TOPICS IN XHOSA VERBAL EXTENSION

by

SIZWE CHURCHILL SATYO

Submitted in accordance with the requirements for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

in the subject

AFRICAN LANGUAGES

at the

UNIVERSITY OF SOUTH AFRICA

Promoter   : Professor J.A. Louw
Joint Promoter   : Professor G. Poulos
Date submitted   : November 1985

I declare that **TOPICS IN XHOSA VERBAL EXTENSION** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

....
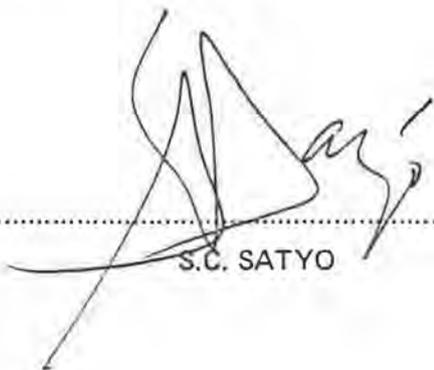
S.C. SATYO

ACKNOWLEDGEMENTS

Grateful acknowledgement is extended in the first place to Professor G. Poulos whose help and encouragement, meticulous scrutiny and useful comments at each stage of the writing of this thesis have been invaluable.

Thanks are also due to the staff of the Unisa library for their willing help in obtaining all the reading matter I requested, and information required.

I should like to express my thanks to Professors L.J. Louwrens and A.S. Davey for their willingness to supply me with reading matter and additional relevant information.

I should like to express my sincere gratitude to Professors J.M. Lenake, D.P. Lombard, C.T.D. Marivate and P.J. Wentzel for their constant moral support and interest in this work.

I should also like to express my thanks to Mrs G. Retief who undertook the typing of this thesis and did it so well.

Last, but not least, deep gratitude is due to my wife, Phumla, who understands the demands of an academic career.

SUMMARY

This study opens with an outline of the approach adopted, highlighting the advantages and disadvantages of working within either a formal theory or adopting a multi-faceted approach. Other highlights of this Chapter include the definition of the scope of this thesis as well as its aims and objectives.

Chapter 2 describes phonetic and phonological phenomena appertaining to verbal extension in Xhosa.

Chapter 3 is concerned with a morphological investigation. In this Chapter Margaret Allen's (1978) method of morphological analysis is applied. This approach appears to handle the morphology of extended radicals adequately.

Chapters 4 and 5 are closely linked. They describe syntactic phenomena. Chapter 4 gives background information about general syntactic phenomena which recur in the study of the syntax of extended verbs as such. In Chapter 5 special issues in the syntactic behaviour of productive extensions are analysed.

Chapter 6 deals with the semantic issues involved in the extension of verbal radicals as well as in their use in sentences. Particular attention is paid to the role of NPs that co-occur with extended radicals in sentences. This aspect has been relatively ignored in previous studies.

Chapter 7 should be seen as the microcosm of the macrocosm, in the sense that it handles the combinations of extensions phonologically, morphologically, syntactically and semantically. Once more particular attention is paid to NPs that co-occur with multiply extended radicals in sentences.

Chapter 8 deals with the unproductive extensions in Xhosa. The syntactic behaviour of verb stems which are extended with these suffixes is not different from that of ordinary or simplex verb stems.

The conclusion sums up points made in previous chapters, stressing once more the advantages of adopting a multi-faceted approach for this intriguing phenomenon of Bantu languages, namely, verbal extension.

CONTENTS

Chapter 1

INTRODUCTION

"Linguistic problems have a way of coming unsolved. Sometimes this is a consequence of the discovery of new data; more often, perhaps, it results from refinements of theory which, by making more precise our notions of what may constitute a viable explanation, invalidate previously accepted ways of accounting for well-known facts."

ROBERT ABERNATHY

(In Koubourlis, D.J. (ed.), 1974, *Topics in Slavic Phonology*, p. 1.)

1.1 AIM

The aim of this work is to explore the interrelated morpho-phonological, -syntactic and -semantic features of extended verb stems in Xhosa. The hypothesis presented here is that the features of extended verb stems serve to subcategorise those verbs. Xhosa has a system of suffixing certain morphemes to verb roots in order to establish a derived (or extended) set of verb stems which are characterised by the following:

(i)   Close morpho-phonological resemblances with the source verb stems or base verb stems.

(ii)   Syntactic operations which are a direct consequence of such extension or derivational processes.

(iii)   Semantic features which are also a consequence of such extension or derivational processes.

1.2 SCOPE AND ORGANISATION OF THESIS

In this thesis the term 'verbal extension' is used to refer to the process whereby certain suffixes are added to the verbal roots in order to expand them. Because of the extent of alteration that results from the extension of verb stems in Xhosa, this thesis handles the following topics:

Apart from the Introduction which is given as Chapter 1, this thesis has been divided as follows:

Chapter 2 deals with phonological phenomena which are of immediate relevance to the extension of verbal stems. No attempt is made to cover the phonology and tonology of Xhosa generally.

Chapter 3 presents the morphological structure of extended verbs. Verbal extension in this study is considered as an aspect of word formation. The general framework within which this aspect is handled is that of "Overgenerating Morphology" as outlined in Allen (1978).

Chapter 4 deals with aspects of Xhosa syntax in anticipation of their pertinence to the syntax of extended verbs as such.

Chapter 5 deals with syntactic relations with particular reference to extended verbs. It deals with syntactic features of words that co-occur with extended verbs. These properties are regarded as important since they help to clarify the contextual features of these verbs; in doing this, one is simultaneously devising a way of sub-categorising extended verbs.

Chapter 6 deals with the semantic perspective of extended verbs.

Chapter 7 handles all aspects of combinations of extensions. In other words, their morphology, syntax and semantics are dealt with in this section.

Chapter 8 deals with the unproductive extensions in Xhosa.

In the conclusion a summary is presented of the general observations gathered in the course of this study.

Bantu grammarians have generally been intrigued by the phenomenon of the extended verb system in virtually all the Bantu languages. To my knowledge, all the research that has been done in this field, taken as a whole, establishes that verbal extension serves to extend not only the morphological structure of a given root but also its syntactic and semantic features. Earlier studies of verbal extension had a rather limited interpretation; attention was only given to certain characteristics of these verbs without evaluating the overall implications of them for the grammar as a whole. However, one cannot condemn the early grammarians for their failure to explore this field adequately, for as Poulos (1981: 38-39) states in another context:

"The framework of analysis within which Doke worked is representative of an inquiry which terminates in the natural history stage, i.e. it is pretheoretical. In terms of the goals of empirical science such inquiries are inadequate. They are characterised by descriptions which are set forth in terms of inductive assertions that are NOT TESTABLE. The fact that they are not testable also implies that they lack PREDICTIVE POWER."

Although the ultimate aim of a study of this kind would be to cover all kinds of extensions in Xhosa, for practical purposes, the main body of this thesis deals in depth with the five major and productive extension suffixes, viz.

/-an-/; /-ek-/; /-el-/; /-is-/; and */-w-/*

Notes on the unproductive extensions will be given in Chapter 8. This Chapter will serve as an important reference for information about the rest of the extension suffixes which will not be handled in the main body of the thesis. Furthermore, the syntactic and semantic properties of the unproductive extensions are not as different from ordinary underived verbs as are the major productive ones.

The five productive extension suffixes in Xhosa are listed below. Alternate realisations, sometimes within certain environments are given in brackets, where applicable, after the major extension suffix.

/-an-/
/-ek-/
/-el-/
/-is-/   *(/-*y-/)*[1]
/-w-/   *(/-iw-/)*

The phenomenon of verbal extension in Bantu has received attention not only in individual languages but also in Guthrie's monumental *Comparative Bantu* which appeared in four volumes between 1967 and 1971.

1.3 TONE

All Xhosa words that are cited in this work will be tone-marked. Following Louw (1968, 1969, 1975, 1979), Westphal (1951) and Pahl (1967) the infinitive tonal pattern is regarded as being the basic one. Only three tonal marks will be used. These are:

(i)   High Tone (´)

(ii)   Low Tone (`)

(iii)   Falling Tone (^)

It is customary to leave the low tone unmarked. This practice will be upheld in this thesis unless there is something special about the low tone in question. A further exposition of tone will be given in Chapter 2. Furthermore, the spelling rules that will be adhered to are those of the Xhosa Language Board as they appear in the 1980 edition of *Xhosa Terminology and Orthography*, No. 3.

The glosses that are given for each example in this study do not necessarily cover all the meanings of a given word or stem. Varieties of meanings are dealt with in Chapter 6.

1.4 PRODUCTIVE AND UNPRODUCTIVE EXTENSION SUFFIXES

The terms productive and unproductive have been introduced above without definition. Productivity is a notion that is particularly relevant to derivational morphology. This factor has been noted by such linguists as Karl Zimmer (1964), Mark Aronoff (1976), Sandra A. Thompson (1974) and David Crystal (1980).

The latter, for example, defines productivity as follows (*op. cit.* 286):

> "A general term used in LINGUISTICS to refer to the CREATIVE capacity of LANGUAGE users to produce and understand an indefinitely large number of SENTENCES."

He goes on to say:

> "The term is also used in a more restricted sense with reference to the use made by a language of a specific feature or pattern. A pattern is 'productive' if it is repeatedly used in language to produce further instances of the same type (e.g. the P past TENSE AFFIX -ed in English is productive, in that any new VERB will be automatically assigned this past tense form). Non-productive (or 'unproductive') patterns lack any such potential, e.g. the change from mouse to mice is not a productive plural formation — NEW NOUNS would not adopt it, but would use instead the productive s-ending pattern ..."

Let us look at the following data from Xhosa; the examples in 1a are meant to illustrate productivity, while those in 1b, which incorporate the suffix /-ul-/, are unproductive or non-productive.

1(a).	úkú-hleka		'to laugh'
	uku-hlékana		'to laugh at each other'
	uku-hlékeka		'to be laughable'
	uku-hlékela		'to laugh at, for ...'
	uku-hlékisa		'to cause to laugh'
	úkú-hlekwa		'to be laughed at'

(b)	uku-bángula		'to remove thorns from flesh'

(c)	*uku-hlekula	<	úkú-hleka	'to laugh'
	*uku-hambula	<	úku-hámba	'to walk'
	*uku-thethula	<	úku-thêtha	'to talk'
	*uku-thumula	<	úku-thûma	'to send'
	*uku-culula	<	úkú-cula	'to sing'

The difference between the forms in 1(a)-(c) is very significant. The speakers of Xhosa know that for the paradigm in 1(a) there exists a relationship which also holds for other paradigms of verbs in Xhosa as the examples in 2 illustrate.

2.	úku-thânda		'to love'
	úku-thandána		'to love each other'
	úku-thandéka		'to be loveable'
	úku-thandéla		'to love for ...'
	úku-thandísa		'to cause to love'
	úku-thândwa		'to be loved'

As Jackendoff (1975: 356) points out, the burden on the memory is considerably reduced if paradigms which are semantically related are also morphologically related. In justifying his standpoint, Jackendoff invites us to compare the "cost" to the memory, of having to store and retrieve totally dissimilar lexical items. I shall use Xhosa examples to illustrate this point. Compare examples such as:

-cinga 'think' and -fá 'die'

with the meanings of the various lexical items which are members of paradigm 2, for instance. If one looks again at 1(b), the speakers of Xhosa know that the suffix /-ul-/

can be attached to verb roots, but since this is not a regular or productive operation, they cannot create new words productively on this model as the examples in 1(c) indicate. However, as far as the examples in 1(a) are concerned, it is abundantly clear that the speakers will know that such a paradigm exists and that there is a relationship among its members. Equally, they will know that other paradigms can be derived from the same model. Lastly, they will know that the starred forms in 1(c) are not used in Xhosa.

Let us now refer to another crucial difference between productive and unproductive extensions. This difference has already been implied in the sets of examples in 1. But for the sake of clarity I propose to use another set. Consider the examples in 3 below:

3(a). *úku-thêtha*　　　　　　　　　'to speak'
　　　úku-thethána　　　　　　　'to speak to each other'
　　　úku-thethéka　　　　　　　'to be worthy of talking about'
　　　úku-thethéla　　　　　　　'to speak for ...'
　　　úku-thethísa　　　　　　　'to cause to speak'
　　　úku-thêthwa　　　　　　　'to be spoken about'

(b)　*úku-bâba*　　　　　　　　　'to be bitter'
　　　*úku-babána
　　　*úku-babéka
　　　úku-babéla　　　　　　　　'to inflict bitterness on/to'
　　　úku-babísa　　　　　　　　'to cause to be bitter'
　　　*úku-bâtywa[2]

The starred forms in 3(b) are totally inconceivable and can never be posited, even as possible words by the speakers of the language. One can therefore explain this by putting verbs into various categories which will make it possible to predict "acceptable" and "unacceptable" forms.

From the above it can be deduced that there are various blocking devices which constrain overgeneration or even misgeneration or malformation which may be inherent in a source or base form. Compare the example in 3(b) above. In other instances the base verb will block a certain derivative on the basis of its (the base verb's) semantic import.

EXAMPLES

4. *-fa*   **-fana*[3]

    'die'

1.5 COMBINATIONS OF EXTENSIONS

The question of the rules that govern the combinations of certain extensions and the rejection of others will also be dealt with. An attempt will be made to formulate rules that can predict this process.

Consider, for instance, the following examples:

5. *úkúxina*   'to crowd'

    ukuxinánisa   'to crowd together'

    ukuxinanísela   'crowd for'

    ukuxinaniselwa   'crowd together for'

But *úkuvûya*   'to rejoice'

     úkuvuyísa   'to cause to rejoice'

     *ukuvuyisekwelisa

     *ukuvuyaniselwa

The acceptable forms and the starred ones which are unacceptable, point to some interesting rules that make it impossible for certain combinations to occur while others can be derived.

1.6 SOME REMARKS ABOUT THE MORPHOLOGY OF THE WORD IN XHOSA

In this thesis I shall be dealing mainly with certain suffixes and their attachment to some roots. In order to appreciate the use of the various extensions, brief reference will be made here to the structure of the word within the broader framework of the language.

1.6.1 The morphology of the word in Xhosa

Since the nineteenth century (*vide* Lyons 1968: 187), it has been customary for linguists to classify languages into the following structural types: isolating, agglutinating and inflecting (or fusional). The terms isolating and inflecting will not be discussed here since their relevance is only peripheral. For details about them, readers are referred to Lyons (1968: 187-192). The language of this research, Xhosa, belongs to the agglutinating type. According to Lyons (1968: 188):

"An agglutinating language is one in which words are typically composed of a
sequence of morphs with each morph representing one morpheme."

Let us illustrate this composition of words by means of sequences of morphemes by
taking examples from Xhosa:

6(a). *ndi-ba-bon-íle*   'I have seen them'
      1 2   3   4

  (b) *ú-m̀-fáz(i)-âna*   'a young woman'
      1 2   3   4

  (c) *bá-ya-bon-án-a*   'they see each other/one another'
      1   2   3   4 5

The numbers in these examples refer to the different morphemes.

In example (a) *ndi-* is the first person singular subject concord, *-ba-* is the object con-
cord (OC) of class 2; *-bon-* is the verbal root morpheme and *-ile* is the perfect aspect
morpheme, cf. Van Rooyen (1978: 65) and Sloat *et al.* (1978:12).

In (b) *u-* is the pre-prefix; *-m-* is the basic class prefix; *-fazi-* is the nominal stem and
-ana is the diminutive suffix. In (c) *ba-* is the subject concord (SC) of class 2; *-ya-* is
the formative of the present tense, long form; *-bon-* is the verbal root and *-an-* the
reciprocal extension, and *-a* the terminative vowel. The three examples used above are
not meant to cover all the morphemes of formatives found in Xhosa, but are merely
used to illustrate the point at issue. Let us now make a list of the morphemes found in
examples 6(a), (b) and (c):

(a)   *ndi-*   first person singular subject concord

      -ba-   object concord (Class 2)

      -bon-   verbal root

      -ile   perfect aspect

(b)   *u-*   initial vowel/pre-prefix

      -m-   basic prefix/prefix proper

      -fazi-   nominal stem

      -ana   diminutive suffix

(c)	ba-	subject concord (Class 2)
	-ya-	present tense, long form
	-bon-	verbal root
	-an-	reciprocal extension
	-a	terminative vowel

On the question of morphemes, Lyons (*Ibid.*) states that they:

"... preserve their phonological identity and are immediately recognisable; they are, as it were, simply 'stuck on' ('agglutinated') in sequences."

It is for this reason that words in the Bantu languages may be easily segmented into their constituent morphemes, as has been illustrated in the above examples.

Other important points to remember about agglutinating languages are, according to Lyons (1968: 189):

(i) "determinacy with respect to segmentation into morphs."

(ii) "the one-to-one correspondence between morph and morpheme."

The two things listed above are, according to him, "characteristic of 'agglutinating languages' " *(Ibid.)*. The one-to-one correspondence between morph and morpheme "must be understood as holding within a given word: ..." *(Ibid.)*

For our purposes a morpheme will be defined as a minimal unit of sound that carries meaning. Furthermore, the term morpheme will be used, interchangeably with the term formative.[4]

1.7 THE LEXEME

There is another point which should be clarified here although reference has already been made to it in this work. This is the question of what "form" of the verb is regarded as basic. In certain ways, this would seem to draw one to the vexed question of what a lexeme is in Xhosa. Lyons (1968: 196) distinguishes between three types of words:

(i)   the phonological word;

(ii)   its corresponding orthographic representation; and

(iii)   a grammatical word.

Lyons (1968: 197) uses the term lexeme as follows:

> "... (to ... SCS) denote the more 'abstract' units which occur in different inflexional 'forms' according to the syntactic rules involved in the generation of sentences."

Although the question of what should be regarded as a lexeme in an agglutinating language like Xhosa is quite tempting, I shall not enter into this controversy because its relevance to this study is peripheral. In the rest of this thesis I shall be using terms like verb stem, root, extension suffix, etc., the definitions of which are well known.

1.8   METHOD OF RESEARCH

The method of investigation that has been used in this research is as follows:

Nearly every single verb that appears in the Xhosa-English dictionary by A. Kropf has been tested against all five productive extensions.

Other major sources of material in this work have been:

(i)   a dictionary project in which the writer has been involved for the past seven years; and

(ii)   published literary works in Xhosa.[5]

The Xhosa examples that have so far been used (*vide* no's 1-3 above) must have already captured the eye of the reader with regard to an important phenomenon of the Xhosa verbal system. The examples referred to, show first what has been termed a "base or source verb", i.e. the core from which all the others listed under it are derived; then secondly come the various extensions and derivatives. This behaviour of the verb in Xhosa will be used as a convenient point of departure to outline two important assumptions about the nature of human linguistic competence which distinguishes generative grammar from other approaches. These two assumptions are:

(i)   rule-governed creativity; and

(ii)   infinite use of finite means,

cf. Chomsky (1965: 3-14).

1.9   RULE-GOVERNED CREATIVITY

Rule-governed creativity implies that when someone produces an utterance, he is not simply repeating, by force of habit, one of a set of sentences or words which he has stores in his memory, cf Chomsky (1965: 6 *et seq.*). Rather, one should say that he is creating that word (or sentence or utterance) spontaneously by combining the morphemes (if it is a word) he knows according to certain principles which he "knows". This "knowledge" is an unconscious possession which accounts for the spontaneous or effortless correct use of one's language. These principles constitute the rule-governed aspect of language. This most probably accounts for the ideal speaker's ability to recognise and produce correct words and sentences.

1.9.1   Infinite use of finite means

Closely related to the assumption of "rule-governed creativity" is the hypothesis that the competence of an ideal native speaker enables him to make infinite use of finite items which are found in his language. Once again, consider the examples in 1-3 above. The infinite potential of language implies the principle of "overgeneration", cf. Allen (1985: 185) in the sense that, as far as morphology is concerned, for instance, the rules of word formation must generate the infinite set of possible, well-formed words, only a sub-set of which includes "actual" or "occurring" words. That is why, for example, Allen (1978), Jackendoff (1975), Aronoff (1976) and Booij (1977) divide the Lexicon into a Conditional and a Permanent set. The Conditional Lexicon refers to all "possible" words, while the latter refers to the actually occurring words only.

1.10   EARLIER CONTRIBUTION TO THE STUDY OF VERBAL EXTENSIONS IN XHOSA

Attention will now be given to three grammarians who are of special interest to the present investigation, namely H.W. Pahl, J.V. Cantrell and A. Wilkes. The first two have contributed significantly to the description of the verb and its extensions. The last-mentioned has worked on the same aspect for Zulu, a language that is closely related to Xhosa. Wilkes's contribution cannot be left without comment especially because of his substantial contribution to this area of investigation, and especially because he recently

began to question the way in which earlier linguists handled the whole question of verbal extension, cf. Wilkes (1978: 59-60).

1.10.1 Pahl

In his pedagogical grammars (1963, 1967) and his article in *Fort Hare Papers* (1978), Pahl uses the approach of pioneers like B.I.C. van Eeden (1956) and C.M. Doke (1927). His approach to verbal extension is characterised by the following:

(i)   a list of some examples (usually not more than ten) where the radical may assume an extension suffix;

(ii) a list of not more than ten so-called exceptions;

(iii) the meanings of base or source forms and those of their derived or extended forms;

(iv) isolated examples of some relics of extensions;

(v)   isolated examples of some of the base verbs whose underived forms are no longer extant.

After this, Pahl treats subsequent grammatical relations in respect of each extended verb in a kind of "spot-an-occurrence" method. The inadequacies of such an approach have already been outlined in our quotation earlier cited from Poulos (1981: 38-39).

1.10.2 Cantrell

Cantrell's (1967) is an interesting case. His thesis is an undoubtedly affix-orientated analysis whose aim 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."

It is my claim that nowhere in the study of Xhosa verbal extension are the dangers of an exclusively affix-orientated method better revealed than in Cantrell's work. For example, he takes the following data from Xhosa:

Verb stem		Root
-thânda	'love'	*-thând-*
-fûna	'seek'	*-fûn-*

He states that the above examples led him to a crucial problem in his research, namely how he should describe the root of a disyllabic verb stem. He maintains that the root in the above examples is not really disyllabic. Instead, he declares:

> "It can ... now be regarded as a root consisting of two radicals."
>
> Cantrell (1967: 2)

i.e.   -fu- and -n-.

He says that these radicals are also different. The first one is of the /CV/ shape, while the second is of the /C/ shape. From the above, it is quite clear that to Cantrell the terms radical and root are not used synonymously as is the case with many Bantu grammarians, cf. Guthrie (1967: 1-2). Cantrell (1967: 11) defines the radical as:

> "... the irreducible element within a root, though not necessarily possessing a definite 'meaning' when standing alone, exerts a semantic influence upon any root of which it forms a part."

He adds in a footnote that a radical does have a definite "meaning" when it occurs as a mono-radical verbal root. In this thesis, Cantrell's "radical" standpoint is rejected because it is of such a speculative nature that it does not serve much purpose. For instance, it is immensely difficult for one to imagine how the second "radical" in his terms, which is usually the phonological shape /C/, can have some form of semantic import, no matter how much that may be understood to be underspecified. It is equally impossible to fathom the problems of trying to separate the meaning content of a root according to its phonological sequences. Cantrell's (1967: 4) contention that he is adapting for Xhosa a method that had already been used by Van der Merwe (1941) for the Sotho verbal system does not help him either. There is no principled way in which one can support Cantrell's claim (following Van der Merwe) that:

> "... certain verbal roots possessing a similar first radical, have also a similarity in general meaning."
>
> Cantrell (1967: 4)

Consider, for instance, the following data from Xhosa:

7.	Verb stem		Root
	-hleka	'laugh'	-hlek-
	-hleza	'chew a bone'	-hlez-

-hlêba	'slander'	*-hlêb-*
-hlela	'edit'	*-hlel-*

There is no similarity in meaning between these verb stems. In addition, there is no similarity, in semantic terms, that results from the identical phonological sequences /CV/ and the phonetic realisation [ɬɛ]. The tendency in Bantu grammar to assign certain underspecified meanings to a number of affixes is carried too far in Cantrell's work. In the second part of his research, which deals with extensions, he does not deviate from the mainstream of other traditional Bantu grammarians. Therefore, his taxonomic exposition suffers the same problems of inadequacy as do others, which merely depend on classification and commenting from a very narrow vantage point.

1.10.3 Wilkes

Wilkes (1978) has made a substantial contribution to the study of verbal extension in his doctoral thesis (1971), as well as in a number of articles on this subject.[6] More reference will be made to his thesis in the chapters on morphology, syntax and semantics. Wilkes's (1978: 60 *et seq.*) paper is important in many ways:

(i)   it breaks away from the old approach of other Bantu grammarians;

(ii)   it attempts to work within a particular theory and in that way strives towards a principled generalisation about the "applicative verbs in Zulu".

Wilkes (*op. cit.*) defines the parameters of his approach as follows:

(a)   he rejects the standpoint of those who claim that, "... the formation of all derivative verbs in these languages (i.e. Bantu Languages — SCS), are lexically determined and that they must consequently originate in the lexical component of the grammar."

Wilkes (1978: 60)

(b)   One of his most important reasons for rejecting the above standpoint is that, "... the formation of all lexically derived words is never syntactically determined, ..."

Wilkes (*op. cit.*)

I couldn't agree with him more as far as the quotation in (b) is concerned. But the trouble is that he considers verbal extensions to be syntactically derived for a number of reasons that are unacceptable in this study.

Let us now look at his reasons for his standpoint, cf. Wilkes (1978: 60):

(i)   Verbal extensions "... never affect node labels of the words to which they attach ..."

(ii)   "... their application can in most cases ... be syntactically explained."

(iii) the main factor here is "noun functions" which in the case of most of these suffixes play a determining role in their application.

I shall now deal with the three points above individually. It is further assumed that these observations are applicable to Xhosa as well. They will, therefore, be reviewed in relation to Xhosa.

1.10.3.1 Verbal extension and node labels

Allen (1978: 2) has made the observation that:

> "Derivational affixes invariably change the lexical category of the words to which they attach."

The following data from Xhosa, however, serves to illustrate the inadequacy of the above observation:

8. $[-hámba]_V$ → $[-hámbela]_V$

      $[-thêtha]_V$ → $[-thethísa]_V$

      $[-bíza]_V$ → $[-bizéka]_V$

      $[-bôna]_V$ → $[-bonána]_V$

      $[-thânda]_V$ → $[-thândwa]_V$

It is quite clear from these examples that the addition of verbal extensions does not change the word category of the base forms. The node label "V" is not affected.

1.10.3.2 Verbal extension and syntactic explanation

Wilkes's hypothesis in this regard presents certain problems. If his argument is taken to its logical conclusion, then it implies, for example, that the fact that -bôna (see) in Xhosa is generally regarded as transitive, is syntactically conditioned. Wilkes's claim implies that verbs like those in 9-13 cannot appear in the dictionary; their occurrence is only syntactically determined.

9.   /-el-/ extension

      -hámbela   'go to/for'

      -phékela   'cook for'

      -tyéla   'eat for'

      -bonéla   'see for'

10.   /-an-/ extension

      -bonána   'see each other/one another'

      -thandána   'love each other/one another'

      -funána   'seek each other/one another'

      -ncómana   'praise each other/one another'

11.   /-ek-/ extension

      -phékeka   lit. 'become cooked'

      -bámbeka   'be caught'

      -thandéka   'be loveable'

      -hlúzeka   'be sifted'

12.   /-is-/ extension

      -bonísa   'show'

      -lílisa   'make to cry'

      -phékisa   'make to cook'

      -thethísa   'make to speak'

13.   /-w-/ extension

      -bônwa   'be seen'

      -békwa   'be put'

      -búzwa   'be asked'

      -thêthwa   'be spoken'

The fact that the verb stems in 9-13 above are derivatives does not deprive them of their status as appearing in the lexicon. Rather, the paradigms to which they belong illustrate a striking morphological and a concomitant semantic relationship which considerably lightens the burden on the memory when the cost of having to store and retrieve totally dissimilar lexical items is now avoided by means of this morphological resemblance, cf. Thompson (1974: 2).

1.10.3.3 Noun functions and derivative verbs

In this thesis it will be shown that the syntactic functions of nouns do not determine the occurrence of extensions. Rather, it is the extended verb itself that governs certain syntactic operations. This standpoint is substantiated in Chapter 5.

1.11 THEORETICAL BACKGROUND

Previously, virtually all studies in linguistic topics have had to show some connection with Chomsky's work, cf. Hendrikse (1983: 6). Hendrikse (*op. cit.*) quotes Sampson (1980: 130) who says:

> "Just as books published in the Soviet Union on the most abstract academic topics once had to begin with a ritual obeisance to the guiding genius of Stalin; so nowadays even scholars researching aspects of language which have very little connection with Chomsky's work, often feel obliged to claim publicly that their writings exemplify the Chomskyan paradigm of linguistic thought; ..."

In recent years there has been a new awareness that there are serious problems in adopting a monotheoretical approach to language. For instance, Givón (1979c: 1-2) expresses himself very strongly against working within a monotheoretical framework:

> "I have been convinced for a number of years now that transformational-generative grammar on its various ideological stripes has trapped itself in a labyrinthine prison out of which no graceful natural exit is possible, short of plowing under the entire edifice and starting afresh. I have become more and more weary of the circular, sterile, and scholastic nature of the polemics, and have come to believe that the only hope for a different linguistics lies in the actual practice of doing linguistics differently."

Givón goes on to say:

> "A dysfunctional paradigm in science is a conceptual trap, constraining the mind of the practitioner just as viciously as steel bars would his body."

Further evidence from the movement away from Chomskyan linguistics to a more multi-faceted framework is found in Moore and Carling (1982: 15). They argue as follows:

> "In recent years some theoretical linguists have begun to pay more attention to the importance in the interpretation of language of what they refer to as 'The World'. This is reflected in the flourishing of a domain which has become known as pragmatics. Very broadly, pragmatics is concerned with the characterisation of language in use."

The approach in this research is multi-faceted. I believe that by avoiding a monotheoretical model I will benefit in the following ways:

(i)   In dealing with various extended verb stems and their use in sentences, I do not use what Givón (1979c: 25) calls:

> "Artificial-sounding sentences, in isolation of communicative function and communicative context ..."

(ii)   I believe that I will not "gut the data base", cf. Givón (1979c: 22-44) by studying words and sentences:

> "... whose imputed existence (bears ... SCS) little or no relation to natural language facts."

(iii)   Another advantage of avoiding a monotheoretical framework is that data will not be excluded by the limitations of the model. In a multi-faceted framework, one is free to explain facts of language without any fear of violating the parameters of a particular model. In other words, a multi-faceted framework seems to be the only approach capable of meeting all the points raised above.

Let us conclude this section by referring to Smith (1982: xi) who writes as follows:

> "The failure by most transformationalists to address problems of language use seriously has led some to suspect that the theory was approaching bankruptcy. Within the last few years, however, there has developed a coherent field of pragmatics, stemming from work both in linguistics and the related field of philosophy and psychology and artificial intelligence, which presupposes a competence theory of language and incorporates into it a more general theory of language use."

Although a multi-faceted or multi-theoretical approach is subsumed throughout this thesis — and various theoretical concepts which derive from such an approach are alluded to — the gist of the thesis does not purport to pursue explanations, but rather explores in pre-theoretical terms the major facts that are related to Xhosa verbal extensions. Thus often certain problematic phenomena are highlighted and analysed up to a point without necessarily providing explanations. An important facet of this thesis, therefore, is to systematise the relevant facts involved in verbal extension. Hopefully this systematisation will provide a significant basis from which the problematic phenomena raised in this study could be taken further in research aimed at systematic explanations. This is not to say that no explanations whatsoever are offered in this study. Some are put forward though they would need to be developed further.

Chapter 2

ASPECTS OF PHONOLOGY AND TONOLOGY

2.1 INTRODUCTION

Certain extensions involve phonological issues which could perhaps be discussed under the relevant extension headings. However, in order to facilitate the discussion in subsequent sections, of the phonological properties of each extension, it has been decided to present a general outline here of the phonological phenomena in Xhosa.

Phonology is aptly defined by Sloat *et al.* (1978: 1) as:

"... the science of speech sounds and sound patterns."

They go on to say:

"By a sound pattern we mean (1) the set of sounds that occur in a given language, (2) the permissible arrangements of these sounds in words, and (3) the processes for adding, deleting, or changing sounds."

Present-day research in phonology proves beyond doubt that tonology is as much an integral part of this aspect of language study as are phonemes and the sound patterns. Following this approach, I have therefore, included an analysis of the lexical representation of tone and the nature of applicable tone rules.

2.2 THE VOWEL PHONEMES OF XHOSA

Following the definition of phonology given above, I shall now set out to outline the set of sounds that occur in Xhosa, starting with the vowels. There are five underlying vowels in Xhosa. These, however, correspond to seven phonetic realisations as can be seen below:

1.   /i/   :   [i]
        /e/   :   [ɛ]
                 :   [e]
        /a/   :   [a]

/o/ : [ɔ]

: [o]

/u/ : [u]

The underlying vowel phonemes appear between oblique lines, while phonetic vowel realisations appear in square brackets.

The vowels of Xhosa are represented on the vowel chart as follows: [1]

Diagram 1 — Vowel Chart
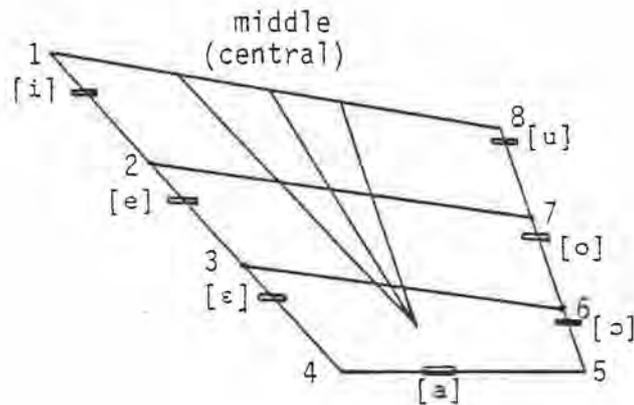
All vowels are universally specified [− consonantal].

2.2.1 Distribution of vowel variants

The variants [e] and [o] are caused by a process known as vowel raising. This process is discussed in par. 2.12.

EXAMPLES

2.   *ínyôsi*   [iɲosi]   'bee'

     ĩséphu   [isephu]   'soap'

but

     énkósáneni   [ɛŋkʔɔsaneni]   'at a minor chief's place'

     ésáhlúlweni   [ɛsałulweni]   'in at the portion'

It should be noted that when [ɛ] and [ɔ] are raised to [e] and [o] respectively, this is not shown in practical orthography.

The following examples of Xhosa words illustrate the occurrence of the various vowel phonemes and associated phonetic realisations:

3. /phila/   :   [pʰila]   'live'
    /pheka/   :   [pʰɛkˀa]   'cook'
    /phékisa/   :   [pʰekˀisa]   'cook-CAUSE'
    /bala/   :   [ɓala]   'count'
    /sola/   :   [sɔla]   'blame'
    /sólisa/   :   [solisa]   'blame-CAUSE'
    /súla/   :   [sula]   'wipe'

2.3   CONSONANTS

The consonants of Xhosa are reflected in the following two charts. The second chart refers specifically to the click consonants.

2.3.1 Phonetic inventory of consonants

See page 22 (Chart 1).

2.3.2 Click consonants

On page 23 is a chart of the basic click consonants that are found in Xhosa. Like the previous one on ordinary consonants (Chart 1), this chart gives details about the manner and the place of articulation of each click consonant.

CHART 1

Manner of Articulation						Place of Articulation					
Manner in which air stream escapes	Passage along which air stream flows	State of the glottis	bila-bial	denti-labial	alveo-lar	alveo-pala-tal	pala-tal	velar	glo-ttal	Equivalents in the practical orthography
PLOSIVE	CENTRAL (ORAL)	ejective	p?		t?			k?		p, t, k
		aspirated	ph		th		ch	kh		ph, th, tyh, kh
		delayed breathy voice[2]	ɓ		ɗ		ɟ̥	g		bh, d, dy, g
		breathy voice	b*		d̤*		ɟ̈*	g̈*		(m)b,(n(d,(n) dy,(n)g
IMPLOSIVE		voiced	b							b
AFFRICATE		aspirated			tsh	tʃh				ts, tsh
		ejective		Φf?*	ts?	tʃ?		kx?		(m)f, ts, tsh, kr
		delayed breathy voice				d̥ʒ				j
		breathy voice		Φʋ*	dz̤*	dʒ̈*				(m)v, (n)z, (n)j
	lateral (ORAL)	ejective			tɬ?*					(n)tl
		breathy voice			dɮ̈*					(n)dl
FRICATIVE	central	voiceless		f	s	ʃ		x	h	f, s, sh, rh,h
		breathy voice		v̈	z̈			ɣ̈	ɦ̈	v, z, rh. h
	LATERAL	voiceless			ɬ					hl
		breathy voice			ɮ̈					dl
		voiced			l					l
		breathy voice			l̈					l
RESONANT	CENTRAL (TRILL)	voiced			r/r̤					r
		breathy voice								
	CENTRAL	voiced	w				j	w		w, y, w
		breathy voice					j̈	ẅ		y, yh, w
	NASAL	voice	m	m*	n		ɲ,ɲ*	ŋ		m, m, n, ny, n , n
		breathy voice	m̈		n̈		ŋ̈			mh, nh, nyh

*These sounds occur in nasal compounds as is indicated in the practical orthography.

22

CHART 2

TABLE OF CLICK CONSONANTS						
Manner of Articulation			Place of Articulation			
Manner in which airstream escapes		State of the glottis	Dental	Alveo-lateral	Palatal	Equivalents in the practical orthography
STOP CONSONANTS	ORAL	voiceless	/, k/*	//, k//*	!, k!*	c,(n)kc, x, (n)kx, q, (n)kq
		aspirated	/h	//h	!h	ch, xh, qh
		delayed breathy voice	/g̥	//g̥	!g̥	gc, gx, gq
		breathy voice	/g̤	//g̤*	!g̤*	(n)gc, (n)gx, (n)gq
	NASAL	voiceless	ŋ/	ŋ//	ŋ!	nc, nx, nq

* These sounds occur in nasal compounds only.

2.4 SYLLABIC PATTERNS

A full description of the terms root extension suffix, terminative vowel and verb stem will be given in Chapter 3. In the meantime these terms will be used without further definition.

2.4.1 Syllabic pattern A

Monosyllabic verb stems consist of the phonological sequence /CV/, that is consonant: vowel. Here are a few examples:

4. /phá/   'give'   /CV/
    /khá/   'draw'   /CV/
    /fá/   'die'   /CV/
    /sá/   'dawn'   /CV/
    /tshá/   'burn'   /CV/
    /tha/   'pour'   /CV/
    /wa/   'fall'   /CV/
    /thi/   'say/do'   /CV/

2.4.2 Syllabic pattern B

Closely linked with the pattern above is another small group of verbs in Xhosa, which Bantu linguists often refer to as "verbs with a latent *i* vowel". Since this latent *i* is manifest in certain syntactic usages only, no attempt will be made in this thesis to postulate a syllabic pattern like the following:

> latent vowel — Consonant — Vowel:
> /VCV/

In fact, these verbs have no direct bearing on the use of extensions. It will suffice in this research to represent the pattern of this type of verb as:

> Consonant — Vowel: /CV/

2.4.3 Syllabic pattern C

The majority of verb stems in Xhosa are disyllabic. Their pattern is as follows:

> /Consonant — Vowel — Consonant — Vowel/
> /CVCV/

Here are a few examples to illustrate this:

5. /búla/   'commit incest'   /CVCV/
    /sála/   'remain'   /CVCV/
    /séla/   'drink'   /CVCV/
    /súla/   'wipe'   /CVCV/
    /sila/   'grind'   /CVCV/
    /sola/   'blame'   /CVCV/
    /zula/   'wander'   /CVCV/

2.4.4 Syllabic pattern D

There is also a group of verb stems which are conventionally referred to as vowel verb stems in Bantu Linguistics. The pattern of these verb stems is described as follows:

(i) /Vowel—Consonant—Vowel/: /VCV/

e.g.

6(a). | /âzi/ | 'know' | /VCV/ |
|---|---|---|
| /âla/ | 'refuse' | /VCV/ |
| /ôna/ | 'do wrong' | /VCV/ |
| /ôma/ | 'dry up' | /VCV/ |
| /ósa/ | 'roast' | /VCV/ |
| /ója/ | 'roast' | /VCV/ |

(ii) /Vowel—Consonant—Vowel—Consonant—Vowel/: /VCVCV/

e.g.

(b). | /álúsa/ | 'herd' | /VCVCV/ |
|---|---|---|
| /áphúsa/ | 'stop suckling' | /VCVCV/ |
| /ónwába/ | 'be happy' | /VCVCV/ |
| /éyísa/ | 'conquer' | /VCVCV/ |
| /áphúla/ | 'break' | /VCVCV/ |
| /óphula/ | 'dish out' | /VCVCV/ |

2.4.5 Syllabic pattern E

Another pattern of verb stems in Xhosa is that of:

7(a). the so-called trisyllabic verb stems.[3]

/Consonant—Vowel—Consonant—Vowel—Consonant—Vowel/: /CVCVCV/

/lúlama/	'be meek'	/CVCVCV/
/phúthuma/	'fetch'	/CVCVCV/
/pházama/	'err'	/CVCVCV/
/phámpatha/	'feel'	/CVCVCV/
/khweléta/	'be jealous'	/CVCVCV/

/thabátha/	'subtract'	/CVCVCV/
/qhawúka/	'snap'	/CVCVCV/
/baléka/	'run'	/CVCVCV/
/fukáma/	'hatch'	/CVCVCV/

2.4.6 Syllabic pattern F

There is also a large group of verbs with four syllables. Under this heading we shall also · treat those verbs which have more than four syllables.

