahò**	head of household
	fundim̱líkòlì	pl. **mafundiwalíkòlì**	teacher [11]

GRAMMATICAL TONE PATTERNS

21. There is another allocation of nouns according to their Tone Patterns in certain contexts. For the present exercise the deictic form of the noun in conjunction with the pronominal possessive has been selected as most representative, and three main Tone Patterns have been found, called here A, B and C. These Patterns in many respects fall in with the Tone Patterns already discussed, but in other respects cut across them.

The pronominal possessives are as follows, taking as paradigm the noun **uhuù** size, bigness.

ouhuu wá hàŋgù	my size		**ouhuu wá hàtù**	our size	
,, ,, **hàhò**	thy ,,		,, ,, **hànyù**	your ,,	
,, ,, **hàhè**	his ,,	(Class 1)	,, ,, **hàò**	their ,,	(Class 2)
,, ,, **hàò**	its ,,	(Class 3)	,, ,, **hàyò**	,, ,,	(Class 4)
,, ,, **hàlò**	,, ,,	(Class 5)	,, ,, **hàyò**	,, ,,	(Class 6)
,, ,, **hàʃò**	,, ,,	(Class 7)	,, ,, **hàzò**	,, ,,	(Class 8)
,, ,, **hàyò**	,, ,,	(Class 9)	,, ,, **hàzò**	,, ,,	(Class 10)
,, ,, **hàò**	,, ,,	(Classes 11, 14)			
,, ,, **hàβò**	,, ,,	(Class 16)			

In the above paradigm, the Possessives have the same Tone Pattern. With some nouns, however, the 1st Person Possessive is different from the rest. Thus, from **mwĩlì** body, **pérà** guava, are obtained :

omwili wa hàhè	his body	but	**omwili wa hâŋgù**	my body
lepera la hahè	his guava	but	**lepera la hâŋgù**	my guava

The Genitive Particles themselves are :

Class 1	**wa**		Class 2	**wa**
3	**wa**		4	**ya**

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[11] Compounded from Swahili **fundi** and French *l'école* !

5	**la**	6	**ya**
7	**ʃa**	8	**za**
9	**ya**	10	**za**
11	**wa**		
14	**wa**		
16	**βa**		

Tone Pattern A [- - - - ¯ — ˍ] or [- - - - ¯ __ ˍ]:

22. The Tone of the noun is Mid level, or occasionally with final syllable High. The Tone of the Genitive Particle is High. The Tone of the Possessor is Mid + Low or Low + Low.

Monosyllabic stems

See § 14.

I	**om̱dri wá hàŋgù**	my tree		
I	**ʃehiri ʃá hahè**	his chair	**eziri zá hahè**	his chairs
I			**emadzi yá hahè**	his excrement
I	**emɓwa yá hahè**	his dog	**zemɓwa zá haò**	their dogs
I	**ouso wá hahè**	his face	**zenyiso zá haò**	their faces
I	**ʃehitswa ʃá hahè**	his head	**ezitswa zá haò**	their heads
I	**om̱dro wá hàtù**	our river	**emiro yá hàyò**	their rivers
I	**ouɓu wá ha(h)è**	his porridge		(Class 6)

Disyllabic stems

See § 17.

I	**enyumɓa yá hahè**	his house	**zenyumɓa zá haò**	their houses
I	**lekapwa lá hàŋgù**	my armpit	**emahapwa yá hahè**	his armpits
I			**zemɓoga zá haò**	their vegetables
I	**em̱levi wá haò**	their drunkard	**owalevi wá haò**	their drunkards
I	**ʃekoho ʃá hahè**	his dove	**ezikoho zá hahè**	his doves
I	**emo(o)to wá hahè**	his child	**owatoto wá haò**	their children

See § 18 (IIA).

II	**om̱lozi wá haò**	their fisher	**owalozi wá haò**	their fishers
II	**ʃefuɓa ʃá hahè**	his chest	**ezifuɓa zá haò**	their chests
II	**emɓuzi yá hahè**	his goat	**zemɓuzi zá haò**	their goats
II			**zenyora zá hahè**	his thirst
II			**zenyora zá haò**	their stars
II	**o(u)lime wá hahè**	his tongue	**zenɗime zá haò**	their tongues

II	**ouɦuni wá ɦaɦè**	his firewood	**zeŋkuni zá ɦaò**	their firewood
II	**oβaɦanu βá ɦaɦè**	his place	**emaɦala yá ɦaò**	their places
II	**leguŋguno lá ɦàŋgù**	my knee		
II	**leʃiʃi(y)o lá ɦàŋgù**	my ear		
II	**eʃaa ʃá ɦaɦè**	his finger	**ezaa zá ɦaɦè**	his fingers

See § 19 (IIIA).

III	**ọm̱ɦonó wá ɦaɦè**	his arm	**emiɦono yá ɦaɦè**	his arms
	om̱ɦono wá ɦàŋgù	my arm		

Occasionally there is a merging of the Genitive Particle with the last syllable of the noun :

I	**ndʒizi yá nyòʃì**	or	**ndʒizá nyòʃì**	honey of bee
II	**emwaná ɦaɦè**	his child	**owana wá ɦaò**	their children
II			**(o)maloni ɦàzò**	their pasture (Class 10)

Tone Pattern B [- - - - - \ _] or [- - - - - \ -] or [- - - - - __ _]

23. The Tone of the noun and the Genitive Particle are Mid level. The Tone of the Possessor is Mid falling (occasionally High falling) + Low.

Monosyllabic stems

See § 15.

II	**em̱dru wa ɦaò**	their person	**owandru wa ɦaò**	their people
II	**ʃeɦindru** **ʃindru** } **ʃa ɦaɦè**	his thing	**ezindru za ɦaò**	their things
II	**leɓwe la ɦaò**	their stone	**emawe ya ɦaò**	their stones
II	**emɓe ya ɦaɦè**	his head of cattle	**zemɓe ꜝza ɦaò**	their cattle

Disyllabic stems

See § 18 (IIB).

II	**ledʒandza la ɦaɦè**	his palm	**emadʒandza ya ɦaɦè**	their palms
II	**leɓauwa la ɦaò**	their flower	**emauwa ya ɦaò**	their flowers
II			**zendzaa za ɦaɦè**	his hunger
II	**emuunɗi wa ɦàò**	their mason	**owaunɗi wa ɦàò**	their masons
II	**letunɗa la laò**	their fruit	**emarunɗa ya ɦaò**	their fruits
II	**eʃi(y)o ʃa ɦaɦè**	his book	**ezi(y)o za ɦaò**	their books
II	**uɓa(w)o wa ɦaɦè**	his plank	**zemɓa(w)o za ɦaò**	their planks

See § 19 (IIIB).

III	**omwili wa hàhè**	his body		
	omwiili wa hâŋgù	my body		
III	**ʃeelevu ʃa hahè**	his chin	**ezilevu za haò**	their chins
III	**em̲limi wa haò**	their farmer	**owalimi wa haò**	their farmers
III	**lepera la hahè**	his guava	**emaβera ya haò**	their guavas
	lepera la hâŋgù	my guava		
III	**owemɓe wa hahè**	his razor	**zenyemɓe za haò**	their razors

Tone Pattern C

24. The Tone of the noun stem is wholly or in part higher than that of the genitive, which is as in B.

Monosyllabic stems

III	**oulé wa hazò**	their length (Class 10)
But [12]	**oule wa hayò**	its length (Class 9)
	oule wa háβo	its length (Class 16)
III	**oḿ̲dró ꜝwá hâŋgù**	my fire
	oḿ̲dró wá hàtù	our fire

Disyllabic stems

See § 18 (IIC).

II	**ʃekómɓé ʃa hahè**	his cup	**ezikómɓé za hahè**	his cups
II	**endzá(y)á ya hàhè**	her child-bearing		
or	**endzá ya hàhè**			
II	**endróví ya haò**	their banana	**zendróví ꜝzá haò**	their bananas

See § 19 (IIIC).

III	**om̲húŋgá wa haò**	their eel		
	om̲húŋgá ꜝwá hâŋgù	my eel		
III	**om̲hógó ꜝwá hâŋgù**	my cassava		
III	**ouhádʒú wa hahè**	his tamarind		
III	**ouŋkóɓé wa hahè**	his spoon	**zeŋkóɓé za hahè**	his spoons
III	**ouʃáʃí wa hahè**	his scarcity		
III	**owíndʒí wa hahè**	his plentitude		
III	**lèpihó la hayò**	its wing (Class 9)	**emaβiho ya hayò**	its wings [13]

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[12] More research needed here.

[13] Tone Pattern B variant.

Compound nouns

25. Here again Tone Pattern is not necessarily the same as in the constituent parts.

A	**em̲drum̲ʃá haè**	his wife	**owandruwaʃé wá haò**	their wives
A	**emɓentʃe yá hahè**	his cow	**zemɓentʃe zá haò**	their cows
C			**zemɓaɓúú ˈzá hâlò**	its baobab fruit (Class 5)
C	**embaɓúú ˈyá hâhè**	his piece of baobab tree		
C	**embaúhúní ˈyá hâhè** **embáúhúˈní ya hahè**	his piece of firewood	**sembaisáŋkúˈní za haò**	their pieces of firewood
C	**ʃetswáɗáhó ʃa hahè**	his head of house	**ezitswáɗáhó za haò**	their heads of houses

Some conclusions

26. By taking into account the three factors—Tone in isolation (Patterns I, II, III), Tone in the Possessive (Patterns A, B, C) and C.B. Tone (where known), one deduces the following facts :

Nouns of Tone Pattern I employ the A Genitive Pattern. Their C.B. Tone values are principally :

Monosyllabic stems : *-CV́, *-CV́V́
Disyllabic stems : *-CV̀CV́

Nouns of Tone Pattern II employ the B Genitive Pattern with monosyllabic stems but both A and B Patterns with disyllabic stems according to C.B. tone values. Thus :

Monosyllabic stems : *-CV̀
Disyllabic stems : *-CV́CV̀ mostly (A Genitive Pattern)
*-CV̀CV̀ mostly (B Genitive Pattern)

Nouns of Tone Pattern III employ the A or C Genitive Pattern with monosyllabic stems but all three Patterns with disyllabic stems, though in the case of A and B Patterns there is some doubt as to whether the nouns concerned perhaps belong to Tone Pattern II. C.B. Tone values also vary much :

Monosyllabic stems : *-CV́CV̀ contracted mostly
Disyllabic stems : *-CV́CV̀ mostly (A Genitive Pattern)
*-CV̀CV̀ (B Genitive Pattern)
*-CV́CV́ primarily (C Genitive Pattern)

27. Arguing from the point of view of the Genitive Pattern one can say :

Tone Pattern A nouns cover :

Monosyllabic stems of Tone Pattern I	C.B. *-CV́, *-CV́V́ mostly
Disyllabic stems of Tone Pattern I	C.B. *-CV̀CV́ mostly
Disyllabic stems of Tone Pattern II	C.B. *-CV́CV̀ mostly
Monosyllabic stems of Tone Pattern III	C.B. *-CV́CV̀ contracted
Disyllabic stems of Tone Pattern III	C.B. *-CV́CV̀

Tone Pattern B nouns cover :

Monosyllabic stems of Tone Pattern II	C.B. *-CV̀, *-CV̀V̀
Disyllabic stems of Tone Pattern II	C.B. *-CV̀CV̀ mostly
Disyllabic stems of Tone Pattern III	C.B. *-CV̀CV̀

Tone Pattern C nouns cover :

Monosyllabic stems of Tone Pattern III	C.B. *-CV́CV̀ contracted
Disyllabic stems of Tone Pattern III	C.B. *-CV́CV́ primarily

28. On the strength of this data one can set up the following tentative Tone Classes, each of which is associated primarily with a particular C.B. starred form. In the following table all the recorded C.B. reflexes are indicated, but the principal reflexes for each Tone Class are printed in bold type.

Tone Class	Monosyllabic stems	Disyllabic stems
IA	***-CV́** ***-CV́V́** *-CV́V̀ *-CV̀V̀	***-CV̀CV́** *-CV́CV̀ *-CV̀CV̀ *-CV́CV́
IIA		***-CV́CV̀** *-CV̀CV̀
IIB	***-CV̀**	*-CV̀CV́ *-CV́CV̀ ***-CV̀CV̀** *-CV́CV́
IIIA	*-CV́CV̀ (contracted)	***-CV́CV̀** *-CV̀CV̀
IIIB		***-CV̀CV̀**
IIIC	*-CV̀ *-CV́CV̀ (contracted)	*-CV́CV̀ *-CV̀CV̀ * **CV́CV́**

Thus, whereas Tone Pattern I is coincident with one Tone Class only (Class IA) with a predominant C.B. reflex, Tone Pattern II underlies two Tone Classes (IIA and IIB), each with a predominant C.B. reflex ; and Tone Pattern III underlies three Tone Classes (IIIA, IIIB, IIIC), each again associated with a predominant C.B. reflex.

Other Genitival Tone Patterns

29. Where the Possessor is a noun, the Tone Pattern of the Genitive construction is affected according to its Tone Class. Compare thus :

IA	**hitswa**		head			
	hitswa ʃa ḿ̲drì	(IA)	top of tree	cf.	**hitswa ʃá hàò**	its top
	hitswa ʃa ikôhò	(IA)	head of dove		**hitswa ʃá hàʃò**	its head
	hitswa ʃá pàhà	(IIA)	head of cat		**hitswa ʃá hàlò**	its head
	hitswa ʃá pùndrà	(IIA)	head of donkey		**hitswa ʃá hàyò**	its head
	hitswa ʃa m̲drù	(IIB)	head of person		**hitswa ʃá hàhè**	his head

Adjectives

30. Similar tonal reaction is to be observed between a noun and its adjective. Examples with IIA noun **mwanà** pl. **wanà** child

***-ké** (1)	**-ʃe**	female	(IA)	**mwana ḿ̲ʃè**	**wana wâʃè**
***-bí** (1)	**-yi**	bad	(IA)	**mwana múyì**	**wana wáyì**
***-kúdù** (1)	**-huù**	big	(IIA)	**mwana ḿ̲hùù**	**wana wáhùù**
***-nénè** (1)	**-nenè**	fat	(IIA)	**mwana ḿ̲nenè**	**wana wánenè**
***-kádì** (1)	**-halì**	fierce	(IIA)	**mwana ḿ̲halì**	**wana wáhalì**
***-kṷpí** (4)	**-fuβì**	short	(IIA)	**mwana ḿ̲fuβì**	**wana wáfuβì**
***-kúndú** (4)	**-kuɗù**	red	(IIA)	**mwana ḿ̲kùɗù**	**wana wá(ŋ)kuɗù**
***-yèdù** (4)	**-eù**	white	(IIA)	**mwaná mwèù**	**waná wèù**
	-titì	small	(IIA)	**mwana ḿ̲titì**	**wana wátitì**
***-gènį** (1)	**-dʒenì**	foreign	(IIB)	**mwana m̲dʒenì**	**wana wadʒenì**
***-dįtò** (1)	**-dzirò**	heavy	(IIB)	**mwana m̲dzirò**	**wana wadzirò**
	-emà	good	(IIB)	**mwana mwemà**	**wana wemà**
***-yįdù** (1)	**-ɗù**	black	(IIIA)	**mwaná ḿ̲ɗù**	**waná wàɗù**
***-dè** (1)	**-lè**	tall	(IIIB/C)	**mwana m̲lè**	**wana walè**

Examples with IA noun **m̲ɓwa** dog
IIB nouns **m̲ɓè** cow, **m̲drù** person, **ɓwe** pl. **mawè** stone
IIIC noun **m̲húŋgà** pl. **mihúŋgà** eel

IA female [14]	**m̲ɓwá n̲tʃè**	**m̲ɓe n̲tʃe**	**m̲dru m̲ʃe**		
IA bad	**m̲bwǎ m̲ɓi**		**m̲dru muyi**	**ɓwe(e) ɓi**	**mawe mayi**

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[14] The word division here is uncertain. Cf. § 20.

IIA	big		m̱ɓe ŋkŭù	m̱dru mhuù	ɓwe kúù	
IIA	small	mɓwá ńtintì		m̱dru m̱titì		
IIB	heavy	m̱ɓwa nzirò	m̱ɓe ndzirò		ɓwe dzirò	mawe madzirò
IIB	good	m̱ɓwa ndʒemà		m̱dru mwemà		
IIIA	black		m̱ɓe nziɗù		ɓwe dziɗù	mawe maɗù

IIA	fat	mhuŋgá ḿ̱nenè	mihúŋgá minenè
IIB	heavy	m̱húŋgá ꜜḿ̱dzirò	mihúŋgá ꜜmídzirò
IIIA	black	m̱húꜜŋgá m̱ɗù	mihúꜜŋgá miɗù

Demonstratives

The Demonstratives are as follows : [15]

	1st	2nd	3rd		1st	2nd	3rd
Class 1	woyì	(w)olà	uwò	Class 2	wanò	walà	waò
3	unò	ulà	uwò	4	yinò	yilà	iyò
5	linò	lilà	ilò	6	yanò	yalà	yayò
7	ʃinò	ʃilà	(y)iʃò	8	zinò	zilà	(y)izò
9	(y)inò	(y)ilà	iyò	10	zinò	zilà	(y)izò
11/14	(w)unò	(w)ulà	uwò				
16	βanò	βalà	yaβò				
17	hunò	hulà	(y)ihò				

31. The Demonstratives are unsatisfactory criteria for Tone Class differentiation because of their levelling tendency (to be found in all Tone Classes but especially with Tone Patterns I and II).

IA	emoto woyì	this child	owatoto wanò	these children
IIA	ʃefuɓa ʃinò	this chest	ezifuɓa zinù	these chests
IIB	ouɓa(w)o unò	this plank	zemɓa(w)o zinù	these planks
II/IIIC			zendzaa zinù	this hunger
IIIA	om̱hono unò	this arm	emihono yinò	these arms
IIIB	leɓwe linò	this stone	emawe yanò	these stones
IIIC	om̱dro unò	this fire		

The great majority of IIIC nouns, however, have a distinctive pattern here : [16]

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[15] Whereas the final vowel of the 3rd Demonstrative is unmistakably **-o**, that of the 1st Demonstrative appears to alternate with **-u**. It is written as heard at the time.

[16] So far we have failed to correlate C.B. *-CV́CV́ with IIIC, except in the case of ' eel ' quoted here. See also §§ 19 (IIIC) and 24.

IIIC	**om̱húŋgá unò**	this eel	**emihúŋgá yinò**	these eels
IIIC	**omhógó (w)unù**	this cassava	**emihógó yinò**	these cassava plants
IIIC	**endróví ìnù**	this banana	**zendróví zìnù**	these bananas
II/IIIC	**endzá(y)a ìnù**	this childbirth		
IIIC	**o(u)ŋkóɓé (w)unò**	this spoon	**zeŋkóɓé zinù**	these spoons
IIIC	**ouhádʒú (w)unò**	this tamarind		
IIIC	**owíndʒí (w)unò**	this plentitude		
IIIC	**ouʃáʃí (w)unò**	this scarcity		

Note also :

IIIA/B	**lepíhó línu**	this wing	**emaβiho yanò**	these wings
IIIC	**ʃekómɓé ʃinò**	this cup	**ezikómɓé zinò**	these cups
IIB	**eʃiyází ʃinù**	this yam	**eziyází zinù**	these yams

Some compound nouns also have a distinctive pattern here :

èm̱drum̱ʃe woyì	this woman	**owandruwaʃe wanò**	these women
emɓentʃe yinù	this cow	**zemɓentʃe zinù**	these cows
ʃetswáɗéhé ʃinù	this head of household	**ezitswéɗéꜜhó zinù**	these heads of household
embaúꜜhúni inù	this piece of firewood	**zembaizáŋkúní zinù**	these pieces of firewood

Cf. :

IA	**ʃehitswa hinù**	this head	**ezitswa zinù**	these heads
IIA	**uhuni (w)unò**	this firewood	**zeŋkuni zinù**	this firewood

Note also a slight difference in Demonstrative tone in :

IA	**emɓwa yíno**	this dog	**zemɓwa zinò**	these dogs
IIA	**ulime úno**	this tongue	**zenɗime zinò**	these tongues
IIB	**emɓe yíno**	this cow	**zemɓe zinò**	these cattle
IIB	**om̱ʈezo unò**	this game	**emiʈezo yíno**	these games
IIIB	**lepera líno**	this guava	**emaβera yanò**	these guavas

This has doubtful significance.

Verbs

32. The verbal Infinitive Prefix is **u-** (**hu-** before monosyllabic stems usually), but verbs do not follow the same Tonal Patterns as nouns, all monosyllabic stems apparently having Mid tone and all disyllabic stems having Mid + Low tone. Thus :

hula	to eat	**hura**	to fear	**hurwa**	to pound

	utsehà	to laugh	**ulimà**	to cultivate	**uhanɗà**	to knead
C.B.	***-cèk-**		***-dìm-**		***-kànd-**	
	uzinà	to dance	**urwaà**	to carry	**uβo(w)à**	to get cool
C.B.	***-bį́n-**		***-túád-**		***-pód-**	

33. There is tonal distinction in the Perfect stem, however, in that verbs with C.B. reflex *-CV̀C- have Mid level tone here :

***-càk-**	**utsahà**	to seek	**tsi-tsaha**	I have sought
***-pèt-**	**uβerà**	to bend	**tsi-βere**	I have bent
***-dìd-**	**ulilà**	to cry	**tsi-lili**	I have cried
***-cį̀ŋg-**	**usiŋgà**	to rub	**tsi-siŋgi**	I have rubbed
	ulowà	to be wet	**tsi-lowo**	I have been wet
***-dų̀t-**	**uvurà**	to pull	**tsi-vuru**	I have pulled

while verbs with C.B. reflex *-CV́C- have Low tone on the final syllable of the Perfect :

***-bį́ád-**	**uza(y)à**	to bear	**tsi-zaà**
***-pít-**	**uβirà**	to pass	**tsi-βirì**
***-dób-**	**ulo(w)à**	to fish	**tsi-loò**
***-túm-**	**urumà**	to send	**tsi-rumù**

Exceptions are relatively rare :

***-tų́ŋg-**	**úfúŋga**	to tie	**tsi-fuŋgu**
***-kòkud-**	**úhóówa**	to cough	**tsí-hóówa** [17]

APPENDIX

VOCABULARY OF NOUNS

34. The nouns are given here in their simple and deictic forms and arranged in their Morphological and Tonal Classes. Readers are left to deduce the rules for phonetic sound change between singular and plural. For the sake of comparative study the corresponding Swahili nouns and C.B. reference (where known) are also given.[18]

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[17] Not all Perfect forms involve the repetition of the stem vowel :

***-tų́d-** **úfú(w)a** to forge **tsí-fú(w)a**

[18] For more accurate comparison, the Swahili entries are in phonetic script.

