"THE VERBAL ROOT IN XHOSA,

ITS COMPONENT RADICALS AND EXTENSIONS "

by

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CONTENTS

ABBREVIATIONS AND CONVENTIONS.

Radical	R
Primary Radical	R1
Secondary Radical	R2
Mono-radical	mono-R
Di-radical	di-R
Tri-radical	tri-R
Root	r.
Verbal root	v.r.
Ideophonic root	Id. r.
Nominal root	nom. r.
Adjectival root	adj. r.
Radical Extension	REx.
Radical Conversion Extension	RCE.
Extension	Ex.
Tonal Markings:	
High Tone	H, ´
Low Tone	L, `
High-Low (falling) tone	F, ^
Consonant (with Radical)	C
Vowel (with Radical)	V
Vowel-Consonant (with Extension)	vc

Unidentified lost consonant γ

Unidentified phoneme

    (in $\underline{V}$, $\underline{C}$ context)   ~

Radical consisting of Vowel only

    (original initial consonant

       having been lost).   ~$\underline{V}$-

Radical consisting of Consonant

    only (original vowel

       having been lost)   -$\underline{C}$~

Primitive/Obsolete (starred forms)   *

Same meaning   (s.m.)

Derived from   <

Giving rise to   >

PREFACE.

I am deeply indebted to my promoters who have guided me with such patience and from whom I have gained so much during the years of study under them. Professor D. Ziervogel has put me deeply in his debt. While never sparing criticism, it has always been constructive; and while faithfully refusing to overlook faults has always given me encouragement and suggested a positive approach to the problems confronting me. During this past year, while Prof. Ziervogel was on long leave, Prof. J.A. Louw has very kindly taken over the responsibility of promoter. I am deeply grateful to him, for his enthusiasm has been an inspiration to me, and his profound knowledge of Xhosa has been of immense value. I have been indeed fortunate in enjoying the guidance of two men so well informed in their subject and so willing to impart their knowledge to others.

Further, I am indebted to Mr. Governor Mjali for the information concerning the tones of the various forms used in this thesis. Mr. Mjali's tones have also been checked by Mr. J.B. Jubase, of the Department of Bantu languages at the University of S.A., and my grateful acknowledgement to him is here recorded.

Mr. G. Mjali has given the Transkeian tonal interpretation throughout. For this I am grateful, for my own experience of Xhosa has been mainly in the Transkei. It is necessary to state this, since there is a certain measure of difference between the Transkeian tonal system and that of certain parts of the Ciskei and more Southern section of the Xhosa area. Mr. Mjali is well qualified

to supply this information.   He grew up in the Transkei, where his Father was a Methodist minister.   After passing his matriculation at the Clarkebury Institution, he studied at Fort Hare, where he read Bantu Languages under the direction of Professor D.D.T. Jabavu.   For the past fifteen years he has been the Xhosa editor of WAMBA (formerly 'Umhlobo Wabantwana').

My own contact with Xhosa began with a period of twenty one years spent in various parts of the Republic of South Africa, while engaged in Missionary work.   The greater part was spent in the Transkei, while shorter periods, spent on the Witwatersrand and in Swaziland, gave me the opportunity of coming into contact with language groups other than Nguni, and Nguni languages other than Xhosa.   This experience has stood me in good stead in undertaking this investigation.

The nature of this study has, of necessity, been concerned to a large extent with known forms, and the Xhosa dictionary has provided the raw material for much of the analysis contained in this thesis.   Though reference has been made, in the course of study, to such earlier dictionaries as John Ayliff's 'Vocabulary of the Kaffir Language' (1862), Albert Kropf's Kafir-English Dictionary (1899) and Kropf and Godfrey's second edition of the same work (1915), care has been exercised to check forms used against the more recent work contained in the 'New Concise Xhosa-English Dictionary' (J. McLaren, edited by J.J.R. Jolobe - 1963).

Finally, I wish to record my deep gratitude to my Wife, who has for the past few years not only encouraged me to continue with this work, but has unselfishly waived all claims to the times we could otherwise have been enjoying one another's company.

CHAPTER I

INTRODUCTION

1.1.0 AIM OF THESIS

1.1.0 As the title suggests, the purpose of this investigation is to establish a clear picture of what constitutes a verbal root in Xhosa, and to classify the various means whereby a simple verbal root may be extended to modify its meaning.

1.1.2 As far back as 1891, Torrend wrote in his classic "Comparative Grammar of the South African Bantu Languages", describing various suffixes which, when added to simple verbal roots, give rise to what he called 'derivative verbs'. His analysis was the basis of later developments in this field of study.

1.1.3 Before embarking on an investigation of the various types of extensions, it was obviously necessary to begin by isolating the verbal root itself, in its simplest form.

1.1.4 In dealing with the verbal root, an attempt is made to identify the nature of the component radicals that comprise the root, and further to speculate on the probable meaning-content of these radicals. Since, however, radicals do not, in general, occur in isolation, such deductions must, of necessity, be mainly speculative.

1.2.0 THE VERBAL ROOT : (v.r.)

1.2.1 Most writers on Bantu have dealt with the verbal stem, and spoken in terms of monosyllabic, disyllabic stems etc. This was natural enough in view of the fact that a syllable in Bantu normally consists of a consonant plus a vowel, and the classification of verbs according to the number of syllables in their stem seemed the obvious means of identification.

1.2.2 In this thesis, however, I have departed from this procedure and dealt with the root, for the following reason. It is generally accepted that the final vowel of a verbal stem is detachable : that once it is dropped, the verbal root is what remains.

The conventional position is clearly stated by
Doke.[1]

In Zulu, the vast majority of simple verb
stems is composed of two syllables, and
ends in the vowel -a.   With the inflexion
of the verb, this final -a may give place to
some other vowel or to some derivative suffix.
There is one part of this regular verb stem,
however, which does not change, and this
invariable part is called the root:
e.g:

Verb stem	Root
thanda	-thand-
funa	-fun-

1.2.3   This led to the further question : how are we
to describe the root of a disyllabic verb stem?   It now
consists of a syllable (consonant plus vowel) and a
consonant.   It cannot be a disyllabic root.   It can,
however, now be regarded as a root consisting of two
radicals.   But there is an obvious difference between
these radicals :

The first : consists of Consonant plus Vowel,

The second : consists of a Consonant only.

e.g: Root :   -thand-

First radical : -tha-

Second radical: -nd-

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1)   Text Book of Zulu Grammar : Doke (1931)
     p. 119.   para 298.

1.2.0. THE RADICAL (R).

1.2.1.   One is immediately faced with a problem. Are
these two radicals of a basically different nature, as
they appear on the surface?   Or are they fundamentally
similar?

1.2.2.   Apart from their semantic rôle and influence
it was necessary to establish whether each of these radicals
originally possessed a radical-vowel, or whether only the
first had a vowel, while the second consisted only of a
consonant.   This question is dealt with in the text.

1.2.3.   Other questions that had to be answered in
this connection were :

> Is it possible to say that these radicals play a
> specific rôle?   If so, what is the precise
> nature of their respective rôles?   In what
> respects are they similar, and in what respects
> do they differ?

1.2.4.   Following on the lead given by Meinhof,
Bourquin[1] developed the theory that the first and second
radicals in a di-radical verbal root do actually fulfil
distinct functions, though he did not go beyond pointing
out that the main semantic force of the verb is vested in
the first radical, and that the second influences it in
some direction.   He did not elaborate on the latter.

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1) cf. Para 2.1.0.

1.2.5   In his thesis, on the ᴊotho verbal stem, Van der
        Merwe[1] developed this line further and shewed how
certain verbal roots, possessing a similar first radical, have
also a similarity in general meaning.   This principle has now
been followed up, and developed in this study in relation to
the Xhosa root.

1.2.6   Similarly, when dealing with the second radical in a
di-radical verbal root, ideas advanced by McLaren[2] led me to
follow up the possibility of establishing a definite pattern,
whereby it would be possible to specify the direction in which
any such radical would influence the root.

1.2.7   In other words, by making a detailed comparison of
verbal roots, on the dual-basis of similarity of form, on the
one hand, and semantic similarity on the other, to identify the
rôle at least of the most commonly found radicals, in both first
and second position in the di-radical verbal root.

1.2.8   The two radicals in a di-radical verbal root are
referred to, respectively, as the primary radical[3] and the
secondary radical.[4]

1.2.9   It must be emphasized that the attempt to analyse the
di-radical verbal root into primary and secondary radicals, and
thereafter to elucidate the meaning-content of these radicals
respectively, has been of an entirely speculative nature.   The
theories put forward in this connection are tentative, and not
intended to be regarded in any way as final.

1.2.10 In seeking to classify the high frequency secondary
radicals into what have been termed 'semantic categories', such
classification is, again, of a speculative nature.   What is
significant is not so much the actual categories suggested herein,
but the fact that some such classification appears to be possible.
That the actual categories suggested here are not altogether satis-
factory, and may indeed prove to be inadequate, is of secondary
importance.

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1)   cf. D.F. van der Merwe, "On the Morphology and Semasiology
     of the Sotho Verbal Stem, with special reference to the
     derivative verbal species".   (1941) : cf Appendix A.
2)   cf. Para. 4.2.0
3)   cf. Chapter 3 : (R1)
4)   cf. Chapter 4 : (R2)

1.4.0. THE VOWEL IN THE DI-RADICAL VERBAL ROOT.

1.4.1. At first sight, a typical verbal root consists of Consonant-Vowel-Consonant. Several questions present themselves in regard to this vowel : What is its origin? In what way is it attached to the Consonant phonemes? Has it any specific semantic function? And if so, what is its nature?

1.4.2. In the course of this study, I have endeavoured, at least, to **indicate** the directions in which the answers to these questions may be found.

I have indicated, for instance, that this vowel is, basically, the undetachable vowel of the primary radical,[1] though it may have been influenced through the now lost vowel of the secondary radical.

1.4.3. While not attempting to allocate a definite semantic shape to any individual vowel, there is evidence, for example, that /U/ may often indicate a 'reversive' idea of the basic verbal root,[2] or abundant action.

1.4.4. Further, the possibility is discussed of a variation in radical vowel being accompanied by a variation in the semantic shape of the primary radical, and a corresponding variation in the meaning of the verbal root[3] as a whole.

1.5.0. SEMANTIC SHAPE.

At this stage an explanation of this term is called for.

When dealing with a complete verbal root, it

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1) cf. Para: 7.2.4.
2) cf. Para: 2.7.6.
3) cf. Para: 2.7.1.

is possible to say that it has 'meaning': e.g. "see", "go", "strike" etc. But although a radical may have a basic idea attaching to it, [1] or may influence the meaning of the complete root in some direction[1], yet neither radical, in itself, can be said to possess 'meaning'. Where semantic value can be appreciated, without amounting to specific 'meaning', the fact is referred to as 'semantic shape'. Both the first and the second radical each possess semantic shape, but taken together, as a complete verbal root, they have 'meaning'.

1.6.0.   EXTENSIONS TO THE VERBAL ROOT.

1.6.1.   While the basic form of the typical verbal root is di-radical, there are various species, derived from the di-radical, by means of suffixal extensions. These suffixes invariably come after the simple root, and before any terminative.

1.6.2.   Meinhof[2] has given us a very thorough and comprehensive analysis of what he calls "derivative extensions" or "suffixes." These "suffixes", however, appear to be of different kinds, and fulfil different functions. It has been my aim in this thesis, to classify these various 'extensions', as I prefer to call them, and to determine in what ways, if any, they differ : both in form and function.

1.6.3.   The definition of an extension, in general terms, is:

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1) cf. Para: 3.1.0.
2) cf. C. Meinhof & N.J. v. Warmelo, "Introduction to Phonology of Bantu Languages" (1932): p. 43. para 21 et seq.

"A morpheme or group of morphemes which

through association with a verbal root

produces a modification in the semantic

force of the verb in respect of relationship,

while retaining the basic meaning of the

verbal root itself."

1.6.4.   In the course of this investigation it
became evident that it is necessary to differentiate
between:

(i)   An extension added to a non-verbal root,
to convert it to use as a verbal root.[1]

(ii)   An extension added to a di-radical verbal
root, giving rise to a tri-radical root.[2]

(iii)   An extension added to a verbal root, at the
will of the speaker, which, while not
modifying the basic meaning of the action
described, yet adds flexibility to the verb
in respect of its application (e.g. causing
the action, doing it to someone else, and
so on).

1.6.5.   I have endeavoured to examine and classify
these different types of Extension, referring to them,
respectively, as

(i)   Radical Conversion Extension

(ii)   Radical Extension, and

(iii)   Extension.

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1) cf. Para: 12.5.0. et seq.
2) cf. Para: 11.5.0. et seq.
3) cf. Para: 14.0.0. et seq.

1.6.6.   In connection with the last-named, viz.,
Extension, while acknowledging the valuable contribution
made by Van der Merwe, I have had to differ with him in
regard to the vowel of the Extension.[1]   I have
attempted to shew that this vowel is as much an undetachable
part of the Extension, as the radical vowel is of the radical,
of which it forms an integral part.

1.6.7.   A further question that has received attention
is whether there is any hard and fast rule governing the
order of sequence of extensions when two or more are in
series.[2]

1.7.0.   TONAL SEQUENCE IN THE VERBAL ROOT.

1.7.1.   It became clear, as the work proceded, that the
study of the verbal root and its extensions, would be
incomplete without some reference to their tonal patterns.

1.7.2.   Have di-radical verbal roots definite tonal
sequences?   Does a root retain its tonal sequence when
extended?   Are there definite tonal sequences to be found
in given extension forms?   If so, what principles govern
these sequences?

1.7.3.   In the final chapter, an analysis is made of the
tonal patterns which are characteristic of the various
verbal roots (and cognate ideophonic roots) both in their
simple and extended forms.

1.7.4.   I have spoken of tonal 'sequences' and
deliberately refrained from using Westphal's term [3] of
'tonal profiles'.   My reasons for so doing are given in
the appropriate place.[4]

1) cf. Para; 14.12.1.
2) cf. Para; 16.1.2. et seq.
3) cf. Prof. E. Westphal ; 'Tonal Profiles of Xhosa
        nominals in final syntactical position.' (1967).
4) cf. Para; 18.1.2., 18.1.3.

1.7.5.   An analysis has been made of the progressive modifications in the tonal contrasts of the verbal root, when the addition of a succession of extensions is made, and the sequence high/low contrasts recorded.   The analysis is based upon the examples given in the corresponding sections of the thesis.

1.7.6.   Since there are certain differences between what are commonly known as Transkeian and Ciskeian tonal dialects, I have used the Transkeian variety throughout.

1.8.0.   MARKING OF TONE.

1.8.1.   As far as possible, I have marked the tones in the examples of Xhosa roots throughout this study.   I have refrained from giving the tones of roots other than those of Xhosa, recognising my own limitation in this regard, and being aware of the possibility of further complications of dialectic variations therein.   Tones have only been marked on the roots, and not on prefixes, such as the infinitive, noun class prefixes etc.

1.8.2.   The tones marked are those occurring in the infinitive form of the di-radical root.

1.8.3.   High Tone indicated by H or ´

        Low Tone indicated by L or ˋ

        High (Falling) Tone, indicated by F or ˄

1.8.4.   Technically speaking, only a vowel can carry a tone.   The di-radical verbal roots, having lost their final vowel, are indicated throughout, as having a final low tone on the secondary radical.

1.9.0.   STARRED FORMS.

Reference is made occasionally in this study
to the reconstructed starred forms in accordance with
the works of Meinhof and others associated with his
views, such as Bourquin.   This has been done for
practical reasons, in order to give some basis of
comparison.   It is fully realised that, in view of
later research, these forms may be found to be inade-
quate in many respects, and will have to be modified
at a later stage.

1.10.0.   INDICATION OF ROOT.

Because it has been important to differentiate
between the root and its extensions, I have used capital
letters to indicate the verbal root:

e.g: -BÓN-

and also, where a radical extension has been added:

e.g: -THÁNDÀ:Z-

But the Extensions have been typed in lower case letters:

e.g: -BÒNísàn-

CHAPTER 2.

2.0.0.   THE RADICAL.

2.1.1.   A radical is the irreducible element within
a root which, though not necessarily possessing a definite
"meaning" when standing alone,[1] exerts a semantic
influence upon any root of which it forms a part.

2.1.2.   In Xhosa, a radical consists, basically, of a
consonant[2] plus a vowel, so linked together that they
are without significance when separated, but constitute,
together, a single morpheme with a definite semantic shape.

2.1.3.   A Primary Radical is any radical which occurs
in first position in a verbal root.   When the root is
mono-radical, the primary radical is, of course, the only
one.

2.1.4.   A Secondary Radical is any radical which occurs
in second position in a verbal root, whether it be a
di-radical or multi-radical v.r.

2.1.5.   A Primary Radical may take the form of
consonant plus vowel; or semi-vowel plus vowel; or
merely a vowel.[3]

2.1.6.   All Secondary Radicals were originally similar
to the Primary Radicals and consisted of a consonant plus
a vowel.   In the course of development, however, the
distinctive radical-vowel of the final radical in most
verbal roots has been replaced by an invariable termina-
tive [4] and the original vowel is no longer identifiable.

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1).   e.g: A radical has a definite "meaning" when it occurs
       as a mono-radical verbal root.
2).   By "consonant" is also implied consonant, consonantal
       compound, or semi-vowel.
3).   cf. Para 2.2.1.
4).   cf. Chapter 10.

2.1.7.   In present-day Xhosa, a radical may appear as:

(i)   Consonant plus vowel :   -CV-

(ii)   Consonant only   :   -C~

      (The original radical vowel having been

      dropped in favour of an invariable

      Terminative: e.g. -a etc.)

      (N.B. ~ represents the lost radical

      vowel, now not identifiable).

(iii)   Vowel only   :   ~V-

      (The original consonant, probably - γ -

      having been lost; here represented by ~)

(iv)   Semi-Vowel plus Vowel : -CV-

2.1.8.   <u>Examples of Radicals:</u>

(i)   -CV-   :

      cf. Primary Radical -BÀ- in -BÀMB- (hold)

        "   "   -THÌ in mono-Radical v.r.

                -THÌ (say - do etc.)

(ii)   -C~   :

      cf. Mono-Radical v.r. -KH~́ (pluck)

      Secondary Radical -PH~ in -KHÙPH- (take out)

(iii)   ~V-   :

      cf. Primary Radical ~A- in -ÂKH- (build)

(iv)   -CV-   (-C- being a semi-vowel)

      cf. Primary Radical -YÁ- in -YÁL- (command).

2.2.0.   <u>PRIMARY RADICALS CONSISTING OF A VOWEL ONLY.</u>

(See (iii) above).

2.2.1.   A primary radical may consist of a vowel only.
Originally it is almost certain that all radicals had an
initial consonant.   Certain radicals, however, with an

original consonant -γ- have lost this consonant, and the radical has been reduced from - γ A- to -A-. For example, the root -ÂKH- (build) is probably derived from the primitive form -γ AK-. Today the radical vowel -A- of -γA- survives as the primary radical in -ÂKH-.

2.2.2.   N.B. It is important to differentiate such

primary radicals, consisting of a vowel

only, from the non-radical initial

vowel, occurring in certain verbal roots,

where the initial vowel is a survival of

a primitive infinitive prefix *γi- etc.

and not a radical.

2.2.3.   The initial consonant *γ , which is lost in the primary radical of vowel verbal roots, recurs in the imperative form as /y/ : for example :

yAKHani apho! (build over there!)

yAmKela imithandazo yethu!   (receive our prayers)

2.3.0.   THE INCIDENCE AND FUNCTION OF
           THE RADICAL IN DI- AND MULTI-RADICAL
           VERBAL ROOTS.

2.3.1.   While it will be necessary to deal fully with this aspect of the radical when describing the di-radical and multi-radical verbal roots, it is desirable to mention briefly at this stage the fundamental differences between the radical when used as R1[1] and when used as R2.[2]

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1) R1 : Primary Radical ; cf. Chapter 3.
2) R2 : Secondary Radical ; cf. Chapter 4.

2.3.2.　　　Fundamentally the morphological shape of the Primary Radical (R1) and the Secondary Radical (R2) is identical.　　Each consists, basically, of consonant plus vowel (with the variations already mentioned).[1]

2.3.3.　　　That is to say, originally all radicals probably had the same semantic force, whether used as R1 or R2.

2.3.4.　　　In the course of development, however, where two radicals were fused together to make one morpheme, with a combined semantic shape, (i.e. as in the formation of the di-radical verbal root[2] certain secondary radicals tended to occur more frequently with a definite semantic force, often with considerable semantic shift, for example, R2 -M-[3] indicating prolonged action, and so on (cf. mono-R v.r. -(i)M⁄ (stand)).

2.4.0.　　　PRIMARY RADICAL.

2.4.1.　　　A radical occurring by itself, as a mono-radical verbal root, or a radical occurring in first position in a di-radical or multi-radical verbal root, is known as a Primary Radical.

　　　For Example:-

2.4.2.　　　The mono-Radical -THȈ　(say, think, do, etc.) is both a primary radical, and, incidentally, also a mono-radical verbal root, besides being the mono-radical stem.

2.4.3.　　　The mono-Radical -PH⁄ (give) is both a primary radical, and a mono-radical verbal root.

2.4.4.　　　The mono-Radical -(i)M⁄ (stand) is both a primary radical, and a mono-radical verbal root.

1)　cf. Para; 2.1.7.
2)　cf. Para; 7.2.3.
3)　cf. Para; 4.3.0.

2.4.5.   In the mono-radical verbal roots, the primary radical must inevitably carry the full semantic force of the root, since it is the only radical.

e.g;   -B⌣   (become)

-(i)M⌣   (stand)

-THÌ   (say, think, do).

2.4.6.   When the primary radical is fused with a second radical, the latter becomes the secondary radical in a di-radical root.

2.4.7.   The Primary Radical in such a combination of R1:R2 continues to carry the main semantic force of the root. For example, the primary radical -JÍ- carries the idea of twisting, turning :   It occurs in several di-radical verbal roots, with this meaning predominating:

e.g;   -JÌC-   (plait neatly)

-JÌJ-   (twist, turn)

-JÌK-   (turn round, turn about)

-JÌL-   (interweave)

-JÌNG-   (hang, dangle, swing)

-JÌZ-   (tie, put around, (the head)).

2.4.8.   In each of these roots, the fundamental idea of 'twisting', 'turning' is obvious, and is vested in R1   -*JÍ-.   The modifying influence, giving distinctive meaning to the roots, is supplied by the variations in R2.

2.4.9.   In Appendix A, I have given fairly full examples of this principle, shewing how the main semantic shape of the verbal root is carried by R1.

2.5.0.   SECONDARY RADICAL.

2.5.1.   A radical occurring in second position is known as a secondary radical.

2.5.2.   The same radical may occur either as a
primary or a secondary radical.

2.5.3.   The semantic force of a radical is by no means
necessarily the same in primary and secondary position.

For example, the radical -B~, as a mono-
radical (primary radical) carries the meaning of "be;
become."

As a primary radical, it may have a variety of
semantic shapes;   e.g.

In   -B̂AB-   (itch),   -B̀ÀL-   (count)

-B̂AND-   (be cold to the touch; congeal)

-B̀ANG-   (cause)

-B̀AZ-   (sharpen to a point)

There does not appear to be any clear semantic relationship
between these primary radicals.   There are, in fact,
differences of tone.   There may also be several semantic
values or several distinct radicals with the morphological
shape -B~.

By contrast, when -B~ occurs as a secondary radical, it
most frequently indicates definite and often vigorous
action of some kind (when so occurring, it is known as an
'operative' radical)[1].

Or it may indicate 'becoming' or 'being' in a certain
state or condition[1];   (when so occurring, it is known as
a 'neuter' radical.   In such instances, it is in line
semantically with -B~, when occurring as a primary radical.)

2.5.4.   At this stage, it is only necessary to note that
any radical may carry an entirely different semantic force
depending on whether it occurs in a primary or a secondary
position.

_____

1)   See Para: 4.3.0.

2.5.5.   The secondary radical has almost an
adverbial influence upon the semantic shape of the verbal
root, modifying the action described by the primary
radical in some given direction.   The direction in
which the secondary radical influences the primary
radical is discussed fully in a later chapter.[1]

2.6.0.   RELATED RADICALS.

2.6.1.   There are only two mono-radical verbal roots
whose radical vowel can be identified with absolute
certainty - They are

-THÌ   (say, think, do) and

-TSHÒ   (say so, think so, do thus).

In other words, we may say that there are only two
radicals in Xhosa today (occurring also as primary
radicals) with a known radical vowel.

2.6.2.   There is also one di-radical verbal root, with
a secondary radical with a known, undetachable radical
vowel; namely

-ÂZÌ   (know).

2.6.3.   In other words, there are actually three
radicals in Xhosa which appear to have retained their
original radical vowel ; viz.

-THÌ, -TSHÒ and -ZÌ.

(N.B. Even -TSHÒ is open to question : it might well

be a later variant of -THÌ).

2.6.4.   The remainder of the mono-radical roots have
all accepted the invariable terminative -a etc. and thus
lost their original radical vowel, whatever it may have been.

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1) cf. Semantic shape of secondary radicals;
         para: 4.8.0.

They therefore can only be recorded as :

-B⸜ (become) -PH⸍ (give) etc.

-(i)M⸍ (stand) -(i)V⸍ (hear) etc.

(N.B. The symbol /~/ representing a vowel,

the exact nature of which is now uncertain).

2.6.5.   In the case of secondary radicals of di-radical roots, all trace of the original radical vowel is now lost, since its place has been taken by the invariable terminatives -a̱ etc., although its influence may still survive in the radical vowel of R1 in the di-radical root.

2.7.0.   RHIZEME.

The term 'Rhizeme' is one I have had to coin. It is applied to a family of related radicals wherein there may be variants in the consonant or vowel phonemes, or in both, resulting in a modification of the semantic shape of the radical, without destroying its relationship to the rhizeme as a whole.   This is a phenomenon that has already engaged the attention of students of Bantu languages,[1] particularly on the level of the consonant phonemes.   The idea is here extended to include also variants within the vowel phonemes of the radical.   The term 'rhizeme' is derived from the Greek ῥίζα (root).

2.7.1.   The main semantic shape of a root is carried by the R1.   Thus we have, for example,

-THÁTH⸜ (take), with R1, -THÁ- (idea of taking).

We find also the root,

-THÒTH⸜ (withdraw), with R1, -THÒ- (similar idea

of taking, but in this instance, taking back)

And again, we have,

-THÚTH⸜ (take away), with R1, -THÚ- (similar idea of

taking, but in this case, taking away).

---

1) cf. Prof. J.A. Louw, "The consonant phonemes of the lexical root in Zulu". (Afrika und Übersee sprachenkulturen: Band XLViii : 1964.

2.7.2.   Recognising the fact that a radical vowel in
the Rl of a di-radical root is not necessarily the original
basic R vowel, we could represent Rl in each of the above
instances as -TH~, with R vowel -A-, -O-, and -U-
respectively.

2.7.3.   There is sufficient semantic relationship
between these three roots to allow for the possibility that
-TH~ is the same Rl in each case, but with a different vowel,
giving a semantic shift to the R.   This variation in vowel
might either be due to the influence in the R2 fused with it
to form a di-R v.r., or it might be that -TH~ can take
various R vowels, to form related R, viz., -THA, -THO- and
-THU etc.

2.7.4.   If this is so, then we have a group of R, related
closely to each other but with variant R vowels.

       For example:
   The radicals -TH~, -THA, -THO and -THU belong to the
   same rhizeme, as illustrated by the three roots:

       TH~   THA in -THÁTH- (take)
              THO in -THOTH- (draw back)
              THU in -THÚTH- (take away)

2.7.5.   There are three main directions in which variant
forms may be found within a given rhizeme : namely,

   (a)   When a given R has a constant R consonant,
           with variations in the R vowel :
   (b)   Where there is a variation in the R consonant,
           the R vowel remaining constant :
   (c)   Where the R consonant and vowel are identical,
           but there is a variation in the tonemic
           value of the R vowel.
Fuller examples of this principle are given below.
_____
1) cf. Doke :   "Bantu Terminology".

2.7.6.   (a) A given radical having a constant radical

consonant with variations in the radical vowel ; e.g:

     -SÁL- (remain) cf -SÚL- (wipe off, wipe away)

There is an obvious semantic relationship existing between

these two roots.   It becomes even clearer when we add,

for comparison,

     -SÙS- (remove, take away (tr)), and

     -SÙK- (get up and go away)

The primary radical in each case is the common R1 -S~ (idea

of removing, going or taking away).   It occurs here

variously as :

     -SA- in -SÁL- and as -SU- in -SÚL-, -SÙS-, and -SÙK-.

R1 -SÁ- contains the idea of 'remaining', while in each

case, R1 -SÙ- contains the reverse idea, i.e., that of

'removing', 'going or taking away'.

The variant factor here is the vowel -U- which, when it

replaces -A-, has a reversive significance.[1]

It appears, however, that -SÁ-, -SÚ- and -SÙ- are actually

variations of the same radical: the one representing the

basic idea of the verbal root, and the other expressing

variations.

As the di-radical roots stand today, R1 is -SÁ-, -SÚ- and

-SÙ- respectively.   Whether they were originally so, or

whether the present variation in radical vowel has evolved

in the process of the formation of the di-radical root by

the fusion of R1 with R2, is a question discussed in

principle when dealing with the synthesis of the di-radical

verbal root.[2]

---

1)   In the extensions (cf para: 15.8.0. the vowel -u-
     frequently has the semantic force of reversing or
     undoing the action described by the original root.

2)   cf Synthesis of the di-radical root : para 7.2.0.

The above are by no means isolated examples. Other such
pairs of roots (and pairs of R) include such as : e.g.,

     -PHÀPH- (be open : alert, attentive) and
     -PHÙPH- (dream)
     -THÁTH- (take) and
     -THÚTH- (convey away)
     -VÀL-   (shut) and
     -VÙL-   (open)

It would appear that variations in the tone of the radical
vowel may occur within the same rhizeme.

2.7.7.   (b) There may also be variants within any
given rhizeme, the variations in this case being vested in
the consonantal element.

Louw[1] has made a thorough investigation of this phenomenon
in Zulu. It is unnecessary to quote at length from Louw's
paper, as that is available in its full text. The
following pairs of verbal roots are, however, quoted to
illustrate the principle involved:-

> "A whole range of stems will be given here to
> illustrate the function of /kh/ and /g/ to
> indicate a minimum of semological differences
> between stems whose meanings have otherwise
> great similarities:" e.g.,

/ kh /	/ g /
-kheba (dig out, hollow out)	-geba (bend down, incline)
-khexa (sit in amazement, be dejected, be open mouth with amazement).	-gexa (hang loose)
-khekha (get plucked, dipped up)	-gega (remove hair)
-khipha (take out)	-giba- (take out, pursue)".

---

1) Louw, J.A., "The Consonant Phonemes of the lexical
    root in Zulu". Afrika und Übersee, Band XLVIII
    No. 2, 7:3:65.

Louw goes on to state that this contrast in consonant
phonemes appears to be of greater significance than
differences of tone when contrasting such pairs of roots.
He says[1]

> "The majority of the verb stems..... in 4.6.
> are all low in tone so that it is only the
> opposition between /kh/ and /g/ which is
> really relevant. This supports my opinion
> that this significant opposition between
> related consonants has replaced tone to a great
> extent in Zulu."

Further quotation would be redundant.
Louw has, however, drawn attention to a most important
factor in the study of the semantic shape of radicals.
The principles pointed out by him regarding Zulu apply
equally to Xhosa. Such a detailed study is, however,
beyond the scope of this study.

This principle is seen operating in Xhosa.
Taking an example from a primary R, we have e.g.,

(-HLÀL- (remain, sit) : R1, -HLÀ-
(
(-SÁL- (remain behind, stay) : R1, -SÁ-

-HLÀ- and -SÁ- are almost certainly related R, derived
from a common ancestor, probably * -ka-.
Similarly we have :

(-GÀND- (stamp, tramp): R1, -GÀ-
(
(-KHÂND- (beat out, hammer, forge): R1, -KHÂ-

(-NÁMÁthel- (stick to, adhere to): R1 : -NA-
(
(-NCÁMÁthel- (stick close to,

(be attached to)   : R1 : -NCA-

An example of the same principle operating in a secondary
R is found in such pairs of roots as :

-thi fúthù (be overheated, out of breath):

R2, -thù

-FÙDÚMàl- (be warm) : R2, -DÚ-

---

[1] J.A. Louw: "The Consonant phonemes ... in Zulu."
para 4.7.

2.7.8.   The possibility exists of a third variant within a related group of radicals, namely, where the R have identical consonants and vowels, but there is a variation in the tonemic value of the vowels.

An example of this may be found in the R1   -HLA- as found in the roots :

    -HLÂZà   (adj., fresh)

    (um)HLÀZà (2) (raw sore; ulcer)

    -HLÀZ-   (expose: and so, disgrace).

2.7.9.   In contrast with the foregoing, however, it is possible to find instances of pairs of R, which appear identical in form, and with a similar tonal value, which do not belong to the same rhizeme, and which have widely differing semantic shapes.   For example :

    The two mono-R v.r.,

        -B- (become) and -B- (be of opinion, think)

    And such di-R v.r. as

        -BÀNG- (cause) and -BÀNG- (claim)

    each has an apparently identical form and tone, in

    the: R1, yet with no apparent connection semantically.

CHAPTER 3.

3.0.0. <u>PRIMARY RADICAL</u>.

3.0.1. A primary radical is the first radical in any verbal root, irrespective of whether it is a simple mono-radical, or an extended multi-radical root. For example:

-THÌ   in   -THÌ   (say)

-BÔ-   in   -BÔN-   (see)

-BÒ-   in   -BÒNGÓ:Zel-   (beseech for)

It is this primary radical which carries the main semantic shape of the complete verbal root.

3.1.0. Bourquin[1], following Meinhof, recognised that the two radicals that comprise a di-R verbal root have a different semantic function.[2] He drew attention to the fact that the main semantic shape of the root is vested in the primary radical, and that the secondary radical modifies the semantic shape of the primary radical in a certain direction. He did not, however, go on to identify the direction or directions of such influence.

3.1.1. I am entirely in agreement with this point of view. The primary radical does carry the main semantic shape of the verbal root, and the secondary radical has, often, almost an adverbial influence, indicating continuity of action, interrupted action, and so on.[3]

---

1). W. Bourquin (1923) "Neue UrBantu Wortstämme" etc.: Chp. 2, page 191 <u>et seq</u>.
2). The terminology in this paragraph is my own, not Bourquin's.
3). See "Secondary Radical" para: 4.8.0. etc.

3.1.2.   If we take, for example, the group of v.r.,
-JÌC̀- etc.,[1] we find a common Rl, viz. -JÌ-, and a common

semantic shape, namely, the idea of twisting or turning.

We may conclude, therefore, that the common semantic
shape is supplied by the common Rl.

3.1.3.   On the other hand, it does not necessarily

follow, because two or more roots contain a common Rl,

(that is, in form and tone), that the Rl is identical in

each case.

It is possible to have several radicals with identical

consonant-_cum_-vowel combination and with no discernible

tonal differences, yet having different semantic shapes.

For example, if we take the C̲V̲ combination of -BA- :
we find the following roots with -BA- as Rl ; viz:

        -BÂB-̀   (itch)

        -BÀL-̀   (count)

        -BÂND-̀   (congeal, be cold to touch)

        -BÀNG-̀   (cause)

        -BÀZ-̀   (sharpen to a point)

Yet there appears to be no common semantic shape shared
by these Rl.

We may conclude that there are probably several
radicals with the same C̲V̲ form.

3.1.4.   In the light of what I have said about the
Rhizeme[2], it is also possible to find two or more Rl,

with different radical vowels, yet being so closely related

that, in essence, they constitute the same Rl.

For example:

        In the group of roots:

        -PHÀPH-̀   (be alert, attentive; open out)

        -PHÊPH-̀   (be nimble, start aside etc).

        -PHÙPH-̀   (dream)

---

1) cf. Para; 2.4.7.
2) cf. "Rhizeme"; see para; 2.7.0.

The three Rl, -PHÀ-, -PHÊ- and -PHÙ- belong to the same rhizeme, carrying the idea of being wide-awake or alert. The common Rl should here be represented as -PH~, ~ representing the variant vowel within this rhizeme.

3.1.5.   And again, taking the pair of roots,

    -PHÁTH-̀ (touch, handle, hold in the hand)

    -PHÙTHá-PHÙTH-̀ (grope about, feel around
                    with the hands)

we have actually two different variants of the same Rl, viz. -PH~, belonging to the same rhizeme.   (In the latter root, -PHÙ- is the 'reversive' of -PHÁ-).

3.1.6.   In other instances, a difference in tonemic values is clearly established, differentiating between two Rl whose <u>CV</u> form is identical, but with different semantic shapes.

    For example:

        -THÂND-̀ (like, love, etc.)

        -THÀND-̀ (wind up).

3.1.7.   There are, on the other hand, pairs of verbal roots with apparently identical Rl, both in <u>CV</u> form and tonemic values, with quite different meanings: e.g.,

        -BÀNG-̀   (cause, occasion, bring about), and

        -BÀNG-̀   (claim, demand)

A more accurate tonemic analysis might, however, disclose a fine variation between these R, but no such data is at present available.

3.2.0.   Except where a Di-R v.r. obviously consists of a reduplicated Rl, e.g.,

        -BHÀBH-̀ (flutter, flap)[1]

there is nothing that I have been able to discover to

---

[1]. The reduplicated R indicates repetative action as described by the R.

indicate that any given R must carry the same semantic

shape in both R1 and R2 positions.

2.3.0.   In Appendix A, I have listed 147 primary

radicals, and against them, mentioned two or more verbal

roots with a corresponding common R1, and a related

semantic shape.

Reference to this Appendix will give full examples of

the principles outlined in the preceding paragraphs.

There is, of necessity, a great variety of R1

semantic shapes possible in relation to any CV form.

CHAPTER 4.

4.0.0.   SECONDARY RADICAL.

4.1.0.   Reference has already been made to Bourquin's
comments[1] regarding the respective functions of the
primary and secondary radicals.

4.2.0.   McLaren[2] takes the matter a step further, and
attempts to allocate definite semantic values to some of
the more commonly found R2.[3]   What he says in this
connection is of great importance, in that it was the first
serious attempt, in Xhosa at least, to give positive
semantic values to certain R2.

   He says, _inter alia,_

   "The great majority of Xhosa verbs end

   in one or other of the following syllables:

   la, ka, ma, ba, tha, za, mba, nga."

He then gives examples of these stems, and the gist of

his conclusions can be summarised in the following table:

   Table of McLaren's semantic
   classification of R2 :   [4]

'Second Syllable' [5]	Type of Action described.
ba	forcible action
ka	motion, or change of position
la	mostly transitive
ma	continued or progressive action
tha	action done with the hand
mba	continuous action
nda	denoting mental feeling or acts
nga	tentative action
za	suffixed to descriptive nouns to form a verb.

1)   cf. Para: 2.1.0.
2)   McLaren: Xhosa Grammar (1926) para 146.
3)   McLaren refers to "second syllables" where I would refer
        to R2 (R2, of course, having the form -C~.)
4)   cf. McLaren: Xhosa Grammar (1926) para: 146.
5)   His "second syllable" corresponds to my R2 (viz. -C~)

4.3.0.   Van der Merwe[1] made a detailed study of the

R1 and R2 in the Sotho verb, and came to two conclusions

that are of interest to us here : namely,

(a)   That it is the consonant in the radical

which is the dominating semantic factor;

and

(b)   That although the radical vowel of R1 "may

give some colouring to the meaning of the

root", its function is only of secondary

importance.

I must challenge this supposition, for it is obvious that

the consonant and the vowel which constitute any radical

are both an essential and integral part of the radical.

Without the radical vowel, the consonant alone has no

semantic shape.   But the CV combination does carry

semantic value.

4.4.1.   The vital importance of the rôle played by the

radical vowel of R1 is clearly seen in the Rhizeme.[2]   Here

it is clear that the variation in radical vowel has a

definite semantic influence on the shape of the whole root.

4.4.2.   Whereas, in R1, the radical retains a radical

vowel (whether in its original form, or in a form resulting

from the fusion of RV of R1 and R2), in R2 of most di-radical

v.r., the radical vowel has been dropped in favour of the

more recent terminatives -a, -ile etc.

For example, in -THÉMB~ (hope)

R1 retains its radical vowel -E- in -THÉ-

R2 has lost its radical vowel and should,

more correctly, be written as ~ in -MB~.

1)   V.d.Merwe, "On the Morphology and Semasiology of the
       Sotho verbal stem ..." (1941) Chapters 1, 2 and 3.
2)   cf. Rhizeme : para: 2.7.0.

4.4.3.   Owing to the loss of the radical vowel of R2,
we are at a disadvantage when we attempt to make a
large-scale comparative analysis of the incidence of
certain R2, with a corresponding analysis of similar
semantic values.   Had R2 retained its original radical
vowel, we could say that, for instance,

>   CA had a certain semantic shape, while

>   CE, CI, CO, CU, had definite variations in

>   semantic shape.

As it is, however, with the loss of the final vowel in
favour of -a etc., all we have to work on is the surviving
consonant, with the unidentified radical vowel: i.e. -C~.

4.4.4.   This being the case, all secondary radicals,
with any given consonant, are indistinguishable from one
another.   This makes detailed and accurate classification
extremely difficult, if not impossible.   However, I have
endeavoured to make as clear an analysis of the more
frequently-occurring (high frequency) secondary radicals,
the results of which are given in the following pages.   In
order to carry out this survey, I took 977 regular di-radical
v.r., comparing them on the two-fold basis of:

>   (i)   Similarity of secondary radical

>   forms (i.e. C~) and

>   (ii)   Similarity of semantic shapes.

4.5.0.   An analysis was made of the frequency of
incidence of the various secondary radicals occurring in
these 977 v.r., and three main categories were found to be
necessary: viz:

>   (i) High-frequency secondary radicals: These

>   have a frequency of incidence of over 1%,

with a definite semantic shape attaching to them.   (In
many instances a given C~ was found to fall into more

than one semantic category. This could possibly be accounted for, at least in part, by the factors mentioned above[1]. These R2 I have called 'Standardised' high-frequency secondary radicals.

(ii) High frequency secondary radicals (with a frequency of incidence of over 1%) which do not shew any definite tendency to carry a distinctive semantic shape. These R2 I have called 'Unstandardised' high-frequency secondary radicals.

(iii) Low-frequency secondary radicals (with a frequency of incidence of less than 1%). These appear to have no identifiable semantic shape, and I have called them 'unstandardised' low-frequency secondary radicals.

N.B. It must be borne in mind that several of the last-named group have 'click' consonants, which indicate either a 'borrowing' from non-Bantu Khoisan languages, or a substitution of a 'click' for some other true Bantu consonant.

4.6.0. The following Table sets out the details of these three groups of secondary radicals.

---

1) cf. Para: 4.4.3.

TABLE A.

Shewing the comparative frequency of incidence of
SECONDARY RADICALS
in di-R verbal roots.

4.6.1.

(i)   High Frequency Standardised Secondary Radicals:

Radical:	Percentage Frequency:
-B~	10. 5
-C~	2. 0
-D~	2. 0
-R~	1. 4
-K~	6. 0
-L~	18. 5
-M~	4. 1
-MB~	3. 0
-ND~	3. 5
-NG~	6. 1
-Q~	2. 1
-S~	2. 4
-TH~	5. 3
-X~	2. 0
-NY~	1. 4
-SH~	2. 0
-Z~	4. 5

4.6.2.

(ii)   High-Frequency Unstandardised Secondary Radicals:

-N~	4. 1
-PH~	2. 0
-Y~	1. 8

4.6.3.

(iii)   Low Frequency Unstandardised Secondary Radicals:

Frequency:	0.08%	-NTS~	-NX~	-TY~	
	0.07%	-TS~			
	0.06%	-NDL~	-NTY~	-TSH~	
	0.05%	-DL~	-F~	-J~	
		-NGC~			
		-NQ~	-NGQ~	-NKQ~	
	0.04%	-KR~	-MF~	-T~	
	0.03%	-NC~	-QH~	-GQ~	
	0.02%	-CH~	-NKC~	-GX~	-NGX~
		-G~	-GW~		
		-MP~	-MZ~	-NK~	-W~
	0.01%	-BH~	-CH~	-GC~	
		-KRW~	-KW~	-LW~	-THW~
		-NJ~	-NTSH~	-NXH~	-NKX~
		-P~	-NQH~	-GQW~	
		-SHW~	-TYH~	-TYHW~	

4.7.0.   THE SEMANTIC SHAPE OF STANDARDISED SECONDARY
           RADICALS IN REGULAR DI-RADICAL VERBAL ROOTS.

4.7.1.   First of all, 977 regular di-radical verbal roots
were analysed to ascertain their comparative frequency of
incidence.   The result is given in Table A.[1]

4.7.2.   The low-frequency secondary radicals were too
numerous, and of too low a frequency to be able to draw any
general conclusions concerning their semantic value.   I
therefore classed them as "unstandardised" for the purposes
of this survey.

4.7.3.   In the case of the three high frequency un-
standardised radicals, (-N~ 4.1%, -PH~ 2.0%, and
-Y~ 1.8%), no clear picture emerged.

---
1) cf. Para: 4.8.0.

4.7.4   The semantic values attributed to the high-frequency
secondary radicals (which constitute 78% of the total radicals
analysed), were arrived at as follows.   Verbal roots with high-
frequency secondary radicals were sorted and grouped together
under these radicals.   A second sorting was made, into sub-
groups, according to their semantic affinity.   These groupings
are given in full in Appendix B.

4.7.5   The results of this analysis have not proved to be
very conclusive in general.   For example, while a given radical
may be found in only one or two categories, it is by no means
the only radical occuring in such categories.   For instance,
-L~ is found in both the Neuter (2) and Effective (4) categories,
and even then, it is only one of many radicals in these two,
contrasting, categories.

4.7.6   On the other hand, the results are rather more
satisfactory in the case of the Factative (9), where -Z~
predominates, and occurs in no other category: Contactive (10)
-TH~.

4.7.7   With regard to the Associative radical (11), -N~,
while it appears to be the typical associative radical, it is
not only found in that category.

4.7.8   In view of these inconclusive results, it is obvious
that the classification given hereunder, can only serve as a
working hypothesis within strict limitations.   Several other
factors, such as the lost radical vowel of the R2, would have
to be considered, before a really satisfactory semantic
classification could be made.

4.8.0   TABLE   B

                    Shewing the semantic categories of the
                       high-frequency secondary radicals.

4.8.1

1.   OPERATIVE R2 (2)
      B~   D~
      34   9

2.   Neuter R2   (13)

B~	D~	R~	K~	L~	N~	Q~	S~
11	6	2	7	17	9	2	3

	SH~	TH~	X~	Y~	NY~
	2	5	2	4	3

3.   Punctative R2 (6):

    C~   PH~   Q~   TH~   X~   NY~
    12   4   12   7   7   4

4.   Effective R2 (7):

    D~   R~   K~   L~   N~   X~   Y~   NY~
    7   8   41   56   9   10   4   2

5.   Positional R2 (2):

    M~   PH~   (Pos. Eff.)
    4   11

6.   Protractive R2 (6):

    M~   MB~ (Protr-Op)   N~   ND~   NG~   NY~
    32   33   8   24   52   4

7.   Mental-Emotional R2 (2):

    ND~   N~
    9   4

8.   Causative R2 (1):

    S~
    11

9.   Factative R2 (3):

    SH~   Y~   Z~
    9   7   29

10.   Contactive R2 (1):

    TH~
    32

11.   Associative R2 (1):

    N~
    7

12.   De-Adjectival R2 (1):

    PH~
    1

    Unstandardised R2 (6):

    C~   D~   Q~   S~   SH~   TH~
    4   1   3   2   4   1

4.8.2.   Total number of regular di-radical verbal roots
on which this survey is based: 626. (Being those with
high-frequency R2).   The complete list of classified verbal
roots, upon which this classification is made, is given in
Appendix B.

4.9.0.   Description of the terms used in
           describing the semantic categories of
           high-frequency R2.
           _____

4.9.1.   The verbs in Appendix B are classified according
to their secondary radicals, and grouped again according to
any semantic affinity between them.   By this means it has
been possible to arrive at the several semantic values
attaching to the various high-frequency secondary radicals.

4.9.2.   A description of the semantic categories is
given below.

    1.   OPERATIVE R2:
    The verbs with this radical describe "doing something",
and frequently describe vigorous or even violent action,
e.g. 'breaking up', 'mixing up', 'kicking', 'stabbing' etc.
Others again describe less violent action, such as 'bending',
and again others, quieter activity requiring skill, such
as 'singing', 'painting'.   Semantically there is often
little if any distinction between 'operative' and 'effective'
radicals.   There is also a separate group of 'Protractive-
Operative' radicals which are described in para: (6) hereunder.

    2.   NEUTER R2:
    Are found with verbs describing "being" or "becoming"
or " being in a state" of doing or being.   The greatest
variety in semantic force is found in this category, there
being 13 radicals with a 'neuter' significance.

3.   PUNCTATIVE R2.

There are six radicals mentioned with 'punctative'
force.   They describe various actions which are performed
at intervals, intermittently, or repeated time and time
again.   Because of their intermittent nature, such verbs
often indicate 'staccato' action, such as 'chopping',
'hacking' etc., or again, they may describe action that is
renewed from time to time, e.g. "struggling on."

4.   EFFECTIVE R2;

As stated under (1), it is not always clear what divides
an 'effective' from an 'operative' radical.   Such radicals,
however, describe positive action, and may be transitive or
intransitive.   (These radicals are frequently found in
verbal roots derived from ideophones, fulfilling, at the
same time, the rôle of a RCE.[1])

5.   POSITIONAL R2;

These have a narrow radical content, being practically
restricted to the two radicals -M~ and -PH~.   Verbs with
this type of radical indicate the fixing of something in
position.   Either basically, or in relation to something
or someone else; i.e., describing "going out" or "coming
in", or "accompanying" or "taking out" from.

6.   PROTRACTIVE R2;

The verbs with these R2 describe a wide variety of
activity of a prolonged nature.   They include transitive
and intransitive verbs ; they describe drawn-out physical
activity; or a process giving rise to a certain state
(Protractive Neuter).

7.   MENTAL/EMOTIONAL R2;

The two radicals -ND~ and -M~ cover most of this group.
They are in verbs which describe activity employing the
mind or the emotions.

1) cf. RCE - Radical Conversion Extension; cf. para; 12.2.1.(iii)

8.   **CAUSATIVE R2:**

As their name implies, such radicals describe 'causing something to happen', or 'giving rise to' as distinct from 'doing'.   For example, while 'get up' is 'Effective', 'make to get up' or 'awaken' someone is 'Causative'. In many cases, verbal roots with this secondary radical also have forms with the 'Effective' and 'Neuter' secondary radicals.

9.   **FACTATIVE R2:**

Whereas 'Causative' radicals describe 'making something happen', 'Factative' radicals describe action that brings about a certain state or condition while this continues to exist : such as 'kindling' a fire, which then continues to burn.

10.   **CONTACTIVE R2:**

This radical supplies the idea of action involving contact with someone or something : or action performed with the hand, or some part of the body.

11.   **ASSOCIATIVE R2:**

Such radicals are not numerous, but are found in a few verbs describing association between two (or more) people or things, or referring to human relationships between people.

12.   **DE-ADJECTIVAL R2:**

As the name suggests, this radical is found in a di-radical verbal root, derived from a mono-radical adjectival root.   Only one such example has so far come to my notice in Xhosa.[1]

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1) cf. Para. 13.7.2.

13.   UNSTANDARDISED R2:

I have used this term to describe radicals which,
while occurring in one or other of the above 12 groups
in certain contexts, do not appear to fall into any
particular category in the instances quoted.[1]

4.10.0.   LOW-FREQUENCY SECONDARY RADICALS.

Due to their low-frequency of incidence, I
have made no attempt to classify these.   There are too few
to justify any generalisation.

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1)   cf. Table A., para's: 4.6.2.,   4.6.3.

CHAPTER 5.