(a) Verb stems with four syllables have the following pattern:

Consonant–Vowel–Consonant–Vowel–Consonant–Vowel–Consonant–
Vowel: /CVCVCVCV/
e.g.

8.
| /tyibílĭka/ | 'slip' | /CVCVCVCV/ |
| /nqanqáthéka/ | 'need tobacco' | /CVCVCVCV/ |

(b) Verb stems with five or more syllables. Their pattern is: /CVCVCVCVCV/
e.g.

| /bolekisána/ | 'lend to each other/ one another' | /CVCVCVCVCV/ |

In principle if one reduplicates a single verbal extension suffix, the number of syllables that a verb stem can have theoretically is infinite.

2.5 THE SYLLABIC PATTERN OF EXTENSIONS

Up to now the patterns that have been dealt with are those of simplex verb stems. I shall defer the treatment of the arrangements of sounds in extended verb stems until after the treatment of the syllabic pattern of extensions has been completed. Like the various categories of verb stems, the extensions have a recognisable structure, namely:

(i)	/VC/	/-an-/
(ii)	/VC/	/-ek-/
(iii)	/VC/	/-el-/

(iv)	/VC/	/-is-/
(v)	/VC/	/-iw-/

But it should be noted that the passive extension has a variant which consists of a consonant only, viz. /-w-/.

2.6 GENERAL REMARKS ON SYLLABLE STRUCTURE

The syllable structure characteristic of Xhosa is as follows:

(i)   Consonant—Vowel: CV

e.g.

9.   *bô* $ *na* $ 'see'

        zi $ *lá* $ 'abstain'

Each syllable in the above examples has been written with the syllable marker $.

(ii)   There are those syllables which consist of a vowel only: V $. Copious examples of this phenomenon can be found among the so-called vowel-verb stems. The first syllable in this type of verb is invariably a vowel only, e.g.

10.   *-ô* $ *ma* $ 'be dry'

        -á $ *lú* $ *sa* $ 'herd'

        -é $ *yi* $ *sa* $ 'defeat'

The pattern of the above syllables is as follows:

V $ CV $

V $ CV $ CV $

V $ CV $ CV $

Although examples have been sought from verbs only, the above exposition is true of all types of words in Xhosa. In the above brief outline of syllable structure, I have by implication said that a syllable in Xhosa can never be of the pattern: Consonant : C only. A closer look at a wider spectrum of examples in Xhosa reveals that this implied suggestion is untenable. Consider, for example, the following examples from nominals:

| 11. | *ú $ ṁ $ ntu $* | Class 1 | 'person' |
| | *ú $ m $ só $* | Class 3 | 'following day' |

The second syllable of nouns from these classes is what is conventionally referred to as the syllabic [ṃ] by Bantu linguists. It constitutes therefore an example of a syllable that consists of a consonant only. Originally this syllable (which is actually the prefix proper of these classes) consisted of a consonant and a vowel /CV/ and that vowel later disappeared. To strengthen this view one can compare this prefixal element with its counterpart in the closely related language, Zulu, which still retains the vowel "u" which has disappeared in Xhosa.

From the details given above it is clear that basically the syllable structure of Xhosa is as follows:

(i)   CV $ (Consonant Vowel)

This happens on a very large scale.

Examples from Swahili, Bemba and Kongo, quoted by Guthrie (1970c: 72) demonstrate that this is characteristic of many languages of the Bantu family.

(ii)   V $ (Vowel only)

Examples of this range from the so-called vowel verbs to the nouns (particularly preprefixes) and other words of Xhosa generally.

12.(a) Vowel verbs

ô $ na $	'sin'
V $ CV	
é $ yí $ sa $	'defeat'

(b) Nouns

ú $ ṁ $ ntu $	Class 1	'person'
ú $ ṁ $ zi $	Class 3	'home/house'
í $ lí $ tye $	Class 5	'stone'
í $ sí $ tya $	Class 7	'dish'

í $ ndo $ da $	Class 9	'man'
ú $ lu $ thí $	Class 11	'stick'
û $ bû $ si $	Class 14	'honey'
ú $ ku $ tyá $	Class 15	'food'

(Even those noun classes that have been omitted exhibit the syllabic structure under consideration here.)

(iii)   The syllable that consists of a consonant only does not seem to be basic to the arrangement of sounds in Xhosa words. Where it exists, one can account on phonological and morpho-syntactic grounds, for its occurrence in certain well-defined cases (even if the phonological methods used are diachronic).

This latter point (iii) above makes it possible for us to explain why the extension sequence /-iw-/:/VC/ (which is an alternant of /-w-/:/C/) selects, on phonological grounds, the radicals or roots to which it will attach.

The data at our disposal shows that attaching /-w-/ to monosyllabic verb stems would result in an unacceptable sound sequence or phonological realisation.
e.g.

13.   */phwa/*
       /khwa/
       ***/thw/*
       /lww/
       /tshw/
       /yw/

Note also that there is a general tendency in Bantu to lengthen monosyllabics by adding a vowel, for instance.

2.7 /-an-/:/VC/ EXTENSION
When this extension is taken together with the detachable terminative /-a/, it is realised as /-ana/.

14.	/thânda/	e.g.	/thandána/	'love each other/ one another'
	'love'			
	/bôna/		/bonána/	'see each other/ one another'
	'see'			
	/thîya/		/thiyána/	'hate each other/ one another'
	'hate'			
	/bôpha/		/bophána/	'tie each other/ one another'
	'tie'			
	/phîxa/		/phixána/	'be warped together/ be confused'
	'confuse'			

When verbs that have been extended in this manner are used in the perfect tense, we get an example of vowel assimilation which is one of the natural processes in phonological theory, cf. Sloat, *et al.* (1978: 116), i.e. *-ana* > *-ene*.

The perfect aspect suffixes in Xhosa are /-ile/ and /-e/, cf. Sloat, *et al.* (1978: 23 and Van Rooyen (1978: 65). All reciprocal or /-an-/ extended verbs employ the variant /-e/ in the perfect aspect. In the case of the /-an-/ extension, an interesting occurrence of vowel harmony is noticed throughout. When the terminative /-a/ changes to /-e/ in the perfect, the initial /-a-/ vowel of the extension /-an-/ changes to /-e-/ as well. This is an instance of assimilation. Sloat characterises this process as follows:

> "... a very common phonological process called assimilation, in which a sound changes to become more like other sounds near it."
>
> Sloat, *et al.* (1978: 24)

2.8 /-ek-/:/VC/ EXTENSION
The extension /-ek-/ does not manifest any peculiar phonological properties. Even with the irregular verb stem -tsho no extended form exists (due to semantic constraints) and therefore no variant form exists which would require special phonological attention.

2.9 /-el-/:/VC/ EXTENSION
This extension has a variant /-ol-/ which occurs with the irregular verb stem -tsho, hence -tsholo.

2.10 /-is-/:/VC/ EXTENSION
The variants of this extension suffix are quite substantial. Since my main concern in this chapter is that of phonological processes, I shall only make reference here to those

that are of phonological significance. The verb /-tsho/ becomes /-tshiso/ when extended by the extension suffix /-is-/. Since /-tsho/ consistently uses terminative /-o/ where other verbs use /-a/ even when extension suffixes are added, and since the phonological phenomenon of vowel harmony invariably results, cf. par. 2.7, it is now striking that this operation is not seen at work in the case of /-is-/ attachment. One immediately wants to know whether it would not be */tshoso/ instead of /tshiso/. Probably the reason for this apparent violation of a general rule lies in the nature of the vowels that are involved. [i] is a high **front** vowel while [ɔ] is a mid **back** vowel. There is no common phonetic feature between these two vowels. Compare the following formalisation:

$$
\begin{bmatrix} + \text{V} \\ + \text{Syl} \\ + \text{high} \\ + \text{front} \end{bmatrix}_{i}
\qquad
\begin{bmatrix} + \text{V} \\ + \text{Syl} \\ - \text{high} \\ + \text{back} \\ + \text{round} \end{bmatrix}_{ɔ}
$$

There are a few examples which I find to be of phonological interest, namely:

15. -thwésa   'to robe'
     and
     -ámbesa   'to clothe'

Pahl (1978: 85) mentions these examples and lists them as forming their extended structures by means of a variant of /-is-/ which he postulates as /-es-/. A search through Guthrie's Common Bantu extensions has revealed that /-es-/ does not have a CB cognate in his terms. /-es-/, however, does exist for languages of other Guthrie zones, but not for Xhosa, which is listed as S41. On these grounds, therefore, Pahl's postulation is suspect and therefore rejected. Furthermore, a serious flaw in Pahl's postulation of /-es-/ as a variant of /-is-/ is made questionable as a result of his own inadequate explanation. The explanation he gives leaves one under the impression that:

16. -thwésa   and   -ámbesa
     'robe'   'clothe'

are derived by simply attaching his postulated variant of /-is-/ to the verbal roots -thwal- and -ambath- respectively. If that were the case the resultant phonological realisation would be:

17.   *-*thwalesa* and *-*ambathesa* respectively.

The above exposition of this fallacy compels me to differ with Pahl. This research has revealed that what is happening here should rather be explained as follows:

if one takes the verbal roots
-*thwal*- and -*ambath*-

and let the rule of extension attachment apply, the final consonant of the root is deleted, cf. Sloat, *et al.* (1978: 118). Once this happens, it leaves one with open syllabes -*thwa*- and -*amba*- (-*amba* actually has two syllables -*a mba*, but we are concerned with only the second one -*mba*). The terminative -*a* vowels of -*thwa*- and -*amba*- are now juxtaposed with the vowel of the extension suffix /-*is*-/ thus:

18.(i) -*thwal*- + -*isa*   -*thwa(l)*- + -*isa*
        -*thwa*- + -*isa*   -*thwesa*
             e
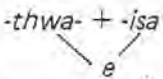
   (ii) -*ambath*- + -*isa*   -*amba(th)* + -*isa*
         -*amba*- + -*isa*   -*ambesa*
              e
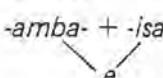
The phenomenon of loss of segments is not an unheard of process in phonological theory, cf. Sloat, *et al.* (1978: 118). Since juxtaposition of vowels is prohibited in Xhosa, vowel coalescence takes place between the [a] vowels of the verbs concerned and the [i] vowel of the extension suffix /-*is*-/:

19.   -*thwa* + *isa*   -*thwésa*
              e
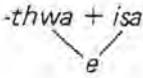
       -*amba* + *isa*   -*ámbesa*
              e
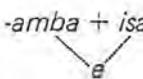
The explanatory adequacy of the hypothesis outlined above, compared with that of Pahl makes it far easier therefore to argue for relationship in meaning in a principled way between:

-thwálisa and *-thwésa* on the one hand

and

-ambáthisa and *-ámbesa* on the other.

This relationship in meaning obtains because, according to the above hypothesis, the two derivatives *-thwésa* and *-ámbesa* originate from the same roots as *-thwálisa* and *-ambáthisa* respectively.

2.11 /-w-/:/C/ EXTENSION

A variety of phonological details connected with the rule of /-w-/ attachment has been outlined above. In this section I now propose to deal exclusively with the phonological process of palatalisation. Palatalisation is one of the natural assimilatory processes. Sloat, *et al.* (1978: 13) describe it this way:

> "This process superimposes a palatal articulation on non-palatal consonants which are followed by a front vowel or glide."

Or as they put it on p. 121 of the same book, palatalisation is:

> "..., the assimilation of a consonant to the palatal articulation of an adjacent front vowel or glide."

Referring mainly to the South African Bantu languages, Louw (1975: 16) says:

> "It is a well-known rule in South African Bantu Languages, with the exception of Lala that a bilabial consonant cannot be used with a bilabial glide, i.e. *w*; under these circumstances there can be either velarisation as in Venda, GiTonga and Shona and to a lesser extent in Sotho and Tsonga, or the bilabial may be palatalised. The latter sound change takes place in Nguni (Zulu, Xhosa and Swazi), Sotho, Venda and Tsonga."

In another unpublished article, Louw (1981: 38) makes some revealing statements about this problem. His hypothesis runs as follows:

> "When palatalisation is found in any language it is usually caused by front vowels, cf. *i* and *e* or the semi-vowel *y*. It is therefore rather exceptional that the back semi-vowel *w* should be held responsible for palatalisation in Xhosa. This is however not always the case, cf. *inkatyana* where the palatal consonant is ascribed to the influence of the *i* in the original *inkabi*. I think that on the same basis it was the *i* in the full passive suffix or extension *-iwa* which is still

found in monosyllabic stems, cf. *-tyiwa* (be eaten), which caused the palatalisation in the passive of verb stems which had bilabial consonants in the terminating syllable.

One can say here that the bilabial consonants adapted themselves to the palatal position of an original *-i-* of *-iwa* while the *-i-* itself disappeared."

(Prof J.A. Louw's unpublished notes)

In the light of the above, it is clear therefore that the high front vowel [i] as well as its equivalent prepalatal semi-vowel or glide [j] cause all bilabial consonants to be palatalised. (For details about palatalisation in locatives, diminutives and some noun prefixes *vide* Louw 1975.) This palatalisation is, however, limited to all bilabial consonants that do not occur stem-initially. Palatalisation in passive formation in Xhosa can therefore be captured by means of the following generalisation:

$$
\text{PAL} \begin{bmatrix} + \text{Cons} \\ \text{bilabial} \end{bmatrix} \rightarrow \begin{bmatrix} + \text{Cons} \\ \text{alveo-pal} \end{bmatrix} \Big/ \underline{\quad} \begin{bmatrix} - \text{Cons} \\ - \text{bk} \\ + \text{hi} \end{bmatrix}
$$

Condition- if $\begin{bmatrix} + \text{Cons} \\ \text{labial} \end{bmatrix}$ does not occur stem initially.
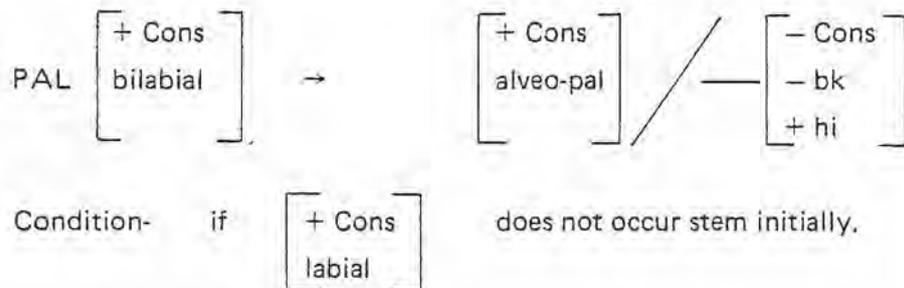
The above generalisation for palatalisation in passive formation further indicates that this assimilation process is regressive since the underscore ——— is placed before the determinant, cf. Sloat, *et al.* (1978: 45).

According to Sloat, *et al.* (1978: 45):

"The features shared by the output and the environment in [this rule] ———
[−bk, + hi] ——— are the features which define palatalisation in consonants."

I shall now list the various sound changes that occur and refer to the specific syllables in which they occur.

EXAMPLES

(i)   In a large number of cases, palatalisation occurs when the final syllable of a given verb contains a labial consonant. The following examples demonstrate this:

$$\begin{bmatrix} + \text{cons} \\ + \text{labial} \end{bmatrix} > \begin{bmatrix} - \text{bk} \\ + \text{hi} \end{bmatrix}$$

20.(a)   *úkulôba*   →   *úkulôtywa*   [ɓ]   >   [cʔ]
       'to fish'   'to be fished'

(b)   *úkúdyobha*   →   *úkúdyojwa*   [b̥]   >   [d̥ʒ]
       'to smear'   'to be smeared'

(c)   *úkulûma*   →   *úkulûnywa*   [m]   >   [ɲ]
       'to bite'   'to be bitten'

(d)   *úkubôpha*   →   *úkubôtshwa*   [ph]   >   [tʃh]
       'to tie'   'to be tied'

(e)   *úkufûmba*   →   *úkufûnjwa*   [mb̥]   >   [ɲd̥ʒ]
       'to pile up'   'to be piled up'

(f)   *úkumpómpa*   →   *úkumpóntshwa*   [mpʔ]   >   [ɲtʃˀ]
       'to pump'   'to be pumped'

(ii)   Palatalisation may also occur in syllables other than the final one, as long as they are not stem-initial. It is of particular interest for this research that this phenomenon is exhibited when the rule of extension suffix attachment has applied. The examples listed below illustrate this fact:

21.(a)   *ukunyibílika*   →   *ukunyityilíkiswa*
         [ɓ]   →   [cʔ]
         'to melt'   'to be made to melt'

(b)   *ukubhúbhisa*   →   *ukubhújiswa*
         [b̥]   →   [d̥ʒ]
         'to annihilate'   'to be annihilated'

(c)   *ukugxabha-gxábhisa*   →   *ukugxaja-gxájiswa*
         [b̥]   →   [d̥ʒ]
         'to rush'   'to be rushed'

(d)   *ukunqumámisa*   →   *ukunqunyányiswa*
         [m]   →   [ɲ]
         'to stop'   'to be stopped'

(e)   *úkubophélela*   →   *úkubotshélelwa*
         [ph]   →   [tʃh]
         'to tie'   'to be tied'

(f)   *ukuthémbisa*   →   *ukuthénjiswa*
         [mb̥]   →   [ɲd̥ʒ]
         'to promise'   'to be promised'

(g)	úkumpompóza	→	úkumpontshózwa
	[mp]	→	[ɲtʃʔ]
	'to pour out'		'to be poured out'
(h)	úkubibǐtheka	→	úkubityithékiswa
	[ɓ]	→	[cʔ]
	'to grieve'		'to be grieved'
(i)	ukumbombózela	→	ukumbonjózelwa
	[mb̥]	→	[ɲd̬ʒ̬]
	'to grumble'		'to be grumbled'
(j)	ukulámla	→	ukulányulwa
	[m̩]	→	[ɲu]
	'to intervene'		'to be intervened'
(k)	úkuthamsanqélisa	→	úkuthanyusanqéliswa
	[m̩]	→	[ɲu]
	'to bless'		'to be blessed'

A number of issues of phonological interest have been revealed by the above sample of data.

(i)   Palatalisation can also apply to labial consonants other than those that appear in the final syllable of the stem, when the extension /-w-/ is attached to it.

(ii)   Examples (j) and (k) are of great importance for the phonological structure of Xhosa. They exhibit an instance of the prevention of a phonological anomaly, where after palatalisation has applied we are faced with the "possibility" of an occurrence of a syllabic consonant which is not *m*. This is blocked by the mechanism of the recoverability of the vowel *u*.

These observations may be represented as follows:

A.
$$\begin{bmatrix} \text{Syl} \\ \text{bk} \end{bmatrix}_{u} \rightarrow \phi \ / \begin{bmatrix} \$ \\ +\text{nasal} \\ +\text{labial} \\ +\text{cons} \end{bmatrix}_{m} \underline{\hspace{2cm}}$$
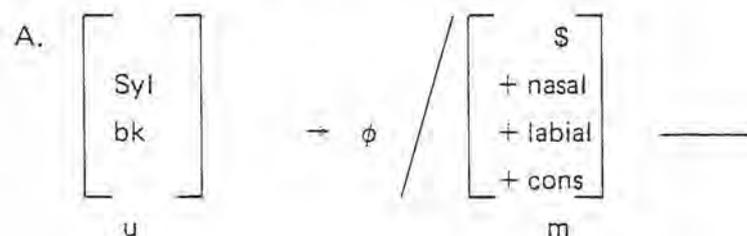
B.   Compare the above generalisation with the following:

$$
\begin{bmatrix} \$ \\ +\text{Syl} \\ +\text{nasal} \\ +\text{labial} \\ +\text{cons} \end{bmatrix} \Rightarrow \begin{bmatrix} \$ \\ +\text{Palatal} \\ +\text{nasal} \\ +\text{cons} \end{bmatrix} \begin{bmatrix} +\text{Vocalic} \\ +\text{bk} \\ +\text{hi} \end{bmatrix}
$$

               ṃ   ɲ   u
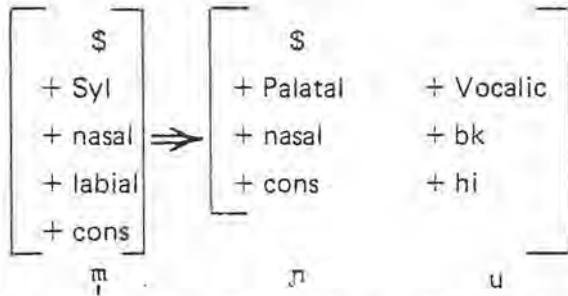
Condition: If and only if Palatalisation takes place.

Rule "B" above is intended to capture the recoverability of /u/ once syllabic [ṃ] has been palatalised. This rule is of immense value for the syllabic structure of Xhosa because it proves that the zero realisation of the /u/ of our syllabic [ṃ] can also be accounted for in synchronic terms. Statements made by Bantu linguists[4] about this phenomenon have tended to imply that this can only be handled diachronically.

(iv)   Another interesting phenomenon is that if a syllable that is immediately to the left of the one in which palatalisation takes place, also contains an identical labial consonant, palatalisation is also superimposed on this consonant (or consonant cluster). Compare example (d) on the above list.

(v)   Examples (g), (h) and (i) might appear to be counter-examples at first sight, whereas in fact they are not. They do not create any problems for our phonological standpoint because their occurrence is blocked at the level of the rule that states that palatalisation does not occur stem-initially.[5]

(vi)   If examples such as:

22.   *ukuntshontshozwa   <   úkumpompóza
                                         'to pour out'

     *ukutyityithekiswa   <   ukubibithekisa
                                         'to grieve'

could be posited in the lexicon, they certainly obliterate the originals from which they are derived. This blockage is understandable since deriving a word from another falls beyond the scope of phonology and phonological rules, cf. the starred forms above.

2.12 VOWEL RAISING WITH PARTICULAR REFERENCE TO /-is-/

Xhosa has a phonetic rule that changes the mid-front vowel [ɛ] as well as the mid-back vowel [ɔ] to [e] and [o] respectively, cf. 2.2.1. The [i] vowel of the extension /-is-/ is one of the causes of the raising of [ɛ] and [ɔ] to [e] and [o] respectively.

e.g.

23.   [sɛŋga → seŋgisa]   'milk'   →   'cause to milk'

[sɛla → selisa]   'drink'   →   'cause to drink' ·

[sɔŋga → soŋgisa]   'fold'   →   'cause to fold'

[sɔmpa → sompʔisa]   'work out' →   'cause to work out'

Another interesting aspect of this process is that this [i] raises all preceding vowels [ɛ] or [ɔ] in a word unless a vowel other than [ɛ] and [ɔ] interrupts the succession of these mid-front or mid-back vowels.

e.g.

24.   *úsékélézile*   [usekʔelezilɛ̄/]

'he/she hopes to gain'

úyazitshotshobelísela   [ujazitʃhotʃhoɓelisɛla]

'he/she imposes himself/herself'

Compare:

úyasekasekelélisa   [ujasɛkʔasekʔelelisa]

'he/she tries to support'   1 2 3 4 5 6 7 8 9

Vowel 3 is not raised by vowel 8 because of the interrupting vowel 4.

The rule of the vowel raising may therefore be formalised as follows:

$$
\begin{bmatrix} +V \\ \left\{ \begin{matrix} \varepsilon \\ \mathsupset \end{matrix} \right\} \end{bmatrix} \rightarrow \begin{bmatrix} +V \\ \left\{ \begin{matrix} e \\ o \end{matrix} \right\} \end{bmatrix} \Bigg/ \underline{\quad} C \begin{bmatrix} +V \\ \left\{ \begin{matrix} i \\ u \\ m' \end{matrix} \right\} \end{bmatrix}
$$
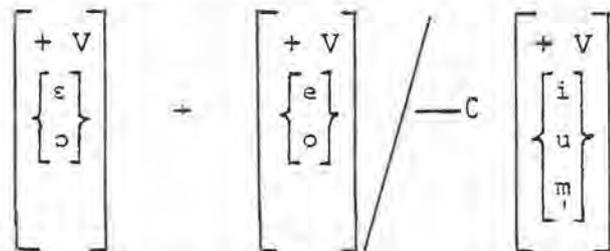
C = Consonant

The inadequacy of the above rule stems from the fact that it fails to capture an important generalisation, namely that any other [ɛ] or [ɔ] that precedes the raised [e] or [o] will also be raised, unless a vowel other than /e/ or /o/ interrupts the succession. I therefore propose to reformulate the above rule as follows:

$$
\begin{bmatrix} +V \\ \begin{Bmatrix} \varepsilon \\ \mathfrak{d} \end{Bmatrix} \end{bmatrix} \rightarrow \begin{bmatrix} +V \\ \begin{Bmatrix} e \\ o \end{Bmatrix} \end{bmatrix} \bigg/ \underline{\quad} \begin{bmatrix} +V \\ \begin{Bmatrix} i \\ u \\ e \\ o \\ \not{s} \\ m \end{Bmatrix} \end{bmatrix}
$$
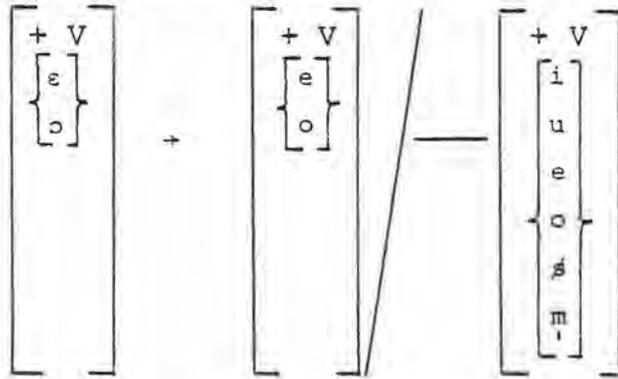
Even the effect of syllabic /m/ on the preceding [ɛ] or [ɔ] is captured by this rule.

2.13 ASPECTS OF TONOLOGY

In the paragraphs that follow the tonal patterns are given of monosyllabic and disyllabic verb stems. Observations are also made concerning some of the tonal changes that take place when extensions are added to basic verb stems.

2.13.1 Monosyllabic verb stems

These can be divided into two groups, according to their underlying tonal patterns:

(i)   H   Stems

e.g.

25.	*-fá*	'die'
	-phá	'give'
	-sá	'dawn'

(ii)   L   Stems

26.	*-/wa*	'fight'
	-na	'rain'
	-sa	'take to'
	-ya	'go to'

(i)   [+ h] in monosyllabic stems maintains its position even when a /VCV/ or /VCVCVC/ sequence of extension suffixes is added. But as soon as it is /VCVCVCVCV/ or more, the following rule starts operating. [+h] of HL

tonal structure shifts to the antepenult, the moment a derived verb stem, e.g. -dámbisa is re-derived, so to speak, and when this process of re-derivation operates on a recursive basis, e.g. -dambísisa. I shall refer to this tonal operation as "the [+h] antepenult recursive rule". It is interesting to observe that this rule operates indiscriminately across boundaries of verb stem tonal patterns.

e.g.

27.(a) úkufá   →   úkufísa

     'die   'cause to die'

    (b) úkufá   →   úkufísisa

        'die'   'cause to be stone dead'

    (c) úkufá   →   úkufisisísisa

        'die'   'cause to be real stone dead'

    (d) and when (c) is re-derived *ad infinitum*.

(ii)   L Stems.

e.g.

28.(a) ukúlwa   →   ukúlwisa

       'fight'   'cause to fight'

    (b) ˉukúlwa   →   ukulwísisa

        'fight'   'cause to fight well'

    (c) ukúlwa   →   ukulwisisísisa

        'fight'   'cause to fight very well'

The data above shows that when a /VCV/ sequence extends an L-stem, no tonological changes take place. However, as soon as a /VCVCV/ (PLUS RECURSIVE REDUPLI-CATION) sequence is used to extend the L-stem, then the antepenult rule, cf. par. 2.13.1, applies. I should like to postulate that the rule operating in (b) is still the antepenult rule and that this can be accounted for by including the prefixal elements in counting the syllables which are accompanied by the relevant tones. This is common among vowel verbs, i.e. verbs with latent /i/ below.

2.13.2 Verb stems with latent *i*

These can also be divided into two groups, thus:

29.(a) úkûma   'to stand'

      úkûba   'to steal'

      úkûva   'to hear'

(b)   *úkúza*   'to come'

      úkútha   'to pour milk in a calabash'

      úkúhla   'to descend'

      úkúmba   'to dig'

When extension suffixes are added the following occurs:

30.   *úkûma*   →   *úkumísa*

      'to stand'   'to stand + cause'

      úkûba   →   *úkubísa*

      'to steal'   'steal + cause'

      úkûva   →   *úkuvísa*

      'to hear'   'hear + cause'

It is quite evident that the falling tone of the infinitive prefix exercises influence on the tone that follows. The behaviour of this falling tone in this environment is exactly the same as that which was observed in disyllabic verb stems (in other words, it is now realised as low L and the succeeding low L becomes high H).

This rule may be summarised as follows:

31.   *úkûma*   →   *úkumísa*

      [+h] [+h −h] [−h]   ⇒   [+h] [−h] [+h] + [−h]

      PP   P   S   PP   P   Ext-S

                                               (a)   (b)

       1   2   3   1   2   3   4

      PP   =   pre-prefix

      P   =   prefix

      S   =   stem

      Ext-S =   extended stem

(a) and (b) are the syllables for the extended stem. Numbers 1-3 and 1-4 indicate the number of syllables; ⇒ means "changes to".

Rather than in the case of FL disyllabic stems, as soon as an extension suffix /VCV/ attaches, the falling tone (which falls on the syllable peak /V/ of the /ku/ prefix with

two moras m₁ and m₂ [´ `] respectively), shifts to the succeeding syllable, and is realised as [+h]. This is another example of tone shift; it is iterative from left-to-right.

32. úkúza   →   úkúzisa

    'to come'   'come + cause'

    úkútha   →   úkúthisa

    'to pour milk   '_____ cause'
    in a calabash

    úkúhla   →   úkúhlisa

    'to descend'   'descend + cause'

    úkúmba   →   úkúmbisa

    'to dig'   'dig + cause'

Once again, the tonal behaviour observed here is identical with the tonal behaviour that was explained in the same tonal environment under disyllabic stems. In other words, the tonological operations exhibited by this type of verb stem with latent -*i*- are identical with those of monosyllabic L-stems.

The tonal changes will be summarised as follows:

(i)   [+h] [+h] [−h]   e.g.   úkúza
      PP   P   S   'to come'

            ↓

      [+h] [+h] [−h] [−h]   e.g.   úkúzisa
      PP   P   Ext-S   'to cause to come'

(ii) [+h] [+h] [−h] [−h]   e.g.   úkúzisa
      PP   P   Ext-S   'to cause to come'

            ↓

      [−h] [−h] [+h] [−h] [−h] e.g.   ukuzísana
      PP   P   Ext-S   'to bring one another'

(It should be noted that, for our purposes, only tones of surface forms are provided here. A study of deep or underlying tones could result in a postulation of different rules.)

Example (ii) is clearly an instance of the antepenult rule that was postulated above.

2.13.3 Disyllabic verb stems

These verb stems can be divided into three groups according to their tonal structure or patterns.

(i)   Those that are Falling Low (FL) [ˆ ˋ]

33.   *-fûna*   'seek, look for, want'

        -bhâla   'write'

        -thânda   'love, like'

        -qîna   'be strong, be firm'

(ii)   Those that have Low Low sequence (LL) [ˋ ˋ]

34.   *-dala*   'create'

        -cenga   'beg'

        -vula   'open'

        -bola   'rot'

(iii)   Those that are High Low (HL) [ˊ ˋ]

35.   *-dámba*   'subside'

        -dĭpha   'dip'

        -téna   'make bricks'

        -thúla   'off-load'

Tone is significant in a number of ways in Xhosa:

(i)   It is lexically significant in that each verb has an inherent tonal structure or tonal pattern which is as part of a given verb, as are the phonological segments that constitute it.

(ii)   Tone may also be said to have a semantic significance because in some cases, if a certain tonal pattern is used instead of another, a different meaning output may result.

(iii)   So important is tone that even in the conjugation of the verb it follows certain well-defined behaviour patterns which have been dealt with by J.A. Louw (1968, 1975), L.W. Lanham (1960), D.M. Beach (1923). H.W. Pahl (1967) and A.S. Davey (1973).

The latter thesis offers a more systematised and detailed exposition of tonal behaviour in the conjugation of the verb in Xhosa.

While I am still on the tonal patterns of disyllabic verb stems, it would be fitting to consider the tonal behaviour of these verbs when extension suffixes are added:

(i)   FL verb stems
       The initial vowel of the extension suffix acquires a high tone when the initial syllable loses its falling tone:

36.   *úkufûna*   →   *úkufunísa*
       'to seek'   'to seek + cause'
       úkubhâla   →   *úkubhalísa*
       'to write'   'to write + cause'
       úkuthânda   →   *úkuthandísa*
       'to love'   'to love + cause'
       úkuqîna   →   *úkuqinísa*
       'to be tight'   'to cause to be tight'

(ii)   LL verb stems
       The first syllable of the LL stem now gets a high tone, and the extension gets a low tone:

37.   *úkúvula*   →   *ukuvúlela*
       'to open'   'to open for'
       úkúdala   →   *ukudálela*
       'to create'   'to create for'
       úkúcenga   →   *ukucéngana*
       'to beg'   'to beg one another'
       úkúbola   →   *ukubólisa*
       'to rot'   'to cause to rot'

(iii) HL stems
       Here there is no change, except that the initial syllable of the extension gets a low tone, as was the case in (ii) above:

38.　　*-dámba*　　→　　*-dámbisa*

　　　　'to subside'　　　　'subside + cause'

　　　　-dípha　　→　　*-díphisa*

　　　　'to dip'　　　　'dip + cause'

　　　　-téna　　→　　*-ténisa*

　　　　'to make bricks'　　　　'to make bricks + cause'

　　　　-thúla　　→　　*-thúlisa*

　　　　'to be quiet'　　　　'quiet + cause'

It should be pointed out here that only four of the five productive suffixes that are the main concern in this thesis behave according to the rules exemplified above. These are */-an-/, /-ek-/, /-el-/* and */-is-/* extension suffixes.

2.14 SUMMARY OF TONAL CHANGES[6]

(i)　　FL stems

39.　　*úkufûna*　　　　→　　*úkufunísa*

　　　　'to seek'　　　　　　'to cause to seek'

　　　　[+h] [−h] [+h −h] [−h]　　⇒　　[+h] [−h] [−h] [+h] [−h]

A rule like 39 above should be interpreted as follows:

> the morphology requires that the tonal sequence HLFL must change to HLLHL when the simplex radical which has a falling tone is extended by a /VC/ extension suffix.

This rule demonstrates that once an extension suffix of the phonological structure /VC/ has been added to this type of verb, the falling tone (which falls on the syllable peak /a/ with two moras m_1 m_2, [′ ˋ] respectively) shifts one syllable to the right and is realised as [+h]. This is an example of tone shift; it is iterative from left-to-right.

(ii)　　LL verb stems

　　　　úkúvula　　　　→　　*ukuvúlisa*

　　　　'to open'　　　　　　'to cause to open'

　　　　[+h] [+h] [−h] [−h]　　⇒　　[−h] [−h] [+h] [−h] [−h]

　　　　　PP　P　　S　　　　　　PP　P　　　Ext-S

This rule captures the generalisation that if an LL stem is extended by a /VC/ suffix, the consequences of such an operation, as far as tonal structure is concerned, are that [−h] on the first syllable is realised as [+h]. This is an example of tone shift.

(iii)   **HL stems**

e.g.

    úkudámba   →   *úkudámbisa*

    'to subside'   'to cause to subside'

The addition of the /VC/ sequence has no significant implications for tone. However, let us look at the following:

(a)   *úkudámba*   →   *úkudambísisa*

       [+h] [−h] [+h] [−h]   ⇒   [+h] [−h] [−h] [+h] [−h] [−h]

        PP   P   S   PP   P   Ext-S

(b)   *úkudámba*   →   *úkudambisísisa*

       [+h] [−h] [+h] [−h]   ⇒   [+h] [−h] [−h] [−h] [+h] [−h] [−h]

        PP   P   S   PP   P   Ext-S

(iii)(a) and (b) above, hopefully, captures the generalisation that [+h] of HL tonal structure shifts to the antepenult the moment a derived verb stem, e.g. *-dámbisa* is re-derived, so to speak, and when this process of re-derivation operates on a recursive basis. I shall refer to this tonal operation as "the [+h] antepenult recursive rule". It is interesting to observe that this rule operates indiscriminately across boundaries of verb stem tonal patterns.

Chapter 3

ASPECTS OF MORPHOLOGY

"Morphology is a new member among the recognised autonomous systems in linguistic theory. Some of its crucial characteristics are known. It has a vocabulary of primitives (root, morpheme, word, stem (or the adjacency or atomic condition; ...)). The locality principle excludes essential variables or "long-distance" rules from morphology. Beyond these rudimentary features a great deal remains unsettled about how and where morphology and syntax connect ..."

GREG CARLSON and THOMAS ROEPER
(Glot Jaargang 2:3/4, 1979: 123)

3.1 INTRODUCTION

The aim of this chapter is to give an exposition of the morphological structure of extended verb stems in Xhosa. The study of their morphological status will be done in relation to the base or source verb stems. Verbs in Bantu can be broken down into constituent morphological elements. The nature of these elements is discussed in the following paragraphs.

3.2 AFFIXES

In this analysis it has been found useful to distinguish between the following morphological units:

The ROOT: which functions as the core of a word and bears the basic meaning of it.

The AFFIX: which modifies the meaning of the root. A more detailed account of the affixes and the process of affixation follows below (*vide* par. 3.3). Different kinds of affixes are found in morphological studies in Xhosa. Affixes that precede a root are called prefixes, while those that follow the root are called suffixes.

Consider the following examples from Xhosa.[1]

PREFIXES:

1. *NdiyayiBONiswa*   'lit. I am being shown it'
        1 2 3   'It is being shown to me'

In the above example all prefixal elements have been numbered 1, 2, 3, and the ROOT has been written in capital letters. In the example below only the suffixal elements are numbered:

SUFFIXES:

2.   *BasayiBON is w a*   'lit. They are being shown it'
             1 2 3   'It is being shown to them'

When an affix is inserted directly into a ROOT, such an affix is referred to as an INFIX. Such a process is very rare in Xhosa. As far as I could ascertain, only Pahl (1967: 7) has suggested that there are instances of infixation in Xhosa. He gives the following examples:

3.(a)   *úkúqonda*   *ukuqononóndisa*
       'to understand/   'to understand thoroughly'
       comprehend'

(b)   *ukuphónonga*   *ukuphonónonga*
       'to assess'   'to assess'

The writer is only familiar with *ukuqononóndisa* and *ukuphonónonga*.

3.3 MORPHOLOGICAL STRUCTURE OF THE VERB

The following are the morphological constituents of the verbal which are often mentioned in the description of the shape of the verbal:

(i)   the negative formative (in initial position);
(ii)   the subject concord (SC) which is **dependent** on the class of a subject noun;
(iii)   the tense/aspect marker (A-M);
(iv)   the object concord (OC) which is **dependent** on the class of an object noun;
(v)   the verbal root;
(vi)   the derivational or extension affixes;
(vii) the terminative vowel.

The pre-SC slot is filled only if the verb is in the negative.[2] The morpheme that is used in the SC slot is part of the concordial system of Xhosa and is **dependent** on a given noun class. The tense or aspect marker follows the subject concord (SC). The object concord (OC) slot may be filled, although this is not obligatory; the OC, like the SC,

is also **dependent** on the relevant noun for agreement. After this comes the obligatory slot of the verbal root. The root is the core of the verbal; it is the central morpheme around which all other peripheral morphemes (whether prefixal or suffixal) concatenate in a specific order. The last slot is that of the terminative vowel. This terminative vowel has received a lot of attention from various scholars who have studied the verb and its extended shapes in a number of languages of the Bantu group. It has been described in various ways by a large number of grammarians, e.g.

(i)   Cantrell (1967: 1) has described it as "the detachable terminative vowel".

(ii)   Moore (1966: 92) calls it "the final mode marker".

(iii) Mchombo (1978: 88) refers to it as "the verbaliser".

The basic verb stem in Xhosa (as it is found for example in the positive infinitive) ends in -a with the exception of three stems, namely:

4.   *-tsho*   'utter, say'

      -thi   'say'

      -âzi   'know'

Other examples of Xhosa verb stems:

5.   *-bôpha*   'tie'

      -phetha   'complete'

      -sônga   'fold'

      -qonda   'understand'

      -thûnga   'sew'

The examples below are meant to illustrate the analysis of Xhosa verbs into various morphological units:

6.(a) *andisábábóni*   'I don't see them any longer'
       1 2 3 4   5 6

  (b) *andisábáfúndéli*   'I don't read for them any more'
       1 2 3 4 5 67

  (c) *andisábácúkánísi*   'I don't crowd them together any more'
       1 2 3 4 5 678

The above examples in no. 6 will now be broken down into their morphological constituents. They will be reproduced as 7(a), (b) and (c) respectively, for convenience.

7.(a) a-   :   Pre-SC negative formative (Pre-SC N.F.)

       -ndi-   :   Subject concord (SC)

       -sa-   :   Aspect marker (A-M)

       -ba-   :   Object concord (OC)

       -bon-   :   Verbal root (VR)

       -i   :   Terminative vowel (TV)

It should be mentioned for the purposes of this investigation, that the surface phonological realisation of the TV is dependent on the tense/mood of a given verb (and whether it is positive or negative).

(b)   a-   :   Pre-SC negative formative (Pre-SC N.F.)

       -ndi-   :   Subject concord (SC)

       -sa   :   Aspect marker (A-M)

       -ba-   :   Object concord (OC)

       -fund-   :   Verbal root (VR)

       -el-   :   Extension (Ext.)

       -i   :   Terminative vowel (TV)

(c)   a-   :   Pre-SC negative formative
                              (Pre-SC N.F.)