Morphological Class 1

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IA	m̲gazidʒa	yem̲gazidʒa	Ngazija	m̲ŋgaziʄa [19]	
IA	m̲levi	(y)em̲levi	drunkard	m̲levi	
IA	mooto	(y)emooto	young child	m̲toto	
IA	m̲drum̲ʃe	(y)em̲drum̲ʃe	woman	m̲ke	*-ké
IA	mwandzihadʒi		writer	mwandikaʄi	
IIA	m̲s(a)wahilì	yem̲s(a)wahilì	Swahili	m̲swahili	
IIA	mwaaraɓù	yemwaaraɓù	Arab	mwaaraɓu	
IIA	mwalimù	yemwalimù	marabout	mwalimu (teacher)	
IIA	mwanà	(y)emwanà	child	mwana	*-yánà (1)
IIA	mwidzì	yemwidzì	thief	mwizi	*-yį́bį (1)
IIA	m̲zuŋgù	yem̲zuŋgù	European	m̲zuŋgu	*-júŋgù (1)
IIA	m̲tʃwa(y)ì [20]	yem̲tʃwa(y)ì	witch	m̲tʃawi	*-cábí (3)
IIA	m̲lozì	(y)em̲lozì	fisher		*-dób- (5)
IIA	m̲hezadʒì	yem̲hezadʒì	singer	m̲tʃezaʄi (dancer)	
IIA	m̲waɗè	yem̲waɗè	sick person		*-dúád- (5)
IIB	m̲drù	(y)em̲drù	person	m̲t(h)u	*-ntù (1)
IIB	m̲dʒenì	yem̲dʒenì	stranger	m̲ɠeni [21]	*-gènį (1)
IIB	m̲limì	(y)em̲limì	farmer	m̲kulima	*-dìm- (5)
IIB	m̲piʃì	yem̲piʃì	cook	m̲piʃi	*-yįpik- (5)
IIB	muunɗì	(y)emuunɗì	mason	mwundi, mwunzi	
IIB	m̲tʃukuzì	yem̲tʃukuzì	porter	m̲tʃukuzi	
IIIB	m̲drwáhazì	yem̲drwáhazì	workman		

Morphological Class 2 (plural of above)

IA	waŋgazidʒa	owaŋgazidʒa	(see above)	waŋgaziʄa
IA	walevi	owalevi		walevi
IA	watoto	owatoto		watoto
IA	wandruwaʃe	owandruwaʃe		wat(h)u wake
IA	wandzihadʒi	owandzihadʒi		
IIA	was(a)wahilì	owas(a)wahilì		waswahili
IIA	waaraɓù	owaaraɓù		waaraɓu
IIA	walimù	owalimù		wa(a)limu

[19] Implosive palatal ʄ.
[20] Metathesis ? Cf. Swahili.
[21] Implosive ɠ.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIA	wanà	owanà	(see above)	wana	
IIA	wedzì	owedzì		wezi	
IIA	wazuŋgù	owazuŋgù		wazuŋgu	
IIA	watʃwa(y)ì	owatʃwa(y)ì		watʃawi	
IIA	walozì	owalozì			
IIA	wahezadʒì	owahezadʒì		watʃezaji	
IIA	wawaɗè	owawaɗè			
IIB	wandrù	owandrù		wat(h)u	
IIB	wadʒenì	owadʒenì		wageni	
IIB	walimì	owalimì		wakulima	
IIB	wapiʃì	owapiʃì		wapiʃi	
IIB	wa(w)unɗì	owa(w)unɗì		waundi, waunzi	
IIB	watʃukuzì	owatʃukuzì		watʃukuzi	
IIIB	wandrwáhazì	owandrwáhazì			

Morphological Class 3

IA	m̱dri	om̱dri	tree	m̱ti	*-tí (1)
IA	m̱dro	om̱dro	river	m̱to	
IA	m̱ɗu	om̱ɗu	foot		
IIA	mwezì	omwezì	month	mwezi	*-yédį (1)
IIA	mwahà	omwahà	year	mwaka	*-yákà (1)
IIA	m̱ʃiyà	om̱ʃiyà	tail	m̱kia	*-kídà (1)
IIA	m̱pakà	om̱pakà	boundary	m̱paka	*-pàká (3/4)
IIA	m̱feredʒì	om̱feredʒì	ditch	m̱fereɟi	
IIA	m̱boβoò	om̱boβoò	areca nut palm	m̱popoo	
IIB	m̱dʒì	om̱dʒì	village	m̱ɟi	*-jì (1)
IIB	m̱waŋgò	om̱waŋgò	door	m̱laŋgo [22]	*-dàŋgò (1)
IIB	m̱meyà	om̱meyà	plant	m̱mea	*-mèd- (5)
IIB	m̱fuŋgu(w)ò	om̱fuŋgu(w)ò	key	ufuŋguo	*-tùŋg- (5)
IIB	m̱ţezò	om̱ţezò	game	m̱tʃezo	
IIB	mwiyanò	omwiyanò	boundary		
IIC	m̱sirù	om̱sirù	forest	m̱situ	*-tį́tù (1)

[22] In some dialects : mwaŋgo.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIIA	**m̲hŏnò**	**om̲hŏnò**	arm	**m̲kono**	***-kónò** (4)
IIIB	**mwĭlì**	**omwĭlì**	body	**mwili**	***-bìdì** (4)
IIIC	**ḿ̲drò**	**óḿ̲drò**	fire	**moto**	***-yótò** (1)
IIIC	**m̲húŋgà**	**om̲húŋgà**	eel	**m̲kuŋga**	***-kúŋgá** (1)
IIIC	**m̲hógò**	**om̲hógò**	cassava plant	**muhogo**	
IIIC	**m̲hădʒù**	**om̲hădʒù**	tamarind tree	**m̲kwaɟu**	

Morphological Class 4 (plural of above) [23]

IA	**miri**	**emiri**	(see above)	**miti**
IA	**miro**	**emiro**		**mito**
IA	**minɗu**	**eminɗu**		
IIA	**meézì**	**emeézì**		**miezi**
IIA	**maahà**	**yemaahà**		**miaka**
IIA	**miʃiyà**			**mikia**
IIA	**mipakà**			**mipaka**
IIA	**miferedʒì**			**mifereɟi**
IIA	**miβoβoò**			**mipopoo**
IIB	**midʒì**	**emídʒì**		**miɟi**
IIB	**miwaŋgò**	**yemiwaŋgò**		**milaŋgo** [24]
IIB	**miměyà**	**emiměyà**		**mimea**
IIB	**mifuŋgu(w)ò**	**emifuŋgu(w)ò**		**fuŋguo**
IIB	**miţezò**	**emiţezò**		**mitʃezo**
IIB	**miyanò**			
IIC	**misirù**			**misitu**
IIIA	**mihonò**	**emihonò**		**mikono**
IIIB	**miĭlì**	**(y)emiĭlì**		**miili**
IIIC	?[25]			**mioto**

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[23] The deictic prefix varies between **e-** and **ye-** ; it is only given here where actually recorded.

[24] In some dialects : **miaŋgo**.

[25] According to our informant, this word is never used in the plural.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIIC	**mihúŋga**	**emihúŋga**		**mikuŋga**	
IIIC	**mihógò**			**mihogo**	
IIIC	**mihádʒù**	**emihádʒù**		**mikwaɟu**	

Morphological Class 5 [26]

IA	**vu**	**levu**	ash	**ɟivu**	***-bų́ (1)**
IA	**ɓuu**		baobab tree	**m̱ɓuyu**	***-bùyú (1)**
IA	**kapwa** [27]	**lekapwa**	armpit	**kwapa**	***-kúápà (4)**
IA	**dʒwa(y)i**		egg	**yai**	***-yáyí (3)**
IA	**ɗema**		fish trap	**ɗema**	
IA	**ɓunɗi**		bird of prey	**ɓundi** (owl)	
IA	**dzaha**		volcano		
IA	**fumɓa**		sea water		
IA	**filifi**		face rash		
IIA	**pahà**	**lepahà**	cat	**p(h)aka**	***-pákà (1)**
IIA	**dzinà**	**ledzinà**	name	**ɟina**	***-yį́nà (1)**
IIA	**dziwà**		milk	**maziwa**	***-dį́bà (1)**
IIA	**dʒimɓò**		song	**wimbo**	***-yímbò (1)**
IIA	**ɗahò**	**leɗahò**	home site	**rago** (camp)	***-dábò (3)**
					***-dágò (3)**
IIA	**ɓelè**		breast		***-béédè (1)**
IIA	**fuzì**		shoulder	**fuzi**	***tų́ų́dį (1)**
IIA	**guŋgunò**	**leguŋgunò**	knee		
IIA	**ʃiʃi(y)ò**	**leʃiʃi(y)ò**	ear	**sikio**	
IIA	**gondzì**		sheep		
IIA	**tihò**		roof		
IIA	**peleyò**		brush		
IIA	**fuɓà**		hearthstone		
IIA	**paŋganyilè**		shark		
IIA	**ɓuʃinì**		Madagascar	**ɓukini**	
IIB	**ɓwe**	**leɓwè**	stone	**ɟiwe**	***-bùè (1)**
IIB	**dziwà**		lake	**ziwa**	***-dįbà (1)**
IIB	**dʒandzà**	**ledʒandzà**	palm of hand	**gandʒa**	***-gànjà (1)**
IIB	**gomɓè**		fat old cow	**ŋombe** (cow)	***-gòmbè (1)**

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[26] The deictic prefix here is regularly **le-**, but is only given here where actually recorded.
[27] Metathesis? Cf. Swahili.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIB	ɗomò		lip	m̲ɗomo	*-dòmò (1)
IIB	ɓa(w)u(w)à	leɓa(w)u(w)à	flower	ua	*-dùbà (3)
IIB	—		fish scale	ɓamba (flat thing)	*-bámbá (4)
IIB	tavù	letavù	cheek	ʃavu (ṭavu dial.)	*-càgú (4)
IIB	tamà	letamà	maize	m̲tama (millet)	*-támà (4)
IIB	tunɗà	letunɗà	fruit	tunda	
IIB	dzizì		flock	zizi (stable)	
IIB	tsaβuhò		game	cf. tʃapuka (to speed up)	
IIB	paà		trash		
IIB	gomɓesì		coelacanth		
IIIA	dzítsò		eye	ɟitʃo	*-yįcò (1)
II/IIIA	dzinyò		tooth	ɟino	*-yį́nò (1)
IIIA	kăà		charcoal	kaa	*-kádà (1)
IIIA/B	pího	lepího	wing		*-pìkò (4)
IIIA	gísì		goose		
IIIA	fundim̲líkòlì	lefundim̲líkòlì	teacher		
IIIB	péra	leperà	guava	pera	
II/III ?	fuù		finger nail		
II/IIIC	ɗunɗì		mosquito		

Morphological Class 6 (plural of above) [28]

IA	(?no plural)		(see above)	maɟivu
IA	maɓuu			miɓuyu
IA	mahapwa	emahapwa		makwapa
IA	madʒwa(y)i			mayai
IA	maɗema, malema	emalema		maɗema
IA	ma(ɓ)unɗi			ɓundi
IA	madzaha			
IIA	maβahà	emaβahà		p(h)aka
IIA	madzinà	emadzinà		maɟina
IIA	madziwà			maziwa
IIA	madʒimɓò			nyimbo

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[28] Here the deictic prefix would seem to be **e-** (not **ye-**).

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIA	malahò	emalahò		marago	
IIA	maɓelè				
IIA	mafuzì			mafuzi	
IIA	maguŋgunò				
IIA	maʃiʃi(y)ò			masikio	
IIA	magondzì				
IIA	marihò				
IIA	maβeleyò				
IIA	mafuɓà				
IIA	maβaŋganyilè				
IIB	ma(a)wè	emawè		mawe	
IIB	madziwà			maziwa	
IIB	madʒandzà	emadʒandzà		magandʒa	
IIB	malomò			miɗomo	
IIB	ma(w)u(w)à	ema(w)u(w)à		maua	
IIB	maamɓà			maɓamba	
IIB	maravù	emaravù		maʃavu, maʈavu	
IIB	maramà	emaramà		mitama	
IIB	marunɗà	emarunɗà		matunda	
IIB	madzizì			mazizi	
IIB	matsaβuhò				
IIB	maβaà				
IIB	magomɓesì				
IIIA	maatsò			matʃo	
II/IIIA	măɳyò	emanyò		meno	
IIIA	mahaà			makaa	
IIIA/B	maβíhò	emaβíhò			
IIIA	magisì				
IIIA	mafundiwalíkòlì	emafundiwalíkòlì			
IIIB	maβerà	emaβerà		mapera	
II/III ?	mafŭù				
II/IIIC	maûnɗì				

Other Class 6 nouns :

IA	mare	emare	saliva	mate	*-té (1)

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIA	**maà**	**emaà**	fingers (alt.)		
IIA	**madʒì**	**emadʒì**	water	**maji**	***-jí** (4)
IIA	**mafurà**		oil	**mafuta**	***-kų́tà** (1)
IIA	**mahalà**	**emahalà**	places	**mahala, mahali**	
IIA	**malonì**	**omalonì** [29]	pasture		
IA/C	**madzǐ**	**emadzǐ**	excrement	**mavi**	***-bį́** (1)
Morphological Class 7					
IA	**ʃiŋgazidʒa**		Ngazija language	**kiŋgazija**	
IA	**hiri**	**ʃe(h)iri**	chair	**kiti**	***-tí** (1)
IA	**hitswa**	**ʃe(h)itswa**	head	**kitʃwa**	***-tú** (3)
IA	**ʃahula**	**eʃahula**	food	**tʃakula**	***-lí-** (5)
IA	**iβi(y)a**	**ʃeeβi(y)a**	ladle	**ɓia** (serving pot)	***-bìyá** (2) (pot)
IA	**ikoho, íkoho**	**ʃeekoho**	dove		
IIA	**ifuɓà**	**ʃefuɓà**	chest	**kifua**	***-kų́bà** (3)
IIA	**itanɗà**	**ʃeetanɗà**	bed	**kitanda**	***-tándà** (1)
IIA	**iɗonɗò**	**ʃeiɗonɗò**	lame one		
IIA	**ʃaà**	**eʃaà**	finger	**nyaa** (finger nail)	***-yádá** (4)
II ?	**iloò**		fish-hook		***-dóbò** (1)
IIB	**hindrù**	**ʃehindrù**	thing	**kit(h)u**	***-ntù** (1)
IIB	**idʒoŋgò**	**ʃeidʒoŋgò**	hunchback		
IIB	**ʃi(y)ò**	**eʃi(y)ò**	book	**tʃuo**	
IIB	**ʃoononɗè**	**eʃoononɗè**	knife		
IIB	**ʃi(y)azì**	**eʃi(y)azì**	yam	**kiazi**	
IIC	**ikomɓè**	**ʃeekomɓè**	cup	**kikombe**	***-kómbè** (3)
IIIC	**hítswáɗahò**	**ʃé(i)tswáɗahò**	head of household		
II/IIIB	**ilévù, ilevù**	**ʃeelevù**	chin	**kiɗevu**	***-dèdų̀** (1)
II/IIIB	**hínò**	**ʃehinò**	mortar	**kinu**	
Morphological Class 8 (plural of above)					
IA	**ziri**	**eziri**		**viti**	
IA	**zitswa**	**ezitswa**		**vitʃwa**	

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[29] Irregular, see Class 16.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IA	zahula	ezahula		vyakula	
IA	ziβi(y)a	eziβi(y)a		maɓia	
IA	zikoho	ezikoho			
IA	zi(y)o	ezi(y)o	victuals	m̱lo	*-lí- (5)
IIA	zifuɓà	ezifuɓà		vifua	
IIA	zitanɗà	ezitanɗà		vitanda	
IIA	ziɗonɗò	eziɗonɗò			
IIA	zaà	ezaà		zaa (dial.)	
IIB	zindrù	ezindrù		vit(h)u	
IIB	zidʒoŋgò	ezidʒoŋgò			
IIB	zǐ(y)ò, zi(y)ò	ezi(y)ò		vyuo	
IIB	zoononɗè				
IIB	zi(y)azì	ezi(y)azì		viazi	
IIC	zikomɓè	ezikomɓè		vikombe	
IIIA	zitswǎɗahò	ezitswáɗahò			
II/IIIB	zilevù, zilévù	ezilevù		viɗevu	
II/IIIB	zǐnò			vinu	
Morphological Class 9					
IA	ṉtsi	entsi	country	ṉtʃ(h)i	*-cí (1)
IA	m̱vi	emvií ẽvi	grey hair	m̱vi	*-bį́ (1)
IA	m̱ɓwa	emɓwa	dog	m̱bwa	*-búá (1)
IA	fi	emfi, ẽfi	fish	ṉswi	*-cú̯í (1)
IA	m̱ɓeṉtʃe	em̱ɓeṉtʃe	cow	-ke	*-ké (1)
IA	nyumɓa	enyumɓa	house	nyumba	*-yùmbá (1)
IA	paɗe	empaɗe	side	pande (lump)	*-pàndé (1)
IA	koɗe	eŋkoɗe	fist	konde	*-kònt- (5) (to knock)
IA	mbere	embere	ring	p(h)ete	*-pèt- (5) (to bend)
IA	mɓoga	emɓoga	vegetable	mboga	*-bògà (4)
IA	ndʒizi		honey		
IA	mɓatse		sweet potato		
IA	ŋgano		grain	ŋgano	

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IA	ŋgalawa		outrigger canoe	ŋgalawa	
IIA	mɓuzì	emɓuzì	goat	mbuzi	*-búdį (1)
IIA	mɓeù	emɓeù	seed	mbegu, mbeyu (dial.)	*-bégù *-béyù (1)
IIA	mvuà	emvuà, ẽvuà	rain	mvua	*-bų́dà (1)
IIA	nyorà	enyorà	star	nyota	*-yótò (3)
IIA	nyohà	enyohà	snake	nyoka	*-yókà (1)
IIA	nyoʃì	enyoʃì	bee	nyuki	*-yókì (1) *-yúkì
IIA	kuhù	eŋkuhù	fowl	k(h)uku	*-kúkù (1)
IIA	tsihù	entsihù	day	siku	*-tįkù (1)
IIA	koɗò	eŋkoɗò	war	k(h)ondo (obs.)	*-kóndò (1)
IIA	teɗè	enteɗè	date	t(h)ende	*-téndé (4)
IIA	pundrà	empundrà	donkey	p(h)unda	
IIA	βooβoò	eβooβoò	areca nut	p(h)opoo	
II ?	ɗarì	eɗarì	ceiling	ɗari	
IIB	n̠(d)zì	en(d)zì	fly	(i)nzi	*-gį (1)
IIB	m̠ɓè	emɓè	head of cattle		
IIB	mbu(w)à	embu(w)à	nose	p(h)ua	*-pùdà (1)
IIB	ŋgomà	eŋgomà	drum	ŋgoma	*-gòmà (1)
IIB	ŋgozì	eŋgozì	skin	ŋgozi	*-gòbį (1)
IIB	nyamà	enyamà	meat	nyama	*-yàmà (1)
IIB	nyendò	enyendò	hammer	nyundo	*-yùndò (3)
IIB	nyunyì	enyunyì	bird	nyuni (dial.)	*-yùnį (1)
IIB	ndzi(y)à	endzi(y)à	road	ndʒia	*-jìdà (1)
IIB	tsaβuhò [30]		a game		
II/IIIA	ţépè	enţépè	stripe	utepe (tape)	
II/IIIA	mbĕβò	embĕβò	wind	p(h)epo	*-pépò (1)
II/IIIB	nɗévù	enɗévù	beard	uɗevu	*-dèdų̀ (4)
II/IIIC	n(d)za(y)à	en(d)za(y)à	childbearing	kuzaa (to bear)	*-bį́ád- (5)
II/IIIC	ndrovì	endrovì	banana		
II/III ?	mɓónò	emɓónò	castor oil nut		

[30] From **utsaβuhà** to play ; cf. Sw. **tʃapuka** to speed up.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIIC	**m̲ɓaɓúù**	**em̲ɓaɓúù**	fruit of baobab		
IIIC	**mba(a)ɓúù**	**emba(a)ɓúù**	piece of baobab		
IIIC	**mbaúhùnì**	**embaúhùnì**	piece of firewood		

Morphological Class 10 (plural of above)

IA	**n̲tsi**	**zentsi**	countries	**n̲tʃ(h)i**	
etc.					
IIA	**mɓuzì**	**zemɓuzì**	goats	**mbuzi**	
etc., but note :					
IIA	**nyorà**	**zenyorà**	thirst	**nyota**	***-yótà** (1)
IIB	**m̲ɓè**	**zem̲ɓè**	cattle		
etc.					
II/IIIA	**ţépè**	**zenţépè**	stripes		
etc.					
IIIC	**m̲ɓaɓúù**	**zem̲ɓaɓúù**	fruit of baobab		
IIIC	**mbaizáŋkúnì**	**zembaizáŋkúnì**	pieces of firewood		

Morphological Class 10 (plural of Class 11) [31]

IA	**nyiso**	**zenyiso**	faces	**nyuso**
IA	**nyita**	**zenyita**	bows and arrows	**nyuta**
IA	**nyifa**	**zenyifa**	cracks	**nyufa**
IA	**nyiɓu**	**zenyiɓu**	porridge	
IA	**nyipanɗe**	**zenyipanɗe**	sides	**p(h)ande**
IA	**nyimandre**		breezes	
IA	**nyiţamɓi**	**zenyiţamɓi**	wicks	**t(h)ambi**
IIA	**kunì**	**zeŋkunì**	firewood	**k(h)uni**
IIA	**paŋgà** **nyipaŋgà**	**zempaŋgà** **zenyipaŋgà**	swords	**p(h)aŋga**
IIA	**mbeβò**	**zembeβò**	winds	**p(h)epo**
IIA	**nyavù**		nets	**nyavu**
IIA	**kurà**	**zeŋkurà**	walls	**k(h)uta**
IIA	**tsihù**	**zentsihù**	days	**siku**

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[31] Note the alternative Prefix **nyi-**.