THE VERBAL ROOT.

5.0.0. THE ROOT.

5.1.0. A Root is that irreducible element in a word which remains after the word has been stripped of all structural framework, such as prefixes and suffixes[1], while still retaining its essential semantic entity.

5.2.1. If we apply this definition to the English word "understand" : "understand" is the verbal root. It describes the act of the mind when any fact is grasped. This root cannot be further reduced, or sub-divided without destroying its semantic identity. It might be argued that it could be further divided into "under" and "stand". But in so doing, we should entirely destroy its semantic entity. It is possible to add a suffix to this root, and so convert it into a noun or an adjective, viz:

<p style="text-align:center">"understand<u>ing</u>".</p>

The semantic entity of the verb is not in any way impaired by so doing.

<p style="text-align:center">"Understand" is, therefore, an example of
a verbal root : the "irreducible element"
of that particular word.</p>

5.2.2. Apart from certain interjections, such as <u>Ewe</u>, <u>hayi</u>, <u>hawo</u> etc., every Xhosa word contains some structural framework.

5.2.3. In his thesis "'n Vergelykende studie van die defisiënte verbum van die Ngunitale", Louw[2] discusses the distinction between the "lexical meaning of words" and the "structural framework which has a grammatical meaning", into which the words are set.

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1) 'Suffixes' include detachable suffixes, such as verbal terminatives, (cf Para: 10.1.4(iv), as well as the more permanent suffixes such as the Radical Extension. cf Para 11.0.0. etc.
2) Louw, J.A.: "'n Vergelykende..." Para 1.4.05 et seq.

He goes on to quote nonsensical lines from Lewis Carrol's "Jabberwocky", applying this principle of "framework" and its relationship to "words" in a sentence: e.g.

> "All mimsy were the borogroves,
>   And the mome raths outgrabe ..." [1]

He points out that the "framework" consists of the elements underlined above, while the remaining elements (not underlined) constitute the "lexical meaning of words."

5.2.4.   Applying this principle to the Xhosa verb, we find that any verbal form consists of

(i)   A structural framework, which has

grammatical meaning:

viz. Subject concord, tense forming

formative, terminative

and

(ii)   A root carrying its essential

lexical meaning.

For example, in the phrase,

(abantwana) bayafunda

(the children are learning)

The structural framework of the verb consists of

ba-   :   subject concord

-ya-   :   tense formative of present indicative

-a   :   present indicative terminative

while the root, carrying the essential semantic shape of the verb is

-FUND-

5.2.0.   A root, per se, does not necessarily belong to any one particular part of speech.   According to the structural framework into which a given root is fitted, the root may fulfil the function of a verb, or noun or adjective etc.

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1)   Louw, J.A.: „'n Vergelykende Studie" Para: 1.4.07/08.

Nevertheless, despite this adjustment to various usages, the root itself retains its own unique semantic entity.

5.4.0.   Roots which may thus be fitted into structural frameworks relating to different parts of speech are known as "multi-functional roots".

5.5.1.   There are different types of verbal root in Xhosa; namely;

Mono-radical v.r. consisting of one radical.

Di-radical v.r. consisting of two radicals, fused into one root, with a single semantic entity.

5.5.2.   There are also verbal roots that consist of three radicals, but they are not true tri-radical roots in the sense that the di-radical v.r. are di-radicals.

5.5.3.   It will be shewn in the following chapters that certain roots with three radicals can be demonstrated to be derived from di-radical v.r., with an additional radical added thereto.   Yet there is sufficient semantic relationship existing to shew that the root with three radicals can really be reduced to a di-radical (irreducible root) plus an added third radical.

Strictly speaking, therefore, in terms of our definition of the root as the "irreducible element of a word", these are not true tri-radical roots.

Such forms include, for example ;

-GÀNGÁTH-[1)] (tread down earth); cf. -GÂNG-

(be bold, impudent); REx Punctative -TH~ (℥) [2)]

---

1) cf. Para. 11.5.1.
2) cf. Para. 4.8.0.

5.5.4.   In the same way, it will be shewn that a
number of roots with apparently three radicals are, in
fact, derived from di-radical ideophonic roots, with the
addition of a third radical[1] to convert such roots into
use as verbal roots.

Since, however, such roots can be reduced to their di-
radical basis, without destroying their essential semantic
entity, they cannot be regarded as true tri-radical roots.

Such forms include : e.g.

-GÓDÙK- (go home), -GÓDÙS- (take or send home)

cf. the ideophone (Zu) -thi godu (of going home).

5.5.5.   Certain verbal roots in common use today appear
to be tri-radical while, in fact, they are extended di-
radical v.r., whose original di-radical form has fallen into
disuse, leaving the extended root only[2] :   These are
referred to as standardised extensions.

Such forms include : e.g.

-KHÀNGÉL- (look; look at).

The fact that the original di-radical v.r. *-KHÂNG- is no
longer extant does not detract from the fact that this root
is really the applied extension[3] -KHÀNGél-.

It cannot be regarded as a tri-radical root, but must be
classified as di-radical, with an extension.

5.6.0.   MULTI-FUNCTIONAL ROOTS.

5.6.1.   Strictly speaking, there is no hard and fast
demarcation between 'verbal roots', 'nominal roots' etc.[4]
In this study, however, since the main interest centres in
the verbal root, the term "root" will be taken as referring
to verbal roots, unless otherwise indicated.

1)   cf. Radical conversion extension; Para: 12.5.0.
2)   cf. Standardised extensions : Para: 17.5.2.
3)   cf. Extensions, Applied ... Para: 15.1.1.
4)   cf. Para's: 5.3.0. and 5.4.0.

5.6.2.   Examples of multi-functional roots used within the framework of the noun, verb, adjective and so on.

-THÁND-

     Nominal: Class 1   umTHÁNDi   (lover)

                 Class 9   inTÁNDo   (will, wish)

                 Class 11   uTHÁNDo   (love)

                 Class 15   ukuTHÁNDa   ((the act of) loving)

     Verbal: ukuTHÁNDa   (to love)

-KHÚL-

     Nominal: Class 1   umKHÚLuwa   (elder brother)

                 Class 5   iKHÚLu   (great number, 100)

                 Class 9   inKHÚLu   (eldest son)

                 Class 11   uKHÚLu   (the majority)

                 Class 14   ubuKHÚLu   (greatness)

                 Class 15   ukuKHÚLa   ((the act of) growing)

     Adjectival: -KHÚLu   (great, large)

     Verbal: uku-KHÚLa   (to grow, increase).

5.7.0.   <u>ROOTS OF FOREIGN ORIGIN.</u>

5.7.1.   As in all living languages, there are certain words that have been "borrowed" from neighbouring languages. In such instances, the root of the borrowed word is incorporated into the syntactical framework of Xhosa, accepting the usual prefixes, suffixes etc.

5.7.2.   These roots, however, even though adapted to Bantu usage, do not necessarily conform to the typical pattern of Bantu roots. For this reason, no conclusions regarding Bantu radicals, roots and so on, may be drawn only from such roots of foreign origin.

5.7.3.   The sources of such roots are mainly from two

sources:

    (i)   From European languages: viz.

        English and Afrikaans (or earlier forms

                              of Afrikaans)

    (ii)   From the Khoisan languages: viz.

        Bushman and Hottentot .

5.8.0.   THE INFLUENCE OF KHOISAN
           LANGUAGES ON NGUNI ROOTS.

5.8.1.   The influence of the Khoisan languages is

widespread in the Nguni languages.   This is only natural,

since the Khoisan peoples overlapped considerably with the

Nguni-speaking Bantu territorially.

Considerable care, therefore, is necessary in assessing

where Bantu forms are pure, and where they have become

corrupted by borrowings from Khoisan sources.

5.8.2.   It is significant that Khoisan forms are

only found in the roots of Xhosa, and never occur in the

structural framework of the language.   This indicates

that the language was well established before the Khoisan

influence began to 'lend' words, or roots, or phonetic

modifications to the original Bantu.

5.8.3.   Under phonetic influences are included those

roots where there is a substitution of, for example, a

click for a typical Bantu consonant:

for example:

        -NÀMáthèl- and -NCÀMáthèl-

        (be attached to, stick close to).

5.9.1.   I. Schapera[1] mentions certain characteristics
of the Khoisan languages that are relevant here.
For instance,

(i)   Like the Bantu syllable, "Generally
        syllables are made up of either
        (a) a consonant or consonant combination
            with following vowel (or diphthong)" or,

(ii)   Unlike the Bantu syllable : "or
        (b) a consonant or consonantal combination,
            a vowel or diphthong, <u>and a terminal</u>
            <u>consonant</u>, <u>which is invariably a nasal</u>."
            (The italics are mine).

(iii)   "Very many syllables commence with a click,
        and the quick succession of these clicks
        in speech is an outstanding feature in
        all the (Khoisan) languages."

5.9.2.   From (i) above, it is obvious why certain
syllables or complete roots were so easily borrowed from
Khoisan and fitted into the speech pattern of Bantu.

(N.B. (ii) Can explain such forms as uXÀM (monitor
lizard), which is not a usual Bantu form, having no final
vowel.   Its inclusion into the 'personal' class 1 of
nouns may also be explained by the fact that it is a
borrowed word, and only allocated to a noun class at a
later stage in order to make its use possible within
the Bantu grammatical framework.

(iii) Suggests that wherever a 'click' is met with,
it should immediately be regarded as a probable 'borrowing'
from Khoisan.

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1) I. Schapera; "The Khoisan Peoples of S.A." (1930)
      Chapter XV, pages 422 <u>et seq</u>.

5.10.0.   Turning to grammatical processes,

5.10.1.   Schapera goes on to say that, (p.422(a))

"The radical elements of Khoisan words are

to a great extent, if not altogether, mono-

syllabic, and any additional elements can

usually be shewn to have a functional

significance. ..... the principal mechanism

for modifying the form of the radical

element so as to express a new denotive

concept lies in the employment of suffixes."

5.10.2.   Here again a common principle is shared by
both Bantu and Khoisan languages, in so far as the
employment of suffixes are concerned by way of extending
the root.   Bantu, however, differs from Khoisan in that
the latter tends to mono-R roots, while Bantu prefers
the di-R root.

5.10.3.   The similarity in regard to the use of suffixes
to extend the root must be attributed to some common factor
far back in the origins of both language families, rather
than to any borrowing one from the other;   for suffixal
extension is the most common form found in Bantu languages
as a whole.

5.10.4.   "Reduplication of the radical element of a
word is of frequent occurrence", observes Schapera
(p. 424(2)).   This also is met with commonly in Bantu.

5.10.5.   The points of similarity are surprisingly
frequent.   To refer to them in greater detail is
unnecessary for the present purposes.

5.11.0.   It is interesting to note, however, that, unlike Bantu, Schapera states (p. 426):

> "Syntax: Parts of Speech:
>
> "There is no formal distinction between parts of speech in any of the Bushman languages, save Naron. It is generally impossible to determine merely from the form of the word what part of speech it is, although it may be noted that clicks occur in substantives and verbs, and that pronouns, auxiliaries and words in perpetual use rarely have them."

Two considerations arise from the foregoing:

(a)   There is obviously a form of 'multi-functional' root in Bushman which, however, unlike the Bantu multi-functional roots, do not have a structural framework which differentiates the various parts of speech. (cf. para; 5.6.1.)

(b)   The fact that clicks are rarely found in "pronouns or auxiliaries" may help to account for the fact that no clicks have found their way into Bantu apart from certain roots.
(cf. para; 9.7.0.)

5.12.0.   A list of 111 of the more commonly used Xhosa verbal roots (of more than two syllables) was taken, and the following facts noted:

Of the total 111 roots, 49 contained the evidence of Khoisan influence in the existence of 'click' consonants - (Approximately 50%).

A further 20 have a reduplication of a
radical, which is an acknowledged feature
of Khoisan languages.   (Approximately 18%).

The remaining 42 roots did not shew evidence
of either of these characteristics.

5.12.0.   SUMMARY:

5.12.1.   Clicks are foreign to the phonetic system
of Bantu languages as a whole.   They appear only in the
languages in the Southern area of Africa.   They are
borrowed from the Khoisan languages.   They cannot,
therefore, be regarded as typical of Bantu languages
generally.

In Nguni, however, clicks have become
established as a recognised feature of the languages. In
Xhosa their use is very wide-spread and it is impossible
at this stage in the development of the language to regard
them as a "foreign" element.

5.12.2.   When dealing with the semantic force of
component radicals within verbal roots, it must be recognised
that, because the click consonants are not of Bantu origin,
the same semantic interpretation cannot necessarily be
applied to such radicals as may be applied to those of
true Bantu origin.

5.12.3.   There are instances, however, where a click
consonant has been substituted for an original Bantu
consonant. In which case, the semantic interpretation
really attaches to the original Bantu radical and is only
transferred to the click-containing radical through such
substitution and not by virtue of its own intrinsic form.

CHAPTER 6.

6.0.0. MONO-RADICAL VERBAL ROOTS :

6.1.1. The simplest form of the verbal root is the mono-radical, consisting of -CV.[1]

6.1.2. In two instances, the original formation of the mono-R v.r., viz. CV, has been retained, the later developed terminative -a added to it, and the original radical-vowel -u- has become a semi-vowel; e.g.,

-LWà (fight) < *-LUa < *-LU~ < *-lu-
-HLWà (bec; dark) < -*HLUa < *-HLU~ < *-Ku-

6.1.3. Originally, therefore, the radical verbal root and verbal stem were identical in form ; viz:

*-THÌ, *-TSHÒ, *-PH~́, *-LÙ etc.

6.1.4. With the substitution of the later terminative -a in place of the radical-vowel, however, most mono-R now have distinct forms ; viz:

Radical, consisting of CV or C~
e.g. -THÌ, -B~̀ etc.
Verbal root ; consisting of C~
e.g. -B~̀, -DL~́
Verbal stem ; consisting of Cv ;
e.g. -Bà, -DLá etc.

6.2.0. It is important to recognise that there are three distinct categories of mono-R v.r., namely:

(i) Simple mono-R v.r. e.g; -B~̀ (be, become)

(ii) Mono-R v.r. with a latent initial -i-
e.g; (-i)V~́ (hear, feel)

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1) cf. Description of mono-R v.r. which have retained their radical vowel ; paras. 2.6.1. - 2.6.3.

(iii)   Mono-R v.r. with a non-radical

        initial vowel : e.g: -éHLˋ (descend).

6.3.0.   (1) SIMPLE MONO-R VERBAL ROOTS.

6.3.1.   In the following comparative list of mono-R
v.r. found in Xhosa, there is also given alongside the
English meaning, the probable starred form of the root.
Where the same mono-R v.r. occurs in Zulu (Z) and Swazi (S),
the fact is indicated in the last two columns on the right.

Xhosa Mono-R v.r.	Original.	Occurring also in:	
-B˜ (become, be)	*-y-	Z	S
-DL˜ (eat)	*-li-	Z	S
-F˜ (die)	*-kû-	Z	S
-HLW˜ *-HLÙ (bec. dark)	*-ku-	Z	S
-KH˜ (pluck)	*-k-	Z	S
-LW˜ *-LÙ (fight)	*-lu-	Z	S
-N˜ (rain)	*-n-	Z	S
-NY˜ (defoecate)	*-nî-, -nŷ-	Z	S
-PH˜ (give)	*-p-	Z	S
-S˜ (bec. light)	*-ki-	Z	S
-S˜ (take to)[1]			
-TH˜ (pour in)	*-t-	Z	—
-TY˜ (eat)	*-li-	—	—
-TSH˜ (burn)	*-pi-	Z.-SH˜ :	S. -SH˜
-W˜ (fall)	*-ɣu-	Z	S
-Y˜ (go)	*-ɣi-	Z	S

6.3.2.   The influence of the original radical vowel,
/I/ and /Û/ is seen in the phonological changes in the
consonants of the mono-R, -DL˜, -TY˜ : < *-li-; -F˜,
< *-ku-; -S˜, < *-ki-; and -TSH˜, < *-pi-. Although

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1)   -S˜ < *ya > *yisa

the original radical vowels have been assimilated, their presence in the primitive forms is evident from these consonantal modifications.

6.3.3.   On the other hand, the radical vowels have survived in the form of the semi-vowel in the following instances : /-U-/ has survived as /-W-/ in -HLẀ- < *-Ḵu-; and -LẀ-, < *-lu-; and the radical-vowel /Î/ as /-Y-/ in -NỲ-, < *-nî-> *-nŷ-.   It is clear that the final -a terminative necessitated this change from vowel to semi-vowel to avoid the occurrence of two successive vowels.

6.3.4.   In the case of -Ẁ-, and -Ỳ-, the original */- Ɣ̥ -/ has fallen away, and the original radical-vowels, -*(Ɣ)u- and *-(Ɣ)i- have become the semi-vowels -W~ and -Y~, respectively, when followed by final -a terminative. Here -*(Ɣ)U- and -*(Ɣ)I- become the radical.

6.3.5.   The two mono-R v.r. -DL~́ and -TY~́ are both from the same original form *-li- (eat).   -TY~́ is probably a later development.

6.4.0.   (2) MONO-RADICAL VERBAL ROOTS
           WITH LATENT INITIAL -i-

6.4.1.   A small group of mono-R v.r. occurs in the Nguni languages which are in some way associated with an initial -i-.

6.4.2.   This initial vowel is, however, never in evidence per se.   The fact that it exists, however, is apparent whenever, in the course of conjugation, the vowel -a- would normally immediately preceed such v.r.   When this occurs, the -a- coalesces with the latent -i- to form -e-.

6.4.3.   This group of mono-R is generally recognised by Bantu linguists, and reference made to it in the standard Grammars.   Doke summarises the conventional theory regarding the origin of such roots ; (Doke : Zulu Grammar 1921 : page 120 para. 301):   viz.,

> "These stems are derived from more primitive
>
> vowel verbs, -ima, -imba, -iva-
>
> -iza, -izwa."

He goes further and points out that in present day Lamba, the regular forms of corresponding roots are -ima (stand), -imba (dig) and -isa (come).

6.5.1.   The question arises as to the nature and function of this initial vowel.   If it constituted a radical, its loss would inevitably affect the meaning of the verb.   But whether its influence is apparent or not, the semantic force of the root as a whole is not affected. It is reasonable to conclude, therefore, that the initial latent -i- is not a lost radical.

6.5.2.   The origin of this latent -i- is suggested by Ziervogel in his Grammar of Swazi (p. 70-71) where he bases his argument on Meinhof's theory as set out in his "Grundzüge Einer Vergleichenden Grammatik der Bantu Sprachen" (1948), (page 60, para: 30).   The theory put forward is that the non-radical initial vowels occurring in certain v.r. are the remains of a primitive infinitive prefix, namely $^{*}\gamma$ i-, and classified as class 23 in Meinhof's classification.   If this supposition is accepted, the way is open to regard the latent -i- as derived from the infinitive prefix $^{*}\gamma$ i- > i-.

6.5.3.   Ziervogel goes further and draws attention to Eislen's thesis, and suggests that the process does not end with a * γi- > i- transition.   He suggests that this primitive infinitive prefix may have had various vowels, namely not only * γi- but also * γe-, * γa- and * γo-.

6.5.4.   Once this were established, it would account for the constant alternative forms such as Xh. -HL~, -(i)HL~) -éHL~ (cf. para: 6.3.1.), -TH~ -éTH~ (pour in).

6.6.1.   The following mono-R v.r. occur in Xhosa with latent initial -i- : [1]

-(î)B~,   -(i)HL~,   -(i)M~,   -(i)MB~,
-(i)V~,   -(i)Z~

6.6.2.   The probable original forms of these roots are as follows:-

-B~,   -(i)B~ (steal)[2] < * γi-v~, * γe-v̱~
     cf. Z.   -eB~.

-HL~,   -(i)HL~,   -éHL~ (go down) < * γi-ḵ~, * γe-ḵ~
     cf. Z.   -eHL~.

-M~,   -(i)M~ (stand)   < * γi-m~

-MB~,   -(i)MB~ (dig) < * γi-mb~, * γe-mb~.
     cf. Z.   -MB~,   -(i)MB~,   -eMB~.

-V~,   -(i)V~ (hear)   < * γi-v~.

-Z~,   -(i)Z~ (come)   < * γi- γ ~.

The prefix * γi-, * γe- is the primitive infinitive prefix, as described in para: 5.5.2. above.

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1)   cf. Table C , Para 6.3.3.
2)   In the infinitive the tonal differences between -B~ (become) and -(i)B~ (steal) are clear: viz., úkúBà (become) and úkûBà (steal).

6.7.0.   (3) <u>MONO-RADICAL VERBAL ROOT</u>
              <u>WITH INITIAL NON-RADICAL VOWEL:</u>

6.7.1.   In Xhosa there is one mono-R v.r. which has
three alternative forms: viz.,

    -HL$\grave{}$~,   -(i)HL$\grave{}$~,   -éHL$\grave{}$~ 1)

6.7.2.   This v.r. illustrates the theory [2] that both
initial latent -(i)- and non-radical -e- are not radicals,
but variants of a lost infinitive prefix.

6.7.3.   Zulu provides further examples of this non-
radical -e-,[1]

6.8.0.   <u>ALTERNATIVE FORMS OF THE MONO-RADICAL</u>
              <u>VERBAL ROOTS:</u>

6.8.1.   When a comparison is made of the Xhosa, Zulu
and Swazi mono-R v.r., it is found that in Xhosa, for
example, -HL$\grave{}$~ has all three variants, while Zulu and Swazi
prefer to retain the form with the initial non-radical -e-.
There is considerable variation between these three
languages in regard to the forms retained.

6.8.2.   For example, as will be shewn below, when the
Xhosa roots in this group are compared with the corresponding
roots in other Nguni languages, it is found that while the
root -B$\grave{}$~ /-(i)B$\grave{}$~ (steal) has a latent -<u>i</u>- in Xhosa, in Zulu
it is a mono-R v.r., -<u>e</u>B~, with a constant, non-radical
initial vowel.   A similar position obtains with regard to
Xhosa -MB$\grave{}$~, -(i)MB$\grave{}$~ (dig), and Zulu -MB~, -(i)MB~, <u>or</u>
-eMB~, where all three alternatives occur.

        Again, while in Xhosa there are the three
alternative forms of the root, -HL$\grave{}$~[2], Zulu has only the one
form -eHL~, while Swazi has the forms -eHL~, -eHLik- (s.m.)
A comparative table of the Xhosa latent -<u>i</u>- v.r. and other
Nguni parallel roots, is given in Table C hereunder.

1) cf. Table C Para: 6.3.3.
2) cf. Para: 6.5.3.
3) cf. Para: 6.7.1.

TABLE C

Shewing comparative variants of mono-R v.r. forms
as found in Xhosa, Zulu and Swazi, respectively.

Xhosa		Probable Original Form	Zulu	Swazi
-B~ , -(i)B~	steal	-*ɣiv-, -*ɣev-	-eB~	-B~ , -(i)B~ , -(e)B~ (Sw)
-HL~ , -(i)HL~ , -eHL~	go down	-*ɣik-, -*ɣek-	-eHL~	-eHL~ , -eHLik- (Sw)
-M~ , -(i)M~	stand	-*ɣim-	-M~, -(i)M~	-M~ , -(i)M~
-MB~ , -(i)MB~	dig	-*ɣimb-, -*ɣemb-	-MB~ , -(i)MB~, -eMB~	-MB~ , -(i)MB~
-V~ , -(i)V~	hear	-*ɣiɣu-	-ZW~ , -(i)ZW~	-V~ , -(i)V~
-Z~ , -(i)Z~	come	-*ɣiɣ -	-Z~ , -(i)Z~	-T~ , -(i)T~
			-V~ , -(i)V~ [1)] (increase)	

1) The root -V~ , -(i)V~ (increase) found also in Zulu (and Sw: -ZW~) occurs, as far as the writer can ascertain, only in the phrase 'ishumi elivayo' (ten plus), or in multiples of ten, such as, 'amashumi amathathu evayo' (thirty plus).

6.9.0.   THE STABILIZER yi- WITH MONO-R v.r.

6.9.1.   Bantu scholars have long since commented on the
fact that a mono-radical v.r. never stands alone.   In
verbal roots of more than one radical, the verbal stem
(i.e. root + terminative) may stand alone as a word : for
instance, when used as the singular imperative without an
object : e.g. HÁMBà! (go!) THÊTHà! (speak!)   But the
stem of a mono-R v.r. can never be used alone (as, for
instance, Ma!) but must always be preceded by some particle,
giving the complete word the stability of at least two
syllables.

        For example, the imperative of the mono-R v.r.
-DL~́ (eat) takes the form yìDLá! (eat!) : the latent -i-
mono-R v.r. -(i)M~́ (stand) becomes yìMá! (stand!) : and
that of -HL~̀, -(I)HL~̀, -éHL~̀ (come/go down) is yìHLá!

6.9.2.   The reason for this prefixed particle is
suggested by the term used by Cole in Tswana to describe
it : he refers to it as a "stabilizer".   It appears to be
an invariable principle in Nguni, and certain other Bantu
languages, that, apart from certain interjections, the use
of a monosyllabic word is resisted.

6.9.3.   Xhosa has a preference for di-R v.r., and
where a mono-R has to be employed, as in the examples
given above, this invariable 'stabilizer' is prefixed to
the verbal stem in order to give it the desired stability
of a two-syllable word.

6.9.4.   It is significant that when the imperative is
preceded by, for example, an object concord, the stabilizer
is dropped : the need for it having fallen away by virtue

of the fact that the word now has two syllables already.
For example:

> Whereas yiPHa! (give!) requires the
> stabilizing influence of yi-, it is no
> longer required in the command ndìPHé!
> (give me!...) which now comprises two
> syllables.

6.9.5.   The origin of this stabilizer yi is a matter
of conjecture.   Its morphological form suggests that it
is derived from an earlier prefix *yi-, the y- of which,
according to the usual Xhosa phonetic shift, has become y-.

6.9.6.   In form, it is similar to the hypothetical
primitive infinitive prefix (of Meinhof's class 23)[1]
There does not seem to be any insuperable difficulty in
accepting the theory that this stabilizer prefix yi- is
from the same *yi- (class 23), which also has left its
mark upon the latent -i- and initial non-Radical vowel
mono-R v.r.

6.10.0.   MONO-R v.r. USED AS AUXILIARY-PREDICATIVES:

6.10.1.   Certain mono-R v.r. are used as Auxiliary
predicatives (or „hulp-predikatiewe").[2]

6.10.2.   Louw has coined the term „hulp-predikatief"
to describe what hitherto had been known variously as
"deficient verbs" or "auxiliary verbs."

6.10.3.   It is not within the scope of this thesis
to go into any detail in this connection, as it is more
than adequately dealt with by Louw.   It should be noted,
however, that certain mono-R v.r. are used as auxiliary

---

1)   cf. Grundzüge etc. p. 60, para 20 : Meinhof also states
     here that traces of this prefix are to be found in
     Duala and neighbouring languages.
2)   cf. J.A. Louw's thesis (1963) : „'n Vergelykende studie
     van die defisiënte verbum van die Ngunitale."

predicatives. Some such mono-R v.r. can be used either as a main verb, or as an auxiliary predicative. Others may be used only as auxiliary predicatives, and are not found as main verbs.

6.10.4. The semantic force of these mono-R v.r. is different depending on the use to which they are put in the particular instance under consideration. The shift in meaning is considerable in most instances.

The following paragraphs indicate these usages, and the corresponding variations in semantic force.

(i)   True mono-R v.r. :

Used as a main verb:

-B~	(become, be)
-DL~	(eat)
-KH~	(pluck)
-THI	(say, think, do etc.)
-Y~	(go)

Used as an auxiliary-predicative:

-B~	tense formative
-DL~	habitual action.
-KH~	occasional action
-THI	used with ideophones: used with gestures to indicate numbers, or action
-Y~	tense formative

(ii)   Mono-R v.r. with initial latent -i- :

Used as main verb:

-(i)HL~	(descend)
-(i)Z~	(come)

Used as auxiliary-predicative :

-(i)HL\~   denoting early action

-(i)Z\~   tense-formative.

(iii)   Mono-R v.r. used only as auxiliary-predicative:

-D\~   Indicating action ultimately

             carried out ; i.e. "...until....."

N.B. This radical would appear to be semantically
       related to the adjectival root -Dé (long).

-NG\~ . Denoting some apparent action or state
         of affairs, which is somewhat uncertain.

     . Expressing a desire to do or be ....

     . Denoting unfulfilled condition.

     . Indicating obligation to do ....

CHAPTER 7

7.0.0.   DI-RADICAL VERBAL ROOTS

7.1.1.   Xhosa shews a strong preference for a di-
radical root.   The following is evidence of this fact.

(i)   It has already been shewn, when discussing
the mono-R v.r., where it was stated that "a mono-R v.r.
never stands alone"[1] - For example, you cannot say
"THI!" (say!) but such a mono-R v.r., used in the imperative,
demands the use of the prefix yi- in order to stabilize the
root, and give it the 'status' of a di-radical form.
(Although yi- is not a radical here, it does give the balance
equivalent to a di-radical form.)[1]

(ii)   The great majority of Xhosa verbal roots are
di-radical.   Statistics are unnecessary to support this
statement.   A glance at any dictionary will reveal this
to be so.

(iii)   Where there are v.r. which are apparently tri-
radical or multi-radical v.r., a close examination will
reveal that they originate from one of the following sources:

From a mono-R or di-R v.r., with an additional
radical or radicals.[2]

From a mono-R or di-R root of multi- functional
(nominal or adjectival) or ideophonic origin,
with an additional radical or radicals.[3]

From a mono-R or di-R v.r., to which an
extension has been suffixed, and the
original mono-R or di-R, lost.[4]

1) cf. Para. 6.9.1.
2) cf. Radical Extensions ; Chapter 11.
3) cf. Radical Conversion Extensions ; Chapter 12.
4) cf. Standardised Extension Forms ; Para. 17.5.2.

From foreign words, borrowed and adapted to
Xhosa from non-Bantu languages.[1]
From a combination of two or more roots.[2]

7.1.2.   This preference for mono-R or di-R roots is
seen also in the adjectival roots.

Out of a total of 13 recognised adjectival
roots in Xhosa, 7 are mono-R, 8 di-R, 2 are di-R with
a diminutive suffix, and 1 is a combination of two radicals,
as will be seen from the examples given in Appendix D.

7.2.0.   SYNTHESIS OF DI-RADICAL VERBAL ROOT

7.2.1.   It has already been seen that there are certain
mono-R v.r. with a complete semantic significance, conveying
such ideas as "becoming" (-B~), "dying" (-F~), "giving"
(-PH~) etc.
Such radicals consist of a consonant plus a vowel : an
indivisible combination.
The number of such radicals is necessarily very limited,
even if allowance is made for different radical vowels
within any given rhizeme, and variations in tone and so on.

7.2.2.   Through the development of the di-R v.r., the
lexical scope of the language is increased to an almost
unlimited extent.
It is further increased, and given additional flexibility,
by the various types of extension.

7.2.3.   The di-R v.r. is the result of the fusion of
two R.   It is important to stress that it is a process of

1) Compare : The Influence of Khoisan Languages : para. 5.8.0.
2)   e.g. -THÀNDÁBÙZ~ (doubt) < -THÀND~ (twist) and
               -BÚZ~ (ask).

fusion that is involved, and not merely the justaposition
of two R.

In order to demonstrate how such a process of fusion
actually took place, and to give examples, would require
a wide, comparative investigation based on data from
several Bantu languages, and from widely separated language
groups.   Such an investigation is, however, outside the
scope of the present study.

7.2.4.   Where two R were thus fused to form a di-R v.r.
the radical vowel of both R1 and R2 were liable to some
form of assimilation.   In a di-R v.r. in its present form,
only the (probably modified) radical vowel of R1 remains.
There is nothing to indicate positively whether it is in its
original form (i.e. as before fusion with R2,) or whether
it is in a modified form.

7.2.5.   It is rather too late in the day to attempt any
detailed reconstruction of modern Xhosa forms, however.
This process, if indeed it did take place, must have done
so far back in the history of the Bantu languages as a
whole, since the di-radical root is a common feature of all
Bantu languages, and not of Nguni alone.   The assonic forms
of certain Bantu languages today seem to indicate that
some such process may have operated, at least in certain
cases.   For example, to quote Van Eeden[1] (quoting
Bleek)[2]

     'Thus in Herero,

suta (pay)	>	sutu
tona (bear)	>	tono
pita (go out)	>	piti
teka (dip)	>	teke

---

1) cf. B.I.C. van Eeden, 'The Terminating vowel of the
     Bantu verbal stem.'
2) cf. Bleek, 'Comparative Grammar of S.A. Languages'.

and in the Angola language,

tunda (go out)	>	tundu
zola (love)	>	zolo
dshiba (kill)	>	dshibi
enda (walk)	>	ende

The assonic vowel pattern in di-radical verbal roots is
not uncommon in Bantu, and is important as indicating
some possible process of assimilation in the fusion of
the two R, in certain instances.

7.2.6.   No profound study has yet been made of the
morphological relationship between ideophonic roots and
verbal roots.   It is, however, interesting to observe
the large number of roots, with identical semantic shape[1],
which have an assonic vowel pattern in the ideophone while
the verbal root, in Xhosa, has accepted the invariable
terminatives.[2]

For example :

-thi fèfè   (besprinkle)   cf. -FÈF- (s.m.)

7.2.7.   At a later stage, the terminative vowel of the
v.r. is discussed in detail.   It need only be noted here,
however, that the final vowel of the present-day di-R
is a detachable -a, the original vowel (i.e., the radical
vowel of the original R2) having been lost.   The conse-
quence is that, although the original R1 and R2 each had
its own distinctive radical vowel, today the radical vowel
of R2 no longer appears.   It may, or may not, survive
indirectly in the present radical vowel of R1.

---

1) cf. Para. 12.2.4.
2) cf. Para. 10.0.0. etc.

7.2.0.   TYPES OF DI-RADICAL VERBAL ROOTS

7.2.1.   Assuming that a di-R v.r. is the result
of fusion of two R, there are two main groups of di-R
v.r., namely:

    (i)   Those where R1 and R2 were identical,
         and the di-R v.r. consists of a re-
         iteration of that R.

    (ii) Those where R1 and R2 were dissimilar R.

For example :

    (i)   -BHABH- (flutter) and -DAD- (swim)
         are obviously roots consisting of a
         re-iterated R, while

    (ii) -HAMB- (go) and -THUM- (send) are
         composed in each case of dissimilar R.

7.2.2.   Roots consisting of a re-iterated R:

    Some of these are an obvious re-iteration, both
morphologically and semantically: indicating the
repetition of an action : for example:

--BHABH-	(flutter)
-DAD-	(swim)
-JIJ-	(twist)
-PHAPH-	(flap (wings or garments))
-QHAQH-	(tease (wool))
-XHAXH-	(chop (meat))
-ZAZ-	(spread over, occupy widely)

7.2.3.   Others, again, appear to consist of a re-
iterated R, but without indicating repetitive action:
for example :

-CÀC-	(be clear)
-CHÀCH-	(recover from illness)
-THÁTH-	(take)
-VÀV-	(express thanks to a performer).

7.3.4.   Again, there are di-R v.r. which appear to be mere re-iterations of R1 while, in fact, they consist of an R1 (carrying the main semantic idea of the verb) with an R2 (which has merely a kind of adverbial influence on the root, as is usual in the case of secondary radicals)[1]

For example:

-THÁTH- (take) is probably composed of

R1 * -THA (idea of touching)

R2   -TH~ (secondary radical, with punctative or contactive significance).

7.3.5.   The majority of di-R v.r. consist of two R of entirely different R : such as

-HÁMB-	(go)	HA:MB~
-THÛM-	(send)	TH~:M~
-FÌK-	(arrive)	F~:K~

It is in connection with such roots that the importance of the difference in semantic function is realised between the primary and secondary radicals.

Bourquin[2] noted that the primary radical (he called it the "first syllable") of a di-R v.r. contains the characteristic meaning of a root as a whole, while the "second syllable" (called here R2) modifies the root in a certain direction. The relative significance of the Primary[3] and Secondary[4] radicals is discussed fully elsewhere.

---

1)   cf. Semantic influence of Secondary Radicals: cf. para 3.1.0.
2)   W. Bourquin: "Neue Ur-Bantu Wortstämme"..p.191 et. seq.
3)   cf. Primary Radicals : para. 3.1.1.
4)   cf. Secondary Radicals : para. 4.8.0.

7.2.6.   REDUPLICATED DI-RADICAL VERBAL ROOTS

Xhosa, in common with other Bantu languages, sometimes uses the device of a re-duplicated di-radical root.   The semantic implication of this reduplication is two-fold : namely,

(i)   Signifying an intensification of the
          action described in the di-R v.r., or

(ii)   Signifying a rather desultory carrying
          out of the action described in the di-R
          v.r.; almost a punctative effect.

The following examples illustrate the principle involved.

7.2.7.   (i) Examples of re-duplicated verbal roots signifying an intensification of the action described by the di-radical root:

-DUBÁDÙB- (mix up completely) : cf.

   -DÙB- (mix together, mingle)

-GONGXÁGÒNGX- (examine very thoroughly): cf.

   -GÒNGX- (dig deep; question deeply)

-HÈNDÁHÈND- (tempt persistently); cf.

   -HÈND- (tempt to evil)

-JÈNGQAJÈNGQ- (chop up): cf.

   -JÈNGQ- (cut across, sever)

-KHÀNDÁKHÀND- (pound repeatedly): cf.

   -KHÂND- (beat out, hammer, forge)

-LINGÁLÌNG- (test or tempt repeatedly): cf.

   -LÎNG- (try, attempt, test)

-PHÀNGÁPHÀNG- (hit forcibly): cf.

   -PHÀNG- (do with speed or force)

-PHÌNDÁPHÌND- (keep repeating, do over and over again): cf.

   -PHÌND- (repeat : fold over)

-PHÙLÁPHÙL- (listen, hearken, attend, obey): cf.

    (um)PHÙLà (3) (earwax) and cf. (im)PÚLà (9)

    the hole of the ear).

-ZÀMÁZÀM- (move backwards and forwards ; shake ;

    rock): cf.

  -ZÀM- (shake, strive).

(ii)   Examples of reduplicated di-R v.r., indicating

    desultory action, with an almost punctative

    effect; e.g.

-BÈTHÁBÈTH- (beat about): cf.

   -BÉTH- (hit, strike)

-BHÌDLÁBHÌDL- (double like a hare ; confuse,

         mislead): cf.

   -BHÌDL- (s.m.)

-CHÒLÁCHÒL- (pick up here and there): cf.

   -CHÓL- (pick up; come upon suddenly).

-DÙNGÁDÙNG- (stir up, disturb, make turbid): cf.

   -DÙNG- (s.m.)

-FÙNÁFÙN- (search about for): cf.

   -FÛN- (want, seek)

-GÙNGQÁGÙNGQ- (twist, wriggle, writhe): cf.

   -GÙNGQ- (s.m.)

-HÀMBÁHÀMB- (walk about; go to and fro): cf.

   -HÁMB- (walk ; go)

-KRÙTHÁKRÙTH- (strip off (bark)); pull at ; worry at):cf.

   -KRÚTHek- (be distracted, worried, worn out).

-PHÀTHÁPHÀTH- (feel with the hands): cf.

   -PHÁTH- (touch, handle).

CHAPTER 8.

8.0.0.   <u>VERBAL ROOTS WITH INITIAL VOWEL</u> :

8.1.1.   Comments on various types of verbal roots with an initial vowel[1] are to be found in most of the earlier works on Bantu.   For example, Werner[2] and more recently Ziervogel[3], discuss the probable origin of such forms.

8.1.2.   Doke[4] has the following additional comments to add:

> "There are two main types of vowel-verb in Zulu :
>
> (1) Those of which the stem invariably commences in a vowel, this vowel being either <u>a</u>-, <u>e</u>-, or <u>o</u>- .
> It is noteworthy that there is none commencing in either of the vowels <u>i</u>- or <u>u</u>-.
>
> (2) Those which have two forms, either of which may be used at will : the first commencing in a vowel, usually <u>e</u>-, and the second form being a regular verb without any initial vowel. There is one defective verb also."

8.1.3.   The above comments apply equally to Xhosa.
It must be clearly understood, however, that the two types of v.r. with initial vowel mentioned above in (1) and (2) are two distinct and separate types.   In this study I have referred to (1) as "vowel-verbal roots", and those under (2) as "verbal roots with initial non-Radical vowel."   These two types are discussed separately in detail in the following pages.

1) cf. Para's. 2.2.0. <u>et seq</u>.
2) cf. A. Werner, 'Bantu Languages', para. 145 (1919)
3) cf. D. Ziervogel, 'Grammar of Swazi', page 67 <u>et seq</u> (1952)
    cf. also Para. 652/3/4.
4) cf. Doke : "Zulu Grammar" (1931) page 121, para: 303.

8.2.0.   VOWEL-VERBAL-ROOTS

8.2.1.   There are actually three distinct types of
verbal-root involving an initial vowel.   They may be
classified as :

8.2.2.   The first group consisting of mono-radical v.r.
with a latent initial -(i)-,which have already been dealt
with.[1]   The conclusions arrived at may be briefly
summarised here, viz. that this initial -(i)-is not a
radical, but probably what has survived from a primitive
infinitive prefix.

This group includes such roots as:

   -(î)B~ (steal),   -(i)V~ (hear, feel) etc.

8.2.3.   A second group consists of di-radical v.r.
whose Rl consists of a vowel only (the original initial
consonant having been lost).   In these v.r., the initial
vowel (Rl) is constant : that is to say, there are no
alternative forms for any one v.r.   Such Rl are found
in A-, E- or O-.   There do not appear to be instances
of Rl in I-, or U-.   This group includes such v.r. as,

   -ÂKH~ (build),   -ÉNZ~ (make, do),   -ÓS~ (roast).

This group constitute the only true vowel-verbal roots,
since their initial vowel constitutes a radical (Rl).

8.2.4.   A third group may be described as a form of
regular di-radical v.r. having, however, a non-radical
initial vowel preceding the primary radical (Rl).   In
this group, the following features are important:

   (i)   The initial vowel is not a radical, and
             therefore does not carry any semantic value.

---

1) cf. Para. 6.4.0.

(ii)   In certain instances, there may be alternative

forms of the initial vowel for any given root:

for example, with initial e- or o-, as in

-éBÙL- or -óBÙL- (skin, flay).

As far as I know, Xhosa has no such v.r. with

initial a-, i- or u-.

(iii)   In other instances, the di-radical v.r. with

initial vowel may also have an alternative form

in which the initial vowel is lost, and the v.r.

occurs as a regular di-radical v.r. For example,

-éTHÙK-; -óTHÙK- and -THÚK-

all have the identical meaning (be startled):

There are also the transitive forms,

-éTHÙS- and -óTHÙS- (startle).

The retention or loss of the initial vowel has no

semantic effect. It is therefore not a radical.

8.2.5.   Mono-Radical verbal roots with latent initial
-i- have already been dealt with. Further elaboration
is, therefore, unnecessary here.

8.3.0.   TRUE VOWEL-VERBAL ROOTS

8.3.1.   The regular di-R v.r. consists of a primary
radical R1 (consisting of a consonant plus vowel) and a
secondary radical, R2, consisting of a consonant only
(the radical-vowel of R2 having been dropped in favour
of the terminative -a etc.)

8.3.2.   There is a comparatively small number of v.r.,
however, whose R1 consists today of a vowel only. These
are the true vowel-verbal roots, and are derived from
regular di-R forms, the initial consonant of which has

been dropped. All that remains today being the radical-
vowel of the original R1, which now itself constitutes R1.

8.3.3. Table D gives a representative list of such
v.r., as found in Xhosa, and also for comparative purposes,
in Zulu and Swazi. It will be noted that while there
are di-R v.r. with R1 A-, E-, O-, there are none with R1
I- or U-.

8.3.4 It is generally accepted[1] that these di-R are
derived from earlier starred forms (as given in the extreme
right hand column of Table D), whose original consonant ɣ̥
of R1 has been lost, leaving the radical vowel only to
fill the rôle of R1.

8.3.5. ## TABLE D

VOWEL-VERBAL ROOTS

(Di-R v.r., with R1 as Vowel only:)

The following is a fairly comprehensive table
of di-R vowel-verbal roots found in Xhosa. For com-
parative purposes, it is indicated also where these or
equivalent v.r. are found in Zulu and Swazi. Reference
has already been made to the fact that they are probably
derived from original forms with an initial consonant,
probably ɣ̥ , now lost. These are given in the
extreme right-hand column:

---

1) cf. Para: 8.3.5.

Xhosa.		Also found in			Original forms.
-AB-	distribute	Zu	Sw		* ɣav-
-AKH-	build	Zu	Sw		* ɣak-
-AL- 1)	refuse	Zu	Sw		* ɣal-
-AND-	increase	Zu	Sw		* ɣand-
-ANG-	kiss	Zu	Sw		* ɣang-
-AZI-	know	Zu	Sw	(-ATI)	* ɣa ɣi
-EL-	winnow, flow	Zu	Sw		* ɣel-
-EN-	be overgrown	Zu	Sw		* ɣen-
-END-	marry (of woman)	Zu	Sw		* ɣend-
-ENZ-	make, do	Zu	Sw	(-ENT-)	* tend- 2)
-ETH-	hand to, bring				* ɣet-
-OKH-	transfer fire	Zu	Sw		* ɣok-
-OM-	dry; bec. hard	Zu	Sw		* ɣom-
-ON-	spoil, sin	Zu	Sw		* ɣon-
-OND-	go straight on be thin	Zu -OND-	Sw (-ONDZ-)		* ɣond-
-ONDL-	feed the young etc.	Zu	Sw		* ɣo ɣa
-ONG-	use sparingly	Zu			* ɣong-
-OPH-	bleed, sweat profusely	Zu	Sw		* ɣop-
-OS-	roast	Zu	Sw		* ɣoka
-OTH-	bask (in sun etc.)	Zu	Sw	(-OTS-)	* ɣot-

---

1) N.B. Xhosa also has -AL- (start fermenting milk in new calabash): McL. Dict. p. 2.

2) cf. Bourquin: N. Ub. W: p. 248.

8.4.0.   VERBAL ROOTS WITH NON-RADICAL
          INITIAL VOWEL :

8.4.1.   We now come to the group of verbal-roots with
a non-radical initial vowel.   These must be sub-divided
into:

> (i)   Mono-radical verbal-roots, preceded by
>   non-radical initial vowel.
>
> (ii)   Di-radical verbal roots, preceded by
>   non-radical initial vowel.
>
> (iii) Di-radical verbal roots, with alternative
>   forms of non-radical initial vowel.
>
> (iv)   Di-radical verbal roots which may occur as
>   a regular di-radical, or with an alternative
>   form, being preceded by a non-radical
>   initial vowel.

N.B. Where alternative forms occur, as in (iii) and
      (iv) above, the alternative forms are inter-
      changeable, involving no semantic change.

8.4.2.   Mono-radical verbal-roots, preceded by
          non-radical initial vowel.[1]

8.4.3.   Di-radical verbal-roots, preceded by
          non-radical initial vowel.

Such verbal-roots fall into two categories : viz.,

> (i)   Those which have an alternative initial
>   non-radical vowel.   In some instances two

variants may occur in Xhosa, with no semantic difference
between the two forms.   In other instances, the variant
occurs in Zulu, but with an obviously common origin and
with related semantic force.

---

1) cf. Para. 6.7.0. etc.

(ii)   Those which have both a form with a non-

radical initial vowel, and an alternative

form, without the initial vowel, with identical or

related semantic force.

8.5.1.   Di-radical verbal-roots with alternative variants

of initial, non-radical vowel.   As these alternative

variants are only apparent in the related Zulu forms, these

are quoted for comparative purposes.   For example :

	Xhosa.	Zulu.
-áLÀM-	get glimpse of	-eLAM- come next in birth.
-éBÙK-	peel off (intr.)	
-óBÙK-	" (s.m.)	
-éBÙL-	peel off (tr.)	-eBUL- strip, bark
-óBÙL-	" (s.m.)	-oBŪL- (s.m.)
-óBÙZ-	" (s.m.)	
-óLÙL-	stretch out (tr.)	-eLUL- stretch out (Intr.)
-óLÙK-	" . (Intr.)	
-òYÍK-	fear, be afraid of	
-òYÍS-	overcome	-eYIS- have contempt for

8.5.2.   It is reasonable to conclude that since the

initial vowel may vary, without a corresponding variation

in the semantic shape of the root, the initial vowel is

not a radical, but has some other origin.

8.6.1.   Di-radical verbal-roots with alternative forms,

either with or without initial non-radical vowel, and with

no corresponding semantic variation.   Again, a comparison

with certain Zulu forms is necessary to complete the data.

For example:

      Reference has been made in the preceding
paragraph to the group, -eBÚL̀- (peel off), -óBÙL̀-, -éBÙK̀-,
-óBÙK- etc. Then there is the di-radical v.r. -BÚL̀-
(confess, admit (incest etc.)) There is a semantic shift
here, but it does not amount to a fundamental semantic
variant.

8.6.2.   Again, reference has been made to the group
-óLÙL̀- (stretch out), -óLÙK̀- etc. There is also the
extended root -LÚL̀ek̀- (to straighten out something that
was bent). The roots are obviously *-LUK- and *-LUL-
respectively : the initial vowel, where it occurs, being
non-radical.

8.6.3.   In Xhosa, the di-radical v.r. -NQÁB̀- (bec.
fixed, stuck : in perfect tense, be scarce, expensive)
occurs. In Zulu this root has the non-radical initial
vowel form, -eNQAB- (disallow, prohibit).

8.6.4.   Finally, there is the group of roots:
        -éTHÙK̀-, -óTHÙK̀- (be startled)
        -éTHÙS̀-, -óTHÙS̀- (startle).
      These have corresponding di-radical variants,
      with no non-radical initial vowel, and no
      semantic variation : viz:
        -THÚK̀- (be startled)

Again, the initial vowel, where it occurs, with no apparent
semantic influence, cannot be regarded as a radical.

8.7.0.   The root -ÁMB̀ÀTH̀- (clothe oneself), presents
problems peculiar to itself. There may be other parallel
instances, but they have not yet come to my notice.

The group -ÁMBÀTH- (clothe oneself): -ÁMBÙL-
(wear old, ragged clothes, etc.) (More correctly, -ÁMBÀTH-
indicates adorning oneself in ceremonial clothes, and
-ÁMBÙL- disrobing, or dressing in shabby clothes) has
corresponding forms in Zulu, with an initial -A- or -E-;
viz., -AMBATH- or -EMBATH-.   This suggests that this
root is therefore to be included under those in paragraph
(8.5.1.) above; and should therefore be written -aMBÀTH-,
-aMBÙL- etc., the initial vowel being non-radical.

If this is so, the root would be *-MBÀTH- and
*-MBÙL- respectively.   This may be so, or the -ATH- and
-UL- may be extensions, in which case it would be more
likely for the roots to be di-radical, viz. *-AMB-.

It would appear more probable, however, that
these are not roots with extensions, but related roots,
with contrasting secondary radicals;   with a non-radical
initial vowel, viz. -aMBÀTH- and -aMBÙL-.

A further factor that should be remembered, is
the apparently related ideophone thi wàmbù (throw on a
garment, etc.)

CHAPTER 9

9.0.0. <u>TRI-RADICAL VERBAL ROOTS</u> .

9.1.0. The number of tri-radical verbal roots is comparatively low. In attempting to describe the possible origin of some of these roots, the derivation of which is obscure, a certain amount of repetition has been unavoidable, as there are more exceptions than regular forms.

9.2.0. I have referred to such verbal roots as tri-radical since they are, in effect, tri-radical now. But in almost every instance, such roots, when of pure Bantu origin, are really extensions of one kind or another of mono-R or di-R roots. These roots are variously verbal, multi-functional, nominal or ideophonic.