       -ndi-   :   Subject concord (SC)

       -sa-   :   Aspect marker (A-M)

       -ba-   :   Object concord (OC)

       -cuk-   :   Verbal root (VR)

       -an-   :   Extension 1 (Ext. 1)

       -is-   :   Extension 2 (Ext. 2)

       -i   :   Terminative vowel (TV)

The figures next to "Extension" here indicate the number of extensions concatenated.

3.3.1 Schematisation of formatives

It should be easier now to formulate some rule which will capture the morphological configuration in examples 6 and 7 above. Such a rule will, it is hoped, indicate which

morphemes are optional and which ones are obligatory in order to realise an acceptable Xhosa verb:

3.3.2 A tentative structural description (SD) of a Xhosa verb
Abbreviated structural description 1:

[(Pre-SC N.F.) + ⟨SC⟩ + (A-M) + (OC)⟨VR⟩ + (Ext ...*) + ⟨TV⟩]
Condition: If and only if the verb is not Imperative or Infinitive.

(i)   The brackets ( ) indicate that the relevant item is optional.

(ii)   The brackets ⟨ ⟩ indicate that the item concerned is obligatory.

If one looks at the abbreviated structural description of the verb above, one will observe that, in the final analysis, the most basic shape of the verb consists of:

[SC + VR + TV]

However, for purposes of this research, I shall only concentrate on the sequence [VR + TV] since verbal extension involves suffixation and never prefixation. The nature of formatives which appear before [VR] will not be pursued.

3.3.3 The root base
The delimitation of this research constrains me to focus my attention on the other most important characteristic of the Xhosa verb. This is the extension of verbal roots. In order to give an explicit description of this morphological operation, I shall need to use some explanatory terms. This will be done following Guthrie (1970c: 92). Guthrie proposed the following working terms:

(i)   Simplex radical/root: this term is used to designate

"... the shortest type of radical ..."

Guthrie (1970c: 92)

(ii)   extended radical/root: this refers to

"... the longer related type ..."

Guthrie (1970c: 92)

(iii)   complex radical/roots: these are

"... radicals/roots which cannot be broken down into simplex radical and an extension ..."

Guthrie (1970c: 93)

The following are the examples for the three types of radicals/roots mentioned above:

3.3.4 Simplex radicals

8.
-khany-	'shine'
-bamb-	'hold/catch'
-vul-	'open'
-sus-	'remove'
-bûk-	'watch/admire'

3.3.5 Extended radicals/roots

The following examples illustrate what Guthrie (1970c: 93) refers to as

"...regular types of relationship ..."

Note that the above extended forms correspond to the simplex ones set out above.

9.
/-an-/	/-ek-/	/-el-/	/-is-/	/-w-/
-khányan- 'shine'	*-khányek-*	*-khányel-*	*-khányis-*	*-khanyw-*
-bámban- 'hold'	*-bámbek-*	*-bámbel-*	*-bámbis-*	*-banjw-*
-vûlan- 'open'	*-vúlek-*	*-vúlel-*	*-vúlis-*	*-vulw-*
-súsan- 'remove'	*-súsek-*	*-súsel-*	*-súsis-*	*-susw-*
-bukán- 'admire'	*-bukék-*	*-bukél-*	*-bukîs-*	*-bûkw-*

3.3.6 Complex radicals/roots

Contrary to what was said above about "regular types of relationship" (both morpho-logical and semantic) which obtain between simplex and extended radicals, there is a considerable group of radicals whose endings incorporate phonological sequences that are identical with productive extensions, but, nevertheless, do not have any corresponding simplex radicals. The following examples illustrate this fact:

/-an-/

10.	*-hlang-an-*	'meet/come together'
	-dib-an-	'meet'
	-ling-an-	'be equal'
	-fum-an-	'obtain'
	-shwab-an-	'shrink'

/-ek-/

11.	*-balék-*	'run'
	-ánék-	'spread out'
	-tyábek-	'plaster'

/-el-/

12.	*-búlel-*	'thank'
	-galél-	'pour'
	-zimél-	'hide'

/-is-/

13.	*-cékis-*	'detest'
	-xabis-	'value'
	-ntywízis-	'shed tears'

/-w-/

14.	*-nxânw-*	'be thirsty'
	-bâtyw-	'be sexually aroused'
	-vûthw-	'be ripe'

In Guthrie's (1970c: 93) terms, therefore:

> "Any longer radicals which cannot be broken down into a simplex radical and an extension, are termed 'complex', although as in the (examples in 9 and 10 above — SCS), the shapes of complex and extended radicals may be quite comparable."

3.3.7 Identification of extensions

The method used by many researchers into verbal extension in Bantu languages is simply this:

Subtract a simplex radical from a corresponding extended radical.

The examples in 9 and 10 above illustrate this point. The method of breaking down a morphological string was quite convenient, probably for two crucial reasons:

(a)   the agglutinating nature of the Xhosa language;

(b)   the approach to language study that was current at the time, the structural approach:

> "... the essential sense, ..., in which the approach is structural is that the language is supposed to be actually composed of morphemes in sequence, i.e. of 'strings' of morphemes and similarly, though at a different level, of strings of phonemes."
>
> Palmer (1971: 107)

3.4 PRODUCTIVE EXTENSIONS

The productive extensions in Xhosa are as follows:

15.(i)   /-an-/

(ii)   /-ek-/

(iii)   /-el-/

(iv)   /-is-/[3]

(v)   /-w-/

3.5 THEORETICAL FRAMEWORK

In the previous pages an outline is given of the previous treatments of the morphological structure of "simplex", "extended" and "complex" verbs in Xhosa. That exposition was meant to show the crucial information provided by those treatments, as well as the considerable number of morphological problems which those previous treatments were not equipped to handle adequately. With these points in mind, I shall now outline the theoretical framework in which the present analysis of verbal extensions will be carried out.

In dealing with the morphological aspect of verbal extension, I shall assume the general framework of morphological investigations presented in Jackendoff (1975), adapted and developed by Booij (1977), Hammond (1977) and Allen (1978), as well as the works cited by these linguists in support of their general theoretical foundations. It should also be noted that:

(i)   Jackendoff applied his theory to English;

(ii)   Booij used Dutch as his target language;

(iii)   Hammond wrote on word formation with reference to Spanish derivational morphology; and

(iv)   Allen used English and Welsh in her morphological investigation.

In this thesis the data used is from Xhosa. This language is vastly different from any of those languages cited above, perhaps chiefly because of its agglutinating nature. Consequently the ideas of the linguists listed above will be adapted whenever and wherever this is deemed necessary for an adequate description of Xhosa verbal extension. The morphological aspect of verbal extension is also investigated within the Lexicalist Hypothesis. In this research verbal extension is treated as an aspect of word formation.

Since the Lexicalist Hypothesis is conceived within Generative Grammar, it recognises certain crucial principles which are essential to this grammatical theory:

(i)   It is accepted that word formation within the Lexicalist Hypothesis depends crucially on the assumption that native speakers are able to handle morphological patterns and processes in terms of rules and generalisations which are considerably more abstract than those which were proposed by some previous approaches, cf. Guthrie (1970c). This observation is now widely accepted by researchers in morphological operations.

Consider, for example, what the following linguists say about this phenomenon:

(a)   Booij (1977: 2) says in his study of Dutch morphology:

> "Part of the competence of the native speakers of Dutch is knowledge of the vocabulary of Dutch words and their semantic, syntactic, morphological and phonological properties."

He refers to this as the Lexicon of Dutch.

(b)   Hammond (1977: 1) says that:

"Speakers of a language can produce and understand words they have never heard before, provided the words are related to ones they already know. They also reject other words as nonsensical or somehow incorrect. These activities are possible because every language user possesses a knowledge of how words are derived in his particular language. In Transformational Generative Grammar (TGG) this aspect of language has been accounted for by word-formation rules (WFRs)."

(ii)   Any analysis of Xhosa must capture the important linguistic generalisation that the stem in Column A is related to those in B.

16.   A   B

                                             [[*thandan*]*a*]   '— each other'
                                             [[*thandek*]*a*]   '— able'
        [[*thând*]*a*]   [[*thandel*]*a*]   '— for'
        'love'   [[*thandis*]*a*]   'make to —'
                                             [[*thandw*]*a*]   'be —ed'

The relationship between the words in 16 (Columns A and B) obtains not only in morphological shape but also in semantic output.

(iii)   The relationship between the words in 16. (Columns A and B) falls outside the scope of the transformational component, cf. Lees (1960), and must be handled by a formalism which belongs to the Lexical component (*vide* Chomsky (1970); Jackendoff (1975: 640); Booij (1977: 2-5); De Guzman (1976: 5-6)).

(iv)   There must be a formalism that is specifically developed to capture and generalise the relations between, for example, the lexical entries in 16 A and B in accordance with a native speaker's intuition, cf. Booij (1977: 1); Jackendoff (1975: 641); Aronoff (1976: 2 *et seq.*); Hammond (1977: 1-13).

(v)   The other central claim is that morphological rules must be assumed to generate the set of possible words of a language, cf. Allen (1978: 195 *et seq.*); Jackendoff (1975: 640 *et seq.*); Booij (1977: 2 *et seq.*). It will be discovered that some of these "possible words" may not necessarily be "occurring words". The reason for according recognition to these so-called "possible words" is that, as Allen (1978: 195-196) puts it:

"... as long as there is no discoverable general principle which can rule out their derivation, then they are morphologically well-formed or possible words."

The name given to this type of morphology is that of "overgenerating morphology". Overgenerating Morphology would, for example, "overgenerate" forms such as those in 17 below:

17.

*bolana	<	-bola	'rot'
*boleka	<	-bola	'rot'
*vuthwana	<	-vuthwa	'get ripe/become ripe'
*vuthweka	<	-vuthwa	'get ripe/become ripe'

In the light of the above fundamental principles, I shall now attempt to analyse morphologically the five productive extensions. Some other extensions which may be relevant to the discussion will be mentioned as the need arises. It is argued that verbal extension is a morphological word-formation process which is governed by the same constraints and conditions as any other rules of word formation. It is believed that:

(a)   these productive extensions display in their own limited way the general problems associated with derivational morphology;

(b)   an adequate analysis of extensions should lead to a principled description of the various extensions, as well as the rules governing their combination.

3.6 THE MORPHOLOGY OF PRODUCTIVE EXTENSIONS

The morphological conditions under which /-an-/, /-ek-/, /-el-/, /-is-/ and /-w-/ are found are considerably similar in a number of significant points. Let us look at the following examples:

18.   -fúnd-a   'learn, study'

A	B	C
-fúnd-	-fúnd-an-	-fúnd-an-a
'learn/read'		
-fúnd-	-fúnd-ek-	-fúnd-ek-a
-fúnd-	-fúnd-el-	-fúnd-el-a
-fúnd-	-fúnd-is-	-fúnd-is-a
-fúnd-	-fúnd-w-	-fúnd-w-a

Extensions attach to the radical or root.

19. S.D.

        [*thand*]   'love'

        S.C.

(i)   [[*thand*]*an*]

(ii)   [[*thand*]*ek*]

(iii)   [[*thand*]*el*]   +   a

(iv)   [[*thand*]*ís*]

(v)   [[*thand*]*w*]

These bracketings, in my opinion, indicate that the extensions dealt with here always occur with "simplex", cf. Guthrie (1970c: 92-93) roots on the left-hand side and an obligatory terminative vowel on the right-hand side. One can further argue that there is morphological motivation for this type of bracketing. If one looks again at 19 above, it becomes clear that the cost of deriving the extended verb stems from the base or "simplex" ones is, to put it in simple terms, the supplanting of the obligatory terminative vowel with the relevant extension, followed by the obligatory attachment of the terminative vowel(s):

$$\begin{bmatrix} \begin{Bmatrix} -a \\ -i \\ -o \end{Bmatrix} \end{bmatrix}$$

The terminative vowel [-*o*] occurs with the verb stem [-*tsho*] only.

Another important fact to note from this bracketing is that there is no morphological justification for a possible alternative bracketing like the following:

20. [*thânda*]   'love'

                                 [*thandána*]

                                 'love each other/one another'

                                 [*thandéka*]

                                 'be loveable'

   [*thânda*]   [*thandéla*]

   'love'   'love for'

                                 [*thandísa*]

                                 'make to love'

                                 [*thândwa*]

                                 'be loved'

In an analysis of the morphological structure of a stem or a word, this bracketing would miss an important generalisation about how the constituent morphemes concatenate in order to realise a word or stem.

The other possible bracketing as exemplified in 21 below would be unacceptable:

21.

$$[\,thanda\,] \quad \rightarrow \quad \left\{ \begin{array}{l} [[thanda\,]_V ana\,]_V \\ [[thanda\,]_V eka\,]_V \\ [[thanda\,]_V ela\,]_V \\ [[thanda\,]_V isa\,]_V \\ [[thanda\,]_V wa\,]_V \end{array} \right\}$$

'love'

Note that there is no change in word category. Compare, for example, English: (These examples are reproduced from Allen (1978: 19)):

22. $[in[[digest]_V ion]_N]_N$
$[in[[experience]_V]_N]_N$
$[in[[act]_V ion]_N]_N$
$[in[[toler(ate)]_V ance]_N]_N$
$[in[[balance]_V]_N]_N$

The examples from English indicate quite clearly that one can insert category markers because the morphology here is, no doubt, word-based.

If the rule given below is accepted, then it must also be accepted that morphological rules could generate extended verb stems which may not necessarily be occurring words or stems or forms:

Abbreviated structural description II

$[[VR] + [TV]] \quad \rightarrow \quad [[VR] + [Ext] + [T]]$
where [Ext] indicates extension.

This rule reiterates the crucial claim of overgenerating morphology that the fact that a form does not necessarily occur does not mean that it is morphologically ill-formed. Compare the following examples:

23.   [*fa*]   *[*-fana*]
      'die'

The problem one encounters with regard to the example in 23 above is that it is non-occurring, if the intended meaning is that of reciprocity. An account of some semantic factors involved in the non-occurrence of otherwise morphologically well-formed words, will be dealt with in the chapter on Semantics. The rule of extension attachment states only that:

$$\left[\begin{array}{c} \text{-an-} \\ \text{-ek-} \\ \text{-el-} \\ \text{-is-} \\ \text{-w-} \end{array}\right\}$$

can be suffixed to verbal roots. Following a formulation to be developed later in this chapter, the rule of extension attachment can be tentatively formulated as follows:

Abbreviated structural description III

$$\left[\; [VR] \cdot + \left\{\begin{array}{c} \text{-an-} \\ \text{-ek-} \\ \text{-el-} \\ \text{-is-} \\ \text{-w-} \end{array}\right\} \quad + \quad \left\{\begin{array}{c} \text{-a} \\ \text{-i} \\ \text{-o} \end{array}\right\} \;\right]_{Ve}$$

where VR = Verbal Root.

$$\left\{\begin{array}{c} \text{-a} \\ \text{-i} \\ \text{-o} \end{array}\right\} \quad = \text{ obligatory terminative vowel}$$

Ve = Extended verb

Another important factor which is illustrated by these bracketings is the morphological structure of a Xhosa verb; in other words, the word results from a concatenation of various morphemes, in a particular sequence, and each one having a particular designation by virtue of which it occupies or fills in a particular slot in the sequence.

3.7 MORPHEMES OF XHOSA REVISITED

At this point I should present some details about the nature of morphemes with particular reference to verbal extensions. A detailed account of this appears in Wilkes (1971: 4 *et seq.*). Wilkes starts off by saying that morphological investigations treat the word as a unit of structural (*vormlike*) and semantic aspects. In Wilkes's terms, therefore, the structural and semantic constituent units which are united to form words are what he refers to as "woordaspekte". To put this more explicitly, I shall take the liberty to reproduce Wilkes's (1971: 5) own definition of the concept of "woordaspekte":

> " 'n Woordaspek kan gedefinieer word as 'n fonologiese aspek binne die woord-klankvorm wat met 'n bepaalde betekenisaspek van diè woord in verband gebring kan word."

Wilkes (1971: 5) goes on to say that the antithesis between WORD and WORD CONSTITUENT UNIT is of crucial importance. He says that words are by definition units of sound and meaning. Word constituent units, on the other hand, are structural-semantic (*vormlike-semantiese*) units within whole words which can only exist within and by virtue of the existence of words.

The point that is raised by Wilkes (1971: 5) which is somewhat pertinent to the model of morphology that is accepted in this thesis is the following: there is a distinction between word-nuclei (*woordkerns*) and morphemes (*morfeme*). Using the Zulu example (which, incidentally occurs in Xhosa, as well),

24.   *Ùfíkile*   'he has arrived'

he says that it can be broken down into the following morphological units:

(i)   the nucleus/core (*kern*)
       -fik-
       (the usual term for this is Root or Radical)
(ii)   the morphemes *-u-* and *-ile*.

Wilkes *(op. cit.)* lists the following reasons for drawing a distinction between word-nuclei/word-core and morphemes:

(a) Word-nuclei, in the first place, form the root or radical units of word constitu-
ent parts around which all the other formatives are structured and by virtue of
which they stand in a certain (grammatical) relationship. Hence, for instance,
one can distinguish between prefixal and suffixal morphemes.

(b) Secondly, as Wilkes notes, word-nuclei (roots/radicals) are individual consti-
tuent units of words (*woordaspekte*) which differ from one word to the other.
Conversely morphemes are categorial (*kategoriale*) constituent units or forma-
tives, i.e. they are formatives which are recognised by virtue of the fact that
they must appear in a series of words.

(c) Thirdly, Wilkes (*op. cit.*: 6) says that word-nuclei form an **open** category (*oop-
kategorie*). In other words, a category which is unlimited in that given language.

(d) Morphemes, on the other hand, form a closed (*geslote*) category whose mem-
bers are limited because the morphemes of a language can never be freely re-
duced or increased.

Wilkes has made a rigorous and informative analysis of the morphological structure of
Zulu extended verbs. More important, also, is the fact that it has touched on serious
problems of morphological investigation:

(i) The crucial distinction between the root/radical and the extensions. Wilkes's
description of what a root/radical is, is accepted.

(ii) Of equal importance is the way Wilkes has characterised the extensions, for
example, as a closed category.

It should, however, be noted that in this thesis the verbal root/radical is considered a
morpheme.

3.7.1 Affix ordering

In this thesis morphemes will be grouped into two major divisions, cf. Wilkes (1971:
5-6):

(a) Roots/Radicals will be referred to as **central**. These constitute the nucleus or
core of a given word and they have a lexico-semantic significance. Except in
cases where palatalisation occurs (*vide* Chapter 2), this part of the word re-
mains constant whatever suffixal or prefixal affixes are added.

(b)   Then there are peripheral affixes (prefixal and suffixal) which are attached to the root or nucleus.

The implications of this division are of great importance to an analysis of extended verbs in Xhosa (and probably other Bantu languages, as well). The morphology outlined above implies that there is some external ordering principle which concatenates morphemes from the centre to the periphery. This will be illustrated by means of the following simple diagram:

A

Simplex verb stem	*-thanda*	Base verb
	↓ B	
Word nucleus	*-thand-*	Root
	↓ C	
Extensions	/-an-/ /-ek-/ /-el-/ /-is-/ /-w-/ (Level I Affixation)	Extensions
	↓ D	
Terminative vowel	-a- -i- -o- ≠ (Level II Affixation)	Terminative vowel
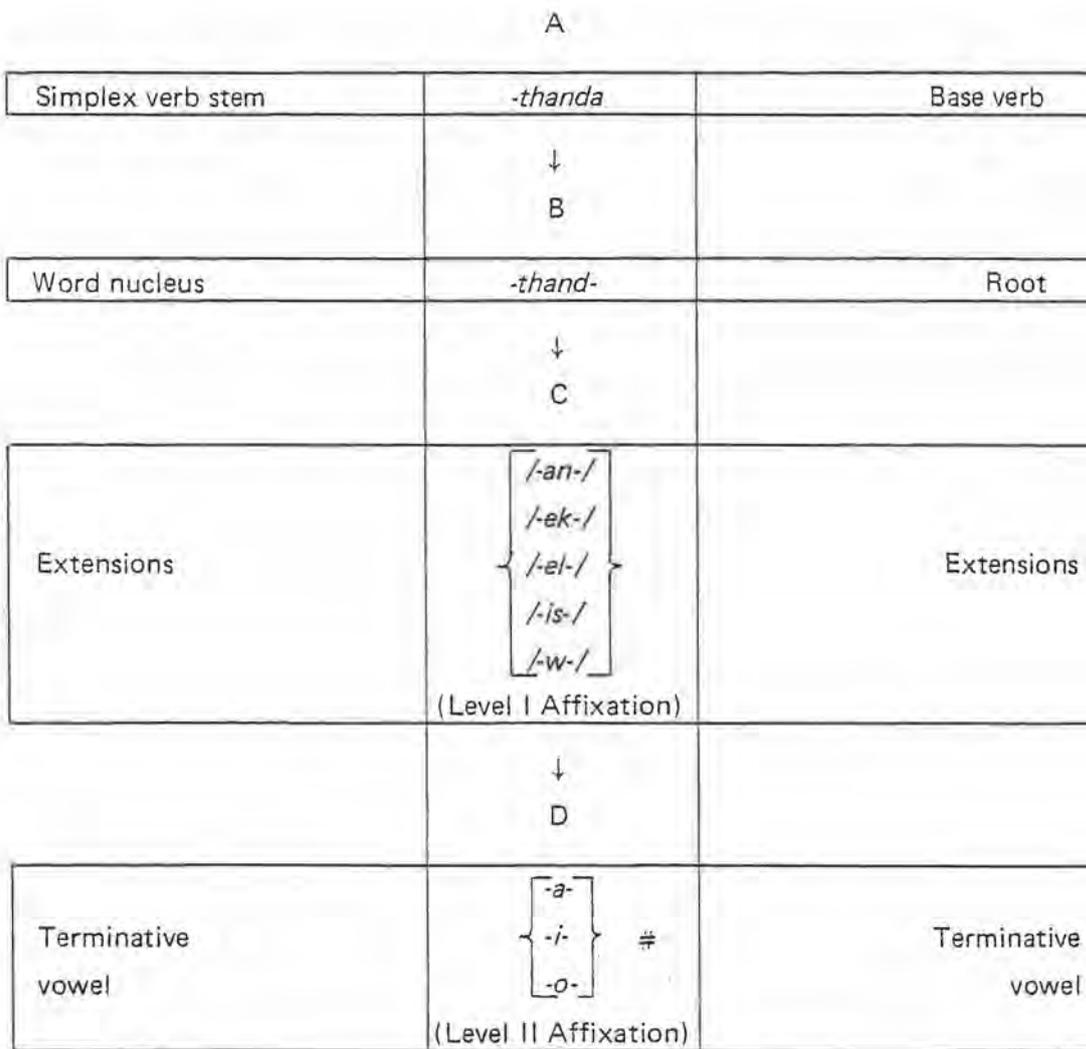
Note that the information on the left-hand side of the diagram is the usual description of a Xhosa verb, cf. Guthrie (1970c); while the information on the right-hand side column is meant to coincide with the terminology used in this thesis in describing ver-

bal extension as a kind of word-formation process. The example of a Xhosa verb stem and its affixes appears in the middle column. The sign # in the last position indicates that an affix appears obligatorily word-finally.

The following should be noted about the diagram above:

(a)   [[*thând*]a] 'love' stands for the verb stem that is to be extended. I have referred to this as the base verb stem.

(b)   The various **levels** of concatenation are indicated by I and II.

(c)   In Level I one finds extensions.

(d)   Level II is the point where the obligatory terminative vowel (TV) is suffixed. Only after this level, can one speak of an extended verb stem as against an extended root/radical, cf. Guthrie (1970c: 60 *et seq.*).

The advantages of this Level Ordered Morphology are that:

(i)   it correctly predicts the order of concatenation of various morphemes in order to realise the required extended form;

(ii)   the concatenation of Level I affixes on their own output is also predicted.

One can now speak of a Morpheme Ordering Hypothesis which clears a crucial problem of terminology. Some linguists, cf. Guthrie (1970c) and Cantrell (1967), who have investigated this phenomenon have used the term "Radical extension", while others have used the term "Verbal extension".

If /-an-/, /-ek-/, /-el-/, /-is-/, /-w-/ are suffixed only to roots as the diagram above predicts, then this explains why sequences such as those in 21 above are not possible. 21 is repeated below as 25 for the sake of convenience:

25.

$[thanda]_V$
'love'

$[[thanda]_V ana]_V$
$[[thanda]_V eka]_V$
$[[thanda]_V ela]_V$
$[[thanda]_V isa]_V$
$[[thanda]_V wa]_V$

While the forms in 25 cannot be yielded by this model of morphology, those in 19 can. 19 is reproduced below as 26 for easy reference:

26. S.D.

    [*thand*]

    S.C.

        [[*thand*]*an*]

        [[*thand*]*ek*]

        [[*thand*]*el*]

        [[*thand*]*is*]

        [[*thand*]*w*]

The examples in 26 are possible because they do not violate the morpheme structure conditions proposed by the morpheme ordering hypothesis. The forms listed in 26 above give further empirical evidence to Allen's (1978: 190) argument for:

> "A morphology which makes explicit the identical notions: morphologically well-formed and possible word, and distinguishes them from the notion of occurring word."

3.7.2 Bracketing

Let us remark once more about the nature of our bracketing and what it signifies. Compare the following examples in 27 below:

27. [[[*thandáz*]*el*]*a*]   'pray for'

     [[[*lím*]*is*]*a*]   'cause to plough'

     [[[*xháml*]*ek*]*a*]   'be wasted'

     [[[*xhwíth*]*an*]*a*]   'quarrel with (one) another'

     [[[*phôx*]*w*]*a*]   'be reprimanded'

A number of important issues are revealed by the bracketing used here:

(i)   There is no obvious word stage in the derivation of these extended forms. Compare, for example, the following derived English words, cf. Allen (1978: 34):

28. [un[involvement]$_N$]$_N$

     [un[employment]$_N$]$_N$

     [un[fulfilment]$_N$]$_N$

     [un[acceptance]$_N$]$_N$

With Xhosa verbal extension no shift in word category is caused.

A category marker only becomes necessary after the last or outermost set of bracketings.

(ii)   The sets of bracketings used serve to indicate the parameters of the structured morphemes.

(iii)   From these brackets, it is possible to capture the process of verbal extension as follows:

Abbreviated structural description IV

$$[[VR] + [TV]]_V \quad \rightarrow \quad [[VR] + [Ext \cdots^n] + [TV]]_{Ve}$$
$$\qquad\qquad\qquad\qquad\qquad\quad 1 \qquad 2 \qquad 3$$

where VR   =   Verbal Root/Radical

TV   =   Terminative Vowel

Ext   =   Extension

...n   =   indicates that theoretically there is no limit to the number of extensions permitted

Ve   =   Extended verb

The above can be condensed into the one below.

Abbreviated structural description V

$$[[VR] + ([Ext \cdots^n]) + [TV]]_{Ve}$$

This description characterises the possibilities in a Xhosa verb. The brackets ( ) are meant to show that the extension(s) is/are optional. The difference between this description and the previous one is that in the former the process of derivation or extension is explicitly stated by means of an arrow.

3.7.3 Verbal extension rule

The derivation expressed in IV above will henceforth be referred to as the VERBAL EXTENSION RULE (VER). The empirical and theoretical implications of this rule are

crucial to the morphological theory proposed here. Overgenerating morphology is intrinsic to this rule; compare, for instance, the form in 23 above, reproduced here as 29 for easy reference:

29.	*-fa*	**-fana*
	'die'

Furthermore, the formulation of this rule is also in accordance with the morpheme ordering principle, hence the numbers which are meant to show the sequence of morphemes. The assignment of specific positions to the various morphemes cannot be violated.

The Verbal Extension Rule forms extended verbs whose morphological structure (and, perhaps, to a considerable extent, semantic structure) is transparent. Morphological transparency, exhibited by extended verbs refers to the complete predictability of internal word structure as the sets of brackets indicate. Let us look at the example in 30.:

30.	[[[*thand*]*ek*]*a*]
		Root
		Level I
		Level II

(i)	The first set of brackets indicates the original root.
(ii)	The second set of brackets indicates the morphological operation of /-ek-/ attachment (first level affixation). Typical of an agglutinating language (*vide* Pei & Gaynor 1980: 8) /-thand-/ and /-ek-/ have been combined into a single unit (note, not an indivisible unit as the brackets show; two morphemes are involved here), resulting in the extended root; the two morphemes constituting the extended root each have:

	"... a distinct, fixed connotation and a separate existence ..." (*vide* Pei and Gaynor 1980: 8).

(iii)	The third set shows the terminative vowel (TV) Slot.

3.8 WORD-BASED OR ROOT-BASED MORPHOLOGY

The aforegoing remarks about the nature of extended verbs and their derivation compels me to state categorically whether word-based or root-based morphology is preferable for Xhosa. I shall start off by discussing the hypothesis that word-formation rules (WFRs) in Xhosa are word-based.

(i)   The hypothesis that WF-rules are word-based has been cautiously defended for languages like English (Aronoff 1976) and Dutch (Booij 1977). Booij (1977: 32) does concede that word-based word-formation systems may not be "... a universal principle valid for every language". Even in English and Dutch a number of counter-examples to word-based word formation have been found (*vide* Booij 1977: 32-33).

Let us imagine that word-formation rules for Xhosa are word-based. It would then have to be accepted that extended verbs in Xhosa are realised by adding productive extensions to basic verb stems. This hypothesis would then perhaps be formalised as follows:

Abbreviated structural description VI

V	$\rightarrow$	Ve
-hámba	$\rightarrow$	*-hámbisa*
'walk'		'walk + cause'

This formalisation would have to be further improved or expanded in order to capture all the ramifications involved in such a morphological operation, like the following:

(a)   The basic verb stem loses its terminative vowel.

(b)   The second operation is that of the attachment of the extension suffix.

(c)   After the extension has been attached, the obligatory terminative vowel must attach in order that the morphological structure of the extended verb stem should conform to the formula:[4]

Abbreviated structural description VII

$$\left[\left[\begin{Bmatrix} VR \\ VRe \end{Bmatrix} \right] + \left[TV \right] \right]_V$$

(Where: VRe = Extended root.)

(d)   The rule of verbal extension within a word-based model of word-formation can therefore be approximated in the following way:

Abbreviated structural description VIII

$$[[[VR] + [TV]] \rightarrow [VR] \rightarrow [VR + Ext \cdots^n] \rightarrow [VR] + [Ext \cdots^n] + [TV]]$$

A question which immediately comes to the fore within this word-based model is how one gets rid of the obligatory terminative vowel, whose deletion eventually makes the extension to attach directly to the root. Following Booij (1977: 39 *et seq.*) I shall examine two possible ways of handling this problem.

According to Booij (1977: 39) one will have to choose between:

(a)   morpheme-deleting word-formation rules; and
(b)   truncation rules.

The first proposal above implies that a given word-formation rule must incorporate a morpheme-deletion mechanism within its formulation.[5] It seems reasonable to propose that:

> "... the assumption of morpheme-deleting word-formation rules is a logical possibility."
>
> (*vide* Booij 1977: 39)

especially because of the agglutinating nature of the Xhosa language. With this in mind, therefore, the rule for deriving an extended verb stem from a base verb of the form $[[VR] + [TV]]_V$ could be formulated as follows:

Abbreviated structural description IX

$$[[VR] + [TV]]_V \rightarrow [VR] \rightarrow [VR + Ext \cdots^n] \rightarrow [[VR] + [Ext] + [TV]]_{Ve}$$

In Booij's terms, therefore, it is intrinsic in this rule that the TV of the verb stem shown on the left of the arrow deletes on the right-hand side of that arrow. Theoretically, therefore, the root on the right-hand side of the arrow is still verbal; then all the other morphological operations follow according to the principle of morpheme ordering as outlined earlier in this chapter.

Another possible rule for the formulation of extended verbs within a word-based model could be formulated as follows:

Abbreviated structural description X

$$[VR(+TV)]_V \rightarrow [VR + Ext^{...n} + TV]_{Ve}$$

In terms of this formulation, only one rule is needed for the formation of an extended verb. In terms of this rule the round brackets indicate that the terminative vowel is detachable, but its occurrence is obligatory. This means that an element such as an extension may be introduced, as is illustrated on the right. In practical terms, therefore, in the case of, for example:

$[\textit{-thânda}]_V$

one can only derive

$$\left[\begin{Bmatrix} \textit{-thandána} \\ \textit{-thandéka} \\ \textit{-thandéla} \\ \textit{-thandísa} \\ \textit{-thândwa} \end{Bmatrix}\right]_{Ve}$$
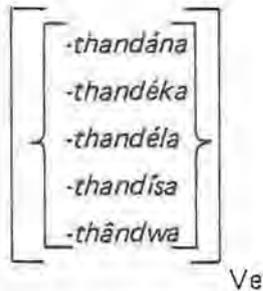
and not those examples appearing in 31. below:

31. *thandaana
     *thandaeka
     *thandaela
     *thandaisa
     *thandawa

3.8.1 Root-based model

Attention will now be given to the more popular and current approach to verbal extension in Xhosa, namely the root-based model. Before outlining the mechanics of this model, I shall furnish a few reasons why it is currently the most popular approach:

(i)   probably the methods used in the descriptive approach made this a more tenable approach, however indirectly this may have occurred.

(ii)   the agglutinating nature of the Xhosa language has facilitated this method. Words are often treated as transparent combinations of morphemes;

(iii)   the fact that morphemes in Xhosa (or in Bantu) are divided into two major groups: the central and the peripheral;

(iv)   the status of the central morphemes as word-nuclei and their other characteristics as outlined earlier in this chapter;

(v)   the level-ordered structuring of the various peripheral morphemes;

(vi)   the overall "disjunctive" ordering of morphemes within a given lexical item. The term "disjunctive" must be understood within the context of Booij's (1970: 40) words.[6]

In terms of root-based word formation, the starting point is the word-nucleus, the root. The terminative vowel is irrelevant for at least two important reasons:

(i)   it is detachable;

(ii)   the word-final slot may be filled by various vowels depending on tense, mood and whether the verb is in the positive or negative form;

(iii)   morphemes are meaning-bearing.

3.8.2 The choice of a model

In the preceding paragraphs, an outline of two models has been presented; the question arises as to which one is suitable for the investigation being undertaken in this study. In my opinion, a choice will depend on two important considerations:

(i)   well-formulated, but simple adequate rules;

(ii)   our assumptions about the structure of the lexicon.

In accepting a root-based model, I, therefore, propose a re-definition of description X above, which for the sake of convenience is reproduced as XI below:

Abbreviated structural description XI

$$[VR(+ TV)]_V \rightarrow [VR + Ext \cdots^n + TV]_{Ve}$$

Throughout this thesis the "disjunctive" ordering, cf. Booij (1977: 40) of the morphemes has been indicated by a set of brackets for each morpheme. In XI above, the

the fact that the word-final morpheme obligatorily deletes before extension attachment, is underlined by the sign ( ). On the basis of the information provided by this description, I can defend my argument for verbal extension which is root-based.

Furthermore, our assumptions about the classes of morphemes, as outlined earlier in this Chapter, i.e. into central and peripheral should be borne in mind. Rules that one can formulate within a word-based or stem-based model have an in-built contradiction in them because they claim that a terminative vowel must first delete before an extension can be attached.[7] In addition, such rules necessitate a mechanism to delete the terminative vowel and a similar mechanism to re-attach the terminative vowel after the extension has been added. Compare also Booij's (1977: 32) claim that the word-based model is not necessarily universal.

3.9 MORPHEME ORDERING HYPOTHESIS

The morpheme bracketing which is employed throughout this work results from a general principle of Xhosa morphology. This general principle is referred to as the "morpheme ordering hypothesis". This hypothesis predicts the internal structure of a given word form. The Verbal Extension Rule (VER) forms extended verbs by means of productive extensions. The morphological structure of these verbs is transparent. Morphological transparency refers to the complete predictability of word-structure. I also wish to propose that the morphological shape assigned to verbs by VER is always concomitant with semantic transparency, i.e. there is morphological and semantic regularity. Compare Jackendoff (1975: 640-645):

> "It makes sense to say that two lexical items are related if knowing one of them makes it easier to learn the other — i.e. if the two items contain less independent information than two unrelated lexical items do."

	/-an-/	(Meaning = reciprocal)
32.	[[*thând*]*a*] 'love'	[[[*thand*]*án*]*a*]
	[[*bôn*]*a*] 'see'	[[[*bon*]*án*]*a*]
	[[*búz*]*a*] 'ask'	[[[*búz*]*an*]*a*]
	[[*hlêb*]*a*] 'back-bite'	[[[*hleb*]*án*]*a*]

	/-ek-/	(Meaning = neuter)
33.	[[*khând*]*a*]	[[[*khand*]*ék*]*a*]
	'hammer'	
	[[*lâhl*]*a*]	[[[*lahl*]*ék*]*a*]
	'throw'	
	[[*vul*]*a*]	[[[*vúl*]*ek*]*a*]
	'open'	
	[[*énz*]*a*]	[[[*énz*]*ek*]*a*]
	'do'	

	/-el-/	(Meaning = applicative)
34.	[[*bôn*]*a*]	[[[*bon*]*él*]*a*]
	'see'	
	[[*sîk*]*a*]	[[[*sik*]*él*]*a*]
	'cut'	
	[[*zil*]*a*]	[[[*zîl*]*el*]*a*]
	'abstain'	
	[[*vul*]*a*]	[[[*vúl*]*el*]*a*]
	'open'	

	/-is-/	(Meaning = causative)
35.	[[*bhâl*]*a*]	[[[*bhal*]*ís*]*a*]
	'write'	
	[[*bal*]*a*]	[[[*bál*]*is*]*a*]
	'count'	
	[[*fûnd*]*a*]	[[[*fûnd*]*is*]*a*]
	'read'	
	[[*hlal*]*a*]	[[[*hlál*]*is*]*a*]
	'sit'	

	/-w-/	(Meaning = passive)
36.	[[*bhâl*]*a*]	[[[*bhâl*]*w*]*a*]
	'write'	
	[[*bal*]*a*]	[[[*bal*]*w*]*a*]
	'count'	
	[[*fûnd*]*a*]	[[[*fûnd*]*w*]*a*]
	'read'	
	[[*hlal*]*a*]	[[[*hlal*]*w*]*a*]
	'sit'	

3.10 OVERGENERATING MORPHOLOGY

It should have become clear by now that the morphology proposed in this thesis is an overgenerating one. Put differently, the rules of verbal extension will obviously generate an infinite set of possible well-formed verbs. Only a fraction of these will necessarily be occurring words, cf. Allen (1978: 190 *et seq.*), Jackendoff (1975: 655-658) and Halle (1973: 2-8), etc. Consequently a distinction is made between:

(a)   A Conditional Lexicon, i.e. a set of morphologically well-formed or possible words; and

(b)   A Permanent Lexicon, i.e. the actual occurring words.

According to Allen (1978: 195):

> "The central empirical datum in support of Overgenerating Morphology is the fact that words derived by regular derivational process may not be occurring words ... but when subsequent derivational processes apply, occurring words may result."

Consider the following examples from Xhosa:

	/-an-/	(Meaning = reciprocal)
37.	[[gcôb]a]	[[[gcob]an]a]
	'rejoice'	
	[[vûy]a]	[[[vuy]an]a]
	'enjoy'	
	[[ónwab]a]	[[[onwab]an]a]
	'be happy'	

	/-ek-/	(Meaning = neuter)
38.	[[bol]a]	[[[bol]ek]a]
	'rot'	
	[[bohl]a]	[[[bohl]ek]a]
	'decrease'	
	[[wuth]a]	[[[wuth]ek]a]
	'decrease'	

However, note that when intervening extensions occur in the above forms, acceptable stems are realised,[8] e.g.

39.	[[[[gcob]is]an]a]	'make one another happy'
	[[[[bol]is]ek]a]	'capable of being made to rot'
	[[[[mith]is]ek]a]	'capable of being made pregnant'
	[[[[hluth]is]ek]a]	'capable of being made satiated'

3.11 FOSSILISED EXTENSIONS REVISITED

Given the type of bracketing that has been used throughout this thesis, radicals with fossilised extensions do not offer any problem. From the way I use brackets around them, one observes that they are not derivable by rule. In other words, their status is the same as that of any underived forms. Compare the following examples:

/-an-/

| 40. | [[hlangan]a] | 'meet/assemble' |

/-ek-/

| 41. | [[bolek]a] | 'borrow' |

/-el-/

| 42. | [[osel]a] | 'fatally wound' |

/-is-/

| 43. | [[xabis]a] | 'appreciate' |

/-w-/

| 44. | [[batyw]a] | 'be sexually aroused' |

3.12 EXTENSION AS A RECURSIVE PROCESS

Another important characteristic of verbal extension is that it is a recursive process. In other words, theoretically there is apparently no formal limit to the number of times that VER can reapply to its own output.[9]

3.13 ARGUMENTS AGAINST ROOT-BASED MODEL

Mchombo (1978: 88) argues against root-based morphology because:

> "... roots and words as inputs to the lexical derivational rules could possibly lead to divergent methodologies and the recognition of an heterogenous set of derivational rules."

He, therefore, argues that a word-based model is preferable because, in his terms:

(i)   it is constrained; and

(ii)   results in a well-ordered or well-organised grammar.