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIB	**nyiwavù**	**zenyiwavù**	ribs	**mbavù**	
IIB	**mɓawò**	**zemɓawò**	planks	**mbao**	
IIB	**nyituɗà**	**zenyituɗà**	beads	**t(h)unda**	
IIB	**tseò** **nyitseò**	**zentseò** **zenyitseò**	winnowing trays	**t(h)eo**	
IIB	**tsuŋgò** **nyitsuŋgò**	**zentsuŋgò** **zenyitsuŋgò**	tails		
II/IIIA	**nɗimè**	**zenɗimè**	tongues	**ndimi**	
II/IIIA	**nyǐlè**	**zenyǐlè**	hair	**ny(w)ele**	
II/IIIB	**nyemɓè**	**zenyemɓè**	razors	**nyembe**	
IIIC	**koɓè** **nyiŋkoɓè**	**zeŋkoɓè** **zenyiŋkoɓè**	spoons		
Morphological Classes 11 and 14					
IA	**uso**	**ouso**	face	**uso**	***-tį̀ò (4)**
IA	**uta**	**outa**	bow and arrow	**uta**	***-tá (3)**
IA	**ufa**	**oufa**	crack	**ufa**	***-kų̀à (4)**
IA	**uɓu**	**ouɓu**	porridge		
IA	**upanɗe**	**oupanɗe**	side	**upande** (piece)	***-pàndé (2)**
IA	**umandre**	**oumandre**	breeze	**umande** (dew)	
IA	**uʈamɓi**	**ouʈamɓi**	wick	**utambi**	
IA	**uʃe**		femininity	**uke**	***-ké (1)**
IA	**uwii, uyi**		badness	**-wi** (obs.)	***-ɓí (3)**
IA	**utoto**		childhood	**utoto**	
IA	**ufenya** [32]		laziness		
IIA	**uhunì**	**ouhunì**	firewood	**ukuni**	***-kúnì (1)**
IIA	**upaŋgà**	**oupaŋgà**	sword	**upaŋga**	***-páŋgà (2)**
IIA	**upepò**		wind	**upepo**	***-pépò (3)**
IIA	**wavù**	**owavù**	net	**wavu**	***-yábų̀ (1)**
IIA	**uhurà**	**ouhurà**	wall	**ukuta**	
IIA	**usihù**	**ousihù**	day	**usiku** (night)	***-tįkù (1)**
IIA	**u(w)anà**		childhood	**uana**	***-yánà (1)**

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[32] From French *fainéant* ?

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIA	**wuumè**		masculinity	**uume**	***-dúmè** (1)
IIA	**widzì**		theft	**wizi**	***-yįbį** (1)
IIA	**wiitsì, uyitsì**		freshness	**uɓitʃi**	***-bícį** (1)
IIA	**uhuù**	**ouhuù**	size	**ukuu**	***-kúdù** (1)
IIA	**unenè**		fatness	**unene**	***-nénè** (1)
IIA	**utitì**		smallness		
IIA	**uŋkuɗù**		redness	**wekundu**	***-kúndú** (3)
IIA	**udʒiŋgà**		foolishness	**uɟiŋga**	
IIA	**ufaumè**		kingdom	**ufalme, ufaume** (dial.)	
IIA	**weù**		whiteness	**weupe, weu** (clearing in bush)	***-yèdù** (4)
IIA	**ufuβì**		shortness	**ufupi**	***-kų́pí** (4)
IIB	**uwavù**	**ouwavù**	rib	**uɓavu**	***-bàdų̀** (1)
IIB	**uɓawò**	**o(u)ɓawò**	plank	**uɓao**	
IIB	**utuɗà**	**outuɗà**	bead	**utunda** (string of beads)	
IIB	**utseò**	**outseò**	winnowing tray	**uteo**	***-céd-** (5) (to sift)
IIB	**utsuŋgò**	**outsuŋgò**	tail		
IIB	**udzirò**		weight	**uzito**	***-dįtò** (1)
IIB	**uzirò**		pregnancy		
IIB	**udʒenì**		foreignness	**ugeni**	***-gènį** (1)
IIB	**wemà**		goodness	**wema**	
IIB	**uŋgudʒà**		Zanzibar	**uŋguɟa**	
II/IIIA	**ulimè, ulímè**	**oulimè**	tongue	**ulimi**	***-dímè** (1) ***-dímì**
II/IIIA	**unyilè**		hair	**uny(w)ele**	***-yų́édé** ***-yų́ídí** (3)
IIIA	**úɗù**		blackness		***-yį́dù** (1)
II/IIIB	**wěmɓè**	**owěmɓè**	razor	**wembe**	
IIIC	**uŋkóɓè**	**o(u)ŋkóɓè**	spoon		
IIIC	**uhâdʒù**	**ouhédʒù**	tamarind(s)	**ukwaɟu**	
IIIC	**(ú)wîndʒì**	**o(u)wîndʒì**	plentitude	**wiŋgi**	***-yį́ŋgì** (1)

	Ngazija				
	simple	*deictic*	*English*	*Swahili*	*C.B.*
IIIC	**uʃâʃì**	**ouʃâʃì**	scarcity	**utʃatʃe**	
IIIC	**úlè**	**oúlè**	length	**urefu**	***-dè** (4) ***-dèèpṵ̀**

Morphological Class 16

IIA	**βahanù**	**oβahanù**	place	cf. **pahali**
	βahanò	**oβahanò**		

Morphological Class 17

Irregular (cf. Class 6) :

IIA	**malonì**	**omalonì**	pasture

Compare :

	this . . .	*their . . .*	*. . . of the people*
Class 16	**oβahano βanò**	**oβahano βá haò**	**βahano βa wandrù**
Class 17	**omaloni hunù**	**omaloní haò**	**maloni ya wandrù**
Class 6	**emahala yanò**	**emahala yá haò**	**mahala ya wandrù**

ANALYSING, DESCRIBING, AND TEACHING BANTU LANGUAGES

By E. O. J. WESTPHAL

Guthrie has published little on the description and teaching of individual Bantu languages and has concentrated almost all his energies since 1955 on comparative Bantu studies. Although unpublished, his contribution to ' language description ' was nevertheless great and I would like to record some of his commentary on the analysis and description of Bantu languages and on the proper organization and purpose of an African (Bantu) language department.

This commentary was delivered in lectures, seminars and numerous research discussions.[1] Other contributors to this volume may wish to say something about his more recent comparative work but I hope here to draw attention to his not so obvious but nevertheless important contribution to the theory of the description of particular Bantu languages. As stated, this material has not been published but I hope that Professor Guthrie will perhaps feel, after reading this contribution, that many would welcome its publication.

Colleagues are agreed that it was probably in 1955 that Guthrie decided to concentrate wholly on his comparative work in Bantu. Up to this time he had pursued two lines of investigation : (a) the nature and proper description of specific Bantu languages, and (b) the nature and range of the features and characters common to various groups and to the whole family of Bantu languages. I am not concerned with (b) and Michael Mann is reporting, elsewhere in this collection, on Guthrie's analysis of Bemba and on the teaching course he had prepared for this language. The Bemba [2] and earlier Lingala [3] studies are the only two descriptive and teaching grammars he has prepared for Bantu languages. Despite this and despite the fact that he did not give us a published example of his descriptive method, I feel content in my own mind that he set the scene for a reassessment of descriptive linguistics for Bantu by his interest in comparative Bantu, by the high quality of his outline studies in specific Bantu languages (some of which had not been recorded before), by his view of what I would describe as a ' total ' language, and by his view of the cluster of interlocking disciplines required to display all facets of the ' total ' language in a single continuous and self-generating descriptive operation. This operation should have included the study of ' oral lore ' but in fact it never did so.

In this essay I wish to bring to light some of the difficulties experienced in

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[1] Notes taken during lectures, Bemba teaching material, and outline notes on the morphemes of a number of languages, given in lectures on Comparative Bantu.

[2] *Bemba* : unpublished cyclostyled teaching and lecture notes.

[3] *Lingala* : M. Guthrie, *Lingala grammar and dictionary*, Leopoldville, 1935 (and later editions).

preparing a logical place for Bantu languages in the hierarchy of disciplines recognized for teaching and examination purposes at universities—particularly in South African universities. My experiences in this respect have shown me the wisdom of Guthrie's belief that the subject of ' Bantu languages '—being a part of ' descriptive linguistics '—is a self-standing discipline with its own methods, techniques and ultimate aims.

Nobody has mentioned, as far as I know, that despite the presence of what appeared to be very complete grammars of several Bantu languages, Bantu language description was really at a very low ebb in the early post-war years. It seemed as if the pattern had been set by C. M. Doke for all Bantu languages and that there was now nothing more to do than to record every remaining Bantu language according to his pattern. Subsequent transformational-generative work has in fact shown that there was a vast range of material that had never been touched upon even in the best available descriptions. One of Guthrie's contributions was to open up the lines of exploration that led to the analysis and description of this material, independently and along rather different and perhaps more rewarding lines than those of transformational-generative grammar. Nevertheless the pattern of description—if not the pattern of analysis—which he suggested, did not carry much influence with other Bantuists, though it is partially reflected in Price's Ngombe,[4] Atkins's Nyanja,[5] and in my highly tentative Kwangari.[6] I believe that, despite the paucity of applications, what I like to think of as Guthrie's ' commutative set ' analysis and description, coupled with his view of the basically available data in a ' total ' language, will yet yield further results.

It is perhaps necessary to say again that I am not so much concerned with published matter but rather with the contribution of a particular person at a particular institution.

For nearly 100 years centres in three countries dominated African (Bantu) language studies : the central figures at these institutions (Beach, Bleek, Doke, Guthrie, Jones, Meinhof, Pienaar, Tucker, Ward, Werner, Westermann) gave direction to and profoundly influenced the discipline. But I contend—perhaps against the view of my colleagues—that the sometimes casual and sometimes deliberately designed association of the discipline (or department) of African studies with other disciplines (or departments) at a university have had a profound influence on the direction that African language studies have taken. There are those amongst us who have shaped their studies towards phonetics, towards acoustics, towards history, towards general linguistics, towards ethnology, and towards other disciplines, but at the centre there has always remained the need

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[4] *Ngombe* : E. W. Price, *Ngombe grammar* (cyclostyled), London, 1947.

[5] *Nyanja* (Chewa) : Guy Atkins, ' The parts of speech in Nyanja ', special number of *Nyasaland Journal*, III, 1, 1950.

[6] *Kwangari* : E. O. J. Westphal, *Kwangari* (cyclostyled), London, 1958.

to describe a particular language *in toto* in such a way that it could be coherently (and, please God, rapidly) taught. This central theme therefore remains the vital one, around which the peripheral interests are built up.

During the post-war years and particularly around 1949—shortly after Guthrie had published his ' Classification '—[7] a variety of theories were being tested in practice and in philosophical discussion. Amongst these topics was the relative merit of what Guthrie described as ' notional ' as against ' formal ' grammar of Bantu. The dichotomy was at first not generally accepted and many ' notional ' grammars of that time were regarded as ' scientific ', in the belief that only a single descriptive criterion—viz. the ' formal '—had been applied to the language in question. Guthrie, in developing the ' empirical approach ', pointed out that the only immediately ascertainable and empirically common matter to speaker, hearer, and observing linguist alike, was the sound that passes between speaker and hearer. In itself this common matter is devoid of meaning. Apart from doubts about the acuity of hearing of different individuals, this matter that can, so to speak, be grasped out of the air need not be in doubt, and can generally be taken for granted. Given a reasonable acuity of hearing this matter is not generally in dispute, but what happens thereafter, after the first auditory impact, will increasingly depend upon a knowledge of the language, and will increasingly involve ' meaning '. The linguist's primary duty is to discover the range of sounds, but as he gains a knowledge of the language his attention and his interest shifts to the analysis and description of the various kinds of ' forms ' into which the sounds cohere.

There is therefore a sequence of steps that a descriptive linguist must take in presenting his material. The material may be arranged, perhaps, according to the chronological order of its discovery (e.g. sounds are presented first, then morphemes or words, then sentences, and lastly vocabulary) ; perhaps according to the priority of the elements and abstractions of the material ; or perhaps according to the priority in which the elements should be presented to a learner of the language. From this last consideration, viz. the teaching priority of different aspects of the language, develops the *descriptive* transformational display in which, naturally, ' meaning ' has its place ; but at the time of which I write there was a suggestion that ' meaning '—if not entirely indispensable to analysis—was a kind of ' screen ' for the description. It was not the ultimate aim of the description. With reference to transformation grammars of Bantu, I know of no complete description of a whole language, but such fragmentary examples of it as I have seen are promising and may develop into the continuous self-generating analysis that I think Guthrie's approach certainly could develop into.

With the matter common to speaker in mind, Guthrie at first distinguished ' elements ' of a language—he misleadingly said ' elements of *language* '—from

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[7] M. Guthrie, *The classification of Bantu languages*, I.A.I., London, 1948.

' forms '. He later dropped the term ' elements '. It was unfortunate that this term as originally described by him acquired the ambiguity : ' elements of *a language* '/' elements of *language* ' and that it was not strictly applied to the system of audible symbols and symbolic structures that make up a *specific* language. Had this useful concept been retained, his commutation series—more accurately described as ' commutation sets '—would have developed into a self-generating formal grammar, with the ultimate aim of elucidating the ' meanings ' of a given language. The commutation sets would have included not only phonological sets, but also morphological, lexical, and syntactical ones.

The preoccupation of a ' notional ' grammar is the intended meaning and the cultural context in which an utterance is made, and not primarily and only the forms and formal structures of the language. Guthrie was criticized—particularly by South African linguists—for his rejection of ' notional ' grammar, and the reason for this may have been that for some people the notional superstructure of a language actually precedes its formal and auditory realization.

Although some colleagues may disagree, the transformational-generative applications to Bantu I have seen are notional, as is shown by their use of such terms as ' event ', ' object ', etc.[8] These terms are not descriptive of behavioural classes but of notions ; and the terms of classical grammar do not necessarily become reinstated and purified by the application of the stricter search and comparison procedures of transformational and generative grammars. Moreover, since the basic premises of both notional and transformational grammars are not dissimilar—since neither of them take a look at the total language, they both result in a series of disjointed studies determined rather by the traditional disciplines than by the facts of the language. The basic data for any language are its sentences —not its sounds, its morphemes, its lexemes, its meanings. As early as 1951 Guthrie insisted that complete utterances—a major proportion of which are sentences—are the basic data upon which the description of any language should be founded. This is also the premise upon which his ' Bantu Sentence Structure ' is based.[9] A sentence contains the basic data by which, in contrast with other sentences in the language, it can be analysed.

Looking back on the post-war period of development with a kind of hindsight, it seems to me that while the ' notional ' and ' formal ' trends have not been placed in perspective, the controversy, sometimes heated, produced healthy results. The emphasis on the general undesirability of ' notional ' grammars had the effect of freeing Bantu linguistics from its all too close association with speculative philosophy on the one hand and with ethnology, social anthropology, and sociology (in South Africa alone perhaps), on the other.

Bantu descriptive linguistics—and perhaps that of other African and Oriental

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[8] E. Nida, *Towards a science of translation*, Leiden, 1964 (and personal communication).

[9] M. Guthrie, *Bantu sentence structure*, S.O.A.S., London, 1961.

languages—was to come under a different kind of microscope. At a somewhat later stage questions arose about the precise fields of activity of ' Bantuists ' and ' general linguists ' and about the day-to-day relationship of the two departments with reference to teaching and research. While there are those who firmly believe that ' general linguistics ' constitutes a genuine discipline, some Bantuists have equally firmly believed that ' descriptive linguistics ' constitutes a genuine discipline. In South Africa, departments of phonetics (and linguistics) were founded within the African Language Departments and this fact has always been reflected in their syllabuses. In London it was perhaps more evident than at smaller institutions that ' general linguists ' could not become ' general ' unless they graduated through one or more ' Language Departments '. Bantuists (or Africanists), on the other hand, were not general linguists and, unfortunately, mostly saw themselves as language teachers only. Where they did attempt linguistics their efforts were indistinguishable from those of general linguists and they were unable to define the nature of their discipline. While the creation of regional departments solved the problem for them, Guthrie on the other hand insisted that ' descriptive linguistics ' (or the Bantu branch of it) was concerned with a ' total language '—not with unrelated fragments of unrelated languages—and with a field and with techniques rather different from those of general linguistics.

In 1920 in South Africa the first undergraduate course in a Bantu language was designed at the University of Cape Town (UCT) and was shortly thereafter offered in the prospectus. In order to equate this Bantu course with French and German—both with vast literatures—the authorities required a rather heavier emphasis on linguistic studies for the only just ' literate ' Bantu languages. Shortly thereafter the University of the Witwatersrand created the department of Bantu Studies (under C. M. Doke) following much the same pattern. At both universities the need was soon felt for phonetics ; and phonetics departments were soon created within the School of African Studies (at UCT) and within the Department of Bantu Studies (at Wits.). In Britain and Germany the situation was somewhat different. In both countries there were no undergraduate courses in Bantu languages and in London these only came into existence in 1955 as B.A. (Honours) courses in Sotho, Nguni and Swahili. In both the British and German universities there was relatively little teaching, and teachers at these universities occupied themselves more with research. Those who know the pre-war situation say that Phonetics departments were always independent and autonomous, but in South Africa they were initially ' service ' departments. They did not, however, long remain so ; and it is to the credit of D. M. Beach (at UCT) and P. de V. Pienaar (at Wits.) that they gained their independence so soon. In South Africa, then, phonetics and general linguistics grew out of the study of African languages. Their teaching was limited and auxiliary to language departments as far as they were not merely concerned with speech therapy.

There seems to be a feeling today that the roles of Language and General Linguistics departments should be reversed ; and one suspects that a distinction might come into existence between ' pure ' and ' applied ' linguistics, where the more practical interests of a ' regional ' organization do not rule paramount. Guthrie, on the other hand, insisted that Bantu language studies were an autonomous discipline and that at a practical and empirical level the hierarchical structures and systems of sound, form, and meaning were surely more easily handled by a Bantuist than by a general linguist. Tensions do regrettably exist between Language and Linguistics departments and did exist in London. In part, these tensions arose from different views about ' language ' (i.e. the general human faculty for speech) and ' a language ' (i.e. the specific spoken language of a language community).

While there may be a feeling that the roles of Language and Linguistics departments should be reversed, I—coming from a South African tradition—cannot follow how phonetics, phonemics, phonology and general linguistics came to develop their autonomy at all without involving the Language departments. Certainly phonetics, then as now, is not capable of general and universal statements, and its continued ineffectiveness is illustrated by the fact that even now vowel and consonant phenomena have not been brought together as specializations of the same thing with very different periodic functions in speech. Guthrie avoided the controversy between phonetics and phonemics, and in his use of the term ' speech sound ' kept the door open for an independent study of the speech sounds of Bantu languages. In this he was aided by the peculiar morpho-phonemic circumstances of Bantu which—as comparative studies revealed—permitted an almost complete phonemic statement through what might be termed a preliminary morpho-phonemic list, in which nasalization, palatalization and velarization are seen as effects on (C), a primal consonant :

(C) Cw Cy
NC NCw NCy
-C -Cw -Cy (this latter 'NC minus N' group in certain languages only, e.g. Venḓa)

While one may hope for the emergence of an overall linguistic discipline, it seems clear enough to me that Bantu descriptive linguistics has not yet run its full course and can still make its contribution to this ultimate aim. But as long as its aims remain entangled with those of general linguistics, it cannot develop its own view of the continuous and self-generating sequence of what Guthrie has termed ' discovery and display '. General linguistic statements remain separate and bitty and do not lead to an understanding of the ' total language ' for the reader or the learner. Not only has the important question of Bantu syllabification never been attempted, but also the ' levels of abstraction ' on which both language exploration and language learning depend have never been enumerated. Attempts to apply Guthrie's elucidations (i.e. the function and inter-relationship of elements, forms and meaning in the total language) show that these ' levels ' are not infinite in number, do not occur with equal intensity in all languages, and can be ordered in Bantu so as to yield a continuous and coherent description of a ' total language '.

With the development of transformational-generative grammar for Amerindian languages, a further reorganization had to take place in Bantu studies. Up to this time a sort of combined morphology and syntax—that of C. M. Doke—had served the Bantu languages well. A statement of Bantu morphology was in some measure a statement of its syntax. But with the attempt to apply this kind of morpho-syntax to other African languages it became abundantly clear that this would not work. Not all languages have a morphology. The pattern applied to Amerindian languages seemed more capable of serving such languages as !xũ-Bushman than the Bantu morpho-syntax of which I speak. In his early lectures in 1951 Guthrie developed what for want of a better term I describe as his ' syntax of tensions '. Subsequently—in 1961—he published his revised ' Bantu sentence structure '.[9] In both his lectures and his publications he stressed the primacy of sentences as data.