9.2.1. Tri-R roots which are apparently derived from di-R roots by the reduplication of R1 to form R1 and R2, R3 being the R2 of the original di-R root. For example :

-BHÚBHÙZ-̀ (retch, vomit) ; cf. -BHÚL-̀ (thresh, beat out) ; (here R3 is the Factative -Z~ (9), replacing the Effective -L~ in -BHÚL-̀).[1]

-GÓGÒD-̀ (scrape the bottom of a mealie pit) ;
cf. -GÒD-̀ (dig out, excavate)

-GÚGÙD-̀ (run along the surface) ; cf. -GÙD-̀ (be smooth).

9.2.2. Tri-R v.r. apparently derived from a di-R root where R1 has been re-iterated in the position of a third R,[2] (in some instances, with phonetic modification);

In the following examples, I have been unable to identify the di-R roots, but the semantic shape

---

1) cf. Para. 4.8.1.
2) This really amounts to a di-R r. plus Radical Extension.

of Rl has been identified as occurring in
other roots also : for example:

-DÁKÀD- (Massacre, tear to pieces) :

   Rl, *-DA- (idea of tearing): cf. also

      -DÁBÙL- [1] (tear, rend)

      -DÁBÙK- [2]   (be torn).

-GÉBÈNG- (fall upon, rob) :

   Rl: *-GE- (idea of violent, aggressive action): cf.
also -thi gèbhù (cut deep, cut much)

      -GÈNG- (throw, burst a door wide open)

      -GÈC- (cut a way through bush etc.)

      -GÈNGQ- (dig deep : trench)

-HLÚKÙHL- (slaughter, by severing the aorta):

      Rl, *-HLÙ- (idea of separating): cf. also

      -HLÙTH- (take away by force : deprive of)

      -HLÙZ- (strain, filter)

-NDÍKÌND- (speak with vehemence and gesticulation):

      Rl, *-NDÌ- (idea of pestering continually).

      -NDÌND- (keep soliciting to evil : keep

            hammering at (metaphorically)).

9.4.0.   Tri-R v.r. derived from
         Di-R v.r. plus radical extension : [3]

-BHÁBHÀM- (be furious): cf. -BHÀBH- (flap about):
     REx: Protractive -M~ (6)

-JÓNGÒTH- (demand one's rights): cf. -JÒNG-
     (look fierce): REx : Punctative -TH~ (2)

-KHÒLÓS- (be secure, lean upon): cf. -KHÔL-
     (satisfy, convince): REx : Neuter -S~ (2)

---

1) Or -DÁB-ùl-
2) Or -DÁB-ùk-
3) cf. Radical extensions :   Chapter 11.

-NYÚBÙL- (Laugh, shewing the gums): cf. Zu: -NYUB-

    (make fun of, make a butt of): REx :

    Effective -L~ (4).

-NGQÙMK- (be blunt) and -NGQÙMZ- (make blunt)

    cf. (isi)NGQÛM (4) (a blunt article).

    REx: -K~ Neuter (2) and -Z" Factative (9).[1]

    respectively.

-QÈLÉS- (be independent, be proud): cf. Zu: -QEL-

    (take one's stand, face to face, with an opponent:

    e.g. as a young man about to fight):

    REX: -S~ Neuter (2)[1]

-SÚKÙM- (stand up, stand erect): cf. -SÙK- (get up

    and go away): REx: -M~, Protractive (6) [1]

-SÚKÙZ- (move, shift tr.): cf. -SÙK- (get up and go

    away): REx: -Z~ Factative (9) [1]

-TYÛMZ- (bec. burst, smashed): -TYÚMK- (bec. burst,

    smashed): cf. also ukuthi cùm, -CÚMK- (be

    broken, smashed, thro' falling):

    REx: -Z~, factative (9) and -K~ neuter (2)

    respectively. Suggests Khoisan origin,

    with final -M~.

9.5.0.   Tri-R v.r. derived from :

        Di-R v.r. plus Extension:[2]

-KHÀNGÉL- (look, look at) is undoubtedly <

*-KHÂNG- plus Applied Extension -el- (1)(a):

-PHÉNDÙL- (answer) cf. *-PHEND- plus

    Reversive-actional Extension -ul- : (13)

---

1) cf. Semantic Significance of secondary radicals,
        para. 4.8.0.

2) cf. Extensions : Chapter 15.

-SHÚMÁYÈL-   (proclaim, preach):   cf. *-SHUM-

      plus Extensive-stative (irregular) extension

      -ayel-   (2)(g)

9.6.0.   Several Tri-R or Multi-R v.r. are evidently
derived from di-R or multi-R Ideophones, plus a radical
conversion extension.   Those v.r. which fall into this
category, and whose original ideophonic roots are still in
use, are dealt with in Chapter 12.

Several others, however, have also probably been so formed,
but the original ideophones from which they were derived
are no longer in current use in Xhosa.   For example:

(-BHÚRÙZ-   (retch, vomit):   cf. *-thi bhuru (s.m.)
(
(with factative conversion extension -Z~.
(
(-BHÓRÒZ-   (s.m.)   same derivation.

(-GÙNÚND-   (eat bare): cf. *-thi gunu.
(
(-GÙNÚZ-   (gobble up, finish) : same derivation,

          except that the former has the Protractive

          Conversion Ext. -ND~, while the latter has

          the Factative Conv: extension -Z~.

(-RÒNGQÁZ-   (roam, ramble): cf. * -thi rongqa.
(
(-RWÁNGQÀZ- (s.m.) : cf. *-thi rwangqa.

(-MÓKÒTH-   (chew, munch) : cf. *-thi moko
(
(-MÚKÙTH-   (s.m.) : cf. * -thi muku

      In each case, the conversion extension is
      the punctative -TH~.

9.7.0.   There is a comparatively small number of
tri-R and multi-R v.r., which do not suggest a ready
solution as to their origin.   It is perhaps significant
that they usually possess click consonants, indicating
Khoisan (and therefore non-Bantu) influence.   It is possible

that these, obviously not typical Bantu forms, are in fact
borrowed from Khoisan roots.   (I. Schapera[1] mentions
that it is common in Khoisan for "two or more radical
elements" to combine to form one single word.)
Examples of such roots include:

-BHAKÁX-[2] (come upon broadside)

-BHENGEQ- (be arrogant, independent)

-GQÓSHONG-[3] (be harsh with, rebuff)

-GXÓLOXH- (feed towards the kraal at sunset)

-NQENDEV- (be slothful, indolent)

> N.B. It is interesting to note that R1
>
> in -NQÉNDEV- (be slothful, indolent)
>
> and R1 in -NQÉN- (be lazy) are identical.

9.8.0.   SUMMARY OF CONCLUSIONS

The majority of so-called Tri-radical or multi-
radical verbal roots are, in fact, extensions of one kind
or another of a simpler (mono- or di-radical) root. This
may be a multi-functional, or ideophonic root.

These multi-radical roots are mostly formed by

(i)   The addition of a radical extension,

e.g.,   -GÚDLÚZ- (shake violently)

< -GÚDL- (rub, knock against);

REx : Factative -Z~ (9)

(ii)   By means of a radical conversion suffix

added to an ideophonic root :

e.g. -GÉBENG- (fall upon, rob) ; cf.

-thi gèbhù (inflict severe open wound)

---

1) cf. para. 5.8.0. et seq.
2) cf. roots with tonal sequence LHL ; para. 18.9.3.
3) cf. roots with tonal sequence HLL ; para. 18.9.4.

(iii) By means of an Extension added to a mono-R
       or di-R root, the original unextended root
       having fallen into disuse:

       e.g. -KHÀNGél- (look, look at): cf.
             *-KHÂNG- (obsolete di-R v.r.) plus
             applied extension -el- (1)[1]

(iv)   By the combination of two roots, to form
       one multi-radical root :

       e.g. -THÀNDÁBÚZ- (doubt): cf -THÀND- (twist)
       and -BÚZ- (ask).

(v)   By the combination of roots, sometimes of
       borrowed (e.g. Khoisan) origin:

       e.g. -KHÚMÀNQ- (be amazed, astonished):
       cf. *-KUM- and -thi nqà (be surprised).

9.9.0.   MISCELLANEOUS TRI-RADICAL v.r.

9.9.1.   There are in addition, several tri- or multi-R
v.r. which have a less obvious origin. I have suggested
possible origins for some of these roots. Since they do
not constitute large groups, they must of necessity be
treated rather as individual and rather exceptional forms.

9.9.2   When dealing with derived multi-radical verbal
roots whose origin is obscure, some light may be thrown
on their origin through a study of their tonal sequence.
This aspect is dealt with fully in chapter 18.   For
example, roots with a tonal sequence of HLL are found
to be derived from a limited number of sources.[2]   By
a process of elimination, the probable source of obscure
roots may be thus deduced.   The result is, however,
still a matter of speculation in most cases.

---

1) cf. Extensions : para. 15.1.1.
2) Roots with tonal sequence HLL : cf. para. 18.9.4.

9.9.3.   From unidentified di-R v.r.

-NDÍBAZ-   (hesitate, be irresolute), and

-NDÍLath-   (be fickle)

R1 in each case carries the idea of being
unstable, undecided.

-NDÍBAZ- is probably from a di-R Id. root *-thi ndiba
(where R1 -NDÍ- indicates being undecided) with a
radical conversion extension -Z~ (factative R2)

-NDÍLath- probably from a related di-R root, *-NDIL-
and R2 neuter -L~, with the contactive extension
-ath- (10).

N.B.   Zulu also has -NDIND- with the meaning
"rove about, wander around aimlessly."

-SÚNGÚL- (commence, inaugurate) : cf.

Zu - SUNDUZ- (push forward, push away) :
There is the possibility that R1, -SU- is
the same as in -SÚK- (get up), -SÚL- (remove,
wipe off), -SÚS- (remove tr.) etc.
If this is so, the next step is to establish
the di-R v.r., viz: *-SÚNG-

R1, -SU- (idea of getting up, getting moving)
R2, -NG~ (protractive R).

To this di-R root is added a radical extension
-L~ (being the effective R).

N.B.   In the Zulu -SUNDUZ- R2 is the protractive
R2 -ND~, and the radical extension, the
factative R -Z~.

9.9.4.   Tri-R v.r. associated with di-R ideophonic
roots, with a radical conversion extension providing the
third R; e.g.

-DÁKÙMB- (be depressed): the form suggests derivation

from ideophonic root *-thi dàkù (not identi-

fied) possibly related to *-DAKU- as found

in -DAKWa (-DAKUa : Zu: be besotted, be

overcome : -U- here being part of the R2,

-KU~). To this di-R root is added the

Radical Conversion Extension -MB~, which

has the significance of protracted action,

and supplies the third R.

9.9.5. From di-R nominal root

-DLÓKÒV- (plunge, buck, rear): cf. Zu.,

(u)DLOKo (11) (One of a regiment found by Mpande),

cf. also Xh: (i)DLÒKó-DLÒKò (5) (an uneven heap):

The R in third position is a low-frequency

secondary R for which I have not been able to

establish a satisfactory semantic category.

-NÍKÌN- (rub against, arouse from sleep) and

-NÍKÌZ- (tear to pieces; worry (as a dog a smaller

animal)) : cf. (ama)NÌKí-NÌKì (6) something

rubbed threadbare, sg. tattered).

Radical conversion extension, -N~ (R2 Protractive)

and -Z~ (R2 factative), respectively, supply

the R in third position.

9.9.6. Tri-R v.r. related to di-R nominal root

(still found in Zulu, tho' not in Xhosa): viz.

-GÒNÓND- (suck a dry udder, breast):

cf. Zu (in)GONo (9) (nipple of breast :

small head at top of a calabash).

9.9.7   Tri-R v.r. related to reduplicated di-R

  nominal root (found in Zulu, tho' not in Xhosa): viz:

  -HLÀFÚN- (chew) : cf. Zulu:

    (ama)HLAFu-HLAFu (6) : (coarsly ground

    grain) : The radical conversion extension

    -N~is similar to the secondary radical

    -N~which carries a "protractive" significance.

  -NYÓVÙL- (stir up Kaffir corn in water to wash it)

    (walk heavily - labour a point)

    possibly associated with Zulu

    (i)NYOVu-NYOVU (5) a person who muddles things,

    causing confusion : with which compare Xh:

    (u)NYÓVù (11) (a mixture of Kaffir corn and

    broth). To this di-R root is added the

    RCE -L~ (R2 Effective).

    cf. -thi nyòvù (of shifting something heavy)

9.9.8 From mono-R Ideophonic root (Xhosa)

    with extension

  -NYÚBèl- (slink, skulk) cf. mono-R ideophonic root

    -thi nyúú (slink, skulk). The derivation

    is in two stages. First, the addition of

    RCE -B~ (R2 operative), secondly the

    addition of the applied extension -el- (1).

9.9.9 From di-R Zulu ideophonic root

  -MÓKÒTH- (chew, munch) : cf. Zu. -thi moklo

    (of breaking a bone) : with RCE -TH ~

    (R2 punctative).

  -MÚKÙTH- (same meaning as -MÓKÒTH-) : possible

    variant of -thi moklo.

-SHUMPUL- (pinch, twist the skin) cf. the Zulu

    ideophonic root, -thi shumpu

    (get broken off, in a tearing manner), to

    which is added the RCE -L~ (effective R).

9.9.10.

    -VABul- (walk aimlessly about):

    -VATSHul- (s.m.) and -VENTSHul- (s.m.)

        cf. Zulu ideophonic root - thi vaba

        (do things generally in an untidy, disorderly

        aimless manner):

        The ideophonic root is adapted to verbal root by

        the loss of the final vowel > *-VAB- to which

        is then added the abundant actional extension

        -ul- (7)(a)

                > -VABul-

N.B. -VATSHul- and -VENTSHul- are probably

      later corruptions of -VABul-.

N.B. -VENTSHul- possibly influenced by the

      Afrikaans verb "vent" (carry about for

      sale, hawk, peddle).

N.B. The fact that these are later corruptions could

      also account for their being pronounced with

      a different tonal sequence.

9.9.11.   From hypothetical di-R ideophonic root

        (unidentified : no such root having been found

        in either Xhosa or Zulu as far as I know):

        A radical conversion extension supplies the

third R in each case.

-BHÁVÙM- (growl, snarl): cf. hypothetical ideophone
　　　*-thi bhavu, with RCE -M~ (R2, with protractive
　　　significance).[1]

-GÙNÙZ- (gobble up, finish): cf. -GÙNÙND- (eat
　　　bare) : suggests origin from *-thi gunu,
　　　with RCE -Z~ (R2, with factative significance):
　　　and -ND~ (R2, with protractive force)
　　　respectively.

-TSHÁWÙL- (sing (of water on the boil) : The form
　　　suggests hyp. ideophonic origin: *-thi tshawu :
　　　RCE, -L~ (R2 effective) as R in third position.

-TYWÁSHÙMB- (be flat) and -TYWÁSHÙB- (beat, hammer at):
　　　suggest ideophonic origin : *-thi tywashu
　　　in each case : RCE being -MB~ (R2 protractive
　　　operative) and -B~ (R2 operative) respectively,
　　　as R in third position.

　N.B. Primary radical *-TYWÁ- is found in the
　　　Ideophonic root, -thi tywá (be flat on the
　　　ground).

-TYHÍSHÌL- (depart hastily): suggests hyp. ideophonic
　　　origin, *-thi tyhishi with RCE, -L~ (R2
　　　effective) as R in third position.
　　N.B. The primary radical *-TYHI- occurs also
　　　in the ideophonic root -thi tyhi (go
　　　straight forward, proceed etc.)

-ZÓNGÒM- (resound): suggests hyp. ideophonic origin,
　　　*-thi zongo with RCE -M~ (R2 Protractive)
　　　as R in third position.

---

1) cf. Also Zu: (isi)BHAVu-BHAVu (wild, fierce person) (7)

CHAPTER 10

10.0.0.   THE VERBAL TERMINATIVE.

10.1.0.   In his article "The Terminating Vowel of the
Bantu Verbal Stem"[1] Van Eeden refers in detail to the
comments made by Bleek, Hahn and Meinhof, in this
connection.   In summarising their findings, Van Eeden
draws attention to certain factors which he considers of
particular importance.

10.1.1.   After observing that the earliest Bantu
linguists encountered insoluble difficulties in regard to
the terminating vowel, he states that the purpose of his
treatise is to throw more light on the problem by indicating
that:

> "The terminating vowel of the Bantu verbal
>
> stem was originally not -a, and that in
>
> polysyllabic stems it was determined by
>
> assimilation to the stem vowel : in other
>
> words, that -a is a later addition which
>
> replaces the assimilated vowel."

10.1.2.   In the light of the evidence available, it
does not seem necessary to question the assumption that
-a is a later development, replacing some other original
terminating vowel.

However, I suggest that, originally, it need
not necessarily have been a matter of the final vowel
being assimilated to the "stem vowel."   I suggest that,
in the fusion of two radicals, in the formation of a di-
radical v.r., the radical vowels of both R1 and R2 may

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[1] B.I.C. van Eeden: Bantu Studies : Vol. VIII : No. 4.,
        December, 1934.

have been involved in assimilation in certain cases.

10.1.3.   In commenting on the assimilated forms, Van
Eeden quotes[1] Bleek's examples of verbal stems found in
Herero, and in Angola.   Bleek speaks of the stems with
final -a being "commuted to" assimilated stems.
For example : in Herero :

        suta (pay) > sutu;   tona (beat) > tono

and in Angola :

        zola (love) > zolo; dshiba (kill) > dshibi

and so on.

        But Van Eeden strongly supports Hahn's
contention, and I quote:[2]

            "I must refer again to Hahn who has

            been previously mentioned .... He was ...

            the first person to maintain that the

            assimilated "are the radical forms of

            such verbs" - which is in complete

            accordance with the view I am defending."

10.1.4.   SUMMARY OF CONCLUSIONS:

    (i)   Di-radical v.r. were originally composed

            of two radicals, each consisting of a

            consonant plus vowel;   these radicals

            being 'fused' (not merely in juxtaposition).

    (ii)   Originally, therefore, verbal roots could

            have had a final vowel consisting of any

            one of the vowels -A, -E, -I, -O, -U.

    (iii)   As discussed fully by Van Eeden, a later

            development led to the dropping of the final

            vowel of the assimilated forms, and the

            substitution of a detachable, invariable

            final -a.

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1) V. Eeden : p. 368.
2)   "   368.

(iv)   This 'invariable final -a' only occurred

in certain tenses and moods.   Other

terminatives, indicating mood and tense,

positive and negative etc., also developed.

(v)   The terminative may now take any one of

the following forms, according to the

sense required : viz.

-a, -e, -i, -ile, -anga.

These are now classified and their

usage described.

10.2.0.   FUNCTION OF VERBAL TERMINATIVE:

10.2.1.   The terminatives fulfil the following
functions:

(i)   Tense formatives : indicating not only

time (present, past, future etc.), but

include the ideas of possibility,

continuity, completion of action and so on.

(ii)   Positive and negative aspects.

(iii)   Infinitive, Indicative, Imperative

and Subjunctive moods.

These terminatives are used in the conjugation of the verb,
and occur in every verbal form, since one or other of them
is needed in order to complete any verbal form.   They may
be suffixed to the basic verbal root (mono-radical, di-
radical or multi-radical) or to any extended root.

10.2.2.   It is not the purpose of this study to go
into detail regarding the various forms the verbal
terminative may take.   It is sufficient for me to state
that I follow Doke[1] in his treatment of the conjugation

1) Doke, C.M. Text Book of Zulu Grammar (1921)
        para. 387 - 455.

of the verb, since the principles involved are the same
in both Zulu and Xhosa, with minor divergencies which do
not concern us here.

10.2.0.   What is of significance in the present
context is the fact that the final radical vowel of a
verbal root is no longer the original, undetachable
radical vowel of the final radical, but is now a
detachable terminative, invariable within a given
context.

CHAPTER 11

11.0.0.   RADICAL EXTENSIONS : GENERAL.

11.1.0.   There are several instances of di-radical roots being extended by means of an additional radical. This extension may be effected in various ways.   The result is a tri-radical root.   For example:

(i)   Where a di-radical root is extended by the suffixing of a radical extension:

(ii)   Where the radical extension is inserted between the R1 and R2 of the original di-radical root.

(iii)   Where the extension is effected by means of re-iterating the R1 of the original di-radical root.   Sometimes this is a simple reduplication: Sometimes there is a modification of the consonant in the reduplicated radical.

(iv)   Miscellaneous, irregular instances of the addition of a radical extension.

11.2.0.   A feature of such extended roots is that the root-vowel of the original di-radical verbal root is retained in any subsequent syllable formed as a result of the radical extension.[1]

11.3.0.   Verbal roots may often be formed by the addition of a radical of an existing (or extinct) ideophonic root.

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1) i.e. There is an assonic vowel pattern.

11.4.0.   An adjectival root (such as mono-Radical -nci´
(small) may be converted into a verbal root by the radical
extension -PH~ (i.e. -NCÍPH- (become small)).

  N.B. In the last two instances, the radical
        extension is referred to as a 'conversion'
        extension ; it is only one adaptation,
        however, of the radical extension.

11.5.0.   Examples of a radical extension
               suffixed to a di-radical v.r., e.g.

11.5.1.
   -CĔKĔC- (loath, fear): cf. -CĔKís- (s.m.) :
            REx : R1 repeated as R2.
   -CHWÍLÍSH- (cut to mincemeat): cf. -CHWÍL- (cut
            small) : REx : Factative -SH~ (9)
   -FÁXÁNG- (press out) : cf. -FÁX- (wring out) :
            REx : Protractive -NG~ (6) cf. also
            -XÁFÁNG- (s.m.)
   -GÁNGÁTH- (tread down (earth)): cf. -GÂNG- (be
            bold, impudent): REx : Punctative -TH~ (2)
   -TÓTÓB- (hobble, totter along): cf. -THÓTH-
            (draw back, be irresolute)
   -GÒNGÓTH- (beat away) : cf. *-GÔNG- (?) : REx :
            Punctative -TH~ (2)
   -GQWÉTHÉSH- (do rapidly, do with energy): cf.
            -GQWÉTH (turn upside down): REx :
            Factative -SH~ (9)
   -GÚDLÚZ- (shake violently): cf. -GÚDL- (rub, knock
            against : allude to spitefully): REx
            Factative -Z~ (9)
   -GÚNGQÚZ- (jolt, rattle): cf. -GÚNQ- (twist, wriggle):
            REX : Factative -Z~ (9)

-HÉLÉM- (keep aloof from); cf. -HÉL- (put aside):

      REx ; Protractive -M~ (6)

-HLÚBÙL- (strip off); cf. -HLÚB- (moult, discard):

      REx ; Effective -L~ (4)

-HLÚNGÙL- (shake, sift) ; cf. -HLÚNG- (s.m.) :

      REx ; Effective -L~ (4)

-KHÒLÓS- (be secure, lean upon, confide in): cf.

      -KHÔL- (satisfy, convince); REx:

      Neuter -S~ (2)

-KRÉQÉZ- (make a sawing noise); cf. -KRÉQ- (hack

      off, saw off); REx ; Factative -Z~ (9)

-NCWÉBÉSH- (ask for snuff); cf. -NCWÊB- (take snuff):

      REx: Factative -SH~ (9)

-NTLÁNTLÁTH- (chew at, munch at); cf. -NTLÂNTL-

      (disagree, quarrel); REx: Punctative -TH~ (2)

-NXÚLÙM- (stand alongside); cf. -NXÙL- (lead a

      horse alongside, riding another); REx:

      Positional -M~ (5)

-QHÚBUTÝ- (elbow one's way); cf. -QHÙB- (drive, push,

      press); REx: -TY~ (low-frequency,

      unstandardised; possibly cf. Factative -SH~ (9))

-QÍNGQÍTH- (try again and again); cf. -QÎNGQ- (stand,

      stop, halt); REx; Punctative -TH~ (2)

-QÙLÚS- (bend down and turn the back); cf. -QÛL-

      (shy away, start); REx; Neuter -S~ (2)

-QWEBÉD- (push forward, struggle); cf. -QWÊB-

      (accumulate); REx; Operative -D~ (1)

-RABÁS- (speak idly, chatter); cf. Zulu -RAB- (stand

      about in scattered formation); REx; Neuter

      -S~ (2) ; cf. also Xhosa di-R root in

      -RABAX- (adj. ; coarse, rough).

-RÚQÙZ- (drag, trail along); cf. -RÙQ- (trail on

      the ground ; <u>intr</u>); REx: Factative -Z~ (9)

-RWEBESH- (get by deception or bribery): cf. -RWEB-
   (peddle, sell, trade): REx: Factative -SH~ (9)

-SINGIL- (collect painfully : e.g. food, money etc.):
   cf. -SING- (make towards; look steadily after):
   REx : Effective -L~ (4)

-SUKUM- (stand up, stand erect); cf. -SUK- (rise
   get up): cf. REx : Positional -M~ (5)

-SUKUZ- (move, shift): cf. -SUK- (rise up, get up):
   REx : Factative -Z~ (9)

-SULUNG- (make clean and tidy): cf. -SUL- (wipe):
   REx : Protractive -NG~ (6)

-THANDAZ- (entreat, pray, beseech): cf. -THAND-
   (twist) : REx : Factative -Z~ (9)

-THINTITH- (stammer, stutter): cf. -THINT- (intercept,
   hinder : keep back (a cough)): REx :
   Punctative -TH~ (3)

-THUKUM- (throb, pulsate): cf. -THUK- (start, be
   startled): REx: Protractive -M~ (6)

-THUTHUL- (carry off, wholly): cf. -THUTH- (take
   away, convey away): REx : reduplication
   of R1 as R1 and R2 in tri-R v.r.

11.5.2.   Where the original di-radical
           root was reduplicated : e.g.,

-BATHAZ- (walk gingerly): cf. -BATHa-BATH- (s.m.):
   REx: Factative -Z~ (9)

-RASHAZ- (rustle): cf. -RASHa-RASH- (s.m.)
   REx : Factative -Z~ (9)

-KRABAZ- (walk on a surface that gives way): cf.
   -KRABa-KRAB- (creak): REx: Factative. -Z~ (9)

11.5.3.   Examples of Radical Extension inserted
            between R1 and R2 of the original di-
            radical root ; e.g:

-NDIKIND- (speak with vehemence and gesticulation):

        cf. -NDIND- (keep hammering at, keep soliciting):

        REx : Effective -K~ (4) ; cf. also

        mono-R ideophone -thi ndi (make a noise, rumble)

-THABATH- (take): cf. -THATH- (s.m.) ; REx:

        Operative -B~ (1)

11.5.4.   Examples of Radical extension by means
            of the re-iteration of R1 of the
            original di-radical root , e.g:

    (i)

-GOGOD- (scrape the bottom of mealie pit): cf.

        -GOD- (excavate) :

-KHANKANY- (refer to, mention): cf. -KHANY- (be

        light, give light).

-TYITYIMB- (quiver (as an assegai being thrown)):

        cf. -TYIB- (throw etc.)

-TYITYIB- (cast metal, found): cf. -TYIB- (throw etc).

    (ii)

        Where the original di-radical root was re-
        duplicated ; e.g.,

-LOLONG- (look at in detail): cf. -LONGa-LONG- (s.m.)

    (iii)

        Where the R1 of the original di-radical root
        undergoes modification in the process of re-
        duplication : e.g.,

-NGCUNGCUTH- (waste away, lose condition): cf.

        -CUTH- (narrow, reduce in size).

11.6.0.   From the foregoing examples of radical
            Extensions, two factors stand out clearly:

   (i)   That although there is often considerable
            semantic shift from the di-radical root to
            the extended root, there is sufficient
            semantic resemblance to establish the
            relationship.

   (ii) That when a di-radical root accepts a
            radical extension, there is vowel assonance
            throughout the Extended root.

11.7.0.   In addition to the types of radical extension
forms already given, there is a wide variety of forms met
with only very rarely.   Such include the following:

11.7.1.   Di-radical root (found in nominal form)
with radical conversion extension,[1] resulting in
verbal root : e.g.,

-KRÁWUK- (be stung (by nettle)): cf. (i)KRÁWu (5)
        (nettle): REx: Neuter -K~ (2)
-NGXWÉLÈR- (wound tr.) : cf. (i)NXÉBà (5) (wound):
        REx : Factative -SH~ (9) : cf. also
        iNGXWFLÈR: (5) (injury)
-QÒLÓNG- (cut out meat between the bones): cf.
        (u)QÔLò (11) (narrow ridge with steep sides):
        REx : Protractive -NG~ (6)

11.7.2.   Reduplicated di-radical (nominal) root,
            where one di-radical segment accepts a
            radical extension, resulting in a
            verbal root : e.g.,

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1) cf. Chapter 12.

-DLÓKÒV- (plunge, buck, rear): cf.

(i)DLÒKó-DLÒKò (5) : (ragged heap) : REx:

-V~ (Unstandardised, low-frequency)

11.8.0.   Di-radical verbal root (still extant

in Zulu tho' not in Xhosa), with radical

extension: e.g:

-GWÉGWÉD- (take indirect route): cf. Zu. -GWEGW- (form

into a hook (e.g. piece of wire)): REx. :

Effective -D~ (4)

-KHÒKHÓB- (go bent with age, or begging): cf. Zu.

uKHOKHo (1) (ancestor) : REx. : Neuter -B~ (2)

11.9.0.   Di-radical (nominal) root, still

extant in Zulu tho' lost in Xhosa, with

radical extension, resulting in verbal

root : e.g.

-GÓNÒND- (suck a dry udder or breast): cf. Zu:

(in)GONo (9) (nipple, small head at top of

calabash): REx : Protractive -ND~ (6)

-QÒLÓS- (walk, or behave arrogantly): cf. Zu.

i(li)QOLO (5) (bunch of ostrich feathers

worn by young man on the head: "ukuthwala

iqolo" (to be conceited): REx: Neuter -S~ (2)

11.10.0.   Reduplicated di-radical (nominal) root,

still extant in Zulu tho' lost in Xhosa,

with radical extension, resulting in

verbal root : e.g.,

-HLÀFÙN- (chew) : cf. Zu. (ama)HLAFu-HLAFu (6)

(grain broken up or coarsly ground):

REx. Protractive -N~   (6)

Tri-radical (nominal) root, extant in
Zulu, not found in Xhosa, where R1R2 (the
di-radical base) has radical extension,
resulting in verbal root : viz.,

-NGCÍKÌV́- (reproach); cf. Zu. (i)NGCIKINGCi (5) (any
contemptuous, dirty thing); REx:
unstandardised -V~

11.11.0. There are instances of roots with a di-
radical origin, where the di-radical root
has accepted a radical extension and, in
the process, the R1 has undergone phonetic
change : e.g.,

-SHÚKÙM̀- (shake, move, stir); cf. -SÙK̀- (arise, get
up); REx: Protractive -M~ (6)

-M̀BÁNDÁZ̀- (speak awkwardly); cf. -BÂND̀- (congeal, be
cold); REx : Factative -Z~ (9)

-NKWÍNÌZ̀- (squeal, squeak); cf. -NCWÌǸ- (whine, moan);
REx : Factative -Z~ (9)

-TYÉKÈZ̀- (throw up milk (as an infant)); cf. -TSHÈK̀-
(purge); REx : Factative -Z~ (9)

11.12.0. Roots with di-radical origin where the
original R1 is reduplicated (and in the
process become aspirated) and a radical
extension is accepted : e.g.,

-QHWÁQHWÀZ̀- (clap the hands); cf. -QWÀB̀- (s.m.)
REx : Factative -Z~ (9)

11.13.0. Verbal roots from di-radical v.r. with
both verbal and ideophonic roots found
in Zulu, where a radical extension has
been accepted : e.g.,

-BHÍBHÍDL- (blow out the mouth (as a teething child)):

    cf. Zu: -thi bhidli (pucker up the face, as

    a child about to cry) and cf. Zu: -BHIHL- (s.m.)

-CHÁNÁB- (expose (to heat)): expose (to public gaze)):

    cf. Zu: -thi caba (be flat, level, smooth (as

    a plain or hut floor)): cf. also Zu: -CHAB-

    (chop away bushes (as when clearing an area

    of bush)).

  N.B. In the first example, the radical extension is

    a re-iteration of R1, in the latter it is the

    Effective -N~ (4), which is introduced between

    R1 and R2.

11.14.0.   RADICAL CONVERSION EXTENSIONS.

11.14.1.   Radical conversion extensions are radical
extensions accepted by non-verbal roots (e.g. ideophonic,
adjectival, nominal roots) to convert them for use as
verbal roots.

11.14.2.   For the sake of clarity, I have dealt with the
conversion of non-verbal roots to verbal roots under the
following headings:

  (i) Verbal roots associated with Ideophonic roots:

   N.B. These fall into two sub-groups:

    (a) Those ideophonic roots from which the

     final vowel alone is dropped in favour

     of the verbal terminative -a.

    (b) Those ideophonic roots which accept a

     radical conversion extension.

  (ii) Verbal roots associated with Nominal roots:

  (iii) Verbal roots associated with Adjectival roots:

CHAPTER 12

12.0.0.   RADICAL CONVERSION EXTENSION
IN RELATION TO IDEOPHONIC ROOTS

12.1.0.   A detailed study of Zulu ideophones was made by
D. Fivaz.[1]   It is his expressed opinion that many verbal
roots are derived from ideophone and not vice versa.[2]

12.1.1.   Fivaz shews that in "disyllabic" ideophones,
the vowel sequence is assonic (i.e. with identical vowels
in first and second syllable) in approximately 55% of the
ideophones examined.   In the remaining 45%, the vowels are
dissimilar from one another.

12.2.1.   Verbal roots may be derived from ideophonic
roots in one of three ways ; namely :

   (i)   Loss of the final vowel of the ideophonic root,
          and substitution of the verbal terminative
          (-a etc.):

   (ii)   Loss of the final vowel (as in (i)) and the
          addition of an extension, followed by the
          verbal terminative :

   (iii) By the addition of a radical conversion extension
          (RCE), (-C~), followed by the verbal terminative.

These processes are fully illustrated in the following
paragraphs.

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1) D. Fivaz: "... the Ideophone in Zulu".
2) ditto: page 107. "There are in turn ... verb radicals
    .... derived from these ideophones. That (they) are
    derived from the ideophone and not vice-versa is seen
    from the derivative suffixes added to the ideophones."

12.2.2.　　Conversion of ideophonic roots to
　　　　　　verbal roots through the loss of the
　　　　　　final vowel in favour of the terminative
　　　　　　-a (etc).

Reference has already been made to the fact that
certain di-radical roots may be regarded as 'multi-
functional' roots.　For example -FUND- may be regarded
as a verbal or nominal root according to the syntactical
framework into which it is fitted;　as bayaFUNDa (they
learn) it functions as a verbal root ;　as umFUNDi (a
scholar) it functions as a nominal root.

12.2.3.　　In a similar manner, certain ideophonic roots
may be regarded as 'multi-functional'.　The ideophonic
root often resembles assimilated verbal roots.[1])　By
dropping the final vowel of the ideophonic root, and
suffixing a verbal terminative (-a etc.), the root
functions as a verbal root.

Examples of this principle are given below.

12.2.4.　　Di-R ideophonic root, converted to
　　　　　　verbal root through the loss of the final
　　　　　　vowel, in favour of the terminative -a
　　　　　　(etc.) ; e.g.,

　　　　From ideophonic roots, with final -a:

-thi khitha　(get loose and fall):　cf. -KHITH- (cut)
-thi ngunga (gather, congregate):　cf. -NGUNG- (s.m.)
-thi quba　(come upon, overtake etc.):　cf. -QUB- (s.m.)
-thi wutha　(decrease, reduce, withdraw):　cf. -WUTH-
　　　　　(abate, subside)
-thi thupha　(bud: lay finger on, call attention to):
　　　　　cf. -THUPH- (s.m.)

1) cf. Para: 7.2.5.

From di-radical ideophonic roots with final -e:

-thi bhenqe (turn over (ground)); cf. -BHENQ- (s.m.)

-thi diphe (sink (as foot in mud)); cf. -DIPH- (s.m.)

-thi duke (fly off, disperse); cf. -DUK- (wander away)

-thi fefe (besprinkle, rain gently); cf. -FEF- (s.m.)

-thi fohle (be depressed, sink down); cf. -FOHL-
(break down : trans.)

-thi geqe (throw out, jerk out); cf. -GEQ- (s.m.)

-thi goxe (intr. : retreat, withdraw); cf. *-GOX- (s.m.)
(also the form -ROX- (s.m.))

-thi roxe (draw back, withdraw); cf. -ROX- (s.m.)

-thi krwece (touch, nudge); cf. -KRWEC- (touch, nudge,
tickle)

-thi jace (break, expire); cf. -JAC- (break in two, waste)

-thi jize (tie/put, round (the head)); cf. -JIZ- (s.m.)

-thi ndinde (be rounded off : in perfect order); cf.
-NDIND- (s.m.)

-thi ngweve (bec: grey (with mildew, cobwebs etc.))
cf. -NGWEV- (s.m.)

-thi nkale (maul, beat, bruise); cf. -NKAL- (s.m.)

-thi qhaqhe (tear/cut open); cf. -QHAQH- (s.m.)

-thi qhole (anoint, flatter, pay tribute); cf. -QHOL- (s.m.)

-thi qhwethe (take out a thorn : give hint to);
cf. -QHWETH- (s.m.)

-thi shwaqe (break clean off); cf. -SHWAQ- (s.m.)

-thi tsheqe (cut/tear, off); cf. -TSHEQ- (s.m.)

-thi tshize (strew, sprinkle, bespatter); cf. -TSHIZ- (s.m.)

-thi tywine (glue, seal, cement); cf. -TYWIN- (s.m.)

-thi vale (enclose, shut in, surround); cf. -VAL-
(shut, close)

-thi vingci (close up, stop up, fasten); cf. -VINGC- (s.m.)

-thi vivi (cut/break up, small); cf. -VIV- (s.m.)

-thi gxogè (throw at/into : kick at); cf. -GXOG- (s.m.)

-thi zolè (bec: calm, subside); cf. -ZOL- (s.m.)

From di-R ideophonic roots with final -i;

-thi cimí (put out, extinguish); cf. -CÎM- (s.m.)

-thi cimbí (fall/disappear, one by one); cf. -CÎMB- (s.m.)

-thi fixì (punch repeatedly); cf. -FIX- (s.m.)

-thi khanyí (glimmer, blink); cf. -KHANY- (shine, be clear)

-thi ntsilí (thrash out, hammer out); cf. -NTSIL- (s.m.

-thi nyhilì (burst in, flood in); cf. -NYHIL- (push away)

-thi gqibì (tr.: finish, complete, end); cf. -GQIB- (s.m.)

-thi xhimfì (punish, box) : cf. -XHIMF- (s.m.)

From di-R ideophonic roots with final -o :

-thi ndyokrò (push/kick away); cf. -NDYOKR- (s.m.)

From di-R ideophonic roots with final -u :

-thi bhucù (mix, knead, together tr.); cf. -BHUC- (s.m.)

-thi cuthú (half-close the eyes); cf. -CÚTH- (s.m.)

-thi mpuntshú (jump out); cf. -MPÚNTSH- (s.m.)

-thi nkàthù (take handfuls of); cf. -NKÀTH- (s.m.)

12.3.0.   It may happen that a mono-radical ideophonic
root may surrender its final vowel to the later terminative
(-a etc.), and in addition, the root may be extended through
the re-iteration of R1 : For example :

-thi bhé (bleat, like a sheep : be abandoned etc.) :

        cf. -BHÈBH- (bleat, like a goat).

12.4.0.   Conversion of Ideophonic root to a verbal
root where the ideophonic root passes through two stages;
namely:

(i)   The ideophonic root loses its final vowel
in favour of the later terminative (-a etc.)

(ii) To this root is now attached an extension.

      N.B.   In the instances given below, the
intermediate stage (i) above, has fallen
into disuse, and only the extended form
is now in use.

For example :

(i)   -thi hlàsì (snatch, seize, grab) is converted
to use as a verbal root by the loss of the
final vowel -i, in favour of the verbal
terminative -a ..

(ii)   To this root *-HLÀS- is added the extension
-el-, to form -HLÁSel- (s.m.), the extension
becoming virtually fixed in the position of R3.

Further examples of this principle are given below.

12.4.1.   By the addition of an Extension to ideophonic
roots with final -a :

      With Neuter-Stative Extension -ek-.

-thi khàhlà (come down with crash): cf. -KHÁHLek- (s.m.)

-thi màtshà (be downcast): cf. -MÁTSHek- (s.m.)

-thi shwàcà (be sullen, morose): cf. -SHWÁCek- (be doleful)

      With persistive-Actional Extension -ek- :

-thi thwàxà (do repeatedly): cf. -THWÁXek- (s.m.)

-thi tyàbà (be flat): cf. -TYÁBek- (plaster (a wall)).

-thi nàmá (fix upon, adhere to): cf. -NÁMek- (glue up,

                                     seal up).

      With Applied Extension -el :

-thi khàhlà (come down with a crash): cf. -KHÁHLel-
(throw down with a crash).

-thi krwàqà (glance, look back at):   cf.[1] -RWÀQél-

     (be on one's guard : draw in the legs).

-thi gàdlà (throw down, pour out):   cf. -GÁDLèl- (s.m.)

-thi gqàgqà (be pitted with, trimmed with):   cf.

     -GQÀGQél- (trim a garment (e.g. with buttons)).

-thi rìntyà (catch in noose, ensnare):   cf. -RÍNTYel- (s.m.)

     With Reciprocal Extension -an- :

thi- gága (surprise, attack suddenly): cf.

     -GÀGán- (attack each other).

     To ideophonic roots with final -e :

     With Neuter (Stative) Extension -ek- :

-thi qhèkè (crack, break off):   cf. -QHÉKèk- (s.m.)

-thi qwèngè (be scattered (of a flock)):   cf. -QWÉNGèk- (s.m.)

     Persistive-Actional Extension -ek- :

-thi qhùshè (cover, conceal, hide):   cf. -QHÚSHèk- (s.m.)

     With Causative Extension -is- :

-thi rìncè (catch with noose) :   cf. -RÍNCìs- (s.m.)

     To ideophonic roots with final -i :

     With Applied Extension -el- :

-thi hlàsì (snatch, seize, grab):   cf. -HLÁSèl- (s.m.)

     With Associative Extension -an- :

-thi shìnyí (be close, thick, luxurious):   cf.

     -SHÍNYàn- (be dense, on top of one another)

     To ideophonic roots with final -u :

     With Positional (protractive) Extension -am- :

-thi fùkù (rise or swell a little):   cf. -FÙKám-

     (brood, sit : digest (of a python)).

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1) Note: Modification of consonant in primary radical.

12.5.0.   Conversion of Ideophonic root to
            verbal root by means of a radical con-
            version extension:

12.5.1.   Verbal roots are frequently formed from ideo-
phonic roots by means of the addition of a radical con-
version extension.

     For example:

From mono-radical ideophonic root -thi chó (pick up, find
suddenly) is formed the di-radical verbal root -CHÓL- (s.m.)
by means of the addition of the radical conversion extension
-L~ ; being the Effective R (4).

From the di-radical ideophonic root -thi phàzì (wink, blink)
is formed the tri-radical verbal root -PHÁZÌM- (s.m.) ;
by means of the addition of the radical conversion
extension -M~:being the Protractive R (6).

12.5.2.   Earlier writers have referred to this suffix as
a "verbalising suffix", e.g., -la, -za, -ka etc: I do not
dispute that this term describes the function of these
extensions.   I have, however, elected to refer to them
as "radical conversion extensions" for three reasons :
namely :

    (i)   'Radical', because the extension does, in
           fact, consist of a radical which can be
           identified as similar to the standardised,
           high-frequency secondary radicals : similar
           both in form and semantic force :

    (ii)   'Conversion', since these suffixes are used
           to convert non-verbal to verbal roots :

    (iii) 'Extensions', because they are such, being
           added to the root from which they are
           derived.

12.5.3.   Examples of di-radical verbal roots being
derived from a mono-radical ideophonic root to which is
added a radical conversion extension:

To ideophonic roots with final -a :

-thi jâ (stare, bristle : stand on end (hair)): cf.

-JÂL- (stare (from poverty)): (bristle (with anger)):

RCE : Effective -L~ (4)

-thi ngxà (drop, flow (of tears)): cf. -NGXÀZ- (s.m.)

RCE : Factative -Z~ (9)

To ideophonic root with final -e :

-thi dwè (extend in line : stand in file): cf.

-DWÈL- (stand in line (e.g. for identification)

RCE : Effective -L~ (4)

-thi twè (be wide open, be comprehensive):

cf. -TWÈL- (talk right on)

RCE : Effective -L~ (4)

To ideophonic root with final -i :

-thi rwii (move swiftly or straight): cf. -RWÎC-

(work straight, plough straight):

RCE : Unstandardised -C~

-thi jwii (fall off/out : intr: throw, hurl : tr):

cf. -JWÎL- (throw, hurl): RCE: Effective -L~ (4)

-thi ntywi (dive/plunge (into water)): cf. -NTYWÌL-

(plunge etc. tr.): RCE: Effective -L~ (4)

-thi tswii (squeak, speak falsetto): cf. -TSWÎN- (s.m.)

RCE: Neuter -N~ (2)

-thi nyì (proceed a little : go out of sight): cf.

-NYÍKa-NYÌK- (handle, shift, a dead body):

RCE : Effective -K~ (4)

To ideophonic roots with final -o :

-thi chó (pick up/find suddenly): cf. -CHÓL- (s.m.)

RCE : Effective -L~ (4).

-thi mbò (fall with a thud): cf. -MBOL- (throw down

with a thud): RCE ; Effective -L~ (4)

To ideophonic roots with final -u :

-thi nkú (strike, thresh): cf. -NKUL- (s.m.)

RCE ; Effective -L~ (4)

-thi shú (suck all the milk): cf. -SHUB- (s.m.)

RCE ; Operative -B~ (1)

-thi phù (pant) ; cf. -PHUSá-PHUS- (tease, irritate)

RCE : Causative -S~ (8)

12.5.4. Examples of tri-radical verbal roots

being derived from a di-radical ideophonic

root to which is added a radical conversion

extension:

To ideophonic roots with final -a :

-thi mangà (be startled, astonished): cf. -MANGAL- (s.m.)

RCE ; Effective -L~ (4)

-thi mpakà (slap with the hand): cf. -MPAKAZ- (s.m.)

RCE ; Factative -Z~ (9)

-thi ncwabà (become drowsy, nod): cf. -NCWABAZ- (s.m.)

RCE ; Factative -Z~ (9)

-thi ntlakà (do roughly): cf. -NTLAKAZ- (s.m.)

RCE ; Factative -Z~ (9)

-thi thathà (hop, jump etc.): cf. -THATHAMB- (s.m.)

RCE ; Protractive-operative -MB~ (6)

·thi thingá (be perplexed): cf. -THINGAZ- (s.m.)

RCE ; Factative -Z~ (9)

-thi tywabà (knock against): cf. -TYWABAZ- (s.m.)

RCE: Factative -Z~ (9)

-thi tshiphà (of a rustling sound, e.g. rain on thatch):

cf. -TSHIPHIZ- (drizzle): RCE: Factative -Z~ (9)

-thi xharà (misfire): cf. -XHARAZ- (s.m.)

RCE: Factative -Z~ (9)

To ideophonic root with final -e :

-thi dukè (wander away); cf. -DUKUD- (move about, <u>intr.</u>)

      RCE; Neuter -D~ (2)

-thi fehlè (walk unsteadily); cf. -FEHLEZ- (s.m.)

      RCE; Factative -Z~ (9)

-thi menyè (shine, reflect light); cf. -MENYEZ- (s.m.)

      RCE; Factative -Z~ (9)

-thi nkènté (ring, tinkle, jingle); cf. -NKENTEZ- (s.m.)

      RCE; Factative -Z~ (9)

-thi qabé (reach to the top); cf. -QABEL- (s.m.)

      RCE ; Effective -L~ (4)

-thi vithè (break into pieces); cf. -VITEK- (be

      brittle); RCE; Neuter -K~ (2)

To ideophonic roots with final -i :

-thi fixì (push repeatedly ; be angry) ; cf. -FIXIZ- (s.m.)

     RCE ; Factative -Z~ (9)

-thi gijì (run); cf. -GIJIM- (s.m.)

     RCE ; Protractive -M~ (6)

-thi gwilì (Zu; be disloyal); cf. -GWILIK- (Xh; s.m.)

     RCE ; Neuter -K~ (2)

-thi gingxí (drop/fall suddenly); cf. -GINXIZ- (s.m.)

     RCE ; Factative -Z~ (9)

-thi gqwizì (graze, glance off); cf. -GQWIZIL- (s.m.)

     RCE ; Effective -L~ (4)

-thi nyikí (throb, of a wound); cf. -NYIKIM- (quake,

     tremble); RCE; Protractive -M~ (6)

-thi nyikí (throb, of a wound); cf. -NYIKIZ- (grate,

     as two ends of a broken bone); RCE; Factative -Z~ (9)

-thi phazì (wink, blink); cf. -PHAZIM- (s.m.)

     RCE; Protractive -M~ (6)

-thi phicì (press/crush down, with the finger or toe);

     cf. -PHICIK- (s.m.); RCE; Effective -K~ (4)

-thi shicì (press, impress); cf. -SHICIL- (s.m.)

      RCE; Effective -L~ (4)

-thi tshikí (turn round ; turn the back); cf. -TSHIKIL-

      (s.m.) RCE; Effective -L~ (4)

-thi tshìthì (speak weakly); cf. -TSHITHIZ- (s.m.)

      RCE: Factative -Z~ (9)

-thi tyikí (be black with mud); cf. -TYIKIL- (drag

      through the mud); RCE; Effective -L~ (4)

-thi xhìmfì (punch, box); cf. -XHIMFIZ- (s.m.)

      RCE; Factative -Z~ (9)

      To ideophonic roots with final -o :

-thi fothò (be dented); cf. -FOTHOK- (s.m.)

      RCE; Neuter -K~ (2)

-thi fòngqò (bend upwards, curve); cf. -FONGQOZ-

      (walk bent); RCE: Factative -Z~ (9)

-thi gxòkò (thrust, e.g. hand into a sack); cf. -GXOKOZ-

      (do roughly); RCE: Factative -Z~ (9)

-thi ròqò (do often, do continually); cf. -ROQOL- (be

      doubled up in pain); RCE: Neuter -L~ (2)

-thi mònxò (slap); cf. -MONXOZ- (s.m.); RCE: Factative

      -Z~ (9)

-thi nkcónkcó (trickle ; fall in drops); cf. -NKCONKCOZ-

      (chirp, as a bird); RCE: Factative -Z~ (9)

-thi phòlò (blab, blurt out); cf. -PHOLOZ- (s.m.)

      RCE: Factative -Z~ (9)

      To ideophonic roots with final -u :

-thi bòfù (pierce); cf. -BOFUL- (strive to get through;

      walk heavily etc.); RCE; Effective -L~ (4)

-thi bhàdlù (pierce through a hollow object with blunt

      instrument); cf.

-BHÁDLUL- (s.m.[1])   RCE : Effective -L~ (4)

-BHÁDLUZ- (s.m.)[1]   RCE : Factative -Z~ (9)

-thi bhovù (gore, stab, wound): cf. -BHÓVUL- (s.m.)
    RCE : Effective -L~ (4)

-thi caku (touch lightly : treat with respect): cf.
    -CÁKÚL- (s.m.) : RCE : Effective -L~ (4)

-thi ciphu (be cut into, chipped): cf. -CIPHUL- (cut
    into, chip): RCE: Effective -L~ (4)

-thi cubù (feel lazy): cf. -CÚBUK- (bec: drowsy,
    lethargic): RCE: Neuter -K~ (2)

-thi chuku (touch lightly): cf. -CHÚKÚM- (go off at
    a touch, be quick-tempered): RCE: Protractive -M~ (6)

-thi dlàthù (tear, pierce, wound severely): cf. -DLÁBHUK-
    (open (of an ulcer)): RCE: Neuter -K~ (2)

-thi dwàngù (spread out (wings or clothes)): cf.
    -DWÁNGUZ- (s.m.): RCE: Factative -Z~ (9)

-thi fùkù (rise/swell a little): cf. -FÚKUK- (s.m.)
    RCE : Neuter -K~ (2)

-thi gàbù (part, break, clear away (of clouds)): cf.
    -GÁBUK- (s.m.): RCE: Neuter -K~ (2)

-thi gùngxú (tumble down): cf. -GÚNGXUK- (s.m.)
    RCE: Neuter -K~ (2)

-thi gqàthù (burst): cf. -GQÁBHUK- (s.m.)
    RCE: Neuter -K~ (2)

-thi gqúphú (of something falling with a thud): cf.
    -GQÚPHÚZ- (throw a stone into water (in ritual)):
    RCE: Factative -Z~ (9)

-thi gqùzù (come/break off): cf. -GQÚZUK- (s.m.)
    RCE: Neuter -K~ (2)

-thi gùngxú (tumble down): cf. -GÚNGXUK- (s.m.)
    RCE: Neuter -K~ (2)

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[1] "Same meaning" in English, though in Xhosa there is a
subtle difference. The Effective -L~ emphasizes the
action, and the Factative -Z~ the result of the action.