In his model in which the word is taken as the basic primitive, he assumes the following structure of the lexicon:

```
         ┌──────────────┐                    ┌──────────────────────┐
         │   WORDS      │◄──────────────────►│  REDUNDANCY RULES    │
         └──────────────┘                    └──────────────────────┘
                │  ▲
                ▼  │
   ┌─────────────────────────┐
   │  PRODUCTIVE LEXICAL      │
   │      PROCESSES           │
   └─────────────────────────┘
                │
                ▼
   ┌─────────────────────────┐
   │  LEXICAL ITEMS           │
   └─────────────────────────┘
                │
                ▼

   to Sentence-forming
   processes
```
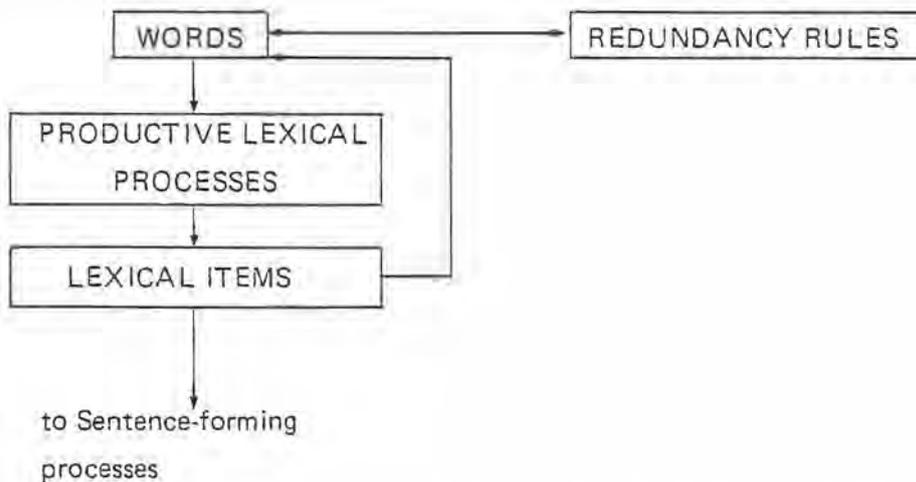
I shall present his approach and then give reasons why it could not be accepted in this thesis. Mchombo (1978: 88) starts off by reiterating Cantrell (1967: 1), when he claims quite rightly, that the final *-a* of the verb in Chichewa (cf. Xhosa) is a separate morpheme. He says that the minimal morphological structure of the verb may be described as being of the following form:

Verb Root + *a*

He further qualifies the above rule schema by claiming that, in fact, it is not accurate to talk of the notion "verbal root" once the *-a* has been detached. He points out, justifiably, that:

"... there is ... no *a priori* reason to denote the remaining part when the /a/ is removed as a verb root rather than a noun (or nominal) stem."

He suggests that one should rather use the variable X to represent what has been wrongly referred to as a verbal root; he refers to the *-a* as the verbaliser. In other words, morphologically, the verb now takes the following shape:

X + *a*

If the above rule is accepted then the relationship between verbs and the so-called de-verbative nouns is captured regularly because this rule (i.e. X + a) implies that both the noun and the verb derive from the same root (or word nucleus). Within this approach, therefore, if a noun is to be derived from root X, this will be done by means of nominaliser attachment; and conversely, if a verb is to be derived, a rule of verbaliser attachment will be invoked. In fact, this view, as Mchombo (1978: 89), too, concedes, follows strictly Chomsky's (1970) Lexicalist Hypothesis.

Mchombo (1978: 91) rejects this root-based approach for certain reasons which have been found to be unconvincing in this research. His criticism of the root-based model stems from the following:

(i)   He claims that it is not imperative to accept Chomsky's Lexicalist framework without further modifications.

(ii)   Secondly, he rejects the notion of morphological and semantic regularities.

As he puts it:

> "... it is not at all clear as to whether the morphological and semantic related-ness are to be taken as both necessary and sufficient conditions in the relation of Lexical items or whether one is a necessary and the other a sufficient condition, and, if so which one is which."

Mchombo's arguments against this approach stem from his acceptance of the view that the morphemes lack semantic content. In rejecting this view about the morpheme, he quoted copiously from Bazell (1954) and Aronoff's (1976: 11) now famous examples of the berries (some black berries are red). Mchombo bases much of his argument on these examples from Aronoff. It is, however, accepted that probably these examples are well-motivated for the English language. Mchombo, however, does not supply us with convincing examples from Chichewa (or any language of the Bantu family) to underline his complete acceptance of Aronoff's standpoint. Even the lone example (*Ibid.*: 123):

45.   *badwa*   >   *mbadwo*
       'give birth'   'generation'

the relationship of which he would seem to reject (or doubt) as:

"... the rather tenuous connection ...",

seems to be counter-evidence to his adopted theory. (I am making this claim in view of our acceptance of the semantic content of morphemes and the subsequent morphological and semantic regularities.)

(iii)   It is Mchombo's third reason for rejecting the idea of the derivation of nouns and verbs from a common root X which, in my opinion, seems to be justified. He says that the following words from Swahili pose problems:

46.   *tuma* 'send'; *tumia* 'use'; *mtumaji* 'boss sender'; *mtumishi* 'servant'; *tumio* 'use, expenditure'.

The reason for this problem is that, in his terms, if *tumia* is derived from *tuma*, then (rightly so):

> "In assigning the categorial features, to the lexical entry, how is the required resultant form to be guaranteed? How does one ensure that the assignment of the features for (verb) yields *tuma* rather than *tumia*?"
>
> Mchombo (1978: 124)

This argument by Mchombo seems to be well-motivated and points categorically to an unresolved problem which weakens this approach.

Now let us look at Mchombo's (1978: 124 *et seq.*) word-based alternative to the root-based model. In dealing with this approach, he takes his examples from verbs and their corresponding derivative nouns. He formalises the process of the derivation of nouns from verbs within a word-based model as follows:

$$[X]_{root} \, [X + \text{verbaliser}]_{Verb} \rightarrow [X] \, [X + \text{Noun}]_{Noun}$$

In an attempt to give this data even more immediate relevance to the goal of this thesis, the writer has decided to add the following example which shows the derivation of a verb stem from another verb stem (verbal derivation/verbal extension):

$$[X]_{root} \, [X + \text{verbaliser}]_{Verb} \rightarrow [X]_{root} \rightarrow$$
$$[X + \text{Extension} + \text{Verbaliser}]_{Ve}$$

(where Ve stands for extended verb stem).

The foregoing formulations would appear to make this word-based model unacceptable on methodological grounds because it involves a "Duke of York" derivation. Duke of York derivations are:

> "... derivations that in some relevant respect have the form A B A ... and the strategy of postulating such a derivation in order to achieve a description of some piece of linguistic data (is called S.C.S.) the Duke of York Gambit."
>
> Pullum (1976: 83)

The notion "Duke of York derivation" merely implies that the nouns (or verbs) are derived from verbs instead of being derived directly from the common root. In other words, such a derivation involves:

(i)   first the introduction of the verbaliser to yield the verb;

(ii)   then the dropping of that same verbaliser, which is then followed by (iii);

(iii)   the filling of the now empty slot by means of a nominaliser (or the extension + a).

Mchombo (1978: 91 *et seq.*) defends this type of derivation by citing Pullum (1976: 83) who says that:

> "... linguists very frequently seem to give evidence of a tacitly held belief that there is ... ... something inept and risible about a linguistic analysis which determines that certain structures assigned a derivation of the general form A B A, an underlying representation (or some nonultimate remote formulation) is mapped on to an intermediate form distinct from it, and then to a surface (or other superficial) representation which is identical with the earlier stage."

The rule of [(*-an-*, *-ek-*, *-el-*, *-is-*, *-w-*)] attachment will be provisionally expressed as follows:

$$[[\ ]]_{Vs} \ (\textit{-an-}, \textit{-ek-}, \textit{-el-}, \textit{-is-}, \textit{-w-})]_{Ve}$$

where Vs   =   verb stem

Ve   =   extended verb stem

The above rule does not tell us that the extension actually attaches to the root and that the terminative vowel must delete; and further that after the extension has attached a terminative vowel must obligatorily be affixed. Thus from the above rule one could get examples like the following:

47.　*-hambaan

　　　*-thethais

An examination of verbal extension in Xhosa reveals that the extensions actually attach to the root (or Word Nucleus) of the verb, which is achieved by a process of the deletion of its last morpheme, even if one assumes a word-based model:

Simplex Verb Stem		Extended Verb Stem		
Root	Terminative Vowel	Root	Extension	Terminative Vowel
			Extended root	

48.　[[*bon*]　[*a*]]　　　　[[[*bon*]　*an*]　*a*]

　　　'see'　　　　　　　[[[*bon*]　*ek*]　*a*]

　　　　　　　　　　　[[[*bon*]　*el*]　*a*]

　　　　　　　　　　　[[[*bon*]　*is*]　*a*]

　　　　　　　　　　　[[[*bon*]　*w*]　*a*]

3.14 CONCLUSION

Within a word-based theory of morphology, the fact that the extension is said to be attached to the root would seem to be contradictory, and therefore undermine the very basic tenet of a theory that purports to treat the word as its basic prime. Virtually every example from Xhosa data would, therefore, constitute very strong counter-evidence to this theory. In other words, the base would appear to fail as a legitimate entity. In the light of the arguments presented in the preceding paragraphs, the disjunctive characteristic of Xhosa words favours the root-based model and not the word-based one.

Chapter 4

GENERAL BACKGROUND ON SOME ASPECTS OF XHOSA SYNTAX

4.1 INTRODUCTION

This section provides some relevant background information about Xhosa grammatical structure. It is included for the sole purpose of facilitating the discussion of the syntax of verbal extensions. Some of the more important concepts that recur in various places throughout the main part of the thesis are briefly explored here. This chapter, however, does not purport to represent a complete study of the syntax of Xhosa.

4.2 SENTENCE-SCHEMATA

I shall, following Lyons (1977: 469), operate with a set of terms and concepts which come partly from traditional grammar and partly from more recent grammatical theory. Firstly, I shall give a list of sentence-schemata. This will in no way be an exhaustive list of sentence-schemata in Xhosa; I shall merely list those that are relevant to this research:

(1)   NP + V
(2)   NP + V + NP
(3)   NP + V + Loc
(4)   NP + V + Instr.
(5)   NP + V + Cop.
(6)   NP + V + Poss
(7)   NP + V + Ass

The symbols used in the above sentence-schemata should be interpreted as follows:

NP	=	Noun Phrase
V	=	Verb
Loc	=	Locative
Instr	=	Instrumental
Cop	=	Copulative
Poss	=	Possessive
Ass	=	Associative

The sentence-schemata listed above can be exemplified as follows:

1.(a)   *Índoda íyagodóla*
        'The man is feeling cold'

  (b)   *Índoda ítya ínyama*
        'The man eats meat'

  (c)   *Índoda isebénzela égarãjï*
        'The man works in the garage' (specific location)

  (d)   *Índoda ithengĩsa ngesónka*
        'The man is selling bread'

  (e)   *Índoda ilúnywa yínjá*
        'The man is bitten by the dog'

  (f)   *ÚThémba uhámbisa ókukáyisé*
        "Themba walks like his father'
        lit. 'Themba's walk is very close to that of his father'

  (g)   *Índoda ihámba nómfâzi*
        'The man walks with the woman'

I have deliberately included in the above examples some constituents which are special-
ly required by the type of extension that the verb has. For instance, a locative such as
'egaraji' in sentence (c) is specially required by the */-el-/* extended verb to indicate loca-
tion. In sentence (d) the instrumental *'ngesonka'* is specially required by the */-is-/* ex-
tended verb to indicate the means whereby the action denoted by the verb is achieved.
In terms of Lyons (1977: 470) the propositions in (a)-(e) above identify certain refer-
ents and state that X does this or that, or that X has a certain property or that X is in
a certain place or that X is a means whereby Y is achieved, etc. The NPs that appear
left-most are called subjects. What is said about the subject is expressed by means of
the predicate.

Let us look again at sentences (c) and (d). Both locatives and instrumentals are not
generally recognised as constituting a major class of sentence-constituents on a par with
nominals (nouns as such) and verbs, cf. Lyons (1977: 473). For example, Lyons (*op.
cit.*) says:

> "In traditional grammar, they are treated as just one of several subclasses of
> adverbs or adverbial phrases."

In terms of Lyons (1977: 473) *'egaraji'* and *'ngesonka'* above are used as adverbials or
"... extra-nuclear adjuncts."

Sentence (f) above deserves special mention because of the use of the "possessive"
'okukayise' (like his father). The term possessive is somewhat problematic not only in
Bantu, but apparently also in languages like English, cf. Lyons (1977: 473). With ref-
erence to this term, Lyons (*op. cit.*) notes:[1]

> "It is worth noting, however, that the term 'possessive', as it is traditionally
> employed by linguists, is somewhat misleading: it suggests that the basic
> function of the so-called possessive constructions that are found in many
> languages is the expression of possession or ownership."

Lyons (*op. cit.*) then points out that the "possessive" is not always used to refer to
possession or ownership.

He (1977: 473-474) then elaborates:

> "Generally speaking, however, a phrase like 'X's Y' means more than 'the Y
> that is associated with X'; the referent of '(the) Y' with referent of '(the) X'
> is frequently one of spatial proximity or attachment."

In Xhosa it has been pointed out by Louw (1963b: 46) that possessives convey various
significances, e.g.

(i)   "Possessives" which indicate the object from which something is made, e.g.

2.   *úphahla lwéngcá*
      'a thatched roof'

(ii)   "Possessives" which denote the use or purpose of something, e.g.

3.   *índlu yókutyéla*
      'a dining room'
      lit. 'room of eating'
      íxésha lokuthándaza
      'time for prayer'
      lit. 'time of praying'

(iii) "Possessives" used to denote numerical order, e.g.

4. *ùsukú lókuqâla*
    'the first day'
    lit. 'day of the first'

(iv) "Possessives" that denote the contents of something, e.g.

5. *lémele yámânzi*
    'a bucket of water'

The apparent overlap between (iv) and (ii) with reference to use will be clarified by pragmatic factors.

(v) "Possessives" that denote some property or characteristic of something, e.g.

6. *ìnkúnzí yéhágu*
    'boar'
    lit. 'bull of pig'
    ámazwí ómbúlelo
    lit. 'words of thanks'

(vi) "Possessives" that indicate a quality of something, e.g.

7. *ìnkósí yéenkôsi*
    'King of kings'

Compare Louw (1963b).

With regard to syntactic relations, I would like to offer the following as a working proposal for this thesis:

(a) the verb is assumed to occupy a central position and determines what kind of NPs will co-occur with it, cf. Chafe (1970: 96);

(b) subject and object NPs are assumed to be constituents of sentence-nuclei;

(c) the locative, the instrumental, the copulative, the possessive and the associative are assumed to be a specific type of NP which I will describe later.

4.3 STATES PROCESSES AND ACTIONS

Both Chafe (1970: 95-104) and Lyons (1977: 483 *et seq.*) agree that the way man conceptualises the physical world involves: states, events, processes and actions. Lyons (*op. cit.*) then says that there is unfortunately no adequate term that can be used to embrace states, events, processes and actions. He proposes the term situation to cover all these. A distinction is then drawn between static and dynamic situations. Lyons (*op. cit.*) defines the two major concepts: "static situation" and "dynamic situation" in what I consider to be very clear terms.

4.3.1 Static situation

"A static situation (or state-of-affairs, or state) is one that is conceived of as existing rather than happening, and as being homogenous, continuous and unchanging throughout its duration."

4.3.2 Dynamic situation

"A dynamic situation, on the other hand, is something that happens (or occurs, or takes place): it may be momentary or enduring; it is not necessarily either homogenous or continuous, but may have any of several temporal contours; ..."

The temporal contours that are referred to are that:

(i)   If the duration of the dynamic situation extends in time, then it is a process.

(ii)   On the other hand, if the situation is momentary, then it is an event.

(iii)   Thirdly, once there is reference to some controlling agency, then it is an action.

Lyons (1977: 483) then concludes by saying that:

"... a process that is under the control of an agent is an activity; and an event that is under the control of an agent is an act."

4.4 VALENCY

In the treatment of the syntax of extended verbs I shall be dealing with the concept of valency. Lyons (1977: 486) says about valency:

"The concept of valency can be seen, ..., as something which takes over and extends the more traditional, but more restricted, notions of transitivity and

government. But it is also quite clearly relatable to the predicate-calculus classification of predicators in terms of the number of arguments that they take in well-formed formulae: ..."

In terms of this analysis, the verb in sentence 8(a) has a valency of 1; sentence (b) a valency of 2.

8.(a) *Íindlebé zám zíyagodóla*
   'My ears are feeling cold'

  (b) *Úmôya ugodólisa íindlebé zám*
   'The wind makes my ears cold'

The area covered by the concept of valency stretches beyond just determining the number of NPs that a verb takes, cf. Lyons (*op. cit.*). It is also used to account for the differences in the sets of NPs that co-occur with verbs. Let us take, for example, the verb stems:

   -nīka   'give'

            and

   -béka   'put'

in Xhosa. As the sentences below illustrate, both verbs have a valency of 3. However, they differ in the sets of co-occurring NPs that they allow:

9.(a) *Úmamá unīka ûsána ibhótile*
   'Mother gives the baby a bottle'

  (b) *Úmamá ubéka ibhótile étáfíleni*
   'Mother puts the bottle on the table'

The verb *'unīka'* takes a subject, a direct object and an indirect object. The verb *'ubéka'*, on the other hand, takes a subject, a direct object and a **locative**. (An indirect object may not occur in this final position.) In terms of Lyons (1977: 487) then one may state that the two verb stems: *-nīka* and *-béka* differ in valency: they are associated with two distinct valency-sets represented in 9(a) and (b) respectively.

It will be apparent in the section on the syntax of the five productive extensions that the differences in valency-sets will be associated with the type of extension used on the

verb. These extensions are productive mechanisms that account for the decrease or increase of the intrinsic valency of a verb, cf. Lyons (1977: 487, Epée (1976: 15 *et seq.*).

Finally, it should be pointed out that there is a clear indication of interdependence between the semantic content of a verb and its valency. Various models of case grammar have been used to demonstrate this. Following Lyons (1977: 488) the term **valency roles** will be used to refer to semantic relations like Agentive, Patient, Instrumental, Associative, Locative, etc. In this regard Lyons (1977: 488) says:

> "What are traditionally called cases (e.g. the nominative, accusative, genitive, dative, etc., in Latin, German or Russian) would correlate only imperfectly with valency roles which, in certain formulations of case grammar at least, are held to be universal components of various kinds of states, events and processes."

Mallinson & Blake (1981: 39 *et seq.*) have made an extensive study of "Agent" and "Patient" marking cross-linguistically. In their discussion of case marking they make reference to the possibility of employing the following entities:

Si	=	intransitive subject
A	=	transitive subject
O	=	object

They (Ibid.) argue that:

> "This system, which originated with Dixon 1972, involves three syntactic primes, though the system is semantically based to the extent that A must cover the agent of a transitive verb and O the patient, irrespective of morpho-syntactic considerations."

After a careful examination of the utility of using the three entities Si, A and O, Mallison and Blake (Ibid.) decide to adopt a combination or conjunction of Si and A. They (Ibid.) explain their choice as follows:

> "We do not use it in a semantic sense, i.e. we do not use it for a conjunction of Si and A as deep or underlying subject at least not without qualification. Where a grammatical relation embraces Si and O, we shall refer to that relation as the Absolute relation."

What is of particular interest to this thesis is the discovery by Mallison and Blake that:

> "The marking for Si, A and O may be **direct** or **indirect**. By direct marking we mean marking for the function of a noun phrase on the noun phrase itself. This marking may be in the form of affixes (prefixes, infixes or suffixes) or adpositions (prepositions or postpositions). By **indirect marking** we mean forms appearing not on the noun phrases whose relationship they signal but in some other position in the clause. These forms are usually clitics or affixes and in most instances they appear on the verb."

Consider the following examples from Xhosa:

10.　*ÚThémba*　　*úyabaléka*
　　　Themba　　　SC-pres-run
　　　SC　=　　Subject Concord
　　　'Themba runs'

11.　*ÚThémba*　　*úyamthánda*　　　*úNómsá*
　　　Themba　　　SC-pres-OC-love　　Nomsa
　　　OC　=　　Object Concord
　　　'Themba loves Nomsa'

In both the above examples the SCs, i.e. the first elements in the verbs, refer to *Thémba*. In other words, the subject-predicate relation is indicated by incorporating the Subject in the verb, cf. also Williams (1981b: 81). In 11 above, the OC which is the third element in the verb, refers to *ÚNómsá*. Since word order in Xhosa is characteristically S.V.O., i.e. Subject-Verb-Object, it can be used to mark S and O.

However, the cross-referencing forms (i.e. the Concords) can also be employed to mark Agent and Patient since they are assigned **distinct positions within** the verb for S and O. In Xhosa the various concords can be matched unambiguously (**after word order constraints have been met**) for S and O and this enables one to identify grammatical relations quite easily.

Now consider the following sentences from Xhosa:

12.(a)　*Ndiyamthánda*
　　　　　I-pres-him/her-love
　　　　　'I love him/her'

(b) *Báyathandána*

They-pres-love + REC

'They love each other/one another'

(c) *Báyathandéka*

They-pres-loveable

lit. 'They are loveable'

(i.e. They are admirable)

The above examples indicate another important fact about Xhosa sentence structure, namely that S and O NPs are optional. In other words, the verb can stand on its own and actually form a sentence. The concords in the verb (the SC and OC) stand in the place of the noun phrases, cf. also Mallinson & Blake (1981: 43).

Stalker (1975: 6) points out quite rightly that there are three main devices that are used in natural languages to encode or to embody syntactic relationships among words in sentences. These devices are: order, case and concord. A number of examples will be given below to illustrate each of these devices.

(i) Order

Consider the following examples of sentences in Xhosa which illustrate the basic order SVO:

(a) *Índoda ibétha úmfâzi*

'The man hits the woman'

(b) *Úmfâzi ubétha índoda*

'The woman hits the man'

(ii) Case

INFLECTED

Wormald (1951: 3) says that in handling a Latin sentence one should:

> "First pick out the verb; then find from the ending of each noun which word is the subject and which the object; ..."

Consider the following Latin sentences:

(a)   *Regina puellam laudat*

'The queen praises the girl'

(b)   *Nauta agricolam amat*

'The sailor loves the farmer'

PREPOSITIONAL

Since Xhosa does not have prepositions, English examples will be used to exemplify this phenomenon:

(a)   They gave the teacher the children.

(b)   They gave the teacher **to** the children.

Even though prepositions do not occur in Xhosa, other devices are employed, such as, for example, extensions which in certain syntactic environments, convey significances which are close approximations of what we call prepositional clauses in English.[2]

(iii)   Concord

13. (a)   *Úmfâzi*   ubétha   *índoda*

        'Woman   she-beat   man'

        'The woman beats the man'

  (b)   *Ábáfâzi*   babétha   *índoda*

        'Women   they-beat   man'

        'The women beat the man'

  (c)   *Úmfâzi*   úyayibétha   *índoda*

        'Woman   she-pres-him-beat   man'

        'The woman beats the man'

  (d)   *Ábáfâzi*   báyawabétha   *ámádoda*

        'Women   they-pres-them-beat   men'

        'The women beat the men'

The bold forms in the verbs in (a) and (b) show concordial agreement between subject nouns and the verbal complex. These agreement forms are derived from the prefixal elements of the nouns which have also been printed in bold. The bold elements in the verbal complexes in (c) and (d) are the object concords; they bring about

agreement between the object nouns and the verb. Like the subject concords they are derived from the prefixal elements of the nouns.

Assuming, therefore, that the task of a grammar is to give an adequate description of the acceptable sentences of a language, Stalker (1975: 7) then concludes that:

> "... any adequate grammar must successfully deal with at least such of those three coding devices as appear overtly in the language being studied."

Stalker (*op. cit.*) goes on to make the following important observation:

> "It is clear that no grammar consisting entirely of rules for concord, rules for word order, or rules for case — however abstractly these rules might be stated — can specify all the acceptable sentences of a language. It is also clear that, for languages where these three syntactic coding systems are to any degree either interdependent or redundant, no grammar consisting of three separate sets of conditions (one for word order, one for case, and one for concord) can be adequate, however abstractly each set of conditions may be specified."

The above views expressed by Stalker are attested in Xhosa where the interdependence of word order, case and concord needs to be considered in providing an adequate description of the sentences of the language.

4.5 MARKED AND UNMARKED NPs IN A SENTENCE

It has already been pointed out in par. 4.4 that grammatical relations are not formally marked on nouns that serve as subjects and objects of a Xhosa sentence. In other words, a noun such as *ukutya* 'food' will have the same shape whether it is the subject of the sentence as in 14, the first object in a sentence as in 15, or the second object, as in 16:

14. *Úkutyá kúvuthíwe*
    'The food has been cooked'

15. *Ábántwana bátya úkutyá*
    'The children eat food'

16. *Úmpheki úpha ábántwana úkutyá*
    'The cook gives the children food'

In this thesis, a distinction is made between a "marked" and an "unmarked" NP. A NP is said to be unmarked if it is not inflected in any way; in other words when neither prefixes nor suffixes are added to it. In terms of this analysis, therefore, the NPs *úṁpheki, ábántwana* and *úkutyá* in 16 above are unmarked. Compare the examples in 20 below which are marked in terms of this analysis:

17. (a) *Úṁntwana usíka ísónka ngém/éla*
   'The child cuts bread with a knife'

   (b) *Úṁfâzi úzisa úṁntwana ésikólweni*
   'The woman brings the child to school'

   (c) *Úṁntwana ubéthwa yíndoda*
   'The child is beaten by the man'

In 17(a)-(c) *úṁntwana, úṁfâzi* and *úṁntwana* respectively are unmarked; but *ngéméla* in 17(a) is marked with the instrumental *nga-; ésikólweni* in 17(b) is marked with the locative prefix *e-* and the locative suffix *-ini-*. In 17(c) *yíndoda* is marked by being prefixed with the copulative marker *yi-*.

Another very important fact that warrants some mention is that Xhosa, like many other Bantu languages, uses the noun class system in terms of which each noun is characterised with respect to:

(i)   the class prefix that appears in the noun itself; and
(ii)   the concordial system which is closely related to the class prefixes.

Consider, for example, what happens when a noun is used as the subject of a sentence:

18.   *Ílítye liyaqengqéleka*
       'The stone rolls'

The following characteristics should be noted about the sentence in 18 above:

(i)   The subject NP appears **before** the verb. It is quite common for subject NPs in Xhosa to stand before the verb.
(ii)   The subject NP is incorporated in the predicate by means of the subject concord. It should be noted that all subject NPs are obligatorily indexed in the verbal complex, except in the infinitive and the imperative.

4.6 CONCORDS OR AGREEMENT PREFIXES

One of the most important characteristics of Bantu languages concerns the phenomenon of concordial agreement. By this is meant that word categories which are grammatically linked to a noun contain a concord which shows agreement with that noun. With respect to verbs, subject concords are obligatorily used with the exception of the infinitive and the imperative. Object concords, on the other hand, may be left out subject to certain conditions; however, where they occur, they show agreement between the verb and the object noun.[3]

4.6.1 SCs and OCs without overt controller NPs

Both the SC and the OC may occur either with or without an overt controller NP present in a given sentence. In other words, the NP that specifies the shape of the SC or OC may itself be omitted from the sentence. Compare the following sentences.

19.(a) *Ábáfâzi báyabahlámba ábántwana*

'The women wash the children'

(b) *Báyabahlámba*

   SC OC

   'They wash them'

For a full list of SCs and OCs in Xhosa, the reader is referred to Louw (1963b: 67) and Pahl (1967: 69-76).

The syntactic positions of subject NPs and object NPs must strictly be observed in a neutral sentence, at least. In other words, the subject must appear preverbally, while the object must appear postverbally. Compare the example below:

20.   *Úmfûyi uxhéla ígusha*

   'farmer SC slaughter sheep'

   'The farmer slaughters a sheep'

However, this rigid word order may not necessarily be adhered to once the object NP is indexed in the verb. Pragmatic considerations will determine the word order of a given sentence. Consider the following sentences when the OC is used:

21.(a) *Ùmfûyi úyayixhéla ígusha*

'The farmer does slaughter the / a } sheep'

(b) *Ígusha, úmfûyi úyayixhéla*

'As for the sheep, the farmer does slaughter it'

(c) *Úyayixhéla úmfúyí ígusha*

'The sheep is slaughtered by the farmer'

4.7 WORD ORDER: SVO

Louwrens (1980: 85 *et seq.*) has demonstrated that the rigid word order of subject (1) verb (2) object (3) is not always adhered to in Xhosa. In his article Louwrens (1980: 84) refers to what he calls:

"... (a) die frekwente regs verplasing van grammatiese subjekte; en (b) die herhaalde gebruik van grammatiese objekte in die post-verbale posisie."

Louwrens (*op. cit.*) quotes examples from S.E.K. Mqhayi (1978: 22-23) and G.B. Sinxo (1976: 19) to underline his argument. In supporting Louwrens's observations, examples have been sought from other authoritative sources in Xhosa literature. These are as follows:

22.(a) *"Wâphumá ápho úMthunzíni ..."*

'He went out, Mthunzini ...'

Jordan (1940: 70)

(b) *"Wâhambá úMthunzíni ézívá édaníle ..."*

'He went there, Mthunzini, feeling disappointed ...'

Jordan (1940: 73)

(c) *"Zínqwalê kunye esibingelélweni êzi ntwáná zíbomvána, záḿyéka éjongê esibingelélweni umbingéleli ..."*

'They bowed together at the altar, these little red boys, and left the priest at the altar ...'

S.M. Burns-Ncamashe (1968: 4)

(d) *"Usebenzê shushú uTíyó ..."*

'He worked hard, Tiyo ...'

Chalmers & Soga (1971: 20)

All the above examples show the frequent post-verbal use of the subject in Xhosa. Louwrens (1980: 86) further makes the following observation about the post-verbal occurrence of object NPs in Xhosa:

"Ofskoon aspekte wat post-verbaal optree en terselfdertyd met die werkwoord kongrueer 'n verskynsel is wat nie so algemeen in Xhosa teëgekom word as die een wat in die vorige paragraaf geillustreer is nie, het dit in Nguni ewenwel 'n veel hoër gebruiksfrekwensie as in Sotho."

Consider the following Xhosa examples which have been reproduced from Louwrens (1980: 86) for purposes of convenience. (The English glosses have here been added by me.)

23.   Sinxo (1976: 19)

         Kwési sithuba úNdiméni
(a)   *úwánqándile ámánye ámákhwenkwé esíthi 'Háyi, bafóndîni, kwánele nôko ngôku, musáni*
(b)   *úkubabétha ábántu ábábhinqiléyo'*

         'op die tydstip het Ndimeni
(a)   hulle gekeer, die ander seuns met die woorde, 'Nee, kêrels, dis nou genoeg
(b)   moenie hulle slaan nie die mense van die skoner geslag'

         'at this stage Ndimeni
(a)   warned the other boys and said, 'no, comrades, it's enough now,
(b)   do not beat up women folk'

In Louwrens's (1980: 87) terms, there are two possible approaches which one could use in order to unravel this problem, cf. Louwrens (*op. cit.*). He suggests that one could adopt:

(i)   the "after-thought theory" as formulated by Givón (1974) and Hyman (1974); or

(ii)   the "presentative movement theory", as formulated by Hetzron (1974).

The "after-thought theory" as formulated by Givón (1974) is rejected by Louwrens (1980: 88) on the following grounds:

"... dat Givón sy afdelings rakende 'after-thought'-verskynsels klaarblyklik baseer op waarnemings wat hy ten opsigte van mondelinge **taalgebruik** maak."

Louwrens supports his argument by quoting examples from S.E.K. Mqhayi (1978: 3). Hyman's formulation of the after-thought theory is also found to be inadequate and rejected by Louwrens (1980: 90). He prefers the theory of the presentative movement for the analysis of the Xhosa data referred to in the sentences above.

4.8 THE PRESENTATIVE MOVEMENT THEORY

The theory of presentative movement was formulated by Hetzron (1974). According to this theory:

> "The effects of context do contribute to the structuring of the sentence. There exist many linguistic phenomena formally describable within the sentence, but understandable only if the surrounding context is taken into consideration. Such an approach will show that some of the sacrosanct syntactic categories and distinctions are mere consequences of discourse-grammar requirements to which sentence-grammar has to adapt itself by whatever means available."

Compare Hetzron (1974: 347).

More specifically, this theory states that the structuring of a sentence may be influenced by the desire to bring a certain item in it into prominence. As Hetzron (1974: 347) puts it:

> "A sentence may be restructured in such a manner that one component of it will be given a status of prominence in the short-range memory so that it will dominate the immediate sequel to that particular utterance."

He goes on to say:

> "I call the motivation for this type of prominence the presentative function."

The clearest indication that a given item is marked for presentative function is that it will occur in a sentence-final position. It is actually this transfer of items to the end of the sentence that Hetzron (1974: 348) calls the presentative movement.

4.8.1 Grammatical subjects in the post-verbal position in Xhosa

Consider the following sentences from some well-known books in Xhosa literature:

24.(a) *"Akazange alinde uNojayiti, wafaka into ayiphetheyo, yadla intonga kuwo omabini amakhwenkwe lawo, wawajajulisa ukubheka ekhaya. Uye wabeka nje le inguBalafuthi ekhaya, nanko esukela ngoku uMaqandeka, ... "*

Sinxo (1979: 42) *(uNojayiti Wam)*

'She did not wait, Nojayiti, she inflicted punishment, using the stick on both boys, she chased them home. After dropping Balafuthi at home, she chased Maqandeka towards his home, ...'

(b) *"Waphuma apho uMthunzini inkabi yakhe se igangxwe phambi kwendlu; wafaka idyasi, wathwala umnqwazi waphuma."*

'When he came out, Mthunzini, his horse had already been waiting in front of the house; he put on his overcoat, and his hat and left.'

In terms of Hetzron's theory, the right-dislocation of the subject NPs *uNojayiti* in (a) and *uMthunzini* in (b) is caused by the "presentative movement". An element that has been right-dislocated via the Hetzronian theory of the presentative movement has the following characteristics:

(i) it is promoted to a privileged status of prominence because "... it is going to be mentioned or referred to in the subsequent discourse."

Hetzron (1974: 347)

(ii) "... the clearest manifestation of the presentative function is that elements marked by it end up, wherever they have started from, in a sentence-final position."

Hetzron (1974: 348)

(iii) "... the presentative element is supposed to leave a deeper trace in the hearer's short-range memory than the rest, no matter what the subsequent sentences are about."

(op. cit.: 379)

In sentence (a) the subject NP *Nojayiti* has been right-dislocated to a sentence-final position so that it can be available for later mention in the discourse. In fact *Nojayiti* has the status of discourse-theme in passage (a). The same applies to passage (b).

One of the most important observations made by Hetzron (1974: 376) and which has been particularly noted by Louwrens is that strictly speaking the presentative function is a stylistic device. In this regard Louwrens (1980: 92) states:

"It is thus evident that the manifestation of the presentative function does not have the same compelling power as some other functions in language. This is mainly a function of stylistic importance, and its non-application would cause no serious impairment in the expression."

Referring once more to the passages in (a) and (b) above, the employment of the word order: SVO would not impair the intelligibility of these examples. Compare the following:

25.   *ÚNójáyiti akázañge alínde*
      'Nojayiti did not wait'
      ÚMthunzíni wâphúmá ápho
      'Mthunzini went out'

4.8.2 Grammatical objects in post-verbal positions

Louwrens (1980: 98) also makes an important observation with regard to the position of the object NPs post-verbally. As he puts it:

" 'n Analise van Xhosa-tekste toon egter dat verbale kongruensie in die geval van objekte, dieselfde pragmatiese funksies het as wat Hetzron se sogenaamde 'presentative movement', in die geval van subjekte vervul."

Consider the following sentences which have been reproduced from Louwrens (1980: 100):

Sinxo (1976: 22)

26.(a)   *"Wâvuyá kakhúlú úMavela ákumbóná úNdiméni. Ngósuku ólúlándelayó ..."*

         'He became very excited, Mavela when he saw him, Ndimeni. On the following day ...'

   (b)   *"... bâhamba kunye báya kufunéla úNdiméni úmsebênzi ápho kwakusebénza úMávela ..."*

         '... they travelled together, looking for a job for Ndimeni, at the place where Mavela was employed ...'

According to Louwrens (1980: 99) the use of the object concord in the above examples has the same pragmatic functions as the right-dislocation of the subject NP. As he puts it:

"Dat die objekskongruensiemorfeem in gevalle soos hierbo om min of meer dieselfde pragmatiese redes gebruik word as wat die regsverplasing van grammatiese subjekte teweegbring, blyk uit voorbeelde waarin beide hierdie verskynsels met vergelykbare diskoersfunksies in dieselfde teks teëgekom word. In dergelike gevalle word twee naamwoordstukke gefokusseer waarvan een die subjek, en die ander die objek van die predikaat is."

Louwrens (1980: 100) points out, quite rightly, that in the examples in 26(a) above, both *Mavela*, a subject NP, and *Ndimeni*, an object NP, are focussed, and together they form the central theme of the passage.

4.8.3 Indefinite subjects

The indefinite subject is always represented by the indefinite subject concord *ku-*. The predicates of such sentences usually imply (i) existence, (ii) emergence, or (iii) creation, cf. Hetzron (1974: 353). The indefinite SC of class 17 is generally used when reference is made to an indefinite subject. In such cases the verb with the subject concord *ku-* occurs in initial position and the subject noun occurs after the verb, e.g. 27(a)-(b). Modifications of the use of this indefinite SC will be illustrated with the passive extensions. Refer to paragraphs 5.24 and 6.46 in this regard. For the moment let us consider the use of this concord in sentences which involve non-extended verbs. Compare the following sentences:

27.(a) *Kuhámba úmntu*
   'There travels a person'

 (b) *Kucúla íkwáyala*
   'There sings a choir'

With regard to sentences such as the above, Doke (1955: 10) says:

"It may be taken, then, as a working rule, that an indefinite subject or object is not represented in the predicate by its class concord, but by an indefinite concord or by none at all ..."

In Dokean terms such sentences as those in 27 above should be analysed as follows:

(i)   the predicate should be referred to as "indefinite"; and

(ii)   the subject is referred to as the "logical subject", not a "concordial subject".

4.9 COMPOUND SUBJECT NPs

When compound subjects are employed in Xhosa, a number of options are open as far as the use of concords is concerned. The treatment of compound subject NPs is pertinent to radicals extended with /-an-/ (cf. par. 5.2 ff). For the moment we may consider their use with non-extended verbs. These may be summarised as follows:

(i)   If the first NP in the compound group is assumed to be of greater importance (or in focus), then the concord that is used is the one that refers to this first NP.

(ii)   The subject concord of class 2 (i.e. *ba-*) is used where a compound consists of NPs that refer to persons, irrespective of the class or classes of the NPs.

(iii)   The subject concord of class 10 nouns (i.e. *zi-*) is used where a compound consists of NPs that refer to animals, irrespective of the class or classes of the NPs.

(iv)   The subject concord *ku-* is generally used for what Doke (1955: 17) refers to as:

"... material compounds and for compounds of mixed substantives."

The above principles of concordial agreement will now be exemplified:

(a)   Where the first NP is considered of greater importance.

28. (a) *Índoda nómálúsi íya édlélweni*
         'The man and the shepherd go to the veld'

    (b) the use of *ba-*
         Índoda nómálusi báya édlélweni
         'The man and the shepherd go to the veld'

    (c) the use of *zi-*
         Ínjá néháshe zíyabaléka
         'The dog and the horse are running'

    (d) the use of *ku-*
         Ixhegókazi néxhego kúyiwa edolóphini
         'Both the old woman and the old man are going to town'

4.10 THE VERB WITH TWO OBJECTS

Verbs that take two objects in Xhosa can be divided into two groups, namely:

(i)   those that naturally take two objects;

e.g.

29.   *-nǐka*   'give'

        -phá   'give as a present'

        -búza   'ask'

(ii)   those which take one object in their simple form, but take two objects in their applied and causative forms.

Compare Doke (1955: 40). In the case of (ii) above, it is customary in Bantu linguistics to treat the two objects as follows:

(a)   one of the object NPs, usually the SECOND one, is regarded as the object of the basic stem; and

(b)   the other object, usually the FIRST in the sequence of NPs that appear post-verbally, is referred to as the object of the derived stem.

Double objects which occur with extended verbs will be treated under the respective extensions. In this section attention will be given only to those double-object NPs which occur with verbs that are not extended.

Consider the following sentences:

30. (a) *Útǐtshala unǐka úṁntwana ǐncwadǐ*

                           1   2

         'The teacher gives the child a book'

    (b) *Útǐtshala úpha úṁntwana ǐsónka*

                           1   2

         'The teacher gives the child bread'

    (c) *Útǐtshala ubúza úṁntwana úmbużo*

                           1   2

         'The teacher asks the child a question'

    (d) **Utitshala unika incwadi umntwana*

    (e) **Utitshala upha isonka umntwana*

    (f) **Utitshala ubuza umbuzo umntwana*

The fact that sentences (a)-(c) are acceptable while (d)-(f) are totally unacceptable is an indication that a basic word order exists. This basic word order is rigid. However, as the examples in 31 below indicate, this rigid basic word order is subject to the non-occurrence of the object concord in the verb. Once the object concord is incorporated in the verb, there is some freedom of movement as far as the objects are concerned. Compare the following examples:

31.(a) *Útĩtshala uyinĩka úḿntwana ĩncwadĩ*

                  1   2

    'The teacher gives the book to the child'

  (b) *Útĩtshala umnĩka ĩncwadĩ úḿntwana*

               2   1

    'The teacher gives the child a book'

  (c) **Utitshala uyinika incwadi umntwana*

  (d) **Utitshala umnika umntwana incwadĩ*

The above examples attest to the fact that the position immediately to the right of the verb is reserved for the object NP that is NOT incorporated in the verb. It can be argued that since Xhosa is basically an SVO language, an object NP is indirectly fronted by means of an OC in the verb (bear in mind also the prefixal position of the OC in the verb). Once the object NP is incorporated in the verb, it is prohibited from occupying the FIRST SLOT after the verb where two objects are involved in a simple sentence.