Guthrie's ' sentence structure ' theory remained uninfluential, except for two applications by his colleagues, because despite his insistence on the primacy of syntactical data he brought no practical demonstration of his views (in the form of a total description of a language). On the other hand the notional dependence (in my view) of transformational-generative grammars and their dependence on a type of statement regarded with suspicion as excessively ' mathematical ' by some experts, does not place them in a better position than more conventional grammars for elucidating a language. Both description and teaching at university level must be made to be more rapid and effective than the natural way of learning a language (as a child does in, say, seven years). If general linguistics and mathematics are necessary in the university language curriculum, the learner would be best advised to take tuition in these two subjects before embarking on the language itself. The development of a language description (and language learning) discipline remains a priority for Bantu languages. Fortunately the basis for this development exists in the promise of transformational-generative techniques and in the as yet undeveloped premises and their implications of Guthrie's ' total language ' description. When Guthrie broke off his descriptive studies of a particular Bantu language (Bemba), a descriptive hiatus remained between syntax and morphology—a hiatus that could have been developed into a statement of what might be termed ' lexology ', a missing discipline.

The hiatus was and remains crucial for Bantu, since the all-important concept of word-division arises from it. Guthrie's colleagues pressed him for a descriptive terminology that would have overcome this difficulty, but he rightly pointed out that such a terminology arose from the application of syntactical procedures and that it should be descriptive of the behaviour of entities isolated by these procedures.

In Bantu language teaching at university level, emphasis has always been placed on analysis and description, and in South Africa both Linguistics of Bantu and Comparative Bantu have played an important part in the curriculum and final examination. In devising the curriculum, men like Doke, Lestrade, and Schwellnus (Pretoria), pointed out that the absence of literary studies in Bantu would produce a ' soft option ' *vis-à-vis* French, German, English, etc.—all with vast literatures. It was perhaps for this reason that neither British nor continental universities offered undergraduate courses in Bantu until London offered these for a few languages in 1955 ; as Honours courses in combination with social anthropology and a small amount of linguistics ; and (later) a full quota of either linguistics or history. Nevertheless, even in London, the teaching curriculum demands a great deal of linguistic competence from the student, and in this respect does not differ much from what is demanded at South African, Rhodesian, and Lesotho universities.

Although literary specialization was offered and permitted at South African universities, this was of a painfully low order. However, things have changed a great deal in at least two universities—Natal and UNISA—where literary studies are conducted at a postgraduate level, and where research tends to draw in the body of oral knowledge of a language community and not only the (minute) literature.

At UCT development is somewhat different. Guthrie pointed out that descriptive linguistic studies were chiefly concerned with an interpretation of the culture of the language community on its own terms, and that they occupied a key position in the constellation of regional studies. Teachers at UCT have attempted to apply this and are concentrating on the description of the complete and exhaustive oral lore that constitutes the body of knowledge passed on from generation to generation in that culture. Only one other work on Bantu—that of Bruno Gutman—[10] is comparable to the work undertaken by men like S. M. Tindleni at UCT.[11]

It is to be hoped that at S.O.A.S. where linguists of many languages, social anthropologists, historians, general linguists, and descriptive linguists, exist under the same roof, an agreement will be reached which would give a strong new impetus to language studies of all kinds, and that discussion will show how the constellation of linguistic techniques could be combined into a single linguistic discipline.

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[10] Bruno Gutman, *Die Stammeslehren der Dschagga*, München, 1932–8.

[11] S. M. Tindleni, publication in preparation on Hlubi traditions.

NOTES ON THE SYNTAX OF THE PASSIVE IN SWAHILI

By W. H. WHITELEY

In Swahili, and in Bantu languages more generally, the occurrence of a post-radical extension (**-w-**) in a verb has traditionally been associated with the label ' Passive '. Verbs thus extended designate a situation which is effected by some agent other than the grammatical subject of that verb. This agent may or may not be specified, but it could be argued that some implication of agency exists, a fact which marks off such a situation from one designated, say, by a **-k-** extension (' Stative '). This point is nicely made in the following example from one of the texts examined below :

Najum, bila ya kungojea kuambiwa, alivuta kiti kilichokuwa kimesukumwa, au kimesukumika chini ya meza, akakaa ;	(G7) Najum, without waiting to be told, pulled out a stool which had been pushed by someone, or was simply pushed under the table, and sat down

The actual situation, however, appears to be much more complex : while the choice of the passive is sometimes dictated by a need to state the agent explicitly, more frequently the choice implies a disavowal of particular agency, a device which in many contexts is reminiscent of English usage, and which, indeed, in journalistic Swahili may owe something to English models. More importantly, there are many contexts in which the specification of agency is not only irrelevant but perhaps not even required by the choice of a particular verb.[1] This general situation is not by any means peculiar to Swahili, as John Lyons has recently observed :

> ' If there is any one function that is common to the passive in all the languages that are customarily said to have a passive voice (and in certain languages this seems to be its sole function : e.g. in Turkish), this is that it makes possible the construction of " agentless " sentences : e.g. *Bill was killed* '.[2]

Grammatical descriptions of Swahili have, in general, paid very little attention to the Passive, most writers contenting themselves with noting its form, and adding that **na** (' by ') occurs with the agent, and **kwa** (' by/with ') with the instrument.[3]

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[1] There are some extreme cases of verbs, e.g. **-elew-**, **-chelew-** which are no longer either syntactically or semantically Passive at all. There are others, **-zaliw-**, **-shindw-**, **-tengenezw-**, come immediately to mind, which in very many instances imply no agency at all.

[2] *Introduction to theoretical linguistics*, John Lyons, Cambridge, 1968, 378.

[3] Mrs. Ashton comments ' Note that the agent of a Passive verb is preceded by **NA** ' but in her first translation exercise on the Passive the first sentence is ' The witch was stoned (**mchawi alipigwa mawe**) ' which raises the question of the status of **mawe**. This and more than half the examples in this exercise are agent-less sentences (*Swahili grammar*, E. O. Ashton, Longmans, 1947, 223–4).

On the other hand, however, Sacleux had long ago recognized the role of the Passive in

To single out these two amplifications of the passive verbal-piece is to give a poor idea of the variety of possible amplifications and, as will be seen below, gives an erroneous idea of their importance, if this can be judged by frequency of occurrence. A detailed study would require that several questions be answered: are there, for example, any restrictions on the occurrence of the extension; how widespread is its incidence in speech and writing; what are the factors governing its choice in particular contexts; what is the range of amplifications of the passive verbal-piece? When this information is available one can perhaps move on to more general questions: can the various amplifications be handled within a single theoretical framework, or are the connections between syntax and semantics such that syntactic information can most economically be handled within the lexicon?

In an earlier study I listed a number of simple radicals for which the Passive extension was not acceptable, noting also its unacceptability with the **-(a)n-** (' Reciprocal ') extension.[4] I also made some very tentative remarks on the available choices for amplification.

These choices can be summarized by the following schema:

$$(Vw) + NP_{O/2} + NP_{App.} + NP_{O}/NP_{C} + (\textbf{na} + NP) + (\textbf{kwa} + NP) + NP_{temp.} + NP_{spat.}$$

While it is theoretically possible for all seven to occur, I have encountered no more than four, and the incidence of more than three is very low. The choices are exemplified as follows:

(i) $NP_{O/2}$ This object nominal phrase constitutes the second or fixed object of an extended radical or of one of the many simple radicals which usually associate with two objects. Examples tend to occur in entailments of type Ei:

jirani lake alilimiwa shamba (na mgeni), Cf. Pi **mgeni alimlimia jirani lake shamba** (O_2)	His neighbour had his garden cultivated for him (by a stranger)
mtoto wake alipewa zawadi (na waziri), Cf. Pi **waziri alimpa mtoto wake zawadi** (O_2)	His son was given a present (by the minister)

(ii) $NP_{App.}$ This designates a nominal phrase which intrinsically or conventionally appertains to the subject:

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creating agent-less sentences, ' En dehors de là, le Swahili emploie soit la forme passive, soit la forme neutre pour conserver comme sujet des incidents, aussi bien que de la phrase principale, la personne ou l'objet qui est en question ' (*Grammaire des dialectes swahilis*, C. Sacleux, Paris, 1909, 305), and more recently we find Loogman commenting ' When consideration of the agent is intended to be excluded, the passive form is used ' (*Swahili grammar and syntax*, A. Loogman, Duquesne, 1965, 407).

[4] *Some problems of transitivity in Swahili*, S.O.A.S., 1968, 75–80.

mtoto alikatwa kidole, The child cut (his) finger

From sentences of this type a special entailment occurs :

kidole cha mtoto or **kidole chake mtoto kilikatwa**

(iii) NP_O may be sub-divided into :

(*a*) where NP constitutes the object in an Eiv type of entailment, with a nominal of Classes 16–18 as subject (see also 6 below) :

pembeni pamewekwa bendera, In the corner there was placed a flag

Cf. Piv **bendera imewekwa pembeni**

and (*b*) where NP constitutes the object in a Piii/Eiii[5] pattern :

Eiii **nyumba moja imeezekwa bati,** One house was roofed with corrugated iron

Cf. Piii **bati imeezekwa nyumba moja,** Corrugated iron was the roofing for one house

NP_C constitutes a complement to the subject and appears to be limited to certain radicals only, e.g. **-it-**, call ; **-geuz-**, turn sthg. into sthg.

mtoto wake akaitwa Selemani, His child was called Selemani

(iv) (**na** + NP). An agentive adverbial phrase characteristic of type Ei entailments :

Ali kafuatwa na mtoto wake, Ali was followed by his child

Cf. Pi **mtoto wake kamfuata Ali**

(v) (**kwa** + NP). An instrumental adverbial phrase, not participating in entailments. While the phrase is commonly initiated by **kwa** this is not by any means always so :

lori lilisukumwa kwa bidii, The lorry was pushed vigorously

(vi) $NP_{temp.}$ A nominal phrase indicating the time at which the event takes place. Does not participate in entailments :

nyumba itabomolewa asubuhi, The house will be demolished in the morning

(vii) $NP_{spat.}$ ($NP_{O/3}$). A nominal phrase indicating the place at which the event takes place. Such sentences are usually of a Piv type, with appropriate entailment Eiv (see (iii) *a*, above) :

Piv **mgeni aliibiwa chumbani,** The guest was robbed in the room

Eiv **chumbani paliibiwa mgeni**

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[5] This pattern is discussed in detail in my ' Focus and entailment : further problems of transitivity in Swahili ' (with J. D. Mganga), *African Language Review*, 8 (in press).

To assess the validity of the above tentative schema, as well as to make a more systematic examination of the incidence of the Passive, I decided to sample some written texts. Two texts were selected : *Kisima cha Giningi* by Muhammed Said Abdullah (Evans, 1968) and *Majadiliano ya Mkutano Mkuu wa TANU*, 27/2–3/3/67 (Govt. Printer, Dar es Salaam, 1967). The former is a crime novel by an eminent Zanzibar writer, and exemplifies modern colloquial Swahili as spoken—and written—on the island : the latter is the verbatim account (*Hansard*) of a special general meeting of TANU called to discuss the Arusha declaration, and exemplifies the speech of delegates from all over Tanzania. The former comprises 101 pages, *c.* 22,500 words of text, while from the latter the first 101 pages yielded *c.* 43,500 words of text. All occurrences of the passive were noted, in both relative and non-relative forms, with the exception of nomino-verbals.[6] A total of 631 occurrences (214 from *Giningi*, 417 from *Hansard*) yielded, surprisingly enough, a frequency in both cases of one Passive extension per 105 words of text. The examples were initially sub-divided according to the type of amplification, thus (**na** + NP), (**kwa** + NP), one NP, two NP's, Ø—the last mentioned including clauses introduced by **kwamba**, etc. The percentage incidence of these amplifications is as follows :

		(**na** + *NP*)	(**kwa** + *NP*)	*1 NP*	*2 NP*	Ø	*Total*
Giningi	Non-relative	13·0	8·4	39·25	·9	23·4	84·95
	Relative .	1·9	1·4	7·9	·45	3·25	14·95
Hansard	Non-relative	10·6	9·9	29·4	·2	32·1	82·1
	Relative .	4·8	·2	8·7		4·1	17·8

Of the instances in which the Passive was amplified by either one or two nominal phrases, 70 per cent (*Giningi*) and 62·5 per cent (*Hansard*) of these comprised amplifications by nominals of Classes 1–14. The remainder were divided almost equally into amplifications by nominals of Class 15 (nomino-verbals) and Classes 16–18 ($NP_{spat.}$) in *Hansard*, but in *Giningi* 26·6 of the remainder were amplified by nominals of Classes 16–18 and only 3·4 per cent by nominals of Class 15.

The immediately striking fact about these figures is the low incidence of the ' agent ' and ' instrument ' amplifications in contrast to those marked by nominals or, indeed, by the absence of an amplification. While it may be that some proportion of the frequencies is due to recent developments in the language, it seems unlikely that any really sweeping changes have taken place during the past 20–30 years, so that I think it is reasonable to infer that in Swahili too, an important function of the Passive is to permit the formulation of agent-less sentences. The range of nominal amplifications is also an interesting and important feature.

A detailed examination of examples for each of the seven types of amplification is now given. Following the citations a short commentary is given on possible

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[6] Though in passages in which the repetition of a particular passive occurs as a rhetorical device, particularly common in *Hansard*, only one instance is recorded.

reasons for the choice of the Passive in the relevant context, but since it has not been possible to consult either writer or speakers, this should be regarded as extremely tentàtive.

1. $NP_{O/2}$ A second or fixed object may constitute the amplification either for a simple or an extended Passive. Such sentences can be regarded as entailments of P sentences in which, characteristically, O_1 is animate and O_2 inanimate (but note H46 below). The evidence is that $NP_{O/2}$ takes precedence in sequence over other amplifications.

(*a*) Simple Passive. Some of these verbs are extremely common—and not only in the sampled texts; e.g. **-p-**, give; **-ambi-**, tell; **-uliz-**, ask questions; **-lip-**, pay; **-pig-**, hit; **-fung-**, close; **-kat-**, cut; **-nyim-**, withhold; **-ung-**, join. Others, however, are less common, and may not be generally accepted, e.g. **-tum-**, send; **-tandik-**, cover sthg.; **-choko-**, poke at; **-kabidhi**, deliver; **-dhulumu**, defraud; **-pasu-**, split (examples of the last four are ambiguously (*a*) or (*b*), see below):

H9 [7] **Mimi naulizwa maswali,**[8] — I am asked questions

A typical P sentence for this might be:

X. aniuliza maswali, — X. asks me questions

where **maswali** is O_2 in both cases.

H4 **kuna mameneja wanalipwa mishahara ;** — There are managers, they are paid salaries

H15 . . . **tunaweza tukanyimwa misaada sisi . . . ,** — Maybe we shall be denied aid

H46 **Sasa ikiwa Azimio hili linaungwa mkono na Tanzania nzima,** — Now if this Declaration is supported by the whole of Tanzania

Commentary

In the case of the last two examples it is reasonable to infer that the choice of the Passive is dictated by the need to maintain continuity of grammatical subject, both extracts being embedded in larger contexts dominated by these subjects. Furthermore the fact that no agent is stated in H15 rules out the possible choice of a non-Passive form, whereas in H46 the choice of the agent with a non-Passive form would seriously break up the continuity of the passage. In the case of the first two examples, and also to some extent in the third, it is the particular subject on which the attention of the audience is being focused that demands the use of the Passive

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[7] H and G refer to *Hansard* and *Giningi*, while the numerals refer to page references.

[8] The citations are preceded and followed by dots (. . .) if they are excised from an uninterrupted passage. If they are preceded or followed by a minor pause (,/;) they are cited initially with a lower case and followed by the appropriate punctuation mark. If they are preceded or followed by a full stop, they are cited with an initial capital and followed by a full stop.

in essentially agent-less sentences. In the first the President is enumerating some of his responsibilities ; in the second he is listing the personnel in a factory.

H11	**Lakini halafu tulitumwa, tulitumwa jambo lingine,**	But then we were sent, we were sent another matter
G96	. . . **kuwa kadhulumiwa urithi wa ndugu yake.**	That he had been defrauded of his brother's inheritance

Commentary

In the second example the choice of the Passive seems to be dictated by the need for continuity of subject—the piece coming at the end of a long description of the man concerned. In the first example, however, focus on the particular subject seems to be the predisposing factor.

(*b*) Extended Passive. The two most common extensions are the Causative (**-sh-**, **-z-**) and the Oblique (**-i-**/**-e-**) :

H11	**Na kusema kweli tangu tumetenda tunaletewa mabarua ya pongezi tu.**	And as a matter of fact since we did it we've had brought to us nothing but letters of congratulation
H41	. . . **na wale ambao wanaokatiwa mirija** . . . ,	And those who have had their strings (lit. drinking-straws) cut
H78	. . . **watu wengine hukopeshwa fedha na Serikali** . . . ,	Some people are loaned money by Government
G53	**nilikumbuka maneno ya yule mke kuwa amewekewa uramali mlangoni pake,**	I remembered the words of the woman that she had had divination done for her at his door
G72	**Nadhani tambara hili ndilo alilozibiwa mdomo** . . . ,	I think that this is the cloth with which she had her mouth stopped

Commentary

In the first, second and fourth of these examples the choice of the Passive appears to have been determined by the wish to maintain continuity of subject. In the third example, however, focus on the subject appears to have been the determining factor. In the last example it is the location of the Passive within a relative clause which is important.

2. $NP_{app.}$ Only a small number of examples of this amplification have been noted from the two texts. On the occasions when more than one amplification occurs, $NP_{app.}$ yields precedence to $NP_{O/2}$.

G56	**mama yangu huniremba masizi uso mzima, nikibakishwa macho tu.**	My mother used to anoint me with soot, my whole face, leaving only my eyes

G71	**pua ilikuwa imekatwa kipande,**	One side of the nose was cut
G72	**. . . kakatwa mikono . . . ,**	Her arms were cut
G83	**Tena fikiri namna yule maiti alivyochongwa mikono yake akavuliwa bangili zake.**	Furthermore, just think how the corpse's arms had been cut about, and the bangles removed
H30	**. . . M. na A. wanakutwa mikono mizima . . . ,**	M. and A. are found with their arms unscathed
H100	**ni lazima . . . (dau) litaongozwa ongozwa lile, litashikwa usukani bara bara liongozwe vizuri lisije likagonga mwamba.**	It is essential that the ship (of State) be guided, that the tiller be grasped properly, that it be guided well and not run on to a reef

Commentary

The first of these is a somewhat unusual example of the rather common linking device by which continuity is achieved, the verbal-prefix of V_2 being linked to the object-prefix of the preceding verb, thus :

nilimkuta . . . amerudi kwake/ameachishwa kazi,	I found him returned home/relieved of his job

One might have expected in this context a preference for the non-Passive, **akinibakisha**, but evidently the linking device seemed to be more attractive. The last two examples also illustrate a desire to maintain continuity, facilitated perhaps by the fact that these are agent-less sentences. The second and third examples occur amongst a large number of Passives, in the course of an extended passage in which the writer is detailing the injuries suffered by the murdered woman. The Passive, with an implication of some agency, is clearly very suitable ! Finally, the fourth example's Passive is dictated by its location within a relative clause.

Only two cases have been noted, both from *Giningi*, of a second amplification, $NP_{O/2}$:

G57	**Msa . . . alitiliwa sahihi fikira yake . . . ,**	Msa . . . had his thought confirmed for him
G99	**. . . yule bibi kachomwa kisu kifua cha mbele . . . ,**	The woman was stabbed with a knife in the chest

Commentary

In the case of the first example the choice of the Passive seems to have been determined by a need for continuity : in the second, a discussion of the wounds of the murdered woman, the question of choice does not arise.

3. NP_O and NP_C :

(*a*) Examples in which the subject of the Passive verb is a nominal of Classes 16–18 occur rather infrequently and are entirely restricted to G :

G12	**Pembeni, huku na huku, kumejengwa makalibu ya kukusanyia maji . . . ,**	On the corners, here and there, are built tanks for catching water . . .
G53	**ambapo kwa wakati ule pamekuwa pamewekwa meza ya msonobari,**	Where at that time are placed a pine table . . .
G60	**na unapotoka nje uone kunako tumbuo ya mlango wako mmepachikwa toto la ndizi . . . ,**	And when you go outside and find on your door-catch (ring) a banana fruit-bud
G66	**na katikati ya kila shubaka mmegandishwa chungu cha fedha safi . . . ,**	And in the middle of each recess was pressed in a bright silver pot
G66	**na ubavuni kwake pamechimbwa nafasi ya duara . . . ,**	And on one side of it there had been dug a circular space

Commentary

In the first example the choice of the Passive is dictated partly by the need to maintain the continuity of the discussion on the features of the house, and partly by the need for an agent-less clause at this point. It is interesting to compare a very similar sentence on p. 9 where a Piv, rather than an Eiv pattern is preferred. The second example occurs within a relative clause where avoidance of the Passive would appear strained. The third example, by contrast, is the first of three Passives in a description of the evidence which might lead one to suppose one had been bewitched. The implication of agency is clearly crucial ! In the final two examples the choice of the Passive seems again to be dictated by continuity of subject and also partly by the sheer irrelevance of any possible agent.

(*b*) Examples of a Piii/Eiii pattern are somewhat more numerous than the foregoing but again are mainly restricted to G. While in the majority of cases NP_O immediately follows the Passive, there is the interesting case of G39 where precedence is given to $NP_{spat.}$:

G9	**Stesheni ya Giningi ilikuwa kibanda . . . na juu kimeezekwa bati . . . ,**	Giningi police-station was a hut . . . and its roof was covered with corrugated iron
G39	**kina baraza mbili za saruji . . . ya ndani pana iliyorusiwa juu yake magunia ya mbata ;**	It had two cement verandahs . . . the inner one was broad on which were stacked sacks of dried coconut
G58	**ukatia mguu wako katika chungu kipya kimechorwachorwa ' mkuruwano ',**	And you put your foot into a new pot on which words from the Koran have been scribbled

G94	. . . **na alipoona chumba cha mwanawe mlango umetiwa tumbuo** . . . ,	And when he saw that his niece's room had the door on the catch . . . (**tumbuo** is actually a metal ring, but the point is clear)
H3	**tuliona kama TANU imetiwa kitu kipya, kama imezaliwa upya.**	We saw that TANU had been invested with something new, as though it had been born again

Commentary

In the case of the last two examples I think that the choice of the Passive is dictated by the need to focus particular attention on the subjects concerned, although both are good examples of essentially agent-less sentences. The first example is a straightforward case of continuity, while the second, with the location of the Passive within a relative clause, is equally straightforward. In the third example, with its concern with witchcraft, the implication of agency provides a satisfactory case for the choice of the Passive.