-thi jàdù (have eruption of the skin): cf. -JÁDÙK- (s.m.)

     RCE: Neuter -K~ (2)

-thi jàjù (jump back, back out): cf. -JÁJÙL- (s.m.)

     RCE: Effective -L~ (4)

-thi khámfù (catch, grasp): cf. -KHÁMFÙL- (walk heavily)

     RCE: Effective -L~ (4)

-thi khéfù (sit down and regain one's breath): cf.

     -KHÉFÙZ- (breathe quickly): RCE: Factative -Z~ (9)

-thi kràdù (kick up the heels): cf. -KRÁDÙL- (s.m.)

     RCE: Effective -L~ (4)

-thi kríphú (tear, rip open): cf. -KRÍPHÙL- (s.m.)

     RCE: Effective -L~ (4)

-thi krwàqù (glance back at): cf. -KRWÁQÙL- (s.m.)

     RCE: Effective -L~ (4)

-thi hlùzù (come/peel off): cf. -HLÚZÙK- (s.m.)

     RCE: Neuter -K~ (2)

     cf. -HLÚZÙL- (peel off: <u>trans</u>): RCE: Effective -L~ (4)

-thi nàmbù (creep, crawl): cf. -NÁMBÙZ- (s.m.)

     RCE: Factative -Z~ (9)

-thi nàwù (open the beak for food (small birds)): cf.

     -NÁWÙZ- (commit fornication).

     RCE: Factative -Z~ (9)

-thi ngcùmbú (go on persevering): cf. -NGCÚMBÙZ- (s.m.)

     RCE: Factative -Z~ (9)

-thi nqàkù (catch, snap at, receive): cf. -NQÁKÙL- (s.m.)

     RCE: Effective -L~ (4)

-thi phèthù (be light-headed, thoughtless): cf. -PHÉTHÙK-

     (be upset, overturned): RCE: Neuter -K~ (2)

     -PHÉTHÙL- (ward off: turn aside <u>tr</u>.)

     RCE: Effective -L~ (4)

-thi phùcù (slip off : bec: smooth, chafed): cf.

     -PHÚCÙK- (s.m.): RCE: Neuter -K~ (2)

     -PHÚCÙL- (rub off, chafe): RCE: Effective -L~ (4)

-thi qàbù (clear away (mist)); recover (from swoon)); cf.

   -QÁBÙK- (clear away, recover, revive);

   RCE; Neuter -K~ (2)

   -QÁBÙL- (dispel, disperse, assuage);

   RCE; Effective -L~ (4)

-thi qháphù (be seen/found suddenly); cf. -QHÁPHÙK-

   (s.m.) RCE; Neuter -K~ (2)

-thi qhàwú (break off, snap shut); cf. -QHÀWÚL- (s.m.)

   RCE; Effective -L~ (4)

-thi qhíphú (break/part, of clouds); cf. -QHÍPHÙK-

   (s.m.) ; RCE; Neuter -K~ (2)

-thi qhíwú (be torn off, separated); cf. -QHÌWÚK- (s.m.)

   RCE; Neuter -K~ (2)

-thi shùnqù (be cut, broken off short); cf. -SHÚNQÙK-

   (s.m.) ; RCE; Neuter -K~ (2)

-thi tyhùthù (cut, tear off, snatch away); cf. -TYHÚTHÙL-

   (s.m.) ; RCE; Effective -L~ (4)

-thi tyùmbú (rush, plunge into, molest); cf. -TYÙMBÚZ-

   (flounder about); RCE; Factative -Z~ (9)

-thi xhèzù (pull, tear, jerk); cf. -XHÉZÙL- (tear off,

   tear away); RCE; Effective -L~ (4)

-thi xhíphú (fasten/seize upon); cf. -XHÌPHÚL- (s.m.)

   RCE; Effective -L~ (4)

-thi xhàmfù (catch sg. thrown); cf. -XHÁMFÙL- (s.m.)

   RCE; Effective -L~ (4)

12.5.5.   A mono-radical ideophone may be reiterated
           and then accept a radical conversion extension;
           for example;

-thi bhúù (buzz (like bees)); cf. -BHÚBHÙZ- (s.m.)

-thi nwè (of spreading out (as the dawn)); cf. -NWÉNWÈZ-

-thi khú (poke, jab at); cf. -KHÙKHÚZ- (nibble)

-thi qhó (do persistently); cf. -QHÓQHÒZ- (drip, drop)

-thi sàä (become scattered); cf. -SÁSÀZ- (scatter about)

   N.B.   Each of the above has RCE; Factative -Z~

-thi ntlá (knock about); cf. -NTLÀNTLÁTH- (chew at,

      munch at, crush, crumble).

   RCE; Punctative -TH~ (3)

12.5.6.   A mono-radical ideophone may be reiterated,

        (and in the process, R2 may undergo nasalisation)

        and accept a radical conversion extension:

        for example:

-thi khú (of poking, jabbing); cf. -KHÙNKÚTH- (beat,

      thrash severely)

-thi qhò (do persistently); cf. -QHÓNGQÒTH- (knock

        with the knuckles)

     and a similar formation, where, however, the

     primary radical becomes the simple consonant,

     the secondary remaining nasalised: e.g.

-thi ndò (look in, visit occasionally); cf. -DÓNDÒTH-

      (reiterate, repeat exactly);

-thi ngqù (tap the ground with a staff); cf. -QÚNGQÙTH-

        (thresh out (grain)).

   N.B.   In each of these the RCE is Punctative -TH~ (3)

12.5.7.   A mono-radical ideophone may undergo

        extension in two stages : viz.

   (i)   To a di-radical verbal root, by the addition

          of a radical conversion extension, and later

   (ii)   To a tri-radical v.r. by the addition of a

          radical extension:

For example:

   (i) -thi nkò (hold on to (with the teeth)); cf. *-NKÒB-

        RCE; -B~ (operative) (1)

   (ii) -NKÓBÒZ- (follow persistently); REx Factative -Z~ (9)

Further examples of this process include the following:

-thi chù (do a little, and then stop):

      RCE: Protractive-Operative -MB~ (6)

      REx: Causative -S~ (8)

      Extended root: -CHÚMBÙS- (do bit by bit: bore the ear)

-thi fè (feel emotion)

      RCE: Effective -K~ (4)

      REx: Punctative -TH~ (3)

      Extended root: -FÉKÈTH- (trifle with, sport, play)

-thi ncà (be close to)

      RCE: Contactive -TH~ (10)

      REx: Protractive -M~ (6)

      Extended root: -NCÁTHÀM- (hide, shelter oneself)

-thi nyá (get steeped in water)

      RCE: Neuter -K~ (2)

      REx: Protractive -M~ (6)

      Extended root -NYÁKÀM- (get moist, damp)

-thi sàà (become scattered, dispersed)

      RCE: Neuter -K~ (2)

      REx: Causative -S~ (8)

      Extended root: -SÁKÀS- (do on a large scale)

12.6.0.   A mono-radical ideophone may be converted to a di-radical verbal root by the addition of a conversion extension, and in addition, accept an extension, giving the appearance of a tri-radical root. For example:

-thi gáá (reach to) :

  (i)   The mono-radical ideophonic root is converted to a di-radical verbal root by the addition of a radical conversion extension: > *-GÀN-, the radical conversion suffix being Effective -N~ (4),

(ii)   The di-radical verbal root then accepts an
         extension (in this case the neuter-stative
-ek- (2)) > -GÁNek- (make evident; illustrate,
demonstrate.)

-thi ngcò (pour out gently):

(i)   The mono-radical ideophonic root is converted
         to a di-radical verbal root by the addition of
a radical conversion extension, > *-NGCÓZ- (which
root is lost), the radical conversion extension
being Factative -Z~ (9)

(ii)   The di-radical verbal root then accepts an
         extension > -NGCÓZis- (pour out a little).
(In this case, the extension is the causative -is- (5)).

12.7.0.   A mono-R ideophone may undergo an extension in
three stages; viz: (i) addition of RCE; (ii) addition of
a REx, (iii) acceptance of an extension : the resulting
root having the appearance of a multi-radical root:
For example:

     -thi záá (be despised, be destroyed)

(i) ।   The mono-radical ideophonic root is converted
         into a di-radical verbal root by the addition
of a radical conversion extension; > *-ZÁK- :
the radical conversion suffix being the neuter
-K~ (2)

(ii)   This di-radical root is further extended by the
         addition of a radical extension; > -ZÁKÁZ- :
the Radical Extension being the Factative -Z~ (9)

(iii)   This extended root may further take the
         Neuter-Stative extension -ek- (2), i.e.
-ZÁKÁZek- (be frayed, worn out).

119

12.8.0.   A mono-radical ideophone may undergo an
extension in two stages, namely : first, conversion to a
di-radical verbal root by the addition of a radical con-
version suffix, and secondly, by a further extension by
means of a two-segment extension; for example:

-thi nqà (be surprised).

(i)   The mono-radical ideophone is converted to a
        di-radical verbal root by the addition of a
    radical conversion extension, > *-NQAD-. The
    radical conversion extension is Neuter -D~ (2)

(ii)   The resulting di-radical root is then further
        extended by the addition of a two-segment
    extension > -NQADalal- (be surprised).   The
    extension being the Neuter Stative Actual (Extensive)
    -alal- (15.2.5.)

        The final extended root has the appearance of
    being a multi-radical root.

12.9.0.   A mono-radical ideophone may undergo conversion
to a di-radical verbal root, accept a radical extension,
and again accept a one-segment extension suffix; e.g.

-thi ncà (stick to, adhere to)

(i)   Undergo conversion to a di-radical verbal root
        by accepting conversion
        *-NCAM- (distinct from the di-radical verbal
        root -NCAM- (despair).
    Radical Conversion Extension, Positional -M~ (5).

(ii)   The resulting di-radical verbal root then
        accepts a radical extension, being in this case,
    the Contactive -TH~ (10).

(iii)   The extended root further accepts an extension,
        in this case the Applied -el- (1)
    Extended root: -NCAMATHel- (stick close to).

12.10.0.   A mono-radical, reduplicated, ideophone,
converted to a di-radical verbal root followed by a
'fixed' extension; e.g.

-thi gqá-gqá (be pitted, be dotted (with beads etc.)):

cf. -GQÀGQél- (trim a garment (with beads etc.)):

Extension being the Applied -el- (1)

A mono-radical ideophonic root may be reduplicated and
converted, in two stages, to a di-radical verbal root,
with a 'fixed' extension ; e.g;

-thi tshù (be anxious, restless, eager (to go)):

(i) Mono-radical ideophonic root, reduplicated and
the final vowel dropped and replaced by the invariable
terminative -a.

i.e. *-TSHÙTSH-

(ii) This di-radical verbal root now extended by
the addition of the Causative (5) extension -is- >
-TSHÙTSHis- (persecute, make restless).

-thi tyú (put on, throw on, jump up suddenly):

(i) Mono-radical ideophonic root reduplicated,
and final vowel dropped in favour of terminative
-a
> *-TYÚTY-

(ii) This di-radical verbal root now extended by
the addition of the Causative extension -is- (5)
> -TYÚTYis- (damage, through careless handling).

12.11.0.   Di-radical verbal root, related to di-radical
ideophonic root ; where R2 in the ideophonic root is
replaced by a different R2 in the di-radical verbal root : e.g.,
-thi cwàkà (be silent): cf. -CWÀL- (sit still, remain
quiet before launching an attack):

In -thi cwàkà, R2 is Neuter -K~ (2)

In -CWAL-, R2 is Effective -L~ (4)

N.B. The basic idea of the two roots is contained

in R1, viz. *-CWÀ- (idea of being silent).

12.12.0.   An apparently tri-radical verbal root,
associated with a di-radical ideophonic root, where the
ideophonic root is converted to a verbal root by the
addition of a radical conversion extension, and, at a
later stage, R2 and R3 are transposed.   (N.B. This is
evident, despite the form of the respective roots, since
the semantic force of each is identical) viz;

-thi nchwàzì (become dark ; fall (of dusk));

(i)   The di-radical ideophonic root is converted
to a verbal root, by the loss of the final
vowel in favour of the terminative -a   >
*-NCHWÀZ-.

(ii)   A radical extension ; viz. Effective -L~ (4)
is added to this root ; >*-NCHWÁZÀL-

(iii)   R2 and R3 are transposed;
-NCHWÁLÀZ- (s.m.)

12.13.0.   A di-radical ideophonic root converted to a
verbal root with four radicals in three stages; viz. (i)
The loss of final vowel in favour of invariable terminative
-a ; (ii), (iii) Addition of two radical extensions,
in series; e.g.,

-thi kràbí (jump over); cf. -KRÀBÁLÀZ- (rush, hurry)

(i)   *-KRAB-

(ii)   *-KRABAL- ; REx, Effective -L~ (4)

(iii)   -KRÀBÁLÀZ- ; REx, factative -Z~ (9)

12.14.0.   A di-radical ideophonic root, converted to a
verbal root in two stages ; viz; (i) the addition of a

radical conversion extension, (ii) the addition of a
radical extension : e.g.,

-thi pholo (blurt out, reveal): cf.

      -PHOLOLOZ- (s.m.)

  (i) *-PHOLOL- : RCE, Effective -L⁓ (4)

  (ii) -PHOLOLOZ- : REx, Factative -Z⁓ (9)

12.15.0   A di-radical ideophonic root, converted to a
verbal root in two stages : viz, (i) the addition of a
radical conversion extension, (ii) the acceptance of an
extension : e.g.,

-thi dungu (scatter, fly away): cf.

      -DUNGUDel- (abandon home, wander about):

  (i)   *-DUNGUD- : RCE, Operative -D⁓ (1)

  (ii)   -DUNGUDel- : Ex, Applied -el- (1)

-thi dyuphu (plop in, plunge into): cf.

      -DYUPHULek- (be plunged into confusion).

  (i)   *-DYUPHUL- : RCE, Effective -L⁓ (4)

  (ii)   -DYUPHULek- Ex, Neuter (Stative) -ek- (2)

-thi gubu (be overcast): cf.

      -GUBUNGel- (cover)

  (i)   *-GUBUNG- : RCE, Protractive -NG⁓ (6)

  (ii)   -GUBUNGel- : Ex, Applied -el- (1)

12.16.0. A di-radical ideophonic root, converted to a
verbal root by the addition of a radical conversion
extension with, however, a phonetic modification of the
consonant in the R1 and/or R2 of the resulting verbal
root: e.g.,

-thi kruthu (draw a weapon): cf.

      -RUTHUL- (s.m.)

      RCE: Effective -L⁓ (4)

-thi nqónqó (in knocking at a door (with the knuckles)):

      cf. -QÓNGQÒTH- (knock with the knuckles)

      RCE: Punctative -TH~ (3)

-thi hlèphù (be torn off): cf.

      -SÍPHÙL-

      (tear out by the roots):

      RCE: Effective -L~ (4)

12.17.0.   A reduplicated di-radical ideophonic root, where one di-radical segment is converted to a verbal root by the addition of a radical conversion extension: e.g.,

-thi chàphù-chàphù (feel sick, nauseous: be annoyed):

      cf. -CHÁPHÙK- (s.m.)

      RCE: Neuter -K~ (2)

-thi còbò-còbò (of being broken up):

      cf. -CÓBÒZ- (grind up):

      RCE: Factative -Z~ (9)

-thi mpàkù-mpàkù (blow, brag, puff):

      cf. -MPÁKÙZ- (s.m.)

      RCE: Factative -Z~ (9)

-thi vùngà-vùngà (make a low, continuous murmuring sound):

      cf. -VÚNGÀM- (growl, snarl)

      RCE: Protractive -M~ (6)

12.18.0.   A di-radical ideophonic root, where the primary radical alone is re-iterated to form a di-radical verbal root, and this is again extended by the addition of a radical extension: e.g.,

-thi mpàkà (slap with the hand): cf.

      -MPÁMPÀZ- (grope in the dark):

      REx : Factative -Z~ (9)

-thi nxhàlè (stuff, cram into): cf.

      -NXHÁNXHÀS- (interpose between opponents)

      REx : Causative -S~ (8)

12.19.0.   A di-radical ideophonic root, the primary
radical alone of which is retained, and R2 replaced by a
different radical, the whole being further extended by a
radical extension : e.g.,

-thi gèbù (gash); cf. -GELESH- (plough, and leave fallow):

    R2 becoming Effective -L~ (4)

    REx being Factative -SH~ (9)

-thi ngciphu (perch on a point : balance on an edge):

    cf. -NGCILIZ- (hop on one leg):

    R2 becoming Effective -L~ (4)

    REx being Factative -Z~ (9)

-thi webu (move away quickly): cf. -WEXUL- (sweep

    along (of a torrent)):

    R2 becoming Effective -X~ (4)

    REx being Effective -L~ (4)

12.20.0.   A tri-radical ideophonic root, of which the
primary and secondary radicals only are retained and the
resulting di-radical root being converted into a verbal
root by the addition of a radical conversion extension: e.g.,

-thi finini (draw together (of the body), distort (of

              the face)): cf.

    -FINIZ- (s.m.)

    -RCE: Factative -Z~ (9)

-thi fithithi (ooze out): cf. -FITHIZ- (put forth a

              little, gradually):

    RCE: Factative -Z~ (9)

-thi qukulu (bend down, crouch down)

    cf. -QUKUMB- (be turned in, be rounded off):

    RCE: Protractive -MB~ (6)

12.21.0.   A tri-radical ideophonic root, of which the
primary and secondary radicals go to form R1 and R2 of a
di-radical (reduplicated) verbal root: e.g.,

-thi qìkìlí (turn a somersault); cf.

   -QÌKa QÌK- (roll over; roll about).

12.22.0.   An ideophonic root with five radicals, of
which R1 and R2 only are retained, and to which a radical
conversion extension is added; e.g.,

-thi ròxòxòxòxò (creak, like a wagon);

   cf. -RÓXÒZ- (s.m.)

   RCE; Factative -Z~ (9)

12.23.0.   Di-radical ideophonic roots, found now in Zulu,
but not in Xhosa, converted to a verbal root by means of a
radical conversion extension : e.g.,

-thi godu (of going home); cf. -GÓDÙK- (go home),

   RCE; Effective -K~ (4) ; cf. -GÓDÙS- (take or
   send home); RCE ; Causative -S~ (8)

-thi khàzí (shine, be bright); cf. -KHÁZÍML- (s.m.);

   (cf. also -CHÀTÍML- (s.m.))

   RCE; Protractive -M~ (6)

   N.B. The Zulu equivalent retains a -u- between

   -M- and -L- ; viz; -KHAZIMUL-)

   -ul- is actually an extension; viz. -ul-

   abundant-actional, and this extended root should

   really be represented as -KHAZIMul- and

   -CHATIMul- respectively.

-thi gèbè (inflict big open wound (with kerrie etc.));

   cf. -GÉBÈNG- (fall upon, rob);

   RCE; Protractive -NG~ (6)

-thi nìkì (be all about in all directions etc.);

   cf. -NÍKÌZ- (tear to pieces, worry)

   RCE; Factative -Z~ (9)

   (cf. also (ama)NÌKÍ-NÌKÌ (9) (tatters); Zu.)

   cf. -NÍKÌN- (knock, rub against)

   RCE; Effective -N~ (4)

-thi nyùkù (tug to and fro (so as to loosen a post in

    the ground)); cf. -NYUKÚTYH- (push, thrust forward)

    RCE; Unstandardised, low-frequency -TYH~

    cf. also Zu; -NYUKUZ- and-NYIKIZ- (s.m.)

-thi phìcí (talk or act in a crafty manner, dodging

    first here, then there); cf. -PHIKIC-

    (investigate thoroughly into);

    RCE; Effective -K~

    Note, two stages; viz.

    (i)   -PÌCIK-

    (ii) -PÌKIC- (R2 and R3 being transposed).

    N.B. Zulu has the form -PHICIK- (s.m.)

-thi shùmpù (break off, in a tearing manner);

    cf. -SHÚMPUL- (pinch, twist the skin);

    RCE; Effective -L~ (4)

12.24.0.   Reduplicated di-radical Zulu ideophonic root
where corresponding Xhosa conversion to verbal root occurs,
by means of radical conversion extension added to one di-
radical segment ; for example;

-thi chunu-chunu (eat just a little, and stop):

    cf. -CHÚNUB- (keep at arm's length)

    RCE; Operative -B~ (1)

-thi dliki-dliki (pull about in a rough manner ; rub

    against (as a goat against a hut wall) ; worry,

    (as a dog a smaller animal));

    cf. -DLÍKIDL- (shake well, worry (as a dog));

    RCE; Reiteration of R1 in R3 position.

CHAPTER 13

13.0.0.   <u>VERBAL ROOTS RELATED TO NOMINAL/ADJECTIVAL ROOTS:</u>

13.1.0.   There are two main groups of verbal roots which are related to nominal roots : namely:

(a)   Multi-functional roots[1] which are only distinguishable as nominal or verbal roots when seen in their context.

(b)   Verbal roots which are obviously related to nominal roots.   These again, fall into a number of sub-divisions, according to their form.   Examples of these varieties are given below.

13.2.0.   <u>DI-RADICAL VERBAL ROOTS</u>

13.2.1.   <u>Di-radical Verbal Roots with corresponding di-radical nominal roots.</u>[2]

There are many multi-functional roots which may be used either as verbal, or nominal, or adjectival or adverbial roots, according to their context, and according to the prefixes and suffixes with which they are used: For example:

Multi-functional Root -THÂND̀- (idea of liking or loving): e.g.

Used as a Verbal root :

Infinitive -ukuTHÂND̀a (to love)

Present Indic. bayaTHÂND̀a (they love)

---

1) cf. para. 5.3.0., 5.4.0., 5.6.2.

2) <u>Or</u> Adjectival <u>or</u> Adverbial roots.

13.2.2.   From Multi-functional roots:

A large number of di-radical verbal roots are found to have the identical root to that of nominal roots, for the reasons stated above.   It is impossible, in these cases, to say dogmatically whether they were first used as verbs or as nouns.   It is equally impracticable to give anything like a full list of such verbal roots in this survey: they are too numerous, and too well known to any student of the language: they are of the type:

-BÀMB- (hold):   -FÚND- (learn, read)

-HÁMB- (walk, go):   -KHÛL- (grow)

-THÂND- (love, like): -THÊTH- (speak)

13.2.3.   Di-radical verbal roots with corres-

ponding nominal roots (with common

multi-functional root origin).[1]

e.g:

-BÈNG- (cut into long strips): cf. umBÈNGò (3)

(long slice of meat : a foretaste of meat

being roasted at a feast).

-BÍND- (choke with emotion): cf. isiBÍNDi (7)

(liver, courage).

-BHÀC- (cut out and make the isiBHÀCa): cf.

isiBHÁCà (7) (part of a skin Kaross).

-GÌD- (contribute provisions to wedding feast): cf.

umGÌDi (2) (marriage feast)

-GWÀD- (take snuff): cf. iGWÀDá (5) (snuff)

-GWÀL- (behave in cowardly manner): cf.

iGWÀLá (5) (coward)

_____

1) cf. Para. 5.3.0., 5.4.0.

-GQÙR- (exorcise, by burning medicines);

    cf. iGQÌRà (5) (witchdoctor), iGQWÌRà (s.m. with

    more sinister significance)

-HLÀZ- (expose : bring disgrace upon); cf. iHLÀZò (5)

    (disgrace).

*-HLON-[1]) (be bashful); cf. uHLONi (11) (modesty) (shame)

13.2.4.   <u>Di-radical verbal root with corresponding</u>

        <u>di-radical nominal root, where, however, the</u>

        <u>secondary radicals differ : e.g.,</u>

-TSHÈTH- (chip off (e.g. pumpkin rind)); Secondary

    radical, Punctative -TH~ (2) cf. isiTSHÈTSHè

    (knife) (7), Secondary radical, reiteration

    of primary radical.

13.2.5.   <u>Di-radical verbal root, with corresponding</u>

        <u>re-duplicated di-radical nominal root,</u>

        <u>where, however, the secondary radicals</u>

        <u>differ : e.g.,</u>

-DÌZ- (blab; set out secrets): secondary radical,

    Factative -Z~ (9) cf. iDÌBÍ-DÌBì (5) (blundering

    speaker): Secondary radical Operative -B~ (1)

13.3.1.   <u>Di-radical verbal root, with corresponding</u>

        <u>mono-Radical Nominal root, now extinct in</u>

        <u>Xhosa, but surviving in Zulu; e.g.,</u>

-ZWÀZ- (plait, weave); cf. umuZWA (2) (small, fibrous

    root : threadlike shoot):

    Secondary radical : Factative -Z~ (9)

---

1) This di-radical root is no longer 'live' but survives
   in the applied-extension form -HLÒNèl~ (shew respect to).

13.3.2.   Related to Mono-Radical Nominal Root; e.g.,

There are three such roots, all related to the same
nominal root; viz. iliNYÀ (5) (stress, pressure); but
differing in their secondary radical and extension; namely;

-NYÀNZél-   (constrain, compel (someone to do something);

        R1 : *-NYA- (idea of pressure)

        R2 : -NZ~ (modified -Z~ factative (9))

        Extension Applied -el- (1)

-NYÀTHel-   (tread upon)

        R1 : *-NYA- (idea of pressure)

        R2 : -TH~ (Contactive (10))

        Extension Applied -el- (1)

-NYÀTSHAZ-   (strut about proudly)

        R1 : *-NYA- (idea of pressure)

        R2 : Unstandardised -TSH~

        Radical Extension : Factative -Z~ (9)

13.3.3.   Related to Repetative Mono-Radical
            nominal root, with radical conversion
            extension : e.g.,

-NQÙNQÚL-   (make a clean sweep (of anything within reach));

    cf. ama-NQÚ-NQÙ-NQÙ (5) (repeated blows (upon

        the head));

                N.B. The secondary radical reverts

                    to the simple consonant).

        Radical conversion extension : Effective -L~ (4)

13.4.0.   Related to di-radical nominal roots,
            with radical conversion extension; -PH~,
            de-nominative (12).

13.4.1.   There are three nominal roots, describing
abstract qualities (of human character), which are con-
verted into verbal roots by the use of the de-nominative
R -PH~ (12);   e.g.,

-HLONÍPH-   (pay or shew respect): cf. uHLÔNì (11)
              (modesty, reverence, shame).

-KHÁLÍPH-   (be active, energetic, brave): cf.
              ubuKHÂLì (14) (sharpness, acuteness, energy),

-NÀNDÍPH-   (have a pleasant taste in the mouth):
              cf. ubuMNANDi (14) (fine, smooth, sweet,
              pleasant).

-VÍLÀPH-   (play the sluggard): cf. ubuVILa (14)
              (sloth, laziness).

Note on RCE -PH~:

(i)   I have classified -PH~ as a Radical Conversion
        extension and not as an Extension (in terms of this
        thesis) for the following reasons :

(a) RCE -PH~ must be distinguished from other R2 with the
     form -PH~ : e.g., as found in di-R v.r. as
     -KHUPH- (take out).

(b) When occurring as a RCE, it is found only in connection
     with nominal or adjectivel roots, and used to convert
     them to use as verbal roots.

(c) When used in this way, it consists of the form -CV or
     C~, (as do other radical extensions), whereas the
     Extensions consist of the form -cv-.   (cf. para's
     14.3.0., 14.4.0., 14.5.0.)

(ii)   So far I have not come across in Xhosa the
        alternative form -PHAL~, as found in Zulu in such
        forms as -KHULUPHAL- (grow fat, fill out etc. : < -KHULu
        (great, etc.)

12.4.2.   Related to di-radical nominal root, with
              radical conversion extension, -PH~ (de-
              nominative (12), followed by neuter-stative
              extension -al- (3) :

-FÍPHàl- (become dim)﹔ cf. uFÍFì (11) (an indistinct view)

    R1 ﹕ *-FI- (idea of becoming dim, dark)﹔

    RCE﹕ radical extension, denominative -PH~

    Ex ﹕ -al- neuter-stative -al- (2)(d)

13.5.0.   <NOMINAL ROOTS, AND CLASSIFIED

    (a) According to the related noun class﹕

    (b) According to the extension employed﹕

e.g.,

13.5.1.   Class 3 Nouns.

    With radical conversion extension ﹕ Effective -K~ (4)
-BÁNÈK- (lighten)﹕ cf. um ÀNè (lightening)

    With radical conversion extension ﹕ Punctative -TH~ (2)
-CÌMDÉTH- (talk incessantly﹕ enumerate details)﹕

    cf. umCIMBi (matter under discussion).

    With extension Persistive-Actional -ek- (4).
-BÁLèk- (flee, run)﹕ cf. umBÂLà (a shin bone).

        N.B. Analogous to the idiom ucela kuxhongo.

            literally "he asks from the shin-bone"

            (uxhongo, "shin-bone",) meaning "he takes

            to his heels.")

13.5.2.   Class 5 Nouns.

    With radical conversion extension ﹕ Effective -L~ (4)
-BÚBÙL- (hum, growl, mutter)﹕ cf. iBÚBù (swarm of bees)
-BHÀDÚL- (rove about)﹕ cf. iBHÀDÙ-BHÀDù (wanderer)

        also isiBHÀDÙ-BHADù (s.m.)

-DÙBÚL- (shoot, come into ear)﹕ cf. iDÙBÚ-DÙBù (some-

        thing swollen).

-HÀWÚL-[1] (be greedy, rapacious)﹕ cf. iRÀWú (an ardent,

        hot-tempered man).

---

1) Note primary radical consonant differences ﹕ radical
   velar and radical glottal fricatives.

-RIWUL- (pounce upon); cf. iRAWu (ardent, hot-tempered man).

With radical conversion extension : Factative -SH~ (9)
-CEBESH- (be indolent; trust to luck); cf. iCEBu
(chance, luck)
-QOQOSH- (cut short, draw in, gather up); cf. iQOQo
(private consultation of counsellors)

With radical conversion extension; Causative -S~ (8);
-TALAS- (straddle, strut; be proud); cf. iTHALa
(exposed rock, rocky ground).

With radical conversion extension; Factative -Z~ (9)
-BHADAZ- (walk gingerly : speak hesitatingly);
cf. iBHADi (springbok; species of butterfly)
-GOLOZ- (squat on haunches); cf. iGOLo (lower part of
rectum).
-GRWAMBUZ- (be noisy in eating); cf. iGRWAMBU-GRWAMBu
(a greedy, voracious eater).
-KHENKCEZ- (ring, tinkle); cf. iKHENKCE-KHENKCe (a
tinkling bell); cf. also -KHENQEZ- (ring,
rattle) and -KHONKCOZ- (tinkle, ring).
-KHEPHUZ- (foam at the mouth); cf. iKHEPHu (snow).
-KHOHLOZ- (cut down in quantity); cf. iKHOHLE-KHOHLe
(a stabbing left and right)
-NYANGAZ- (murder: lie in wait to ambush); cf.
amaNYANGe (pl: ancestors). Probably because,
when a man dies, his spirit joins those of
his ancestors.)

With Extension : Applied -el-.
-BALel- (shine, clear; be hot, scorching); cf. iBALa
(desert place, open, clear space)
-JOZel- (make for (a place where an ox has been slaughtered);
cf. iJOZi (large slaughtering assegai).

-KHWÉZel- (stoke up a fire; make it burn brightly): cf.

      -KHWÉZi (Venus : the morning star).[1]

-THÚBel- (creep through an opening): cf. iTHÚBa (an

      opening, opportunity).

      With Extension : Persistive-Actional -ek-.

-SÍNek- (grin: have the gums shewing): cf.

      amaSÍNí (the gums: pl).

13.5.3.   Class 7 Nouns.

With radical conversion extension: Effective -L~ (4):

-DLWÉNGÚL- (treat with violence): cf. isiDLWÉNGu

      (a violent man).

With radical conversion extension: Positional -M~ (5)

-PHÓNGÓM- (be on hands and knees): cf. isiPHÓNGò

      (projecting knoll)

With radical conversion extension: Factative -SH~ (9):

-QHOBÓSH- (hobble, knee-halter, fasten): cf. isiQÓBò

      (a bar, fastening a door)[2]

With radical conversion extension: Factative -Z~ (9):

-KHWÁTHÁZ- (glean, pick up): cf. isiKHWÁBa (mealie

      stalk without fruit): (N.B. In the verbal root,

      the secondary radical is the punctative -TH~ (3),

      while in the nominal root, it is the Operative

      -B~ (1)

13.5.4.   Class 9 Nouns.

With radical conversion extension: Causative -S~ (8)

-DULÚS- (stick out, project): cf. inDÚLi (hill, projection).

-NYÁNÍS- (speak the truth; act correctly): cf. -iNYÁNi

      (truth, reality)

---

1) The idea could either be that of brightness, or the
    fact that, on waking at dawn, a fire was usually made up
    in the centre of the hut in the iZÍKÓ (hearth).

2) Note the consonant of the primary radical becomes
    aspirated in the verbal root.

With radical conversion extension; Factative -SH~ (9)
-NKCÉNKCÉSH- (lead water, irrigate); cf. iNKCÉNKCè
      (corrugated iron).

With radical conversion extension; Punctative -TH~ (3)
-NTSÓMPÒTH- (speak mysteriously); cf. iNTSÓMi (fable
      fabrication).

With radical conversion extension; Factative -Z~ (9):
-KHÒNDLÓZ- (harp on a subject); cf. inKÓNDLò (a kind
      of dance).

-MPÚLÙZ- (slip out (of words));   cf. iMPÙLÁ-MPÙLà
      (a slippery thing). N.B. Zulu has thi phulu
      (of something passing or being ejected smoothly).

-NYÁKÀZ- (do on a large scale);   cf. iNYÀKà (crowd,
      swarm; great quantity); cf. also -NYHÍKÍZ-
      (do to excess)

-YÁNTÀZ- (ramble about, saunter around); cf. iYÁMBÁNè
      (something disorderly). (In the verbal root,
      the secondary radical is the unstandardised,
      low-frequency -NT~, while in the nominal root,
      it is the protractive-operative -MB~ (6).

With extension; Applied -el- :
-PHÍSel- (burn charms); cf. imPÍSÀ (a plant whose root
      is used in medicine given to a pregnant woman
      or to children.

13.5.5.   <u>Class 11 Nouns.</u>

With radical conversion extension; Effective -L~ (4):
-NQHÉZÙL- (butt, hit hard); cf. uNQHÉZÚ-NQHÉZù
      (the sound of rams butting)

With radical conversion extension; Causative -S~ (8):
-DÁDÀS- (spread out, so as to keep away an unwanted
      newcomer or unwelcome visitor); cf. uDÁDà
      (dense bush, thicket).

-DÙNKÚS- (move in dense forest; grope one's way),

    cf. uDÙNKÚNKù (anything widespread or dense).

With radical conversion extension; Factative -Z~ (9):

-DÌMBÁZ- (take grain out of a pit); cf. uDÎMBà

    (large number)

-WÁYÀZ- (keep going and coming); cf. uWÀYà (a long,

    endless thing).

With extension : Persistive-Abundant Actional -uk- :

-KHÀNÚK- (long for greatly); cf. uKHÁNÀNà (greediness,

    lengthy speaking etc.)

13.5.6.   Class 15 Nouns.

    All infinitive forms of the Verb are, in fact, also nouns of the 15th. class.[1]

    A classic parallel in English is to be found in the couplet: "To err is human, to forgive, divine," or, in other words, Error is human, forgiveness is divine.

    It would serve no useful purpose to give examples here. The above covers the subject, and further illustration is unnecessary.

13.6.0.   VERBAL ROOTS RELATED TO ADJECTIVAL ROOTS

13.6.1.   The number of true adjectival roots is very limited.   Bennie[2] and Louw[3] give the number as eighteen, though Bennie includes -ni? (whatever: indefinite

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1) For example:
    ukuFÚNDà is the Infinitive of the verbal root -FÚND- (read, learn); but may also be regarded as the noun ukuFÚNDà (learning, reading)
2) W.G. Bennie (1939) Grammar of Xhosa for Xhosa-Speaking: p. 88.
3) J.A. Louw (1963) „Handboek van Xhosa", page 58, para 11.4.

adjective), which Louw omits; and Louw includes -ncínci
(small,) (alternative form), which Bennie omits. McLaren[1]
includes an obsolete form -ncí (small), and its reduplicated
form -ncínci (very small).

13.6.2. It follows, therefore, that the number of verbal
roots related to these adjectival roots (and possibly
derived from them in certain cases) is also small.

13.6.3. It must be remembered that, while we refer to
such verbal roots being related to adjectival roots, most
of the adjectival roots are also related to nominal and/or
adverbial forms, derived from them. It seems obvious,
however, that the adjectival root is that from which such
nominal or adverbial forms are derived.

13.7.0. The following examples illustrate the ways in
which verbal roots are related to corresponding adjectival
forms.

13.7.1.   <u>Di-radical verbal roots related
            to true adjectival roots ; e.g.</u>

-DAL- (create); cf. -DÁLà [2] (old, ancient).
       (The common semantic factor is the idea of
       going back, towards the origin of things.)
-KHUL- (grow, increase); cf. -KHULu [2] (great, big).

13.7.2.   <u>Di-radical verbal root, related to an
            (obsolete form of) true adjectival root,
            R2 being the radical conversion extension,
            de-adjectival -PH~ (12).</u> e.g.

-NCIPH- (decrease, become less); cf. -NCí (obsolete
        form of -NCÍNCi (small).

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1) J. McLaren - Xhosa-English Vocabulary (1936) also gives
      the form -nci as an obsolete form.
2) Note also the nominal forms derived from these
      adjectival roots; e.g.,
            umDÀLì (creator) : ubuDÀLà (age) etc.
            uKHÚLà (weeds)   : ubuKHÚLù (greatness) etc.

13.7.3.   Verbal root, related to mono-R adjectival root

with diminutive extension; the radical conver-

sion extension being the Punctative -TH~ (3) e.g.,

-NCINITH- (break into pieces); cf. -NCINANe (small).

In the verbal root, the RCE is the punctative

-TH~ (replacing the diminutive extension in

the adjectival root).

13.7.4.   Verbal root, related to reduplicated -

di-radical adjectival - nominal root, by

addition of a radical conversion extension: viz:

-PHOTHOZ- (act nimbly, quickly): cf.

ubuPHOTHO-PHOTHo (14) (nimble, agile)

RCE: Factative -Z~ (9)

-VETYEK- (be snub-nosed); cf. ubuVETYE-VETYe (14)

(flexibility):

RCE: Neuter -K~ (2):

cf. also -BHETY- (bend back)

-thi bhetye and -thi bhetye-bhetye

(be bent with weakness):

ubuBHETYE-BHETYe (14) (flexibility):

-BHETYE-BHETYe (used adjectivally): flexible.

13.7.5.   Verbal root, related to di-radical adjectival/

nominal root, the primary radical being re-

iterated, followed by a radical conversion

extension: viz.

-NGWENGWEM- (stand aloof - due to a sense of guilt):

cf. ubuGWENX.a (14) (crookedness):

-GWENX.a (used adjectivally: crooked, wrong,

perverse)

RCE: Protractive -M~ (6).

13.7.6.   <u>Verbal roots, related to di-radical</u>

               <u>adjectival/nominal roots, with</u>

               <u>addition of an extension:</u> e.g.,

-HLÙNGis- (cause to be painful): cf. ubuHLÛNGù (14)

        (pain : also used adjectivally: (painful)).

        Extension : Causative -is- (5)

-HLÀZíy- (make fresh, renew): cf. uHLÂZà (11)

        (fresh green grass):

        -luHLÂZà (used adjectivally: green, blue):

        ubuHLÂZà (14) (greenness)

        Extension : Causative (Stative) -iy- (7).

CHAPTER 14

EXTENSIONS : INTRODUCTION

14.0.0.   EXTENSION

This term is used hereafter to describe the particular type
of extension to the verbal root which consists of a vowel
plus consonant phoneme which constitute an indivisible unit,
represented by the symbols -vc-.[1]   Unless otherwise
indicated, 'Extension', without further elaboration, refers
to this type of extension.

14.1.0.   DIFFERENCES BETWEEN RADICAL EXTENSIONS
                        AND EXTENSIONS

14.1.1.   Unlike the Radical Extensions, all of which
consist of the form -C~, the Extension consists of -vc- (or
multiples thereof):   e.g., -el-, -is-, -isis- .
For example, the di-R v.r. -KHÔL- (satisfy, content,
convince), may take either a radical extension, or an
extension.   e.g.,

  (a) Radical extension : -S~, causative (8) :

       -KHÔL- > -KHÒLÓS- (confide in, be secure etc.)

       It will be noted that the REx is -S~ (or -C~)

  (b) Extension :   When, however, this di-R v.r. -KHÔL-

       takes an extension, such as the applied -el-,[2] or the

       causative -is-,[3] the extension in each case consists

       of a vowel plus consonant, (or -vc-) : e.g.,

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1)   Small letters are here used, viz. -vc-, to emphasize that
     this type of extension is, generally speaking, not of a
     'permanent' nature, but is liable to be used only at the
     discretion of the speaker when the occasion so demands,
     e.g. : -BÔN- (see) > -BÒNis- (cause to see, show):
     cf. para. 15.5.1.
2)   cf. para. 15.1.0.
3)   cf. para. 15.5.0.

-KHÔL- (satisfy, content etc.)

> -KHÔLél- (have pleasure in, like)

> -KHÔLis- (give satisfaction, please)

14.1.2.   Not infrequently the extensions (Ex) are more
loosely connected with the di-R v.r. than the radical
extensions (REx), in that they do not have as profound a
semantic influence upon the simple root.   Further, the
extensions may usually be used or discarded by the speaker,
which is not the case with roots extended by means of a
radical extension.

14.2.0.   BACKGROUND

14.2.1.   Most writers in Bantu have devoted a certain
amount of space to the description of what they have usually
termed 'derivative verbs'.   Torrend[1], for instance, refers
to 'applicative verbs', 'causative verbs', 'intensive verbs',
'reversive and expansive verbs' and 'reciprocal verbs'.   He
made an early assessment of these species with considerable
accuracy.   We should, however, refer to these species as
extended forms of the verbal root.   Though he did not use
this term, Torrend implied this by virtue of the fact that
he recognised that they owe their distinctive form and
significance to their suffixes.

Later[2], he has this interesting comment to add,
concerning the difference in function between these
extensions and the auxiliary verbs employed to modify
the sense of the main verb.

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1) Torrend: Comparative Grammar of the S.A. Bantu
              Languages: p. 275 para. 1064 (1891)
2) As above, but p: 280 para. 1085.

He says:

"There is unmistakably an essential difference between the general notion implied by verbal suffixes, and that implied by auxiliaries. But until we have somewhat more abundant data to go by, it is no easy task to define this difference exactly. If, however, I am not mistaken, auxiliaries generally imply a notion of time. Respectively they imply that an action is taking place now, or took place before, lasts a long time or a short time, was never done, or was done once, still lasts, or is already accomplished etc., all of them notions which come under that of difference of time. , Verbal suffixes, on the contrary, are ╱ rather either relational or include relation, and cannot be said to contain the notion of either time or duration. Passive verbs, for instance, suppose an agent and a patient; applicative verbs suppose an efficient cause, acting upon a subordinate agent; intensive verbs being superlative, imply comparison with what is usual and common; expansive and reversive verbs bring back the mind to a contrary action; reciprocal verbs suppose at least two agents' acting one upon another; all of them notions which come under the head of relation."

14.2.2.   Bryant[1] had this to say concerning the derivative species of the verb:

> "There are several kinds of derivative verbs,
> i.e. secondary forms constructed out of the
> primitive root by some modification or change
> thereof. They are of at least 25 different
> kinds, as follows:-"

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1)   A.T. Bryant; "Zulu-English Dictionary" : 1905
        p. 103 (Introduction).

He describes the "modification or change thereof", in terms of "changing the final a of the primitive root into -ela or -isa etc.," according to the species concerned.

The fact that the final -a in the simple verbal stem is not a part of the root, but a detachable terminative vowel, had not yet been appreciated.

In the "25 derivative verbs" listed by Bryant, are included

(1) Objective (now known as the applied)

(2) Causative

(3) Reciprocal

(4) Stative-passive or Neuter-passive

(now known as Stative or Neuter).

In addition he lists 20 reduplicated or compound forms. Under "derivative verbs" he includes the reflexive construction,[1] (which is not a verbal species), but he makes no mention of the Passive species (with characteristic extension -w-, -iw-).

14.2.3. Subsequent writers have all made mention of the "derivatives", including Werner[2], who calls them "Derived forms" and McLaren[3], who uses the same term. McLaren[4] introduces the recognition of the 'reversive' suffixes characterised by the vowel -u- (with the consonant of the extension or as root vowel). Doke[5] and Bennie[6] took the matter further.

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1) Where the reflexive (Objective) concord -zi- is introduced before the verbal root. This is not strictly a verbal species at all, but depends for its distinctive character on the objective (reflexive) concord.
2) The Bantu Languages. A. Werner (1919) p. 146.
3) McLaren: "A Xhosa Grammar": (1936) p. 109.
4) McLaren: "A Xhosa Grammar": (1936) p. 118.
5) Doke: "Zulu Grammar" (1921) p. 126.
6) Bennie: "Grammar of Xhosa for Xhosa Speaking" (1929) p. 123.

14.2.4.　　Bennie follows Bryant in including the 'reflexive' as a derivative species of the verb, but does not treat the subject in any detail.　Doke, with his usual thoroughness, goes far deeper than his predecessors had done. He also recognises the Passive as being a derivative species of the verb.　Even Doke appears to include the terminative -a in the extensions.

14.2.5.　　Louw[1], carries the investigation a step further in Xhosa, in recognising such extensions as the 'contactive' and 'positional' species[2], which had escaped being named previously in works on Xhosa.

14.3.0.　　ACCEPTANCE OF CERTAIN EXTENSIONS

14.3.1.　　Sharman[3] has recently done considerable research on the Extensions in Bemba.　His treatment and description of the Bemba Extensions deserves mention here, as what he says applies in general terms to the Extensions generally in Bantu.　He says[4],

> "Both morphologically and semantically, these
> belong to a clearly identifiable series : they
> are elements occurring after the verb radicals[5]
> and modifying their basic meaning (that is, a
> given extension normally modifies meanings of
> radicals[5] in a certain direction,)　Not all
> radicals[5] can be associated with all extensions :
> many associations are naturally precluded on
> semantic grounds, and still others are phono-
> logically determined.　But there are always
> many cases in which there is no apparent reason
> why a given radical[5] should not be found in
> association with a given extension, and yet is not."

1)　J.A. Louw: „Handboek van Xhosa" (1962) p. 150.
2)　This punctative -tha is actually a Radical Ex: -TH~, and also, protractive -ma, viz. -M~; though protractive stative -am- is an extension.
3)　J.C. Sharman: "Morphology etc. in the Single Verb Forms in Bemba" : Definitions : page 9.
4)　J.C. Sharman (as above): page 46, para 2 and 5.
5)　Or "verbal roots" in my terminology.

14.3.2.　　With regard to the resistance of certain verbal roots to certain extensions, I am fully in agreement with Sharman.　In writing on Tsonga, Junod[1] speaks with enthusiasm about the rich flexibility of the Bantu languages, due to the many species of extension.　"All these various derivations can combine," he says, "according to given laws, each adding its own meaning to the others."　And he goes on to say, "An endless number of combinations is thus rendered possible."　While agreeing that there is great flexibility and a wide range of combinations, there are also strict limitations, as indicated above.

14.3.3.　　As far as my observation goes, it would appear that while the more common extensions are 'live' (that is, capable of being added to verbal roots with considerable freedom), the majority are no longer so.

14.3.4.　　Having inquired from several Xhosa-speakers, why certain roots are resistant to certain extensions which appear to be open to use with them, the invariable answer is to the effect that, "We Xhosa's do not say that." It is, apparently a matter of usage, rather than any intrinsic incompatibility.

14.3.5.　　Certain of the extensions enjoy very wide acceptance by verbal roots.　Such include the Applied (1) -el-, Neuter Stative (2) -ek-, Causative (5) -is- and the Connective -an- (6).　Others, on the other hand, have a restricted use, only occurring with a comparatively small number of verbal roots.

14.4.0.　　Doke[2] states, "Though the S.E. Bantu languages

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1)　H.A. Junod:　"Life of a S. African Tribe" : Vol. II.
　　　page 141.

2)　Doke, C.M.　"The Bantu Speaking Tribes of S.A."
　　　　(I. Schapera) (1927) page 327.

"are not so rich as the central in verbal derivative forms, they still employ the most typical and have occasional examples of a number of others."

14.5.1.   Later, Doke[1] gives a comprehensive list of the main S. Bantu derivative verbal species.   He goes on to say, "The primary semantic characteristic of a suffix appears to be in its consonant, and the vowel or vowels, which are often evolved independently, and sometimes may not belong to the suffix proper at all, appears to be a secondary characteristic, though they do play some semantic part."

14.5.2.   Here I must reluctantly disagree with this view. In terms of this thesis, the vowel of the extension is as much an integral part of the extension as the radical vowel is of its radical.

14.6.0.   In conclusion, it may be said that although there is a surprisingly large number of different verbal extensions in Xhosa, it is really only a few that are 'live', and have a high frequency of incidence.   For the rest, the incidence is low and restricted.

14.7.0.   THE EXTENSION, ITS FORM AND FUNCTION

14.7.1.   An Extension is, in effect, a suffix which
           may be added to a verbal root, thereby
           modifying the effect of the action described
           more in respect of its application rather
           than its essential nature.   It is followed
           by the usual verbal terminatives.

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1) Doke, C.M. "The Southern Bantu Languages" (1954) p. 66.

14.7.2.   In explanation of the above, an example may clarify the position.   If we take the verbal root -BÔN- (see), whatever extension is added to this root, the basic idea will always be retained; viz., the idea of "seeing". When the applied extension is added, the idea of "seeing" is extended to the idea of "seeing for" someone etc. With the causative extension the idea of "seeing" is extended to that of "causing someone else to see", thus to "show". Again, where the reciprocal extension is added, the idea of "seeing" is now extended to the idea of "seeing one another". The basic idea of "seeing" is unchanged, but the scope of the verb is extended to include other factors modifying its relationship to those factors.

14.7.3.   "LIVE" EXTENSIONS:

This term is used in connection with those extensions which may be fairly freely used with verbal roots which are semantically open to such usage. The number of such "live" extensions is, however, strictly limited. The fact must always be borne in mind also, that certain verbal roots, apparently capable of accepting such suffixes, still resist them. As one informant expressed it, "Yes, you could say that, but to a Xhosa it would not make sense." Such is the power of usage in the acceptance or rejection of certain forms of speech.

14.7.4.   INACTIVE EXTENSIONS:

By 'inactive' extensions, is meant those extensions which can no longer be used freely with verbal roots, or discarded at the whim of the speaker. There are certain such extensions which occur only very rarely and only with a strictly limited number of roots.

14.8.1.   ONE-SEGMENT EXTENSIONS:

Several extensions consist of one segment, with
the form -cv- ; e.g., the Applied -el- (1), as in -BONél-
(see on behalf of, etc.)

14.8.2.   TWO- AND THREE-SEGMENT EXTENSIONS

Others again may consist of two and rarely three
segments, with the form -cvcv-, -cvcvcv-, respectively.
When these occur, with a single semantic significance,
they are due to a process of re-iteration, indicating the
intensification of the extension.   Infrequently the re-
iteration is not so obvious due to the substitution of
a variant[1] in place of one of the segments.

   e.g. :   -QONDisis- (explain fully) (Ex 5(d)).