Now consider the following examples:

32.(a) *Útĩtshala uyinĩka ĩncwadĩ úḿntwana, xá seyĩndála kakhûlu*

                  1   2

    'The teacher only gives a book to the child when it is too old'

  (b) *Útĩtshala umnĩka úḿntwana ĩncwadĩ xá sélêmdála kakhûlu*

    'The teacher only gives a child a book when that child is old enough'

When one of two object NPs is marked (+ presentative) one of two things can happen:

(i)   the one that is marked (+ presentative) will be incorporated in the verb, and will occupy the SECOND object slot, as in 31(a) and (b);

(ii)   when a subordinate clause occurs which modifies the main verb, then the object NP that is marked (+ presentative) is moved to the left, i.e. it occupies the FIRST SLOT after the verb.

In addition, some prosodic elements come into play here, as is shown by means of commas in the examples below. (See 32 above for translation of these sentences).

33. (a) *Útîtshala, umnîka úmntwana, íncwadî, xá sélêmdala kakhûlu*

    (b) *Útîtshala, uyinîka íncwadî, úmntwana, xá seyîndála kakhûlu*

The phrases *"umnîka úmntwana"* and *"uyinîka íncwadî"* are usually stressed and made to rise in intonation above the rest of the sentence.

If it is accepted that this construction is some form of presentative function, it could also be argued that this construction is event-setting. By this I mean that the event that is made prominent in this construction (e.g. *'umnîka úmntwana'*) is viewed as dependent or occurring only after another event has been completed; this FIRST event is invariably referred to in the subordinate clause.

In this section only certain aspects of Xhosa syntax have been handled; the observations made have a bearing on the various syntactic situations that arise in sentences which incorporate extended verbs. These are discussed in the chapter which follows.

Chapter 5

THE SYNTAX OF VERBAL EXTENSIONS IN XHOSA

"There is even a temptation to think that what we need is not a totally explicit model of grammar such as the transformational-generative one, but something much more like that sketched in Bolinger (1961). Grammatical competence has been compared to knowledge of the rules of a game like chess; but perhaps it is more like the ability of a (reasonably good) chess player, who does not only have to know the rules of the game but how to devise a sequence of moves that will suit his purpose (presumably winning the game) ..."

D.J. ALLERTON (1978: 32)

Journal of Linguistics, 14, 1978: 21-33

5.1 THE SYNTAX OF /-an-/ EXTENDED VERB STEMS

This chapter examines the way in which variations in the number of arguments a verb can take (and their semantic relations to that verb) are syntactically and morphologically marked. Consider the simple verb stem -*thanda* 'love' and its derived forms:

1.   -*thandána*   'love one another'

         -*thandéka*   'loveable'

         -*thandéla*   'love for'

         -*thandísa*   'cause to love'

         -*thândwa*   'be loved'

The derived forms differ from the simple form, on the one hand, and from each other, on the other hand in terms of the number of co-occurring NPs they require and the grammatical relations of those arguments to the verb.[1] Compare the following sentences:

2. (a)   *ÚThémba uthánda úNómsá*

        'Themba   he-love   Nomsa'

        'Themba loves Nomsa'

   (b)   *ÚThémba nóNómsá   báyathandána*

        'Themba   and Nomsa they-pres-love + REC'

        'Themba and Nomsa love each other'

(c) *ÚThémba úyathandéka*

'Themba he-pres-loveable'

'Themba is loveable'

(d) *Útítshala umthandeła úkukhúthala úNómsá*

'Teacher he-her-love-for diligence Nomsa'

'The teacher loves Nomsa for her diligence'

(e) *ÚNómsá uthándwa ngúThémba*

'Nomsa she-pres-love-pass by Themba'

lit. 'Nomsa is loved by Themba'

The above sentences reveal some differences between the valency sets of morphologically related words.

A number of proposals have been put forward as to how one should handle these differences. Roger Epée (1976) and Anthony Vitale (1981) have dealt with these phenomena transformationally for Duala and Swahili, respectively. However, Vitale (1981: 188-189) hints at the shortcomings of such an approach when he states that:

> "It is clear from the analysis of the data presented in this study, as well as from other grammars previously written from a variety of theoretical standpoints, that an adequate theory of morphology still remains to be constructed. In particular, there is a need to know in which parts of the grammar affixes take on semantic substance and phonological form, how they may be inserted into various proper slots within the verb, and what formalisable relationships connect the morphology and syntax."

Vitale (*op. cit.*) then chooses the passive to illustrate the points raised above. He goes on to say:

> "For example, it has been shown that -*w*- (passive) attachment is connected with the preparing of some NP from certain non-agentive (e.g. objective, dative, locative) positions in the p-marker or, at least, that certain underlying functions take on a subject function in derived structure. While the connection between morphology and syntax is fairly clear in this case, it is much less clear in other areas, e.g. the additive and subtractive changes in the number of arguments of a given verb such as is found in causatives and certain types of intransitives."

5.1.1 Introduction

Virtually all grammars in Bantu languages refer, however superficially, to the notion of "reciprocity". This notion is, actually, not a peculiarity of Bantu languages. It has been

studied in many other languages, especially within the framework of Transformational Generative Grammar (henceforth T.G.G.). Bhat (1978: 40) characterises the nature of reciprocal meaning in minute detail.[2]

The nature of reciprocal meaning as outlined in Bhat (1978: 40) has an interesting bearing on the deployment of NPs that occur with an /-an-/ extended verb.

Xhosa examples will now be used to illustrate what Bhat (1978: *op. cit.*) says:

3.(a)   *ÚThémba ubóna úNómsá*
        'Themba he-see Nomsa'
        'Themba sees Nomsa'

  (b)   *ÚThémba nóNómsá báyabonána*
        'Themba and Nomsa they-pres-see + REC'
        'Themba and Nomsa see each other'

3(a) is a non-reciprocal sentence, bf. Bhat (*op. cit.*). In terms of this sentence, *Themba* and *Nomsa* are involved in the action or event of seeing (*-bôna* /see): quite clearly *Themba* is the Agent and *Nomsa* is the Patient. 3(b), on the other hand, is a reciprocal sentence. In terms of this sentence, as Bhat (1978: 40) put it in another connection, both *Themba* and *Nomsa*:

> "... are not only involved in the roles of an Agent and a Patient respectively, but also in the respective reverse roles of Patient and an Agent; ..."

In terms of 3(b), therefore, the two different involvements of *Themba* and *Nomsa* are combined:

> "... and stated as forming the sub-events of a single event, ..."
>
> Bhat (*op. cit.*)

5.2 CONJOINED NPs

The combination of the Agentive and the Patient involvements of each of the noun phrases *Themba* and *Nomsa* results in a reciprocal event. This combination of roles has important syntactic implications: the noun phrases concerned may be conjoined as the examples in 4 indicate.

4.(a)   *ÚNómbasá nóPhúmezá báyabukána*
        'Nombasa and Phumeza they-pres-admire + REC'
        'Nombasa and Phumeza admire each other'

  (b)   *ÚNómbasá nóPhúmezá báyabúzana*
        'Nombasa and Phumeza they-pres-question + REC'
        'Nombasa and Phumeza ask each other (questions)'

  (c)   *ÚNómbasá nóPhúmezá báyathandána*
        'Nombasa and Phumeza they-pres-love + REC'
        'Nombasa and Phumeza love each other'

The examples in 4 above indicate that the noun phrases *UNombasa* and *UPhumeza* have been conjoined to form a "conjoined noun phrase, namely *UNombasa noPhumeza*". This conjoined noun phrase syntactically represents the subject of the sentence. Semantically, however, it incorporates both the Agent and the Patient. Compare, for example, the English sentence:

Michael and Mary see each other

where the Agent is represented by the conjoined noun phrase "Michael and Mary" and the Patient is represented by the reciprocal pronoun "each other", cf. Bhat (1978: 40).

In the examples in 5 below *Nombasa* and *Phumeza* occur as separate noun phrases *uNombasa* and *uPhumeza: Nombasa* as the Agent, while *Phumeza* is the Patient.

5.   *ÚNómbasá uthánda úPhúmezá*
        'Nombasa she-love Phumeza'
        'Nombasa loves Phumeza'

5.3 PLURAL ARGUMENTS IN THE SUBJECT SLOT
The examples in 6 below indicate that there is a constraint in Xhosa reciprocal sentences which implies that the subject of such sentences must be in the plural. In other words, the subject must either be conjoined or plural. Compare the following examples:

6.(a)   *ÚThónqo nóPhiko báyathukána*
        'Thonqo and Phiko they-pres-insult + REC'
        'Thonqo and Phiko insult each other'

(b) *Ábáfâzi báyathandána*

    'Women they-pres-love + REC'

    'Women love one another/each other'

Compare the ungrammaticality of 6.(c) below:

(c) **Umfazi uyathandana*

    *'The woman loves one another'

The question of the plurality of subjects has been noted by Bhat (1978: 50) and Wilkes (1971: 113). Bhat (*op. cit.*) who uses English as his target language, puts it this way:

> "There appears to be a constraint, in most of the languages, that the coreferential arguments of a reciprocal sentence must be conjoined or plural. This constraint is apparently due to the way in which the reciprocal sentences are generally formed: they put together two different noun phrases which represent the two reciprocating arguments into a single noun phrase, and represent through it only one of those arguments. The other argument is either left unspecified, or represented by a reciprocal pronoun."

Wilkes (1971: 113) expresses his viewpoint as follows:

> "Alle werkwoorde waarin die resiprokale agtervoegsel die semantiese variant 'resiprokaal' of 'assosiatief' neem, vertoon 'n verpligte valensie vir onderwerpsbepalings met 'n kollektiewe of meervoudsbetekenis. Hierdie bepalings kan òf uit 'n enkele naamwoord òf uit 'n newegeskikte naamwoordgroep bestaan."

Wilkes emphasises that the constraint on plurality of arguments depends on whether a given verb which is extended by /-an-/ incorporates the semantic reading of either the "reciprocal" as such or the "associative" semantic variant.

Should one fail to point out the constraint emphasised by Wilkes (*op. cit.*), one runs the risk of being challenged with the following sentences as apparent counter-examples:[3]

7.(a) *ÚThémba usélana*　　　　　　　*nótywala*

    'Themba he-drink + REC　　liquor'

    'Themba drinks liquor continuously'

(b) *Úmfána   unyúkana   néntaba*

     'young man   he-climb + REC   mountain'

     'The young man climbs the mountain continuously'

(c) *Injá ikhonkóthana   négqwírha*

     'dog it-barks (at) + REC   witch'

     'The dog barks (at) the witch continuously'

Actually the examples in 7 above fall outside the scope of the generalisation given by Wilkes (1971: 113) and which has also been endorsed in this research. The examples in 7 have a durative or an iterative semantic reading, which happens to be indicated morphologically by /-an-/; so they form a different set that permits a singular subject.

5.4 SINGULAR NOUNS AS SUBJECTS

Consider the following examples which could also be taken as counter-examples to the claim made above about the need for plurality of subjects in reciprocal sentences:

8.(a) *IsiMféngu síyanyokána*

     'The Mfengus spy on one another'

(b) *IsíMatánzima síyathandána*

     'The Matanzima people love one another'

(c) *Ùsâpho lúyathandána*

     '(Members of this) family love one another'

The semantic reading of the sentences in 8 is "reciprocal", and yet they have "singular" subjects. The grammaticality of these sentences is accounted for by the fact that although they belong to singular classes (7 & 11), in fact, they have a collective semantic reading. On that basis therefore, they do not violate the principle of plurality which has been claimed for subjects of reciprocal constructions.

Also, any other /-an-/ extended verbs that exclude the semantic reading of "reciprocity" or "association", do allow singular subjects. Compare the following examples:

9.(a) *ÚPhákámile uthandána   nóBúlelwá*

     'Phakamile   he-love + REC   and Bulelwa'

     'Phakamile is in love with Bulelwa'

(b) *ÚLíziwé ubonána*   *nóyïsé*

    'Liziwe she-see + *an*   and + father'

    'Liziwe meets her father'

In the above examples, the principle of reciprocity is understated, and the semantic reading of "X is engaged in an event/activity with Y" is emphasised.

Because of this semantic reading, syntactically we get what Wilkes (1971: 113) refers to as the "broken co-ordinate subject group" or the "onderbroke newegeskikte onderwerpsgroep".

With reference to the examples such as those in 9, Wilkes states:

> "In hierdie geval volg die verskillende naamwoorde mekaar nie direk in tyd nie maar word deur die werkwoord van mekaar geskei en wel op so 'n wyse dat die een naamwoord die werkwoord voorafgaan terwyl die ander 'geassosieerde' naamwoord, dit wil sê die bindpartikel /na/ + naamwoord, op die werkwoord volg. Die onderwerpskakel wat in hierdie geval gebruik word is diè wat na die eerste (pre-verbale) naamwoord verwys."

5.5 CHOICE OF SCs

The principles that govern the choice of SCs where subjects are conjoined are the same as those discussed in par. 4.9 under compound subject NPs.

5.6 DETRANSITIVISATION

It has been suggested in some studies in Bantu languages, cf. Bokamba (1976: 42) and Abasheikh (1978: 34), that the attachment of /-an-/ to a verbal root detransitivises that verb. Compare the examples below:

10.(a) *ÚNómbasá uthánda*   *úPhúmezá*

    'Nombasa she-likes   Phumeza'

    'Nombasa likes Phumeza'

Compare:

  (b) *ÚNómbasá nóPhúmezá   báyathandána*

    'Nombasa and Phumeza they-pres-like + REC'

    'Nombasa and Phumeza like each other'

Note also that the examples in 11 below would appear to strengthen the claim that /-an-/ detransitivises a verb to which it attaches:

11.(a) *ÚNómbasá nóPhúmezá bathandána ábántwana

   lit. *'Nombasa and Phumeza love each other children'

   (b) *ÚNómbasá nóPhúmezá babukána ábántwana

   lit. *'Nombasa and Phumeza admire each other children'

If one compares Xhosa and English reciprocal sentences, for instance, one becomes aware of a slight difference in the structure of the sentences. English examples used by Bhat (1978: 40-41) will now be reproduced for convenience. In his analysis Bhat (*op. cit.*) uses the following examples which he numbers 1a and 1b:

"1a   John talked to Mary about the show.

 b   John and Mary talked to one another about the show."

The object slot in 1b is filled by the reciprocal pronoun "one another". Compare the Xhosa example in 10 reproduced for convenience as 12.

12.   ÚNómbasá nóPhúmezá báyathandána

   'Nombasa and Phumeza love each other'

Bhat (*op. cit.*) then elaborates as follows:

> "In 1a, for example, **John** and **Mary** occur as distinct noun phrases, representing an Agent and a Patient respectively; whereas in 1b, the two have combined together to form a conjoined noun phrase, namely **John and Mary** and this latter phrase has been used for representing the Agent; the Patient, on the other hand, is represented by the reciprocal pronoun **one another** in 1b."

It is interesting, however, to point out that the pronoun "one another" and the conjoined noun phrase "John and Mary" have the same referents.

Coming back to Bantu languages, consider again some ideas that have been put forward by Bokamba (1976: 42) and Abasheikh (1978: 34). Bokamba (*op. cit.*) argues that the occurrence of the reciprocal /-an-/ in Dzamba and Chimwini respectively, detransitivises that verb to which it attaches. Bokamba (*op. cit.*) uses the following examples which are reproduced as 13 below:

13.(a) *Musa a-bet-ăkĭ Poso lelo*

    'Musa he-hit-ed Poso today'

    'Musa hit/beat Poso today'

(b) *Musa na Poso ba-bet-an-aki lelo*

    'Musa and Poso hit each other'

(c) **Musa na Poso ba-bet-an-aki bana lelo*

    'Musa and Poso they-hit/beat each other children today'

Bokamba (*op. cit.*) draws the following conclusion from the above examples:

> "... given a transitive verb such as -*bet-a* in (13(a) ... SCS), for example, the occurrence of the Reciprocal suffix on that verb will yield a structure such as (13(b) ... SCS) where both Musa and Poso are functioning as the subjects of the sentence. The occurrence of this suffix on the verb makes it impossible for another object noun phrase to co-occur with it as the ungrammaticality of (13(c) ... SCS) demonstrates."

Bokamba's standpoint is reiterated by Abasheikh (1978: 34) who says categorically that:

> "Syntactically, the reciprocal verb excludes the presence of the noun phrase that can appear with the unextended verb."

He illustrates his point by citing examples from Chimwini or Chimbalazi, a Bantu language spoken in Southern Somalia (Guthrie: Comparative Bantu Zone G):

    -big-   'hit'

14.   *Wa:na*   *wa- m-bish-ile*   *Ali*

      'children   SP-OP-verb-T/A   obj'

      'Children hit Ali'

Abasheikh claims that although -*big*- can co-occur with an object, its reciprocal derivative -*big-an*- 'hit one another', cannot. He adds:

> "The -*an*- element indicates the object of the verb and thus disallows any overt NP object."

I would rather propose that /-an-/ should be described as indicating reciprocity, at least in the example that Abasheikh (*op. cit.*) uses, instead of saying that it:

"... indicates the object of the verb ..."

The arguments raised by both Bokamba (*op. cit.*) and Abasheikh (*op. cit.*) can be adopted for Xhosa data as well. But this cannot be done without some qualification. A rigorous test of the claims made by both Bokamba and Abasheikh reveals a number of problematic areas in Xhosa reciprocal sentences, particularly with regard to the acceptability or unacceptability of an overt NP object. Consider the following examples from Xhosa:

15.(a) *ÚThémba nóNómsá babúkana*   *amehlo*
      'Themba and Nomsa they-admire + REC eyes
      'Themba and Nomsa admire each other's eyes'

  (b) *ÚThémba nóNómsá babukána*   *íinwéle*
      'Themba and Nomsa they-admire + REC hair'
      'Themba and Nomsa admire each other's hair'

  (c) *ÚThémba nóNómsá bahlámbana*   *izándla*
      'Themba and Nomsa they-wash + REC hands'
      'Themba and Nomsa wash each other's hands'

If the view expressed by Bokamba (1976: 42) and Abasheikh (1978: 34) is taken without qualification, then the examples in 15 would be counter-examples. The examples in 15 above demonstrate an important feature of reciprocal sentences in Xhosa. These examples indicate the use of the reciprocal to show a relationship of possession between two noun phrases.[4] Bhat (1978: 43) also refers to this use of the reciprocal in English. He says:

"..., English uses the reciprocal device for indicating a relationship of possession as well (in addition to that of identity) between two arguments."

Compare the following English examples:

16.(a) John and Mary are washing each other's dishes.

  (b) The girls are quarrelling with one another's boy friends.

Cf. Bhat (1978: 43).

The issue raised by the examples which allow an overt object NP in spite of the attachment of /-an-/ to the verb, compels one to reformulate the generalisation about the behaviour of reciprocal sentences in Xhosa as follows:

(i)   All simple roots that are marked to co-occur with one object will lose that single overt object once /-an-/ is attached to them. Now compare the following examples:

17.(a)

(i)   *ÚPhúmezá ubúza   úNómbasá ímibúzo*
                           1   2
        'Phumeza she-ask   Nombasa questions'
        'Phumeza asks Nombasa questions'

Compare:

(ii)   *ÚPhúmezá nóNómbasá   babúzana   ímibúzo*
        'Phumeza and Nombasa   they-ask + REC questions'
        'Phumeza and Nombasa ask each other questions'

   (b)

(i)   *ÚPhúmezá uhlámba   úNómbasá íinyawo*
        'Phumeza she-wash   Nombasa feet'
        'Phumeza washes Nombasa's feet'

Compare:

(ii)   *ÚPhúmezá nóNómbasá   bahlámbana   íinyawo*
        'Phumeza and Nombasa   they-wash + REC feet'
        'Phumeza and Nombasa wash each other's feet'

(ii)   The attachment of the reciprocal extension /-an-/ necessitates a reduction in the number of overt object noun phrases that may co-occur with the verb.

In cases where /-an-/ is attached to a simple (i.e. underived) root that co-occurs with one overt object noun phrase, the resulting reciprocal verb will disallow any overt object noun phrase, hence the ungrammaticality of the examples in 18.

18.(a) *ÚNómbasá nóPhúmezá bathandána ábántwana*
   (b) *ÚNómbasá nóPhúmezá babukána ábántwana*

On the other hand where /-an-/ attaches to a simple root that is marked for co-occurring with two overt object noun phrases (cf. 17(a)(i) above), the number of those noun phrases is reduced by one. Therefore, the idea of detransitivisation, cf. Abasheikh (1978: 34) and Bokamba (1976: 42) would not be adequate as a generalisation with respect to Xhosa data. In fact Wilkes (1971: 116) independently came to the same conclusion as far as Zulu is concerned. Where Abasheikh (op. cit.) and Bokamba (op. cit.) would use "detransitivisation", he justifiably prefers to describe the process involved as follows:

> "(die ... SCS) vermindering van oorganklikheidsgraad" (i.e. the reduction of the degree of transitivity of verbs).

Wilkes (1971: 116) summarises his findings with respect to the syntax of /-an-/ in Zulu as follows:

> "Die resiprokale suffiks verskyn slegs in kombinasie met (afgeleide) werkwoordbasisse met 'n transitiewe semantiese waarde. Die rede hiervoor is dat hierdie suffiks die oorganklikheidsgraad van werkwoorde waarin dit optree verminder deurdat dit die betrokke werkwoorde eenmaal minder oorganklik maak as in gevalle waar hulle sonder hierdie suffiks optree. Dit beteken dat die aantal voorwerpe waarvoor hierdie werkwoorde 'n sintaktiese valensie verleen, in hierdie geval met een verminder word."

In terms of this, a double-transitive verb will have a valency for one co-occurring NP. An ordinary transitive verb will become intransitive, cf. Wilkes (1971: 116).

Any verb that is marked for now allowing a co-occurring overt object noun phrase (i.e. an intransitive verb) is barred on semantic grounds from permitting the attachment of /-an-/ for indicating reciprocity as such. Consider the following examples in 19 below:

19.(a) *ÚLizo nóNóxolo báyahámbana

    lit. *'Lizo and Noxolo walk each other'

  (b) *ÚLizo nóNóxolo bayalílana

    lit. *'Lizo and Noxolo cry each other'

  (c) *ÚLizo nóNóxolo báyamána

    *'Lizo and Noxolo stand each other'

The ungrammaticality of the examples in 19 above appears to reiterate the real nature of the notion of reciprocal meaning, cf. Bhat (1978: 40) and Wilkes (1971: 108-116). In

other words, for the idea of reciprocity to be realised, even if no overt object NP appears syntactically, the logical object, cf. Wilkes (1971: 116) must be simultaneously encompassed in the subject.

Another interesting fact about the examples in 19 is that although they are sometimes allowed to co-occur with special NPs as objects, those special object NPs are not allowed to occupy the subject slot as the examples below show:

20.(a)

(i)   *ÚLizo uhámba índlela*
         lit. 'Lizo travels the road'

Compare:

(ii)   **ÚLizo néndlela báyahámbana*

   (b)

(i)   *ÚLizo ulíla íinyémbezi*
         lit. 'Lizo cries tears'

Compare:

(ii)   **ÚLizo néenyémbezi bayalílana*

   (c)

(i)   *ÚLizo ulála úbúthongo*
         lit. 'Lizo sleeps sleep'

Compare:

(ii)   **ÚLizo nóbúthongo báyalálana*

In semantic terms, the object noun phrases in 20 (a)(i), (b)(i) and (c)(i) are not objects in the same sense as 21 below.

21.

Injá ítya dog it-eat		
	ílaphu	'cloth'
	ísónka	'bread'
	ínyama	'meat'
	úmngqúsho	'stampmielies'
	ígazí	'blood'
	ípápa	'porridge'

$$
\text{'The dog eats'} \quad \left\{ \begin{array}{l} \text{a cloth} \\ \text{bread} \\ \text{meat} \\ \text{stampmielies} \\ \text{blood} \\ \text{porridge} \end{array} \right\}
$$
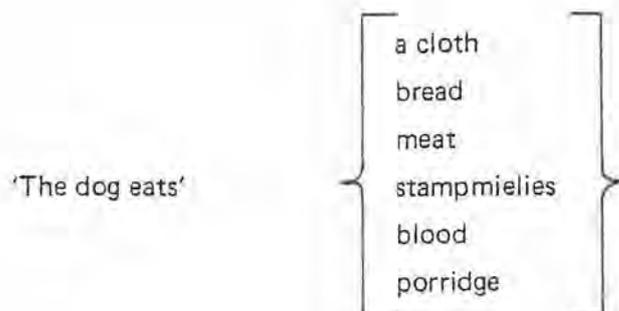
In Epée's (1976: 11) terms, the object NPs in 20:

> "... are cognate with the verb, i.e. they refer to the state or process of the verb."

Epée (*op. cit.*) states quite rightly that verbs like those in 20:

> "... differ from true two-place predicates ..., which can take a wide range of objects."

Compare 21 above.

5.7 THE EXTENSION /-an-/ AND THE DEVELOPMENT OF CO-OCCURRING NPs

Consider the sentences in 2(a) and (b) and which are reproduced as 22(a) and (b) respectively, for the sake of convenience.

22.(a) *ÚThémba uthánda úNómsá*
   (Subject)   (Object)
   'Themba likes Nomsa'

   (b) *ÚThémba nóNómsá báyathandána*
   Conjoined subject
   'Themba and Nomsa like each other'

These sentences illustrate the principle of the reduction of the degree of transitivity. See Wilkes (1971: 116). In addition, once the verb is extended with /-an-/ for reciprocity, then, according to Bhat (1978: 40) both *Themba* and *Nomsa* are involved in the activity/event, denoted by the verb, as Agent and Patient simultaneously. Syntactically, this is realised by means of the conjoined subject: *UThemba noNomsa*. Note also that the second NP is marked with *na +*.[5]

Compare also 17(a)(ii) and (b)(ii) which are reproduced here for the sake of convenience:

23.(a)   *ÚPhúmezá nóNómbasá babúzana Ímibúzo*
      (Conjoined Subject)   (Object)
      'Phumeza and Nombasa ask each other questions'

  (b)   *ÚPhúmezá nóNómbasá bahlámbana íínyawo*
      (Conjoined Subject)   (Object)
      'Phumeza and Nombasa wash each other's feet'

"Ímibúzo" and *"íínyawo"* in the above sentences are the nouns to which the action of the verb transits; in other words, they are the syntactic objects. They do not qualify in terms of Bhat's (1978: 40) characterisation as reciprocal NPs which are both Agents and Patients, hence they are not even marked with *na+*.

The NPs *"ímibúzo"* (questions) and *"íínyawo"* (feet) in 23 above are "factive" in the sense of Louw (1971b: 7). Louw (*op. cit.*) defines the term factive as follows:

> "... factive indicates the complementary fact to which the process of action of the predicates transits, brings up, or brings forth — ..."

Compare also Lyons (1977: 491). It should, however, be pointed out that Louw (1971: 8) warns that although the terms "assistive" and "factive":

> "... correspond in many examples with the terms 'subject' and 'object' they should not be confused with them, because they are not always the same, ..."

It is hoped that one can at once appreciate the difference between, for example, the valency roles of *"ímibúzo"* and *"íínyawo"* in 23 above and *"nóNómbasá"* in 24 below:

24.   *ÚPhúmezá uthandána nóNómbasá*
    'Phumeza likes Nombasa'

The systematic ambiguity of sentence 24 for reciprocity, the durative, etc. is handled under Semantics, *vide* par. 6.3 *et seq.*

5.8 SUMMARY

The following major syntactic phenomena have been observed in this analysis of /-an-/ extended roots:

(i)   there is a high frequency of conjoined subjects;

(ii)   there is an equally high frequency of what Wilkes (1971: 115) calls the:
        "onderbroke newegeskikte onderwerpsgroep";

(iii)   there is a reduction in the degree of transitivity of an /-an-/ extended verb (cf. Wilkes 1971: 116);

(iv)   an overt object NP may be allowed to occur with an /-an-/ extended verb subject to the constraint that there must be a relationship of possession between such an object NP and the subject (whether the subject is conjoined or not). A further remarkable point to note about this kind of possession is that it is not morphologically a possessive.

5.9 THE SYNTAX OF /-ek-/ EXTENDED VERB STEMS

5.9.1 Introduction

This section examines the syntactic environments in which /-ek-/ extended verbs can occur. This extension is probably the most problematic in the sense that very little in-depth research has been done on it as such. One of the main problems encountered by researchers concerns the use of an appropriate name for this extension. A number of definitions have been proposed by various grammarians. These definitions are all largely semantically motivated; they have therefore been included in the section on semantics.

5.10 THE EXTENSION /-ek-/ AND OBJECT NPs

Ellington (1977: 116) summarises the syntactic behaviour of neuter verbs (equivalents of /-ek-/ verbs in Xhosa) in Tiene as follows:

> "The neuter extension in Tiene is what Guthrie terms a 'minus object' extension. That is, its association with a verbal radical entails the presence of one less object than with the simplex form of the same verb. Transitive verbs are thus made intransitive so that the object of the simplex form of the verb becomes the subject of the extended form."

Consider the following sentences:

25.(a) *ÚPhúmezá úyamthánda úNómbasá*
      NP1   NP2
    'Phumeza loves Nombasa'
  (b) *ÚNómbasá úyathandéka*
      NP1
    'Nombasa is loveable'

The examples in 25 above demonstrate that once a verb has the */-ek-/* extension, NP2 (i.e. the object) in the (a)-sentence becomes NP1 (i.e. the subject) in the (b)-sentence.

In the literature no attention has been given to the uses of the long versus the short form of the verb in Xhosa when */-ek-/* has been attached. Consider the examples in 26 below. In these examples, I have reproduced those in 25 in the short form of the present tense.

26.(a) *ÚPhúmezá uthánda úNómbasá*
      NP1   NP2
    'Phumeza loves Nombasa'
  (b) *ÚNómbasá uthandéka kúPhúmeza*
      NP1   NP2
    lit. 'Nombasa is loveable to Phumeza'

(NP2 in the latter example refers to uPhumeza, which functions as the base of the locative construction.)

The use of */-ek-/* extended verbs in the long and the short form of the present tense appears to raise some interesting syntactic, morphological and even semantic issues. It has been generally accepted that in sentences with */-ek-/* extended verbs, NP1 of the (a)-sentences above becomes NP2 in the (b)-sentences. (By this it is meant here that NP1 of the (a) sentences occupies the NP2 position in the (b) sentences.)

27.(a) *ÚPhúmezá uthánda úNómbasá*
      NP1   NP2
    'Phumeza loves Nombasa'

(b)

(i)   *ÚNómbasá uthandéka úPhúmezá

(ii)   *ÚNómbasá uýathandéka úPhúmezá

First let us assume that the sentences in 27 above are related, and then let us compare their syntactic structures:

(i)   Sentence (a) has a subject NP, a verb and an object NP.

(ii)   Sentence 26(b) which incorporates an /-ek-/ extended verb has a subject NP, a verb plus /-ek-/, and a locative NP.

Since sentence (b) is virtually merely an /-ek-/ version of sentence (a) one can further point out the following:

(i)   NP2, the object of (a)-sentence becomes NP1, the subject of the (b)-sentence.

(ii)   NP1, the subject of the (a)-sentence becomes a locative NP2 in the (b)-sentence.

Compare also the following examples:

28.(a) ÚPhúmezá uthánda úNómbasá

        NP1   VP   NP2

        'Phumeza loves Nombasa'

   (b) ÚNómbasá úyathandéka kúPhúmezá
                              ngúPhúmezá

        NP1   VP

        lit. 'Nombasa is loveable to Phumeza'
                                   because of Phumeza'

   (c) ÚNómbasá uthandéka kúPhúmezá
                            ngúPhúmezá

        NP1   VP

        lit. 'Nombasa is loveable to Phumeza'
                                   because of Phumeza'

Now consider the examples in 28(a) and (b). If the sentence in (a) is recast as (b) using the /-ek-/ extension, NP1 of sentence (a) may either be left out or surface as either a copulative or a locative. The inclusion or exclusion of the locative and the copulative NPs depends on pragmatic factors, e.g. how far one wishes to restrict the applicability

of the verb *"úyathandéka"*. The obvious semantic differences between the use of the locative and the copulative will be deferred until the semantics is handled in the next chapter.

A comparison of the above sentences demonstrates that the following occur once an */-ek-/* extended verb replaces a simple or underived verb (*vide* the examples in 28 above):

(i)   The object NP in the (a)-sentence becomes the subject NP in the (b)-sentence.

(ii)   Following the general rule of Xhosa syntax, if the long form of the present tense (indicative) is preferred, NP1 of the (a)-sentences is not obligatory in the (b)-sentence. If one prefers to include it, it is mandatory that it should never appear as an object of the */-ek-/* verb; it can appear as a locative or a copulative, as stated above.

(iii)   Once again, following the general rule of Xhosa syntax, if the short form of the present tense (indicative) is preferred, NP1 of the (a)-sentence must obligatorily appear in the third slot, i.e. immediately after the verb (cf. sentence (c)).

The above evidence supports Wilkes's (1971: 138) claim:

> "Die neutro-passiewe suffiks ... verleen normaalweg nie aan werkwoorde 'n sintaktiese valensie vir voorwerpsbepaling nie, maar verminder dit wel met een."

Although it has been customary to accept the idea of the "intransitive syntactic valence" of an */-ek-/* extended verb, this research has found that there are a number of problem areas which necessitate a review or reformulation of the general rule or observation made about the prohibition of an object NP after an */-ek-/* extended verb.

5.11 DOUBLE OBJECT NPs

Consider the following examples:

29.(a) *ÚPhúmezá umthánda*   *ízidlélé úNómbasá*
            NP1   NP2   NP3
        'Phumeza she-her-love   cheeks   Nombasa'
        'Phumeza loves Nombasa's cheeks'

(b) *ÚNómbasá uthandéka*   *ízidlélé (kúPhúmezá)*
     NP1   NP2   NP3
     'Nombasa she-love-neuter   cheeks   to Phumeza'
     lit. 'Nombasa's cheeks are appealing to Phumeza'
     (i.e. Phumeza likes Nombasa's cheeks)

Note also that *ízidlêle* may also be represented by an OC in this sentence. Hence:

(c) *ÚNómbasá úyazithandéka ízidlélé (kúPhúmezá)*

These examples show that /-ek-/ extended verbs can, in fact, be followed in these instances by object NPs. The constraint that governs the occurrence of an object NP with an /-ek-/ extended verb is as follows:

> Such a usage of /-ek-/ extended verbs must be for denoting a relationship of possession between the subject NP and the relevant object NP.

In this situation the subject NP is semantically the possessor, while the object NP is the possessee. As was the case under /-an-/ extended verbs, cf. also Bhat (1978: 40-43), the possession here is not indicated morphologically.

Compare also the following paraphrases of the sentence in 29.

30.   *ÚPhúmezá uthánda ízidlélé zikáNómbasá*
      'Phumeza likes Nombasa's cheeks'

Compare the possessive construction (with its morphological realisation):

> *"ízidlélé zikáNómbasá"*
> 'Nombasa's cheeks'

with the following part of sentence 28.(b):

> *"ÚNómbasá uthandéka ízidlêle"*
> lit. 'Nombasa's cheeks are loveable'

From the above evidence one could conclude that while it is true that "/-ek-/ reduces the degree of transitivity of a given root", cf. Wilkes (1971: 116), this statement needs further refinement or amendment. It should be added that where the neutro-passive verb denotes a possessive relationship between NP1 and NP2 as outlined above, Xhosa manifests this by means of an object NP as the example in 29(b) shows.

5.12 DOUBLE TRANSITIVE VERBS

Consider the following examples:

31. (a) *Úmfâzi ubúza úmntwana úmbúzo*

    NP1   NP2   NP3

    'The woman asks the child a question'

(b) *Úmntwana ubúzeka úmbúzo* $\left\{ \begin{array}{l} \textit{émfázíni} \\ \textit{ngúmfâzi} \end{array} \right\}$

    NP1   NP2

    'The child could be asked a question in the opinion of the woman/by the woman'

The above sentences reveal the following:

(i)   NP2 of the (a)-sentence becomes NP1 in the (b)-sentence in exactly the same fashion as it was found in the case of transitive verbs. In other words, the object NP becomes the subject NP.

(ii)   NP3 of the (a)-sentence becomes NP2 in the (b)-sentence. (Incidentally, here it functions as an object NP, cf. *Úmntwana úyawubúzeka úmbúzo.*)

(iii)   NP1 of the (a)-sentence follows the general rule of sentences with /-ek-/ extended verbs: it appears either in its locative or copulative form as illustrated in 31(b). Furthermore, it is optional.

5.13 INTRANSITIVE VERBS

Consider the following sentences:

32. (a) *Ímvúla íyáthotha*

    NP1   VP

    'The rain subsides'

(b) **Ímvúla iyathótheka*

    NP1   VP

33.(a) *Ísísu síyábohla*

NP1 VP

'The tummy 'subsides''

(b) **Ísísu siyabóhleka*

Firstly, the unacceptability of the (b)-sentences above demonstrates that the general rule about sentences with /-ek-/ extended verbs still stands — namely that NP2 of the (a)-sentence (*vide* no 28.) must be NP1 in the (b)-sentences. This becomes even clearer since the absence of NP2 in the (a)-sentences in 32 and 33 above creates problems. The fact that NP1 of an (a)-sentence cannot be an NP1 in a (b)-sentence as well, is clearly demonstrated by the unacceptability of the (b)-sentences in 32 and 33 above.

Xhosa handles this problem area by invoking the impersonal or indefinite subject concord *ku-*, hence the following examples:

34.(a) *Kuthótheka émvuléni (xá kúkhê kwavéla úmnyama)*

'Rain could subside (when the rainbow appears)'

(b) *Kubóhleka ésíswini (xá úkhé wásébénza)*

'The tummy could 'subside' when you do some work'

Yet another important generalisation about sentences with /-ek-/ extended verbs still stands, namely that the NP1 of (a)-sentences in 32 and 33 cannot appear as an object — it will always be either in its locative or copulative form. That is why the following sentences are unacceptable.

35. **Kuthótheka îmvula*

*Kubóhleka ísísu

5.14 VERBS WHICH TRADITIONALLY TAKE SPECIFIED OBJECT NPs

Consider the following examples:

36.(a) *Úmfazi ulíla îinyémbezi*

NP1 VP NP2

lit. 'The woman cries tears'

(b) *Íinyémbezi zilíleka émfázini*

NP1 VP : NP2

'It is a woman who cries tears'

37.(a) *Ívila lilála úbúthongo*

    NP1 VP   NP2

    lit. 'A lazy man sleeps sleep'

(b) *Úbúthongo bulàleka kwívila*

    NP1   VP   NP2

    'It is a lazy person who enjoys sleep'

The behaviour of these verbs is not different from that of ordinary transitive verbs.

Even marginal verb stems in terms of transitivity or intransitivity like *-hámba* (walk/ travel) do not offer any problems. When they are used transitively they behave like other transitive verbs in all respects, i.e. including the use of OCs, and when they are used intransitively they fall in line with other intransitive verbs.

38.(a) *Índoda íyahámba*

    'The man walks'

(b) **Indoda iyahambeka*

(c) *Índoda ihámba índlela*

    'The man travels the road'

(d) *Índlela ihámbeka endódeni*

    'The road can be travelled by a man only'

5.15 THE NEUTER AND THE PASSIVE

A number of examples will be given below to show that the "neutro-passive" and the passive as such can be found regularly in the same syntactic environments. (Probably this justifies the term "neutro-passive" which is used to refer to */-ek-/* verbs, which is used by some grammarians, e.g. Wilkes (1971: 138).

39.(a) *Índoda ibétha úmfâzi*

    NP1   VP NP2

    'The man hits the woman'

(b) *Úmfâzi ubétheka* { *endódeni* / *yíndoda* }

    NP1   VP   NP2

    lit. 'A woman is beatable to the man (or could be beaten by a man)'

    i.e. 'A man does beat up a woman'

    lit. 'A/The woman is beatable because of the man'

(c) *Úḿfâzi ubéthwa yíndoda*

'The woman is beaten by the man'

(d) **Umfazi* $\left\{ \begin{array}{l} ubetheka \\ uyabetheka \end{array} \right\}$ *indoda*

(e) *Úḿfâzi ubétheka ûdúma*

    NP1   VP   NP2

lit. 'The woman can be opened a wound'

'The woman has had a wound opened (caused by some external force)'

To summarise, the examples above illustrate the following:

(i)   An */-ek-/* extended verb may have a semantic relationship with a locative noun or a copulative noun depending on the interpretation imposed on them by the speaker.

(ii)   Sentence (d) reiterates the fact that an */-ek-/* extended verb is prohibited from having a semantic relationship with an object noun; thus prohibition is only relaxed when there is a semantic relationship of inalienable possession between such an object noun and the subject NP.[6] Sentence (e) is an example of this latter fact.

5.16 THE SYNTAX OF */-el-/* EXTENDED VERB STEMS

5.16.1 Introduction

Perhaps a good way of introducing the question of syntax of */-el-/* extended verbs in Xhosa is to use the words of Kisseberth and Abasheikh (1977: 189). Referring to Chimwini, which is a Bantu language, they state:

> "The applied form of the verb typically allows the occurrence of an unmarked non-subject NP that the basic form of the verb does not allow. ... We refer to this extra NP as being 'dependent' upon the applied form. That is, this NP could not occur in the sentence (as an unmarked NP) except by virtue of the fact that the verb is in its applied rather than its basic form."

Compare also Epée (1976: 7-9).

Syntactically, */-el-/* extended verbs involve the addition of an extra NP to the basic subcategorisation of a verb. For instance, Epée (1976: 55) in his analysis of Duala counterparts of */-el-/* which he refers to as "Directionals", says:

"By directional, I mean a construction in which a simple one or two-place pre-
dicate occurs with an additional argument, the dative; this dative is semantical-
ly interpreted as benefactive, goal or source. The addition of this type of argu-
ment is morphologically indicated on the verb with either of the two suffixes
-ea, or *-ne*."