NP$_C$. This complementary nominal phrase seems to be characteristic of only a very limited number of radicals, e.g. **-it-**, call ; **-geuz-**, turn someone/something into something else :

G68	**aligeuzwa samaki mkubwa** . . . ,	He was turned into a large fish . . .
H4	. . . **mabepari** . . . —**ambao kwa Kiingereza huitwa** ' **capitalists** ',	*Mabepari* . . . who in English are called ' capitalists '

Commentary

In the first case the choice of the Passive is dictated by the desire for continuity, while the incidence of the second can be explained by its location in a relative clause.

Finally, there is a single example of a nominal phrase broken by the Passive which might well be included here :

H86	. . . **nyumba imejengwa ya vyumba sita** . . . ,	The house was built of six rooms

4. (**na** + NP). As noted earlier, the agentive adverbial phrase occurs on about 15 per cent of the occasions on which a Passive is recorded. Where more than one amplification occurs it tends to yield precedence of sequence, e.g. to NP$_{app.}$ or NP$_{O/2}$; otherwise it tends to follow the Passive immediately.

G17	. . . **nyumba hiyo, ikilinganishwa na nyumba nyingine zilizo karibu, huweza kuwa ni kasr ya mfalme imezungukwa na vibanda** . . . ,	This house, if it were compared with other nearby houses, it is like a king's palace surrounded by huts

It should be noted that this extract includes the only example recorded of a non-agentive **na**-phrase, distinguishable by the fact that its status is unaffected by P/E patterning.

G27	**Macho ya Bwana Msa yalivutwa na umajimaji mwingine uliokuwako juu ya sakafu mbele ya sanduku.**	Bwana Msa's eyes were drawn to another damp patch on the floor in front of the box
G30	**Mimi natoshekwa na hayo na ninayo haki . . . ,**	I am satisfied with this and I'm sure . . .
G37	**Bwana huyo kanatokwa na jasho jingi mno —,**	This fellow has lost a great deal of sweat
G69	**njia . . . ilichoma usoni moja kwa moja . . . mpaka uione imezingiwa na mikarafuu . . . ,**	The path . . . cut straight across . . . until you see it diverted by the trees

Commentary

In the third, first and last of these extracts the choice of the Passive seems clearly associated with the wish to maintain continuity, though in the case of the third example the continuity is with what follows rather than with what precedes the Passive. In the second, the choice of the Passive is dictated at least in part, surely, by the length of the following agentive phrase.

$NP_{app.} + ($**na**$ + NP)$. Isolated examples from G have been noted :

G90	**. . . amekwisha chokolewa macho yote mawili na samaki . . . ,**	He had had both his eyes poked out by fish

$NP_{O/2} + ($**na**$ + NP)$. Examples of this are fairly common both in G and H :

H38	**. . . wengine tulipata bahati tukaoa wake . . . labda na nyumba moja alipewa na baba yake . . . ,**	Some of us had the good fortune to marry wives . . . and perhaps too a house given by her father
H78	**sheria iliyowekwa ni kuwa watu wengine hukopeshwa fedha na Serikali . . . ,**	And the law that was laid down is that some people are loaned money by the Government

Commentary

In the first two of these examples the choice of the Passive seems to have been dictated by the need to maintain continuity, though in the case of the second example it is continuity of discussion that is achieved rather than that of subject. In the last example it seems from the larger context that it is the need to focus on **watu** which determined the choice of the Passive.

5. (**kwa** + NP). This amplification occurs on about 10 per cent of the occasions for which a Passive has been recorded. It usually follows the verb immediately, but yields precedence to $NP_{app.}$, $NP_{O/2}$, and NP_{O}. No clear evidence for other amplifications is available.

G8	**Moja katika maneno matatu yaliyonunuliwa kwa elfu, elfu,**	One of the three words that are bought in their thousands

G11	**. . . kama ilifukizwa kwa mavi ya punda makavu.**	As if it had been fumigated in dried donkey's dung
G16	**Nyumba hizo zilikuwa zimejengwa bila ya plani yo yote ;**	The houses had been built without any plan whatsoever
G41	**. . . mihogo yake mitatu mikubwa mikubwa imefungwa katikati kwa ununu . . . ,**	His three very large pieces of cassava were tied with coconut fibre round the middle
G63	**Nywele zake zimepasuliwa njia katikati,**	Her hair was parted in the middle
H5	**watu wakifanya kazi sharti walipwe kwa kazi wanayoifanya,**	If people work they should be paid for the work they do
H7	**. . . nguzo za uchumi zishikwe kwa jumla na watu,**	The props of the economy should be grasped (controlled) collectively by the people
H19	**Leo wanakimbiwa kwa nini,**	To-day why are they (people) run away from
H28	**Mkutano ulifungwa kwa kuimba . . . ,**	The meeting was closed by singing
H80	**nitashindwa kujibu kwa ufasaha.**	I shall be unable to answer correctly

Commentary

Of these extracts the second, third, sixth and seventh all seem to exemplify a choice of the Passive for reasons of continuity of subject, while in the case of the first the choice is dictated by the location of the verb in a relative clause. In the fifth extract, the choice seems to be determined by the wish to focus on a particular subject. The remaining extracts are straightforward examples of agent-less sentences.

6. NP_{temp}. On the evidence of the small number of occasions on which this amplification occurs with others, it appears to have a low degree of precedence in sequence :

G26	**(sehemu) zilizoelekea kuwa zimeshikwashikwa wakati . . . (sanduku) lilipofunguliwa hiyo jana . . . ,**	(The parts) which appeared to have been grasped when (the box) was opened on the previous day
G38	**na laiti angelizaliwa kabla sijamtoa S.P. kwenda . . . ,**	And if only he'd been born before I despatched S.P. to go . . .
G87	**. . . na saruji iliyojengwa karne nyingi nyuma . . . ,**	And the cement which had been built many centuries before . . .
G46	**mimi nilioteshwa usingizini leo usiku . . . ,**	I had a dream in my sleep last night

H22	**Wamezaliwa zaliwa siku chungu nzima.**	They've been re-born on a whole heap of days
H67	**. . . na anataka aendelee na uongozi wake ina [*sic*] kamrija kale kanakatwa sasa —,**	And supposing he wants to continue with his leadership then his petty strings have been cut
H84	**Mkutano uliahirishwa saa 11 jioni hadi kesho . . . ,**	The meeting was adjourned at 5 p.m. until the following day
H85	**lakini nilikuwa nimetajwa hapa jana mapema na mtu ambaye . . . ,**	But I was mentioned here early yesterday by someone who . . .

Commentary

In the case of the second, fourth, fifth and eighth of these examples, the choice of the Passive seems to have been determined by the desire for continuity, and this is also achieved in the case of the first and third example, where the Passive is located within a relative clause. In the sixth example the Passive is chosen because of the wish to focus on *Kamrija.* Finally, the seventh example is a straightforward agent-less sentence.

7. NP_{spat}. Precedence for this amplification when in association with others seems to be very variable. Compare, for example, G39 and 53 ; H5 and 56.

G10	**Yule bwana aliyeripoti jana kanzu yake imeibiwa uwanjani pake juu ya kamba,**	The man who reported yesterday that his *kanzu* had been stolen from his yard on the line
G20	**(kisanduku) . . . na kikafunuliwa mbele yake,**	(The little box) . . . and it was opened in front of him
G26	**na ufunguo wake ulikuwa ukiwekwa juu ya rafu ya msonobari iliyopigiliwa juu ya ukuta . . . ,**	And its key was kept on the pine shelf which was fixed on the wall
G39	**. . . (baraza) ya ndani pana iliyorusiwa juu yake magunia ya mbata ;**	The inner verandah was broad on which were stacked sacks of dried coconut
G53	**. . . aliwekewa uramali mlangoni pake.**	He had had divination done for him at his door
H4	**hata kiraka hujui kinatiwaje katika mpira wa ndani.**	Even a patch, you don't know how it goes into an inner tube
H5	**yaani wamekabidhiwa mikononi mwao uwezo wa kunyonya.**	What I mean is they've had handed over to them the means to be dependent
H56	**Hili neno la amani limetumiwa sana katika maelezo . . .**	This word ' trust ' is very commonly used in explanation

Commentary

In the first, third and sixth examples the choice of the Passive seems to have been dictated by the wish to focus on the subjects concerned. In the remaining examples continuity of subject seems to have been the important consideration, with the Passive in example four being additionally located within a relative clause.

CONCLUSIONS

Examination of two modern texts has provided a substantial amount of evidence in support of a view that in Swahili an important function of the Passive is to make possible the construction of agent-less sentences. On the other hand, consideration of the reasons influencing the choice of the Passive in given contexts suggests that, whether the agent is relevant or not, the Passive is frequently a useful device to maintain continuity of grammatical subject both within and across sentence boundaries. Finally the choice may also serve to highlight the grammatical subject of the Passive verb, and while there are many examples which suggest that continuity of subject is also being maintained, there are other cases (see, for example, G94) in which it is the discontinuity with a previous subject which contributes to the achievement of focus.

A question that now arises is whether one could reasonably infer that if a given verb will accept the Passive extension it will accept any type of amplification, or whether particular verbs select particular amplifications, thus making possible greater refinement in the lexicon. To answer this would go beyond the scope of the present paper but an initial examination of the first fifty pages of G yields Passive extensions for the verbs shown in the table on page 404.

The occurrence of **-tok-**, **-dondok-**, **-ingi-** and **-toshek-** [9] in column 1 may occasion some surprise, and it seems unlikely that any of the last three could be followed by IN, or possibly even Ø. Similarly the occurrence of **-ch(elew)-** and **-za(liw)-** in columns 3 and 4 is no guarantee of their acceptability in columns 1 or 2. A preliminary consideration of this evidence suggests that the links between semantic features and syntax are so close that no general statement is possible, at least at this stage.

On the other hand the material provides some initial hypotheses, both for comparison with other Bantu languages, and for more general studies concerning the relationship between syntax and semantics.

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[9] Especially when we find an example like **Alipokwisha tosheka na usafi wake,** . . . on p. 99.

PASSIVE EXTENSIONS

+ na	+ kwa	+ IN	+ Ø
	-ach-		-ambi-
-chuku-		-ch(elew)-	-chan-
		-chong-	
-dondok-			
		-ezek-	
-fuat-	-fukiz-	-fung-	-fu-
-funik-	-fung- (3)	-fungi- (3)	
		-funguli-	
-ingi-		-ibi- (2)	-ibi- (5)
		-it- (2)	
	-jeng- (2)	-jeng-	
	-kunj-		-kat-
			-kunj-
-let-			
-linganish-			
	-nunuli-		
		-otesh-	-one-
	-pand-	-p-	
		-pangili- (2)	
		-pigili- (3)	
		-rejesh-	-rudish-
		-rusu	
		-rudish-	
-shik- (2)	-sakifi-	-shik-shik-	-sukum-
-simamish-		-shind- (2)	
		-simamish-	
		-sifu	
-tok-		-tandik-	-tak-
-toshek- (3)		-taraji	-to-
		-tazamish-	
		-ti- (3)	
-u-			
-vut-	-vut-		
		-wek- (2)	-wek-
-zunguk-			-za(liw)-

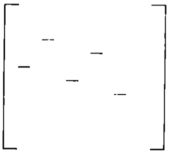
EXTERNAL TONAL SANDHI IN DAGBANI

By W. A. A. WILSON

The tone patterns of Dagbani [1] are typical of so-called terraced-level systems, and are readily analysable in terms of two tones, High (H or ´), and Low (L or `), and key lowering or Downstep (ꜝ).

There is a lowering of key whenever L precedes H, each of these changes being marked by a Downstep symbol:

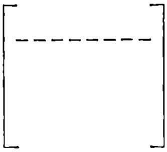
1. **bò ꜝ ká tə̀ ꜝ yéǹ ꜝ nyá?**



what shall we see?

In certain H tone sequences all the tones are on the same pitch:

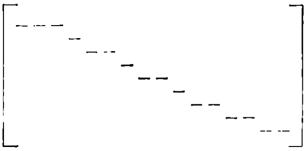
2. **ó də́ zí ó báá lá ná**



he is not to bring his dog here

Within other H tone sequences there may be one or more instances of key lowering:

3. **ḿ bórá ꜝ mí ꜝ nə́ ó ꜝ báŋ ꜝ ḿ nə́ ꜝ nə́ ꜝ tóó ꜝ gbáá ꜝ sélí**



I want him to find out which one I can take

The above possibilities may occur in any combination:

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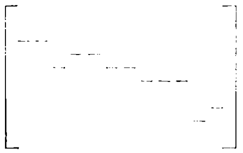
[1] For the non-tonal phonology, cf. Wilson and Bendor-Samuel (1965).

4. **bóósù ꜝ máá ꜝ záá ꜝ ná lá ŋ́ŋò ꜝ há**



the bus stops over there

The occurrence of key lowering between H tones can be significant, though it can never be so in LꜝH sequence [2]:

5. **ò ꜝ bə́ sé lí tə́ mà**	he did not roast it for me
6. **ò ꜝ bə́ sé ꜝ lí tə́ mà**	he did not sew it for me

The purpose of this article is, besides giving examples of external tonal sandhi, to present (a) criteria for determining the deep-level tones of the words involved, and (b) a set of ordered rules which derive the surface-level tones from the deep-level tones.[3]

DETERMINING DEEP-LEVEL TONES OF THE WORD

The distribution of L tones within the utterance has two characteristics which are relevant in arriving at deep-level forms:

I. Word-initial L tones are restricted in their occurrence after another word. They may follow only certain words which in certain contexts can have only L tones; these include certain verbal stems and simple pronouns.

II. In an utterance other than a Yes/No question, LH occurs finally, to the exclusion of LL.[4]

Because of these restrictions on the occurrence of L tones the deep-level tones of a word may best be postulated in the first instance on the basis of those surface-level tones which occur when the word is initial but not final in the utterance.

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[2] It is customary to use the Downstep symbol in HꜝH sequences, but not in LꜝH, mainly for economy of notation. This convention, however, obscures the fact that this symbol indicates the same key lowering phenomenon wherever it occurs. Low tones are subject to this lowering, as are the High tones, but by the nature of the case the difference in pitch between L tones cannot be as great as between H tones.

[3] The rules to be presented stop short of giving a phonetic realization of the utterance involving, *inter alia*, elisions of vowels and the occurrence of syllabic consonants. The forms here given as ‘ surface ’ may thus be regarded as ‘ phonemic ’; and the Rules as outlining the fundamental system.

[4] Only two exceptional words in this respect have been met to date, both being suffixless place names: **Tàmàlì** and **Bànvə̀m**. Utterance final L(L) may also follow the Infinitive marker **ǹ**: **ǹ sè**, to sew, cf. Rule 9.

The contexts in which the surface tones most clearly retain the deep-level word initial tones [5] (noted *H and *L) [6] are:

(a) Utterance initial:

7. **wàhù ꜝ máà**	the horse
8. **págá máà**	the woman
9. **ò ꜝ bə́ kúlí**	he did not go home
10. **ḿ bə́ kúlí**	I did not go home

In examples 7 and 9 the first word has initial *L, and in examples 8 and 10 the first word has initial *H.

(b) After initial simple pronoun having *L tone:

11. **ò kùlìꜝyá**	he went home
12. **ò ꜝ bə́ kúlí**	he did not go home

In ex. 11 the second word has initial *L; in ex. 12 the second word has initial *H. Both of these words begin with H tones after *H tone simple pronouns:

13. **ḿ kúlíyà**	I went home
14. **ḿ bə́ kúlí**	I did not go home

Deep-level word final tones are most readily identifiable when utterance medial, in view of the restrictions on the occurrence of utterance final LL.

15. **ò kùlìyà ' zúŋó**	he went home to-day
16. **ò kùlì'yá**	he went home

In ex. 15 the second word has a final L tone, but a final H in ex. 16 where it is utterance final. Similarly, the first word in ex. 7 has LH tones: **wà'hú** in isolation, since it is then utterance final. Words such as **kuliya** and **wahu** are regarded as having final *L tone.

Lexical and morphological tones

The tones of words, particularly of verbal forms, may be analysed at a deeper level than that required in examining sentence sandhi (cf. n. 5). One may distinguish lexical and morphological tones, as the following examples briefly illustrate. From the Infinitive (ex. 17) it can be established that the verb **se**, roast, has a *H tone, and **se**, sew, has a *L tone. These are regarded as lexical tones. In a number of forms, the lexical tones are neutralized. In the Non-Future affirmative (ex. 18), in the Imperfective (ex. 19), in the 2nd person singular Imperative with no expressed subject (ex. 20), the tones of the stem are *L, while

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[5] For the purposes of this article the tones underlying the form of the word as it appears in a given utterance are taken as 'basic' or 'deep-level'. The present study is not concerned with lexical or morphological tones.

[6] The asterisk is also used to indicate examples which remain subject to subsequent changes.

in the Name of Action (ex. 21) they are *H. These tones supersede the lexical tones as manifested in the Infinitive, and are regarded as morphological. In some contexts (cf. 5, 6) the lexical tones can be inferred even from H tone surface forms: *L raised to H is then distinguished from *H by a following Downstep before a word having initial H in its surface form.

17. **ǹ sé**	to roast
ǹ sè	to sew
18. **ò sè ꜝ lí**	he roasted/sewed it
19. **ò sèrà ꜝ lí**	he roasts/sews it
20. **sèmà ꜝ lí**	roast/sew it
21. **sébú**	roasting/sewing

TONAL SANDHI (EXTERNAL)

Words with initial *H retain this tone unchanged in all but a very few contexts. However, when certain words with final H precede, Downstep occurs before *H at the word boundary. Compare:

22. **págá bíhí**	the woman's children
23. **sáná ꜝ bíhí**	the stranger's children

In ex. 23 there is key lowering before the second word, just as there is in ex. 24, in which the first word ends in a L tone:

24. **sáámbà ꜝ bíhí**	the strangers' children

In words with initial *L the raising of *L to H is not an assimilation, in spite of what ex. 13 compared with ex. 11 might imply, since it can also follow words with final *LL and *HL tones. This raising is grammatically conditioned, taking place in any context unless the nature of the previous word prevents it. The patterns of ***kùlìyà**, ***nààyà** and ***nə̀** after words with final *L are shown here:

25. **wàhù ꜝ kúlíyà**	the horse went home
26. **sáámbà ꜝ kúlíyà**	the strangers went home
27. **wàhù ꜝ náàyà**	the horse has finished (it)
28. **sáámbà ꜝ náàyà**	the strangers have finished (it)
29. **wàhù ꜝ nə́ ꜝ kúlí**	the horse will go home
30. **sáámbà ꜝ nə́ ꜝ kúlí**	the strangers will go home

After many words in final H, *L initial words have the same patterns as in examples 25 to 30:

31. **págá kúlíyà**	the woman went home
32. **págá náàyà**	the woman has finished (it)
33. **págá nə́ ꜝ kúlí**	the woman will go home

If, however, the preceding word is one of those which is followed by ꜜ before a subsequent initial *H, words with initial *L appear as here:

34. **sáná kúlìꜜyá** the stranger has gone home
35. **sáná nááꜜyá** the stranger has finished (it)
36. **sáná nə̂ ꜜ kúlí** the stranger will go home

Compare also the tones of ***kpèyà*** in:

37. **págá kpéyà** the woman went in
38. **sáná kpêꜜyá** the stranger went in

and of ***Kùmáhí*** in:

39. **ò nyà ꜜ págá KúꜜmáhÍ** he saw the woman in Kumasi
40. **ò nyà ꜜ sáná KûꜜmáhÍ** he saw the stranger in Kumasi

Nouns of the tonal types of **paga** and **sana**, respectively, differ in their surface forms only in vocatives [7] introducing a sentence (whenever a given item has such a form):

41. **m̀ ꜜ págá, . . .** my wife, . . .
42. **m̀ ꜜ sánâ, . . .** my guest, . . .

In ex. 42 there is a final glide which does not occur in ex. 41. One may then postulate a latent final *L in words of the **sana** tonal type. This tone is assigned to a zero segment, indicated by a dot, placed at the end of the word: ***sáná.̀***.[8] This final L is absent in ***págá***.

The final *L in ***sáná.̀*** has the same key lowering effect on a following *H as does the final *L in **sáámbà**, though the latent *L does not persist into the surface form, except as in ex. 42.

43. ***sáná.̀ ꜜ bíhí** > **sáná ꜜ bíhí** (cf. examples 23 and 24)

This final latent *L does not have the same effect as a final *L vowel when the following word has initial *L:

44. ***sáná.̀ kùlìyà** > . . . > ***sáná kúlìyà** (> as ex. 34)
45. ***sáámbà kùlìyà** > **sáámbà ꜜ kúlíyà** (cf. ex. 26)

**L initial words*

*L initial words beginning with less than three consecutive *L tones, such as ***nə̀***, ***kpèyà***, ***Kùmáhí*** have HL glides on their first tonal segment, following ***sáná.̀***:

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[7] This applies to the Western dialects with which this article is concerned; in Eastern dialects the same difference is made in the isolated form of the word, final glides in this position being phonetically very reduced.