           -Visisis- (speak out distinctly) (Ex 5(d)).

and with a variant in one segment :

   e.g. :   -HLAMBuluk- (peel off, come off intr.)

          cf. -HLAMBulul- (cleanse thoroughly).

14.8.3.   ONE-SEGMENT EXTENSIONS IN SERIES

It may happen that two one-segment extensions may
follow one another in series, resulting in a form which,
apart from the context, might be mistaken for a two-segment
extension.   Where there are two one-segment extensions
in series, however, the fact will be made clear by the
semantic shape of the extended root.

   e.g. :   -LINDel:ek- (be expected)

         < -LIND- (wait) followed by the applied and

            neuter stative (actual) extensions in series.[2]

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1) cf. Ex 7(c) : para. 15.7.3.
2) cf. Para. 16.2.2.

14.8.4.   On the other hand, we may find a two-segment extension, with a single semantic force.

e.g. :   -GÀNDélèl- (stamp hard into);

< -GÀND- (stamp, tramp) followed by the

applied (intensive) extension.[1]

14.9.1.   THE VOWEL IN THE EXTENSION

While agreeing fully that the consonantal element of the extension carries the main semantic force, the vowel is by no means without semantic significance.

14.9.2.   I am unable to accept Van der Merwe's[2] term "connecting vowel" for the vowel of the extension, as this suggests that it is merely a link between the verbal root and the extension. This vowel is, in fact, as much an intrinsic part of the extension as the radical vowel is an undetachable part of the radical.

14.9.3.   The vowel and the consonant of the extension segment together form an indivisible unit, and each carries its share of semantic force.

14.9.4.   In the case of the consonantal element, we are able to find semantic parallels with those of the secondary radicals, but in the case of the vowel elements, definite semantic classification has not been found possible, except to a very limited extent.

14.10.0.   Semantic significance of the vowel
             element in the extension segment

14.10.1.   Without claiming to explain why it should be so, the fact may be recorded that the vowel -i- occurs in

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1)   cf. Para. 15.1.2.
2)   cf. D.F. van der Merwe: "Morphology and Semasiology
        of the Sotho Verbal Stem....." etc: Chapter 4.

the extensions which carry either a 'causative' or a 'factative' force (sometimes -i- is assimilated to -e-). For example:-

The extension-vowel is -i- in the following extensions:

Causative-stative	-iy-	(5(h))
Causative	-is-	(5(a)-(c))
Causative-Stative	-es-,-ez-	(5(f)(g))
Causative-Intensive	-isis-, -isisis-	(5(d) and (e))

14.10.2.   When the extension-vowel is -u- it is found either with a 'reversive' significance,

e.g.,

Reversive Actional	-al-, -uk-	(8(c)(b)
Reversive Neuter Stative	-uk-	(8)(a) etc.

or with an 'abundant' significance,

e.g.,

Abundant Stative (Completive)	-uluk-	(7(c))
Abundant Actional	-ul-, -ulul-	(7(a) and (b))

14.11.0.   SEMANTIC SIGNIFICANCE OF THE CONSONANTAL ELEMENT IN THE EXTENSION SEGMENT:

14.11.1.   There is an underlying connection between the semantic shape of certain consonants, whether they occur in radicals or extensions.   The following parallels will illustrate this:

R2: Ex.	In Radical (R2) and Radical Extension (REx) and Radical Conversion Ext. (RCE).	In Extension (Ex).
-L~, -el-	Effective (4)	Applied (1)
-K~, -ek-	Neuter (2)	Neuter-Stative (2)(a)
-K~, -ek-	Effective (4)	Persistive-Actional (3)
-M~, -am-	Positional (5)	Protractive-Stative (9)
-N~, -an-	Associative (11)	Associative 6(c)
-S~, -is-	Causative (8)	Causative (5)
-TH~, -ath-	Contactive (10)	Contactive (10)

14.11.2.   While obvious parallels are not possible in the case of all secondary radicals and extensions with a common consonantal element, the above examples at least suggest a possible semantic relationship, and common origin.

14.12.0.   The general question of the derivation of many of the extensions is covered by Meinhof[1]. It is not necessary to refer in detail to his conclusions. The object of the present study is rather to describe the extensions as they exist today in Xhosa, rather than to discuss their origin.

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1) cf. C. Meinhof and N.J. van Warmelo, 'Introduction to Phonology of Bantu Languages'. (1922) Page 107 et seq.

CHAPTER 15

15.0.0.   EXTENSIONS : INDIVIDUAL

The following Extensions are found in Xhosa:

1.	Applied.			15.1.0.
	(a)	Applied	-el-	15.1.1.
	(b)	Completive (Applied)	-elel-	15.1.2.

2.	Neuter Stative:			15.2.0.
	(a)	Actual	-ek-	15.2.1.
	(b)	Potential	-ek-	15.2.2.
	(c)	Actual (Completive)	-ekek-	15.2.3.
	(d)	Actual	-al-	15.2.4.
	(e)	Actual Extensive	-alal-	15.2.5.
	(f)	Extensive	-akal-	15.2.6.
	(g)	Extensive (Irregular)	-ayel-	15.2.7.

3.	Persistive Actional	-ek-	15.3.0.
4.	Completive Applied-Stative	-elek-	15.4.0.

5.	Causative:			15.5.0.
	(a)	Actual	-is-	15.5.1.
	(b)	Assistive	-is-	15.5.2.
	(c)	Imitative	-is-	15.5.3.
	(d)	Causative (Intensive)	-isis- -isisis-	15.5.4.
	(e)	Intensive (Causative)	-isis-	15.5.5.
	(f)	Causative (Stative)	-es-	15.5.6.
	(g)	Causative (Stative)	-ez-	15.5.7.
	(h)	Causative (Stative)	-iy-	15.5.8.

6. Connective: 15.6.0.

  (a) Reciprocal   -an-   · 15.6.1.

  (b) Reciprocal (Completive)   -anan-   15.6.2.

  (c) Associative   -an-   15.6.3.

7. Abundant: 15.7.0.

    (a) Abundant Actional   -ul-   15.7.1.

    (b) Abundant Actional
        (Completive)   -ulul-   15.7.2.

    (c) Abundant Stative   -uluk-   15.7.3.
        (Completive)

8. Reversive: 15.8.0.

    (a) Neuter Stative   -uk-   15.8.1.

    (b) Persistive Actional   -uk-   15.8.2.

    (c) Actional   -ul-   15.8.3.

    (d) Causative   -us-   15.8.4.

    (e) Actional (Completive)   -uluk-   15.8.5.

9. Protractive Stative   -am-   15.9.0.

10. Contactive   -ath-   15.10.0.

11. Passive   -w-, -iw-   15.11.0.

15.1.0.   <u>APPLIED EXTENSION:</u>

15.1.1. 1(a) <u>APPLIED EXTENSION: -el-</u>

        The Applied extension is highly active, in that it
can be used in conjunction with a large number of verbal roots.
It can virtually be accepted by any root where the meaning
permits its use.

        It is not intended to give multiple examples of
the incidence of this extension, for to do so would merely
be to repeat information which is available in the standard
dictionaries.

Background:

Investigators from early times have not failed to note and comment on this extension. Reference has already been made to Torrend's comments[1] concerning its semantic significance. He does not, of course, differentiate between the verbal root and the extension, but speaks of them as one entity, 'applicative verbs'. He makes it clear, however, that the 'applicative' element is due to the Extension. In describing the function of this species, he says that they 'suppose an efficient cause, acting upon a subordinate agent.'

Bryant[2] makes a brief reference to 'derivative verbs' and mentions 'Objective verbs, formed by changing the final a of the primitive root into ela, and signifying 'for, to, on behalf of, against' etc. Werner[3] speaks of 'Derived forms of the verb', and uses the terms 'Applied' (or 'Relative' or 'Prepositional') in describing this species. She points out that this species 'gives rise to numerous idioms, some of which have no exact European equivalent', and goes on to say:

> "The most general rule that can be laid
> down for its use implies that the action
> is done with reference to some person or
> thing other than the direct object of the
> verb."

Werner proceeds to point out also that,

> "If the verb is intransitive, and therefore
> has no direct object, this form makes it
> transitive, and enables it to take one."

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1) Torrend, J.; Comparative Grammar of S.A. Bantu Languages (1891) page 275, para 1064.
2) Bryant, A.T. (1905) Zulu-English Dictionary: page 102.
3) A. Werner; "The Bantu Languages". (1919) p. 148.

The description is taken considerably further by Doke[1]. He standardises the term 'Applied' for this species and gives a clear and full analysis of the conditions under which the extension is used, and its semantic force in those usages. Doke still, however, refers to 'derivative verbs' and 'the applied form of the verb'. In his description, however, he adds little to what has already been said by Werner, but comments,

> "The sense of the applied form is supplied
>
> in English by the use of such prepositions
>
> as 'for', 'towards', 'on behalf of', 'to
>
> the detriment of."

McLaren[2] brings the discussion into the particular field of Xhosa, and reverts to the terms, 'Derivative Forms" of the verb, and "The Directive Form" in particular in referring to this extension. He gives alternative terms again (following Werner) viz. 'Relative' or 'Applied'. In the main, he covers more or less the same ground as Doke (as quoted above).

Bennie[3] follows McLaren's terminology, viz. "Directive Form", but his treatment, though brief, is in line with Doke. Ziervogel[4] speaks of the 'Applicative' or 'Directive' verbal suffix, according to their respective contexts. Here the recognition of the species in terms of a suffix is first mentioned as such. Van der Merwe[5] refers to 'Derivative suffixes' in general and variations of the 'Applicative' when dealing with this species in Sotho.

1) C.M. Doke: "Zulu Grammar", (1931) p. 131, para 231-241.
2) J. McLaren: "Xhosa Grammar" (1936) : page 109
3) W.G. Bennie: "Xhosa for Xhosa Speaking" p. 124 (1939)
4) D. Ziervogel: "Grammar of Swazi" (1952) para 77.
5) D.F. van der Merwe: "On the Morphology ..... Sotho
      Verbal Stem ...." (1941) Chp. 5, p. 84.

It is left to Sharman[1] to emphasize the true nature
of these derivative species, when he refers to them as
'Extensions'.   He reverts to Torrend's original term,
'Applicative'.   He does not, however, add any original
contribution to the basic descriptions of the species given
by his predecessors.

To sum up: This extension seems to have collected more
variations of name than any other of its kind, but the
actual extension itself is invariable in Xhosa.   The reason
for the multiplicity of names is probably due to the fact
that this particular Extension can be used to express so
many shades of meaning.[2]   These shades of meaning and
types of usage may be summarised as follows:[3]

> Note   : The term 'Applied' has now
> been generally adopted, and I find no
> reason to disagree with it.

The uses of the Applied Extension may be illustrated by
the following examples:

(i)   The applied extension is often used where
       the same meaning is supplied in European
languages by means of a preposition.   The actual nature
of the prepositional idea thus expressed is often
determined by the meaning of the simple verbal root :
for instance,

-FÌKèl- (arrive <u>at</u>)   cf. -FÌK- (arrive) :

-LÙNGèl- (suit, be right   cf. -LÙNG- (be right, fit) :
            <u>for</u>)

-HÁMBèl- (go <u>to</u>; visit)   cf. -HÁMB- (go, travel) :

1) J.C. Sharman. 1964 . Chapter 5. "Verb forms in Bemba."
2) Applied Species: Known variously as: Applicative, Objective,
      Applied, Relative, Prepositional, Directive.
3) Only a single example is given, as the usages are
      regular, and repetition would add nothing of
      significance to our survey.

-LÁNDel- (follow <u>after</u>) cf. -LÁND- (follow, pursue) :

-JÍKel- (turn <u>towards</u>) cf. -JÍK- (turn (intr.) :

-SÚKel- (rise up <u>against</u>, cf. -SÚK- (rise up) :
          attack)

-GCÍNel- (keep <u>for</u>, <u>on</u> cf. -GCÍN- (keep, preserve) :
     <u>behalf of</u>)

(ii)   The applied extension is used, in connection

        with the locative, to indicate motion 'towards' :

        e.g.,

ukuBUYela ekhaya   : (to return to one's home)

baBALEKela phina?   : (where are they running to?)

DLULela phambili   : (pass on towards the front)

BALEKela nganeno   : (run towards this side)

HAMBela ngasentabeni : (travel towards the mountain)

yaFIKela entungo   : (it reached to the inside of the roof)

(iii)   The applied extension is used to

        indicate the locality where something

        takes place : e.g.,

Impi yasiFIKela apho : (The army came upon us **there**)

Inkabi yaWela emgodini, yaFela khona:

    (The ox fell into a hole and died there)

WaFela eRautini: (He died at Johannesburg)

(iv)   When followed by the interrogative suffix

        -ni?, the applied extension may express

        the question 'Why?' : e.g.,

NiHLALelani?   (What are you waiting for?

                   Why are you waiting?)

NiKHALelani?   (What are you crying about?

                   Why do you complain?)

NiSEBENZelani?   (Why are you working?)

(v)   When the applied extension is added to a

        verbal root which, in its simple form is

intransitive, it may take an object and thus, in effect,

become transitive; e.g.,

  -LÀMB- (become hungry) ; -LÁMBel- (hunger for)

  NdiLAMBela isonka. (I am hungry for bread)

  -LÌL- (cry, shed tears); -LÍLel- (mourn for)

  Mus'ukuLILela umntwana ; (Do not mourn for the child).

(vi)   When the applied extension is added to

        a transitive verb, it may take two objects;

the one being the object of the simple verbal root, and the

other the object of the applied idea.   The latter is the

real object of the applied extension idea, and takes

precedence in word-order over the former, while its concord

only may preceed the verbal root ; e.g.,

    Intombi imTHUNGele unina ingubo;

    (The girl has sewn a dress for her mother)

    NdiwaBOPHele amahashe;

    (inspan the horses for me).

(vii)   When the applied extension is followed

        in series by the passive extension -w-,

certain idiomatic forms are met with, but still retaining

the idea of action 'in respect of' ; e.g.,

    NdAKHelwa indlu ; (A house was built for me;

      Lit; I was built-for, in regard to a house)

    SaHLELwa yingozi ; (We were descended-upon, it

    was danger. Danger came upon us).

Umntwana waFelwa ngunina: (The child was bereaved

of its mother. Lit: The child was died-on by his

mother. This is in line with an old English usage

where a man might say, "My Father has died on me.")

BaTSHONelwa lilanga besesendleleni: (They were

benighted while still on the road. Lit: They were

gone-down-upon, it is the sun ...... etc.)

N.B. It will be noted that in each case, with

the exception of the first example, the

agent of the passive is in the copulative

form.

(viii) The applied extension may be used in the

infinitive form to indicate purpose. (N.B.

Some refer to this usage as indicating 'locality', but

the idea of 'purpose' seems predominant): e.g.,

Indlu yokuDLela : (A room to eat in: or, a dining-room)

Indawo yokuBUTHela : (A place to gather in: or, a

meeting place.)

Isitya sokuDLela : (A dish to eat from: or, an

eating-dish).

(ix) When the applied extension is used in

conjunction with the reflexive objective

concord -zi-, it has the force of "doing something in

relation to oneself," or "doing by oneself," or "doing

of one's own accord:" e.g.,

UkuziHLALela : (To remain by oneself,

To remain on one's own)

NdaziFUNDela : (I learned on my own).

Ukhula luyaziMILela: (Weeds grow up of their own accord).

(x)   There are several verbal roots in

        existance in Xhosa today which clearly

have an applied extension, but whose simple verbal root

has ceased to be used.[1]   The applied extension has

thus become standardised as part of the verbal root.

This process accounts for several verbal roots of

apparently three radicals. For example:

    -FÙLél-   (thatch a roof : roof in a hut):

    -KHÀNGél-   (look at): -MÀMél- (listen to, harken):

    -SÓNDel-   (draw near).

15.1.2.
  (1)(b)   <u>COMPLETIVE (APPLIED) EXTENSION : -elel- :</u>

        Doke[2] gives the name 'Perfective' to this

extension.   He says,

    "In many Bantu languages this or a phonetically

    cognate suffix indicates an action carried to

    perfection or completion.   In Zulu this force

    is evident in several examples, but not in all."

I have decided to adopt here the term 'Completive (Applied)'[3]

for this extension.   Obviously the emphasis lies on

'Completive', since the action described by the verb is

carried out to its conclusion, or completely done :

'(applied)', since it is, in form, a re-iteration of the

applied extension.

As Doke points out,[2] some of these extended roots

definitely indicate intensive action, but others have no

such emphatic emphasis.

---

1) cf. para 17.5.2.
2) C.M. Doke : Zulu Grammar (1931) para 367 etc.
3) cf. D. Ziervogel : Handbook of the Zulu Language :
        page 123, para. 585., uses term 'Completive'.

Examples where the extension carries an obviously completive intensive semantic shape.

-FÍNCélèl- (decant, exhaust): cf. -FÍNC- (drain, drink out).

-GÁNDélèl- (stamp hard into): cf. -GÁND- (stamp, tramp)

-LÚNGélèl- (be equal, be even, be parallel):

    cf. -LÚNG- (be right, be suitable)

-MÍNYélèl- (drain out completely, exhaust completely):

    cf. -MÍNY- (swallow, drain, exhaust)

-NGXÉNGélèl- (mix thoroughly, adulterate thoroughly,

    corrupt utterly): cf. -NGXÉNG- (corrupt, mix)

-ÓMélèl- (become very dry, very hard, very firm):

    cf. -ÔM- (become dry, hard, paralysed).

Examples where the completive significance of the extension is not obvious :

-DÍBélèl- (fill up with earth : bury underground):

    cf. -DÎB- (fill a hole, mix together)

-NÓNélèl- (shew respect to, shew friendship for):

    cf. -NÓN- (become prosperous, be respected)

-NXÍBélèl- (tie up to, fasten to): cf. -NXÍB-

    (put on (clothes)): fasten (belt)).

-TYÉLélèl- (pay a visit to): cf. -TYÉL- (tell, inform)

15.2.0. (2) NEUTER STATIVE EXTENSIONS.

There are seven sub-categories of this extension : namely,

(a)	Neuter Stative (Actual)	-ek-
(b)	Neuter Stative (Potential)	-ek-
(c)	Neuter Stative (Actual) (Completive)	-ekek-
(d)	Neuter Stative (Actual)	-al-
(e)	Neuter Stative (Actual) Extensive	-alal-
(f)	Neuter Stative (Extensive)	-akal-
(g)	Neuter Stative (Extensive) Irregular	-ayel-

Neuter Stative (a) and (b) Extensions ; -ek-

The Neuter Stative (Actual) -ek- and the Neuter Stative (Potential) -ek- extensions are really one extension which has developed a two-stream semantic shift. Both of them indicate "being" in the state or condition described by the verb; in the case of the 'Actual', the state is already attained, in the case of the 'Potential' it is regarded only as being a possibility.

Both are 'live' extensions, though the Neuter Stative (Actual) is more commonly found than the Potential species.

15.2.1. 2(a) NEUTER-STATIVE (ACTUAL) EXTENSION -ek-

Background: Torrend[1], strangely enough, does not mention this species when discussing the 'derivative verbs'. He only lists the five ; viz.: "Applicative, Causative, Intensive, Reversive and Reciprocal." Bryant[2] refers to this group as 'Static-passive' or 'Neuter passive' verbs, "signifying a continuous condition of the passive state, most conveniently expressed in English by the word 'get'".

Werner[2] uses the term 'Neuter-Passive' and adds, "distinguished from the passive by expressing a state, or the possibility of being subjected to an action, rather than the actual undergoing of the action on some definite occasion." When she refers to "or the possibility," Werner is here confusing the Neuter Stative (Actual) suffix with the Neuter Stative (Potential)[4]. She does, however, put her finger on the basic idea, namely, that this extension describes being in a 'state' or 'condition'

1) J. Torrend: (1891) "Comparative Grammar of S.A. Bantu Languages", para 1064.
2) A.T. Bryant: (1905) "Zulu Dictionary", p. 103.
3) A. Werner: "The Bantu Languages." p. 147.
4) See Extension para 15.2.2.

described by the simple verbal root.   Doke[1], under the general heading of 'Neuter' says,

> "The Neuter, Middle or Quasi-passive form in Zulu[2] indicates an intransitive state or condition without any special reference to an agent determining that condition."

> "There is a clear distinction between the passive and the neuter forms in their significance ..... In many cases, the force of the English suffix -able or -ible expresses this neuter form ; in others, the idea of 'get' or 'become', as opposed to the passive use of 'be', seems to be the nearest equivalent."

Doke does not clearly differentiate between what I refer to as the 'Neuter Stative (Actual)' (2)(a) and 'Neuter Stative (Potential)' (2)(b) species, respectively.   The equivalent of the English 'get' or 'become' are 'Neuter Stative (Actual)', while those equivalent to the English suffix -able or -ible belong to the 'Neuter Stative (Potential)' species.

Later[3], Doke refers to the two Extensions -eka and -akala and comments,

> "There seems to be no distinction in meaning or significance between the two forms."

There is, however, a distinction; for while -ek- is the Neuter Stative (Actual) Extension, -akal-[4] is the Neuter Stative (Extensive) extension.

Doke continues, in this same section[5] to speak of "Neuter forms of a specialised character (which) occur

---

1)   C.M. Doke: "Zulu Grammar" (1921) para. 328.
2)   These comments in general principle, apply equally to Xhosa.
3)   C.M. Doke : para. 329. "Zulu Grammar" (1921)
4)   See under Extension   15.2.6.
5)   Doke, (1921) "Zulu Grammar", para: 330.

"in connection with many verbs formed from radical
descriptives.[1]   These are what are referred to in this
thesis as radical conversion extensions (RCE).[2]

14.6.3.   McLaren[3] uses the terms "stative" (or "Sub-
junctive" or "Neuter" Form) for this species.
He defines its significance as follows:

> "This form expresses the <u>state of being,</u>
>
> <u>resulting from subjection to the action of</u>
>
> <u>the simple verb.</u>   In meaning, therefore, it
>
> nearly approaches to the passive voice, but
>
> differs from the latter in not referring the
>
> action to any particular agent."

This description is very much to the point; the words
underlined emphasize the essential significance of the
species.

McLaren raises a further point.   He says that
"the stative form makes intransitive verbs out of transi-
tive[4]; and quotes such examples as:

> Iigusha zam ziLAHL<u>ekile</u> (my sheep are lost :
>
> from -LÁHL- (lose : trans;))

But McLaren also fails to differentiate between
the Neuter Stative (Actual) and the Neuter Stative (Potential).
He does, however, recognise that the suffix -akal- is an
intensive form of the 'Stative' species, though he does not
go so far as to record it as a separate entity.[5]

---

1) Herein referred to as "Ideophones".
2) See Chapter 12.
3) J. McLaren (1936): "Xhosa Grammar" p. 114, para 78.
4) In contrast to the 'Applied' species which makes
      transitive of intransitive verbs.
5) Herein referred to as Neuter Stative Extensive.

Typical examples of the Neuter Stative (Actual)

Extension are:

-AZek-	(become known)	from -AZI	(know)
-BHENGEZek-	(be exposed)	from -BHENGEZ-	(expose, lay out)
-CANDek-	(be split)	from -CAND-	(split : tr.)
-DABULek-	(be parted)	from -DABUL-	(part, sunder)
-FAKek-	(be put into)	from -FAK-	(put in, put on)

15.2.2. (2)(b) NEUTER STATIVE (POTENTIAL)

EXTENSION : -ek-

As pointed out already, this is actually the same extension as the Neuter Stative (Actual) extension, but with a semantic shift.

When used in the 'potential' sense, this extension indicates the possibility of the subject entering into the state or condition described by the verbal root.   But it is only a possibility : the potential is there, but not as yet reached.   It is equivalent to the idea conveyed by the English suffix -able, -ible etc., indicating a capacity for rather than an accomplished state.

Typical examples of the Neuter Stative (Potential) extension are found in:

-AMKelek- (be acceptable)	: from -AMKel-[1] receive welcome.
-BINQek- (be fit for tying etc.)	: from -BHINQ- (tie round the waist)
-CELek- (be fit to be requested, desirable)	: from -CEL- (ask, request)
-OYIKek- (have the quality of exciting-fear)	: from -OYIK- (fear, be afraid of).
-PHEFUMLek- (be fit for breathing (air))	: from -PHEFUML- (breathe)

---

1)   -AMKel- already has an applied extension before accepting the neuter stative (potential) extension.

15.2.3. (2)(c) NEUTER STATIVE ACTUAL

(COMPLETIVE) : -ekek-

So far, I have only come across one example of this re-
iterated form of the neuter stative actual extension,
-ekek-, namely,

-QÙSHékèk- (be completely covered, be quite hidden):

    cf. -QÙSH- (beat down (undergrowth)), efface,

        remove marks).

There may be several other instances. It is not, however,
a common extension nor a 'live' one.

15.2.4. (2)(d) NEUTER STATIVE (ACTUAL) -al-

There appears to be no semantic difference
between this extension and the neuter stative (actual)
extension -ek- ; both indicate "being" in a state or
condition described by the verbal root.

It appears to be no longer a live extension,
and as far as I can ascertain, occurs in only a very few
instances. For example:

    -FÙDÚMàl- (be warm): cf. -thi fùthù

        (be overheated, out of breath, excited).

    -KHÙKHÚMàl- (rise, swell, expand):

        cf. -KHÛL- (grow, increase): (R1 -KHU-

        carries the idea of 'getting larger': it is

        re-iterated as R1 and R2, R3 is the Protractive

        secondary R -M- (6).

    -LÌMál- (get hurt, injured, crippled): cf.

        isiLÎMà (7) (cripple, deformed person).

15.2.5. (2)(e)   NEUTER STATIVE (ACTUAL)

EXTENSIVE ; -alal- ;

This extension is basically identical with the Neuter stative (actual) extension in -al- (2(c)).   The only difference is that the extension is here re-iterated to indicate that the condition described by the verbal root obtains in a marked degree.   It is no longer a live extension in the sense that it cannot be added to any root at will.

Examples;

-FÙMBálàl- (lie in heaps, crouch together);

    cf. -FÚMB- (heap up <u>tr</u>.)

-GÒVálàl- (be idle, be indifferent):

    cf. -GÒV- (sit idly, be indifferent)

-MBà-MBálàl- (be buried with pomp);

    cf. -MB- (dig)

-NGXÁBálàl- (stand with legs astride ; sit astride) ;

    cf. -NGXÂB- (spread out the legs)

-PHÁTHálàl- (fall on the hands, fall helpless);

    cf. -PHÁTH- (touch, handle)

-TSÀKálàl- (be thoroughly tame, be fully trained):

    cf. -TSÀK- (be tame)

15.2.6. (2)(f)   NEUTER STATIVE (EXTENSIVE);

-akal-

Semantically there does not appear to be any great difference between the significance of this extension, and the preceding species, -ek-, -ek-, -al- ; For example:

    -BHÉNGÉZek- (be exposed) and

    -FÍHLákàl- (be hidden, mysterious)

both have a straightforward neuter stative force. On

the other hand, it could be argued that while the extension

-ek- in -BHENGEZek- suggests becoming exposed at a certain

time, the extension -akal- in -FIHLakal- carries the idea

of a drawn-out process or condition.

Or again,

-LIMal- (get hurt, injured, crippled)

-ONakal- (suffer injury, suffer loss);

One might suggest that -LIMal- indicates the actual

receiving of an injury, while -ONakal- carries the sense

of the condition of being injured persisting.   The

distinction, if it exists at all, is very slight.

On the other hand, certain roots do not accept

one extension, while they are invariably used in conjunction

with another.   For example: the form -BONakal- (be

obvious, be visible) is invariably used and, as far as I

know, one never comes across the form *-BONek-.

It seems possible that the form -akal- is a

combination of -ek- with -al- ; the effect, semantically,

of two statives in series, giving rise to an extensive

stative force.

For example:

-BONakal- (be visible : be obvious)

could well be derived from *-BONek:al-, the series -ek:al-

becoming, by assimilation -akal.   (The principle of re-

iteration resulting in an intensive form is found, for

example, in the Causative-Intensive extension -isis-, and

in the Applied-Completive -elel- etc.) The only difference

here being that two dissimilar one-segment extensions,

with similar semantic force, are used to form the re-

iterated extension instead of two identical segments.

Examples:

-BÓNakàl-   (be obvious): cf. -BÔN- (see)

-ÈNZakàl-   (be done to : be hurt : be injured):

      cf. -ÉNZ- : (do, make)

-FÌHLákàl-   (be hidden, be mysterious):

      cf. -FÎHL- (hide, conceal)

-GCÌNákàl-   (be preserved): cf. -GCÌN- (keep,

      preserve)

-KHÒHLákàl- (be habitually at a loss: be evil:

      be cruel):

      cf. -KHÓHL- (embarass: escape one's

      memory)

-NCÉDákàl- (be helped; be assisted): cf. -NCÈD-

      (help)

-ÒNákàl-   (suffer injury : suffer loss):

      cf. -ÔN- (injure, wrong (tr.))

-ÒYÌSakàl- (be convinced : be persuaded):

      cf. -ÒYÍS- (persuade : overcome)

15.2.7 NEUTER STATIVE (EXTENSIVE): -ayel- (IRREGULAR) (2)(g)

Semantically this extension appears to be similar to the regular Neuter Stative (Extensive) extension, -akal- :

There is only one example that I have come across of a di-R v.r. taking this extension, viz.,

      -XÙB- (mix up things or people, of

      (different kinds): cf.

  -XÙBáyèl-[1] (be confused, complicated)

The alternative form quoted in McLaren's dictionary, *-XÙBáyàl-, is not substantiated by my informants.

---

1) Appears to be a parallel form to -SHÙMáyèl- : (tr.)
   cf. Meinhof gives *-ay- as a durative extension;
   M. and v. W., "Intro. to phonology ..." p.42 para
   21(5).

15.3.0.   PERSISTIVE ACTIONAL EXTENSION : -ek-
 (3)   _____

     Morphologically this extension is identical with
the Neuter Stative (Actual) and (Potential), but semantically
there appears to be little relationship.   On the other
hand, since the Neuter Stative (Actual) describes "being"
in a certain state or condition, it does contain the
"persistive" idea.   It could be argued, therefore, that
when carrying a stative significance, this extension is the
Neuter Stative (Actual) -ek- extension, and that when
carrying an operative significance, it is the persistive-
actional -ek-.   If this should be the case, then, again,
this is part of the same extension as found in 2(a) and (b)
above, with yet another semantic shift.

     The persistive actional extension indicates that
the action described by the verbal root is extended or
continuous or is of comparatively long duration.   I was
only successful in identifying four examples of this
extension.   There are, no doubt, others as well, though
it is one of the rarely used extensions.

For example:

    -BHÚLek- (thresh well): cf. -BHÚL- (beat out, thresh)

    -JÁKÁTYek- (walk with antics and capers): cf.

       -JÁKÁTY- (leap (like a monkey): fling about)

    -KHÚLek- (tether) : cf. *-KHÛL- (tie)

    -LÚLek- (straighten out): cf. -óLÚL- (draw out,
         stretch out, extend)[1]

---

1) cf. Para: 8.5.1.

15.4.0.   COMPLETIVE APPLIED-STATIVE EXTENSION: -elek-

(4)

This term calls for some explanation -

Obviously there are two component factors in this extension: an applied factor -el- and a neuter stative factor -ek-.   It might be assumed at first sight that this is an instance of two, one-segment extensions in series.

Against this, however, is the fact that we have such pairs of extended roots as; e.g.,

-OMélel- (become very dry, very hard, very firm) and

-OMélek- (be very firm, strong, zealous);

cf. -OM- (become dry)

and

-THENDélel- (wobble) and -THENDélek- (be wobbly)

cf. -THEND- (turn round, revolve).

These are obviously closely related intensive forms, the Applied completive extension -elel- signifying the process by which the condition is reached as described by the verbal root, and the Applied-Stative, -elek- signifying the condition attained as described therein.   In the latter it would appear that the force of an intensified, re-iterated form is not lost, the neuter stative element -ek- being substituted in lieu of the re-iterated applied element -el-.

As far as I have been able to ascertain, this Applied-Stative extension is far less frequently used than the applied-completive extension. It is not a live extension today.

Care must be exercised not to confuse this extension, -elek- with an applied plus neuter stative in series. This combination is frequently met with in such extended roots

as:

    -NQWÊN-   (have a strong desire, lust, covet)

       -NQWĒNel-   (have a desire for, lust after)

       -NQWĒNélek-   (be desirable)

Here -el- is the one-segment Applied extension, and
-ek- is the one-segment Neuter Stative Potential
extension.

15.5.0.   CAUSATIVE EXTENSIONS:

  (5)

     There are eight sub-categories of Causative
extensions, namely,

(a)	Causative (actual)	-is-
(b).	Causative (assistive)	-is-
(c)	Causative (imitative)	-is-
(d)	Causative (intensive)	
	Two-segment	-isis-
	Three-segment	-isisis-
(e)	Intensive (Causative)	-isis-
(f)	Causative (Stative)	-es-
(g)	Causative (Stative)	-ez-
(h)	Causative (Stative)	-iy-

     Sub-categories (a) to (e) inclusive, are all
essentially the same extension.   In the causative (actual),
(assistive) and (imitative), there is a three-fold semantic
shift pattern.   In the (intensive) forms, under sub-
category (d) we find an intensification of the causative
(actual) extension brought about by re-iteration of the
one-segment extension.

Sub-categories (f) to (h) are distinct species, and are
dealt with under their respective headings.

15.5.1.   CAUSATIVE (ACTUAL) EXTENSION: -is-
(5)(a)   _____

        The Causative extension -is- is one which has
been recognised from the outset of Bantu study. Torrend[1]
speaks of 'Causative Verbs', and says, 'Causative verbs
are properly expressive of the efficient cause that
determines an act.'

Bryant[2] merely mentions 'causative verbs' and gives the
example of tand-isa, giving the two meanings, 'cause, make
or help to love'.

In common with most writers to date he does not refer to
the 'actual' and 'assistive' shifts of meaning, although
there is considerable difference between 'making' someone
do something and 'helping' them to do it.   At this stage
we are only concerned with what I have called the Causative
(Actual) semantic species, "cause (to do)", "make (to do)".

        McLaren[3] enlarges on the function of this
extension by saying,

        "This form indicates the extension of the action
        of the verb to a second agent .... It turns
        intransitive verbs into transitive,[4] in
        which condition they may take two objects."[5]

The frequency of incidence of this extension is high.

Examples of the Causative (Actual) extension:

    -BONis-   (shew): cf. -BON- (see)
    -CACis-   (explain, make clear): cf. -CAC- (be clear)
    -CEBis-   (give advice, counsel): cf. -CEB- (scheme)
    -DUMBis- (cause to swell): cf. -DUMB- (swell)
    -GUDis-   (smooth, iron tr.): cf. -GUD- (be smooth, sleek)
    -HLUTHis- (satisfy with food): cf. -HLUTH- (bec:satisfied)

1) J. Torrend: "Comparative Grammar etc." para 1072. 11.
2) A.T. Bryant: "Zulu-Eng: Dictionary" (1905) p. 102
3) J. McLaren: Xhosa Grammar (1926) page 111, para 76.
4) e.g. -BUY- (return, intr.) -BUYis- (bring back, tr.) etc.
5) e.g. ndabaBONisa indlela (I shewed them the way).

15.5.2.   CAUSATIVE (ASSISTIVE) EXTENSION -is-

(5)(b)

Whereas the Causative (Actual) extension indicates 'to
cause' or 'to make' to act in the way described by the
verbal root, this extension has acquired the semantic
shift of 'to help' to act in the manner described by the
verbal root.

I give rather more examples of this extension
since it has not previously been acknowledged as a
separate sub-species; e.g.,

-HLABis-   (help to stab; help to slaughter) ;
          cf. -HLAB- (stab)
-HLAKULis-[2)]   (help to hoe); cf. -HLAKUL- (hoe)
-HLINZis-   (help to slaughter; help to flay or skin);
          cf. -HLINZ- (slaughter, skin)
-LIMis-   (help to plough); cf. -LIM- (plough)
-PHEKis-   (help to cook); cf. -PHEK- (cook)
-PHUM-elel-is-[1)]   (help to succeed); cf. -PHUM- (come
                                        out, go out)
-QABis-   (help to smear the body with red ochre);
          cf. -QAB- (smear the body)
-QHUBis-   (help to drive); cf. -QHUB- (drive)
-QIQis-   (help to comprehend); cf. -QIQ- (comprehend)
-QONDis-   (help to understand); cf. -QOND- (understand)
-THWALis-   (help to carry); cf. -THWAL- (carry)

---

1) Hyphens have only been used here to isolate the
    causative extension from the preceding intensive
    applied extension.
2) or possibly -HLAKulis- < -HLAKul.-

15.5.3.   CAUSATIVE (IMITATIVE) EXTENSION : -is-

(5)(c)

        This is, strictly speaking, merely the causative
(actual) extension, but used in a specialised construction.

        Doke[1] describes this construction very concisely,

            "The Causative form, followed by a

            qualificative pronoun derived from a

            possessive with class 8 concord is

            used indicating 'to act like'."

This applies equally to Xhosa.

For example,

            Umntwana uHAMBisa okukaYise;

Literally; The child causes to walk that (way of walking)
            of his father.

    Or   :   The child walks like his father.

In the same way, we would find such examples as,

            BaHLEKisa okwabantwana;

                They are laughing like children.

            UFUNDisa okomLungu;

                He reads like a European.

15.5.4.   CAUSATIVE (INTENSIVE) EXTENSION;

(5)(d)
            -isis-   -isisis-

        This extension is the Causative (Actual) extension,
converted into the intensive form by means of re-iteration.

        In most cases, the intensive form is of the two-
segment variety.   Very rarely, it consists of three-
segments.

---

1) C.M. Doke; Zulu Grammar (1921) page 138, para 252.

For example:-

-KHÁNYisis- (enlighten fully); cf. -KHÁNY- (be

      clear, give out light)

-QÍNisis- (establish firmly); cf. -QÎN- (be fixed,

      firm, tight)

-QÓNDisis- (explain fully); cf. -QÓND- (understand)

-Vísis- (explain fully) and -Visísis- (speak out

      distinctly); cf. -V- (hear, feel)

-Wísis- (throw down violently : cause to fall heavily):

      cf. -W- (fall).

15.5.5.   INTENSIVE (CAUSATIVE) EXTENSION; -isis-
(5)(e)

      The re-iterated form of the Causative (Actual)
extension may, on the other hand, also be used with certain
verbal roots, without conveying any strictly 'causative'
idea. When it so occurs, it merely intensifies the action
described by the verbal root. For example, we find:

-CHÁZisis- (comb out finely : explain thoroughly)

      cf. -CHÁZ- (straighten out, explain)

-FÚNisis- (search thoroughly); cf. -FÛN- (seek, wish)

-GÁNDisis- (tramp thoroughly, stamp well); cf.

      -GÁND- (tramp, stamp)

-NGQÍNisis- (assert positively); cf. -NGQÍN-

      (testify, bear witness to)

-TYÉLisis- (narrate explicitly: narrate in detail):

      cf. -TYÉL- (tell, inform)

15.5.6.   CAUSATIVE STATIVE EXTENSION; -es-
(5)(f)

      This extension is very rare. It indicates
bringing about a state or condition described by the
verbal root. It is not a live extension.

Example:

     -AMBes- (clothe officially - adorn)

The di-R v.r. *-AMB- is no longer extant, but through comparison with other extensions of this root[1] it is obvious that it must have existed.

The possibility of it having a connection with the ideophonic root -thi wambu (throw on a garment) cannot be overlooked.

The root -THWES- (put on the head, crown with) could be a regular di-radical v.r.   On the other hand it might also be a variant of -THWAL- (carry (on the head)).   If the latter is the case, then both these roots would be extensions of a mono-R v.r. -THU, with the stative extension -al- > -THWal- and the Causative Stative extension -es > -THWes-, respectively.

It would be unwise to be over dogmatic on this point.

15.5.7.   **CAUSATIVE STATIVE EXTENSION; -ez-**
(5)(g)

     This extension must be classified under the 'Causative' extensions, but with the proviso that it differs semantically from the preceding causatives.   I have used the term 'Causative Stative' to describe it, because this extension indicates bringing about a state or condition similar to that described by the verbal root.

It is interesting to note that its consonantal element is -z-, similar to the factative secondary radical -Z~, which has a similar semantic influence, viz; "the factative radical indicates action that brings about a certain state or condition ....."[2]

---

1)   e.g. -AMBath- (contactive extension); -AMBul- (Reversive actional extension).   cf. para 8.7.0.

2)   cf. Semantic significance of Secondary radicals: See para 4.8.0.

Examples:-

-HLÁMBez- (purify); cf. -HLÁMB- (wash)

-KHÁNYez- (contradict): cf. -KHÀNY- (deny, be clear of)

-KHÀWÙLez- (make haste); cf. -KHAWÙL- (reach to, be

        bounded by)

-LÈNYez- (dart out the tongue); cf. -LÊNY- (lick,

        dart (as a flame))

-NQÁMLez- (lay crosswise); cf. -NQÁML- (cut off,

        cut short)

-NQÚMLez- (put across); cf. -NQÚML- (cut off)

-PHÉPHéz- (blow); cf. -PHÊPH- (avoid, be nimble)

-PHÚMez- (bring out, bring over); cf. -PHÚM-

        (come out, go out)

-Wòz- (take over, ferry across); cf. -W- (fall)

-YÁLez- (give an order, commission); cf.

        -YÁL- (instruct, command)

Compare also -

-FÙDÚMez- (cause to become warm); cf. -thi fùthù

        (be over-heated, out of breath) and

        *-FÚDÚM-, -M~ being the protractive

        radical conversion extension.

 KHÙKHÚMez- (cause to expand, rise); cf.

        *-KHÚKHÙM- (swell)

15.5.8.   CAUSATIVE (STATIVE) EXTENSION: -iy-
(5)(h)

       This is an extension very rarely met with. In
fact there are only two examples that I can quote with
any degree of certainty.

       As with other extensions, earlier writers have
sometimes tended to fail to differentiate between
Radical Extensions, of the form -C~, and Extensions, of
the form -vc-, with which we are dealing in this chapter.

Both Werner[1] and Doke[2] refer to a Causative

in -ya, but in each case, it is a radical extension to

which they refer, and not an extension _per se_.

Werner writes[1] in this connection:

> "It has not been thought necessary to take any
>
> notice here of the causative in -_za_ and other
>
> variations arising from the presence of certain
>
> consonants in the stem.   The causative in -_ya_
>
> is a distinct form, sometimes found side by
>
> side with the others."

While Doke[2] states :

> "Of the two types of (causative) suffix
>
> shewn, -isa is the commoner in all the
>
> languages, and is still a living suffix,
>
> while -_ya_ is no longer living.   This -_ya_
>
> is, however, the primary and basic causative
>
> suffix, while -_isa_ is secondary and composite..."

The two examples of the Causative (stative) extension

-iy- are :

-HLÁZíy- (make fresh, revive, renew):

> cf. uHLAZa (11)(fresh, green grass: spring)
>
> (-HLÂZ- is obviously a multi-functional
>
> root with the idea of reviving, being
>
> fresh etc.)

-THîy- (from -THÍ:iy-) (give a name): literally

> (cause to say (a name))

(Note, when a child is given a name, the phrase is

> " ukuTHiya igama." McLaren[3] also holds this
>
> view of the origin of -THîy-).

1) A. Werner, "Bantu Languages" (1919) p. 148
2) C.M. Doke, "The Southern Bantu Languages" (1954) p. 68
3) cf. J. McLaren: Xhosa Grammar: (1936): p. 210, para 147.

15.6.0.   CONNECTIVE EXTENSION: -an-

(6)

        This extension has in the past usually been
referred to as the 'reciprocal' extension. My reason
for selecting the term 'connective' is given below.
Before doing so, however, the background on this extension
is briefly reviewed.

Background:

        Torrend[1] does little more than refer to 'Reciprocal
Verbs', stating that they take "the suffix -ana."
Bryant[2] also merely mentions them. Werner[3] adds, "The
reciprocal in -ana implies, as may be gathered from the
name, an act done by two or more people to each other."
Doke[4] adds that,

        "Certain reciprocals have a slightly different
        significance[5] from the plain idea of reciprocal
        action, in that they are intransitive or neuter
        in force, carrying also the idea of association.
        It is noteworthy that, in certain Central Bantu
        languages, such as Lamba, a definite Associative
        suffix -ankana or -akana is still in use."

        This is another extension that has developed two
semantic streams. Hitherto this has been referred to as
the 'reciprocal' extension. This term, however, only
takes into account one of the two semantic shapes. I have
therefore decided to accept the general term 'connective',
since this implies that more than one agent is involved
in the action described by the verbal root.

1) J. Torrend (1891) 'Comparative Grammar of S.A. Bantu
    Languages', page 280, para. 1084.
2) A.T. Bryant: 'Zulu-Eng. Dictionary' (1905) p. 103.
3) A. Werner (1919) 'Bantu Languages' p. 151.
4) C.M. Doke (1921) 'Zulu Grammar' para. 343
5) Different, that is, from the sense of 'by one another' etc.

Then there are the two different relationships which give
rise to the sub-categories: namely:

    (a) Connective reciprocal extension,

    (b) Connective reciprocal completive extension,

    (c) Connective associative extension.

15.6.1.   CONNECTIVE RECIPROCAL EXTENSION : -an-
(6)(a)

       The connective reciprocal extension indicates that
there are two agents (or more) involved in the action
described by the verbal root, and that they carry out
this action in relation to one another, according to the
sense of the verb.   The significance of this extension
is, therefore, equivalent to the English "each other", or
"to each other" or "for each other" etc.
For example:

  -BONan- (see each other) from -BON- (see)

  -BAMBan- (seize each other : contend with one another)

      from -BAMB- (hold, seize)

  -CELan- (request each other); from -CEL- (ask, request)

  -NCEDan- (help one another); from -NCED- (help)

  -GCINan- (take care of one another; from

      -GCIN- (keep, preserve)

  -DLULan- (pass each other by); surpass each other)

      from -DLUL- (pass)

  -FOHLan- (break each other's heads); from -FOHL-

      (break down, break in)

  -KHANDan- (knock against each other); from

      -KHAND- (beat out, hammer)

This is a very active extension, and may be used with
most verbal roots where the sense allows.

15.6.2. RECIPROCAL (COMPLETIVE) EXTENSION: -anan-
(6)(b)

As far as I know there is only one example of
this completive extension. Basically it indicates that
the action described by the verbal root is carried out by
two or more agents, in relation to one another. Morpho-
logically it is a re-iteration of the one-segment,
Reciprocal extension -an-. Semantically it is identical
with the one-segment species, but it indicates more com-
plete action. The one example I have to offer is:

-Vánàn- (understand each other perfectly:

be on very friendly terms with one another).

15.6.3. CONNECTIVE ASSOCIATIVE EXTENSION: -an-
(6)(c)

When used as the connective associative extension,
the semantic significance is that two or more agents acted
in the manner described by the verbal root "together".
Sometimes the extended verb is used as it stands, as in

SaBONana ngeCawa -

We met (together) on Sunday.

At other times, this extension is followed by the second
agent, and connected with the preposition na- (with), as in

SaHLANGana nabo ekhaya -

We met (together) with them at home.

This is a far less active usage of the extension than the
reciprocal usage.

Examples of the connective associative extension
include:

-DÌBàn- (meet together (with)): cf. -DÎB-

(fill up a hole, mingle, mix).

-FÙM-án- (obtain): the di-R v.r. *-FÛM- is no longer

in use.

-HLÁNGan- (meet with): the simple verbal root *-HLÀNG-

is no longer in use; but the multi-functional

root -HLANG- is found in the nominal form

uHLANGa (11)(stem, tribe, race, etc.)

with the idea of 'togetherness' etc.

-XÚBan- (mix up together): (tr.) cf. -XÙB- (mix up).

15.7.0.   ABUNDANT   EXTENSIONS

(7)   WITH Ex VOWEL -u- :

Extensions containing the vowel -u- have either

an 'abundant' or a 'reversive' significance. Torrend[1]

was one of the earliest writers to draw attention to this

fact when he said,

"Reversive and Expansive verbs agree

in taking identical suffixes."

He would probably have been more accurate had he said that

the vowel -u- in extensions may carry either a 'reversive'

or 'expansive' semantic force.[2]

Some writers, including Doke[3], strangely enough,

refer to -ulul- as a reversive extension. He quotes, for

instance, the roots -VÌMB- (cover) and -VÚMBulul- (uncover)

in support of this. However, although there is a

reversive factor involved in these two roots, it lies in

the radical vowel of R1, rather than in the extension.

R1 -VÌ- in -VÌMB- is replaced by R1 -VÙ- in -VÚMBulul-.

-VÌ- and -VÙ- in this case belonging to the same rhizeme,

1) J. Torrend: (1891): "Comparative Grammar of S.A. Bantu
    Languages": page 279, para 1080.
2) The 'reversive' semantic force of -U- as a radical
    vowel is seen in the R1 of -THÁTH- (take) and -THÙTH-
    convey away) respectively.
3) C.M.Doke: "Zulu Grammar" (1931) para 370.

but with -VÙ- as the reversive of -VÌ-. The extension
-ulul- merely acts as an 'abundant' extension to -VÙMB-
(uncover).

McLaren[1] also speaks of -HLÀMBulul- as the
reversive of -HLÀMB- (wash), whereas it is so patently
an abundant extension, giving the meaning 'wash thoroughly'.

15.7.1.   ABUNDANT ACTIONAL EXTENSION: -ul-
   (7)(a)

          This extension indicates that the action
described by the verbal root is carried out thoroughly.
It may occur with certain roots as a one-segment extensioñ,
-ul-.
In others it takes the reduplicated form, obviously
indicating a doubly thorough action, -ulul- (see under
7(b)).

     Examples of the one-segment extension include:-
       -HLÙBul- (strip off); cf. -HLÙB- (moult, discard)
       -HLÙNGul- (shake, shift); cf. -HLÙNG- (shake, shift)
       -THÙTHul- (carry off wholly); cf. -THÙTH- (take
                       or convey away)

15.7.2.   ABUNDANT ACTIONAL EXTENSION: -ulul-
   (7)(b)

          This two-segment extension is really identical
with the one-segment extension mentioned in (7)(a) above.
The only difference is that it is here re-iterated, making
it more 'abundant'.   It seems, however, that certain
roots accept the one-segment extension, and others the
two-segment form.   The forms are not interchangeable.
As far as I can ascertain, this is not a very live

1) J. McLaren: 'Xhosa Grammar' (1936) p. 122.

extension.

Examples include:

-HLAMBulul- (cleanse thoroughly): cf. -HLAMB- (wash)

-HLAZulul- (spread out, expose utterly, squander)

    cf. -HLAZ- (expose, disgrace)

-HLUBulul- (strip off completely): cf. -HLUB-

    (moult, discard)

-KHOTHulul- (finish the lot, scrape out):

    cf. -KHOTH- (lick)

-MBulul- (search out): cf. -MB- (dig)

-NABulul- (stretch out completely):

    cf. -NAB- (stretch oneself out)

-THUNTulul- (walk mincingly, trip along):

    cf. -THUNT- (walk lightly)

NOTE:

    There is one extension form which presents an
interesting problem. The problem, however, lies rather
in the meaning attaching to the simple verbal root, than
to the extension.

    The simple verbal root is -ONG- for which the
following, somewhat contradictory meanings are given:

    (a) Nurse, take care of, look after (the sick)

    (b) Bring up sparingly.

These two alternative meanings are, apparently, in
themselves the reverse of one another.

    The extension form, however, -ONGulul- is
usually given the one meaning "feed up with nourishing
food."

    It would be possible, therefore, to regard
-ulul- as the abundant actional extension of (a) or
as the reversive actional of (b).

15.7.3. ABUNDANT STATIVE (COMPLETIVE) EXTENSION -uluk-
(7)(c)

This extension is the stative equivalent of the abundant actional extension -ulul-.   Certain of the verbal roots which accept the latter also take the stative form. It would appear that the extension is not so live as to be applicable to all such roots.