Following Epée (*op. cit.*) it could be argued in Xhosa as well that the addition of the
extra NP, which has similar semantic interpretation as the Duala counterparts, is mor-
phologically indicated on the verb by the suffix /-el-/.

Consider the following examples:

40. (a) *Úmfúndisi ufúnda íBháyíbhile*

'The minister reads the Bible'

(b) *Úmfúndisi ufúndela íbandlá íBháyíbhile*

'The minister reads the Bible for the congregation'

In the (a)-sentence there are only two NPs that occur with the verb, namely the subject
NP and the direct object NP. In the (b)-sentence, however, an additional NP appears.
According to Louw, *et al.* (1967: 101):

"The one object is that of the basic stem, the other that of the applied stem."

In terms of Epée (1976: 56) the additional NP fills the dative (or indirect object) posi-
tion. Epée (*op. cit.*) further argues that there is a "... dependency relation ..." between
the morphological marking on the verb (i.e. by means of /-el-/ in Xhosa and /-ea/ and
/-ne/ in Duala) and the occurrence of the dative NP.[7] He explains:

"The relationship between the simple verb and its directional counterpart can
be informally represented in the following manner:

$$V \quad + \quad \left\{ \begin{array}{c} \langle\ -ea\ \rangle \\ \langle\ -ne\ \rangle \end{array} \right\} \qquad : \qquad \langle NP \rangle \qquad NP\ (Agent)$$

where the angled brackets around the suffixes and the first NP represent the
dependency relation between the occurrence of the suffixes *-ea* and *-ne*, and
the dative object."

For Xhosa, this informal representation of the dependency relation between the mor-
phological marking on the verb and the dative object could be as follows:

V   +   -el-   :   NP   NP (Agent)

5.17 THE EXTENSION /-el-/ PLUS TRANSITIVES AND INTRANSITIVES

An analysis of /-el-/ constructions will now be tested against transitive and intransitive verbs in Xhosa:

41.(a) *Ínkwenkwé ipháka ínyama*

       'The boy dishes out meat'

  (b) *Ínkwenkwé iphakéla ínjá ínyama*

       'The boy dishes out meat for the dog'

A comparison of sentences 41(a) and (b) above demonstrates what the /-el-/ extension does to transitive verbs in Xhosa. Transitive verbs become three-place predicates, cf. Epée (1976: 58). A look at sentences 42(a) and (b) shows that the intransitive verbs become two-place predicates:

42.(a) *Índoda íyabulâleka*

       'The man struggles'

  (b) *Índoda ibulalékela ûsaphó lwayó*

       'The man struggles for his family'

In Xhosa there appears to be no restriction or constraint on the type of NP that fills the dative position. The only factor that determines what NP one uses is the interpretation that the speaker imposes on the sentence. In other words, the semantic functions of, for example, benefactive, source, goal, purpose, etc. will play a leading role in the selection of the additional NP. A full discussion of these roles will be deferred until the semantics of /-el-/ is discussed in Chapter 6. In this instance Xhosa appears to differ from languages like Duala where Epée (1976: 58) says that:

> "..., the added argument, i.e. the dative NP, in directional constructions must be (+ animate); in other words, the benefactive, source, or goal must be animate, ..."

Let us look at the following examples of sentences where /-el-/ is attached to double-transitive verbs:

43.(a) *Úmfâzi unǐka úmntwana ûbǐsí*

'The woman gives the child milk'

  (b) *Úmfâzi umnǐkela ûbísí úmntwana úkúbá álusêle*

        NP1   NP2   NP3

     'The woman gives the child milk so that she can drink it'

  (c) *Úmfâzi umnǐkela únina úmntwana lé swékile*

     'The woman gives this sugar to the child for the mother'

     i.e. 'The woman gives sugar to the child to give to her mother'

Normally when /-el-/ is attached to a double-transitive verb, it does not increase the number of co-occurring object NPs, cf. sentence (b) above. However, one does come across some rare instances where the number of object NPs may be increased by one, cf. sentence (c) above. This kind of construction has been found to be rare after tests against other double-transitive verbs proved negative or tenuous, at best.

5.18 DELETABLE OBJECT NPs

A claim has been made above that /-el-/ extended verbs co-occur with two object NPs, cf. 40(b). In the light of this claim one will have to account for the behaviour of the applied verbs in the following sentences:

44.(a) *ÚPhúmezá uphékela úNómbasá úkutýa*

     NP1   NP2   NP3

     'Phumeza cooks food for Nombasa'

  (b) *ÚPhúmezá uphékela úNómbasá*

     NP1   NP2

     'Phumeza cooks for Nombasa'

  (c) **UPhumeza uphekela ukutya*

     NP1   NP2

Sentence 44(b) indicates that although an /-el-/ extended verb usually occurs with two object NPs, one of those objects can be deleted in certain cases. The unacceptability of 44(c) suggests that there is a constraint on the deletability of one of the object NPs. In 44(b) the object NP which occurs with the /-el-/ extended verb is NP2 of sentence (a); in other words it is the indirect object. This state of affairs confirms the idea put forward by Louw, et al. (1967: 101) that the indirect object is actually the object of the /-el-/ extended verb. Sentence 44(c), which is ungrammatical further strengthens the

view that should one of the object NPs be deleted then the NP that is left out is the direct object NP. In other words, what actually happens is that the object of the /-el-/ extended verb (i.e. the indirect object) remains, while the object of the simple or underived form of the verb is deleted, cf. Pahl (1978: 402).

5.19 DOUBLE OBJECTS AND OBJECT CONCORDS

When a verb occurs with two object NPs, one would like to ascertain which object NP will be incorporated in the verb. Consider the following sentences:

45.(a) ÚPhúmezá ukúphékela úNómbasá úkútyá
        NP1   VP   NP2   NP3
        'Phumeza cooks food for Nombasa'
        i.e. 'Phumeza cooks the food **for Nombasa**'

  (b)   *UPhumeza umphekela uNombasa ukutya

  (c)   *UPhumeza umkúphekela uNombasa ukutya

  (d)   *UPhumeza ukúmphekela uNombasa ukutya

  (e)   ÚPhúmezá umphékela úkutyá úNómbasá
        NP1   VP   NP2   NP3
        lit. 'Phumeza cooks for Nombasa food'
        i.e. 'Phumeza **cooks** for Nombasa'

The bold script in the English glosses indicates the stressed constituents.

A sentence such as that of 45(b) above can be made acceptable by adding an adverb or complement clause. Compare the acceptability of the following versions of the (b) sentence in number 45 above.

46.(a) ÚPhúmezá umphékela úNómbasá úkutyá kanínzi
        lit. 'Phumeza cooks for Nombasa food many times'
        i.e. 'Phumeza cooks food for Nombasa many times'
  (b) ÚPhúmezá umphékela úNómbasá úkutyá xá évéla ésikólweni
        'Phumeza cooks food for Nombasa when she comes back from school'

The use of the adjunct *"kanïnzi"* and the complement clause *xá évéla ésikólweni* in (a) and (b) respectively makes these sentences acceptable, cf. sentence 45(b). Louw (1963b: 148) observes as follows:

> "As 'n **adverbium volg** op een van bostaande tydvorme (nl, die kort vorme van die teenwoordige en perfektum tye ... SCS) kan die objekkonkord gebruik word om die objek te beklemtoon, ..." (bold script mine ... SCS)

For more details about the long form and the short form the reader is referred to Louw (1963b: 146-149). Commenting on the use of the OC, Cole (1975: 427) says:

> "When the substantival object is expressed and also represented in the verb by its OC, the object is made emphatic. In such constructions the substantival object is semi-parenthetical, and, according to the genius of Tswana, falls outside the basic sentence unit ..."

Let us again look at the following sentences:

47.(a) **UPhumeza uyakuphekela uNombasa ukutya*

(b) *ÚPhúmezá úyakuphékela úNómbasá úkutyá xá kúkhôyo*
'Phumeza does cook food for Nombasa when it is available'

(c) *ÚPhúmezá úyamphékela úNómbasá úkutyá xá kúthéngiwéyo*
'Phumeza does cook food for Nombasa when it has been bought'

(d) *ÚPhúmezá úyamphékela úNómbasá úkutyá*
'Phumeza does cook food for Nombasa'

(e) *ÚPhúmezá úyamphékela úkutyá úNómbasá*
'Phumeza cooks food for Nombasa'

The ungrammaticality of sentence 47(a) is problematic especially if one compares it with the (b)-sentence. The anomaly of sentence (a) could be accounted for in semantic terms. Perhaps one could reinforce this idea by quoting from Duranti's (1979: 32) work:

> "The discussion of a so-called 'Topicality Hierarchy' (hereafter TH) started a few years ago with a paper by Hawkinson and Hyman (1974) on a Bantu language Shona. It examined the degrees to which different types of NP arguments were allowed to undergo Passivisation. More recently, Morolong and Hyman (1977) have shown that the same hierarchy is at work with respect to other linguistic rules, e.g. object agreement in Bantu languages that 'favour' certain kinds of NP types (or Referents) over others. That is, given more than one

'candidate' to undergo (or trigger) a certain rule, certain types of NP arguments will be 'more likely' to do it than others.''

Compare also Morolong and Hyman (1977: 201). There is sometimes an undeniable interdependence between syntactic and semantic phenomena. Morolong and Hyman (1977: 201) appear to underline this fact when they say that:

"... non-grammatical considerations play a critical role in determining grammatical relations, and that the only adequate approach to the Sesotho (and Bantu) object relation is one that derives grammatical relations directly from the semantics and pragmatics of communication.''

5.20 THE EXTENSION /-el-/ AND THE ENCLITIC /-ni?/

When /-el-/ is used with the enclitic /-ni?/ or the corresponding full form *ntoni?* 'what?' it expresses the idea of "why?", "for what reason?" This happens when it functions as the object of extended forms of intransitive base radicals. Context will determine the required meaning:

48. (a) *Ulilelani? / Ulilela ntóni?*

'Why are you crying? / What are you crying for?'

(b) *Uncwinelani? / Uncwinela ntóni?*

'Why are you groaning? / What are you groaning for?'

After extended forms of transitive base radicals, the enclitic translates the English "what?" In order to translate the English "why?" it must first be reduplicated. This reduplication is different from that which expresses a Perfective or Completive significance (i.e. indicating that the action expressed by the base radical is carried out thoroughly, to completion or perfection). Compare the following examples:

49. (a) *Uyikhethela ntoni intombi yakho?*

'What are you choosing for your daughter?'

(b) *Uyikhethelela ntoni intombi yakho xa ikho nayo evenkileni zempahla?*

'Why do you choose (articles) for your daughter when she, too, is present in the clothing shop?'

5.21 THE SYNTAX OF /-is-/ EXTENDED VERB STEMS

5.21.1 Introduction

Most studies of causative constructions frequently make reference to the valency of morphological causatives. Verbs that are extended by /-is-/ for causativity generally increase the valency of transitivity of a verb by one. Wilkes (1971: 125-126) says:

> "Die valensionele implikasies van kousatiewe suffiks /-is-/ is betreklik eenvoudig in die sin dat dit aan werkwoorde hoofsaaklik 'n transitiewe sintaktiese valensie verleen, met ander woorde net soos in geval van die applikatiewe suffiks maak dit die betrokke werkwoord eenmaal meer oorganklik as hul ooreenstemmende teenvoeters waarin hierdie suffiks nie verskyn nie. Dit kom dus neer dat dit aan onoorganklike werkwoorde 'n oorganklike sintaktiese valensie verleen, aan enkel-oorganklike werkwoorde 'n dubbel-oorganklike sintaktiese valensie verleen, ens. ..."

As Wilkes (*op. cit.*) points it out quite clearly in the words quoted above:

(i)   Intransitive verbs become transitive, cf.

50.(a) *Índoda íyahámba*

'The man walks'

(b) *Índoda ihámbisa ívíli*

lit. 'The man lets the wheel walk'

i.e. 'The man sets the wheel rolling'

(ii)   Transitive verbs become doubly transitive, cf.

51.(a) *Índoda ibóna úmhámbi*

'The man sees the traveller'

(b) *Índoda ibonísa úmhámbi índlela*

'The man shows the traveller the road'

(iii)   Double-transitive verbs get an additional NP which is usually morphologically marked for instrumental, cf.

52.(a) *Índoda iníka úmntwana ísónka*

'The man gives the child bread'

(b) *Índoda iníkisa úmntwana ísónka ngómfâzi*

'The man makes the woman give the child bread'

5.22 DEPLOYMENT OF POST-VERBAL NPs

The deployment of post-verbal NPs works strictly according to the factors mentioned under general syntax. In other words, one should take into account the following:

(i)   the short and the long form of the present tense;

(ii)   the incorporation of an OC in the verb;

(iii)   the presentative movement. (See par. 4.8)

For details about this the reader is referred to Chapter 4.

Consider the following sentences:

52.(a) *Úḿfâzi utyísa úḿntwana ísónka*

         'The woman makes the child eat bread'

   (b)   **Umfazi utyisa isonka umntwana*

The deployment of the object NPs after a verb is closely related to the semantic features of (+ animate) and (− animate), **when no object is incorporated in the verb and** when a sentence like (b) above does not have an adjunct or a complement clause as in sentences (d) and (e).

   (c)   *Úḿfâzi umtyísa ísónka úḿntwana*

         'The woman makes the child eat bread'

   (d)   *Úḿfâzi utyísa ísónka úḿntwana ngemivulo*

         'The woman makes the child eat bread on Mondays'

   (e)   *Úḿfâzi utyísa ísónka úḿntwana xá éngxamiléyo*

         'The woman makes the child eat bread when she is in a hurry'

Now let us consider the example below where the position is different:

53.   *Útítshala uchébisa úḿntwana íinwéle*
         NP1   VP   NP2   NP3
         'The teacher causes the child's hair to be cut'

The deployment of two co-occurring object NPs in this sentence is not governed by whether one of them is marked positively for animacy while another is marked nega-

tively for this semantic feature (animacy). Here the widely discussed phenomenon of "inalienable possession" or "extended inalienable possession" comes into play. The inference of "inalienable possession" will be discussed briefly in the light of Scotton's (1981b: 159 *et seq.*) view of the "extended inalienable possession".

Xhosa is one of those Bantu languages which, in the words of Scotton (1981b: 150), have:

> "... special syntactic constructions containing a slot that accommodates only nouns that specify the extent to which the action or state referred to by the verb applies to the noun that stands in a patient relationship to the verb. Nouns that appear in this slot constitute the extensive case; nouns denoting inalienability form a sub-class of extensive case nouns."

In her article, Scotton (1981b: 160) extends the notion of the syntax of body parts. She argues that:

> "... the 'part to whole' characterisation falls short of capturing the generalisation which the meanings represented in the relevant data require. This paper attempts to meet this requirement by characterising all the nouns in question as instances of the EC (i.e. extensive case ... SCS). Semantically, nouns in EC can be defined as standing in a 'real world affinity' to both the main verb and the patient of the construction. In a way that is familiar in the 'real world experience' of Swahili speakers, the meanings of nouns which meet this requirement are such that they particularise the extent to which the action or state referred to by the main verb applies to the patient."

Scotton (1981b: 161) criticises the restrictive nature of the "part to whole" characterisation of IP by Hinnebusch and Mbaye (1971), Whiteley (1972) on Swahili; Voeltz (1976) on Sotho and Hyman (1977) on Haya. At the same time her argument for nouns in the EC which she defines as:

> "... standing in a 'real world affinity' to both the main verb and the patient of the construction."

is still inadequate for Xhosa data; it needs further extension in order to predict all the occurrences in Xhosa. The characterisation of this type of syntactic construction neither relies solely on contiguity (as one can infer from "part to whole" between the patient and the EC noun which particularises it), nor does it rely on:

"... 'real world affinity' between patient, EC noun, and verb ..."

In Xhosa a relationship of possession (in semantic terms) is required between the patient and the EC noun. Consider the examples below:

54.   *ÚThémba uhlúthisa úNómsá ī̄mpahla*
       NP1   NP2   NP3

The above sentence can be interpreted semantically in either of the following two ways:

(i)   'Themba makes Nomsa rob (someone) of his/her goods'
       In this case NP2 is a co-agent or an "instructed agent".
(ii)   'Themba causes Nomsa to be robbed of her goods'
       In this second interpretation NP2 is the object.

Now consider the sentence below where NP4 is morphologically marked for instrument:

55.   *ÚThémba uhlúthisa úNómsá ī̄mpahla ngésígebénga*
       NP1   NP2   NP3   NP4
       'Themba causes Nomsa to be robbed of her goods by a criminal'

The inclusion of NP4 which is morphologically marked for the "instructed agent" is quite important. In this case this type of agent has been marked by the instrumental formative *nga+*. Recall that normally when agents are morphologically marked in Xhosa, they are usually realised in their copulative form. The encoding of the "instructed agent" in the instrumental form reinforces the idea that NP4 is a means whereby the action of the verb is achieved. Details about this will be found in the section on the semantics of */-is-/.*

5.23 DOUBLE OBJECTS AND OBJECT CONCORDS

The syntactic behaviour of double objects after */-is-/* extended radicals is not different from their behaviour when they are used with */-el-/* extended radicals. The following has been noted about the behaviour of double objects:

(i)   When the substantival object is expressed and also represented in the verb by its object concord, the object NP which is incorporated in the verb is usually one slot away from the verb, e.g.

56.(a) *Útítshala umbhalísa izíbalo úmntwana*
'The teacher makes the child write sums'

(b) *Útítshala uzibhalísa úmntwana izíbalo*
'The teacher gives sums to the child (so that he/she can do them)'

(ii) It is possible to deviate from the regular behaviour outlined in (i) above for purposes of emphasis. Compare the sentences below:

(c) *Útítshala umbhalísa úmntwana izíbalo xá énéxésha lôko*
'The teacher makes the child do sums when he has time for that'

(d) *Útítshala uzibhalísa izíbalo ábafúndi xá ílíxésha lôko*
'The teacher gives the sums to the students for them to do when it is time for that'

An object NP that is represented in the verb by means of an OC is only allowed to appear in the slot immediately after the verb when there is an adjunct or a complement clause, cf. the *xa* clauses above.

5.24 THE SYNTAX OF /-w-/ EXTENDED VERB STEMS

5.24.1 Introduction

There is evidence in the abundant literature available that the passive is one of the most problematic and controversial constructions in virtually all the languages. The passive in Bantu, for instance, has been handled transformationally,[8] lexically,[9] within the framework of relational grammar[10] and in a number of other models.[11] Julia P. Stanley (1975: 209) underlines the problem of passive construction when she says:

> "Historically, the passive voice has been one of the most problematic and controversial constructions of English structure, and modern linguistic theory has added little to our understanding of the meaning and function of the passive, beyond reformulations in the terminology of the moment."

Xhosa, like most Bantu languages, has a very productive passive. For instance, both direct and indirect objects can be passivised in Xhosa.

57.

Active

(a) *ÚMamalí ubúza útítshala úmbúzo*
'Mamali asks the teacher a question'

Passive

(b)   *Úmbúzo ubúzwa útítshala ngúMámali*

'The question is asked from the teacher by Mamali'

(c)   *Útítshala ubúzwa úmbúzo ngúMámalí*

'The teacher is asked a question by Mamali'

5.25   TYPES OF PASSIVE SENTENCES

5.25.1 Introduction

In this section reference will be made to those sentences in which the verb occurs with a direct object (DO). When this type of sentence is passivised the DO is placed in sentence-initial position.

5.26   PASSIVES WITH TRANSITIVE SENTENCES

Consider the sentences in 58-60 below:

58.(a)   *Injá   ítya   ínyama*   (Active)

NP1   NP2

(Subject) (Verb) (DO)

'The dog eats meat'

(b)   *Ínyama   ityíwa   yínjá*

NP1   NP2

(Subject)   (Verb + Passive)   (Copulative)

'The meat is eaten by the dog'

59.(a)   *Úmfâzi   úkha   ámânzi*

NP1   NP2

(Subject)   (Verb)   (DO)

'The woman draws water'

Passive

(b)   *Ámânzi   akhíwa   ngúmfâzi*

NP1   NP2

(Subject)   (Verb-Pass)   (Copulative)

'The water is drawn by the woman'

60.(a)   *Útítshala ubétha úmfúndi*

NP1   NP2

(Subject) (Verb) (DO)

'The teacher beats the student'

Passive

(b) *Úmfûndi   ubéthwa   ngùtîtshala*
     NP1   NP2

    (Subject)   (Verb + Pass) (Copulative)

'The student is beaten by the teacher'

The following conclusions can be drawn from the above examples:

(i)   the syntactic positions of NP1 and NP2 of the (a)-sentences are reversed in the (b)-sentences;

(ii)   NP1 of the active sentence, which becomes NP2 in the passive sentence, is always realised in its copulative form.

5.27 PASSIVE SENTENCES WITH DOUBLE-TRANSITIVES

Indirect objects can also be passivised. Consider the examples below:

61.

Active

(a)   *Úmfâzi unîka ûsána ûbîsi*
     NP1   NP2 NP3

    'The woman gives the child milk'

Passive

(b)   *Úsána lunîkwa ûbîsi ngúmfâzi*
     NP1   NP2   NP3

    'The child is given milk by the woman'

Note the following syntactic changes:

62.   *Úmfazi unîka ûsána ûbîsi*
     NP1   NP2 NP3

    'The woman gives the child milk'

63.   *Úsána lunîkwa ûbîsi ngúmfâzi*
     NP1   NP2   NP3

    'The child is given milk by the woman'

Compare also the other possible way of passivising 62.(a).

64.

Passive 2

Úbîsi lunîkwa ûsána ngúḿfâzi

NP1   NP2   NP3

'The milk is given to the child by the woman'

The passive sentences in 63 and 64 above demonstrate that:

(i)   the syntactic position of subject is accessible to both the object NPs (depending on pragmatic conditions like focus and theme (cf. Stanley 1975: 25);

(ii)   the syntactic position of FIRST object, i.e. the position immediately after the verb is accessible to both object NPs. In other words, when the Direct Object is passivised, this slot will be occupied by the indirect object, and when the indirect object is passivised, the slot is occupied by the direct object.

5.28   BODY PART SYNTAX

Consider the following sentences where there exists a relationship of possession between NP2 and NP3, i.e. the two object NPs:

65.(a)   *Úḿfâzi uhlámba úḿntwana îinyawo*

        NP1   NP2   NP3

        lit. 'The woman washes the child feet'

        i.e. 'The woman washes the child's feet'

   (b)   *Úḿntwana uhlánjwa îinyawo ngúḿfâzi*

        NP1   NP2   NP3

        lit. 'The child is washed (her) feet by the woman'

   (c)   **Iinyawo zihlanjwa umntwana ngumfazi*

        NP1   NP2   NP3

   (d)   *Iinyawo zóḿntwana zihlánjwa ngúḿfâzi*

        NP1   NP2

        'The child's feet are washed by the woman'

The following observations can be made about the sentences above:

(i)   the syntactic position of subject is not freely accessible to NP2 and NP3 of the
        sentences in 65, whereas it was found to be the case in the passivisation of
        61-64 above without any constraints;

(ii)   the syntactic slot of subject is governed by some restrictions in the case of NP3
        of 65(a), hence the unacceptability of 65(c);

(iii)   65(a) above testifies to the fact that NP3 of 65(a), i.e. the NP that is semanti-
        cally possessed by NP2, can only have access to the subject position when NP2
        and NP3 are combined in a possessive construction. NP2 becomes morphologi-
        cally marked for the possessive, since it is the possessor.

5.29 INTRANSITIVES

Stative verbs do not allow passivisation in the same way that transitive and double-
transitive verbs allow it. This is quite understandable if one recalls that Lyons (1977:
449) says:

> "It follows that the grammatical structure of languages may be partly, though
> not wholly, determined by semantic distinctions; and that semantic distinctions
> of the kind that are relevant to the definition of parts-of-speech and expression-
> classes may be themselves determined by ontological distinctions that are, in
> part at least, independent of the structures of particular languages."

Consider the following sentences which do not have corresponding passive forms:

66.(a) *Índoda íhlúthi*
        'The man is full'

   (b) *Úmfâzi úmíthi*
        'The woman is pregnant'

The fact that the active sentences above could not be passivised, does not necessarily
mean that stative verbs can never be passivised. Consider the following sentences in
which the same stative verb stems *-hlútha* and *-mítha* are used:

67.(a) *Kúyahlúthwa ngábántwana bákátítshala*
        'The teacher's children are well fed'

   (b) *Kúyamíthwa ngábafúndi ábángénasímo*
        'Irresponsible students become pregnant'

Although stative and other non-stative intransitive verbs in Xhosa may not permit passive counterparts of their active sentences, these verbs may still undergo passivisation with the indefinite concord *ku+*. This happens systematically and regularly in Xhosa. Each of the passive forms in 67 above will be contextualised according to pragmatic conditions of appropriateness. In a discussion of contextualisation and appropriateness Lyons (1977: 574) says:

> "Our model of language-competence, however, will be based upon the knowledge possessed by what might be described as an ideal omnicompetent speaker of a language, where 'omnicompetence' implies, not only perfect mastery of the rules which determine the well-formedness of sentences, but also the ability to contextualise them appropriately in terms of the relevant variables."

It should also be noted that the passives with *ku+* above indicate situations that are extended in time, i.e. processes, cf. Lyons (1977: 482).

5.30 SUMMARY AND CONCLUSION

Finally a list of the syntactic environments in which passives are found in Xhosa will be given below. Note also that semantic details about these types of passives will be deferred until Chapter 6:

(i)   NP   VP   NP

       (Subject)   (Passive)   (Copulative)

This is an example of a full passive sentence. Compare the following example:

68.   *ÚNgxábané wângcwatywá ngámawâbo*

       'Ngxabane was buried by his people'

(ii)   NP1   VP

       (Subject)   (Passive)

e.g.

69.   *ÚNgxábané wângcwatywá*

       'Ngxabane was buried'

This is an example of the so-called truncated passive. In this type of passive sentence structure, the copulative which usually identifies the agent is left out. The passive is

used in this way quite regularly in Xhosa. For examples from published works the reader is referred to the section on the semantics of passives in Chapter 6.

(iii)	NP1	VP	NP2
	(Subject)	(Passive)	(Instrumental)

e.g.

70.   *Úmfí wângcwatywá ngéngubo*
      'The deceased was buried with a blanket'

(iv)	NP1	VP	NP2
	(Subject)	(Passive)	(Locative)

e.g.

71.   *Íthole lângcwatywá emngxúnyeni*
      'The calf was buried in the hole'

Note here that the slot after the verb may also be occupied by an instrumental or locative NP.

The passive sentence with indefinite subject concord *ku* can have the following shapes:

VP

    (NP object)
$$\left\{ \begin{array}{l} \text{Locative NP} \\ \text{Instrumental NP} \\ \text{Copulative NP} \end{array} \right\}$$

e.g.

72.   *Kungcwátywá úNgxábané emngxúnyeni*
      lit. 'It is buried Ngxabane in the hole'
      i.e. 'Ngxabane is being buried in the hole'
      OR

73.   *Kungcwátywa emngxúnyeni*
      lit. 'It is buried in the hole'
      i.e. '(They) bury in the hole'
      Kungcwátywa úNgxábané ngêrhónya
      'Ngxabane is being buried with an old sack'

74.   *Kungcwátywa ngêrhónya*
      'They bury with an old sack'

75.   *Kungcwátywa úNgxábané ngámádoda*
'Men bury Ngxabane'

76.   *Kungcwátywa ngámádoda*
'It is men who bury (the dead)'

Compare also the following sentence types:

VP	NP1	NP2	NP3
(Ku + Passive)	(Object)	(Copulative/Agent)	(Locative OR Instrumental)

The order of NP2 and NP3 will be determined by pragmatic conditions.

(vi)	NP1	VP	NP2
	(Subject)	(Passive)	(Object)

Double-transitive verbs allow a subject NP as NP1 and an object NP as NP2.
e.g.

77.   *Úmbúzo ubúzwa úmfúndi*
'The question is asked from the student'

Compare also:

78.   *Úmfúndi ubúzwa úmbúzo*
'The student is asked a question'

Finally, in this section on the syntax of the passives, I have presented what Schoorl (1978: 331-333) refers to as:

"... exhibitory occurrences ..."

of passive constructions in Xhosa. These occurrences will be revisited in Chapter 6 where the main thrust of their analysis will be on semantics and other instruments in the communicative interaction between speakers and their hearers. Arguments against analyses of "exhibitory occurrences" of linguistic phenomena have been put forward, for example, by Schoorl (1978: 332) when he states the following:

"... when Katz and Fodor presented their outline of a semantic theory in linguistics, they still subscribed to the methodological principle that a linguistic theory should seek to describe the properties of linguistic expressions in complete isolation from their possible settings in verbal, social or physical contexts (1963: 173). As a result of this isolationism, linguistic research tended to concentrate exclusively on what I would term the **exhibitory occurrences** of linguistic expressions, the type of occurrence that one finds in philosophical or linguistic writings when an author invites his readers to consider a particular expression, ..."

Chapter 6

THE SEMANTICS OF VERBAL EXTENSIONS

6.1 THE SEMANTICS OF EXTENSION /-an-/

6.1.1 Introduction

As already discussed in par. 5.1 ff., /-an-/ is generally referred to as the reciprocal extension. This characterisation unfortunately gives the impression that whenever /-an-/ is used, the meaning of "reciprocity" is realised. A few Bantuists who have realised the misconception of associating a term with a morphological form, have preferred the use of numbers when referring to the various extensions.[1] These Bantuists include Poulos (1975: 30-57) and Gowlett (1967: 38-78). Extension /-an-/ has a variety of meanings which will be discussed in this chapter. It should be emphasised, however, that the major meaning of this extension is indeed that of reciprocity and that all the other meanings show some connection to this major one. Pahl (1978: 395-396) says:

> "The primary functions of the reciprocal extension is to convert a verb stem into one that denotes reciprocal action, ..."

He then goes on to add the following important qualification:

> "With certain verbs there are, however, modifications in the functions of the recriprocal extension. It may cease to be reciprocal and denote unilateral action, ..."

Pahl (op. cit.) lists no fewer than NINE so-called "secondary functions". Compare Pahl (op. cit.: 395).

6.2 PREVIOUS DEFINITIONS OF THE RECIPROCAL IN BANTU

Pahl's ideas about the reciprocal use of /-an-/ are nothing new in Bantu grammar. Reference to Cole (1975: 209 et seq.), Louw (1963: 154 et seq.), Doke (1927: 143 et seq.), etc. can be used to support this statement. It is significant that all these definitions are mainly semantic. Cole (1975: 209) characterises the reciprocal as follows:

> "The reciprocal form of the verb has the suffix -ana and indicates that the action signified by the simple stem is carried out mutually by two individuals or groups of things ..."

Doke (1927: 143-144) expresses the idea of the reciprocal and the slightly non-reciprocal use of /-an-/ as follows:

> "The reciprocal form of the verb denotes that the action is reciprocated, and is similar to the form expressed in English objectively by 'one another'. In Zulu this derivative is formed by -ana in place of the final vowel of the verb stem."

He further points out that the standard reciprocal meaning of "mutual action" may be superseded by other variants of meaning. He explains it this way (vide Doke 1927: 143-144):

> "Certain reciprocals have a slightly different significance 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 a definite Associative suffix -ankana or -akana is still in use."

Louw (1963b: 154) has also made similar observations with reference to Xhosa as such. He stresses that besides the standard meaning or idea of "mutuality", /-an-/, in Xhosa, also has the semantic significance of "associative". As he puts it:

> "Die resiprokale stam dui aan dat die handeling wederkerig is tussen twee subjekte. In Xhosa word 'n resiprokale handeling aangedui deur die suffiks -ana wat die uitgangsvokaal -a vervang ... Sommige derivatiewe stamme met die suffiks -ana is intransitief en assosiatief van aard ..."

6.3 THE NATURE OF RECIPROCITY

In Bhat's terms (1978: 40-41) the nature of reciprocal meaning can be summarised as follows:

> "If a normal non-reciprocal sentence refers to the involvement, in an event, of referents of two distinct arguments, such as Agent and a Patient respectively, a reciprocal sentence refers to the involvement of such referents in both these roles. That is, it combines the normal involvement of two referents with their reverse involvement in a given event or state."

Compare the following two sentences:

1(a). *ÙNokhwé uthánda úTozí*

[+ AGT]   Verb   [+ OBJ]

'Nokhwe likes Tozi'

(b) *ÚNokhwé nóTozí báyathandána*

    [+ AGT + OBJ]   Verb

    'Nokhwe and Tozi like each other'

In terms of the definition adopted from Bhat (*op. cit.*), sentence 1(a) is non-reciprocal in the sense that Nokhwe and Tozi are involved in the event/activity of loving as Agent and Patient respectively. In sentence 1(b), on the other hand, the roles of both No-khwe and Tozi are different from those in 1(a). In 1(b) which is a reciprocal sentence, Nokhwe and Tozi, Langacker (*op. cit.*) illustrates his viewpoint by means of three very useful diagrams which have been reproduced here for easy reference as Figures I, II and III. He says:

"With reflexives, the members of the set act collectively on the set as a whole ..."

Compare Figure I (Figure I refers to Figure III in Langacker's book).
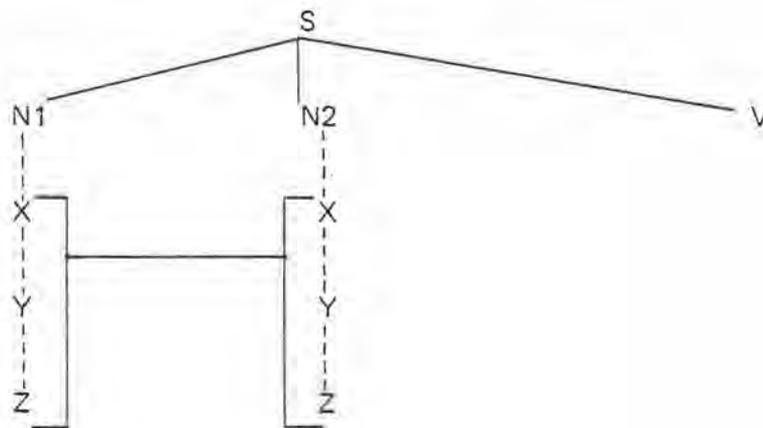
FIGURE I

Alternatively, in the case of reflexives, each member may act upon itself, as Figure II shows:

S
N1   N2   V

X ←――――――→ X

Y →――――――→ Y

X →――――――→ X
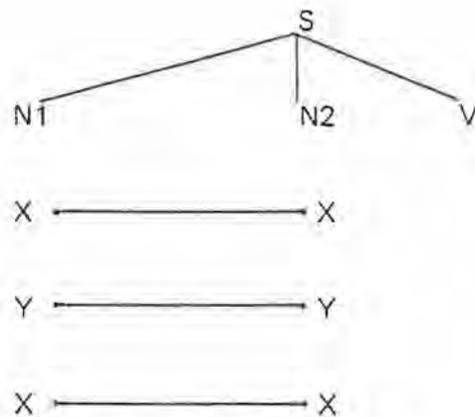
FIGURE II

"... are not only involved in the roles of an Agent and a Patient respectively, but also in the respective roles of a Patient and an Agent."

(*Vide* Bhat, 1978: 41)

In the reciprocal sentence, the two different roles or involvements of Nokhwe and Tozi have been combined and presented as "... sub-events of a single event ..." (Bhat (1978: 40).

This combination of semantic roles of the relevant NPs in a reciprocal sentence, has strong syntactic consequences (which have been dealt with in the previous chapter).

6.4   IDENTITY IN RECIPROCAL MEANINGS

In the section on syntax, reference was made to conjoined noun phrases which act as subject of a given reciprocal sentence. According to Bhat (1978: 40), these conjoined NPs have the effect:

"... of producing a referential identity between the two arguments represented by them."

Bhat (*op. cit.*) rightly points out, for instance, that this identity differs from that which obtains in reflexive sentences. As Langacker (1976: 48) puts it:

"Reflexive and reciprocal constructions are semantically very similar, especially in the plural (singular reciprocals are a contradiction in terms). Both involve co-reference of subject and object, and they differ only in the way in which the verbal relationship is distributed among the members of the set designated by these arguments."

Langacker (1976: 48) characterises the reciprocals as follows:

> "With reciprocals the relations are skewed ... despite the identity of the overall sets involved."

Compare Figure III below:
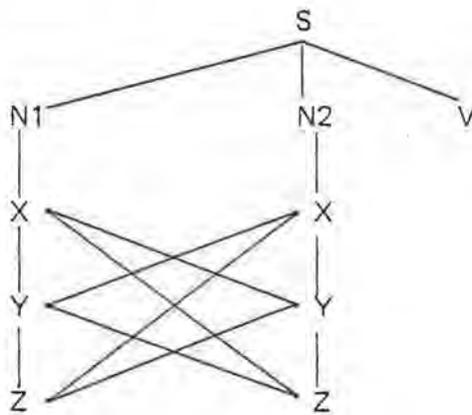
FIGURE III

Langacker's diagrams have been simplified by Bhat (1978: 41) as follows:
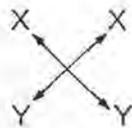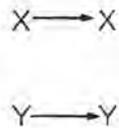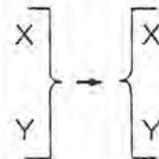
FIGURE IV   FIGURE V   FIGURE VI

In Figure III, which is meant to demonstrate reciprocal meaning, neither X nor Y acts upon itself in the sense of being the patient and at the same time the agent of an event. Bhat (1978: 40) correctly predicts that if one could split an action that is denoted by a reciprocal sentence:

> "... basing the split upon the action of individual agents, there would no more be any co-referentiality occurring between its arguments."

Once co-referentiality of arguments is undermined, then the idea of reciprocity is also obliterated.

This difference between reflexives and reciprocal meanings could be seen clearly in the following pair of sentences:

2.   *ÚThémba nóNómsa báyabulálana*
       'Themba and Nomsa are killing each other'
3.   *ÚThémba nóNómsá báyazibulála*
       'Themba and Nomsa are (each) killing themselves'

2 denotes a reciprocal meaning, whereas 3 denotes a reflexive meaning. The event denoted by 2 can be split into two events as follows:

4(a).   *ÚThémba wâbulalá úNómsá*
          'Themba killed Nomsa'
  (b)   *ÚNómsá wâbulalá úThémba*
          'Nomsa killed Themba'

Notice that neither 4(a) nor 4(b) contains co-referential arguments. It is only when the two events denoted by them are combined together to form a single event, that one obtains co-referentiality as seen in 2.

It would be difficult to split, in a similar fashion, the events denoted by reflexive sentences with conjoined arguments. As it was seen above, such reflexive sentences could be based upon:

(i)   a cumulative event; or
(ii)   an event in which the arguments function as sets.

If 3 represents an event of the former type, for example, it could be split into two subevents as follows:

5(a).   *ÚThémba wâzíbúlâla*
          'Themba killed himself'
  (b)   *ÚNómsá wâzíbúlâla*
          'Nomsa killed herself'

What one finds in 5(a) and (b) above are a subject and an object that are co-referential; this is then realised by the use of the reflexive formative -zi- in Xhosa. In other words, both 5(a) and (b) would not be acceptable as correct statements of the fact indicated by 3 where arguments function as sets. The death of **Themba** and **Nomsa**, according to this meaning, might have occurred as a result of their joint effort. In both cases, however, the referential identity between the arguments of 3 remains unaffected.

6.5 WAYS OF INDICATING THE RECIPROCAL MEANING

Generally, languages appear to favour one of two different ways of indicating the reciprocal meaning. These are:

(i) a special marking on one of the two co-referential arguments;

(ii) a special marking on the verb whose arguments are co-referential in the reciprocal sense.

For instance, English uses the first device by specially marking one of the two co-referential arguments to indicate reciprocal meaning. It uses either "each other" or "one another". Compare the following examples:

6. The lecturers looked at **one another**.

7. Mr Smith and Mr Jones looked at **each other**.

Xhosa uses a combination of the two devices given as (i) and (ii) above. The verb stem is specially marked for indicating reciprocal meaning by the attachment of the /-an-/ extension. The second NP will in turn be prefixed with na +. (Xhosa phonological rules will take care of the prohibited juxtaposition of the "a" of na and the initial vowel of the noun to which it is attached.)

6.6 RECIPROCALS IN XHOSA

Consider the following examples:

8. *ÚSiphó nóMbúlelo báyathandána*
   'Sipho and Mbulelo like each other'

In the words of Scotton (1967a: 74) reciprocals could be described as illustrating:

"... the standard reciprocal meaning of 'mutual action'."

In the 'standard reciprocal meaning' the Agent is also the Patient, while the Patient is also the Agent. Scotton (1967a: 75) further makes this important observation about Swahili reciprocals:

> "Only a root taking both animate subjects and objects may have a standard reciprocal meaning of 'do mutually to each other' ..."

The observation made by Scotton (*op. cit.*) above, is also true for Xhosa. Compare again the following examples:

9(a). *ÚNdílisá nóGcóbisá báyabukána*
    'Ndilisa and Gcobisa admire each other'

  (b) *ÚNdílisá nálé njá báyathandána*
    'Ndilisa and this dog like each other'

But

  (c) **ÚNdílisá nómthûnzi báyathandána*
    *'Ndilisa and the shade like each other'

Sentence 9(c) is unacceptable because the second noun *"umthunzi"* has the semantic feature [-animate].

In other words, there is a semantic constraint on the kinds of NPs that can serve as Agents-cum-Patients in standard reciprocal constructions.