[8] In this particular noun the stem vowel has been simplified before the suffix, cf. Rule 1. A form ***sáán-à*** can be set up, parallel with the plural ***sáán-bà***. There are other *HHL nouns for which no VV can be postulated in the stem; compare CV stem noun ***nólí.̀*** (plural ***nóyá.̀***) mouth, with CVV stem noun ***nyúúlì*** (plural ***nyúyá.̀***) yam.

nə̂ (36), **kpêꜝyá** (38), **Kûꜝmáhí** (40). In the same context, *LLL initial words such as ***kùlìyà** and ***nàà̀yà** have a HL sequence in their first two tonal segments: **kúlìꜝyá** (34), **náàꜝyá** (35).

Where, on the other hand, *LLL initial words have the first two tones raised to H, as **kúlíyà** (31), **náá́yà** (32), words beginning with less than three consecutive *L segments have their first *L raised to H, as **nə́** (33), **kpéyà** (37), **Kúꜝmáhí** (39).

The parallels between these patterns become apparent if one postulates a zero segment with *L tone after the first *L in words with either one or two initial *L tones: ***nə̀ː̀**, ***kpèː̀yà**, ***Kùː̀máhí**. One may then compare:

46a. V̀V̀ > V́V̀ as in ***nààyà** > ***náàyà** (> **náàꜝyá**)
46b. V̀ː̀ > V́ː̀ [9] as in ***kpèː̀yà** > ***kpéː̀yà** (> ***kpéː̀ꜝyá** > **kpêꜝyá**)
47a. V̀V̀ > V́V́ as in ***nààyà** > ***nááyà**
47b. V̀ː̀ > V́ː́ as in ***kpèː̀yà** > ***kpéː́yà** (> **kpéyà**)

YES/NO QUESTIONS

Questions not incorporating interrogative words are distinguished from the corresponding statements by certain phonological markers, as shown here:

48.	**ò ꜝ ká ní**	he is not there
	ò ꜝ kà nìì?	is he not there?
49.	**á nə́ ꜝ cáŋ**	you will go
	á nə́ ꜝ càŋŋ?	will you go?
50.	**ò də̀ zì ò bàà là nàà?**	is he not to bring his dog here? (cf. ex. 2)

Phonetically the L tones following ꜝ (the only type of context in which a ꜝL sequence occurs) are pronounced on a lower pitch than is normal for utterance final L. Where there is a LꜝL sequence, the L tone(s) before the ꜝ are of somewhat higher pitch than in the corresponding statement (ex. 48), though not as high as initial H (cf. the question in ex. 49). Final LL sequences regularly occur in Yes/No questions.

TONAL SEGMENTS

In the deep-level forms it is convenient to regard only certain segments as tonal, though in a detailed consideration of the phonetic realization of the surface form [10] the tone and relative pitch of each segment would have to be indicated. This is analogous to the convention whereby, at a deep level, lip rounding may in some languages be attributed only to the vowels, though phonetically the rounding may be observed throughout a CV sequence.

Tones are regarded as features of segments rather than as suprasegmental

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[9] Another parallel between V̀ː̀ and V̀V̀ is that both are realized as HH before L, cf. Rule 10.

[10] Cf. n. 3.

features or phonemes. The tonal feature concerned is termed ‘ high ’; in H segments this feature has a plus value, noted [+ high] or [+ h], while in L segments it has a minus value, noted [— high] or [— h]. In the formulae presented below, therefore, $\begin{bmatrix} V \\ +h \end{bmatrix}$ indicates a vowel segment with feature ‘ plus high ’, or V́ ; similarly, $\begin{bmatrix} \grave{\cdot} \\ -h \end{bmatrix}$ indicates a zero segment with feature ‘ minus high ’, or ·̀ .

ORDERED RULES

Formula notation

In the rules as formulated here, non-tonal segments are indicated in a given context, i.e. after the oblique stroke, only in so far as they affect the rule's application. The horizontal stroke indicates the position of the items affected by the rule, in relation to other items specified in the context. Where tonal segments alone are specified, the distribution of non-tonal segments is immaterial.

The sign + between symbols indicates a morpheme boundary; ♯ indicates a word boundary; ⊙ indicates utterance boundary.

Word level rules

1. The vowels of CVV(C) nominal or verbal stems are simplified before most suffixes by the deletion of the second V segment. The tonal feature of the deleted segment becomes that of the next tonal segment of the word; the tonal feature of this segment in turn becomes that of a zero segment which is added as word final.

This may be formulated as follows:

$$C \begin{bmatrix} V \\ \alpha h \end{bmatrix} \begin{bmatrix} V \\ \alpha h \end{bmatrix} (C) + (C) \begin{bmatrix} V' \\ \beta h \end{bmatrix} > C \begin{bmatrix} V \\ \alpha h \end{bmatrix} (C) + (C) \begin{bmatrix} V' \\ \alpha h \end{bmatrix} \begin{bmatrix} \cdot \\ \beta h \end{bmatrix}$$

where V and V' are independent sets of non-tonal vowel features and α and β are independent values of ‘ high ’; and where the Cs are not affected.

***yùùm-à** > ***yùm-à·̀**	years
***sáán-à** > ***sán-á·̀**	stranger
***yúúl-ì** > ***yúl-í·̀**	look at

2. A zero segment is deleted when it directly follows a segment of the same tone.

$$\begin{bmatrix} \cdot \\ \alpha h \end{bmatrix} > \phi \ / \ [\alpha h]\ C^{\circ}\ \_\_$$

where C° indicates the absence of any C

***yùm-à·̀** > ***yùm-à**	years

This rule deletes some zero segments inserted by the previous rule. This ensures that they will not be affected by subsequent rules concerning zero segments such as those inserted by Rule 3.

3. A zero segment with L tone is added after the first tonal segment of any word which does not have an initial sequence of at least three *L tones.

$$\phi > \begin{bmatrix} \cdot \\ -\mathrm{h} \end{bmatrix} / [-\mathrm{h}]\underline{\quad}(\mathrm{C})\,([-\mathrm{h}])\,(\mathrm{C}) \begin{Bmatrix} \# \\ [+\mathrm{h}] \end{Bmatrix}$$

***nə̀ > *nə̀ː̀**	(Future marker)
***kpèyà > *kpèː̀yà**	entered
***Dàgbánáː̀ > *Dàː̀gbánáː̀**	Dagomba person

This rule inserts the zero segments discussed in connexion with examples 44 and 45.

Utterance level rules

4. A Downstep mark is inserted in every LH sequence throughout the utterance.[11]

$$\phi > {}^{!} / [-\mathrm{h}]\underline{\quad}[+\mathrm{h}]$$

***Dàː̀gbánáː̀ > *Dàː̀ꜝgbánáː̀**	Dagomba person
***sánáː̀ bíhí > *sánáː̀ ꜝ bíhí**	the stranger's children
***págá nə̀ː̀ kúlí > *págá nə̀ː̀ ꜝ kúlí**	the woman will go home

5. Zero segments with L tone are deleted when between two H tones.

$$\begin{bmatrix} \cdot \\ -\mathrm{h} \end{bmatrix} > \phi / [+\mathrm{h}]\underline{\quad}\,{}^{!}\,[+\mathrm{h}]$$

***sánáː̀ ꜝ bíhí > sáná ꜝ bíhí**	the stranger's children

This rule prevents the application, to the **V́ː̀** sequences concerned, of Rule 11, which forms glides. New **V́ː̀** sequences will arise from the application of Rules 6 and 7; to these Rule 11 will apply.

6. Final zero segments with L tone following H are transferred to the beginning of a following word if this has L initial.

$$[+\mathrm{h}] \begin{bmatrix} \cdot \\ -\mathrm{h} \end{bmatrix} \# [-\mathrm{h}] > [+\mathrm{h}] \# \begin{bmatrix} \cdot \\ -\mathrm{h} \end{bmatrix} [-\mathrm{h}]$$

***sánáː̀ kùlìyà > *sáná ː̀kùlìyà**	the stranger went home

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[11] In the basic forms of Dagbani words Downstep is non-distinctive; only in very few words does a HꜝH sequence occur otherwise than through operation of external sandhi rules. The exceptions are complex polysyllables, generally nouns of foreign origin, e.g. **àlkááꜝlə́mì**, pencil (< Arabic); other words may originally have been compounds, though their etymology is now obscure, e.g. **kpàtə́ꜝnárgà**, spider.

This rule is preparatory to Rule 7, and ensures that only the first tone of a *L initial word is raised after ***sáná.̀** type words.

7. The first two segments of a LL(L) sequence following a word boundary are raised; a Downstep is inserted before these new H tones if the tone before the word boundary is L.[12]

$$[-\mathrm{h}]\,[-\mathrm{h}] > \begin{bmatrix} [+\mathrm{h}]\;[+\mathrm{h}] \\ {}^{!}[+\mathrm{h}]\;[+\mathrm{h}] \end{bmatrix} / \begin{bmatrix} [+\mathrm{h}] \\ [-\mathrm{h}] \end{bmatrix} \_$$

***págá kùlìyà** > **págá kúlíyà**	the woman went home
***sáná .̀kùlìyà** > ***sáná .́kúlìyà**	the stranger went home
***págá nə.̀ ꜝ kúlí** > ***págá nə.́ ꜝ kúlí**	the woman will go home
***sáámbà kùlìyà** > ***sáámbà ꜝ kúlíyà**	the strangers went home

This rule is blocked after certain *L final items. The words after which it does not apply are followed by a tonal bar (|), whose presence, arising from the application of a prior morphological rule, renders Rule 7 inoperative. Compare:

***ò** | **kùlìyà** (not affected by Rule 7) (see ex. 11)
***wà.̀hù kùlìyà** > ***wà.̀hù ꜝ kúlíyà** (see ex. 25)

8. Zero segments are deleted when word initial.[13]

$$. > \phi / \# \_$$

***sáná .́kúlíyà** > ***sáná kúlìyà**	the stranger went home
***sáná .́nə.̀ ꜝ kúlí** > ***sáná nə.̀ ꜝ kúlí**	the stranger will go home

9. An utterance final L tone is raised to H after L, in all but Yes/No questions.

$$[-\mathrm{h}] > {}^{!}[+\mathrm{h}] / [-\mathrm{h}]\_\ \odot$$

***sáná kúlìyà** ⊙ > **sáná kúlìꜝyá** ⊙	the stranger went home
***wà.̀hù** ⊙ > ***wà.̀ꜝhú** ⊙	horse

This rule is blocked before the ? marker. It is also blocked in verb stems directly following the particle **ǹ**; some form of marker having a blocking effect will have been inserted by a morphological rule, cf. tonal bar blocking Rule 7.

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[12] It is necessary to have Downsteps inserted by more than one rule. In such a sentence as
***sáámbà nə.̀ kpé** > . . . > ***sáámbà ꜝ nə.́ ꜝ kpé** the strangers will enter
the two ꜝ cannot be inserted in one operation. It would be possible to place Rule 4 after Rule 8, amending Rule 7 and deleting Rule 9, but this would not obviate the necessity for inserting Downsteps by both Rules 7 and 4. This rearrangement would however entail inserting the ꜝ in a LꜝH form in a different operation from its insertion in a corresponding HꜝH form, cf. **ò nə̀ ꜝ kúlí,** he will go home, **ḿ nə́ ꜝ kúlí,** I will go home.

[13] This rule might perhaps be dispensed with and the zeros retained until Rule 12. This however would be cumbersome. In determining the choice of this alternative, as of the change of rules mentioned in n.12, consideration would have to be given to the most economical manner of setting up a complete sequence of rules for the language.

10. A sequence HL other than V́(C)CV̀ becomes HH before L; this applies to VV sequences and to CVCm stems.

$$\begin{bmatrix}\grave{V}\\ \grave{N}\end{bmatrix} > [+\text{h}]\,/\begin{bmatrix}\acute{V}\,\_\_\,(C)(C)\grave{V}\\ \acute{V}C\,\_\_\begin{Bmatrix}C\\ \#\end{Bmatrix}\grave{V}\end{bmatrix}$$

where Ǹ is a nasal segment with L tone

***sáná páàyà ꜝ zúŋó > sáná pááyà ꜝ zúŋó**	the stranger arrived today
***sáná kpálm̀yà ꜝ zúŋó > sáná kpálḿyà ꜝ zúŋó**	the stranger stayed today

The effect of this rule is to neutralize the difference between the patterns of VV stems or CVCm stems after **sana** and **paga** type words in certain contexts. Compare:

págá pááyà ꜝ zúŋó	the woman arrived to-day
págá kpálḿyà ꜝ zúŋó	the woman stayed today

11. Before the final interrogative **?** marker the last segment of the utterance is doubled if not already double.

$$\phi > [\alpha]\,/\,[\beta]\,[\alpha]\,\_\_\;?$$

where α and β represent the sets of features of given segments and $\alpha \neq \beta$.

***dè vèlà ? > dè vèlàà ?**	is it good?
***á nə́ː ꜝ cáŋ ? > *á nə́ː ꜝ cáŋŋ ?**	will you go?

12. Before the **?** marker a final H tone or H tone sequence is lowered to L back as far as the last Downstep of the utterance (if any).

$$[+\text{h}] > [-\text{h}]\,/\begin{bmatrix} ! \\ \odot \end{bmatrix}[-\text{h}]_0\,\_\_\,[+\text{h}]_0\;?$$

where $[+\text{h}]_0$ indicates any number of H tones, or none.

***á nə́ː ꜝ cáŋŋ ?**	**> *á nə́ː ꜝ càŋŋ ?**	will you go?
***ò nə̀ː ꜝ cáŋŋ ?**	**> *ò nə̀ː ꜝ càŋŋ ?**	will he go?
***ó págá ká níí ?**	**> ò pàgà kà nìì ?**	is his wife not there?

In such a sentence as the last, the rule is applied successively to each H tone in turn, till the whole sequence is lowered. The $[-\text{h}]_0$ indicated after the oblique stroke results from one or more previous applications of the present rule, so is not followed by a ꜝ.

13. In sequences of the type **V́ː** or **Ńː** the H tone becomes a HL glide unless the sequence is utterance final. As a feature of the segment this glide is expressed by [+ fall], all other segments being automatically [— fall]. The Downstep following the next zero segment is retained.

$$[+\text{h}] > [+\text{fall}]\,/\,\_\_\begin{bmatrix} \cdot \\ -\text{h}\end{bmatrix}{}^{!}\,[+\text{h}]$$

***kpéːꜝyá > *kpêːꜝyá**	entered

An additional rule would be needed to allow for the final glide in vocatives (cf. ex. 38).

14. All zero segments are deleted.

. > ϕ
***wà.̀'hú** > **wà'hú** horse
***kpê.̀'yá** > **kpê'yá** entered

KEY LOWERING AND DOWNSTEP

The status of Downstep as a manifestation of key lowering[14] has been frequently discussed in recent years, cf. especially Stewart-Schachter-Welmers (1965); Carrell (1966); Pike (1966); and more recently Armstrong (1968) and Williamson (1968). Increasing attention to the distinction between deep and surface structure, not always made explicitly hitherto, has brought considerable clarification in this, as in other issues.

At deeper levels there is no need to postulate any key lowering in systems such as that of Dagbani since this phenomenon is non-distinctive.[15] At a deep level Dagbani can simply be regarded as a two-tone language. It is only at a relatively 'high', i.e. near-surface level, that key lowering need be specified, being then described as the automatic lowering of pitch that occurs whenever a H follows a L.[16] At a deep level the tonal structure of Dagbani resembles that of Hausa, in which HLH is always realized as HL'H, and in which H'H does not occur. It is emphasized that the taxonomic division between discrete-level and terraced-level languages essentially refers to surface phonology. Hausa, like Dagbani, is a two-tone language in which the key lowering rule operates, but Dagbani differs from Hausa in its subsequent rules. These produce H'H sequences, principally by (a) the deletion of L between H segments (Rule 5), and (b) the raising of LL to HH (Rule 7) before 'H.

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[14] The term 'key lowering' (Pike 1966) or 'downdrift' (Winston 1960) covers the general phenomenon of progressive lowering of pitch, whether in HL'H or H'H type sequences. Most writers tend to restrict the term 'Downstep' to H'H sequences, though sometimes also using it as a general term. Beacham (1968) describes Downstep as a feature of a phoneme, and as a 'hypophoneme' that realizes a component of the toneme 'Drop' (= H' in the notation used here).

[15] Carrell (1966) makes this same point for Ibo, though Williamson (1968) has quoted her as saying that 'a high tone is normally [– e], i.e. downstepped'. What Carrell in fact says is that 'all segments have the feature "non-echo"' (formula: [ ] > [– e]); by this superficially misleading statement she means that 'non-echo' or [– e] is a feature which is applied to all base segments, whether H or L, without distinction. She does not mean to imply that there are H'H and L'L sequences in the base forms, or even that L'L sequences occur at all. Cf. also n. 11.

[16] Cf. n. 2.

BIBLIOGRAPHY

ARMSTRONG, R. G., ' Yala (Ikom) : a terraced-level language with three tones ', *JWAL*, V, 1, 1968, 49–58.

BEACHAM, C. G., Jr., *The phonology and morphology of Yom*, Ph.D. dissertation, Hartford, Conn., 1968.

CARRELL, P. L. G., *A transformational grammar of Igbo*, Ph.D. dissertation, Univ. of Texas, 1966.

PIKE, K. L., *Tagmemic and matrix linguistics applied to selected African languages*, Ann Arbor, 1966.

STEWART, J. M., with P. SCHACHTER, and W. E. WELMERS, *The typology of the Twi tone system*, Univ. of Ghana, n.d. (1965).

WILLIAMSON, K., ' Deep and surface structure in tone languages ', *JWAL*, V, 2, 1968, 77–82.

WILSON, W. A. A., and J. T. BENDOR-SAMUEL, *The phonology of the nominal in Dagbani*, Univ. of Ghana, 1965 ; reprinted in *Linguistics*, LII, 1970, 52-82.

WINSTON, F. D. D., ' The " mid tone " in Efik ', *ALS*, I, 1960, 185–92.

SOME BANTU-LIKE FEATURES OF EFIK STRUCTURE

By F. D. D. WINSTON

Some attention has already been paid to resemblances of vocabulary between Bantu languages and languages of the Cross River area of Nigeria and Cameroun, including Efik. Rather less well known are certain other similarities involving features of the linguistic structure of Efik and Bantu languages, and even when these have been referred to in the literature they have not always been adequately described.[1] As will be seen, the word ' structure ' is used here in a rather wide sense, to embrace any aspect of the language that is not associated simply with individual lexical items ; however, it is only applied to ' surface ' structure, not to ' deep ' structure. Three main types of such structural similarity will be dealt with in the present paper ; and it would be of interest to know how far they are reflected in other languages of West Africa which are generally agreed to be outside the Bantu field.

SIMILARITIES INVOLVING NOMINAL CLASSIFICATION

Efik has now no operative system of nominal classification in the Bantu sense, so that traces of such a system must be sought at various levels of the language.

Most Efik nouns have no inflexion other than a tonal one, which does not concern us here ; some, however, have an alternation of prefix, marking a distinction between *singular* and *plural* forms. The majority, which do not, will be termed *bivalent*. The criteria for singularity and plurality are here taken to be, respectively, ability to combine with **kièt** ' one ', but not with the plural particle **m̀mè** ;[2] and ability to combine with **m̀mè** but not with **kièt** ; bivalent words

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[1] Thus, for example, both in Johnston's *Comparative study of the Bantu and Semi-Bantu languages* and in Westermann's *Die westlichen Sudansprachen*, no account has been taken of vowel harmony in nominal ' prefixes ', as outlined below—as indeed was hardly to be expected.

[2] The orthography used for Efik citations in this paper is the current orthography of Efik with some minor modifications. The following points should be noted :

(i) Orthographic **i** is here written **i** or **ɨ**, according as it has a close front articulation or a lowered and centralized one. These two vowel qualities are in complementary distribution in verb stems in isolation, and in comparable contexts, but elsewhere may be in near-minimal contrast, e.g. **ndide** ' which I am ', **ndɨge** ' I am not '. (The further implications of this approach cannot be pursued here.)

(ii) The unit **ɨ** may have zero articulation before a nasal consonant, e.g. **ifɨ̀n** ' slaves ' is pronounced [**ífǹ̩**].

(iii) **ɨ** may also have zero articulation before **r**. Thus [**brí**] may be analysed as **bɨri**. Complications arise here, however, and it has seemed best for the present purpose to retain the current spelling (e.g. **bri**) for this kind of word.

(iv) Each of the pairs **k** (stem-final) and **h**, **t** (stem-final) and **r**, and **p** (stem-final) and **b**, constitutes a single phonemic unit, which may be written **G**, **D**, or **B** respectively. Thus the orthographic difference between the second consonants of, e.g. **wuk** and **wuhɔ**, represents a sub-phonemic difference, these words being phonemically **wuG** and **wuGɔ**. Orthographic **h** is combine equally with **kièt** and **m̀mè**. Thus **ɔbɔ̍ŋ** ' chief ' is singular, **mbɔ̍ŋ** ' chiefs ' is plural, and **owo** ' person, people ' is bivalent ; and among the contexts in which they occur are the following :

ɔbɔ̍ŋ kièt	one chief	**owo kièt**	one person
ɔbɔ̍ŋ	a chief	**owo**	a person ; people
(m̀mè) mbɔ̍ŋ	chiefs	**m̀mè owo**	people
(m̀mè) mbɔ̍ŋ ìbà	two chiefs	**(m̀mè) owo ìbà**	two people

but not

***m̀mè ɔbɔ̍ŋ**

This is important since there are other ways of referring to ' manyness ' in Efik which do not involve this kind of grammatical relationship ; one of them is described briefly in the second main section of this paper.[3]

Certain Efik nouns, including some which have prefix alternation for number, may also be regarded as derivationally associated with other nouns or with verbs, either by a prefix alternation in the case of noun-noun derivation, or by the presence as against the absence of a prefix, in that of noun-verb derivation. There are also often, in the latter case, differences in the length of stem, so that it is not always possible to determine the direction of derivation. Thus we have **isàŋ** ' (a) walk, journey ', **sàŋa** ' (to) walk, journey ' ; **m̀biòmo** ' load ', **biòm** ' carry on head ' ; and for noun-noun derivation **edìm** ' rain ', **idìm** ' spring, stream '. The functions of these prefixes are much less precise than those of the number prefixes, and verb-noun derivation in particular will not be further considered in this paper, except for the special case of the regular nomino-verbal formatives.