The Stative element is typically introduced by the consonantal element -k- in the second segment.

Examples:

-HLÀMBúlùk- (be full cleansed)

        cf. -HLÀMBúlùl- (cleanse thoroughly);

        cf. -HLÀMB- (wash)

-HLÙBúlùk- (peel off, come off intr.);

        cf. -HLÙBúlùl- (strip off completely)

        cf. -HLÚB- (moult, discard)

-NÀBúlùk- (stretch out completely intr.)

        cf. -NÀBúlùl- (stretch out completely tr.)

        cf. -NÂB- (stretch oneself out).

15.8.0.   REVERSIVE EXTENSIONS.
(8)

The main characteristic of the Reversive extension is the 'reversive' semantic force of the extension vowel /u/ in these extensions.

In the same way that we find, within a given rhizeme[1] radicals which are closely related, but differ in some respect through the substitution of a different vowel, a similar position obtains in the simple and reversive extensions.

---

1) cf. Rhizeme etc. para: 2.7.0.

For example, in the Primary Radicals of -THÁTH- (take)
and -THÚTH- (take away), we have R1 -THÁ-and R1 -THÚ-
respectively.   The reversive (or destructive) character
of -THÚ- is due to the radical vowel /U/ : -THÁ- and -THÚ-
belonging to the same rhizeme.

These reversive extensions are few and far between, and
they must be regarded as almost inactive, since they
cannot be used with just any root the speaker may desire.

There are five species met with, but all are uncommon.
They are:

(a)	Reversive Neuter Stative	-uk-
(b)	Reversive Persistive Actional	-uk-
(c)	Reversive Actional	-ul-
(d)	Reversive Causative	-us-
(e)	Reversive Actional (Completive)	-uluk-

15.8.1.   REVERSIVE NEUTER-STATIVE EXTENSION: -uk-
(8)(a)

        This extension is related to the Neuter Stative
(Actual) (2(a)) extension, -ek- which indicates being in
the state or condition described by the verbal root. The
substitution of the reversive-significant extension vowel
/u/ in place of /e/, supplies the reversive idea in the
extension.

Examples of this extension are very uncommon, and the
extension itself can no longer be regarded as live .
The two examples I quote below both belong to the di-R
vowel-verbal root species of the root: namely,

   -ÀHLúk-   (be separate, be parted (intr.)) [1]

   -ÁLuk-   (go into seclusion, be circumcised)[2]

---

1) See para: 17.7.5.
2) See para: 17.7.4.

15.8.2.   REVERSIVE PERSISTIVE ACTIONAL EXTENSION: -uk-
(8)(b)

This extension is related to the Persistive
Actional extension : -ek- (3); the substitution of the
reversive-significant /u/ in the extension supplying the
reversive element.   It indicates that the action described
by the verbal root persists in not taking place.

So far I have only one example of this extension to quote:
namely,

  -MK- (go away, depart, set out):

   Zulu has the form -MUK- (s.m.) Actually this

   is not a di-R v.r. but the mono-R v.r. (i)M~

   (stand, stop) with the reversive durative

   actional extension -uk-. A comparison of

   the semantic shape of the mono-R v.r. and

   its extended form makes this clear.

15.8.3.   REVERSIVE ACTIONAL EXTENSION: -ul-
(8)(c)

While the vowel -U- as a radical vowel occurs
comparatively frequently with reversive semantic force,
the frequency of incidence of this extension, where the
extension vowel -u- obviously carries the 'reversive'
significance, is very low.

  I quote two examples below, where the reversive
force is obvious from comparison with the di-R verbal
root : namely,

   -BUKul- (refuse its young (as a cow)): desert its

      nest (as a bird)): renounce, disown)

      cf. -BUK- (take care of, look at with admiration)

   -LANDul- (put one off, refuse, make excuses):

      cf. -LAND- (follow up, pursue)

Another example of this extension is found in

-PHÉNDùl- (turn over : answer). The di-R root,
*-PHEND- is no longer in use. Its form,[1] however,
suggests the idea of 'remaining in position', which
would be consistent with -ul- being the reversive
extension.

There is also the di-R vowel verbal root -AHLùl-
(separate, divide tr.)[2]

The di-R root is no longer extant. It would have been
*-ÁHL-, with -A- as Rl, carrying the idea of 'remaining
intact', or 'remaining together'. It is almost certainly
derived from an earlier root, *- ɣA-, where / ɣ /
represents a lost consonant of uncertain identity.

-AMBul- (wear old, ragged clothes): cf.
-AMBàth- (clothe oneself), provides a further
example of this extension.[3]

15.8.4.   REVERSIVE CAUSATIVE EXTENSION: -us-
(8)(d)

This extension may be regarded as related to the
causative (actual) (5a) extension -is-, the reversive
element being introduced by the reversive extension vowel
/u/.   It indicates causing the action described in the
verbal root not to take place.

This is another extension that is very rarely found.
I can offer two examples only at this stage: namely,
The verbal root -Mus- (Do not!) which can never be used
alone, but only in conjunction with a main verb in the
infinitive.   In this construction -Mus- is used to
indicate a prohibitive imperative : e.g.,
Mus' ukuthetha!   Do not talk!

1)   cf. Meinhof's noun class (16) -pha (locative);
        R2, -ND- Protractive (6).
2)   cf. Para: 17.7.5.
3)   cf. Para: 8.7.0.

It is actually the mono-R v.r. -(i)M$^{<}$ (stand, remain)
with the reversive causative extension -us-. When used
in the manner described it would be equivalent to the
English colloquial idiom of

> "Don't stand talking - do something!"

Then there is the root, -ALus- (herd (stock))；
probably from an earlier root * -ɣAL-[1] where / ɣ / is
a lost consonant of uncertain identity).

If we accept the basic meaning of *-AL- as 'spread out',
'herding' would be to cause the cattle not to spread out,
but remain in one particular area.

15.8.5.   REVERSIVE ACTIONAL (COMPLETIVE)； -uluk-
(8)(e)

     The reversive actional (completive) extension is
very rare.   I have only one example to offer, and the
extension will best be described by giving the example
and then analysing it, viz：

    -PHASuluk- (resist stubbornly, refuse to yield)

The di-R v.r. is no longer in current use.   There is,
however, a parallel extended form in

    -PHASalal- (get scattered, get loose)[2]

Normally we might have expected the reversive actional
(completive) extension to have taken the form -ulul-, a
re-iteration of the reversive actional extension -ul-.
As sometimes happens, however, the second segment of a
re-iterated extension assumes a form with a variant
significance ； in this case it is the -uk- of the
reversive persistive actional extension[3] which takes

1) cf. Meinhof's *-   ala (spread out)； cf. para： 17.7.5.
2) Already dealt with under the Neuter Stative Actual
     (Intensive) extension ； -alal- (2(e)), para： 15.2.5.
3) cf. 8(b) above ； para： 15.8.2.

the place of the second segment in this completive form.
Its occurrence in place of the normal actional form serves
to emphasize the prolonged action described.

15.9.0.   PROTRACTIVE STATIVE EXTENSION: -am-
(9)

        This extension indicates that the action or
condition described by the verbal root is continuing. It
is seldom met with, and is not live .

Examples:

    -ÓTHàm- (sit basking (in the sun); live idly)):
            cf. -ÓTH- (heat up, warm up tr): bask).

    -PHÁPHam- (be watchful, be lively):
            cf. -PHÁPH- (be attentive, open out)

    -XÁKam- (be concerned, be anxious):
            cf. -XÂK- (puzzle, perplex)

NOTE: A strong relationship is noticeable between
        this extension -am-, and the secondary radical
        -M~ (6), which also carries a Protractive
        semantic force, and is frequently used as a
        radical extension to verbal roots.[1]

15.10.0.   CONTACTIVE EXTENSION: -ath-
(10)

        The contactive extension indicates an action
involving contact, often contact with some part of the
body, and often involving the hand or other part of the
body.

---

1) cf. Significance of Secondary Radical: para: 4.8.0.
        and Radical Extensions; Chapter 11.

It is an extension very rarely met with, and is
not live .

Examples:

-AMBath- (dress oneself). The di-R v.r. is now
no longer in use.[1]

-NYINath- (close up a hole (by pressure)):

cf. -NYIN- (press together between the

fingers : restrict).

Here again, there is an obvious relationship between the
contactive extension -ath- and the contactive secondary
radical -TH~ (10). The secondary radical is used
extensively as a radical extension, while the extension
-ath- is rare.

, 15.11.0.   PASSIVE EXTENSION : -w-, -iw-
  (11)

The passive indicates that the subject of the
verb is acted upon, in the manner described by the verbal
root, by an agent.
Whereas most extensions have the form -vc-, or multiples
thereof, the passive is now indicated by the extension
-w- (or -iw-), according to the root to which it is attached.
The rules controlling these forms are stated below.
In all probability, the passive extension was originally
the vowel /u/, later becoming the semi-vowel, to avoid
two vowels following one another (when the terminative
followed).

---

1) cf. Para: 8.7.0.

BACKGROUND:

Werner[1] classes the passive as an extension[2] as also does Doke.[3] Ziervogel[4], on the other hand, deals with the passive under verbal tense suffixes. Bennie[5] argues that as it stands "in a much closer relation to the active than these (extension) forms do, it seems better to retain it in the conjugation of the verb. In the active, the action is described from the point of view of the agent. In the passive it is described from the point of view of the person or object acted upon, but the action itself is not modified."

In reply to this, it could be said that, for instance, the action itself is not modified in the reciprocal extension form: it merely comes from either side at the same time.

My own conclusion is that the passive fulfils the conditions of the definition of an extension, in that it is suffixed to a simple verbal root, is detachable from it, and may be used or discarded at the will of the speaker, and does not alter the basic idea expressed by the verbal root.

The passive extension is the most active of all the extensions, as it can be applied to any verb, which, semantically, can be so extended.

The forms and usage of the passive extension are summarised as follows:

1) A. Werner: 'Bantu Languages' (1919) p. 147.
2) Although she does not, of course, use the term 'extension'.
3) C.M. Doke (1931) "Zulu Grammar" p. 126, para 320.
4) D. Ziervogel (1952) 'Swazi Grammar' para. 94.
5) W.G. Bennie (1939) 'Xhosa for Xhosa Speaking', page 97.

(i)   The form -w- is used when it is suffixed to
        a di-radical or multi-radical verbal root and
        followed by one of the following verbal
        terminatives:

                -a,   -anga,   -e   .

(ii)   The form -iw- is used when it is suffixed
        to a mono-radical, or vowel-verbal di-radical
        root.

(iii)   The form -iw- is used when it is suffixed
        to a verbal root and followed by the perfect
        tense verbal terminative -e- (the short form
        of the perfect terminative).

Examples:

(i)   (ukuBONa   (to see)
        (
        (uku-BONwa   (to be seen)

        (akaBONanga mntu   (he has not seen anyone at all)
        (
        (akaBONwanga ngamntu (he has not been seen by
                                    anyone at all)

        (ukuze aBONe   (that he may see)
        (
        (ukuze aBONwe   (that he may be seen)

(ii)   (ukwAKHa indlu   (to build a house)
        (
        (KusAKHiwa indlu   (it is still being build, a house:
                        a house is still being built)

        (ukuPHa   (to give)
        (
        (umntwana uPHiwe isonka   (the child is given bread)

(iii)   (ukuBETHa   (to beat)
        (
        (indoda imBETHile umntwana - (the man has beaten
        (the child)
        (
        (umntwana uBETHiwe yindoda - (the child was beaten
                                    by the man)

The process of palatalisation comes into
operation when the passive extension is preceded by
a labial consonant.   Under these circumstances, the
labial gives way to the corresponding palatal.   This
process may not only affect the sound immediately
preceding the extension; it may operate retrogressively
in any radical except the primary radical.

These changes occur on the following basis;

IN SIMPLE VERBAL ROOT;		IN EXTENSION;	
Ejective bilabial	/p/	Ejective prepalatal	/tsh/
Voiceless Aspirated		Voiceless aspirated	
bilabial	/ph/	prepalatal	/tsh/
Implosive bilabial	/b/	Ejective palatal	/ty/
Voiced bilabial	/bh/	Voiced prepalatal	/j/
Voiced bilabial	/mb/	Voiced prepalatal	/nj/
Voiced bilabial nasal	/m/	Nasal palatal	/ny/

Examples;

Prepalatalisation taking place in radicals immediately
preceding the passive extension.

/p/   /tsh/ -KRÁPà (lap, throw into the mouth); -KRÁTSHwà

/ph/ /tsh/ -BÔPHà (bind, tie); -BÔTSHwà

/b/   /ty/   -HLÁBà (stab, pierce); -HLÁTYwà

/mb/ /nj/   -BÁMBà (hold, seize); -BÁNJwà

/m/   /ny/   -THÛMà (send); -THÛNYwà.

Prepalatilisation may take place through retrogressive
assimilation, in a radical other than that immediately
preceding the passive extension ;

This phenomenon may occur in various circumstances ;

When the passive extension is accepted by a verbal root

which already has one or more extensions : e.g.,

-BHÙBH- (perish)

-BHÚBHìs- (cause to perish, destroy)

-BHÚJìsw- (be destroyed)

-BHÙJísèlw- (be destroyed at)

-THÛM- (send)

-THÙMél- (send to)

-THÙNYélw- (be sent to)

-THÙNYélwàn- (be sent to one another)

Certain di-radical v.r., with an abbreviated extension

in Xhosa, have the full form in Zulu, for example,

    Xh: -LÂMì- is -LAMul- in Zu: (intervene)

The full form in Xhosa should be -LÁMùl-[1]. When

this extended root accepts the passive extension, the

lost extension vowel is usually restored - thus we have

    -LÂMì-   -LÁNYùlw- (passive).

---

1) This extension -ul- may either be the abundant actional
   or the reversive actional. Since the original di-R
   v.r., *-LAM- is no longer in use, we have no grounds
   for semantic comparison to determine whether it is an
   'abundant' or a 'reversive' extension.

CHAPTER 16

16.0.0 EXTENSIONS: IN SERIES

16.1.0 So far we have considered individual exten-
sions.   Extensions may, however, be used in series.
Such sequences may have two, three or even four or
more in series.

In the following pages, examples are given of
typical combinations of extensions in series.   The
only extension not included in these examples is the
passive.   The reason for this being that the passive
extension may be used wherever the meaning of the verb
permits it.   To have included examples of the passive
in each case would have added considerably to the bulk
of this study, and nothing to its usefulness.

I have employed hyphens to divide the extensions
from the verbal root and from one another.   This is
merely a device of convenience, and should not be taken
as a general procedure.

16.1.2 EXTENSIONS IN SERIES: ORDER OF SEQUENCE

There appears to be no hard and fast, tidy rule
whereby we can say that the various extensions when
occurring in series, must follow any given sequence.

Basically, it is a matter that has been deter-
mined by the consideration of semantic emphasis desired.
In the first instance, no doubt, it was so determined,
possibly by trial and error.   Today, however, the va-
rious extended root forms have been standardized, and
the onus does not lie on the individual speaker.

It has been observed that certain verbal roots accept certain extensions, while they reject others. This occurs even where the semantic shape of the root would appear sympathetic to a given extension.[1] This principle of arbitrary selectivity appears to obtain also in relation to the order in which the extensions may be used in series, in regard to any given verbal root. Certain combinations of extensions in series, which might appear permissible in theory, are just not used in practice.

16.1.3 ROOTS WITH TWO EXTENSIONS IN SERIES.

Where there are only two extensions in series, the question of priority is comparatively uncomplicated. Once we have determined the character of the semantic shape desired in the extended root as a whole, we are safe in using that extension as the primary extension.

For example: if we take the root

-BÉTH- (hit, strike, etc.)

We have two alternative forms of the extended root, each using the same extensions, but in a different order. e.g.

-BÉTH-án-ìs-[2] and -BÈTH-ís-àn-.

Both extended roots have a common di-Radical v.r.,

-BÉTH- with the basic idea of 'hitting'

'beating' etc.

---

1) cf. Extensions : para 14.3.4
2) Hyphens are used here merely to clarify the division between the root and the several extensions.

16.1.4 In order to determine the semantic shape of the
extension in its first stage, the di-R v.r.
must be taken, with the primary extension: viz.,
-BĒTH-án-ìs-̀ :   -BÉTHan-̀

Extended idea: hitting one another:
to complete the picture, the secondary exten-
sion is then included, making up the final
extended idea of :-BÉTHán-ìs-̀ causing to hit one
another.

Applying the same principle to -BĒTH-ís-àn-̀, we have the
di-R v.r., with its primary extension: viz.,

-BÉTH-ìs-̀

Extended idea: Cause to hit or Help
to hit:to complete the picture, the secondary extension
is then added, indicating that this action of "causing or
helping to hit" is being mutually carried out by two
agents : thus

-BÈTHís-àn-̀

"helping one another to hit" (presumably some third
party!).

16.1.5 The process today is almost reversed however.
While in the first instance, the extended roots had
extensions added to them in order of semantic priority,
building up the speaker's meaning, today the speaker
has little latitude in building up his own extension
sequences. These have been built up for him, and with
the passing of time, the sequences have become standar-
dized. Now he selects the accepted sequences to ex-
press the meaning he wishes to convey. And that, after
all, is what happens in any established language.

16.1.6 To demonstrate further that, apart from seman-
tic considerations, there is no hard and fast order of
precedence in extension sequences, let us take three
extensions, namely,

-el-   (applied)

-is-   (causative)

-an-   (connective)

We find these three extensions, used in series, but in
varying sequences, in the following extended roots:

(i)   -GQĪB-   (finish): cf. -GQĪB-el-is-an-

(say good-bye for the last time).

(ii)   -BHĪJ-   (twist, turn): cf. -BHĪJ-el-an-is-

(intertwine).

(iii) -BÛY-   (return): cf. -BÛY-is-el-an-

(restore to each other).

(iv)   -HLĀB-   (stab, pierce): cf. -HLĀB-an-is-el-

(stab by accident; offend).

16.1.7 As will be seen from these examples, we have
these variations in the order of sequence:

(i)	-el-	-is-	-an-
(ii)	-el-	-an-	-is-
(iii)	-is-	-el-	-an-
(iv)	-an-	-is-	-el-

16.1.8 Possibly there are other variants, but the
above will suffice to show that no one extension has
permanent precedence over another, since,

-el-   occurs   as Ex 1 in (i), (ii)

                  as Ex 2 in (iii)

                  as Ex 3 in (iv)

-is-   occurs   as Ex 1 in (iii)

                  as Ex 2 in (i), (iv)

                  as Ex 3 in (ii)

-an-   occurs   as Ex 1 in (iv)

                  as Ex 2 in (ii)

                  as Ex 3 in (i), (iii)

16.1.9   The indications all point to the hypothesis that the order of sequence of extensions in series is subject to the order of priority of the semantic influence of the extensions involved.

16.2.0   EXAMPLES OF EXTENSIONS IN SERIES

16.2.1   Applied - Applied: (-el-el-).

-BÔN-   (see) :   -BÒN-él-èl- (make provision for: take advantage of).

-ÉNZ- (do, make): -ÈNZ-él-èl- (do for another, do instead of another)

-QHÙB- (drive):   -QHÙB-él-èl- (drive to, on behalf of)

-SÎK- (cut): -SÌK-él-èl- (cut into for : confer favours).

16.2.2   Applied - Neuter Stative: (el-ek-).

-BÉTH- (hit): -BÈTH-él-èk- (be fastened, be nailed down)

-FAN- (resemble, be like) -FAN-el-ek- (become fit-
ting).

-LIND- (wait): -LIND-el-ek- (be expected)

-HLEL- (pick out, select): -HLEL-el-ek-
(be picked out, as inferior: be shunned)

-VUM- (agree): -VUM-el-ek- (be approved of).

16.2.3 Applied - Neuter Potential: (-el-ek-).

-THEND- (turn round (tr.): make roll, revolve (tr.):
-THEND-el-ek- (be wobbly)

-VUM- (agree): -VUM-el-ek- (be allowable).

16.2.4 Applied - Persistive Actional: (-el-ek-).

-BHUD- (be delirious: wander in mind): -BHUD-el-ek-
(press in and out frequently).

16.2.5 Applied - Causative: (el-is-).

-RWATSHAZ- (rustle):
-RWATSHAZ-el-is- (cause to rustle, trample
down)

-LAND- (follow, pursue):
-LAND-el-is- (cause to pursue)

-QOSH- (join, pin, button (tr.)):
-QOSH-el-is- (make button up)

-VAL- (close):
-VAL-el-is- (say good-bye).

16.2.6 Applied - Causative (Stative): (-el-ez-).

-JIK- (turn round; change):
-JIK-el-ez- (go round about : revolve around)

-ÔM-   (bec: dry, hard):

      -ÔM-él-ez- (make firm)

*-THUB- (cf. (i) THÙBà (5) (Opportunity):

      -THÙB-él-ez- (go thro' an opening).

16.2.7   <u>Applied - Reciprocal</u>: (<u>-el-an-</u>).

-ÁB-   (divide):

      -ÀB-él-àn- (divide between one another)

-ÂKH-   (build):

      -ÀKH-él-àn- (build for each other: build near to one another)

-BHÂL- (write):

      -BHÀL-él-àn- (write to one another)

-BHÌJ- (turn, twist):

      -BHÌJ-él-àn- (twist round each other)

-BÀNG- (claim):

      -BÀNG-él-àn- (claim for each other).

16.2.8   <u>Applied - Associative</u>: (<u>-el-an-</u>).

-BÀMB- (hold, seize):

      -BÀMB-él-àn- (seize for their respective parties)

-BÉK- (put, set, place):

      -BÈK-él-àn- (run parallel)

-BÔPH- (tie, bind):

      -BÔPH-él-àn- (conspire together)

-BÚTH- (gather):

      -BÙTH-él-àn- (gather together (in one place))

-BÛY- (return):

      -BÙY-él-àn- (be reconciled)

-GÀLÉL-[1]) (no longer extant):

    -GÀLÈL-él-àn- (combine resources : pool
    wages)

(or *-GAL- : -GÀLèl-él-àn-).

16.2.9 Neuter Stative (Actual)- Applied: (-ek-el-).

-ÁND- (increase):

    -ÀND-ék-èl- (be increased for, upon)

-BHÀD-ék-èl- (be placed flat for):

    -thi bhàdà (fall down flat): *-BHÀD- (s.m.)
    (extinct root today).

-GÀLÈL-[1]) (pour):

    *-thi gàlé > -GÀLÈ:L- (pour : tr.): or,

    *-GÂL- > -GÀLél- :

    -GÀLÈ:L-ék-èl- (rush violently into): or,

    -GÀLèl-ék-èl- (rush violently into)

-HÈND- (tempt, try):

    -HÈND-ék-èl- (be tempted to ...)

-LÁHL- (leave, throw away, forsake):

    -LÀHL-ék-èl- (be lost to).

16.2.10 Neuter Stative (Actual)- Causative: (-ek-is-).

-BÉK- (honour, respect):

    -BÈK-ék-ìs- (make honourable)

-LÁHL- (leave, throw away, forsake):

    -LÀHL-ék-ìs- (deceive, lead astray)

---

1) This could have been an extended root from a hypo-
thetical di-R ideophonic stem -thi gale > -GÀLÈ:L-
(-L~ being effective (4) RCE).

Or the simple stem may have been *-GAL- with stan-
dardised applied Ext. -el- (1).

*-SIB-   (extinct):

    -SIB-ek-is-   (make downcast)

-XHWAL-   (be perverse, unreasonable):

    -XHWAL-ek-is-   (bring loss upon)[1]

-YAL-   (instruct, command, warn):

    -YAL-ek-is-   (give warning to : make

    cautious).

16.2.11   <u>Neuter Stative (Actual) - Associative</u>:

                (<u>-ek-an-</u>).

-LAHL-   (leave, throw away, forsake):

    -LAHL-ek-an-   (be deprived of).

16.2.12   <u>Neuter Stative (Potential) - Completive</u>

        <u>(Applied)</u>:   (<u>-ek-elel-</u>).

-THUM-   (send):

    -THUM-ek-elel-   (be obliging, willing, handy).

16.2.13   <u>Causative - Applied</u>:   (<u>is-el-</u>).

-AND-   (increase):

    -AND-is-el-   (increase to, increase for)

-AZI   (know):

    -AZ-is-el-   (give information to)

-BHEK-   (look towards):

    -BHEK-is-el-   (refer to)

-BAL-   (count, recount):

    -BAL-is-el-   (narrate to, narrate for)

---

1)   cf. -XHWALek-   (suffer loss).

-GQAL- (observe, notice):

-GQAL-is-el- (observe carefully)

-LAND- (pursue)

-LAND-is-el- (trace for).

16.2.14 Causative - Neuter Stative (Actual): (-is-ek-).

-BHINQ- (gird):

-BHINQ-is-ek- (be girded)

-CHOK- (be neat, be in order):

-CHOK-is-ek- (to have received a finish)

-CON- (be under taboo : be inviolable):

-CON-is-ek- (be put under taboo)

-NGCWAL- (sit close (like children : be bright)):

-NGCWAL-is-ek- (be made bright : be made holy)

-KHANY- (shine, give light, be clear):

-KHANY-is-ek- (be shining)

-QIN- (be firm):

-QIN-is-ek- (be fixed : be convinced).

16.2.15 Causative - Causative Assistive: (-is-is-).

-VUM- (agree, sing):

-VUM-is-is- (help to make sing).

16.2.16 Causative - Reciprocal: (-is-an-):

-AZI- (know):

-AZ-is-an- (inform one another)

-BHEK- (look towards):

-BHEK-is-an- (face one another)

-BHINQ- (gird):

    -BHINQ-is-an- (gird each other)

-HLAL- (remain, sit):

    -HLAL-is-an- (take turns in waiting).

16.2.17 Causative - Associative: (-is-an-):

-BUTH- (gather, congregate):

    -BUTH-is-an- (lie down together (to die))

-LAL- (lie down: sleep):

    -LAL-is-an- (lie down together; or in a

company).

16.2.18 Causative - Completive (Applied):

                  (-is-elel-).

-AZI (know):

    -AZ-is-elel- (make fully known)

-BHEK- (look towards):

    -BHEK-is-elel- (aim at, tend to).

16.2.19 Causative Assistive - Reciprocal:

                  (-is-an-).

-BHUL- (beat out, thresh):

    -BHUL-is-an- (help each other to thresh)

-CEL- (ask, request):

    -CEL-is-an- (help each other to ask)

-S-[1) (bring): ((i)S-):

    -S-is-an- (help each other to bring).

---

1) cf. *-Yis- > -S-.

✗ 16.2.20 Causative (Stative - Persistive Actional:
(-ez-ek-).

-XÌN- (press, throng, impede):

-XÌN-éz-èk- (press in, oppress, distress).

⚡ 16.2.21 Causative (Stative) - Applied: (-ez-el-).

-PHÙNG- (sip, taste):

-PHÙNG-éz-èl- (give to drink (in repeated,

small quantities)

-SÓNDel- (approach) < *-SÒND-:

-SÒND-éz-èl- (cause to approach to).

✓ 16.3.1 Causative (Intensive) - Neuter Stative
(Actual): (-isis-ek-).

-V- (hear): ((i)V-):

-V-isís-èk- (be distinctly heard).

16.3.2 Causative (Intensive) - Causative
(Actual): (-isis-is-).

-V- (hear): ((i)V-):

-V-isís-is- (cause to be clearly heard:

speak out distinctly).

16.3.3 Causative (Intensive) - Reciprocal:
(-isis-an-).

-V- (hear): ((i)V-):

-V-isís-àn- (be in complete agreement with

each other).

16.3.4 Neuter Stative Actual (Extensive) - Causa-
tive Actual: (-alal-is-).

-PHÀNG-   (do with speed or violence : hurry):

    -PHÀNG-alál-is- (break up utterly (tr.))

-TSHÀB-   (be silent : come to nothing):

    -TSHÀB-alál-is- (destroy utterly,

    annihilate).

16.3.5   <u>Neuter Stative Extensive - Applied</u>:

                <u>(-akal-el-)</u>.

-BÔN-   (see):

    -BÒN-akál-el- (be transparent : be left

    destitute)

-ÔN-   (injure, harm, hurt):

    -ÒN-akál-el- (suffer injury in :

    suffer loss in).

16.3.6   <u>Neuter Stative Extensive - Causative</u>

       <u>Actual: (-akal-is-)</u>.

-ÂZI-   (know):

    -AZ-akál-is- (cause to become known)

-CHÌTH-   (spill, scatter, waste):

    -CHÌTH-akál-is- (cause to be ruined,

    cause to be utterly destroyed)

-ÉNZ-   (do, make):

    -ÈNZ-akál-is- (hurt, injure)

-GCÌN-   (keep, preserve):

    -GCÌN-akál-is- (keep absolutely safe)

-ÔN-   (injure, harm, hurt):

    -ÒN-akál-is- (injure, spoil)

-QÒND-   (understand):

    -QÒND-akál-is- (make to understand fully).

16.3.7 <u>Completive (Applied) - Applied:</u>
<u>(-elel-el-)</u>.

-PHÁTH- (touch, handle, deal with):

-PHÀTH-elél-èl- (rest the hand on).

16.3.8 <u>Completive (Applied) - Neuter Stative</u>
(<u>Actual</u>): (<u>-elel-ek-</u>).

-BÉK- (put, set, place):

-BÈK-elél-èk- (be well piled up)

-DÎB- (fill up : mix together):

-DÌB-elél-èk- (be filled up, by earth

falling in)

-NXÍB- (put on clothes, tie up):

-NXÌB-elél-èk- (be connected with).

16.3.9 <u>Completive (Applied) - Causative:</u>
<u>(-elel-is-)</u>.

-LÙNG- (be right, be fitting):

-LÙNG-elél-ìs- (make equal, make parallel)

-PHÚM- (come out, go out)

-PHÙM-elél-ìs- (make succeed : help to

succeed).

16.3.10 <u>Applied (Intensive) - Reciprocal:</u>
<u>(-elel-an-)</u>.

-LÙNG- (be right, be fitting):

-LÙNG-elél-àn- (be equal to, be parrallel

with)

-PHÁTH- (touch, handle):

-PHÀTH-elél-àn- (lean on each other)

-THÌ (say, do):

 -TH-èlél-àn- (co-operate: unite for a purpose)

-VÚS- (waken, arouse):

 -VÙS-èlél-àn- (arouse each other).

16.3.11 Completive (Applied) - Associative: (-elel-an-).

-NXÍB- (put on clothes, tie up)

 -NXÌB-èlél-àn- (be connected together).

16.3.12 Applied - Applied - Reciprocal: (-el-el-an-).

-THÊTH- (speak):

 -THÈTH-èl-él-àn- (speak on behalf of one another).

16.3.13 Applied - Neuter Stative Potential - Applied: (-el-ek-el-).

-NQWÈN- (have a strong desire; covet):

 -NQWÈN-èl-ék-èl- (be desirable for : excite a desire for)

-VÙM- (agree):

 -VÙM-èl-ék-èl- (be lawful for).

16.3.14 Applied - Neuter Stative Actual - Applied: (-el-ek-el-).

-VÚS- (awaken):

 -VÙS-èl-ék-èl- (be aroused : be alerted).

16.3.15 <u>Applied - Neuter Stative Actual - Causative</u>: (<u>-el-ek-is-</u>).

-FAN- (resemble):

    -FAN-el-ek-is- (make fitting).

16.3.16 <u>Applied - Causative - Associative</u>:

        (<u>-el-is-an-</u>).

-ANan-[1] (give in exchange):

    -AN-el-is-an- (give mutual satisfaction)

-GQIB- (finish, complete):

    -GQIB-el-is-an- (say good-bye for the last time).

16.3.17 <u>Applied - Reciprocal - Causative</u>:(<u>-el-an-is-</u>).

-BHIJ- (turn, twist):

    -BHIJ-el-an-is- (intertwine)

-QUMB- (swell : become angry):

    -QUMB-el-an-is- (make angry with each other).

16.3.18 <u>Neuter Stative Actual - Applied - Applied</u>: (<u>-ek-el-el-</u>).

-XHOM- (hang, hang up, hold up):

    -XHOM-ek-el-el- (be connected up to).

16.3.19 <u>Neuter Stative Actual - Completive (Applied) - Associative</u>:

        (<u>-ek-elel-an-</u>).

---

1) cf. -ANel- (be sufficient for), para 17.7.4

-XHOM- (hang up, hang, hold up):

-XHOM-ek-elel-an- (be well connected up
with).

16.3.20 Neuter Stative Actual - Applied -
Reciprocal: (-ek-el-an-).

*-AL- (obsolete : idea of joining, adding):

-AL-ek-el-an- (join with each other :
come near each other in birth).

16.3.21 Neuter Stative Actual - Associative -
Causative: (-ek-an-is-).

-LAHL- (leave, throw away, forsake):

-LAHL-ek-an-is- (deprive of).

16.3.22 Neuter Stative Actual - Causative -
Reciprocal: (-ek-is-an-).

-LAHL- (leave, throw away, forsake):

-LAHL-ek-is-an- (lead each other astray).

16.3.23 Causative - Applied - Neuter Stative
Actual: (-is-el-ek-)

-M- -(i)M- (stand):

-M-is-el-ek- (be established)

-QIN- (be firm):

-QIN-is-ek-ek- (be made firm)

16.3.24 Causative - Applied - Applied:
(-is-el-el-).

-QIN- (be firm):

-QIN-is-el-el- (make firm on behalf of).

16.3.25 <u>Causative - Applied - Reciprocal</u>:
            <u>(-is-el-an-)</u>.

-BÛY-   (return):

     -BÙY-ìs-él-àn-   (restore to each other)

-M~ , -(i)M~ (stand):

     -M-ìs-él-àn-   (confirm each other)

-SHÎY-   (leave, leave behind):

     -SHÌY-ìs-él-àn-   (compete against one

     another in).

16.3.26   <u>Causative - Applied - Associative</u>:
            <u>(-is-el-an-)</u>.

-ÉND-   (marry : used of the woman):

     -ÈND-ìs-él-àn-   (inter-marry with people at

     a distance)

-FÁN-   (resemble):

     -FÀN-ìs-él-àn-   (dress alike)

-SEBÉNZ-   (work):

     -SEBÈNZ-ìs-él-àn-   (work together for).

16.3.27   <u>Causative - Neuter Stative Actual -</u>
            <u>Causative</u>:   (-is-ek-is-).

-ZÁL-   (become full, increase):

     -ZÀL-ìs-ék-is-   (bring to fulfilment).

16.3.28   <u>Associative-Causative-Neuter Stative</u>
            <u>Actual</u>:   (-an-is-ek-).

-BÉTH-   (hit, strike):

     -BÈTH-àn-ís-èk-   (be interrupted).

16.3.29 <u>Associative-Causative-Applied</u>: (<u>-an-is-el-</u>).

-FÙTH-   (puff, blow):

   -FÙTH-àn-ís-èl- (smother)

-HLÀB-   (stab):

   -HLÀB-àn-ís-èl- (stab by accident: offend)

-LÎNG-   (try, attempt, test):

   -LÎNG-àn-ís-èl- (take an example from:

   apportion to)

-PHÂMB-   (turn back, change places):

   -PHÂMB-àn-ís-èl- (parry a blow: set at

   variance with)

-QHÀTH-   (cheat):

   -QHÀTH-àn-ís-èl- (cheat one another out

   of).

16.3.30 <u>Contactive - Causative - Applied</u>:
                (<u>-ath-is-el-</u>).

*-ÁL-   (obsolete -*ɣala : spread out):

   -ÁL-àth-ís-èl- (point out the way to).

16.3.31 <u>Contactive - Causative - Reciprocal</u>:
                (<u>-ath-is-an-</u>).

*-ÀMB-   (obsolete : idea of covering (the body)):

   -ÀMB-àth-ís-àn- (share a covering (e.g.

   blanket) with one another).

16.3.32 <u>Associative - Causative - Reciprocal</u>:
                (<u>-an-is-an-</u>).

-KHÂND-   (hammer, forge):

   -KHÀND-àn-ís-àn- (crowd upon each other)

-SHÎY- (leave, leave behind):

--SHÎY-àn-ís-àn- (vie with one another).

16.4.1 Neuter-Stative Extensive - Causative - Applied: (-akal-is-el-).

-BÔN- (see):

-BÔN-àkàl-ís-èl- (make clear to)

-CHÍTH- (spill, waste, destroy):

-CHÍTH-àkàl-ís-èl- (destroy utterly for).

16.4.2 Neuter Stative Extensive - Causative - Reciprocal: (-akal-is-an-).

-CHÍTH- (spill, waste, destroy):

-CHÍTH-àkàl-ís-àn- (destroy each other utterly).

16.4.3 Neuter Stative Actual (Extensive) - Causative - Reciprocal: (-alal-is-an-).

-TSHÀB- (be silent, come to nothing):

-TSHÀB-àlàl-ís-àn- (annihilate each other).

16.4.4 Reciprocal - Causative - Applied- Reciprocal: (-an-is-el-an-).

-PHÂMB- (change places : change sides ...):

-PHAMB-àn-ís-èl-àn- (exchange places with one another)

*-AN- (obsolete : Idea of being sufficient):

-AN-àn-ís-èl-àn- (give in exchange to one another).

CHAPTER 17

17.0.0 <u>EXTENDED VERBAL ROOTS: MISCELLANEOUS</u>

17.1.0 Doke[1] includes under the heading of "Miscel-
laneous derivative suffixes, "the Persistive in
-ezela". He goes on to say:

> "Verbs ending in this suffix originate
>
> either in simple stems, or in stems
>
> with a seeming applied suffix. They
>
> indicate action gradually, persistently
>
> or forcefully carried out".

Louw[2] also makes reference to -ezela as a persistive
suffix. But Xhosa does not only have verbal roots
ending in -ezel-, but also a number of other apparently
two-segment extensions. .

17.2.1 In the opinion of the writer, many of these
extended forms are not examples of a di-R v.r. with an
extension[3] but are due to various combinations of
radical extensions, radical extensions with extension,
or extensions in series.

A number of such examples are given below and analysed.

17.2.2 There are extended roots with the following
forms of extension:

---

1) C.M. Doke: Zulu Grammar: (1931) para: 368.
2) J.A. Louw: „Handboek van Xhosa" (1963) para:
    30.42.
3) 'Extension' in terms of this thesis: cf. Chp. 15.

-alaz-, -elez-, -iliz-, -oloz-, -uluz-.

Following the analogy of Doke's lead, I tried first
to regard these as being variants of a two-segment
extension, possibly with some species of persistent
variety. The main difficulty, however, lay in the
fact that the vowels were assonic with the simple
root: e.g.

-alaz-	:	cf.	-GÀNGálàz̀- (walk boldly)
-elez-	:	cf.	-SÈKélèz̀- (go round about)
-iliz-	:	cf.	-KRWÌXíliz̀- (swallow doen with difficulty)
-oloz-	:	cf.	-LÒNDólòz̀- (preserve with care)
-uluz-	:	cf.	-RÙBúlùz̀- (crawl along the ground).

17.2.3 It is characteristic of the Extensions[1] that
they consist of the form -vc-, -vcvc- etc., and that
they retain their characteristic extension vowel regard-
less of the nature of the root vowel in the simple root.

On the other hand, it is characteristic of Radical Ex-
tensions that they assume the same vowel as the root
vowel of the simple root[2]: for example:

-GÙDL̀- (rub, knock against): cf. -GÚDL:ÙZ̀-
(shake violently) etc.

---

1) Using the term as in this thesis: cf. Chapter 15.
2) cf. Para 11.2.0.

17.2.4   I therefore submit that it is consistent
with the known facts that where we find extended roots
with the extension forms

     -alaz-,   -elez-,   -iliz-, -oloz-, -uluz-

unless there is clear evidence to the contrary, that
such extensions should be recognised as two radical
extensions, in series, and that they should really be
indicated as:

     -AL:AZ-, -EL:EZ-, -IL:IZ-, -OL:OZ-, -UL:UZ-.

Putting this in the form of a formula, it would be

     ~L: ~ Z-

The vowel being unidentified, and this indicated as
/~/, since, where radical extensions are concerned,
the vowel is determined by the root vowel of the simple
root.

The following examples will serve to show that this hy-
pothesis does, in fact, work out in practice.

17.2.5   <u>ROOTS WITH TWO RADICAL EXTENSIONS IN
          SERIES</u>:

          <u>-AL:AZ-</u>

cf.   -GÂNG-   (be bold, be impudent):
                 -GÀNG:ÁL:ÀZ- (walk boldly)

cf.   -KHÀB-   (kick): -KHÀB:ÁL:ÀZ- (kick out)

cf.   -NÂB-   (stretch oneself out): -NÀB:ÁL:ÀZ-
                 (lie with limbs outspread)

cf.   -NGXÂB-   (spread out the legs): -NGXÀB:ÁL:ÀZ-
                 (straddle)

cf.   -PHÁTH-   (touch, handle): -PHÀTH:ÁL:ÀZ-
                 (do clumsily, inefficiently)

cf. -XHÁS- (prop up, support): -XHÀTH:ÁL:ÀZ- (bear up, stand up against).

N.B. In -XHÁS-, R2 is Causative -S~ (8), while in -XHÀTH:ÁL:ÀZ-, R2 is Contactive -TH~ (10).

17.2.6 **-EL:EZ-**

cf. -KWÈKW- (speak obscurely, in metaphor): -KWÈKW:ÉL:ÈZ- (talk around the point, mislead)

cf. -SÉK- (mark out a circle for a hut foundation): -SÈK:ÉL:ÈZ- (go round about: seek to do by indirect means)

cf. -THÈND- (turn round, revolve): -THÈND:ÉL:ÈZ- (cut or make circular).

17.2.7 **-IL:IZ-**

cf. -KRWÌX- (abuse : <u>tr.</u>): -KRWÌX:ÍL:ÌZ- (swallow down with difficulty)

17.2.8 **-OL:OZ-**

cf. -HLÒHL- (cram, stuff, push in): -HLÒHL:ÓL:ÒZ- (push forward by the neck)

cf. -LÒND- (preserve, protect): -LÒND:ÓL:ÒZ- (preserve with care, protect with care)

cf. -NTYÒNTY- (whistle continuously): -NTYÒNTY:ÓL:ÒZ- (persevere in, take a long time to do).

17.2.9   -U̱Ḻ:U̱Z-

cf.   -RÙQ-́   (trail on the ground):   -RÙQ:ÚL:ÙZ-́

(drag along, trail along):   cf. also

-RÙB:ÚL:ÙZ-́   (glide, crawl along the

ground)

N.B.   In each of the above examples, the

first radical extension has been

the effective -L˘ (4), and the se-

cond, the factative -Z~ (9).

17.3.0   EXTENSION   SERIES   CONSISTING   OF   REDICAL
EXTENSION   (REx)   FOLLOWED   BY   EXTENSION

17.3.1   Several di-R verbal roots accept extensions
which might well be regarded, at first, as being
two-segment extensions.   For the time being I shall
write them as though that is indeed the case.   For
example, we find

-azel-,   -ezel-,   -izel-,   -ozel-,   -uzel-

in such extended roots as;

-LÀQ-́   (be ill at ease):   cf. -LÀQázèl-́   (be
conscience-stricken)

-HLÈHL-́   (step back, retreat):   cf. -HLÈHLézèl-́
(withdraw hastily)

-DÎD-́   (confuse, flutter):   cf. -DÎDizèl-́
(flutter over, quiver in)

-MBÒMB-́   (mumble):   cf.   -MBÒMBózèl-́   (speak to
oneself)

-KRÙKR-́   (gnaw at, tear at):   cf. -KRÙKRúzèl-́
(have acidity, rumble in the stomach)

and likewise, -ozek- in, for example,

-PHŌKózèk- (swell out, as when soaked).

17.3.2   Now a characteristic of the extensions (Ex)
is that they consist of the form -vc- (or multiples
thereof), and each extension has an undetachable,
characteristic extension vowel.

17.3.3 _   In the extensions quoted above, the vowel is
not constant, in the first position, but remains con-
stant in die second position.   For example, in

-azel-, -ezel-, -izel-, -ozel-, -uzel-

the first vowel varies according to the root vowel of
the di-R v.r. to which it is attached, while the vowel
/e/ is constant in second position.

17.3.4   It therefore appears that these are not
examples of two-segment extensions, but consist of
two separate extensions of different species: namely,
a Radical extension (REx) followed by an Extension (Ex).
The following examples will illustrate this principle.

17.4.0   <u>-AZ-el-,   -EZ-el-,   -IZ-el-,   -OZ-el-,</u>
<u>-UZ-el-:   -OZ-ek-</u>.

Actually the above combination of REx followed by Ex,
are in the form of:

(a)   REx :   factative -Z- [1] (9)

Ex   :   Applied -el- (1)

---

1)   This REx is indicated as -Z- instead of the usual
-Z- to indicate that the vowel preceeding it is
determined by, and assonic with the root vowel of
the di-R v.r.

(b) REx : factative ~Z~ (9)

Ex : Persistive-Actional -ek- (3).

17.4.1 -AZ-el-

-LÀQ:ÁZ-èl- (be conscience-stricken):

cf. -LÀQ- (be ill at ease)

-NDÀND:ÁZ-èl- (flutter): cf. -NDÀND- (s.m.)

-PHÀPH:ÁZ-èl- (be nervous, flap the wings):

cf. -PHÀPH- (be attentive, open out)

-QHÀQH:ÁZ-èl- (grind the teeth : gnash the teeth):

cf. -QHÀQH- (tear open, : tease wool)

-XHÀPH:ÁZ-èl- (boil over, go helter-skelter):

cf. -XHÀPH- (eat carelessly : bubble up

in boiling).

N.B. -BÀMB:ÉZ-èl- (keep back, hinder, detain):

cf. -BÀMB- (hold, arrest)

One would expect this extension to take the

form* -BÀMB:ÁZ-èl-. Probably that is the

derivation, the :AZ- having been assimilated

to the influential vowel of the following

extension and become :EZ-el-.

17.4.2 -EZ-el-

-HLÈHL:ÉZ-èl- (withdraw hastily): cf.

-HLÈHL- (step back, retreat)

-QHÈL:ÉZ-èl- (overdress): cf. -QHÈL- (become

accustomed to)[1]

---

1) If these roots are related, there is considerable
semantic shift.

There are also roots with root vowel

-I- such as

-NÌK:ÉZ-èl- (hand around : surrender uncondi-

tionally): cf. -NÍK- (give): and

-XÌN:ÉZ-èl- (press in, oppose, distress):

cf. -XÌN- (press, throng, impede)

Here again, one would expect the forms

-NÌK:ÍZ-èl- and -XÌN:ÍZ-èl-.

Probably these were the original forms, the vowel

preceeding the radical extension having been sub-

sequently assimilated to the vowel of the extension

(Ex).

17.4.3 -IZ-el-

-DÌD:ÍZ-èl- (flutter over, quiver in): cf.

-DÎD- (confuse, fluster)

-PHÌTH:ÍZ-èl- (be mixed up, confused): cf.

(isi)PHÌTHí-PHÌTHÍ (7) (confusion).

17.4.4 -OZ-el-

-MBÒMB:ÓZ-èl- (speak to oneself): cf. -MBÒMB-

(memble).

17.4.5 -UZ-el-

-JÀC:ÚZ-èl- (tramp about in rags): cf. nominal

root (i)JÂCù (5) (tatter, rag)

-KRÙKR:ÚZ-èl- (have acidity, rumble in the sto-

mach): cf. -KRÙKR- (gnaw at, tear at)

-PHÙK:ÚZ-èl̀- (froth up, effervesce): cf. Ad-

jectival root -PHUKu-PHUKu- (shaggy,

frothy)

-RÙQ:ÚZ-èl̀- (creep along, crawl along, glide

along): cf. -RÙQ̀- (trail on the ground).

17.4.6 -ÒZ-ek-

-PHÒK:ÓZ-èk̀- (swell out, as when soaked):

-thi phòkù[1] (pour out, as of smoke).

17.5.0 <u>DI-RADICAL VERBAL ROOT WITH RELATED EXTENSION FORM:</u>

17.5.1 Where a modification of the consonantal
phoneme in R1 or R2 is found:[2]

There are certain di-radical verbal roots which have

a related extended root. These roots, however, are

not identical. A difference in the consonant of R1

or R2 is observed. There is also, in some instances,

considerable semantic shift.

For Example:

-BÀMB̀- (hold, seize)

cf. -MBÁMBìs̀- (say good-bye, bid farewell)

Ex : Causative -is- (5(a))

cf. -BHÁMBàth̀- (pat, soothe, hint at)

Ex: Contractive -ath- (10)

---

1) Probably there was a di-R v.r. * -PHÒK̀-
2) cf. Para 2.7.7.

-FÌNG- (gather up)

    cf. -FÍNGXel- (throw into a heap)

        Ex: Applied -el- (1)

-JÀNG- (wander here and there):

    cf. -JÁNQel- (lag, come late)

        Ex: Applied -el- (1)

-QÂMB- (make up a story)

    cf. -XÀMBul- (describe in detail)

        Ex: Abundant Actional -ul- (7(a)).

17.5.2 DI-RADICAL v.r. which have ceased to be
       used, but whose extended roots are still
       active. e.g.

Extended root:		Extension:
-ÁNel-	(be sufficient)	Applied -el- (1)
-BHÒMel-	(pester, molest)	Applied -el- (1)
-BHÒVel-	(be stunted)	"
-CÓMBel-	(do one's utmost)	"
-FÚLel-	(thatch a roof)	"
-FÙMan-	(obtain)	Associative -an- (6)(c)
-GCÚLel-	(mock at)	Applied -el- (1)
-GQWÁSHul-	(act, speak, with vigour)	Reversive[1] Actional -ul- (8)(c)
-HÀGel-	(grow old)	Applied -el- (1)
-HLWÁYel-	(sow, scatter seed))	"
-KHÀNGel-	(look, look at)	"
-LÙMath-	(take fire (of grass))	Contactive -ath- (10)

---

1) cf. Zulu: -GQWASH-, -GQWAB- (do anything only
   now and again).

-MÁMèl-	(listen, hearken to)	Applied -el- (1)
-MBÍTHèl-	(die unforgiving: cherish a grudge)	"
-SÓNDel-	(approach)	"
-ZÂMl-	(from -ZÁMul-) (yawn, stretch oneself) 1)	Abundant Actional -ul- (7)(a)
-ZÌMél-	(hide oneself)	Applied -el- (1)
-ZÌMéz-	(conceal tr.)	Causative Stative -ez- (5)(g)

17.6.0   ORIGIN OF THE SYLLABIC /M/ RADICAL:

17.6.1   There are certain roots in Xhosa which con-
tain an unusual factor, namely, what is often referred
to as a 'syllabic M'.

Instead of the usual shape of verbal root, viz.
-CVC- as in -BÔN- (see), they have the form -CACC-,
where C is the bilabial nasal/M/: as in

-PHÚML- (rest) and -LÁML- (intervene).

Many of these roots in Xhosa have corresponding forms
in Zulu where a vowel (invariably -U-) is interposed
between the 'Syllabic M' and the following consonant:
for example:

Xhosa: -LÁML- : Zulu: -LAMUL- (intervene)

Xhosa: -PHÚML- : Zulu: -PHUMUL- (rest).

Further, even in Xhosa, the 'lost' vowel -u- is
usually restored when the passive extension suffix
is added to the root; giving the forms: e.g.

-LÁNYULw- , -PHÚNYULw- etc.

---

1) Really a regular abundant actional extension,
    -ul- (7a) of the di-R v.r. -ZÀM- (exert oneself,
    struggle).

17.6.2   These forms in Xhosa are almost certainly
corruptions of the full forms, still found in Zulu.
For example, -LÁML- is probably a contraction of
    -LAMul- < a di-R root, *-LAM- , with an
    abundant-actional extension, -ul- (7)(a).

17.6.3   Examples of verbal roots with the form
    -CVM̲C- (where /M̲/ represents syllabic /M/):
    with corresponding Zulu forms.

Xh: -HLÓM̲:l- (cut off and set aside as Chief's
            portion : reciprocate a favour):
   cf.   Zu: -HLÓMul- (stab a buck a second time
            after it has been wounded).