6.7 RELATIVE MUTUAL INTERCONNECTION OR CORRELATION

Wilkes (1971: 109) has made an important observation about Zulu reciprocals. He points out that the reciprocal idea can be more indirect. Examples will be given from Xhosa since this observation is also true of this language:

10. *Lé thísisi íjongenê nézixândo*
    'This thesis is about extensions'

11. *Íntéthó yakhé íbínxusenê nábágxeki*
    'His speech was somewhat directed at (his) critics'

In the above sense, there is an element of mutual interconnection or correlation. In other words, there is a kind of reciprocal relation between the two items referred to in the sentences in 10 and 11, i.e. the thesis and the extensions, and the speech and the critics, respectively. In 10 above, the thesis about *ízixândo* (extensions) implies the presence of extensions, while in 11, the speech about the critics implies the existence of those critics. A further characteristic of this relation is that of exclusiveness, i.e. in 10 the thesis deals specifically with extensions, while in 11, the speech dealt exclusively with the speaker's adversaries or critics.

6.8   THE ASSOCIATIVE SIGNIFICANCE OF /-an-/

Another equally productive semantic function of the /-an-/ extension is that of indicating an action that is done together by two or more persons. This is referred to as the "Associative" by writers like Van Eeden (1956:689), Wilkes (1971: 109), etc. This implies joint action or doing something together. Consider the following examples:

12.   *Ámádoda nábáfâzi aqukenê émthunzíni*
       'Men and women have assembled in the shade'

13.   *Ízinjá néekáti zingungenê ézíko*
       'Dogs and cats crowded together at the fireplace'

The associative semantic reading can also be realised in those cases where the conjoined subject is split. Compare the following:

14.   *ÚDalíwonga uthandána nóDalíndyebo*
       'Daliwonga likes Dalindyebo'

Literally, sentence 14 means that Daliwonga is engaged in X-activity/event together with Dalindyebo. In other words, Daliwonga is doing something (i.e. the action referred to by the verb) together with Dalindyebo. Here the relationship with the reciprocal is quite clear because of the idea of mutual action.

6.9   THE "ENTANGLEMENT" SEMANTIC READING

Wilkes (1971: 110) proposes the "collective" as a separate semantic variant of /-an-/. He stresses that although writers like Doke and Van Eeden treat this variant as an aspect of the Associative, there are sufficient grounds for treating it separately. As he puts it:

"By nadere ondersoek blyk dit egter dat daar genoegsame semantiese gronde is waarop hierdie twee variante van mekaar onderskei kan (en behoort te) word. By die assosiatiewe variant gaan dit naamlik om die 'tesame doen' van twee of meer sake, terwyl dit by die onderhawige variant om die 'tesame geraak' van een (of meer as een) saak gaan. Hierdie variant, wat in teenstelling met die vorige, ook neutropassief van aard is, kan gerieflikheidshalwe kollektief genoem word aangesien dit die 'byeenraking' van die onderwerp impliseer."

Consider the following examples:

15. *Ímityá íyasongána*
     'The shoe laces are becoming entangled'

16. *Ló mtyá úphóthéne*
     'This thong is entwined'

17. *Sinyóphene ési sithêthi*
     'This speaker is confused'

Rather than the term "collective", I would propose the term "entanglement". The meaning realised in all the examples above is that of "getting entangled".

This meaning is very closely related to the "associative" significance. The only difference is that while the "associative" significance suggests assemblage, the "entanglement" semantic reading has connotations of entwining, enlacing, turning and twisting, curling, folding, etc. This would entail the "coming together" of parts of a particular object, which would have a bearing on the whole idea of reciprocity.

In fact, this observation could be underlined by Wilkes's own suggestions for the Afrikaans translations of such verbs. He suggests the following, cf. Wilkes (1971: 110):

"In Afrikaans kan dit weergegee word deur vertalings soos 'inmekaar/deurmekaar raak', ens., terwyl dit in sommige gevalle ook met (dig) teenmekaar (= dig toe) raak, vertaal kan word."

6.10 THE DURATIVE

This variant indicates that the subject is engaged in a process in a continuous manner. Wilkes (1971: 111) describes this semantic role as follows:

"Hierdie variant toon aan dat 'n onderwerp op 'n voortdurende wyse met 'n proses geassosieer is, dit wil sê dat 'n handeling nie momentaan nie, maar gereeld/herhaaldelik of aanhoudend deur 'n onderwerp uitgevoer word. Hierdie handeling wat altyd 'n sekere tydsverloop as onderskeidende kenmerk het, kan naamlik òf **habitueel** òf **konsentrerend** òf **kontinuerend** van aard wees."

It is clear from Wilkes's (op. cit.) words that the durative is further divided into the following sub-categories:

(i)   **Habitual** action, that is an action that the subject does habitually, often, frequently or on an every-day basis, e.g.:

18.   *Yîntó yakhé úkuthuthána námânzi*
        'He is well known for drawing water continually'

19.   *Yîntó yakhé úkugeléshana námasimi komîle*
        'He is well known for continually tilling the land when it is dry'

(ii)   **Continuous** action. This variant of meaning is used to denote action that continues or persists. In other words, the subject is engaged in an activity persistently or continuously with an NP that functions as a semantic object. Consider the following sentences:

20.   *Úmfâzi uphékana nókutyá*
        'The woman is cooking food continuously'

21.   *Úmntwana ucelána nókutyá*
        'The child is asking for food persistently'

        The distinction between the "habitual" and the ordinary continuation can be accounted for in terms of context.

(iii)   **Concentrated** action. Strictly speaking, this could be seen to relate to a "continuous" type of action, but it differs from the other two in that it also implies that the subject is **absorbed** in an action. Compare the following sentences:

22.   *Ndibukána nósana*
        'I am looking at the child endlessly with admiration'

23.   *Ndijongené néencwadí zám ngôku*
        'I am absorbed by my books now'

This durative significance of /-an-/ could be seen to have some bearing on the idea of reciprocity if one considers the fact that, in the above sentences, the subject is continuously involved with the object in some action or other.

6.11 FOSSILISED FORMS

A number of radicals in Xhosa appear to be /-an-/ extended, but have no corresponding simple stems.

Examples:

24.   *-fuman-*   'get'
        -diban-   'come together', 'meet'
        -fan-   'look alike', 'resemble'
        -lingan-   'be of the same size, height, weight, etc.'
        -hlangan-   'come together', 'meet'

It is interesting to note that, except for *-fuman-*, none of these radicals allows the attachment of /-an-/. Compare the following examples:

        -fumanan-   'to meet one another/each other'

e.g.   *Sâya kufumánana ésikhulúlweni sébhási nómkhulúwa*
        'My elder brother and I met (each other) at the bus stop'

The fact that *-diban-*, *-fan-*, *-lingan-*, *-hlangan-* cannot be used with /-an-/, appears to underline the fact that these radicals have an inherent "mutuality" feature in them. In this respect, they incorporate a major semantic significance of /-an-/. Any further attachment of /-an-/ to these radicals would be semantically vacuous; it is probably on these grounds that such an attachment of /-an-/ is prohibited.

A further strong relationship between these verbal radicals and the reciprocal /-an-/ can be accounted for in syntactic terms. Consider the following sentences:

25(a). *Ábafúndi badibána néetĭtshala*

'The students meet the teachers'

(b) *Ló mntwana ufána nónina*

'This child looks like her/his mother'

(c) *Lé ndoda ilíngana nálé nkwenkwé ngobúde*

'This man is of the same height as that boy'

(d) *Íinkomo zâhlanganá námaháshe édlélweni*

'The cattle met the horses in the veld'

In all the above sentences the second NP is obligatorily prefixed with *na* +, as is the case with a number of reciprocal sentences.

6.12   CONCLUSION

From the data above it appears that /-an-/ has a large variety of meanings. On this basis, it would also appear that one cannot say /-an-/ is not suffixed to a particular radical without first taking into account the intended meaning. It should be emphasised also that all the meanings associated with /-an-/ appear to be related.

6.13   THE SEMANTICS OF /-ek-/

6.13.1 Introduction

A wide variety of names have been used by different grammarians to refer to this extension. The following is a list of some of the names or labels of this extension:[2]

(i)   Neuter

(ii)   Stative

(iii)   Neuter-passive

(iv)   Quasi-passive

(v)   Neuter-stative

(vi)   Metastatic-potential

This large variety of designations for this extension probably shows just how complex and intriguing it is to researchers. The names that have been given to it are all semantically motivated. The problem of finding an adequate name for this extension is perhaps best summarised by Pahl (1978: 397) when he says:

"This extension has traditionally been called the neuter or the neuter-passive extension. The term is an unfortunate one, as -*eka* is neither passive nor neuter. Its two basic functions are as definite and distinct as those of any of the other extensions. These are metastatic (indicating a change, or becoming or getting done) and potential ..."

In spite of the large variety of names that are given to this extension by different grammarians, there is hardly any marked difference in the various labels given to it. There is only a difference with respect to what each grammarian considers as worth emphasising — hence the combinations like:

neuter-passive

quasi-passive

metastatic-potential

The term "neuter" is preferred by those grammarians who wish to stress that this extension is neither active nor passive. "Quasi-passive" indicates that this extension is seen as being passive in part. "Neuter-passive" would appear to make the claim that /-*ek*-/ straddles both the domains of "neuter" and "passive". Pahl's (1978: 397) term "metastatic-potential", is intended to cover all the possible meanings of /-*ek*-/. The two basic functions that Pahl (*op. cit.*) refers to in his definition, are acceptable, but his reasons for rejecting the terms "neuter" and perhaps "neuter-passive", are inadequate, because one could, as well, form compound names for all the other extensions on the basis of their numerous functions. If Pahl's idea is taken to its logical conclusion, then the length of such compound names would be determined by the actual number of functions of the extension(s) concerned.

6.14   THE SEMANTIC NATURE OF /-*ek*-/

If a normal non-stative sentence refers to the involvement in an event, of the referents of two distinct arguments, such as Agent and Patient, then the stative usually refers to an intransitive state or condition or the process of going into that state without reference to the cause of it.[3] The stative is neither active nor passive, cf. Pahl (1978: 397). It is sometimes referred to as the neutro-passive or quasi-passive. Another popular name that is often used to refer to the stative, is that of Neuter, cf. Wilkes (1971: 135-136).

Wilkes (1971: 135-136) summarises the above observations with the following words:

"Die neutralis-derivatief dui in die reël aan 'n intransitiewe toestand of staat of die oorgangsproses wat uitloop in so 'n toestand of stand sonder 'n bepaalde vermelding wat betref die veroorsaking daarvan; dit is nòg aktief nòg passief (en is soms die neutro-passief of quasi-passief genoem)."

The meaning of this extension has often been compared to that of Afrikaans forms with the endings -baar, -lik by Afrikaans-speaking Bantu grammarians, cf. Louw (1963b: 165); Van Eeden (1956: 661), Wilkes (1971: 136).

Van Eeden (1956: 661) describes /-ek-/ extended verbs in Zulu as follows:

"In baie gevalle tree die suffiks van die neutralis op met naastenby dieselfde waarde as die Afrikaanse uitgang -baar of soms ook -lik, soos byvoorbeeld in 'hoorbaar, ploegbaar, beminlik'; dit wil sê, dit dui dan aan dat een of ander handeling, ens. 'plaasvindbaar', 'uitvoerbaar', 'moontlik', ens. is met betrekking tot die (grammatiese) subjek. In party gevalle gee die Afrikaanse 'raak', soos byvoorbeeld 'in die moeilikheid raak', weer die betekenis daarvan redelik goed weer."

The English grammarians, on the other hand, have compared the semantic readings of /-ek-/ extended verbs with the meanings of words ending in -able, -ible. Doke (1927: 139), for instance, says:

"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."

Compare also Pahl (1978: 397), Cole (1975: 196), Doke and Mofokeng (1957: 154).

The stative has also been studied in Bantu languages other than Nguni and Sotho. Scotton (1967a), Eastman (1967) and (1969) have made some invaluable contributions about this extension in Swahili. Scotton (1967a: 110) and Eastman (1967: 108) both refer to Ashton, who observed that the stative expresses two key concepts which, though they are inter-related, should nevertheless be distinguished. These are:

(i)   the expression of a state or condition without reference to any agency; and
(ii) potentiality — "... i.e. whether or not the subject is capable of receiving a given action, usually some reference to agency or the condition of the object being acted upon, or whether or not a certain state may be achieved."

(Vide Scotton 1967a: 108)

Scotton (1967a: 110-111) further adds that:

> "... it becomes clear that it is the concept of state which is opposed to the concept of passive position with reference to agent (as expressed by the passive extended form). The potential aspect concept also carried by the stative shape, is quite unrelated to the opposition."

6.15 THE EXTENSION /-ek-/ AND CHANGE OF STATE (PROCESS)

This is one of the major uses of the /-ek-/ extension. In English this function is expressed by "become" or "get".

It has almost become customary to regard this process of change or "becoming" as being divorced from any form of agency whatsoever. However, some grammarians have now come to realise that there are a number of cases where the process of change or "becoming" is not independent of some form of agency or another. Wilkes (1971: 137) stresses this point as follows:

> "Alhoewel hierdie semantiese waarde impliseer dat die proses vanself in 'n toestand raak, beteken dit nie noodwendig dat daar geen eksterne faktore aanwesig kan wees wat 'n aanleiding is tot so 'n toestand nie."

There are finer semantic distinctions which one must recognise in the use of /-ek-/ with the meaning of "becoming" or "get". The semantic role of "change of state" of /-ek-/ can at least be divided into three categories on the basis of whether or not an **agency** is present.

6.15.1 Change of state without reference to agency

In this usage, /-ek-/ signifies that the subject of the verb has entered into a state or condition and does not refer explicitly or obligatorily to any external force. As Pahl (1978: 398) elaborates further:

> "Here the cause is not an integral part of the concept of the process of change, an essential difference between the metastatic verb and the passive."

The following examples are meant to illustrate this fact:

26. *Índoda yâlahleká kwísíxeko ésikhûlu*

    'The man got lost in a big city'

27. *Ábáhlohli bafúna ínyániso ngézixándo ityhíleke*

'The lecturers want the truth about extensions to become clear'

In the above examples, the process of change or "becoming" is not related to any influence or cause in the speaker's/hearer's mind.

Even in those examples where the semantic relationship contracted between the verb and the co-occurring subject NP is that of state, there is hardly any reference to agency or cause. Compare the following examples:

28. *Usána lúyathandéka*

'The baby is loveable'

29. *Úmvubo úyanandípheka*

'Sour milk with dry porridge is delicious'

The above examples denote a state or condition as opposed to those which indicate "getting into a state", cf. Wilkes (1971: 136).

The latter group are called inchoative verbs. Cole (1975: 277) defines these verbs as follows:

> "Inchoative verb stems indicate an action which can continue for only a limited period of time before attaining completion of the action, whereupon some type of mental or physical state results. In other words, such verbs, when occurring in non-stative tenses, predicate the idea of 'becoming' or entering into a state whereas the completed action and resultant state is expressed by their use in stative tenses."

6.15.2 Change of state with reference to agency

According to Pahl (1978: 397):

> "The agency or cause under the influence of which the change takes place, may be referred to explicitly."

Consider the following examples:

30(a). *Úmntwana ucandéka íinyawo yíngqele*

'The child's feet crack because of icy conditions'

(b) *Úmfúndi úyadidéka yímibúzo éminînzi*

'The pupil gets confused with many questions'

In the above examples, the agency is clearly referred to. This is further facilitated by the fact that the agency relation between the + Agent NP and the verb is expressed morphologically by means of the copulative. The use of the copulative to express agency, is attested, for instance, in the passive compare also par. 6.48 in this section.

6.15.3 "Understood" agency

In this case the agency may be covert or understood. Consider the following examples:

31(a). *Ábafúndi bâmangaliséka*

'The students were amazed'

(b) *Íngáthi ábáhlobo béthu báyakholíseka*

'It seems as if our friends are becoming satisfied'

Pahl (1978: 397) specifically adds that in such cases it is:

"... (the context indicating what it is that will cause him to become satisfied)."

I propose that besides the context, it is the combination of /-is-/ and /-ek-/ (= /-isek-/) that results in this covert expression of the agency.[4] For more details about the causative and agency, the reader is referred to the section on the /-is-/ extension. Consider the following examples:

32(a). *Úmntwana ubonéka úbuxóki kútítshala*

'The child is a liar according to the teacher/in the opinion of the teacher'

(b) *Úmsebênzi uncómeka úbuhlé kútítshala*

'The work is praiseworthy in the opinion of the teacher'

Consider now the following two examples (sentence 30(a) is here repeated as 33(b)):

33(a). *Úmntwana ubonéka úbuxóki ngútítshala*

'The child is assumed to be a liar because of the teacher'

(b) *Úmntwana ucandéka íinyawo yíngqele*

Lit. 'The child's feet crack because of icy conditions'

In the sentences 32(a) and (b) the semantic roles contracted between *kútítshala* and the predicate expresses the source of the "process" indicated by the predicate, i.e. the source of the "assumption that the child is a liar" or "the opinion (in sentence (b)) that the work is praiseworthy". Once again the NPs that contract these relations with the verb are morphologically realised in the locative.

It should, however, be pointed out that although morphological shape appears to clear up some complex issues in certain areas, it does not do this in all cases. The examples in 33(a) and (b) indicate this. Note that in these examples, although the copulative NPs denote agency, there is a slight difference in this agency. In 33(a) the "agent" does not "participate" directly in the action; rather it ensures direct participation by some "unspecified" "participating" agent, while in 33(b) the agent "participates" directly in the action. In spite of this important distinction there is no difference in the morphological shape of these agents.

6.16   THE SUFFIX /-ile/ AND /-ek-/

When the so-called perfect suffix /-ile/ is attached to /-ek-/, it does not indicate the perfect tense,[5] but rather the stative meaning. Consider the examples below:

34.   *Údongá lúcándékile*
      'The wall is cracked'

35.   *Ndiqinisékile*
      'I am sure'

The above information supports the view that these extended radicals are inchoative in significance. Compare:

36.   *Índoda íhámbile*
      'The man has left'

37.   *Ímpúku iphuncúkile*
      'The mouse has escaped'

In the two examples 36 and 37 above, /-ile/ clearly indicates the perfect.

6.17 POTENTIALITY

/-ek-/ may also indicate potentiality, i.e.:

(i)   whether or not the subject of a sentence is capable of receiving a given action. In this role reference to agency is optional, in other words it is not totally prohibited;

(ii)   whether or not a certain state or condition may be achieved.

Pahl (1978: 398) puts it this way:

> "As a potential extension *-eka* denotes ability to undergo a change or action, or yielding to an applied action, as may be indicated by the English -able or -ible, or in Doke's words, it denotes 'to be do-able' ..."

The following examples are meant to illustrate this semantic function:

38(a).   *Lá magámá ábhalwê ngqindilili áyafúndeka nókúbá andinxibánga zigilási*
'These bold letters are readable even when I'm not wearing (my) glasses'

(b)   *Íntsîmi ilímeka xá kúkhê kwána*
'The land becomes ploughable when there has been some rain'

6.18 THE EXTENSION /-ek-/ WITH BOTH "CHANGE OF STATE" AND POTENTIALITY READINGS

In many cases /-ek-/ extended verbs can have both the meanings of "change of state" and "potentiality". Wilkes (1971: 136) describes this situation as follows:

> "In gevalle waar hierdie suffiks prosesse as toestande impliseer, tree dit naastenby met dieselfde semantiese waarde op as die Afrikaanse uitgangsmorfeem -baar of -lik, in welke geval dit ook 'n semantiese implikasie van potensialiteit kan hê ..."

Compare the following examples:

39.

(a)(i)   *Úmkhwêtha unyángeka émva kwéevéki ézintâthu xá éngathakathwánga*
'An initiate gets healed after three weeks if he is not bewitched'

(ii)   *Ukugrúzuka kuyanyángeka, kódwa woná úmhlâza awúnyangéki*

         'A bruise is curable but cancer is not'

(b)(i)   *Úcango luyavúleka*

         'The door opens'

         Lit. 'The door becomes open'

(ii)   *Ôlu cango luyavúleka; ngubaní ló ébésíthi alúvuléki?*

         'This door can be opened; who said it couldn't be opened?'

6.19   SUMMARY

The extension /-ek-/ has several related meanings. These related meanings are probably
all shades of a common core-meaning which could be construed as the proto-typical
meaning of this extension from which the other variant meanings have deviated. This
common core-meaning appears to have a stative-potential significance, the realisation
of which entails an agent which may be explicit or implicit.

6.20   THE SEMANTICS OF EXTENSION /-el-/

6.20.1 Introduction

This section deals with the various uses of /-el-/ extended verbs. The following uses
have been identified:

(i)   benefactive or performance of an action in someone's interest;

(ii)   performance of an action in someone's stead or on his behalf;

(iii)   performance of an action for a reason;

(iv)   performance of an action for an aim or purpose;

(v)   performance of an action at a place;

(vi)   miscellaneous.

6.21   PERFORMANCE OF AN ACTION IN SOMEONE'S INTEREST

In an analysis of the dative in Zulu, Wilkes (1978: 67-68) says that the dative "seman-
tic case relation" is found in sentences like those in 40 below:

40.(a)   *Ínkwenkwé ibhaléla úyisé íncwadî*

         'The boy writes TO HIS FATHER a/the letter'

   (b)   *Úbawó wâthumelá úṁLungu íncwadi*

         'Father sent TO THE WHITE MAN a/the letter'

(c) *Úbawó wâcelá ínkósi ímvúme*

'Father requested OF THE CHIEF PERMISSION'

Wilkes (*op. cit.*) adds the following:

> "In addition to the verb coding of dative objects ... Zulu (as well as many other Bantu languages) also makes use of a noun coding strategy whereby dative objects are marked by means of a locative prefix. In such instances, these objects are usually separated from the verb by the accusative object ..."

The following examples are then used to illustrate this point:

41(a). *Úmfána wâbiká údaba kútítshala*

'The young man reported the matter TO THE TEACHER'

(b) *Úmfána wâthéthá ló mcímbi kúyisé*

'The young man told this matter TO HIS FATHER'

Wilkes (1978: 68) then points out that:

> "In a very limited number of cases these two strategies are found to alternate with each other ... In most instances, however, the interchanging of these two strategies is not permitted and either the one or the other must be used."

Wilkes (1978: 68) says that there are two strategies for encoding the Dative in Bantu. Wilkes (*op. cit.*) admits, however, that:

> "The reason for the co-existence of two dative coding strategies in the grammar of Zulu (and other Bantu languages), including their distributional differences, is a matter I have not yet fully investigated."

I shall first look at the examples used by Wilkes (*op. cit.*). These will be re-cast in Xhosa.

42(a). *Ndibikéla ábántu úkufá*

Lit. 'I report TO THE PEOPLE the death'

(b) *Ndibíka úkufá ébántwini*

'I report the death TO THE PEOPLE'

(c) *Ndenzela ábántwana íntsômi*

Lit. 'I tell TO THE CHILDREN a tale'

(d) *Ndênza íntsômi ebantwáneni*

'I told a tale TO THE CHILDREN'

There are at least two major factors which determine the choice of dative encoding strategy:

(i) Whether or not a verb is derived or underived (i.e. whether it is extended by /-el-/).

(ii) If the verb is underived as in 42(b) above, then the encoding strategy preferred is that of marking the relevant NP for "dative". If, on the other hand, a verb is extended by /-el-/, then it can be assumed that the dative is already encoded in the verb, and that, therefore, there is no need to encode it on the "dative" NP as well. It should be stressed that there are two types of verbs that require the dative in Xhosa (and presumably in other Bantu languages): there are those which need /-el-/ extension in order to have the feature + Dative; there are those which are inherently marked + Dative without the need for /-el-/ extension, for this purpose.

Consider the following examples:

43(a). *Útítshala uníka úmntwana íncwadí*

Lit. 'The teacher gives TO THE CHILD a book'

(b) *Úmamá úpha ûsána ûbîsi*

Lit. 'Mother gives TO THE CHILD milk'

Now note that once the extension /-el-/ is attached to the verbs in the above examples, a reason or purpose semantic relation is contracted. The order of the post verbal NPs will be as follows:

(1) Dative   (2) Accusative   (3) Reason or Purpose

Compare the following sentences:

44.   *Útītshala unīkela úṁntwana íncwadī́úkufúnda*
      (or *úkúbá áfundé*)
      'The teacher gives TO THE CHILD the book to read (or so that he/she may read)'

6.22   DISCOURSE CONSIDERATIONS

If in the discourse the focus is on WHO WILL RECEIVE (i.e. who will be the RECIP-IENT) then the unmarked DATIVE NP will be preferred. If, on the other hand, the focus is on TO WHOM the letter is going, then the dative NP will be specially marked. Consider the following sentences:

45(a).   *Úṁfána ubhaléla úyisé ī́léta*
         'The young man writes his father a letter'

   (b)   *Úṁfána ubhaléla ī́léta kúyisé*
         'The young man writes a letter to his father'

Where the Dative is encoded on the NP, that NP must obligatorily follow the accusative NP. Compare the unacceptability of 46(a) below:

46(a).   **Umfana ubhalela kuyise ileta*

The above sentence can only be acceptable if an OC is incorporated in the verb. This OC will naturally agree with *ileta* (a letter) because the latter is the only object NP.

   (b)   *Úṁfána uyibhaléla kúyisé ī́léta*
         'The youth writes the letter to his father'

Compare Louw (1963b: 148), especially par. 29.22.

It could, therefore, be argued that these different strategies of encoding the dative indi-cate, as it were, the person "concerned" by the action; the particular way in which he/she is concerned, by:

(i)   marking on the verb and zero-marking on the dative NP;

                              OR

(ii)   marking on the verb as well as specific marking on the dative NP.

Thus, the dative-recipient interpretation will depend strictly on (i) above, whereas the dative-locative interpretation will depend on (ii) above.

6.23 BENEFACTIVE ANALYSIS

Several arguments will be presented in order to reject the traditional analysis of the dative in Bantu as a purely "benefactive semantic relation". It is hoped that these arguments will prove that the idea that the semantic content of the dative is essentially "benefactive", is inaccurate. Consider the following examples:

47(a). *Útatá wakhéla úmamá índlu*

    '(My) father builds a home for (my) mother'

(b) *Íntombazâna ithengéla únina íswékile*

    'The girl buys sugar for (her) mother'

In the above examples *úmamá* and *únina* are semantically speaking dative-benefactives. In simple terms, the two NPs referred to above are direct "recipients" of the action. As Pahl (1978: 400) puts it, the examples above indicate:

"... performance of an action for a person, i.e. in his interest: ..."

Now consider the following example where /-el-/ indicates the action is performed on behalf of someone or in his stead, cf. Pahl (1978: 400):

48. *Úmfâzi uphakéla índoda námhlânje; ngómsó índodá íza kuphakéla yená*

    'The woman dishes for the man today; tomorrow it will be the man's turn"

The sentences in 47 are ambiguous in the sense that they may be interpreted as indicating performance of an action in someone's stead or on behalf of someone. The same applies to the example in 49. Pahl's (*op. cit.*) attempt to make this distinction is arbitrary, and therefore unacceptable. The fact that the examples in 47 and 49 can be interpreted for both "performance of an action in the interest of someone" and "performance of an action in someone's stead", demonstrates that the verbs are not specifically subcategorised for either of these instances. Differentiation between these semantic nuances can only be accounted for by means of other strategies, e.g. discourse strategies.

It is, therefore, proposed that both the semantic nuances of "performance of an action for a person" and "performance of an action on behalf of someone" should be subsumed under Dative. The condition on this proposal is that discourse strategies will indicate which meaning is intended.

The example in 49(b) below is ambiguous for the following semantic interpretations (SI):

SI(i)   performance of an action for a person, i.e. in his interest;

  (ii)   performance of an action in another person's stead or on his behalf.

49(a).   *Úmfâzi ubópha ínyandá*

  'The woman ties the bundle (of wood)'

  (b)   *Úmfâzi ubophéla íntombazáná ínyandá*

  'The woman ties the bundle (of wood) for the girl'

In the above examples, the NP that is ambiguous for SI(i) and (ii) occupies the position immediately to the right of the /-el-/ extended verb. *ínyandá* (bundle), the thing that is actually bound, occupies the second position after the /-el-/ extended verb. *ínyandá* is actually the object of *-bôpha* (bind), the underived form of the verb, cf. Pahl (1978: 400-404); Louw (1963b: 101); and also Kisseberth & Abasheikh (1977: 188).

50(a).   **Uphumeza ukupheka ukutya*

  (b)   *ÚPhúmezá ukuphéka kákuhlé úkutyá*

  'Phumeza cooks food well'

  (c)   *ÚPhúmezá úyakuphéka úkutyá*

  'Phumeza does cook food'

Sentence 50(a) is ungrammatical because the OC cannot occur with the short form in this type of sentence.

Sentence 50(b) is grammatical. While the verb is still in the short form of the present tense, the occurrence of the object concord (OC) and the object NP that governs it, is permitted evidently because there is an intervening adjunct *kákuhlé* (well) between the verb having the OC and the object NP that controls it. Sentence 50(c) is also acceptable although there is no such intervening adjunct between the verb and the object NP that

is incorporated in the verb. Evidently this happens because the verb is in the long form of the present tense, as the incorporation of the formative -ya- after the SC indicates.

As sentences 50(a) and (b) show, the object NP that is incorporated in the verb is úkutyá (food). In other words, it is the object NP that is not the benefactive. Now let us look at /-el-/ extended verbs when an object NP is incorporated in the verb. Consider the following sentences:

51.(a) ÚLanga uyilímela úmfâzi íntsími
    'Langa cultivates the land for the woman'

  (b) *ULanga uyilimela intsimi umfazi

  (c) ÚLanga umlímela íntsímí úmfâzi
    'Langa cultivates the land for the woman'

  (d) *UPhumeza umlimela umfazi intsimi

Sentences 51(a) and (c) are grammatical because the object NP that is incorporated in the verb is one slot away from the verb. When the object NP that is incorporated in the verb occupies the position or slot immediately to the right of the /-el-/ extended verb, then that sentence becomes ungrammatical, as sentences 51(b) and (d) attest. The behaviour of the object NPs is not without some problems as the sentences below illustrate:

52.(a) *ULanga uyayilimela umfazi intsimi

  (b) *ULanga uyayilimela intsimi umfazi

  (c) ÚLanga úyamlímela íntsímí úmfâzi
    'Langa does cultivate the land for the woman'

  (d) ÚLanga úyamlímela úmfâzi íntsími
    'Langa does cultivate the land for the woman'

The above examples show quite clearly how semantic-pragmatic factors influence the syntactic structure of these /-el-/ constructions, cf. Kisseberth & Abasheikh (1977: 186-188), Wilkes (1971: 93 et seq.). Sentences 52(a) and (b) are unacceptable in Xhosa. It would be inadequate to account for the unacceptability of these sentences in terms of word order constraints only; this is especially true if one considers the following analysis by Louw (1963b: 147):

"In Xhosa kan òf seun òf present deur 'n objekkonkord in die verbum verteen-
woordig word, byvoorbeeld:

(1)   *úyasinĩka ínkwenkwé ísiphó*
        (hy gee die seun die present)

(2)   *úyayinĩka ísiphó ínkwenkwé*
        (hy gee die present aan die seun)

As *ísiphó* beklemtoon word, staan dit die verste van die predikaat en sy objek-
konkord word gebruik. As *ínkwenkwé* beklemtoon word, staan dit die verste
van die predikaat en word dit beklemtoon."

Compare also Cole (1975: par. 20.4-6).

Now consider sentences 52(c) and (d) which are acceptable. Recall that 51(a) is accept-
able when the short form of the verb is used. Recall also that 51(a) is unacceptable al-
though the short form of the present tense is used. Putting aside the differences of long
and short form of the present tense, there is something common among the sentences
that are unacceptable:

(i)   these sentences (*vide* 51 & 52) are ambiguous in the sense that it is not clear
        which is the benefactive NP, *úmfâzi* or *íntsĩmi;*

(ii)   there is a further untenable situation: the semantic features of the NP *íntsĩmi*
        (land) make it impossible for it to be considered as a benefactive NP in the
        presence of another object NP which is positively marked for animacy.

In other words, whereas the man can cultivate the land for the woman, he cannot "cul-
tivate the woman for the land". It appears, therefore, that sentences 52(c) and (d) are
acceptable because they do not violate the constraint that where a [+ animate] NP and
a [− animate] one occur in an /-el-/ construction, only the [+ animate] NP is permitted
to be a benefactive NP.

Sentences 52(c) and (d) also attest the fact that there are no restrictions on the order
in which the object NPs come. Evidently this is governed by a confluence of factors,
for example:

(i)   definiteness and indefiniteness, and focus, *a la* Louw (1963b: 147);

(ii)   "... the semantics and pragmatics of communication." − in the words of Moro-
        long and Hyman (1977: 199).

(iii)   the presentative function according to Louwrens (1980) and Hetzron (1974).

Louw's (1963b: 147) analysis of the use of the object concord has also been confirmed recently by Kisseberth and Abasheikh (1977: 182) when they observed that:

"The OP often functions as a device for signalling definiteness ..."

OP stands for Object Prefix, which is referred to as the object concord in this thesis.

A large variety of examples of /-el-/ verbs that occur with benefactive NPs will now be given to test the claims made above:

53. (a)   *ÚThémba uphékela ínjá úkutyá*
           NP1   VP   NP2 NP3
          Lit. 'Themba cooks for the dog food'
     (b)   *ÚThémba uphékela úkutyá ínjá*

Sentence (b) above is unacceptable because it allows a NP that is [− animate] to be a benefactive in the presence of a [+ animate] NP.

Now let us consider the sentence below.

54.   *ÚNómsá uthengéla íbhédi ámashíti*
          NP1   NP2   NP3
         'Nomsa buys sheets for the bed'

The above sentence illustrates that an NP that is negatively marked for animacy may, after all, have a "benefactive/recipient role" in an /-el-/ construction. However, this happens if and only if the other co-occurring object NP is also negatively marked for the semantic feature of animacy. Therefore, the arguments put forward about the examples in 52 above, still stand.

Furthermore, there is no restriction on the order of the co-occurring object NPs as sentence 55 below confirms:

55.   *ÚNómsá uthengéla ámashíti íbhédi*
         'Nomsa buys a bed for the sheets'

Once again, the question of definiteness versus indefiniteness; focus, cf. Louw (1963b: 147); the presentative function *a la* Louwrens (1980) and the "... semantics and pragmatics of communication ...", cf. Morolong and Hyman (1977: 201) comes to the fore. It is these factors that determine which object is to be incorporated in the verb and the subsequent order of the object NPs.

Sentences like those in 56 below would appear to pose other problems:

56. (a) *Útītshala ubizéla ábafúndi īkónsáthi*

     NP1   VP   NP2   NP3

    'The teacher organises/arranges a concert for the students'

    Lit. 'The teacher calls a concert for the students'

  (b) *Útītshala ubizéla īkónsáthi ábántwana*

    'The teacher invites the children to the concert'

    Lit. 'The teacher calls the concert for the students'

Both the above sentences are acceptable. One would perhaps want to know why sentence (b) is also acceptable, since it involves an NP that is [− animate] which is also a beneficiary in the presence of a co-object NP that is positively marked for animacy.

The acceptability of the above sentences can be accounted for in terms of semantic shift.

The basic meaning of *-bīza* (call) has shifted to that of "organise for" after the attachment of the /-el-/ extension, cf. sentence 56(a). In sentence 56(b) the meaning "to call" has shifted to that of "to invite".

Two other reasons can be proposed for the acceptability of sentence 56(b):

(i)   if the object NP that is [− animate] is assumed to be the beneficiary in the presence of a [+ animate] NP, then it is assumed that such an NP is used metonymically (i.e. use of the name of one thing for that of another associated or suggested by it). Here the NP appears to refer to locations associated with people. Other NPs in this category are:

        īsikólo (school), *ícáwe* (church), *īyunivésiti* (university), *īthêko* (function), *intlangániso* (meeting), *úrhuluménte* (government), etc.

(ii)   secondly, it may be assumed that the NP that is negatively marked for animacy [− animate] is actually not a beneficiary but a locative in semantic terms. It should be emphasised that this locative reading is not morphologically marked (cf. the possessive relationship that is not morphologically marked above).

An interesting distinction between the semantic roles of the object NPs in sentences 56(a) and (b) is that the [+ animate] NP *ábántwana* (children) is prohibited from being ambiguous for benefactive and locative, at least in the presence of an object NP that is [− animate]. On the other hand, no such constraint applies to the role of the [− animate] NP *íkónsathí* (concert). Although *íkónsathí* (concert) is [− animate], it definitely has connotations of human beings.

An important conclusion that one could draw from the arguments above, is that:

> "... the applied verb can convey the notion of performing the action specified by the basic verb for the benefit of someone or something."
> <div align="right">Kisseberth & Abasheikh (1977: 192)</div>

Compare also Kisseberth & Abasheikh (1977: 190) where they say:

> "The beneficiary in a benefactive applied construction is generally a human NP, since actions are typically performed for the benefit of human beings, not inanimate objects. Nevertheless, one can find instances of benefactive applied constructions where an inanimate NP functions as the beneficiary: ..."

6.24   PURPOSE

The use of /-el-/ to express the "performance" of an action for an aim or a purpose, has been recognised by a number of grammarians for various Bantu languages. Special mention should be made of Wilkes (1978: 70-77) for the particular way in which he deals with the "purposive" function of /-el-/. In the first place, Wilkes (*op. cit.*) does not use the term **purpose**; he uses the term **goal**. A critical analysis of the examples used by Wilkes (1978: 70) shows quite clearly that what he terms **goal** is actually what is called **purpose** in this thesis. One of the most important things about Wilkes's analysis is his combination of "reason and goal". However, it should be stressed that although he combines reason and goal, he still distinguishes between a sentence that has a reason interpretation, and one that has a goal interpretation. Probably Wilkes's reasons for combining reason and goal lie in the distributional features of these functions. These are:

(i)   that reason and goal objects differ from "... dative and benefactor objects ..." (*vide* Wilkes (1978: 70)) in that they are chiefly non-animate and may also be sentential;

(ii)   that both reason and goal objects "... differ syntactically from dative/bene-factor objects in that they may be preceded by accusative objects and thus be separated from the verb carrying their case marker, ..."

Wilkes (*op. cit.*)

(iii)   that the reason/goal relation in sentences can be disambiguated by pronominali-sing the accusative object and then either left- or right-dislocating it so that the reason/goal object appears immediately after the /-el-/ extended verb. Compare the following examples:

Left-dislocation

57.(a)   *Índoda ndiza kuyibulálela ímalí*
       Accusative   Verb   Goal
       'THE MAN I will kill HIM for money'

Right-dislocation

57.(b)   *Ndiza kuyibulálela ímalí índoda*
       Verb   Goal   Accusative
       'I will kill HIM for money, the man'

Left-dislocation

57.(c)   *Lé ndoda ndiyithandéla isibindí sayo*
       Accusative   Verb   Reason
       'THIS MAN I admire HIM for his courage'

Right-dislocation

57.(d)   *Ndiyithandela isibindi sayo lendoda*
       Verb   Reason   Accusative
       'I admire HIM for his courage, this man'

(iv)   regarding the deployment of the post-verbal NPs, Wilkes (1978: 73) also mentions a constraint that is very significant in semantic terms:

> "... an ambiguity may arise as a result of case confusion if the accusative object is not moved from its proximate object position behind the verb."

The case confusion referred to is that should the accusative object occupy the slot immediately after the verb, then it will invariably be assigned the wrong case. Specifically, as Wilkes (*op. cit.*) elaborates:

"... if it remains in that position, case confusion may result with the accusative being interpreted as the benefactor object and the reason object as the accusative object ..."

Compare the following examples:

58.   *Úsibáli ndimthandéla údadé wabó*
       Accusative   Verb   Reason
       'My brother-in-law I like HIM for his sister'

59.   *Ndimthandéla údadé wabó úsibáli*

       Verb   { Dative-Benefactive / Reason }   Accusative

       'I like HIM for (on behalf of) his sister, my brother-in-law'
                            OR
       'I like HIM for (Reason) his sister, my brother-in-law'

(v)   both reason and goal objects (recall that "goal" is Wilkes's term; we use "purpose" in this thesis) may be sentential, cf. Wilkes (1978: 73).

Consider the following examples:

60.   *Ámaséla axhabáshela* [*úkúbá ébe ňgusha*]
       Agentive   Verb   Goal
       'The thieves are rushing IN ORDER TO steal sheep'

61.   *Éli séla balingcúthela* [*ukuxhókonxa úmninińzi*]
       Accusative   Verb   Reason
       'This thief, they stab HIM FOR taunting the owner of the house'

(vi)   when the reason and goal objects are sentential, they may either be:

(a) an **infinitive** clause as in the examples above;

OR

(b) **subordinate** clauses introduced by the complementisers:

úkúbá (mainly for reason); and

úkúze (for purpose or goal in Wilkes's terms).

Consider the following sentences:

62.(a) *Ndibabéthela úkúze bóyike úkúbá ïipésika zám*

Purpose

'I beat them so that they fear to steal my peaches' (lit.)

(b) *Ndibabéthela úkúbá bébê ïipésika zám ízolo*

'I am beating them because they stole my peaches yesterday'

(c) *Ndibabéthela* $\left\{ \begin{array}{l} \textit{úkúbá} \\ \textit{úkúze} \end{array} \right\}$ *bébe ïipésika zálâ mlimi*

'I am beating them up so that they go and steal the peaches of that farmer over there'

When *úkúbá* is used, there is never any difficulty in interpreting the sentence for either REASON or PURPOSE. The following strategies are used in the language to disambiguate a sentence with *úkúbá*:

(i) discourse considerations;

(ii) prosodic elements like tone. Compare the following sentences:

63.(a) *Ndibabéthela úkúbá bébê ïipésika*

'I am beating them up because they have stolen peaches'

REASON

(b) *Ndibabéthela úkúbá bébe ïipésika*

'I am beating them up SO THAT they can steal peaches'

PURPOSE

The differentiating tonal patterns are those on the verb *bebe*.

(iii) There may be other linguistic terms in the given sentences which help to remove any possible doubts about the required interpretations, e.g. adverbs or adverbial clauses. Compare the following examples:

In order to make this point very clear, I shall use the same sentences as in 63 above and just add the adverbs (or adverbial clauses).