While words such as **owo** ' person, people ' do not display any kind of grammatical or lexical prefix alternation, it is still possible to make certain observations about them on the phonological level, and particularly by drawing an analogy with verbal forms. Nearly all nouns begin with one of the vowels **i**, **e**, **a**, **ɔ**, **o**, **u**, or with a homorganic nasal which may be symbolized N. Any such syllable may be termed

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a voiced velar fricative [ɣ], and orthographic **g** is a close variety of this occurring after **i**. (Cf. (i) above.)

(v) The final syllable of trisyllabic verb stems, **de** in the current orthography, is here written **re** unless the preceding consonant is **r**. Thus **menere**, **bèrede**.

(vi) The sequences **ny**, **ŋw** are ambiguous in that they represent either unitary consonants [ɲ, w̃], or a combination of homorganic nasal and semi-vowel [ɲy, w̃w]. Where necessary, a phonetic transcription in square brackets will be included to resolve this ambiguity.

(vii) Tones, unmarked in the current orthography, are shown as follows :

a	high tone
a̍	high tone preceded by downstep
à	low tone
â	`falling tone
ǎ	rising tone

A systematic falling tone is not always realized as an audible fall.

[3] See p. 425.

a phonological prefix or P-prefix. In verbal forms, P-prefixes have precise grammatical functions, for example that of indicating number-and-person agreement with the subject. In addition, there is a system of vowel harmony, such that a 3rd-singular prefix, for example, may occur as **e**, **a**, **ɔ**, or **o**, according to the verb-stem (or sometimes the tense-prefix) which follows it.[4] Other verbal P-prefixes have the stable qualities **i**, **e**, **u**, or the nasal N, so that the general situation may be illustrated as follows, using Ꝟ to represent the variable ' harmonizing vowel ' :

i-	1st pl.	**ìmekă, ìmakă**	we have gone	**ìmedi**	we have come
e-	3rd pl.	**êkă**	they have gone	**êdi**	they have come
u-	2nd sg. neg.	**ukàha**	you did not go	**udìge**	you did not come [5]
N-	1st sg.	**mmâkă**	I have gone	**mmêdi**	I have come
Ꝟ-	3rd sg.	**âkă**	he has gone	**êdi**	he has come

The 3rd person plural and singular forms may be regarded as contractions of ***emėkă**, ***amȧkă**, etc. The unit symbolized Ꝟ in verbal prefixes has two main characteristics : viewed paradigmatically, it is in opposition to **i**, **e**, **u** and N, even though in certain contexts (e.g. before **di**) it is phonetically indistinguishable from one of these ; viewed syntagmatically, it consists of a group of four vowels, each having its own characteristic distribution (which is complementary to those of the other three). Furthermore, it differs from the other vowel units in certain features of its behaviour at word junctions.

A somewhat similar situation is to be found with nominal P-prefixes, except that the factor of paradigmatic opposition is hardly discernible, since grammatical alternation of prefixes plays a far less important part than it does with verbs. However, patterns of distribution are not dissimilar. **i-**, **e-**, **u-** and N- occur without restriction, beyond the homorgany of the nasal ; **ɔ-** and **o-** have some overlap of distribution in terms of generalized phonological patterns, but probably never (or very rarely) with any single nominal P-stem ; and **ɔ-** and **o-** taken together are in complementary distribution with **a-**. Furthermore, the kind of distribution in which **a-**, **ɔ-**, and **o-** occur in nominal P-prefixes is like that for the same vowels in verbal prefixes. For example, in **abaŋ** ' water pot ', **ɔbɔ̀ŋ** ' chief ' (sg.), **owo** ' person ', the vowel of the P-prefix has the same quality as the vowel of the P-stem, as is the case with comparable verb-stems. All these considerations suggest that **a-**, **ɔ-** and **o-** in nominal P-prefixes may be treated as a single unit, symbolized as ' Ꝟ ', the quotation marks being added to indicate that the grounds for setting up such a unit are not quite so cogent for nominal P-prefixes as they are for verbal ones. There are

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[4] Some details of the verbal vowel harmony system are given in I. C. Ward, *The phonetic and tonal structure of Efik*, Cambridge, 1933, 23–5. The description given there, however, applies only to monosyllabic stems.

[5] The terms ' singular ' and ' plural ' in relation to pronoun forms are used in a slightly different sense from that defined on p. 417 f. For the forms **ukàha** and **udige**, cf. section (iv) of n. 2, above.

a few cases of **a-** in nominal words where it is to be taken as an independent unit rather than a manifestation of ' V̵ ' : these are (i) three personal pronouns, e.g. **àfò** ' you ' (sg.) ; (ii) a few personal names, e.g. **Àsukwɔ̌** ' male born on Ikwɔ day '.[6] To sum up, we set up the following as nominal P-prefixes on phonological grounds, supported by analogy from the verbal system : **i-**, **e-**, **a-**, **u-**, N- and ' V̵ '-. It may be observed that where a noun begins with **e-**, with a suitable P-stem, as for example in **edì** ' pig ', it is impossible to decide on phonological grounds whether to assign this to the independent **e-** unit or to ' V̵ '-.

Some Efik nouns are translatable by English adjectives, and frequently occur attributively to other nouns. This suggests a division into ' substantives ' and ' adjectives ', but it is not certain whether this distinction can be applied to all nouns. Accordingly, all will be treated simply as ' nouns ' in the present paper. Occasionally reference will be made to certain nouns being ' used adjectivally '.

It may be noted that nouns thus used, if they denote quantity or number, never show a singular-plural alternation. An example is **uba̍k** ' some ', as in **uba̍k owò** ' some people '. In the sense of ' piece(s) ', on the other hand, the same (or a homophonous) word alternates for singular and plural, as in **uba̍k kièt** ' one piece ', **mba̍k ìbà** ' two pieces '.

Other nominal words are personal pronouns, numerals, and demonstratives. In phonology these are somewhat similar to nouns, but they differ in their grammatical behaviour. They will occasionally be cited in what follows.

It should perhaps be emphasized that there is no concord in Efik within the nominal phrase, except for number, and none between subject and predicate except for number and person.

Alternation of prefix for number

Table I sets out the nouns in which prefix alternation to mark the singular-plural distinction has been observed.[7] Any nouns or verbs which appear to have a clear derivational relationship with nouns already in the Table are also included. Two other groups of words are also listed. One consists of those nouns which are either singular or plural in the sense already defined, but whose pairing is irregular : either they are to be paired by suppletion or they are plural forms whose singular is to be supplied by a bivalent form, i.e. one which can also occur in plural contexts. So that while, for example, **ɔ̀fiɔ̂n** ' plain, smooth ' occurs in singular contexts, either **ɔ̀fiɔ̂n** or **m̀fiɔ̂n** occurs in plural ones, or (in the case of **m̀bɔ̀n**) there is no corresponding singular. In general, the P-prefixes of all these words follow the same patterns as do those of regularly alternating words. The other group is the numerals, whose

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[6] One of the nomino-verbal forms denoting the agent of an action also begins with **a-**, cf. Table II. Further details of the pronouns and personal names mentioned in the text are to be found in Tables III and IV.

[7] Tables I–VII are at the end of the article.

prefixes display a certain regularity which may be compared with that of the nouns.

As regards the phonological shape of the prefix alternations, it can be seen that there are four patterns, of which two are represented by only one word each. The two main patterns are ' **Ꝟ** '-/N- and ' **Ꝟ** '-/**i-**, while **i-**/N- and **u-**/N- (and, in suppletion, Ø/**i-**) also appear. In addition, some related words occur with a **u-** prefix and the approximate meaning of ' characteristic condition or state '. As regards meaning, all the singular-plural pairs fall into three groups : (1) words denoting persons of various kinds, (2) words denoting properties of people or things, i.e. readily translatable by English adjectives, or (3) words denoting pieces. The possibility of a semantic relation between groups (1) and (2) is borne out by the evidence of nomino-verbals with **Ꝟ**- prefix (see Table II), with the meaning ' one who is/does . . .'. (These, however, are bivalent, with no associated plural forms.) The ' adjective-like ' words of Table I might then be taken to have such meanings as ' the one who/which is [white, etc.] ', ' the [white, etc.] one ', and the ' **Ꝟ** '- prefix might be considered agentive even if not fully personal. A further relationship between meanings (2) and (3) is suggested by the fact that all the words in group (3)—or homophones of them—also occur in group (2).

The association of the ' **Ꝟ** '- prefix with a ' singular person ' meaning strongly suggests the comparable **O* class [8] of neighbouring Cross River class-languages, and class 1 of Bantu languages. It would even be plausible to reconstruct an earlier ***o** behind contemporary ' **Ꝟ** ', since in modern Efik **o** is one of the qualities of ' **Ꝟ** ', but is never found in opposition to it. On the other hand, the corresponding N plural prefix has no obvious parallel. Even if Efik ' **Ꝟ** '-/N- could be in some sense identified with Bantu classes 1/2, Efik ' **Ꝟ** '-/**i-** remains something of a problem ; the phonological shapes suggest, perhaps, Bantu classes 3/4, but the meanings appear inappropriate to such an identification. However, there seems no objection to connecting the **u-** prefix described above with Bantu class 14, Cross River **BU*.

One further fact should be recorded here, even though its interpretation is by no means clear. The ' multiple ' verb stems briefly described in the second main section of this paper [9] may be regarded as a kind of plural stem formed from the ' singular ' either by suffixing an **i**, or by modifying the end of the stem so that it ends in V**ŋ**V (or rarely, VNV, where N is a nasal other than **ŋ**). If the latter process can be regarded as a kind of nasalization, then we have in broad terms the same two processes applied at the *end* of verb stems to ' pluralize ' them, namely yotization and nasalization, as are applied to the *prefixes* of certain nouns to pluralize them. What, if any, is the connection between these two phenomena remains obscure.

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[8] An asterisked italic capital is adopted for arbitrary formulae subsuming similar class prefixes in several languages. Thus **BU* includes ioKö **yo-**, **yɔ-**, **yu-**, **b-** (all in one class) ; Boki **ɓo-**, **ɓɔ-** ; etc.

[9] See p. 425.

Lexical alternation of prefix

Table III sets out other examples of prefix alternation in Efik nouns which may be termed ' lexical ', since the alternation appears to have no grammatical relevance at all, except possibly in the case of nouns characterized by ' adjectival usage ', such as those in the first group of words in the Table. It is possible to trace some slight trends, for example words with **u-** denoting a condition or state (first two groups of the Table, also **ufɔn**, **unùŋ**), or an object used for an action (**udɔ̀k**, ? **ukaŋ**). Words with **i-** also denote conditions or states (**inèm**, **idòt**) ; words with N- seem similar to those with **u-**, but perhaps with more specialized meanings (**m̀fɔn**, **ntan**, **ŋkaŋ**). The last two sections of Table III, and Table IV (dealing with nominal words other than nouns and numerals) display other types of prefix patterning, but none that appears immediately relevant to our present subject. Perhaps the most one can say about this group of facts is that it supports the hypothesis that Efik at an earlier stage had a fully functioning system of nominal classification, but tells us almost nothing about it.

One detail that emerges from both Table I and Table III is the existence of derivational prefixes of the patterns VCV or NCV. Thus we have **ɔkpɔsɔŋ** ' hard, strong ', derivable from **sɔŋ** ' be hard, be strong ' ; and **mbukpo** ' the dead ', relatable to **ekpo** ' ancestral spirit '. Similar prefix patterns also appear in nomino-verbals, see Table II. (**àndi-** in that Table is treated as a special case of VCV.) It has not yet been possible to systematize these longer prefix patterns in any useful way.

Semantic groupings of nouns

Besides the feature of prefix-alternation in nouns, it is also possible to discern certain partial correlations of individual P-prefixes with particular semantic categories. Apart from the group of personal words beginning with ' Ꝟ '-, and that of words denoting conditions or states beginning with **u-**, already referred to in preceding sections, we shall single out three such correlations for mention here.

(1) ' Ear ', ' arm ', ' leg '. In Efik there appear to be only three words denoting body parts which begin with **u-** :

utɔŋ ear **ubɔk** arm **ukot** leg

There would be, of course, no reason for singling out these words, were it not for the fact that it is words with precisely these meanings that appear in an unusual pair of classes widely over the Bantu area. For example, Kongo has **kutu/matu** ' ear ', **koko/moko** ' arm ', and **kulu/malu** ' leg ' ; Ila has **kutwi/matwi** ' ear ', **kuboko/maboko** ' arm ', and **kulu/maulu** ' leg '. Similar behaviour is quite common in Cross River languages, but sometimes with more stems than just the equivalents of these three. Thus, loKö has ' arm ', ' leg ', ' thigh ' and ' cheek ' in the unusual **ko-/N-** gender, and ' ear ' in the same singular class but in a more common gender **ko-/li-**, which is, however, unusual for body parts. Further afield, Tiv has ' ear ',

' arm ', ' leg ', ' thigh ', ' cheek ', ' breast ' (in one form), and ' animal leg ', in what appears to be a comparable gender to the Bantu one referred to above.

(2) Words denoting animals. It appears that more Efik words denoting ' animals ' (including amphibia and reptiles, but not insects, birds or fish) begin with **e-** than with any other P-prefix. The following is a list of some of the commoner items :[10]

ebua	dog	**enàŋ**	cow	**ebot**	goat
erɔ̀ŋ	sheep	**edì**	pig	**enìn**	elephant
ekpè	leopard	**ebɔ̀k**	monkey	**edop**	antelope
ebet	hare	**eku**	rat	**èkpɔk**	lizard
èbre	kind of black snake (? mamba)	**èrɔŋ**	young frog	**emiâŋ**	bat
ekwɔ̀ŋ	snail				

Comparable lists with other P-prefixes are :

(i)	**idiɔ̀k**	ape	**ikut**	tortoise
	ibɔ̂m	viper	**ibâ**	small crocodile
	ìkwɔ̀t	' toad '		
cf.	**inuėn**	bird [11]	**iyak**	fish
(ii)	**unàm**	animal	**utaì**	monitor lizard
cf.	**unèn**	domestic fowl		
(iii)	**ɔmɔn**	gorilla	**àsabɔ̀**	python
(iv)	**mfuɔ̀t**	young ' toad '	**mbê**	frog
(v)	**fiɔ̀m**	large crocodile		

The **e-** P-prefix is most directly reminiscent of an **E*- class found in a number of Cross River class-languages, as the singular member of an **E*-/**N*- gender. This in turn may well be connected with the Bantu classes 9/10, though the relationship is not so easy to demonstrate as with some other genders.

(3) Words denoting liquids. This semantic category has perhaps received more attention than any other, apart from that of persons, in the investigation of nominal classification in West Africa. However, it is not very important for our present purpose. These are some of its commonest members in Efik :

mmɔŋ	water	**mmɨn**	palm wine
aràn	oil	**iyìp**	blood
ikîm	urine		

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[10] It is true that, for five out of the 16 words in this short list (those whose stem vowel is **i**, **ɨ** or **e**), the initial **e-** could alternatively be interpreted as ' Ꝟ '-. This, indeed, may well be correct for **èbre**, which could have been formed from **bre** ' be black ' by means of a (derivational) agentive ' Ꝟ '- prefix. It is a little less likely for the others, but even if all the ambiguous words are interpreted in this way, **e-** still has a slight majority over other P-prefixes in words for animals.

[11] It is perhaps worth noting that the **i-** P-prefix of this word agrees with the class 19 prefix of **ìnɔ̀ń/lɔ̀nɔ̀ń** ' bird ' in Duala. Cf. also loKö **yìnɔ̀n/yɔ̀nɔ̀n** ' bird '. The singular class of this gender includes the concord element **f-** and could reasonably be set up in **FI*.

(‘ Milk ’ and ‘ tears ’ are compounds of **mmɔŋ**.) Two of these begin with nasals, but this is obviously not very conclusive.

SIMILARITIES INVOLVING VERBAL EXTENSION

Tables V and VI exhibit the main types of formal relationship that exist between verb stems in Efik. The stems listed there can all be represented by the following phonological formulae, as indeed can the great majority of the verb stems of the language, apart from obvious recent loanwords from English in certain types of speech :

C(i/u)V(C(V(de)))
C(i/u)Vi

It is unnecessary here to specify most of the detailed restrictions on units occurring at certain places in the formulae, or in co-occurrence with other units. However, it must be noted that in the *second* vowel position of the first formula there is rarely more than a twofold opposition in any given phonological context : after any preceding CVC-, -V may be either **-i** (or very rarely **-u**), or one (rarely two) out of **-e**, **-a**, **-ɔ** or **-o**. The situation is thus once again something like that of the normal vowel harmony already described, but various irregularities give it the appearance rather of an earlier vowel harmony system which has become fossilized. For the present purpose the two main possibilities for this vowel will be symbolized as V_i and V_a.

Table V demonstrates relationships between verb stems having the patterns (i) CVC or $CVCV_i$, (ii) $CVCV_a$, and (iii) $CVCV_a$de. It seems preferable to present them in this paradigmatic form, rather than to attempt to isolate suffixes or ‘ extensions ’ such as -V_a for stems in column (ii), or -(V_a)de for those in column (iii). In the first place, a suffix such as -V_a, replacing -V_i, is of a kind which is hardly found elsewhere in Efik. In the second place, it is hardly possible to assign any definite function to such supposed suffixal elements. It is true that the meaning ‘ reversive ’ can be assigned to a number of verbs ending in **-re** and **-de**, but section (4) of Table IV shows that this is not true of all such verbs, and it is still less true that any general function can be assigned to the element -V_a. On the other hand, the element **-re** or **-de** is separable from the remainder of its stem in that the negative suffix **-ke**, if present, will *precede* it ; thus a negative form from **menere** ‘ lift up ’, for example, would be **mmenekere** ‘ I did not lift (it) up ’.

Where there are related stems in two out of the three columns in Table V, or in all three, the most common meanings assignable to the columns are, respectively, *active*, *neuter* (or, occasionally, *reflexive*, i.e. referring to an action done to the subject ; or, by extension, to another person), and *reversive*. Some reversive stems have both active-reversive and neuter-reversive meanings, others only one or other of these meanings. Some of the verbs in column (iii) have meanings which appear to be *generalizations* of the meanings of stems in column (i). (See section (2) of Table V.) (The fairly numerous sets of stems with one member in group (i) and one in group (ii), but none in group (iii), have not been represented at all in Table V.)

Table VI shows verb stems which may be called ‘ multiple ’, as opposed to ‘ simple ’. Briefly, multiple stems either add **-i** to the corresponding simple stem (or replace **-k** by **-i**, thus giving a CVi pattern), or end in -NV$_a$ (N here representing a nasal consonant, usually **ŋ**), related in various ways to the simple form. They require some kind of plural meaning in either subject or object, and the usage for any given stem is constant, but does not seem to be predictable in advance. In some cases the plurality may be in subject or object according to the precise structure ; thus, **ubɔk esiě ôkponi** ‘ his hands are large ’, but **ènye ôkponi ubɔk** ‘ he is large as to the hands ’. Furthermore, even when the subject is plural, the verbal concord prefix may be singular, as it is above. Compare also **edèt ebuà mì ɔ̂wɔ̀ŋɔ kpukpùrù** ‘ my dog’s teeth “ has ” come out all ’ (**wɔ̀ŋɔ** = ‘ go out ’, multiple). Finally, a simple form is usually substitutable for the corresponding multiple form in any context. This is in contrast to the behaviour of singular and plural nouns and noun prefixes, and has suggested the use of the different terms ‘ simple ’ and ‘ multiple ’ for verb stems.

The only obvious resemblance between this whole group of verbal forms and any Bantu phenomenon is that between the Efik reversive ‘ extension ’ -(V$_a$)de and the reversive extension **-ul-**, etc., in Bantu languages. Thus, to quote from the same two Bantu languages as before, Kongo has **teleka** ‘ to put on fire ’, **telola** ‘ to take off fire ’, **binda** or **bindika** ‘ to lock ’ (active), **bindula** ‘ to unlock ’ (active) ; while Ila has **kuyala** ‘ to shut ’, **kuyalula** ‘ to open ’. Both these languages have active-neuter pairs, but without any resemblance of phonological shape to Efik : Kongo **jiula** ‘ to open ’ (active), **jiuka** ‘ to be or become open ’ ; Ila **kuandula** ‘ to split ’ (active), **kuanduka** ‘ to be split ’.

COPULATIVE CONSTRUCTIONS

The final area in which some resemblance to Bantu structure may perhaps be discerned is that of a certain Efik copulative construction. Efik has at least two copulative verbs, **di** linking subject to noun phrase, and **dù** linking subject to locative phrase. Thus, for example :

Càlàbâr edi àkwâ òbiò Efik	Calabar is a large town of the Efiks
Ènye odù ke mbèn inyàŋ	It is on the bank of a river

However, in the case of locative phrases, there is also a non-verbal construction making use of the copulative particle **mmɔ̀**. (A locative phrase may be provisionally defined as one introduced by **ke** ‘ on, at, in ’, etc., with certain limitations ; the adverbs **mi** ‘ here ’, **do** ‘ there (near you) ’, **ko** ‘ yonder ’ are considered to be equivalent to **ke** + nominal.)[12] The precise structures in which copulative **mmɔ̀** is involved are (1) subject + **mmɔ̀** + locative phrase, and (2) **mmɔ̀** + locative phrase; there is also a similar structure lacking **mmɔ̀** altogether, (3) subject + locative phrase. E.g.