Xh: -KHÚM̲:l- (extract (a tooth): remove a calf
            from suckling):
   cf.   Zu: -KHÚMul- (release something that
            is binding : extract a tooth).

Xh: -LÁM̲:l- (interpose, intervene):
   cf.   Zu: -LAMul- (intervene between two
            people or animals fighting).

Xh: -NCHÁM̲:l- (taste, take a little of):
   cf.   Zu: -NCEMul- (suck slightly (as a new-
            born calf)).

Xh: -NQÁM̲:l- (cut off, cut short):
   cf.   Zu: -NQAMul- (cut off, cut short).

Xh: -NQÁM̲:k- (be cut short, cease):
   cf.   Zu: -NQAMuk- (be cut short, cease).

Xh: -PHÁM̲:l- (wander alone; be left alone):
   cf.   Zu: -PHAMuk- (speak without thinking).
                -PHAMuz- (walk thro' water, in an
                aimless way).

In the above examples, it seems likely that the extension in -HLÓM:l-, -KHÚM:l-, -NCHÁMl-, -NQÀM:l-, -PHÀM:l-: is the Abundant actional extension -ul- (with the /u/ dropped in Xhosa).

In -NQÁM:k- it is probably an abundant neuter stative extension -uk- (with the /u/ dropped in Xhosa).

In the case of -PHÚM:l- (rest), this is almost certainly contracted from -PHÚMul-, where -ul- is the reversive actional extension.   This would be semantically consistent with -PHÚM- (go out, come out) cf. -PHÚMul- (rest).

-QHÚMK- (be smashed, crushed, burst), could be derived either from *-QHUM- with a radical extension, Neuter -K~ (2) > -QHUMU:K-, or from *-QHUM- with an extension -uk-, abundant neuter stative > -QHÚMuk-.

The root -LÚMKel- is probably derived in the following stages:

 *-LUM- (di-R v.r., meaning uncertain):

   *-LUMU:K- : -K~ being a radical extension (Neuter (2)) : the vowel taking its form from the root vowel of the di-R v.r. as is the rule where there is a radical extension.[1]

17.7.0   DI-RADICAL v.r., with R1 CONSISTING OF VOWEL, AND WITH EXTENSION:

---

1) cf. Para 11.2.0.

17.7.1   A limited number of di-radical verbal roots,
with what would appear to be a primary radical, con-
sisting of a vowel only, and followed by an extension,
have lost their original forms (without the extension)
and have now been accepted as simple verbal roots.
In most cases, these have primary radical -A-, in a
few cases, -O-.   I have not come across any instances
of initial -E-, -I-, or -U-.

17.7.2   I have tabulated a fairly full list of such
verbal roots below, giving in each instance the data
in the following order:

> Verbal root plus extension with meaning.
> Probable primitive root from which derived.
> Extension, with category and reference
> > number as tabulated in paragraph 15.0.0.

17.7.3   In classifying these roots, I have taken into
account their tonal sequences.[1]   It is found that
they fall into two categories, namely,

> (a)   Those with tonal sequence   HLL,
> (b)   Those with tonal sequence   LHL.

17.7.4   (a)   With Tonal Sequence : HLL :

-ÁLèk-   (put on, over the top of): < ˣ -AL-, < -ɣ́ala
(cover?): Ex : -ek- :   persistive-actional
(3)

---

1)   cf.   Para 18.6.2.

-ÁLuk-   (circumcise) : < *-AL- , < *-ɣala (cover)?:

Ex : -uk- : reversive-durative-actional

(8(b))

-ÁNan-   (barter) : < *-AN-, < *-ɣana (? idea of sa-

tisfying): Ex : -an- : reciprocal (6(a))

-ÁNel-   (be sufficient for): < *-AN-, < *- ɣana (idea

of satisfying ?) : Ex : -el- : applied (1)

-ÁNez-   (satisfy) : < *-AN-, < *-ɣana (? s.m.):

Ex : -ez- : causative-stative (5(g))

-ÁYam-   (lean upon) : < *-AY- , < *-ɣaɣa (?) :

Ex : -am- : protractive-stative (9)

-ÓNGam-   (stand out, stand above) : < *-ONG- , < *-ɣonga

(increase) : Ex : -am- : protractive-

stative (9)

-ÓNGez-   (augment, add to) : < *-ONG-, < *-ɣonga (in-

crease) : Ex : -ez- : causative-stative

(5(g))

-ÓZel-   (become drowsy) : < *-OZ- , < *-ɣoɣa (?) :

Ex : -el- : applied (1).

(b)   With Tonal Sequence : LHL :

-ÀHLúk-   (be separate, parted) :< *-ÂHL- < *-ɣaka

(idea of being together ?) : Ex : -uk- :

reversive-neuter-stative (8(a))

-ÀHLúl-   (separate, divide) : < *-ÂHL- < *-ɣaka (idea

of being together ?) : Ex : -ul- : reversive-

actional (8(c))

-ÀKHám- (gape, yawn) : < *-ÀKH- < *-ɣaka (be spread

out ?) : Ex : -am- : protractive-stative

(9)

-ÀLáth- (point out (with the finger)) : < *-ÂL-

< *-ɣâla (spread out) : Ex : -ath- : con-

tactive (10)

-ÀLús- (herd) : < *-ÂL- < *-ɣâla (spread out) :

Ex : -us- : reversive-causative (8(d))

-ÀPHúk- (break down (intr.)) : < *-ÂPH- < *-ɣâpa

(break?) : Ex : -uk- : reversive-neuter-

stative (8(a))

-ÀPHúl- (break down (tr)) : < *-ÂPH- < *-ɣâpa (break ?):

Ex : -ul- : reversive-actional (8(c))

-ÒMBél- (beat time for) : < *-ÔMB- < *-ɣômba (beat

(drum)) ?): Ex : -el- : applied (1).

CHAPTER 18

18.0.0 <u>TONAL SEQUENCES OF THE VERBAL ROOT</u>
        <u>(AND COGNATE IDEOPHONIC ROOTS)</u>

18.0.1   Up till now, although the tonal values have
been given for the various forms of the verbal root,
no attempt has been made to classify or interpret
them.   In this chapter the tonal patterns are now
reviewed on a comparative basis, and the sequences
classified.

18.0.2   Since full examples of all the forms considered
are already given in previous chapters, it is considered
necessary here to give only one typical example of each
form together with a reference to the section of the
thesis which contains the full examples.   This is done
in order to eliminate lengthy repetition.

18.0.3   The main purpose in this section is not to give
an exhaustive description of the tonal patterns in all
phases of the verbal root and its extensions.   Rather,
it is to establish the typical tonal sequences[1] of the
verbal root and its extensions as found in the infini-
tive.

---

1)   I have used this term rather than "tonal profile",
     (as used by Westphal) because I have only indica-
     ted the H, L or F tonemes, and have not indicated
     the full tonal profile.   cf. Prof. E. Westphal,
     "Tonal Profiles of Xhosa nominals in final syn-
     tactical position".   (1967).

18.1.1   When dealing with the tonal values of a given radical, it is reasonable to assume that it has, basically, a high or low tone.   But it must be emphasized that it will not invariably retain that same tonal value in all circumstances.

For example, it will be shown that a di-R v.r., which (in the simple form) has a low tone on the primary radical, will carry a high tone when the root accepts an extension : e.g.

-B̀A̱NG̀- (claim)   -B́A̱NGèl̀- (claim for).

In the same way, a **falling** tone will, under similar circumstances, become a low tone.

18.1.2   Westphal,[1] and Lanham[2] are careful to point out that tones are high or low according to their contrast in tone within the context of the word in which they occur.   Tones are thus not specific, but comparative, and circumstantial.

18.1.3   I have not attempted to give the complete tonal profiles (to use Westphal's term)[1] but have been content to indicate the tonal sequences in terms of H - L contrasts.   These prove sufficient to indicate characteristic patterns of tone typical of the various forms described.

---

1)   E.O.J. Westphal, "Tonal Profiles of Xhose Nominals" U.C.T. 1964.

2)   L.W. Lanham, "The Tonemes of Xhosa: A Re-Statement" Studies in Linguistics, Vol. 17. 1963).

18.2.0   Reference is also made to certain aspects of
the ideophonic roots, and with particular reference
to their tonal values.   This has been considered ad-
visable in view of the close association between the
verbal root and the ideophonic root: a phenomenon al-
ready noted in previous chapters.

18.3.0   TONAL SEQUENCES OF VERBAL ROOTS:

18.3.1   Mono-radical verbal roots:

Mono-R v.r. in Xhosa carry either a H or L
tone : e.g.

-F´~   (die)   and   -MB`~   (dig).

Full examples are to be found in para 6.3.1.   This
applies to all three types of mono-R v.r.

18.3.2   Di-radical verbal roots:

Three different tonal sequences are found in
the di-R v.r., namely HL, LL and FL, e.g.

-HÁMB-   (go)   :   -BÀNG-   (claim):
-BÔN-   (see)

Full examples of di-R v.r. are to be found in Appen-
dix B.[1]

18.4.0   TONAL SEQUENCES OF IDEOPHONIC ROOTS:

18.4.1   Mono-radical ideophonic roots may have one

---

1)   When these di-R v.r. are extended, the tonal
     sequences become modified following the prin-
     ciples to be discussed later in para 18.6.0
     et. seq.

of three tonal values: viz.,

<div align="center">

H,   L   or   F,   e.g.,

</div>

H :   -thi bhé   (bleat like a sheep)

L :   -thi ncà   (adhere to)

F :   -thi jâ   (stare, bristle)

Further examples under paragraph 12.5.3.

18.4.2   <u>Di-radical ideophonic roots</u> may have one of
four tonal sequences : namely :

<div align="center">

HL,   LL,   HH,   LH : e.g.,

</div>

HL :   -thi qhíphù   (part (of clouds))

LL :   -thi bhàdà   (fall down flat)

HH :   -thi dyúphú   (plunge into)

LH :   -thi gùmbú   (sound hollow when struck).

From my observation, it would appear that the majo-
rity of ideophonic roots in this category carry a LL
sequence.   Further examples are to be found under
paragraphs 12.5.4 - 12.21.0.

18.4.3   <u>Ideophonic roots of more than two radicals</u>
are common enough, but it is open to question whether
they should strictly be classed as tri- or multi-
radical roots.   I have not made a detailed study of
the ideophonic roots of Xhosa, but it would appear
possible that ideophonic roots, like their verbal
root counterparts, are open to extension.   Such ex-
tension being either of the radical extension[1] or,

---

1) e.g. :   -thi màkàthá (be astonished) :   cf.
             -MANGÀ:L-(s.m.) and -thi màngà (s.m.).

far more rarely, the extension[1] variety.

Since, however, no positive data is available to me at this stage, I give the forms as they stand.

It is significant to note, however, that if, for example, -thi hlàzùlùlù[1] is an extended di-R ideophonic root, its tonal sequence is different from what it would be in the extended verbal root, -HLÀZúlùl- (s.m.).

18.4.4　Various tonal sequences include:

LLL　　:　-thi bhàdàdà[2] (fall down flat)

LLH　　:　-thi màkàthá[3] (be astonished)

LLLL　:　-thi gògòlòlò (hesitate)

LLLH　:　-thi khàlàkàthá (thrust, stab)

LHLH　:　-thi phènúphènú (stagger, totter)

HLHL　:　-thi qúngqùlúkà (lie stark (naked))

LLLLL :　-thi ròxòxòxòxò (creak, as a wagon wheel).

18.5.0　__DI-RADICAL VERBAL ROOTS with related Ideophonic roots:__

18.5.1　__Derived from mono-radical ideophonic roots__ through the addition of a radical conversion extension. When this occurs, whether the tonal value of the mono-R Id. root is H, L or F, the resulting di-R v.r. will carry the tonal sequence LL or FL, e.g.,

---

1)　e.g.: -thị hlàzùlùlù (spread out, expose): cf.
　　　　-HLAZ- (expose, disgrace) and abundant
　　　　actional completive) Ext. -ulul-: cf. para
　　　　15.7.2.
2)　Further examples under para 12.20.0; 12.21.0.
3)　Further examples under para 12.21.0.

H > LL :   -thi bhú > -BHÙZ̀-

                (buzz like a bee)

L > LL :   -thi gò > -GÒL̀-

                (snap up, seize)

F > LL :   -thi jâ > -JÂL̀-

                (stare) (stare with poverty)

Further examples are to be found under paragraph

                                 12.5.3.

18.5.2 <u>Derived from di-R ideophonic roots</u> by means of the substitution of the invariable verbal terminative -a,   , for the final vowel of the ideophonic root.

While there is considerable variety in the tonal sequences of the di-R ideophonic roots, the di-R v.r. derived from or related to them, remain confined to the sequences of HL, LL or FL.

From these examples, it appears that there is considerable variation in the transition from Id. r. to v.r., (or <u>vice-versa</u>), in the matter of tonal sequences. Some of these forms are given below. There are probably other variations also, not given here.   e.g.

LL > LL   :   -thi khìthà > -KHÌTH̀-

                (get loose and fall)

LL > HL   :   -thi wùthà > -WÚTH̀-

                (decrease) (abate etc.)

LH > HL   :   -thi ngùngá > -NGÚNG̀-

                (gather, congregate)

LH > LL   :   -thi dìphé > -DÌPH̀-

                (sink (as foot in mud))

LH > FL :   -thi cìmí > -CÎM-

(extinguish)

These roots are dealt with in detail under paragraph

12.2.4.   There are instances where the di-R id. r.

has become adapted as a di-R v.r., and accepted an

extension, the di-R v.r., as such, no longer being

extant.

For example we find forms such as,

-thi màtshà (be downcast)

with a corresponding extended verbal root,

-MÀTSHék- (s.m.).

The tonal sequence of -MÀTSHék- indicates that the di-R

v.r. -MÂTSH- had the sequence FL.   Further examples

are to be found under paragraph 12.4.1.

18.5.3 <u>Tri-radical verbal root formed from a di-R</u>

<u>Ideophonic root</u> by the addition of a radical conversion

extension.   The v.r. -PHÁZÌM- (wink, blink)[1] is an

example of this process.   What concerns us here is that,

irrespective of the tonal sequence of the di-R ideopho-

nic root, when a tri-radical (extended) v.r. is formed

from it, the resulting v.r. conforms to the same tonal

sequence as a v.r. consisting of a di-R v.r. plus a

radical extension or an extension.   For example, we

find the same sequence, viz. HLL in,

-PHÁZÌM- < -thi phàzì (wink, blink)

-THÁNDÀ:Z-[2] (pray, plead), and

---

1) cf. Para 12.5.4
2) cf. Para 11.5.1

-HÁMBèl- [1] (go to, visit).

18.6.0 <u>TONAL SEQUENCES OF VERBAL ROOTS WITH EXTENSIONS</u>.

18.6.1 <u>Mono-radical verbal roots</u>:

> With one-segment extension:
> A comprehensive list of the mono-R
> v.r., together with the extensions
> which they tolerate, is given in
> Appendix C.

The mono-R v.r. retains its tonal value when accepting a one-segment extension. The sequences are, therefore :

Mono-R v.r. H plus extension > HL : e.g.,

-F< > -Fél-   (die for etc.)

Mono-R v.r. L plus extension > LL : e.g.,

-LW-> -LWèl-   (fight for).

Since there is a limited number of mono-radical verbal roots, it is desirable to give them all, together with the extensions which they tolerate[2].

Here, we are not really concerned whether these roots have a latent -i- or not. What is of more significance is whether they have a high or a low tone in the infinitive.

They are therefore grouped according to their respective tones.

18.6.2 <u>Di-radical verbal root</u>

---

1) cf. Para 15.1.1
2) cf. Appendix C.

(i)   With Radical Extension:

Di-R v.r. with tonal sequence HL or LL, become an

extended root with sequence HLL : e.g.,

-CWÍL- (cut small) > -CHWÍLÌSH-

(cut to mincemeat)

and

-FÀX- (wring out) > -FÁXÀNG- (press out).

Di-R v.r. with tonal sequence, FL however, become

an extended root with sequence LHL : e.g.

-KHÔL- (satisfy, content) > -KHÒLÓS-

(confide in, lean on)

Further examples are found under para 11.5.1.

18.6.3 Di-Radical verbal root

(ii)   With Extension (one-segment).

A similar pattern emerges, as with the radical

extension : namely

di-R v.r. HL or LL plus extension > HLL : e.g.,

-HÁMB- (go, travel) > -HÁMBèl- (go to,

visit)

-BÀNG- (claim) > -BÁNGèl- (claim for)

di-R v.r. FL plus extension > LHL, however, e.g.,

-BÔN- (see) > -BÒNÍs- (show).

Further examples are found under paragraphs 15.0.1 -

15.11.0.

As will be seen from a study of the examples of Ex-

tensions, (Chps. 15 & 16) the tonal sequence of

extensions follows the same pattern, under any given

circumstances, irrespective of the species[1] of Ex-
tension involved.

18.6.4   Similarly, di-R verbal roots with additional
extensions, conform to the formula given in paragraph

18.8.0.

It is sufficient to give only brief examples of each
group (classified according to the number of syllables
involved, since the original tone sequence of the di-R
v.r. does not affect the issue at this stage of syllable-
number .

Di-R v.r. with three Extensions : ⋗LLHLL : ·

     e.g. :   -ÉNZ– (do)   -ÉNZ-àkál-ìs– (injure)

          -VÚS– (awaken)   -VÚS-èl-ék-èl–

Di-R v.r. with four Extensions : ⋗LLLHLL :

     e.g. :   -TSHÀB– (come to nothing)

          -TSHÀB-alàl-ís-àn–

          (annihilate each other).

Further examples may be found under paragraphs 16.3.1 -

16.3.32.

18.6.5   Di-Radical Verbal root with two segment Ex-
tension.

     Di-R v.r. with sequence HL, LL or FL all have

     the invariable tonal sequence of LHLL : e.g.

     -BÉTH– (hit)   -BÉTH-án-ìs– (cause to hit each

          other)

---

1)   i.e. Whether it be the Applied, Causative, Associa-
     tive etc.

-JÌK- (turn)   -JÌK-él-èz- (revolve around)

-CÊL- (ask)   -CÊL-él-àn- (ask each other

for).

Whether the two segments are two separate segments

in series, or constitute one two-segment extension,

the sequence remains unchanged : for example :

-PHÚM- (go out, come out)

> -PHÚM-élèl- (succeed)

-GCÌN- (keep) > -GCÌN-àkàl- (be preserved)

-CÊL- (ask) > -CÊL-ísìs- (ask earnestly for)

Further examples are to be found under paragraphs

16.2.1 - 16.2.21.

18.6.6   Di-R v.r. with three Extensions : > LLHLL :

e.g.,

-FÁN- (resemble) > -FÁN-èl-ék-ìs- (make

fitting)

-VÙM- (agree) > -VÙM-èl-ék-èl- (be permis-

sible for)

-THÊTH- (speak) > -THÊTH-èl-él-àn- (speak on

behalf of one another)

Also, in the same way,

-ÈNZ-àkál-ìs-,   -NXÌB-èlél-èk-

-ÀZ-àkál-ìs-

Further examples are given under paragraphs 16.3.1 -

16.3.32.

18.6.7   Di-R v.r. with four Extensions : > LLLHLL :

e.g.,

-PHÂMB-̀   (change places, change sides)

>-PHÀMB-àn-is-él-àn-̀ (exchange places
with one another)

-TSHÀB-̀   (come to nothing) > -TSHÀB-àlàl-ís-àn-̀
(annihilate one another).

Further examples are given under paragraphs 16.4.1 -
16.4.4.

18.7.0   Even if the extensions to the di-R v.r. are
of different types, for example, di-R v.r. plus radi-
cal extension, plus extension, the sequences are the
same as when all the extension segments are of one and
the same species.   For example, we have -THÀNDÀ:Z-él-àn-̀
(pray for one another).   The di-R v.r., >LLHLL   as in
-THÈTH-èl-ól-àn-̀.

18.8.0   The results may be summarised in the following
Table:

Tonal Sequence of Di-Radical Verbal

Roots;   with various extensions :

Di-Radical Sequence:	Number of Extension Segments:		Extended Root: Tonal Sequence:
HL	+	ONE	HLL
LL	+	ONE	HLL
FL	+	ONE	LHL
HL/LL/FL	+	TWO	LHLL
HL/LL/FL	+	THREE	LLHLL
HL/LL/FL	+	FOUR	LLLHLL

18.9.0   <u>INCIDENCE   OF   TYPICAL   SEQUENCES</u>.

18.9.1 Sequence : LL :

Apart from the di-radical verbal roots and di-radical
ideophonic roots which carry this sequence, and which
are self-evident, this sequence is found in the
following derived forms:

    (i)   Di-radical verbal root, derived from a
           mono-radical ideophonic root (L or H)
           followed by a Radical Conversion Exten-
           sion :[1]

    (ii) Di-radical verbal root, derived from a
           di-radical ideophonic root (LL or LH),
           less its final vowel.[2]

18.9.2 Sequence : HL :

Certain di-radical verbal roots and di-radical
ideophonic roots carry this sequence.

18.9.3 Sequence : LHL :

This sequence is found in the following derived
verbal roots:

    (i)   Tri-radical verbal roots, derived from
           a di-radical verbal root (FL), followed
           by a Radical Extension.[3]

---

1) cf. Para 12.5.3
2) cf. Para 12.2.4
3) cf. Para 11.5.1 e.g. -GÀNGÁTH- < -GÂNG- etc.

(ii)   Di-radical verbal roots (FL), when
      followed by a one-segment Extension.[1]

(iii) Tri-radical verbal roots derived from
      a di-radical ideophonic root, (HL, HH,
      LH) followed by a Radical Conversion
      Extension.[2]

18.9.4   The Sequence HLL :

This sequence may be found in the following forms,
examples of which follow :

(i)   Di-radical verbal root plus Radical
      Extension.   (< HL or LL).[3]

(ii)   Di-radical verbal root, derived from
      reduplicated mono-radical ideophonic
      root plus Radical Conversion Extension.
      (< H or L)[4]

(iii) Di-radical verbal root, derived from di-
      radical ideophonic root, less its final
      vowel, plus one Extension.   (< LL).[5]

(iv)   Di-radical verbal root plus one Extension.
      (< HL, LL).[6]

---

1) cf. Para 15.2.2 e.g. -CÈLeḱ-̀ <-CÈL-̀ etc.
2) cf. Para 12.5.4 e.g. -THÌNGÁZ-̀ <-thi thìngà etc.
3) cf. Para 11.5.1 e.g. -CHWÍLÌSH-̀ < -CHWÍL-̀ etc.
4) cf. Para 12.5.5 e.g. -BHÚBHÚZ-̀ <-thi bhúú etc.
5) cf. Para 12.10.0 e.g. -TSHÚTSHÌs-̀ <-thi tshù etc.
6) cf. Para 15.0.0 - 15.8.5

(v) Tri-radical verbal root, derived from
tri-radical ideophonic root, where the
original R3 is replaced by a different
R3, and the final vowel dropped in favour
of the terminative -a.
(< LLL, LLH).[1]

(vi) Tri-radical verbal root, derived from
di-radical ideophonic root, (LL),
followed by Radical Conversion Extension.[2]

(vii) Di-radical verbal root, with non-radical-
initial vowel.[3]

18.9.5 Sequence LHLL :

This sequence is found where there is an extended ver-
bal root comprising, in all, four syllables : namely :

(i) When a di-radical verbal root (HL, LL, or
FL) is followed by two Extensions (or
segments).[4]

(ii) When a di-radical verbal root (HL, LL or
FL) is extended by means of a Radical
Extension and then accepts a one-segment
Extension.[5]

(iii) When a di-radical verbal root is redupli-
cated.[6]

---

1) cf. Para 12.20.0 e.g. -FÍNÌZ- < -thi fìnìnì etc.
2) cf. Para 12.5.4 e.g. -MPÁKÀZ- < -thi mpàkà etc.
3) cf. Para 8.5.1 e.g. -áLÀM- etc.
4) cf. Para 16.2.1 - 16.2.21
5) cf. Para 17.4.0 - 17.4.6
6) cf. Para 7.3.7

(iv) When a di-radical ideophonic root (LL or HH) is followed by a Radical Conversion Extension plus a one-segment Extension.[1]

(v) When a tri-radical ideophonic root (LLL) is converted to a verbal root, through the loss of the final vowel, and is then followed by an Extension.[2]

(vi) When a quadri-radical ideophonic root (LLLL) becomes a quadri-radical verbal root, through the loss of the final vowel.[3]

18.9.6 Sequence : LLHLL :

This sequence is found where an extended verbal root comprises, in all, five syllables : namely :

(i) When a di-radical verbal root (HL, LL, or FL) is followed by three (segments) Extensions.[4]

---

1) cf. Para 12.15.0

2) cf. -NQÙMÁM-is- < -thi nqùmàmà
   (bring to standstill)   (stand still)

3) cf. -HLÁZÚLÙL- (spread out, expose)
       -thi hlàzùlùlù (s.m.)

   N.B. This form might equally well be a typical example of the Abundant Actional (7(b)) Extension -ulul- with the di-R v.r. -HLÀZ- (expose, disgrace)

4) cf. Para 16.3.4 - 16.3.32

(ii)   When a di-radical ideophonic root (LL)

is followed by a radical conversion

Extension, plus two (segments) Exten-

sions.[1]

(iii)   When a quadri-radical ideophonic root

(LLLH) is converted to a quadri-radical

verbal root, through the loss of the

final vowel, and is followed by one

Extension (segment).[2]

18.9.7   <u>Sequence : LLLHLL</u> :

The only examples I have found of this tonal sequence
have·been where a di-radical verbal root is followed
by four (segments) Extensions.   By analogy, however,
it would seem possible for it to occur wherever an
extended verbal root consists of six syllables in all.

For Example:

-PHÀMB-àn-ìs-él-àn- (exchange places with

each other)

< -PHÂMB- (change place : change sides)

-XHÒM-èk-èl-él-àn- (be connected with)

< -XHÒM- (hang)

-BÒN-àkàl-ís-èl- (make clear to)

< -BÔN- (see).

---

1)   cf.   -thi bhèngè > -BHÈNGE:Z-él-èl-
          (flash)   (enlighten regarding)
2)   cf.   -thi khàlàkàthà   (thrust, stab)
          -KHÀLÀKÁTH-èl- (fall into, fall over)

18.10.C <u>DIFFERENCES BETWEEN TONAL SEQUENCES
OF VERBAL ROOTS AS SPOKEN IN THE
TRANSKEI AND CISKEI AREAS</u>.

18.10.1   Where a di-radical root is extended to con-
stitute a root with three syllables, whereas the
Transkei speakers use the tonal sequence LHL, the
Ciskei use the sequence HHL.[1]

18.10.2   Where an extended root consists of four or
more syllables, the Transkei usage employs a basic
<u>final</u> tonal sequence of HLL (for the last three syl-
lables) and every syllable preceding has a low tone,
L : for example:

LHLL,   LLHLL,   LLLHLL.

18.10.3   Under the same circumstances, however, the
Ciskei speaker uses a basic <u>final</u> tonal sequence of
HHL (for the last three syllables), and, as with the
Transkei usage, every syllable preceding has a low
tone, L :

For example:

LHHL,   LLHHL,   LLLHHL.

---

1)   This applies where the di-R v.r. has the sequence
     FL.

CHAPTER 19

19.0.0 SUMMARY OF CONCLUSIONS:

The following is a brief summing up of the conclusions reached in this investigation.

19.1.0 The Radical :

19.1.1 The basic unit of the verbal root in Xhosa is the Radical which consists essentially of a consonant and a vowel phoneme, indivisibly attached (viz. -CV).

19.1.2 Examples of self-contained radicals are seen in such mono-R v.r. as -THÌ, -TSHÒ, which have retained their radical vowel.

19.1.3 For the most part, however, even the surviving mono-R v.r., while being in themselves self-contained radicals, have lost their original vowel and now accept the detachable, invariable terminative -a. giving rise to forms, such as -F⌣ , -W⌣ etc. (or -C ~).

19.1.4 Only a very limited number of radicals still exist as self-contained mono-R v.r. For the most part today radicals exist as component radicals of di-R or multi-R v.r.

19.1.5 When a R occurs as a mono-R v.r., it has

'meaning'. When, however, R is a component radical of a di-R or multi-R v.r., it merely has semantic shape, or semantic influence in a certain direction.

19.2.0   The Rhizeme :

It sometimes happens that a group of R will be related to one another. They are then said to belong to the same Rhizeme. A Rhizeme may contain R which differ in their consonant or vowel phonemes, or in both. There are only minimal variants of the consonant phonemes within the rhizeme.[1]

19.3.0   The Verbal Root :

19.3.1   Verbal roots are conveniently classified according to the number cf radicals which they contain. Thus, there are a limited number of mono-R v.r., the majority are di-R v.r., and again, a very limited number of tri- or multi-R v.r.

19.3.2   Mono-R v.r., may be of three types :   namely,
    Simple mono-R v.r., (of the form -CV or
    C ⌣) :
    Mono-R v.r. with a latent initial -(i)-,
    which though it never occurs as such,
    influences certain vowels that preceed it,
    (viz: -(i)C ⌣).
    Mono-R v.r., with a non-radical initial

---

1)   e.g.   An alveolar will give place to another
             alveolar, a pre-palatal to another pre-
             palatal etc.

vowel : (viz: <u>vC</u> ~).

This initial <u>v</u>, whether latent -(i)-or an actual
vowel, is not a radical, but a probable sur-
vival of an obsolete infinitive prefix.

19.3.3   Di-R v.r. consist of a fusion of two R,
viz: -<u>CV:C</u> ~ .   These radicals are not merely in
juxtaposition, but fused in such a manner as to
constitute an indivisible di-R unit, with a definite
meaning attached.

19.3.4   The Rl carries the main semantic idea of
the v.r., while the R2 exert a semantic influence in
some direction or other : indicating transitive or
intransitive action, protracted or repetative action,
and so on.

19.3.5   The Rl invariably has a radical vowel,[1] but
the R2 in a di-R v.r., loses its characteristic vowel
in favour of a later developed terminative -a.

19.3.6   In a limited number of instances, the Rl has
lost its initial consonant, and leaves a v.r. with
the form -<u>V:C</u> ~ .   These constitute the vowel-verbal
roots.

19.3.7   Tri-R v.r. and Multi-R v.r.
         Basically the Xhosa v.r. is usually di-R.
Those v.r. which appear to be tri- or multi-R v.r.,
are frequently either di-R v.r. with Radical Exten-

---

1)   Except in most mono-R v.r.

sions, or Extensions, or they are derived from ideophonic r., to which have been added a radical conversion extension, and sometimes, in addition, an extension.

19.3.8   With the exception of -THĪ, -TSHŎ, -ÂZĪ, all verbal roots in Xhosa have lost their final vowel and accepted, in its place, an invariable terminative -a.

19.4.0   <u>Extensions to the Verbal Root</u>.

The simple verbal root may be extended by means of:

19.4.1   (i)   A radical extension, consisting of one or more R2.   Where this occurs, the radical vowel of R1 persists throughout the extended root, giving rise to an assonic vowel pattern.

19.4.2   (ii)   An extension, consisting of a phoneme made up of -<u>vc</u>-, or multiples thereof.   Instead of one single such extension, there may be a series of such extensions, following one another.

19.4.3   (iii)   A radical extension may be followed by an extension, but an extension is never followed by a radical extension.

19.4.4   Non-Verbal roots may be converted to verbal roots by one of two processes : for instance :

    (i)   An Ideophonic root, nominal or adjectival root, may be adapted to verbal usage by the loss of the final vowel, and its replacement by the detachable terminative -a.

   (ii)   An Ideophonic or adjectival root may accept a Radical Conversion Extension and thus become a verbal root.

19.4.5   The Extensions, consisting of -vc- or multiples thereof, are more loosely attached to the v.r., than the radical extensions.   They invariably follow the simple verbal root, or any radical extension thereto : they never come between the simple v.r. and a REx.

19.4.6   Though the extension modifies what might be termed the range of activity of the verb, it does not alter the basic idea described by the simple verbal root.

19.4.7   There appears to be no logical reason why certain v.r. resist certain extensions, while accepting others.

19.4.8   Extensions may be used in series to give wide flexibility to the meaning of the verb.

19.4.9   The order of sequence of extensions in
series is dependent upon the emphasis desired by
the speaker.   'No one extension has permanent
precedence over another.'   The passive extension
is the only exception to this rule.

19.5.0   Tonal Contrasts and Sequences.

19.5.1   Mono-R v.r. have either a H or L tonal
                value.
          Di-R v.r. may be HL, LL, or FL.

19.5.2   When a di-R v.r. accepts one extension
         (whether REx or Ex), the following modi-
         fications take place, Di-R v.r. HL and
         LL + Extension >HLL.   Di-R v.r. + Exten-
         sion >LHL.

19.5.3   On accepting two Extensions (of whatever
type) all three di-R v.r. (HL, LL and FL) > LHLL.

19.5.4   Every additional extension (of whatever
type) adds a further low tone to the beginning of
the root : e.g.
                LLHLL,   LLLHLL.

19.5.5   Certain regular variations in tonal se-
quence which distinguish the Transkeian from the
Ciskeian dialectic tonal patterns.   The tones in
this thesis represent the former variety.

APPENDIX A

PRIMARY RADICALS

OCCURRING IN MORE THAN ONE ROOT

N.B. The primary radicals given in the left

hand column in the following pages are

actually starred forms, since they do

not occur today as isolated radicals:

their present form in many instances,

probably being a modified form of the

original.   In order to obviate unne-

cessary repetition, I have not inserted

the asterisk.   It should, however, be

recognised that they are starred forms

in each case.

BHA̭   Idea of spreading out:

-thi bhàbhàlàlà· be widely extended

-BHÀKÁX- sew on a broad patch

-BHÀLÁKAX- sprawl on the ground, fall on

                hands and knees

BHÀ   Idea of haphazard or incoherent action:

-BHÁBHAM- be furious, rage

-BHÁDÀZ-   go slowly; speak hesitatingly

-BHÀNX-   act foolishly

-BHÀTY-   mix (food): mix things up (in speaking)

BHÀ   Idea of convulsive action:

-BHÀBH- struggle for freedom

-BHÁTYUL- beat, flog   ⌐

-BHÁNYAZ- writhe in pain

BHÂ   Idea of roaring, growling:

-BHÁRÚML- cry, roar, growl, angrily

-BHÀVÚML- growl, snarl, speak gruffly

BHÈ   Idea of exposing:

-BHÈNC- blurt out, expose, disclose

-BHÈNQ- turn inside out (garment): unfold

          (petals of flower)

-BHÈNTS- sit in exposed position

BHÈ   Idea of leaping forward:

-BHÉQuî- bound, spring loftily

-BHÈSH- outstart, outrun, outdo

BHÈ   Idea of bending:

-BHÈTY- bend back

-BHÈQ- row, paddle

BHÔ   Idea of erupting:

-BHODL- bring up wind from the stomach

-BHÒJ- stir up: stir up strife

BHÒ   Idea of growling, crying aloud:

-BHOMBÓLOZ- cry loudly: howl with grief

-BHÒNG- bellow like calf: roar in distress

BHÛ   Idea of upsetting:

-BHÙKÚL- trip up, throw down

-BHÙKÚQ- overturn, upset, capsize

 -thi bhùlùkùdù stumble, fall on the knees

BHÚ   Idea of beating

-BHÚL- beat, out: thresh

-BHÚMBUTH- beat softly, pat

BÀ   Idea of identifying:

-BÀL- count, reckon: relate

-BÁLul- pick out, select, make exception of

BÁ   Idea of contracting, coming together:

-BÂND- congeal, be cold to the touch

-BÂNDÁKÀNY- unite, come together into one

BÎ   Idea of making contact with (someone):

-BÎK- report, announce

-BÍZ- call, summon

BÓ   Idea of pressing down:

-BÓB- press down, compress

-BÓHL- fall, sink, collapse

BÒ   Idea of being overripe, bec. rotten:

-BÒL- rot, decompose

-BÒZ- be over-ripe, decaying

BÛ   Idea of holding in esteem:

-BÛK- look at with admiration, intently

-BÛS- do service at court; pay homage

CHÀ   Idea of taking one at a time:

-CHÁPHÀZ- (and -thi chàpa etc): fall in
                    drop

-CHÁPHul- take out some

-CHÀTH- take out one or more from a number

-CHÁTHÀZ- pour out carefully: let out in
    drops

CÎ   Idea of doing meticulously:

-CÌKÍD- feel with the finger, try, test

-CÌKÍZ- do work finely, with extreme care

-CÌKÓZ- speak fluently

CÎ   Idea of covering, smothering:

-CÎK- cover, put lid on

-CÎM- (and -thi cìmí) put out, extinguish
    (fire etc.)

CHÌ   Idea of scattering, spilling out:

-CHÌTH- spill, scatter, spend, waste

-CHÌZ- come out, exude

CÒ   Idea of pressing, crushing:

-CÓBÒZ- crush

-CÒF- press or feel with the hand (e.g. milk
    sac; stomach etc.)

-CÒL- grind fine

CÒ   Idea of being neat, clean, careful:

-CÒC- cleanse, purify

-CÒCÓMBel- robe oneself, dress showily

-CÒTH- walk softly

CÛ   Idea of crushing, crumbling:

-CÙBÚNG- crumble off, nibble off

-CÙKÙCez- break into small pieces, treat

with scant respect

CWÀ   Idea of being still, quiet:

-CWÀL- sit still; wait (before attacking)

-thi cwàkà be still, be silent

-CWÁTSHul- creep stealthily (as a cat)

CWÈ   Idea of cutting off a slither, thin

slice:

-CWÉCul- -thi cwè: cut off thin slice,

dip up a little

-CHWÈL-[1] peel, plane, make smooth

DÀ   Idea of rending, tearing:

-DÁBuk- part, give way, get torn

-DÁKAD- tear to pieces, mangle

DÀ   Idea of being depressed, decreased, low:

-DÁKUMB- be dejected, depressed

-DÁMBUZ- walk slowly, (as a child, or from

dignity, etc)

-DÀN- Be disappointed, discouraged, ashamed

---

1) Note, aspirated consonant in R1.

DÈ   Idea of length, being or holding at a

            distance:

-DÈD- stand back, keep at a distance,

            keep aloof

-DÈND- talk at great length, interminably

-DÈPHisel- hinder, obstruct, prevent rea-

            lization

DÈ   Idea of careless, aimless action:

-DÈBÉLÈZ- talk nonsense

-DÈNG- be slow, slack, stupid

DÎ   Idea of pounding, confusion, quivering:

-DÎB- tramp (earth): beat down; browbeat

-DÎD- confuse: fluster

-DÎKIZel- quiver, (as the muscles after

            exertion)

DÎ   Idea of filling up gap, or hole:

-DÎB- fill up a hole or gap

-DÎK- satisfy, satiate

DÌ   Idea of disintegration, falling into

            ruin:

-DÍLÌK- fall into ruins (as mud walls,

            after rain)

-DÍMal- give up in disgust

-DÌN- fatigue

-DÌNGÀ- be unsuccessful (in seeking work,

            etc.)

DÔ   Idea of being bulky, unwieldy:

-(isi)-DÔDÒ- (7) fat, inert, mass

-DÔL- bec: stiff, dull, indolent

-DÒMBÓZ- thank sententiously, with flattery

DÙ   Idea of stamping, mixing:

-DÚBHÙZ- trample (as a clod into dust, etc.)

-DÙB- mix, knead, trample together

-DÙNG- stir up, disturb

DÙ   Idea of moving about:

-DÙK- wander, wander away; get lost

-DÚKÙD- stir, move about; wear out

-DÙNGÚDel- abandon home, wander about, etc.

DÙ   Idea of rumbling:

-DÚDÙM- thunder, rumble (as a crowd in
              motion)

-DÙM- sound, shout in triumph

-DÙMŹel- hum, mutter, grumble

FÉ   Idea of doing sporadically:

-FÉD- be feckless, lazy

-FÉKÈTH- play, sport: (with   nga)
              dillydally over

FÌ   Idea of drawing in, shortening:

-FÌNG- shorten, tuck in, gather in,
              compress

-FÍNIZ- draw together (the body), make
              grimaces

FÌ   Idea of being dim, indistinct:

-(u-)FÌFÌ (11) a glimpse, indistinct view,
            inkling

-FÍPHÀL- bec: dim; bec: pale, cloudy,
            etc.

FÒ   Idea of exerting pressure upon:

-FÒC- squeeze, squeeze out

-FÒHL- break in,down(skull): depress or
            lower

-FÓTHÒK-;-thi fòtò be dented

FÛ   Idea of getting hold of, acquiring:

-FÙMÁn- come upon, reach, attain

-FÙMBÁTH- clench (fist): grasp : retain,
            comprehend

-FÛY- possess (land): breed (stock)

F⌣ 1)   Idea of being similar:

-FÁN- resemble, be like

-FÚZ- be like, resemble

GÂ   Idea of cutting short:

-GÀMLÉ1- cut short (a long story)

-GÀWÚL- cut down, hew, chop down

_____

1) Common Rhizeme.

GÈ   Idea of violent, aggressive action:

-GÉBÈNG- fall upon, kill and rob

-GÈNG- throw or burst a door wide open

-GÈQ- throw or jerk out

GÈ   Idea of unsteady action:

-GÉTYÈZ- quiver, vibrate, undulate

-GÈVÉZÈL- be weak in the knees; totter

-GÈX- reel, stagger

-GÈZ- be mad, insane, crazy

GÌ   Idea of walking, running:

-GÌDÌM- run with speed

-GÍGÌZ- move in walking

-GÍJÌM- run fast

GÒ   Idea of digging:

-GÒC- dig into

-GÓGÒD- scrape the pit bottom

-GÒMB- scoop out, hollow out

GQÌ   Idea of finishing:

-GQÌB- finish, end, complete

-GQÌL- suck or milk dry

GQÙ   Idea of covering, concealing:

-GQÙBÚTHel- cover, veil

-GQÙK- cover tracks, obliterate, conceal

-GQÙM- cover, smother, conceal, hide

GÙ   Idea of wearing away:

-GÙL- be ill: moan

-GÙMB- wear away : hollow out

HLÀ   Idea of stabbing, cutting, crushing,

              destroying:

-HLÀB- pierce, stab, slaughter

-HLÀHL- cut down, cut up etc.

-HLÁKÀZ- break up, disperse

-HLÁKul- skoffle, weed

HLÀ   Idea of cleansing:

-HLÀMB- wash, swim etc., rebuke

-HLÀNZ- cleanse, purify

HLÈ   Idea of sorting, choosing:

-HLÈL- sort out, pick out, separate

-HLÈNG- separate into good and bad: favour

HLÙ   Idea of separating:

-HLÙTH- take from by force, deprive of

-HLÙZ- strain, filter, sift

JÈ   Idea of cutting:

-JÈC-,-JÈQ- cut clean through, finish off

                     quickly

-JÈNGQ- cut across, sever

JÌ   Idea of twisting, turning:

-JÌC- plait neatly

-JÌJ- twist, turn

-JÌK- turn round, turn about

-JIKIJ- bore through

-JIL- interweave, do wickerwork

-JING- hang, dangle, swing

JO   Idea of aggressive speech, action:

-JOR- use violent, aggressive speech or

    action

-JOK- be always after, constrain: over-

    persuade

-JONGOTH- demand one's rights

JU   Idea of action carried out under

    fatigue:

-JUC-;JUCULUZ-   struggle on in spite of

    fatigue

-JUQ- be feeble, walk feebly

KHA   Idea of violent physical action

    (often aggressive):

-KHAB- kick, shoot (plants)

-KHAHLel- (and -thi khahla): throw or set

       down with force

-KHANKATH- beat often, cuff, pommel

KHI   Idea of coming loose and falling:

-KHIHLIK- slip, fall off: froth over

-KHITHIK- get loose and fall

KHU   Idea of repetition:

-KHUBel- repeat (a statement): recall

      (a judgement)

-KHUMBUL- remember, recollect, keep in mind

KHÛ   Idea of expanding:

    -KHUKHUMal- rise, swell, expand (in boiling)

    -KHUNYalal- rise, swell (in boiling):

          increase (in strength)

    -KHUL- grow

KHWÉ   Idea of getting out of the way:

    -KHWÉBuk- get out of the way, move away

    -KHWÉLel- get out of the way

KHÙ > KHWÀ and KHWÌ

    Idea of crying out:

    -KHWÀZ- call loudly, shout to

    -KHWÌN- whine, whimper

LÀ   Idea of desiring:

    -LÀMB- become hungry

    -LÀNGÀZélel- long for, desire eagerly

LÊ   Idea of movement (to and fro):

    -LÊNY- wag (e.g. a dog's tail): dart

        here and there (as flames)

    -LEKÉNY- lick off (flesh, with rough

        tongue: as a lion)

LÈ   Idea of running:

    -LÈQ- run like cattle : race cattle

    -LÉTSHÈZ- run about, gad about

LÌ   Idea of passing time:

    -LÍBal- idle, loiter, waste time, delay

    -LÌND- wait for, watch for

LÔ   Idea of careful, sustained action:

-LOLONG- ,-LONGA--LONG-   observe carefully:

              look at in detail

--LÔNDL-   spy out : see far off

LÙ   Idea of being straight, correct:

-LULam-   be meek, submissive, obedient

-LULek-   straighten out (something bent),

              put right, correct

-LUNG-   be right, suitable, fitting

MBÀ   Idea of striking, patting:

-MBAKRAZ-   slap, hit, box

-MBAMBAZel-   pat, beat one's breast (for

              joy or sorrow)

--MBATYul-   thrash, flog, scourge

MÊ   Idea of calling, summoning:

-MÊM-   summon, invite, proclaim

-MEMEZ-   call out

MÌ   Idea of swallowing:

-MINY-   swallow outright, drain, exhaust

-MIZ-   swallow quickly, gulp down etc.

MPÀ   Idea of slapping (with hand) etc.:

-MPAKAZ-   slap with hand, smack etc.

-MPANGAZ-   treat unkindly: talk loudly

              about etc.

NÀ   Idea of fixing upon:

-NÀK- accuse falsely; get another into

        trouble

-NÀTH- catch in net, swallow up

NDÌ   Idea of being fickle:

-NDÍBÀZ- hesitate, be irresolute, undecided

-NDÍLàth- be changeable, fickle wavering

-NDÌTH- hesitate, doubt, be undecided

NDÍ   Idea of pestering continually:

-NDÍKÌND- speak with vehemence and gesticu-

        lation

-thi ndì make a noise, rumble

-NDÌND- keep hammering at, keep soliciting to

NGCÂ   Idea of doing in feeble manner:

-NGCÀKÁC- grow thinly : have a few grains on

        ear

-NGCÀMBÁZ- walk feeble : hobble along

NGQÙ   Idea of restless, tortuous movement:

-NGQÙNG- be restless, uneasy, fidget with

        pain

-NGQÙNGQ- dance with contortions

NGX⌃ 1)   Idea of standing, with legs apart:

-NGXÂB- spread out the legs

-NGXÊK- have the legs wide apart, or the

        mouth open

---

1) These belong to the same Rhizeme.

NKWÁ   Idea of feeling insecure:

-NKWÁNTY- tremble with fear

-NKWÁTH- feel unsafe : have an uneasy

              conscience

NQÚ   Idea of breaking, cutting off:

NQÚNQ- chop or cut fine : mince : chop up

NQÚTHUL- pluck out, pull away, cut off

NTLÀ   Idea of rough action:

-NTLAL- knock about : dash or throw down

-NTLÁKÁZ- do coarsly : -thi ntlàkà (s.m.)

-NTLÀNTL- quarrel : disagree

NTSO   Idea of ambiguous, indecisive action:

-NTSÓNKÓTH-) speak indirectly, ambiguously

-NTSÓMPÓTH-) mysteriously

NWE   Idea of stretching, spreading out:

-NWÉNWÉZ- spread, blaze (of veld fire etc.)

-NWÉB- stretch, draw out

NYÂ   Idea of persistent, patient action:

-NYÀMezel- bear, endure, persevere

-NYÀNYÁTH- do again, repeat an action

-NYÀNZel- force, constrain, compel, bring

              pressure to bear upon

NYÀ   Idea of putting pressure on : treading

              on:

-NYÀSH- press down, tread down

-NYÁTHel- tread on, trample on

NYÌ   Idea of throbbing, grating:

-NYÍKÌM- quake, tremble

-NYÍKÌZ- grate (as two ends of a broken

     bone)

NYÒ   Idea of stretching, extending:

-NYÓLuk- be stretched out, be greedy

-NYÓLul- draw out, pull out, etc.

NYÓ   Idea of unfastening, loosing:

-NYÒBúlùl- untie (e.g. shoestring)

-NYÒMBúlùl- untie, loosen, disentangle

-NYÓTHul- pull up, pluck out

NYÙ   Idea of sly, slinking movement:

-NYÙBÚLÙK- crawl, wriggle, move like a

     snake

-NYÙBÚLÙZ- (s.m.)

-NYÚBel- (s.m.)

NYÚ   Idea of upward movement:

-NYÚK- come up, go up, ascend etc.

-NYÚL- draw out, draw up : select

Ó   Idea of bringing to the fore; increasing:

-ÓNGam- stand out, project; superintend

-ÓNGez- add more, bring more, increase (by

     addition)

Ó   Idea of heating:

-ÓS- roast, grill, fry (and -ÓJ- (s.m.))

-ÓTH- warm oneself, bask, heat up

PHÀ   Idea of surrounding:

-PHAHL- encircle, surround, accompany

-PHAL- go about, go round : gallop

PHÂ   Idea of scooping out:

-PHAK- ladle out, serve out (food)

-PHAL- scrape out (pot): Scrape (hide)

PHÂ   Idea of being in position:

-PHAKAM- stand up, stand erect

-PHAMB- change places, turn back

-PHAMBuK- turn aside, deviate, stray

PHÀ   Idea of striking, pounding:

-PHANG- do with speed or force

-PHANZ- be routed, defeated, laid waste

PHÀ   Idea of being open, opening out:

-PHANYAZ- open and shut the eyes

-PHAPH- open out; flap (of wings, garments)

-PHASalal- get scattered, loose

PHÉ   Idea of turning, turning round, up, etc.:

-PHÉKUL- turn up (e.g. corner of a page)

-PHÉKUZ- be turned up, etc.

-PHÉNDUL- turn down, turn over, reply

-PHÉNUK- get upset, lose one's balance

PHÊ   Idea of coming to an end:

-PHÊL-   come to an end, finish

-PHÊZ-   stop, leave off, desist

PHÊ   Idea of searching out:

-PHÊNDL-   examine another's head for

                 parasites: brush aside (part

                 of the hair)

-PHÊNGul-   search out, bring to light,

                 discover

PHÎ   Idea of investigating:

-PHÎCOTH-   investigate searchingly

-PHÎCIK-   inquire thoroughly into

PHÔ   Idea of cooling down:

-PHÔL-   cool, abate, heal

-PHÔZis-   cool (oneself or food): cool down

                 towards

PHÙ   Idea of coming up, out, abundantly:

-PHÙHL-   come up well, grow well, be energetic

-PHÙKÚZel-   froth up, effervesce, be hasty,

                 effervescent

-PHÚPHÙM-   gush out, overflow

PHÚ   Idea of coming loose, slip off:

-PHÚCUK-   slip off, come clean out: etc.