(1)	**Ètê mì mmɔ̀ ke ufɔ̀k**	My father is in the house
	Ènye mmɔ̀ ke ufɔ̀k	He is in the house
(2)	**Mmɔ̀ ke ufɔ̀k**	He (*or* they, etc.) is in the house
(3)	**Ètê mì ke ufɔ̀k**	My father is in the house
	Ènye ke ufɔ̀k	He is in the house

The particle **mmɔ̀** is *sui generis* in Efik, or almost so. It has the same phonological shape as the 3rd person plural independent pronoun, but has nothing else in common with it; in particular, the copulative **mmɔ̀** is used with subjects of any person and number. In this connection, a somewhat similar interrogative construction may be noted: this has a sentence-final harmonizing vowel in place of the locative phrase, and a particle **ènye** in place of the copulative **mmɔ̀**, and may be translated 'where is . . . ?' or 'what about . . . ?', but normally with some implication of asking for action rather than mere information, thus:

(1)	**Ufɔ̀k fɔ̀ ènye è ?**	Where is your house ? (implying: show it to me *or* take me to it)
(2)	**Ènye è ?** (**ènye** = copulative)	Where is it ? (/ are they ? etc.) (similarly)
(3)	**Ufɔ̀k fɔ̀ ô ?**	Where is your house ? (similarly)
(4)	**Ènye è ?** (**ènye** = 3rd sing. pronoun)	Where is it ? (similarly)

The particle **ènye**, oddly, has the same phonological shape as the 3rd person singular independent pronoun, but again without anything else in common with that pronoun.

It does not appear that the copulative **mmɔ̀** directly reflects anything in Bantu languages, but it is here very tentatively suggested that it may be cognate with a somewhat similar copulative particle in another eastern Nigerian language, Boki. In this language the copulative particles form part of the nominal class system, a part of which is set out in Table VII. It will be seen that the copulative particles, as shown in this Table, fit regularly into the class system. However, for a past meaning, as also for 1st and 2nd person agreements in the present and past, the

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[12] There is possibly a slight difference in meaning between locative copulative constructions with the verb **dù** and those with **mmɔ̀** (or zero), in that the latter may have some implication of demonstration, beyond the mere giving of information, but the difference—even if it can be consistently maintained—is slight.

' O class ' element **-mʊ** [13] is treated as if it were a verb stem taking the ordinary verbal prefixes and (apparently, where appropriate) the past tense tones. Thus **ɔ́mʊ́** (Class O), **bámʊ́** (class BA), **kɛ́mʊ́** (class KE), **ḿmʊ́** (1st sing., past), etc. This adds some support to the supposition that a similar ' O class ' copulative particle in some ancestor of Efik may have later become established as a copula for any subject, regardless of person or class, and have continued so, side by side with the verbal **di** and **dù**, to the present day.

In Boki, the copulative particles are used before nouns, before locative phrases, and before ' accompaniment ' phrases (' . . . is with . . . ' = ' . . . has . . . '). E.g.

kɛ̀sɛ̀ ŋ́kín ŋ̀kí gàɲín (< **kàɲín** ; **kàɲín/bòɲín** is a noun)	This house is small
bɛ̀sɛ̀ ḿbín m̀bí wòɲín (< **bòɲín**)	These houses are small
m̀bɛ̀ ɲín	They are here
bámʊ́ ɲin	They were here
ɲ̀ɲí m̀mʊ́ ɾègɛ́bjɛ̀ ɛ̀ ? (**gɛ́bjɛ̀** < **kɛ́blɛ̀**)	Has he got a spear ? (Is he with a spear ?)

There is a somewhat similar situation in Ila, among Bantu languages, where there are copulative particles **ngu**, **mbo**, **nji**, **ndi**, **mbu**, etc., according to class. These, however, are only used in connecting a subject with a noun. To connect a subject with a locative or with a phrase of accompaniment, a form built upon the particle **di** is employed. As far as this type of construction is concerned, therefore, Ila and Efik can only be linked by way of Boki (or some other comparable but hitherto unknown language) in which both locative and nominal copulative sentences share a single type of structure. A further point is that Boki is the only language known to the present writer in which the singular personal class copula element has **m** and a back rounded vowel, rather than a **g**, for instance. Thus the copula in Tiv is **ŋ̀gù**, **ḿbáà**, **ŋ́gúù**, **ŋ́gíì**, **ŋ́gáà**, **kúù**, etc.

The connection between Efik and Boki, and still more between Efik and Bantu languages, in respect of this type of construction, is admittedly tenuous. Some slight confirmation is afforded by a consideration of sentences translating ' where is . . . ? ' In the meagre evidence available from Cross River languages, a number of dissimilar interrogative elements have been found : for example **he**, **kii**, **mɛna**, **bɛ**. It is interesting that the one which most closely resembles the Efik interrogative copula **ènye** is also to be found in Boki : **ɲá** (**á**). Thus :

kɛ̀dʒẅàp ŋ̀kɪ ɲá á ?	Where is the hoe ?

kɛ̀dʒẅàp is ' hoe ', **ŋ̀kɪ** may be a determiner or possibly a copula, and the final **á** may be a separate mark of interrogation or possibly a part of the interrogative **ɲá**.

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[13] Symbols in citations from Boki have IPA values. Boki data quoted here are from personal field notes.

TABLE I

NOUNS HAVING SINGULAR AND PLURAL FORMS

SINGULAR/PLURAL FORMS	RELATED NOUNS WITH **u-** *P*-PREFIX	OTHER RELATED WORDS
Singular/plural in ' Ɐ '-/N-		
ɔbɔ̓ŋ/mbɔ̓ŋ chief/-s	**ubɔ̓ŋ** chiefship, dignity	
àkpàrawà/m̀kpàrawà young man/ . . . men		
atâ(-ùtop)/ntâ(-ùtop) expert (e.g. in hunting)/experts (. . .)		
abià(-ibɔ̀k)/mbià(-ibɔ̀k) practitioner (e.g. of medicine)/practitioners (. . .)		
èdidèm/ǹdidèm king/-s		
àfia/m̀fia white	**ùfia** whiteness	**fia** be white
òbubɨt/m̀bubɨt black	**ubɨt** blackness	cf. **bre** be black **èbre** kind of black snake, ? mamba **mbubɨt-eyò** evening (**eyò** = time, season)
èkprî/m̀kprî small	**ukpri** smallness	**kpri** be small
akanì/ŋkanì old		**kani** be old
obufa [ɔbufa]/**mbufa** new		
ànyan/ǹnyan (1) long ; (2) a length (e.g. of rope)/lengths		
etî/ntî good		
òbukpo/m̀bukpo worthless, vile		
ɔkpɔsɔŋ/mkpɔsɔŋ hard, strong		**sɔŋ** be hard, be strong
ayara/nyara male (of animal)		
òfuri/m̀furi an unbroken whole/ . . . wholes [14]		
Also ' adjectival ' forms in **èdi-/ǹdi-** (see Table II).		
Singular/plural in **i-**/*N-*		
ibiŏ/mbiŏ short piece, piece broken from a length/. . . pieces . . .		cf. **mbiŏ-mbiŏ** short (*pl.*) (see below)
Singular/plural in **u-**/*N-*		
ubȧk/mbȧk piece (often cut longitudinally)/pieces (. . .) [14]		**bàk** cut up animal cf. **bàhare** divide **mbȧi** many pieces (see below)

[14] **òfuri** and **ubȧk** are also used with the meanings, respectively, of ' whole ' and ' some '. In such cases these forms are also used in plural contexts, e.g. **òfuri uruà ìbà** ' a whole two weeks ', **ubȧk owò** ' some people ' (or ' a part of the people ' ?). Cf. p. 420.

SINGULAR/PLURAL FORMS	RELATED NOUNS WITH **u-** *P*-PREFIX	OTHER RELATED WORDS
Singular/plural in ' *V̵* '-/**i-**		
ofìn [ɔfǹ]/**ifìn** slave/-s	**ufɨ̀n** slavery	
erên/irên man (not woman)/men (not women)		
èsen/ìsen (1) strange; (2) (obsolescent) stranger		
Singular/plural by suppletion		
eyen child/**ǹdìtɔ̀** children	**uyen** childhood	
àkamba *or* **àkwâ/ìkpɔ** big		
ŋwân [w̃ân] woman/**ibân** women		
Pluralia tantum		
m̀bòn . . . people, ones [15]		
mbȧi many pieces		cf. **ubȧk/mbȧk**, etc. (above)
ǹdiɔi bad (of many things)		cf. **diɔk** be bad **ìdiɔk** badness; bad (of persons and single things) (*bivalent*)
m̀fiɔ̂n plain, smooth (*pl.*)		cf. **fiɔnɔ** be smooth, slippery **ɔ̀fiɔ̂n** plain, smooth (*bivalent*)
ǹyɔhɔ̀ full (*pl.*)		cf. **yɔhɔ** be full **ɔ̀yɔhɔ̀** full (*bivalent*)
mbiǒ-mbiǒ short (*pl.*)		cf. **ibíbió, ibĭbiǒ** short (*bivalent*) **ibiǒ/mbiǒ** (above)
Numerals		
ìbà 2, **ìta** 3, **ìnàŋ** 4, **ìtiôn** 5, **ìtiôkièt** 6, **ìtiâbà** 7, **ìtiâìta** 8, **ikiê** 100, **ìfâŋ** how many?		
cf. **àbà** 40, **àta** 60, **ànàŋ** 80; **èfut** 15, **edɨp** 20; **duòp** 10; **kièt, tièt** 1; **ùsukkièt** 9 (cf. **suhɔ** = remain).		

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[15] **m̀bòn** is only used with a following attributive nominal, e.g. **m̀bòn emì** ' these ones ', **m̀bòn ufɔ̀k fò** ' people of house your ', i.e. ' your family '.

Table II

Nomino-Verbal Formatives

ndi- : formative for infinitive

ndiwèt	to write	cf. **wèt**	write
ndiŋwɔŋ	to drink	cf. **ŋwɔŋ**	drink
ndiyě	to be beautiful	cf. **yě**	be beautiful
ndiwak	to be many	cf. **wak**	be many

àndi- : formative for noun denoting agent

àndiwèt	writer, author (*bivalent*)

èdi-/(ǹdi-) : formative for noun denoting action or state

èdiwèt	(a) writing
èdiŋwɔ̀ŋ	(a) drinking ; for drinking
èdiyě/ǹdiyě	beautiful
èdiwàk	many [16]

Ꝟ- : formative for noun-phrase denoting agent of action, or person characterized by state

èwèt-ŋwèt	one who writes, clerk ; writer of book, etc. (*bivalent*)	cf. **wèt ŋ̀wèt**	write (book, etc.)
ɔ̀fiɔ̀k-mkpɔ̀	one who knows something ; wise, clever (*bivalent*)	cf. **fiɔ̀k mkpɔ**	know something

u- : formative for noun-phrase denoting (1) action ; (2) (frequently but not invariably) object used for performing action

utɔ-iŋwàŋ	farming	cf. **tɔ ìŋwaŋ**	farm, cultivate farm
usio-ndɔ̀	divorce	cf. **sio ǹdɔ**	(to) divorce
uda-ikaŋ	(1) the getting of fire ; (2) matches	cf. **da ikaŋ**	get fire
ukut-iso	(1) seeing one's face ; (2) mirror	cf. **kut iso**	see face

Table III

Lexical Alternation of Prefix

u-/NC_rV_r- [17]

udobi weight	**ǹdodobi** heavy	**dobi** be heavy
ufere lightness in weight	**m̀fefere** light in weight	**fere** be light in weight
ukoŋ height	**ŋ̀kokoŋ** tall	**koŋ** be tall
utuŋɔ depth	**ǹtɔtuŋɔ** deep	**tuŋɔ** be hollowed out, be deep

u-/èdi- (nominо-verbal)

ùwak large number ; many	**èdiwàk** many	**wak** be many
(**ùyàl** beauty)	**èdiyě/ǹ-** beautiful	**yě** be beautiful

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[16] For the absence of singular-plural alternation with **èdiwàk**, cf. p. 420. The usage with a form like **èdiŋwɔ̀ŋ** has not been recorded in this respect.

[17] C_rV_r denotes a reduplicating syllable.

i-/èdi-, eti-		
inèm pleasantness	**èdinèm/ǹ-** pleasant	**nèm** be pleasant
idòt bitterness	**ètidòt** gall	**dòro** be bitter
u-/N-		
ufɔn goodness	**m̀fɔn** goodness, generosity, usefulness	**fɔn** be good, useful
utan sand	**ntan** sand, soil, clay	
u-/i-		
(*a*) **unùŋ** saltness, salt water	**inùŋ** salt	
(*b*) **udɔ̀k** hoe	**idɔ̀k** yam harvest	**dɔ̀k** dig up
u-/N-/i-		
ukaŋ charcoal	**ŋkaŋ** coal, charcoal **ikaŋ** fire	**kaŋ** roast in pot or hot sand
N-/**i-**		
ndap dream	**idap** sleep	**daba** (to) dream
m̀bet law	**ìbet** taboo	**bet** abstain from
ndèm water spirit	**idèm** grade of Ekpe society	
u-/e-		
ufak (narrow) creek	**efak** (narrow) street	cf. **fak** stop up, close up **faha** be stopped up, be narrow
ufɔ̀k house	**efɔ̀k** container	
N-/**e-**		
ntak reason, cause	**etak** base of tree trunk	
i-/e- or ' Ꝟ '-		
idìm spring, stream	**edìm** rain	
i-/' Ꝟ '-/**e-/mbu-**		
ikpo mourning	**okpo** corpse **ekpo** ancestral spirit	**mbukpo** the dead
' Ꝟ '-/**e-/a-** [18]		
Ɔfiɔŋ name of day	**Efiɔŋ** male born on Ofiong day	**Afiɔŋ** female born on Ofiong day
Ederi name of day	**Edet** male born on Ederi day	**Arɨt** female born on Ederi day
—	**Etɨm** male born on Ibibio (**Ibibio**) day	**Atɨm** female born on Ibibio day
i-/asu-		
Ìkwɔ̌ (1) name of day ; (2) female born on Ikwo day	**Àsukwɔ̌** male born on Ikwo day	

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[18] The allocation of P-prefixes to ' Ꝟ '- or **e-** at this point is based on the overall patterning of this group of words.

TABLE IV

DEMONSTRATIVES, PERSONAL PRONOUNS, ETC.

	Locative Adverbs	Demonstratives	Singular[19] Personal Pronouns				Plural Personal Pronouns
	Ø	' Ꝟ '	a-	' Ꝟ ' or e-	i-	N	N, **mm**, **mbu**
Near	**mi** here	**emì** this	**àmì** I (**'mì**)[20]				
Non-near	**do** there (near you)	**orò** that (near you)	**àfò** you (sg.) (**'fò**)				**m̀bùfò** you (pl.)
	ko there (yonder)	**okò** that (yonder)		**ènye** he, she, it (**esiě**)			
	ke . . . in, at, to, etc.	**ekè** . . . (of), who, which			**ìmɔ̀** he, she, it (reflexive in quotation)		**m̀mìmɔ̀** they (reflexive in quotation)
		ekèn the other					**ǹnyìn** we
		efèn another					**mmɔ̀** they
Interrogative	**m̀mɔ̀ŋ** where ?	**efè** which ?	**àniè** who ?			**ǹsò** what ?	

TABLE V

ACTIVE, NEUTER AND REVERSIVE VERB STEMS

$C(i/u)VC$, $C(i/u)VCV_i$	$C(i/u)VCV_a$	$C(i/u)VCV_ade$
(1) *Meanings regular*		
bùk bury	**bùhɔ** be buried	**bùhɔre** dig up
dian join, stick (act.)	**diana** be joined, stick together (neut.)	**dianare**, **diaŋare** (mult.)[21] separate
fuk cover (e.g. with cloth)	**fuhɔ** cover self (as in masquerade)	**fuhɔre** uncover, become uncovered

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[19] Cf. n. 5, above.

[20] Items in brackets are possessive personal pronouns, where these differ from the independent pronouns listed throughout the Table.

[21] **diaŋare** is a ' multiple ' stem, cf. Table VI. The act of separation implies at least two things to be separated.

$C(i/u)VC$, $C(i/u)VCV_i$	$C(i/u)VCV_a$	$C(i/u)VCV_a de$
kɔŋ hang up	**kɔŋɔ** hang, on self or another	**kɔŋɔre** take down from hanging position
nùk bend (act.)	**nùhɔ** be bent	**nùhɔre** become straight (nt.)
wuk fix (act.) in s.th.	**wuhɔ** be fixed in s.th.	**wuhɔre** unfix; come unfixed
bèrì lean (act.) against s.th.; shut (door)	**bère** be leaning against s.th.; be shut (of door)	**bèrede** move from leaning position (act., nt.); open (door), come open (of door)
dòrì place upon s.th	**dòro** be upon s.th.	**dòrode** take from off s.th.
kɨbi cover (with lid)	**kɨbɔ** be covered (with lid); bend over onto	**kɨbɔre** take (lid) off
biòm carry on head	—	**biòmore** put down from head
bri spread (e.g. mat)	—	**brede** [22] take up (s.th. spread)
tèm cook, boil	—	**tèmere** take off fire
waŋ wind (act.)	—	**waŋare** unwind (act.)
—	**yàra** put (headwear) on self or another	**yàrade** take off (headwear)

(2) *Forms in* **-re** *and* **-de** *generalizing or intensifying*

sùk moderate, reduce force of; go down-stream	**sùhɔ** abate; get down (from s.th.)	**sùhɔre** move down (act., nt.), lower, descend
bàk cut up (animal)	—	**bàhare** divide
kwɔ̀k sweep	—	**kwɔ̀hɔre** wipe
men pick up	—	**menere** lift up

(3) *Irregular forms*

yut rotate (act., nt.)	—	**yurɔde** twist, wring
nèn be straight	—	**nèŋere** straighten (?) [23]
—	**kpùhɔ** exchange	**kpùhɔre** change (act., nt.)
—	**fiɔnɔ** be smooth, slippery	**fiɔnɔre** slip

(4) *$C(i/u)VCV_a de$ only*

—	—	**demere** wake up (act., nt.)
—	—	**dùhɔre** filter
—	—	**kàbare** stir; become
—	—	**kanare** surround
—	—	**kpɔhɔre** unlock (cf. **kɔ̀bì** = lock)
—	—	**wɔŋɔre** turn (act., nt.)

(5) *Suppletion*

bɔp bind, tie	—	**tat** undo, untie **tara** come undone, open out

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[22] Also, more informally, **bride**.

[23] **nèŋere** may be a multiple stem, but it is possible that **nèn** and **nèŋere** should not be associated at all.

Table VI

Simple and Multiple Verb Stems

SIMPLE	MULTIPLE
With final NV	
kpa die	**kpaŋa** die (of many people)
sio take out ; take off (clothes)	**sioŋo** take out (many things) ; take off (several garments) ; etc.
tua weep	**tuaŋa** weep (of many people)
duɔ̌ fall	**duɔ̀ŋɔ** fall (of a liquid, or ? of many things)
mia beat, strike	**mɨŋa, miaŋa** beat, strike (with many blows)
dep buy	**deme** buy (many things)
nyɔŋ go home	**nyɔŋɔ** go home (of many people)
wɔ̀rɔ go out	**wɔ̀ŋɔ** go out (of many things or people)
With final i	
kpon be big	**kponi** be big (of two or more things)
niɔŋ be long	**niɔŋi** be long (of two or more things)
wàk tear	**wàl** tear up (into many pieces)
Doubtful cases	
tɔk urinate	**tɔi** drip
kpɔ̀k crow	**kpɔ̀l** bark
Suppletion	
sɨn put in	**dɔ̀ŋ** put in (many things)
men pick up	**taŋ** pick up (many things)
kpl chop	**kpeŋe** chop (with many cuts)

TABLE VII

DATA FROM BOKI CLASS SYSTEM

Reference Code	Noun Prefix	' This/These ' [24]	Verb Prefix [25]	Copula
O	**o-**, **ɔ-**, **Ø(N)-** sg.	**ḿmʊ́nɛ́n**	**o-**, (**ɔ-**)	**m̀mʊ̀**
BA	**ba-** pl.	**ḿbɛ́nɛ́n**	**ba-**	**m̀bɛ̀**
E	**e-**, **ɛ-** sg., pl.	**ɲ́ɲínɛ́n**	**ɛ-**, (**e-**)	**ɲ̀ɲì**
DE	**de-**, **dɛ-** sg.	**ńdínɛ́n**	**ɽe-**, **ɽɛ-**	**ǹdì**
A	**a-** pl.	**ɲ́ɲínɛ́n**	**a-**	**ɲ̀ɲì**
KE	**ke-**, **kɛ-** sg.	**ŋ́kínɛ́n**	**kɛ-**, (**ke-**)	**ŋ̀kì**
BE	**be-**, **bɛ-** pl.	**ḿbínɛ́n**	**bɛ-**, (**be-**)	**m̀bì**
KA	**ka-** sg.	**ŋ́kɛ́nɛ́n**	**kɛ-**, (**ke-**)	**ŋ̀kɛ̀**
BO	**bo-**, **bɔ-** sg., pl.	**ḿbűnɛ́n**	**bo-**, (**bɔ-**)	**m̀bȕ**

Main Genders

O/BA	**ɔ̀nɛ̀d'/bànɛ̀d'** [26] person
O/E	**òɕíɛ̀/ɛ̀ɕíɛ̀** village
DE/A	**dèbê/àbê** breast
KE/BE	**kɛ̀dʒẅàp/bɛ̀dʒẅàp** hoe
E/BE	**ɛ̀ɲàm/bɛ̆ːɲám** animal
KA/BO	**kàbî/bòbî** dog
BO/A	**bòɕl/àɕl** mortar, **bɔ̀tôŋ/àtôŋ** ear
BO/BA	**bòɕű/bàɕű** face

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[24] There is also a shorter form for ' this/these ', lacking the final **-ɛn**.

[25] The vowel harmony system for Boki has not been fully worked out. Bracketed items in this column are less well substantiated in the available material than the others.

[26] The symbol **d'** indicates an unexploded stop.

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