-PHÚLUK-   slip away, glide away, let slip

-PHÚM-   come out, go out

-PHÚNCUK-   slip off, slip and fall

PHÙ   Idea of coming to nothing:

-PHÙNZ̀-   cast the young

-PHÙTH̀-   come to nothing, prove abortive

PHÙ   Idea of groping for:

-PHÙTHÁ-PHÙTH̀-   grope about, feel with the

            hands

-PHÚTHÙM̀-   go in search of;   fetch, fetch

            back

QHÀ   Idea of cutting open, opening up,

            breaking up:

-QHÀL̀-   unpack, open out: speak in metaphor

-QHÀQH̀-   tear or cut open;   tear asunder

QÂ   Idea of shining, glistening:

-QÀQÁMB̀-   shine, glisten, be bright, pure

-QÀQÁWul̀-   (s.m.) be splendid, glorious

QÎ   Idea of making fast, firm:

-QÌLÍNG̀-   make tight

-QÎǸ-   be fixed, firm, tight

-QÎNGQ̀-   stand, stop, halt

QÔ   Idea of being hard, strong:

-QÒLÓS̀-   walk boldly about: behave arro-

            gantly

-QÒNÓMFel̀-   work hard at

QÒ   Idea of becoming seen, recognised:

-QOND- understand, comprehend, be intel-

　　　　ligent

-QONONDis- point out, shew clearly

QÛ   Idea of bowing, bending down:

-QULUS- bend down and turn the back

-QUKUL- throw down, head-over-heels

QÚ   Idea of going quickly and for a

　　　　short time:

-QUPH- step quickly : act quickly

-QUQ- go hither and thither : go often

SÁ   Idea of fleeing, scattering:

-SA- clear (of dawn), clear up (of weather)

-SAB- flee away, flee from

-SAKAS- do on a large scale

SÁ   Idea of remaining, staying:

-SAL- remain, stay, abide

-SAMel- lean upon, (couch etc.)

SÉ   Idea of drinking:

-SEL- drink

-SEZ- give to drink, make drink

SÒ   Idea of folding, enfolding:

-SONKOTH- entangle

-SONT- twist together, plait, spin

THÎ   Idea of restraining:

-THÎMB- take, seize, capture

-THÎY- ensnare, trap

THÒ   Idea of bowing down, hanging down:

-THÒB- bend, bow, stoop, lower, depress

-THÒKÓMBis- sit with hanging head

-THÓZam- be drowsy, sleepy

TSHÀ   Idea of hostility:

(u)TSHAB- an enemy

-TSHÁKÁMBul- lose patience : become finally
                        angry

-TSHÁMBul- strike in irritation or exaspe-
                    ration

-TSHÁNDul- speak abusively, inveigle

-TSHÁWul- glare : look superciliously

TSHÉ   Idea of cutting, chipping:

-TSCHÉC- cut end off, gnaw

-TSHÉNT- cut off grass with spade : skoffle

-TSHÉNTul- scrape, scratch

-TSHÉQ- cut off, tear off

TSHÚ   Idea of restless action:

--thi tshú- be restless, anxious

-TSHÚL- probe, feel for, talk at random

-TSHÚTSHis- make restless, persecute

THÛ   Idea of repeated, convulsive action:

-THÙTHÚMB- throb, be inflamed

-THÙTHÚMel- tremble with fear : be anxious

TÚ,THÚ   Idea of being quiet, calm:

    -thi tú be quiet, calm

    -THUL- be quiet, be calm, cease

    -THUTHUZel- comfort, quieten

THWA,TWA   Idea of being stretched out: .

    -THWABAZ- lie awake at nights

    -TWABulul- stretch out, spread out

TYE   Idea of drawing back:

    -TYED- draw back

    -TYEK- move aside, swerve, deviate

VA   Idea of being aware of:

    -VANDLAKANY- give a hint : indicate

    -VAVANY- test, inspect, examine

VE   Idea of issuing from:

    -VEL- come forth, come into sight

    -VEZ- make appear; produce, bring forth

VI   Idea of avoiding, restraining:

    -VIK- parry, ward off (a blow)

    -VIMB- be stingy, grudge (avoid giving)

    -VINGC- close up, stop up

VU   Idea of arousing:

    -VUK- wake, rise, get up

    -VUS- waken, arouse

VÙ   Idea of opening up:

-VÙL- open

-VÙZ- leak

WÀ   Idea of falling:

-W - fall

-WÁHLÀZ- throw down, jingle, rattle

XÂ   Idea of being stretched out across:

-XÂB- lie across, lay across, obstruct

-XÂK- puzzle, present difficulties to

-XÀKÁTH- wear (garment): bear (fruit)

-XÀZálàl- lie spread out (of a garment)

XÂ   Idea of being spread around:

-XÀNÁN- spread out on all sides, bec. wide,
                in abundance, varied

-XÀNÁNÀZ- (s.m.)

-XÂND- stool out (of grain): be fertile
                (of land)

XHÀ   Idea of catching, seizing:

-XHÀK- hook on to, join to, fasten to

-XHÀKÁMFÙL- seize, snatch, hold

-thi xhàmfù catch, snatch, seize, hold
                tightly

XHÁ   Idea of holding up, holding out:

-XHÁS- prop, support, maintain

-XHÀTHÁLÀZ- bear up, endure, sustain

-XHÁTHis- prop the feet, stand fast:
                resist

XÌ   Idea of sustained action:

   -XÌK̀-   do something persistently,

       frequently

   -XÌ̀Ǹ-   press, throng, impede

XHÒ   Idea of taking up, being up:

   -XHÒB̀-   take up (weapons: baggage for a

       journey etc.)

   -XHÒM̀-   hang up, hang, lift up

ZÁ   Idea of being languid:

   -ZÀMBÁZèk̀- be languid, effortless

   -ZÁM̀L̀-   yawn and stretch oneself

APPENDIX B

EXAMPLES OF HIGH FREQUENCY

SECONDARY RADICALS: (R2)

(OCCURRING IN REGULAR DI-RADICAL VERBAL ROOTS)

SECONDARY RADICAL -B~

There are two main groups of secondary radicals -B~ , viz.,

    (i)   Operative radical -B~ : with strong transitive force; and

    (ii) Neuter radical B~ : with intransitive force.

(i)   <u>Examples of Operative radical -B~</u>

Involving vigorous, drawn-out action: e.g.- -GÀB- (break up (ground)): -KHÚB- (hoe): -QHÙB- (drive stock: wagon): Push, get on with sg): -GQÛB- (raise dust; or kick up dry cattle dung): -QWÊB- (lay up, accumulate).

Involving vigorous action performed at a certain point in time: e.g. -HLÀB- (pierce, stab): -KHÀB- (kick): -LÔB- (hook; angle): -QÙB- (overtake: strike against).

Involving action requiring the use of the hands: e.g., -CHÚB- (pick grains off a mealie cob): -QHWÀB- (clap the hands): -SÛB- (scoop up: take a double handful of sg).

Involving the application of pressure
(often of the hands etc.) e.g.

-BÓB- (press down, compress):   -BÚB- (press toge-
ther):   -SWÊB- (pinch):   -TYÒB- (crush lice (etc.)).

Involving the mixing up of things: putting
one thing with another and intermingling
them: e.g.

-DÎB- (mix together: fill up (a hole)):   -DÙB- (mix
up and disturb):   -JÙB- (rebound):   -VÙB- (pour _amasi_
over cooked mealies):   -XÙB- (mix up things or people
of different kinds).

Involving breaking down in some sense or
other: e.g.

-CWÀB- (break up small (sticks into smaller lengths):
-GÛB- (grind into meal):   -QCB- (crush, break small).

Involving the body in some manner: e.g.

-GÒB- (bend down: bend (the knee)):   -THÒB- (bend down,
make lower).

Involving action requiring a certain amount
of skill: e.g.

-GWÀB- (sing, chant):   -RWÊB- (trade):   -NGCÌB- (do
skilled labour: repair):   -ZÔB- (draw: paint).

(ii)   Examples of Neuter Radical -B~
            Verbs involving "becoming" and connected
            with an emotional state, or state of mind:
            e.g.

-GCÔB- (be glad):   -NDWÊB- (be timid, shy, suspicious):
-NXÚB- (become alarmed, apprehensive):   -NYÒB- (be in

high spirits;   glad):   -TSHAB- (be silent, morose):
-TSHOB- (become restless, anxious).

Verbs involving mainly "becoming" and connec-
ted with a physical state or condition: e.g.
-GAB- (brim over: be in vain):   -HLOB- (become separa-
ted, become irritated):   -NYAB- (be dull, lazy, lethar-
gic):   -QOB- (become numb, stupefied).

SECONDARY RADICAL -C ~

Secondary radical -C~ frequently indicates
Punctative action.

(i)   Examples of Punctative radical C~
Involving "cutting", "chopping":
-BHAC- (cut out and make the isiBHACa): -GEC- (cut a
way through (bush, rock, etc.)):   -GOC- (dig into):
-JAC- (break into two: waste, spend):   -JEC- (cut clean
through):   -TSHIC- (split).

Involving "mixing together", "interweaving":
-BHUC- (mix together: do repeatedly):   -JIC- (plait
neatly):   -VEC- (plait (a basket)).

Involving generally erratic, intermittent
action:
-CUC- (pass small, hard stools):   -KRWEC- (touch,
nudge;   taunt):   -JUC- (struggle on, despite fatigue
or weakness).

(ii)   Example of Effective radical -C ~
-COC- (purify).

(iii)   Examples of Neuter radical -C ~

-CAC- (be clear): -FAC- (be emaciated, weak).

(iv)   Unclassified

-KRWAC- (fall with a rustling sound) clearly indi-

cates an onomatopoeic origin.

SECONDARY   RADICALS   -D~

Secondary radical -D~ may fulfil three main

functions:

        (i)   Operative radical -D ~
        (ii) Neuter radical -D~
        (iii) Effective radical -D~

(i)   Examples of Operative radical -D~

          Involving violent action, with idea of

          "seizing" etc.:   e.g.

-BHAD- (rob, plunder): -BHED- (hunt):   -DYWID-

(snatch, seize, plunder).

          Involving energetic action, with idea of

          "emptying": e.g.

-GED- (clean out, empty): -GOD- (dig, excavate, sink

a shaft).

          Unclassified verbs involving action exerted

          upon an object: e.g.

-BHID- (puzzle, confuse, mislead): -NCED- (help):

-TYED- (draw back (a bow)): -TYID- (melt, cast).

(ii)   Examples of Neuter Radical -D ~

            Involving "becoming" or "being": e.g.

-BHUD- (be delirious): -DID- (be hesitant): -FED-

(be feckless, lazy): -FUD- (be wont to do): -GAD-

(be mad): -GUD- (be smooth).

(iii)   Examples of Effective Radical -D ~

            Involving intransitive physical movement:

            e.g.

-DAD- (float, swim): -DED- (move back, move away):

-DUD- (dance): -GAD- (run about madly): -GID- (con-

tribute to wedding feast): -GWAD- (take snuff):

-GXAD- (go up to for a moment).

SECONDARY RADICALS -R ~

        For the most part, Secondary radical -R~

is an Effective radical, sometimes describing intran-

sitive action, and sometime transitive.   There are

occasional instances of a Neuter radical -R~ .

(i)   Examples of Effective radical -R--with
            Transitive force:

-GQUR- (exercise, by burning medicines):[1] -NXOR-

(dig out, question closely); -TSAR- (revile): -TUR-

(charm a village, by burning medicines).

---

1) Related to nominal root (i)-GQIRa (5) (witchdoctor).

(ii)   Examples of Effective radical -R~,
            with Intransitive force:

-KWÀR- (pass a stool (of an infant)): -JÒR- (use

violent language or act violently): -QHÀKR- (laugh

harshly): -TWÀR- (babble, chatter).

                N.B.   A derogatory or jarring note

                       is evident in the last three

                       roots quoted above.

(iii)   Examples of Neuter radical -R ~

-BHÀR- (be dry, parched (of ground)): -GXÀR- (be

broad-chested, thick-necked).

                SECONDARY   RADICALS -K~

Secondary Radicals -K~ include:

                (i)   Effective radical -K~
                (ii) Neuter radical -K~

(i)   Examples of Effective radical -K~ : with
            transitive force:

            Action in connection with a specific type

            of object: e.g.

-CÎK- (put lid on): -PHÂK- (ladle out food): -PHÉK-

(cook (food)): -SÉK- (lay a foundation, or support):

-SÒK- (admit to manhood): -SÙK- (dress a hide): -ZÉK-

(marry a woman (used only of a man)).

            Action involving a general object:

-BÎK- (report): -FÂK- (put in, put on): -NÍK- (give):

-NQÎK- (uncover, open): -QÚK- (call together): -SÎK-

(cut, cut off):)VÎK- (parry, ward off): -YÈK- (leave

alone, desist).

Transitive verbs involving human rela-
tionship of one kind or another:

-BÉK- (esteem): -BÛK- (regard with admiration):
-DÎK- (satisfy, satiate): -GXÈK- (mock, scoff at):
-JÓK- (pester, constrain): -KÈK- (turn sg. around
till it fits): -NÀK- (accuse falsely): -NYÈK-
(look at unobtrusively): -THÚK- (swear at): -XÂK-
(puzzle).

With intransitive force:

Action involving movement (towards, or
away from):

-BHÈK- (look towards, go towards): -FÌK- (arrive,
arrive at): -NYÚK- (ascend, climb, go up): -SÙK-
(get up and go away): -TYÈK- (swerve aside).

Verbs describing general intransitive
action:

-NTÈK- (fly around (of rumours)): -NÙK- (stink,
smell): -TSHÈK- (purge): -VÚK- (wake up, arise):
-ZÌK- (go deep, get to the bottom, understand
thoroughly).

With Transitive or Intransitive force:

-HLÈK- (laugh): (intransitive): -HLÈK- (laugh at)
(transitive): -JÌK- (turn round, turn about, rotate,
change): -PHÍK- (contend, dispute, deny).

(ii)   Examples of Neuter radical -K~

Indicating "becoming", "being", e.g.
-CHÒK- (be in order, be tidy): -DÀK- (disappear:

get out of sight): -DUK⌣ (get lost, wander away):
-NGXÊK⌣ (be with the legs wide apart, or the mouth
wide open): -TSAK⌣ (be tame: trained): -THÚK⌣
(be startled): -ZÙK⌣ (be famous).

SECONDARY RADICAL -L ~

There are more regular di-radical verbal
roots with secondary radical -L⌣ than any other R2.
Of the 977 di-radical verbal roots examined, 18.5%
had secondary radical -L⌣ : of these, 77 were tran-
sitive and 45 intransitive. Of the 77 transitive
verbs, 56 were straightforward di-radicals while 21
were related to ideophones. Of the 45 intransitive,
25 indicated "being" or "becoming", and 20 were general
intransitive verbs.

Verbal roots with secondary radical -L~
fall into two main groups:

> (i) Those with Effective radical -L ~
> (ii) Those with Neuter radical -L~

(i)   Examples of Effective radical -L~
           Transitive verbs, involving violent, aggres-
           sive action:

-BHÚL⌣ (beat, thrash): -CÒL⌣ (grind fine): -CWÍL⌣
(cut into fine pieces): -JÙL⌣ (cast, hurl): -NTÌL⌣
(pound, belabour): -PHÂL⌣ (scrape): -QHÙL⌣ (hit
with elbow): -SÌL⌣ (grind): -XHÒL⌣ (gouge out).

Transitive verbs describing careful or
skilful action:

(write): -DWÊL- (arrange in rows): -GQÀL-
(observe carefully): -HLÈL- (arrange, classify):
-KRÓL- (carve).

Transitive verbs describing general
action:
-KHÔL- (satisfy, convince): -RÒL- (draw out, pay):
-NCÈL- (suck dry): -SÚL- (wipe): -THÚL- (take down,
offload): -TYHÍL- (disclose): -VÀL- (shut): -VÙL-
(open): -WÔL- (embrace): -YÁL- (exhort, command):
-ZÁL- (give birth to).

Intransitive verbs: (general):
-BÍL- (come to the boil : perspire): -BÒL- (rot):
-CWÀL- (sit waiting before an attack): -GWÀL-
(behave in cowardly manner): -HLÀL- (sit, reside):
-KRÈL- (be in line): -JÀL- (stare vacantly into
space (as a man in extreme weakness)): -KHÁL- (cry
out, complain): -MÍL- (grow (of plants)): -NDÌL-
(sound faint): -PHÈL- (finish: come to an end):
-PHÌL- (be in good health): -SÁL- (remain behind):
-TSHÌL- (dance (after circumcision)): -VÈL- (come
forth): -WÚL- (move away): -ZÌL- (go into mourning:
abstain).

Verbs which may be used in Transitive or
Intransitive sense: (general):
-BÚL- (confess freely: as a young couple exchanging
confidences): -DLÛL- (pass sg: pass by): -SÉL-
(drink sg: drink).

Transitive verbs related to mono-R

Ideophones, with RCE -L~ Effective

(4) or di-R ideophones with R2, -L~

-CHÓL- (pick up): cf. -thi chó (s.m.)

-DWEL- (arrange or stand in lines: related to

-thi dwè (s.m.)

-RWÍL- (tack (in sewing)): cf. -thi rwíi (move

swiftly and straight)

-NCWÈL- (cut into strips): cf. -thi cwè (cut off

thin slice: dip up a little)

-NKÀL- (maul, bruise): cf. -thi nkàlè (maul, beat,

bruise)

-NTLÀL- (knock about, throw down): cf. -thi ntlá

and -thi ntlàlè (s.m.)

-NTSÌLÌ- (thrash out): cf. -thi ntsílí (s.m.)

-NYHÌL- (push away): cf. -thi nyí (go out of

sight): (Proceed a little way)

-XWÌL- (pounce upon, seize): cf. -thi xwí (s.m.).

(ii)   Examples of Neuter radical -L~

Verbs indicating "becoming" or "being".

-CÀL- (become pinched with hunger): -DLÔL- (become

barren): -GCÂL- (become excitable): -GQÒL- (turn

brown (from rust or smoke)): -RÀL- (become inflamed

(with desire or anger)): -NGCÒL- (become soiled):

-NTSHÙL- (become active, i.e. germinate): -NXÌL-

(become intoxicated): -PHÔL- (become cool): -QÓL-

(become intoxicated, talkative): -QÔL- (become hard):

-THÚL- (become quiet): -XHÀL- (become anxious):

-XÒL- (become reconciled: satisfied): -YÓL- (be

pleasant): -ZÁL- (become full): -ZÒL- (become

calm): -ZÙL- (become restless).

SECONDARY RADICAL -M~

There are three main semantic rôles

played by Secondary radical -M~ :

namely:

(i)   Positional Radical -M~
(ii) Protractive Radical - M~ (neuter)
(iii) Protractive Radical -M~ (Effective).

(i)   Examples of Positional Radical -M~

Verbs with intransitive force: e.g.

-GXAM- (push in, intrude into): -PHÚM- (come out,

go out) rise (of the sun)): -QHÀM- (fix to, nail

to): -XHÚM- (jump or dance up and down).

(ii)   Examples of Protractive (Neuter)
         Radical -M~

Protractive - Neuter radical -M~ : indi-

cating "becoming" or "being", and

remaining in that state for a time, e.g.

-DÙM- (bec: famous): -FÙM- (bec: damp): -NCÀM-

(bec. despondent): -NGXÀM- (be in a hurry): -QHÀM-

(be well covered (with hair: leaves, fruit, etc.)
:

Verbs describing prolonged activity, or

leading to a condition that persists (at

least for a time): e.g.

-CHÙM- (grow abundantly, flourish): -GCÙM- (moan):
-GÙM- (eat ravenously): -HLÛM- (sprout, flourish):
-JÀM- (look fierce): -NCÚM- (smile): -NTÀM- (act
as a spy): -QHÙM- (smoke (of a fire)): -TSÀM-
(subside : fall off in condition).

(iii)   <u>Examples of Protractive (Effective) -M~</u>
-GQÙM- (cover, conceal): -HLÀM- (give a present,
with a view to getting a larger one in return):
-HLÒM- (pile up, stack together): -KRÓM- (slaughter
booty): (plot mischief): -RÙM- (give (a witchdoctor)
payment for his services): -KHÁM- (squeeze, throttle):
-LÌM- (plough, hoe): -LÙM- (bite, gripe (of stomach)):
-NCÓM- (praise): -NXWÈM- (keep aloof from : avoid):
-QÒM- (taste meat, to prove it is not poisoned):
-THÙM- (send): -XHÀM- (bespeak in marriage): -XHÒM-
(hang, lift up): -XÚM- (revive): -ZÀM- (move, shake,
strive): -ZÛM- (ambush).

<u>SECONDARY RADICAL -MB~</u>

     This radical is the Protractive-Operative
Radical. It is fairly consistent in its semantic
force, and indicates definite and protracted or drawn
out action.

(i)   <u>Examples of Protractive-Operative</u>
          <u>(Neuter) radical, with intransitive</u>
          <u>force:</u> with the idea of "being" or
          "becoming". e.g.
-HLÙMB- (be heaped full): -JÀMB- (look angry):

-LÀMB- (become hungry): -NGQÀMB- (be too short,
too small, to fit): -QÙMB- (bec: angry): -THÀMB-
(be soft, pliable): -VÌMB- (be stingy).

      With general intransitive significance:
-DÁMB- (go down, subside): -DÙMB- (swell): -HÁMB-
(walk, travel): -KHÓMB- (point with the finger)
-NÈMB- (keep on doing : persevering): -NZÌMB- (act
indifferently): -PHÂMB- (change places): -QÂMB-
(dance)   : -THÀMB- (wheel (as vultures
in flight)): -THÒMB- (shoot, sprout).

(ii)   Examples of Protractive-Operative
            Radical with transitive force: e.g.
-CÚMB- (put in layers): -FÛMB- (heap up): -GÒMB-
(hollow out, encircle): -GÙMB- (hollow out, wear
away): -HÓMB- (adorn oneself in fine clothing):
-HLÀMB- (wash): -NÀMB- (tattoo): -NCÁMB- (tell
news): -PHÊMB- (kindle (a fire)): -QÂMB- (make
up a false story): -THÉMB- (trust, hope):
-TSHÀMB- (give a grand feast): -VÀMB- (tattoo):
-VÌMB- (grudge, be stingy towards).

SECONDARY RADICAL   -N~

      This radical has a variety of semantic
values, viz:

        (i)   Associative radical -N~
        (ii) Neuter radical -N~
       (iii) Protractive radical -N~
       (iv) Effective radical -N~

(i)   Examples of Associative radical -N ～
            Used in intransitive sense: e.g.

-FÁN̖ (resemble : (always used with preposition
na (with)):

            Used in transitive sense:

            Idea of holding, carrying, or close con-
            tact with: e.g.:
-GÒN̖ (carry in the arms, support): -NYÌN̖ (restrict):
-XÎN̖ (throng, impede).

            Describing human relationships
            (of an antagonistic nature): e.g.
-KRÌN̖ (quarrel, dispute): -NÍN̖ (object to, dis-
like): -NYÒN̖ (insult, point at).

(ii)   Examples of Neuter radical -N ～
            Indicating a state of mind, "being" or
            "becoming".
-DÀN̖ (bec. disappointed): -RÀN̖ (be suspicious):
-NQÊN̖ (be disinclined): -NQWÈN̖ (have strong
desire (to do sg.)).

            Indicating "being" or "becoming" in a
            physical sense: e.g.
-BÙN̖ (bec. faded : wither): -DÌN̖ (bec. tired,
fatigued): -NÓN̖ (bec. prosperous, respected : bec.
a man of influence): -QÎN̖ (be tight, fixed: -QHÀN̖
(be tender (as a wound which is healing)).

(iii)   Examples of Protractive Radical -N ～
            Intransitive use:
-KHWÌN̖ (whine, whimper): -RÒN̖ (snore): -NCWÌN̖

(sigh, groan):   -SÎN- (dance):   -XÚN- (look straight
forward):   -XHÎN- (dance up and down in same spot).

Transitive use:

-FÛN- (want, desire, seek):   -GCÌN- (keep, preserve).

(iv)   Examples of Effective Radical -N~

-BÔN- (see):   -BHÉN- (appeal):   -CHÁN- (aim true :
hit):   -CÒN- (swear):   -KRÙN- (sprain):   -NGÉN-
(enter):   -QHÍN- (knot):   -THÉN- (prune, castrate):
-VÛN- (reap).

SECONDARY RADICALS -ND ~

McLaren claimed[1] that verbs ending in
-nda often denoted mental feelings or acts.   This
is true up to a point: there being a group of ver-
bal roots with this secondary radical -ND~ with
such a force.   On the other hand, there are even
more that have no emotional context, and are strongly
active, describing physical action.   Verbal roots
with secondary radical -ND~ fall into several
groups, these groups, however, having a common cha-
racteristic, viz. of protractive activity.

Examples of Protractive Radical -ND~

(i)   In verbs describing action involving some
           mental activity: e.g.
-FÚND- (learn : learn to do : read):   -QÒND-
(understand: be under the impression that ....).

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1) J. McLaren: "A Xhosa Grammar" (1936) p. 209   146.

In verbs involving being in an emotional

state or coming into an emotional state:

e.g.

-BÍND- (choke with emotion): -THÂND- (love, like):

-VÀND- (feel mental pain): -ZÓND- (have strong emo-

tional reaction for or against: i.e. to loathe, or

to desire greatly).

In verbs involving a mental process,

with a moral or ethical context: e.g.

-HÈND- (tempt (to do wrong)): -JÌND- (backbite).

(ii)   Action involving prolonged transitive ac-

tion: e.g.

-LÁND- (follow, track, trace): -LÌND- (wait for: lie

in wait for (birds, etc.)): -LÒND- (preserve with

care): -SÍND- (weigh down, burden): -THÙND- (pass

water).

Action involving prolonged, vigorous,

punctative (or intermittent) action: e.g.

-CÂND- (split, cleave, divide): -KHÂND- (hammer,

beat out): -GÀND- (stamp, tramp down): -NDÀND-

(flutter): -NDÌND- (keep hammering at : smooth out):

-QÀND- (pick, peck at, peel): -NCÌND- (sop up into

the mouth (e.g. honey, broth, etc.)): -PHÀND-

(scratch up : dig up).

Action involving prolonged action of a

rotary nature: e.g.

-BÒND- (stir round : confuse the issue): -NQÁND-

(turn back, round up): -PHÌND- (turn over, repeat:

do again):   -THĒND- (turn round, roll (e.g. a ball):
revolve (trans.)):   -THÀND- (wind up, fasten round).

Verbs describing a prolonged, gradual
unfolding process: e.g.

-BÂND- (become cold: congeal : be cold to the touch):
-DÈND- (act slowly : talk slowly or interminably):
-NGÙND- (become mouldy (e.g. bread)): rot (manure)):
-SÎND- (be safe): -VÙND- (mould, rot): -XÂND-
(stool out (of grain): be fertile (of land)).

SECONDARY RADICAL -NG~

This is the Protractive - (Initiative)
-NG~

There is a semantic affinity between the
Protractive-Operative radical -MB~ and the Pro-
tractive (Initiative) radical -NG~ .   The affinity
lies in the fact that they both have a strong Pro-
tractive influence.   When occurring in intransitive
verbs, the emphasis is on "Protractive".

Verbs with this secondary radical are
mostly those which describe action leading up to a
sustained state or condition; or action initiating
a process leading to a new status quo.   In some in-
stances, the outcome of the action is definite and
complete.   In others, the outcome is uncertain. In
many of the intransitive verbs, some mental or emo-
tional factor is involved.

Verbs describing action leading to a
definite and completed result;   leading

to a change in condition of the object

of the verb: e.g.

-BÈNG- (cut into long strips): -FÌNG- (shorten):

-GÈNG- (throw or burst open (e.g. a door)): -QWÈNG-

(rend in pieces, wound severely): -THÊNG- (buy).[1]

Action leading to a temporary change of

state or condition of the object of the

verb: e.g.

-GÂNG- (catch): -NGQÎNG- (surround): -NGQÒNG-

(surround): -NYÍNG- (compress, tie tightly).

Action leading to a change in relation-

ship between persons or things

("mixing" or "separating") e.g.

"mixing": "coming together": e.g.

-PHUNG- (meet in council): -NGÛNG- (congregate):

-PHÎNG- (inter-twine, plait): -THÛNG- (sew):

-VÀNG- (mix, mingle).

"Mixing": in the sense of "mixing up":

e.g.

-DÙNG- (stir up, disturb): -NGXÈNG- (mix, corrupt):

-QÚNG- (stir up, disturb).

"Separating" (literally or metaphorically):

e.g.

-CÓNG- (spare : keep back): -HLÈNG- (separate into

good and bad : favour): -HLÙNG- (sift): -NGCWÈNG-

---

1) Constituting a change of ownership.

(strain off): -SÉNG- (milk): -THÛNG- (strain out):
-TSÌNG- (treat with contempt).

> Verbs describing the initiating of ac-
> tion the outcome of which is uncertain:
> e.g.

-BÀNG- (cause to happen): -BÌNG- (sacrifice by
slaughtering a beast): -BÔNG- (sing praises to the
Chief): -CÈNG- (attempt to persuade by means of
flattery or bribes): -CÌNG- (think): -JÁNG- (wan-
der about here and there): -KHÚNG- (entreat):
-LÎNG- (attempt, try, test): -NYÀNG- (treat, heal,
cure, by medicine or charms): -PHÙNG- (taste : sip):
-QHÌNG- (advise : entrap): -SÔNG- (roll up:[1]) dis-
suade): -TSHÀNG- (be fickle, move about): -XÈNG-
(be loose, rickety): -ZÍNG- (prompt someone to do
something).

> Verbs describing a sustained attitude or
> position: e.g.

-FÚNG- (take an oath): -LÙNG- (be right, suitable):
-SÎNG- (look steadily in one direction): -XÍNG-
(remain fixed).

> Verbs describing forceful and sustained
> action: e.g.

-BHÒNG- (bellow (like a calf)): -NTÍNG- (go far
away, soar): -GÂNG- (be bold, impatient): -JÒNG-
(look fierce, stare).

---

1) In former sense, -NG~ is rather a protractive
    radical while in the latter sense, it has also
    the sense of "uncertain outcome".

Verbs describing a sustained mental
reaction: e.g.

-DÈNG- (be slow, stupid): -DÌNG- (be unsuccessful):
-GÂNG- (be bold, impatient): -NGQÙNG- (be restless
(with pain)): -NGXÀNG- (stand idle): -THÒNG- (be
in a trance).

SECONDARY RADICAL -PH~

This secondary radical fulfils three
functions:

      (i)   Positional (Effective) radical
           -PH~
     (ii)   Punctative radical -PH~
   (iii)   Radical Conversion Extension -PH~

(i)   **Examples of Positional (Effective)**
          Radical -PH ~

-BÔPH- (tie, fasten, inspan): -CÙPH- (cut the trip
off): -CHÒPH- (perch, squat): -DÌPH- (sink, as a
foot sinks in mud): -KHÀPH- (accompany): -KHÙPH-
(take out): -PHÀPH- (be open, alert): -PHÊPH-
(act in alert way): -PHÙPH- (dream): -THÙPH-
(point out: lay one's finger on): -TYÀPH- (act at
the psychological moment).

(ii)   **Examples of Punctative radical -PH~**

-CHÀPH- (fall in drops): -DÌPH- (take handfuls of,
help oneself freely to): -QÚPH- (step out or act,
quickly): -XHÀPH- (lap up, eat carelessly).

(iii)   Example of Radical Conversion

           Extension -PH~

-NCÍPH- (become smaller, decrease):   (related to

monosyllabic adjectival root -NCí (small)).

SECONDARY RADICAL -Q~

       The over-all picture of this radical is

"Punctative", though the sub-divisions are many,

providing only a few examples in each instance for

comparison.   There are a few verbal roots with

secondary radical -Q~ which present no clear seman-

tic characteristic.

Examples of Punctative radical -Q~

(i)   Punctative (Effective) action (of general

           nature): e.g.

-BHEQ- (row, paddle):   -FUQ- (throw up earth, as a

mole when burrowing).

(ii)   Punctative (Effective) action (describing

           ways of moving over the ground): e.g.

-GAQ- (creep, crawl):   -RUQ- (trail on the ground):

-JUQ- (walk feebly, be feeble):   -LEQ- (lope: run

like a cat).

(iii)   Punctative (Neuter) action: e.g.

-PHÓQ- (slip off, slip out, rave).

(iv)   Punctative (Aggressive) action:

e.g.

-JWAQ- (tug at, be displeased with).

(v)   Punctative (Destructive) action:

e.g.

-BHUQ- (trample, break down (as cattle in a land)):
-KREQ- (hack off, saw off):   -JEQ- (cut clean
through):   -TSHEQ- (cut off, tear off).

Examples of Neuter radical -Q~ :e.g.
-GIQ- (be satisfied, replete):   -LAQ- (be ill at
ease).

Examples of Understandardised -Q~ :e.g.
-BHEQ- (speak in a lofty manner):   -KROQ- (roast
(beans etc.)):   -GOQ- bar (the door).

SECONDARY   RADICALS   -S~

Secondary radical -S~ is predominantly
Causative.   There appear to be a few instances of
a 'neuter' usage, and also a few unclassified.

Examples:

(i)   Causative radical -S~ : with examples of
parallel roots with a different secondary radical,
but identical primary radical: e.g.
-NXUS- (act so as to mislead another in regard to
one's intention):   related to -NXUL- (lead
a horse alongside the horse one is riding)
where secondary radical is Effective -L~

-SÙS- (remove, take away, send away): Related to

   -SÙK- (get up and go away), in which the

   secondary radical is Effective -K~

-XHÁS- (support, prop): related to -XHÀK- (join,

   fasten to (tr)): in which the secondary

   radical is Effective -K~

-VÚS- (awaken (tr)): related to -VÚK- (wake up

   (intr.)), where the secondary radical is

   Neuter -K~.

(ii)   Causative radical -S~ : for which parallel

         examples are not identified: e.g.

-BÀS- (kindle (e.g. a fire)): -CHÁS- (oppose):

-GÒS- (act on behalf of another : as an agent):

-KRÁS- (speak discordantly, make a noise): -KHÙS-

(keep off, e.g. the rain, wind danger): -QHWÉS-

(try to make something squeeze through something

else): -SÉS- (do indirectly : through an intermediary,

or in an underhand way).

(iii)   Neuter radical -S~ : indicating "being"

         or "becoming": e.g.

-DWÈS- (be daring, foolhardy): -PÁS- (be out of

breath): -THWÁS- (become visible (of the moon : to

emerge after undergoing a period of initiation (as a

witchdoctor)).

(iv)   Unclassified instances of secondary radical

         -S~ : e.g.

-GQWÈS- (come off best (in an encounter or contest)):

-KHÀS- (crawl).

SECONDARY RADICALS -SH~

Although the secondary radical -SH~ does not bear any clear semantic pattern, there are indications that it is often a "Factative" radical, and one of later origin.   The reason for the latter statement is that this secondary radical is oftern suffixed to foreign words, borrowed, for example, from Afrikaans or English, in order to make them usable in Xhosa.[1]

Examples of Factative radical -SH~:

e.g.

(i)   -QHÓSH- (join, pin, complete): -XHÉSH- (drive (stock)): hunt game (on horseback)).

(ii)   Factative radical -SH~ suffixed to mono-
          radical Ideophones to form di-radical
          verbal roots[2]: e.g.

-BHÈSH-   (outstare, outrun): related to -thi bhé
           (be abandoned, deserted).[3]

-CHWÌSH-   (tear off, strip off): related to -thi
           cwé (cut off thin slice)

-HÈSH-   (signal to someone by winks etc.): cf.
           -thi hè (well done!)[3]

---

1) e.g. -MÒSH- (waste, damage) from /mors/ (Afr:
          soil, waste, spill): -KLÍNÌSH- (Eng:
          clean) etc. (Here a REx).

2) i.e., Secondary Radical as Radical Conversion
          Extension.

3) There is considerable semantic 'shift' evident
          here.

-RESH-   (hint to, insinuate): cf. -thi rè (be
              rumoured)

-QHWÉSH-   (run away (of a horse): elope (of per-
              sons): abscond): cf. -thi qhwí (snap
              off)

-TYÈSH-   (cut a furrow : cut into strips): rela-
              ted to -thi tyé (be straight).

(iii)   Factative radical -SH~ as secondary ra-
              dical in di-radical verbal root, where
              a different radical (R2) appears in a
              similar di-radical ideophone: e.g.

-GÙSH- (conceal, hide): and -thi gùbù (be over-
cast).[1)]

(iv)   Factative radical -SH~ as secondary ra-
              dical in di-radical verbal root, where
              there is a corresponding mono-R nominal
              root: e.g.

-NYÀSH- (press down, tread down): and amaNYÁ
(plur: cl:5: pressure).[2)]

(v)   Example of 'Neuter' radical -SH~ : e.g.

-NXÙSH- (be the first one to do ...): -TYÈSH- (be
lazy, indolent).

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1) Compare also the extended verbal root,
    -GÙBÚNGèl- (hide, conceal).

2) Compare also the extended verbal root,
    -NYÁTHèl- (tread, tread upon).

(vi)   <u>Verbs with unclassified secondary</u>
            <u>radical -SH ~</u>

            Indicating "running": e.g.

-GXĪSH- (imitate galloping (as boys in play)).

            Indicating "choosing", "selecting":

            e.g.

-CĪSH- (choose, select): -QÁSH- (choose, select,

        hire (a servant etc.): -QÉSH- (hire, engage

        (e.g. a servant).

            <u>SECONDARY   RADICALS   -TH ~</u>

            Secondary radicals -TH~ are found in

three semantic groups:

            (i)   Contactive -TH~
            (ii) Punctative -TH~
            (iii) Neuter -TH~

(i)   <u>Examples of Contactive -TH ~</u>

            Involving violent action with the hand:

            e.g.

-BÉTH- (hit, strike): -NTLĪTH- (deal a blow : slap):

-QHWĪTH- (strike a spark : strike a match).

            Involving action with the hand, arm or

            shoulder: e.g.

-CHĀTH- (take out one from a number): -CHWĒTH-

(poke, push away): -GQWÈTH- (turn upside down):

-HLÙTH- (take away by force): -KHÈTH- (pick out,

select): -NKĀTH- (take handfuls of): -PHÁTH- (touch,

handle): -PHÈTH- (finish off : bind (a mat)): **-PHOTH-**

(twist, plait): -QHWÈTH- (take out a thorn): -QÚTH-

(hold out the hand, for punishment): -QÚTH- (hold

the hand in front of the mouth): -THÁTH- (take):
-THÚTH- (convey away): -TYÁTH- (carry on the
shoulders): -XHWÍTH- (pluck out, pluck off).

Involving the alimentary system and ap-
petite: e.g.
-HLÚTH- (bec: satisfied): -NÀTH- (gulp, swallow
up): -ZÒTH- (nauseate, cause to vomit).

Involving 'contactive' action, but not
associated with a part of the body: e.g.
-BÚTH- (bring together, e.g. a group of people):
-CÚTH- (become narrow : contract): -SÌTH- (shelter,
intercept): -SÌTH- (hold a feast).

(ii)   Examples of 'Punctative' -TH ~

-CHÌTH- (spill, scatter, spend): -CHÓTH- (walk
softly): -FÙTH- (puff, snort): -KHÌTH- (cut down):
-KHÓTH- (lick): -NDÌTH- (hesitate): -PHÙTH- (come
to nothing): -QÚTH- (cut off short): -THÊTH-
(speak): -TSHÈTH- (chip off, e.g. pumpkin rind).

(iii)   Examples of 'Neuter' -TH ~

-MÀTH- (be sluggish): -MÎTH- (become pregnant):
-NÈTH- (become wet): -NKWÀTH- (be uneasy in one's
conscience): -QÓTH- (be idle (sit around while
others work).

(iv)   Unclassified instance of Secondary -TH ~
e.g.
-GQÓTH- (hunt by oneself).

<u>SECONDARY RADICALS -X~</u>

Secondary radicals X~ fall into three
main groups:

>   (i)   Effective -X~
>   (ii)   Punctative -X~
>   (iii) Neuter -X~

(i)   <u>Examples of Effective -X~</u>

Effective radicals (in general): e.g.
-KRWÌX- (gulp down, swallow with difficulty):
-TSHÍX- (lock, lock up, turn the key).

Effective radicals (in verbs with
'destructive' sense): e.g.
-BHÒX- (scatter, break up, defeat): -GÙX- (strip
bare): -KRÍX- (cast a slur upon someone): -PHÓX-
(make a fool of, deride): -TSHÙX- (embezzle).

(ii)   <u>Examples of Punctative -X~</u>

-BHÈX- (stir round (e.g. food): swing the shoulders:
row (a boat)): -BHÙX- (trample in the mud): -FÀX-
(wring out, press out): -GÈX- (reel, stagger):
-GÍX- (cut in large pieces): -GÙX- (strip bare):
-GWÈX- (row, paddle (a boat)).

(iii)   <u>Examples of Neuter -X~</u>

-BHÌX- (be needy): -RWÈX- (be rough, coarse).

<u>SECONDARY RADICALS -Y~</u>

Three distinct semantic rôles are played
by secondary radical -Y~ : namely.

(i)   Factative -Y~
(ii)   Neuter -Y~
(iii) Effective -Y~

(i)   <u>Examples of Factative -Y~</u> : e.g.

           Verbs describing action bringing about

           a certain condition or state:

           Resulting in a "destructive" effect:

-GRÂY- (crush, grind coarse): -GÛY- (shave off

(e.g. hair): -THÎY- (trap, snare : hate): -TSHÀY-

(smoke (tobacco etc.) (tr.)): -XHWÀY- (cause to

become unsettled : stir up foment (war)).

           Resulting in some state (in general):

-BÎY- (fence in (e.g. cattle kraal, with bushes)):

-XHÀY- (bring on, occasion, cause to take place).

(ii)   <u>Examples of Neuter -Y~</u> : e.g.

-HÒY- (become concerned about, attend to): -JÎY-

(bec: stiff, thick): -MÀY- (be deserted): -QHÀY-

(be hard, proud, haughty).

(iii)   <u>Examples of Effective -Y~</u> : e.g.

-BÛY- (come/go back, return): -CWÈY- (go aside to

consult (secretly)): -FÛY- (possess (land), breed

(stock)): -SHÎY- (leave, abandon).

               <u>SECONDARY RADICALS   -NY~</u>

           This root is found in four categories:

viz:

    (i)   Effective -NY~

    (ii) Neuter -NY ~

    (iii) Protractive -NY~

    (iv) Punctative -NY ~

(i)   Examples of Effective -NY~ : e.g.

-GINY- (swallow): -MINY- (swallow, drain, exhaust).

(ii)   Examples of Neuter -NY~ : e.g.

-GWANY- (be half-cooked): -HLANY- (be deranged):

-KHANY- (be clear, bright, shine).

(iii)   Examples of Protractive -NY~ : e.g.

-KHONY- (bellow, roar): -MANY- (join in one, com-

bine): -MINY- (climb, swarm up): -NTSHWENY-

(shrivel up).

(iv)   Examples of Punctative -NY~ : e.g.

-FINY- (blow the nose): -GRENY- (gnaw at): -LENY-

(lick, dart (as a flame)): -PHANY- (blink, (the

eyelids)).

SECONDARY RADICAL -Z ~

      This radical has a definite Factative
force: that is, it indicates action leading up to
a process or condition. Several di-radical verbal
roots with this radical have parallel forms with
different secondary radicals, (e.g. neuter, effective,
etc.).

This radical may also be found as secondary radical in di-radical roots derived from mono-radical verbal roots or mono-radical ideophones.

In the following examples, parallel forms with other than factative -Z~ as secondary radical, are given for comparison.

(i)   Examples of regular di-radical verbal
            roots with secondary radical 'factative'
            -Z~ : together with parallel roots
            with other than factative secondary
            radicals: e.g.

-BÎZ- (call, summon): cf. -BÎK- (report, make a
            report): where R2 is 'effective' - K~

-BÚZ- (ask, inquire): cf. -BÎK- (make a report):
            In -BÚZ- the R vowel of R1 is the 'reversive'
            -U-, and R2 the factative -Z~

-CHÁZ- (straighten out, explain): cf. -CHÁN- (go
            straight to the mark, hit the mark), where
            R2 is Effective -N~

-HLÙZ- (filter, sift): cf.   -HLÙTH- (take away
            from by force), where R2 is 'contactive'
            -TH~

-JÌZ- (put round, tie round): cf. -JÌK- (turn)
            where R2 is 'neuter' -K~

-KHÚZ- (sympathise with, condole with): cf.
            -KHÙHL- (rub a skin to soften it: rub a
            painful place to alleviate the pain):
            where R2 is low-frequency radical -HL[1])

---

1) cf. -HLÌKÌHL- (rub, soften, massage) etc.

-PHÚZ- (draw into the mouth : sip, drink): cf.

-PHÙHL- (be full of sap): where R2 is

'neuter' -HL~

-PHÚZ- (do slowly, delay in beginning): cf. -PHÀL-

(go fast), where R2 is 'Effective' -L~

-SÍZ- (help, sympathise with): cf. -SÌTH- (<u>tr</u>:

shelter, shade) where R2 is 'contactive'

-TH ~ .

(ii)   Examples of regular di-radical verbal

roots with factative -Z~ as R2, with

parallel forms with other than factative

-Z ~ (R2), and indicating 'becoming' or

'being' in a condition or state of being

or doing: e.g.

-BÒZ- (bec. overripe in the process of decaying):

cf. -BÒL- (rot, decay), where R2 is 'Effec-

tive' -L~

-GÈZ- (bec. mad): cf. -GÈX- (reel, stagger),

where R2 is 'punctative' -X~

-JÌZ- (tie round, put round): cf. -JÌK- (turn

intr.)), where R2 is 'Neuter' -K~

-TSHÁZ- (spurt out, gush out, ooze out): cf. -TSHÀB-

(come to nothing), where R2 is 'neuter' -B~

-VÙZ- (leak out): cf. -VÙL- (open), where R2 is

'Effective' -L~

And a further group, under the same heading,

which are virtually transitive verbs,

capable of taking only one specific object;

that object, more often than not, being
unexpressed: e.g.

-NCÁZ- (beg (tobacco)): cf. -NCÁMB- (give alms),
where R2 is 'Protractive-Operative' -MB ~

-SÙZ- (pass (wind)): cf. -SÙK- (go away, remove
(intr.)), where R2 is 'neuter' -K~

-THÉZ- (gather (firewood)): cf. -THÉN- (prune),
where R2 is 'Effective' -N ~ .

(iii)   Examples of regular di-radical verbal
         roots with secondary radical, 'factative'
         -Z ~ related to mono-radical verbal root:
         e.g.

-TSHÒZ- (maintain, assert): cf. -TSHÒ (say so)

(iv)   Examples of regular di-radical verbal
         roots with secondary radical 'facta-
         tive'[1] -Z~ , related to mono-radical
         ideophones: e.g.

-BHÙZ- (buzz (of bees)): cf. -thi bhúú (s.m.)

-NGXÀZ- (flow (of tears)): cf. -thi ngxà (s.m.)

-NQÀZ- (sit dumb with amazement): cf. -thi nqà
        (be astonished)

-TWÈZ- (stretch out something that can be exten-
        ded): cf. -thi twè (be wide open).

(v)   Examples of regular di-radical verbal
         roots with secondary radical 'factative'

---

1) As RCE

-Z ᷄ , similar to di-radical ideo-

phones: e.g.

-CĒZ- (keep at a distance): cf. -thi cèbu (split

off (e.g. a splinter)):

-CHĪZ- (ooze out, exude): cf. -thi chìthì (come out,

emerge).

(vi)   Examples of regular di-radical verbal

roots with secondary radicals 'factative'

-Z ᷄ , similar to reduplicated di-radical

ideophone: e.g.

-HLĒZ- (gnaw (a bone)): cf. -thi hlèkè-hlèkè (be

split or broken into fragments).

(vii)   Examples of regular di-radical verbal

roots with secondary radical 'factative'

-Z ᷄ similar to nominal roots:

To di-radical nominal root: e.g.

-HLĀZ- (expose: bring disgrace upon): cf. iHLÀZò

(5) (disgrace).

To reduplicated di-radical nominal root:

e.g.

-DĪZ- (blab, let out secrets): cf. iDÌBí-DÌBì

(5) (a blundering speaker).

To an obsolete mono-radical nominal

root (the root in question still being

extant in Zulu): e.g.

-ZWĀZ- (plait, weave): cf. obsolete root umZWa

(3) (small fibrous root : thread-like

shoot etc).

APPENDIX C

Tonal Sequence of Mono-Radical Verbal
roots with High Tone, plus Extensions:

-DL~   (eat)

        -DLék-   (be eaten, fined)

        -DLél-   (fine)

        -DLis-   (cause to eat)

-F~   (die)

        -Fél-   (die at, die for)

        -Fís-   (cause to die)

-KH~   (pluck)

        -KHél-   (pluck for, from)

        -KHék-   (be fit for plucking)

        -KHís-   (help to pluck etc.)

-(i)M~   (stand)

        -Mán-   (stand beside each other)

        -Mél-   (stand for, in place of)

        -Mís-   (cause to stand)

-PH~   (give)

        -PHán-   (give one another)

-S~   (become light : dawn)

        -Sís-   (bring in daylight (at a
                     feast)

-TY~   (eat)

        -TYék-   (be edible)

        -TYís-   (make to eat : feed)

-TSH~   (burn)

        -TSHél-   (burn for)

        -TSHís-   (cause to burn)

-(i)V╱   (hear, feel)

    -Ván╲   (understand each other:
               be on friendly terms)

    -Vél╲   (hear for: sympathise with)

    -Vís╲   (cause to hear)

Tonal Sequence of Mono-Radical verbal
roots with Low Tone, plus Extension:

-B╲~   (become)

-(i)B╲~   (steal)

-(i)HL╲~   (descend)

    -HLèk-╲   (happen)

    -HLèl-╲   (happen to)

    -HLìs-╲   (cause to happen)

-HLW╲~   (become dark)

    -HLWèl-╲   (benight)

    -HLWìs-╲   (do something till nightfall)

-LW╲~   (fight)

    -LWàn-╲   (fight each other)

    -LWèl-╲   (fight for)

    -LWìs-╲   (help to fight)

-(i)MB╲~   (dig)

    -MBèl-╲   (dig for)

-N╲~   (rain)

    -Nèl-╲   (rain upon)

    -Nìs-╲   (cause to rain)

-NY╲~   (soak)

    -NYèk-╲   (become soaked)

    -NYèl-╲   (moisten, irrigate)

-TH~   (pour)

        -THel-   (pour into)

        -THek-   (be poured into)

-W~   (fall)

        -Wel-   (fall on, fall at)

        -Wis-   (cause to fall)

        -Wel-   (cross)[1]

        -Wez-   (ferry across)[1]

-Y~   (go)

        -Yel-   (go for, go to)

        -Yan-   (associate with)

-(i)Z~   (come)

        -Zel-   (come for, to)

        -Zis-   (cause to come, bring)

NOTE: When a mono-R v.r. is followed by two exten-
       sions in series, the tonal sequence is similar
       to that of a di-R v.r. with one extension: e.g.
       -DL ⟩ -DLel- ⟩ -DLel-an- (eat together,
       have fellowship).

---

1) It is also possible that these may be di-radical
    verbal roots, independently derived, with a
    different R1 -W~ .

-TH~   (pour)

   -THèl- (pour into)

   -THèk- (be poured into)

-W~   (fall)

   -Wèl- (fall on, fall at)

   -Wìs- (cause to fall)

   -Wèl- (cross)[1]

   -Wèz- (ferry across)[1]

-Y~   (go)

   -Yèl- (go for, go to)

   -Yàn- (associate with)

-(i)Z~   (come)

   -Zèl- (come for, to)

   -Zìs- (cause to come, bring)

NOTE: When a mono-R v.r. is followed by two exten-
sions in series, the tonal sequence is similar
to that of a di-R v.r. with one extension: e.g.
-DL~ > -DLèl- > -DLèl-àn- (eat together,
have fellowship).

---

1) It is also possible that these may be di-radical
verbal roots, independently derived, with a
different R1 -W~ .

APPENDIX D

ADJECTIVAL ROOTS

Mono-R:

-Bí	(bad)
-Dè	(long, high)
-HLé	(beautiful)
-Ní?	(what)
-TSHá	(new)
-NYè	(one)
-Nè	(four)
* -NCí	(small)

Di-R:

-DÁLà	(old)
-FÛPHì	(near)
-KHÛLù	(great)
-NÍNZì	(many)
-NGÀPHí?	(how many)
-BÌNí	(two)
-THÁTHù	(three)
-HLÁNù	(five)

Di-R plus diminutive suffix, -ane:

-FÙTSHánè	(short)	(< -FÛPHì)
-NCÍNánè	(small)	

Re-iterated Di-R:

-THÁNDÁTHù	(six)	(< -THÁTHù)

APPENDIX E

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in the course of this study:

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