64. (a) *Ndibabéthela úkúbá bébê ïpésika ízolo*

   REASON

   'I am beating them up because they stole peaches yesterday'

   (b) *Ndibabéthela úkúbá bébe ïpésika ngómsó*

   PURPOSE

   'I am beating them up so that they steal peaches tomorrow'

In the places of *ízolo* and *ngómsó* any adverbial clauses could be employed.

Wilkes (1978: 74) then correctly points out that:

> "... these clauses show the same tendency as all the other applicative objects to occur as close as possible to their case marker, i.e. in the position immediately following the main (applicative) verb. If an accusative object is present, it is obligatorily pronominalised and left (or right) shifted ..."

The point that one would like to stress here, is that, although REASON and PURPOSE would appear to share many distributional characteristics, as Wilkes (*op. cit.*) so aptly points out, they are still different in semantic terms. This standpoint is also supported by Pahl (1978: 401) for Xhosa and Scotton (1967a: 126) for Swahili. There is every reason to believe that Wilkes (1978), too, is aware of this, because nowhere in his article does he have problems with distinguishing **reason** and **purpose** (or goal, in his terms).

6.25 PERFORMANCE OF AN ACTION FOR AN AIM OR PURPOSE

Consider the following sentences:

65. (a) *Ábáfâzi baphékela úkóndla ábántwana*

   NP1   NP2   NP3

   'Women cook in order to feed children'

   Abafazi baphekela ukondla abantwana

   Lit. 'Women cook for the feeding of the children'

   (b) *Ínkwenkwé ingxoléla úkugxóthá úbúthongo*

   NP1   NP2   NP3

   'The boy shouts in order to drive away sleep'

Inkwenkwe ingxolela ukugxotha ubuthongo

Lit. 'The boy shouts for the driving away of sleep'

The above examples attest to the fact that the NP that receives the "purpose" semantic interpretation, is always in the infinitive. These examples also show that the word order in */-el-/* constructions which have the semantic reading of "performance of an action for an aim or a purpose", is obligatorily of the sequence:

NP (indirect object — purpose)

NP (direct object — factive).

Compare the ungrammaticality of 65(c) and (d).

65.(c) **Abafazi baphekela abantwana ukondla*

(d) **Inkwenkwe ingxolela ubuthongo ukugxotha*

Note also that NP2 in 65(a) can never be incorporated in the verb and that the incorporation of NP3 is subject to certain constraints. These are dealt with in the next paragraph.

6.26   OC IN THE MAIN VERB AND THE INFINITIVE

Whereas NP3 in 65(a) above could not be incorporated in the verb, this restriction is relaxed in the examples below:

66.(a) *Ábáfâzi babaphékela úkubóndla ábántwana*

NP1   NP2   NP3

Lit. 'The women cook for them in order to feed the children'

'The women cook in order to feed the children'

(b) *Ínkwenkwé ibúngxoléla úkubúgxóthá úbúthongo*

NP1   NP2   NP3

'The boy makes noise in order to drive away sleep'

This double incorporation of NP3 also signals definiteness.

The sentences in 67 below, demonstrate another interesting feature about the incorporation of the object concord in the infinitive in */-el-/* constructions:

67.(a) *Utitshala ubabethela ukubayalana abantwana

   (b) *Utitshala ubabethela ukubayaleka abantwana

   (c) Útĩtshala ubabéthela úkubayálela ĩmbéko ábántwana

     'The teacher beats the children in order to guide them in their behaviour'

   (d) Útĩtshala ubabéthela úkubayálisa ngóswazi ábántwana

     'The teacher beats the children up so that they should behave (in future) for fear of corporal punishment'

   (e) *Utitshala ubabethela ukubayalwa abantwana

The above examples demonstrate that the incorporation of the OC in the infinitive is determined by the transitivity or valence implications of the extended verb stem from which the infinitive is derived. Compare, for instance, the ungrammaticality of 67(a), (b) and (e), specifically because of the valence implications of /-an-/, /-ek-/ and /-w-/ respectively.

Although it has been suggested that generally, the object NPs that can have the semantic role of purpose, are usually the infinitives (or infinitive phrases), there are some idiom-forming verbs which allow ordinary NPs to carry out this function. Compare the following sentences:

68.(a) Ábántu batyéla izĩsu úkutyá

     'The people eat in order to fill their stomachs'

     i.e. 'The people eat greedily'

   (b) Índoda yámbéthélá óogqirha úmfâzi

     Lit. 'The man beat the woman up for doctors'

     i.e. 'The man thrashed the woman hard'

The idiom-forming verb in (b) indicates more of the "extent" than just "purpose" as such.

6.27 PERFORMANCE OF AN ACTION FOR A REASON
Consider the following sentences:

69.(a) Índoda izibámbela úmónákalo ĩĩnkomó

     'The man impounds the cattle because of the damage'

(b) *Útatá uwabéthela úkungxólá ámákhwenkwé*
'Father beats the boys for making noise'

The above examples indicate the following:

(i)   when /-el-/ has the semantic reading of "reason", the position immediately to the right of the verbal complex must be occupied by the object NP that contracts a reason — semantic relationship with the verb. In other words, this NP must be NP2 while NP3 must be the one that is the direct object;

(ii)   in addition to the word order constraint mentioned in (i), NP3 must obligatorily be incorporated in the verb; once this is done, the sentence is disambiguated for any other competing semantic reading or interpretation, except the idea of "performance of an action for a reason". This claim about disambiguation by means of the incorporation of NP3 in the verb, can further be confirmed by the ambiguity which is found in the sentences in 70.

70.   *Índoda ibámbela úmónákalo ïinkomó*
        'The man impounds the cattle for the damage'
        Lit. 'The man impounds for damage cattle'

Firstly, there are no compelling reasons to assign the reason interpretation to any of the co-occurring object NPs above. Secondly, one cannot say with certainty which object NP should be given the benefactive interpretation, should this reading be preferred. It is equally difficult to choose an NP for the direct object interpretation. In fact, a benefactive interpretation for NP2 is automatically ruled out by the semantic feature [— animate], at least in this context, cf. Morolong & Hyman (1977: 201).

In Wilkes (1978: 70 *et seq.*) the Reason and the Goal (i.e. Purpose) case relations are subsumed under one semantic case relation, namely the "Reason/Goal". The following examples are used to exemplify the "Reason/Goal" case relations:

71.(a) *Wayengasithandeli lowomculo*
                    (Noun-object, Reason)
        (He did not like us because/for THAT SONG)
    (b) *Sisebenzela imali kuphela* (Noun-object, Goal)
        (We work for money only)

(c) *Bagijimela ikuginga ikofi* (Sentential-object, Goal)

(They run (for) TO GULP DOWN COFFEE)

Wilkes (1978: 70 *et seq.*) does not say explicitly why he subsumes "reason" and "goal" under one case relation. Yet in the examples he gives, (a) is said to have a reason case relationship, while (b) and (c) are said to have goals. One can only infer that Wilkes probably realised the problem which is sometimes found in attempting to distinguish reason from goal (or purpose) relations. Consider the following sentences:

72.(a) *Utítshala ubabéthela úkúcula ábafúndi*

'The teacher beats the students for singing/so that they may sing'

(b) *Úmzáli ubabizéla úkúcula ábántwana*

'The parent calls the children because they have been singing/so that they can (come and) sing'

The choice of either reason or goal in these sentences can only be determined by recourse to discourse considerations. The */-el-/* extended verbs can be used to express either reason or goal. This could possibly explain why Wilkes (*op. cit.*) decided to put reason and goal under one case relation.

In spite of the ambiguity of the above sentences in 72 for reason and goal (purpose), I propose that there are still enough grounds for separating reason and goal. It seems reasonable to propose that the ambiguity between reason and goal (purpose) is encountered only in those cases where the **infinitive** is used. Consider the examples in 72 above. In all other cases this ambiguity disappears. Compare the following sentences:

73.(a) *Índoda izibámbela úmónákalo íinkomó*

      NM   + AC   + AC

      AGT   + RSN   + OBJ

'The man impounds the cattle for the damage'

(b) *Utítshala ubabéthela ízōno ábafúndi*

      + NM   + AC   + AC

      + AGT   + RSN + OBJ

'The teacher punishes the students for their sins'

Evidently, the above sentences indicate that when /-el-/ has the semantic reading of "reason", the direct object NP (e.g. *ĩinkomó* and *ábafûndi* in (a) and (b) respectively) must be incorporated in the verb. In this way the idea of the performance of an action for a reason, is disambiguated. The fact that the incorporation of the direct object disambiguates such sentences as those in 73, is further attested by the ambiguity in the following sentences where the direct object has not been incorporated in the verb.

74.(a) *Índoda ibámbela   úmónákalo   ĩinkomó*
   + NM   + AC   + AC
   + AGT   ? { + DAT-BEN ? + OBJ
                   + RSN }

(b) *Útítshala ubéthela ábafûndi   izĩbala*
                  + AC   + AC
            ? + DAT-BEN ? + OBJ

Firstly, there are no compelling reasons for assigning the feature [+ REASON] to any of the co-occurring "object" NPs in 74 above. Secondly, all the above co-occurring "object" NPs are ambiguous; one cannot say with certainty which one should be marked as object and whether the remaining "object" NP should be marked for Dative-(-Benefactive) or Reason. In fact, the whole thing becomes more complicated when one of the NPs involved has the feature [+ animate] while the other is marked [− animate].

Wilkes (1978: 70) then points out a very important feature of what he refers to as the "Reason/Goal" objects. He says that:

"Reason/goal objects differ syntactically from dative/benefactor objects in that they may be preceded by accusative objects and thus be separated from the verb carrying their case marker ..."

Logically and semantically the NPs marked [− animate] cannot be marked [+ Dative-Benefactive], cf. Morolong and Hyman (1977: 201). If one takes the logical step that is determined by the "... semantics and pragmatics of communication ...", *a la* Morolong and Hyman (*op. cit.*), then grammatically there will have been no attestable rule that takes care of such an operation.

6.28 PERFORMANCE OF AN ACTION AT A PLACE
The following sentences indicate the idea of "performance of an action at a place":

75.(a) *Ábántwana batyéla úkutyá éndlwini*
      NP1   VP   NP2   NP3
      'The children eat food in the house'

  (b) *Ábántwana bafúndela izíbalo éklásini*
      NP1   VP   NP2   NP3
      'The children read (study) maths in the classroom'

The semantic relation that obtains between the verb and NP3, is that of locative. This case relationship is morphologically marked. There is also a strict word order constraint which determines the sequence of the post-verbal NPs. Once again the general rule of the incorporation of the object NP for matters of definiteness and focus, cf. Louw (1963b: 147) comes into play. If none of the post-verbal NPs is incorporated in the verbal complex, the sequence of these NPs is of the following nature.

              NP2   NP3
  _____
     (Direct object)   (Locative)

where the underscore _____ indicates the position of the co-occurring verb.

If the direct object is incorporated in the verb, the word order is affected. Compare the following structure:

              NP2   NP3
  _____
     (Locative)   (Direct object)

The sentences in 76 below exemplify the structure above:

76.(a) *Ábántwana bakutyéla éndlwini úkutyá*
      NP1   NP2   NP3
      Lit. 'The children eat in the house the food'
      'The children eat (their) food in the house'

  (b) *Ábántwana bazifúndela éklásini ízifúndo*
      'The children do their lessons in class'
      Lit. 'The children do in class their lessons'

Consider the sentences below:

77.(a) *Ábántwana bakutyéla úkutyá éndlwini xa imvula isina*

       NP1   VP   NP2   NP3

       'The children eat food in the house when it rains'

  (b) *Ábántwana bazifúndela izíbalo éklásini xa imvula isina*

       NP1   VP   NP2   NP3

       'The children are doing sums in class on their own when it rains'

In 77(a) the OC *-ku-* incorporates NP2 in the verb and *-zi-* in 77(b) incorporates NP2. Further research proved that the earlier conclusions arrived at were based on what Schoorl (1978: 331) calls "exhibitory occurrences". In other words, I had earlier worked in total disregard of pragmatic occurrences of the expressions in 77.

6.29 LOCATIVE

The locative case relation is assumed to identify the location or spatial orientation of the state or action identified by the verb. It is important to stress here that the semantic feature of "location or spatial orientation of the state or action identified by the verb" will at once be brought into prominence by the extension *-el-*. Following Fillmore (1968: 25), De Guzman (1976: 42) and Louw (1971b: 16), it is further assumed that locational and directional elements do not contrast. In Xhosa there is ample evidence that the differences between these two elements can be determined by the character of the associated verb. That is why it has been easy for many grammarians to distinguish between locational and directional uses of the locative case relation.

A study of the locative relation is generally centred around the following types of sentences:

6.29.1 A-sentences with *-el-* extension

78.(a) *Úmntwana wâbalekélá ébhédini*

      'The child   ran to   the bed'

  (b) *Ámádoda âbuyélá   ezíndlini*

      'The man returned to the houses'

  (c) *Útitshala   uphúngela   ékomítyini*

      'The teacher drinks from the cup'

  (d) *Úmamá   utyéla   étáfîleni*

      'Mother   eats at   the table'

6.29.2 B-sentences (verb without /-el-/)

79. (a) *Úmntwana   wâbaleká ébhédini*
        'The child   ran   on the bed'
    (b) *Ámádoda âbuyá   émízini*
        'The men returned from the houses'
    (c) *Útítshala   uphúnga ékomítyini*
        'The teacher drinks from the cup'
    (d) *Úmamá   útya étáfíleni*
        'Mother eats at the table'

The argument put forward by Cole (1975: 202-203) (for Tswana) is that:

(i)   in the case of the A-sentences where the verb is extended by /-el-/, the action of
         the verb takes place outside of, but is directed towards or into, the area defined
         by the co-occurring locatives;

(ii)   in the case of the B-sentences (where the verb is underived), the action of
         returning takes place within the area defined by the co-occurring locative NPs.

Compare also Van Eeden (1956: 670) who says that sometimes the co-occurring loca-
tive NP in the A-sentences, is emphasised.

The arguments of Cole (1975: 202-203) and Van Eeden (1956: 67), are disputed by
Wilkes (1976: 150 *et seq.*). In rejecting the interpretation of Cole (1975) and Van
Eeden (1956), Wilkes (1976: 151) says:

> "Wat skrywers egter hier uit die oog verloor, is die feit dat lokatiewe naam-
> woorde in Zulu nie altyd aangewend word om lokaliteit in die ruimtelike sin
> van die woord weer te gee nie. Hulle kan naamlik ook lokaliteit as plek (in die
> saaklike sin) beteken. Hierdie feit blyk veral duidelik by plekname wat gewoon-
> lik in lokatiewe vorm gebruik word, selfs in gevalle waar hulle plek en nie ruim-
> te nie, impliseer ..."

With regard to sentences like those in A and B above, Wilkes (1976: 151) then argues
as follows:

(i)   the locative NPs in the B-sentences must be interpreted as illustrating the basic
         (unmarked) semantic function of such NPs, in other words:

"... nie 'n plekfunksie ... nie maar 'n lokaliteitsfunksie, dit wil sê om by of in so-en-so 'n plek aan te dui ..."

(ii)   as far as those "locative" NPs in the A-sentences are concerned, Wilkes (*op. cit.*) argues that in order to change their locative function into that of "place function" [plekfunksie], Zulu, and many other Bantu languages employ the extension /-el-/.

As he puts it, *vide* Wilkes (1976: 151):

"Ten einde nou die lokaliteitsfunksie van hierdie woorde in 'n (saaklike) plekfunksie te verander, maak Zulu (en baie ander Bantoetale) gebruik van die (applikatiewe) werkwoordagtervoegsel -el-, of anders gestel, die agtervoegsel -el- tree in hierdie gevalle op as merker van die plekfunksie van lokatiewe naamwoorde."

Wilkes (*op. cit.*) no doubt shows great insight into the finer semantic differences between the A and the B-sentences. But it is felt in this thesis, that his in-depth analysis could still fail to convince a reader. It is felt that the terms "lokaliteitsfunksie" and "plekfunksie" could have been explained further for the simple reason that both the term "locality" and "place" are not altogether alien to the analysis of, especially, locatives and functions of locatives.

In the next few pages an attempt will be made to explain, in simpler and more practical terms, the function of the locative NPs in the A-sentences. In many cases the locative case relation (indicated by V + el + Loc NP) covers the following nuances:

(i)   to denote motion proceeding towards an object apprehended as the goal of the motion in cases in which the motion reaches the object (or a point in such immediate proximity to it as to admit of the conception of the object as reached by the motion). Consider the following examples:

80.   *Wâbalekelá ébhédini (wafîka wée ncwaba)*
        'He/She ran to the bed (and slept flat (on it))'

        In the above sentence, either of the two interpretations referred to in (i) above, may be preferred after all the possible discourse considerations have been taken into account.

(ii) another nuance that may be denoted by this case relation, is that a motion which reaches an object (or a point in immediate proximity to the object) apprehended as the ending point of a preceding motion. The verbs on which this interpretation depends, denote the act of reaching, not the motion by which the reaching was effected. In other words, this nuance indicates the limit of a motion. Consider the following examples:

81. *Mxelêle aphúmelé ébáléni sílwe*

'Tell him to come out to the open (space) so that we can fight it out'

82. *Uproféisa akávúmi ndifíkelé ésiphelwéni sálé thísisi*

'The professor does not want me to come to the end of this thesis'

(iii) Another nuance of the locative case relation is that it can denote motion that enters into the interior of the body or surface thought of as the goal or ending point. Compare the following examples:

83. *Umfúndisi uxhabáshela ésítadi*

'The pastor rushes to the study/into the study'

84. *Izinjá zábalekelá éndlini yâkuna*

'The dogs ran into the house when it started raining'

(iv) This case relation may also be used to denote extension when the complement indicates the ending point or limit of something thought of as extending. Compare the following examples:

85. *Mtshákazi, thwaléla íqhíya éméhlwéni, kusáhlónítshwa kwêli khâya*

'Bride, please stretch your doek to the eyes, we still observe hlonipha in this family'

86. *Amádoda ánézísu ézikhûlu abhinqéla ezinéneni*

'Men with extended stomachs tighten their trousers below those tummies'

(v) This case relation may also indicate that a motion not only proceeds and reaches an object, but may further suggest moving or moved into physical contact with the object.

87. *Ínxilá lâwelá émánzíni*
'The drunkard fell into the water'

(vi) It may be used of motion or direction towards a goal without implication of actual reaching. Either the expression denotes a motion not implying reaching, or it denotes an imaginary motion followed by imaginary reaching, or it denotes a simple relation of direction, or the complement is of such a kind as not to admit of reaching, e.g.:

88. *Thambekéla ékhohló*
'Lean to the left'

89. *Ndiwaphakamisela ezintábeni áméhló ám*
'I lift my eyes to the mountains'

90. *Ndâlilelá kû Yehóva ngélizwí lám; ndáméméza kú Yehóva ngélizwí lám*
'I cried out to Jehovah with my voice; and called out to him with my voice'

(vii) In other cases the task of this relation may not only be to indicate position or static location (plekfunksie), but also to suggest where the end-point of a motion lies since there has been a motion — this nuance could be called "end-point relation" or "static location", e.g.:

91. *Ndifúndela éófísini*
'I study in (my) office'

92. *Sidlaléla ébáléni*
'We play in the playgrounds'
This is what Pahl (1978: 401) refers to as "performance of an action at a place".

(viii) Once again, when all discourse considerations have been taken into account, the V + *el* + Loc NP construction may be used to indicate that the locative NP is conceived of as a source or place of origin from which something arises, issues, or is fetched. Here there is no stress on motion proceeding from the source; rather the source is just stated as the point or centre where something

takes its origin, rises, has its beginning, **springs** or is derived. The source may be indicated in a general way, as in 93(a) below:

93.(a) *Basúkela éthwathwa ...*

'They start from far away'

(b) *Siza kufúnda sitháthelé ephépheni lésíne síye kumá ápho íNkósí íthí masíme khoná*

'We shall read from page four and stop where the Lord tells us to stop'

6.30 DELETABLE NPs

Let us consider the following sentences where some object NPs have been deleted:

94.(a) *Ábántwana* { *batyéla / báyatyéla* } *éndlwini*

'The children' { eat / do eat } 'in the house'

(b) *Ábántwana* { *bakutyéla / báyakutyéla* } *éndlwini*

'The children' { eat (food) / do eat (food) } 'in the house'

The above examples demonstrate that where the semantic reading "performance of an action at a place" is preferred, the direct objects become optional; this applies whether such an NP is incorporated or not in the verb.

6.30.1 Non-deletable NPs

The direct object of the /-el-/ extended verbs in 95 and 96 below, may have the following nuances:

(i) It may denote something that happens to one. This action may be neutral or to one's advantage or disadvantage. Compare the following examples:

95. *Izíhlangú zâlahlekelá ábafûndi ngémíni yézémidlâlo*

'The shoes got lost to the students on the sports day'

96. *Úbúthongo bâphuthêlá ábafúndi bônke bákuvá ngókuswéleka kómnye wâbo*
'Sleep eluded all the students when they heard about the death of one of them'

(ii) It may denote what Louw (1971b: 7) refers to as the factive. Louw (*op. cit.*) defines the factive as follows:

> "... the factive indicates the complementary fact to which the process or action of the predicates transits, brings up, or brings forth — to give some possibilities of this relationship."

The following examples are meant to illustrate this fact:

97. *Útítshala uxélela ábántwana*
'The teacher tells the children'

98. *Amákhwenkwé aválela íinkomó ébúhlánti*
'The boys shut the cattle up in the kraal'

99. *Índoda élúmkíléyo itshixéla ímalí éséfini*
'A wise man locks (his) money in the safe'

100. *Lé mpéndulo ifanelê úmntu óngangáwe*
'This answer suits a person of your age'

101. *Lé táfile ílungelê íófisi énkúlu*
'This table is fit for a big office'

(iii) Depending on the semantic context of the verb, this case relation may denote doing something in excess, in other words overdoing it. Compare the following examples:

102. *Ábántwana bafumbéla íingubo xá bélála ébusíka*
'The children heap blankets when they sleep in winter'

103. *Amákhwenkwé angálíséngelá íthole úkúbá ákayalelwánga kákuhlé*
'Boys could milk (a cow) excessively to the disadvantage of the calf if they are not given proper instructions'

195

104. *Ísithêthi sâqokélá ámazwĩ ámanĩnzi ngêxêsha élifútsháne*
'The speaker said many words within a short time'

(iv) This case relation may also be used to indicate an action that is directed at a person or thing. Compare the following examples:

105. *Íxhwêle lâcebĩsá úkúbá úmninĩmzi makaduntsúlelé úmṅyangó ángená ngáwo ámagqwĩrha xá éléléyo*
'The witch-doctor advised that the head of the family should stick his behind towards the door that is used by the witches when he is asleep'

106. *Súkúméla ábántu ngáthi ngámábanjwá*
'Don't stand over people as if they are prisoners'

There is also a class of verbs which are derived from other parts of speech by means of the suffix */-el-/*. Accusative NPs which co-occur with these verbs are usually also in the objective case relation. Specifically they show the factive nuance of the objective case relation.

Compare the following examples:

107. *Ábángcatshi bayelénqela úkumkâni*
'Traitors plot against the king'

108. *Ísĩyatha simónela úmhlobo wâso*
'A fool envies his friend'

109. *Ló msebênzi úyawanzĩmela ámádoda*
'This work proves difficult for men'

6.31 THE EXTENSION */-el-/* AND THE INSTRUMENTAL
The use of */-el-/* verbs with instrumental NPs is very restricted. In fact, one could even propose that it is limited to some idiom-forming verbs only. Consider the following example:

110. *Ábafúndi bathembelê ngótĩtshala kúlé ngozi*
'The students trust the teacher in this danger'

In other words, the teacher is the means whereby the action of the verb is achieved. Normally, one would say:

111.   *Ábafúndi bathembelê kútítshala*

'The students have confidence (trust) in the teacher'

Taverner (1977: 138-139) says about idiom-forming verbs:

"... verbs vary in the readiness with which idioms are formed from them, and that as a general rule those most productive in idiom formation tend to be highly frequent, to have a wide variety of meanings and, in some instances, a dual syntactic function, although possession of one such property is no indication that a verb will have another to the same degree. The verbs most productive in the formation of idioms appear, for the most part, to have a central meaning involving possession or location ..."

For further details about idioms and idiom-forming verbs, within a case grammar analysis, the reader is referred to Taverner (1977).

6.32   INDIRECTIVE APPLIED VERBS

The term "indirective applied verb" has been adopted from Kisseberth and Abasheikh (1977: 192-193). In their words:

"... this term is intended to indicate that the action expressed by the basic verb is directed toward someone or something. We shall refer to the NP that is dependent upon the indirective applied verb as the 'indirect' NP."

This term has been found useful for the use of the applied verb in Xhosa,

"... to denote that the object of the predicate is the target of the action of the verb, in other words, that the action of the verb is aimed at the object."

Pahl (1978: 402)

Consider the following sentences:

112.(a) *Índoda iválela ῖinkomó*

'The man locks up the cattle'

(b) *Ísítyebi sitshixéla ῖmalῖ*

'The rich man locks up the money'

One of the first things one should observe here, cf. Kisseberth & Abasheikh (1977: 193) is the fact that the /-el-/ extended verbs above allow only one object NP. *iinkomó* (cattle) and *ímalí* (money) in the above sentences are dependent on the applied verbs *iválela* and *sitshixéla* respectively. The term "dependent" is used in the sense of Epée (1976: 56).

Now compare the following sentences:

113.(a) *Índoda ivála ûthângo*
       'The man closes the kraal'
But
    (b) *Indoda ivala iinkomo*
    (c) *Isítyebi sitshíxa ítyési*
       'The rich man locks the kist'
But
    (d) *Isityebi sitshixa imali*

Taken together with the sentences in 112, the above sentences in 113 show that whereas the basic verb allows an object NP whose referent is the actual thing on which the action denoted by the VP is performed, the applied verb permits only the object NP whose referent is indirectly affected by the action of the basic verb. In other words, in 112, for instance, the man/*índoda* locks/-*vala*, possibly a kraal so that the cattle/*iinkomó* are locked in — i.e. indirectly affected by the action denoted by -*vala*/close or lock. *isítyebi*/rich man in (b) locks/-*tshíxa*, possibly a safe, so that the money/*ímalí* is locked in the safe/*ítyési*.

6.33 SUMMARY

Like all the other productive extensions, /-el-/ is systematically ambiguous for a set number of meanings. The exact meaning required can only be specified in context by means of numerous strategies that the Xhosa language provides. /-el-/ indicates the following major significances:

(a)   performance of an action in someone's interest;

(b)   performance of an action for an aim or purpose;

(c)   performance of an action for a reason;

(d)   performance of an action at a place.

6.34 THE SEMANTICS OF EXTENSION /-is-/

6.34.1 Introduction

Much research has been done cross-linguistically on the phenomenon of causativity. The study of causative constructions has revealed the extent of interaction of some components of the grammar like morphology, syntax and semantics, cf. Comrie (1981: 158) and Mchombo (1978: 133 ff.). As Comrie (1981: 159) puts it:

> "... one of the reasons for the recent intense interest in causative constructions is that their study involves the interaction of formal syntax and semantic analysis, and in many instances, the correlation of formal and semantic parameters."

The importance of the study of causative constructions could further be proved by the fact that it resulted in the development of Generative Semantics, cf. Comrie (1981: 158) and Mchombo (1978: 133). More details about the causative within a Generative Semantics framework can be found in Faber (1976) and in Seok Yang (1976).

6.35 THE NATURE OF A CAUSATIVE SITUATION

Following Comrie (1981: 158-159) the causative situation could be characterised as follows:

> "Any causative situation involves two component situations, the cause and its effect (result)."

In terms of Comrie (*op. cit.*) the following situation or scene could be used to illustrate this fact:

114.(a) *Úprofèsa ufúna ĩthĩsisi éphucukiléyo*

    'The professor wants a good thesis'

  (b) *Ngôko ké úmfúndi ufúnda ĩĩncwadĩ ézinĩnzi*

    'As a result the student reads many books'

In Comrie's (*op. cit.*) terms, the demands of the professor cause the student to read widely. To quote him (1981: 158) directly:

> "These two micro-situations thus combine to give a single complex macro-situation, the causative situation."

The macro-situation in Xhosa could be expressed by combining the two sentences thus:

115. *Úkufúná kukáprofésa íthísisi éphucukiléyo kuménza úmfúndi áfundé ííncwadí ézinínzi*

   'The professor's demand for a good thesis makes the student read many books'

Usually, this whole exercise is summarised in such a way that sentences 116 and 117 below are realised.

116. *Úprofésa wénza úmfúndi áfundé ííncwadí ézinínzi*

   'The professor makes the student read many books'

117. *Úprofésa ufúndisa úmfúndi ííncwadí ézinínzi*

   'The professor makes the student read many books'

In both sentences 116 and 117 it is clear that the cause is the professor's demands and the effect (result) is the student's wide reading. A close study of sentence 115 above shows quite clearly that this sentence has more information than 116 and 117. In the latter, it is not stated clearly what sort of behaviour by the professor results in the hard work of the student, cf. Comrie (1981: 159). Comrie then goes on to explain:

> "The characterisation of cause given above is essentially independent of structural parameters, and there are in fact a number of ways of expressing such a causative situation in English and other languages, such as the use of causative or resultative conjunctions (because, so that) or prepositions (because of, thanks to), the use of a separate predicate of causation, (. . .), or of a predicate that includes within itself the notion of cause ..."

6.36 TYPES OF CAUSATIVES

Linguists, cf. Comrie (1981: 160-161) distinguish the following types of causatives on the basis of their formal parameters:

6.36.1 Analytical causative

In Comrie's (1981: 160) terms:

> "The prototypical case of the analytical causative is where there are separate predicates expressing the notion of causation and the predicate of the effect ..."

Perhaps the best example to illustrate this in Xhosa, involves the use of the verb stem *-enza* — 'make, cause to'.

Consider the following sentences:

118. *Índoda yénza úkúbá ísígebénga sífe*
     'The man causes the cannibal to die'

119. *Ísígebénga sibuláwa yíndoda*
     'The cannibal is killed by the man'

120. **Indoda ifisa isigebenga*

121. **Isigebenga sifiswa yindoda*

In terms of this type of causative, the above examples would be interpreted as demonstrating one of those instances in Xhosa where the causative macro-situation is handled by means of *-énza*.

6.36.2 Lexical causatives

This refers to those:

> "... examples where the relation between the expression of effect and the expression of causative macro-situation is so unsystematic as to be handled lexically, rather than by any productive process."
>
> Comrie (1981: 161)

The best examples for Xhosa suppletive pairs are perhaps the following:

122. *-bulála*   versus   *-fá*
     'kill'   'die'

Comrie (1981: 161) states that:

"Suppletion forms the clearest instance of lexical causatives in that there is, by definition, no regularity to the formal relationship between the two members of the pair."

6.36.3 Morphological causatives

Comrie (1981: 160) characterises this type as follows:

(a) the causative form and its non-causative counterpart are related by morphological means, e.g. affixation or any other morphological means that the language in question may employ;

(b) "The second characteristic of the prototypical morphological causative is that the means of relating causative and non-causative predicates is productive: in the ideal type, one can take any predicate and form a causative from it by the appropriate morphological means."

Comrie (*op. cit.*)

Comrie (*op. cit.*) goes so far as to claim that in languages like Turkish, it is possible to:

"... take pretty well any verb and form a causative from it, and can even form causatives of causatives ..."

This fact is attested in many Bantu languages that I am acquainted with. In Xhosa, for instance, one could take -*va* 'hear' and form -*visa* 'make/cause to hear'; and further take -*vis*- as the basic form for the same process, and derive (cf. Chapter 3):

123. | -*visis*- | 'hear well' |
-*cingisis*-	'think well'
-*qondisis*-	'understand well'
-*cacisis*-	'explain well'

Referring to the iterativity or recursive application of causative suffixes in those languages where this occurs, Comrie (*Ibid.*) claims quite rightly that:

"However, there are limitations on the iterativity of this process, so that long chains of causative suffixes, though occasionally found illustrated in manuals, are of marginal acceptability in the language. In this sense there is probably no language that illustrates the pure prototypical morphological causative, with unrestricted iterativity of the relevant morphological process."

Although an attempt has been made above to isolate three types of causative constructions, one does come across some problem areas which do not seem to fit properly in any one type, cf. also Comrie (1981: 161-162). Consider the following examples from Xhosa:

124. *Útítshala undénza ndifúndisé ábántwana*
     Lit. 'The teacher makes me cause the children to learn'

Superficially, sentence 124 appears to be an unequivocal analytical causative: there are two separate predicates:

(i)   *-énza*   (make/cause) which expresses cause;
and
(ii) *-fúndis-* (cause to learn), which expresses the effect.

The apparent unequivocal nature of sentence 124 soon disappears once one looks at the morphological structure of *-énza* and *-fúndisa*. It becomes apparent that the verb *-énza* which is an introducer of analytical causatives, is followed by a verb which has been extended morphologically by the causative suffix */-is-/*.

In rounding off this section, it should be pointed out that even Comrie (1981: 163) in his typological study, also discovered that there are causative constructions which could be described as:

> "... constructions intermediate between the ideal morphological type and the ideal lexical (suppletive) type, in particular examples where there is a clear formal relationship between the predicates used to express effect and to express causation but no regularity to this formal relationship."

Consider the following pair in Xhosa:

125. *-bulála*   *-fá*
     'kill'   'die'

Now compare the following:

126. *-bulálisa*   :   'to make to kill' or
                        'to make to be killed'

Compare also the following sentences:

127.(a) *Úza kundibulálisa ngétyhéfu*

'You are going to make the poison kill me'

Cf. (b) *Úza kundibulála ngétyhéfu*

'You are going to kill me with the poison'

128.(a) *Úza kundibulálisa úmfazi wakhé ngétyhéfu*

'He is going to make me kill his wife with poison'

(b) *Úza kubulála úmkâkhe ngétyhéfu*

'He is going to kill his wife with poison'

6.37 CAUSE, CAUSER AND CAUSEE

The growing number of articles that are appearing on the semantics of the causee, indicate the importance that linguists attach to this semantic category. Kashi Wali (1981: 302) proposes that:

> "... the central issue that needs to be crucially focussed upon, is the grammatical relation of the C.S. NP [Causative Subject NP ... S.C.S.], the causee, IN CONNECTION WITH THE CAUSAL VERB ITSELF, AND NOT IN ISOLATION OR AUTONOMOUSLY as suggested in the proposals by both Comrie and Cole."

Kashi Wali (*op. cit.*) stresses that it should be recognised that the causative verb contracts a syntactic and semantic relation with its NPs. These syntactic-semantic relations do not exist in isolation, but should always be viewed as closely knit relations between the */-is-/* extended verbs and the relevant NPs.

Wali (1981: 302) quotes the ancient Indian grammarians of the Paninian school, who maintained that:

> "... the primary meaning of the causal morpheme is: THE ACTIVITY OF APPOINTING OR EMPLOYING AN AGENCY TO GET A CERTAIN TASK DONE."

Referring to Xhosa as such, Pahl (1978: 403) would appear to agree with the above words. He identifies the following as the "primary functions" of the causative in Xhosa:

(i)   "to cause someone or something to perform the action of the verb."

Compare the following examples:

129.(a) *Úṁfâzi uhlékisa ûsána*

     'The woman makes the child laugh'

OR   'The woman causes the child to laugh'

   (b) *Índoda ibalékisa iháshe*

     'The man makes the horse run'

The NPs *úṁfâzi* and *índoda* in sentences 129(a) and (b) respectively, are the "causers" while *ûsána* and *iháshe* are the causees. Both *ûsána* and *iháshe* in 129(a) and (b) respectively, are made (caused) to perform the action that is denoted by the verb *-hleka* and *-baléka*.

Sanskrit grammarians, according to Wali (1981: 303), maintainted that:

> "... a causal verb form expresses two activities: the base activity denoted by the verb root and the causation denoted by the affix. Corresponding to these two activities they posit two agents: KARTRU, the agent of the base activity; and HETU, the agent of the causation. Hetu, also known as PRAYOJAK (a planner), is regarded as the principal agent while Kartru is taken to be a subsidiary agent, a PRAYUJYA (meaning a mediator or a cause)."

Commenting on these terms which the Sanskrit grammarians used, Wali (*op. cit.*) says that if one recognises them, then some vexed questions about the:

> "... intricate relationships between the causal verb, the causer and the causee ..."

- could be resolved.

The exposition of the Sanskrit grammarians, as outlined above, offers some valuable insights into our analysis of Xhosa causatives. Although it would not be advisable to embrace the Sanskrit terms referred to above, some modifications of them for Xhosa data would resolve some problem areas. The application of some ideas gained from the above references, could be as follows:

(i)   the syntactic subject which is invariably the planner or designer or unmoved mover could be considered the prime agent;

(ii)   the causee would then be regarded as the "causee agent".

The syntactic subjects *úmfâzi* and *índoda* in sentences 129(a) and (b) respectively, could then be referred to as the prime agents. The syntactic object NPs *úsána* and *îháshe* would then be referred to as the causee agents in sentences 129(a) and (b) respectively. These semantic designations are closely tied up with the relationships that these NPs have contracted with the causative verbs. It is also important to note here that there is a strict non-identity constraint between the prime agents and the causee agent. Consider the following examples:

130.   *Úmfâzi uhlékisa úmfâzi*

       NP1   NP2

       'The woman makes the woman laugh'

where NP1 and NP2 are co-referential. In Wali's (*op. cit.*) terms there is an undeniable close relationship between the non-identity constraint and the employee function of the causee agent. As he puts it (*vide* 1981: 303):

> "Employment of oneself is semantically odd though it is possible to force or coerce oneself into doing something."

The above remarks should not be interpreted as denying the possibility of the co-occurrence of /-is-/ extended verbs with the reflexive formative -*zi*-. Consider the following examples:

131.(a) *Úmfúndi uzibéthisa ngótítshala*

       'The student exposes himself to the teacher to beat him'

  (b) *Ínjá izibhúdlisa ngómôya*

       'The dog exposes itself to the wind to blow it'

The above examples show quite clearly that where the reflexive formative is employed, it is obligatory that the causee agent must be specially marked by the instrumental case marker *nga* +. Semantically, the instrumental case marking denotes that the causee agent should be interpreted as the means whereby the action of the verb is achieved.

There are other syntactic environments where the instrumental case marking of the causee agent is also obligatory. Consider the following examples:

132.(a) *Òontamnaní bagxothísa ábánye ábafúndi ngénqúnunu*

           NP1   NP2   NP3

       'Informers make the principal expel other students'

   (b) *Ábántwana babéthisa ínjá ngénkwenkwé*

           NP1   NP2   NP3

       'The children cause the boy to beat the dog'

In the above sentence, the noun that occupies the slot immediately after the /-is-/ extended verb, is the direct object (DO). Semantically it is the actual experiencer of the action of the verb. The "employee function" of NP3, the causee agent is case marked with *nga* +. This case marking particularly indicates the role of the causee agent as a means whereby the action of the verb is achieved. This is true of both sentences (a) and (b) in 132 above. A more literal translation of sentences (a) and (b) in 132 would clearly bring out the nuances in these sentences:

(a)   "Informers cause other students to be dismissed by the principal."

(b)   "The children cause the dog to be beaten by the boy."

Commenting about a similar situation in Swahili, Scotton (1967a: 122) says that:

"... it is the causation which is passivised, not the action of the verb."

Elsewhere, Wali (1981: 303) adds that it is the "employee function" of the causee agent which:

"... often transforms into an instrumental or a passivised agent without invoking the *ad hoc* machinery of the passive rule."

Variations of the sentences given in 132 above will be given in 133 below.

133.(a) *Òontamnaní bagxothísa ínqúnunu ábánye ábafúndi*

       'Informers make the principal dismiss other students'

   (b) *Ábántwana babéthisa ínkwenkwé ínjá*

       'The children make the boy beat the dog'

In other words, where there is manipulation of the causee agent, the latter turns up as a patient or experiencer. It should be noted also that the causee agent as a manipulated or delegated or employed agency, surfaces as an indirect object (or Dative).

For details about sequential constraints on direct and indirect objects, the reader is referred to paragraph 6.23. Wali (1981: 305) raises an important point which affects not only /-is-/ extended verbs but also all the other extended verbs that are treated in this thesis. He says that the employee-employer relation which is postulated between a causer and a causee, may pose some subtle problems of interpretation with certain verbs. Consider the following examples from Xhosa:

134.   *Úgqirha uphefúmlisa isigúlana*

Depending on the pragmatic-semantic function of the causee agency employed, the sentence above can have the following interpretations:

(i)   'the doctor instructs the patient to breathe';
(ii)   'the doctor assists the patient in breathing';
(iii)   'the doctor uses the/a patient for breathing'.

These subtle differences in semantic readings can only be brought out by semantic-pragmatic considerations. On this basis, therefore, the causee agent in (i) could be interpreted as an "instructee", cf. Wali (1981: 303); the causee agent in (ii) could be interpreted as being involved in an "assistive" relationship or type of causation. The term "assistive" is used in the sense that Pahl (1978: 402) uses it. Lastly, the causee agent could be interpreted as having an "employee function"; in other words, it is employed as an agency to carry out the task indicated by the verb.

In addition to the use of semantic-pragmatic phenomena to decode sentences like the one in 134 above, one could also recall what Chafe (1970: 97) said, namely that:

> "... the nature of the verb determines what the rest of the sentence will be like; in particular, that it determines what nouns will accompany it, what the relation of these nouns to it will be, and how these nouns will be semantically specified."

6.38   TYPES OF CAUSATION

6.38.1 Transitivising function

There is a class of verbs where the attachment of /-is-/ merely serves to transitivise those verbs. Where this happens, the subject of the verb manipulates the object. Most important is the fact that the object is not viewed as causee agent but rather as a patient. Compare the following examples:

135.(a) *Úmfúndi uphakámisa ísándla*

'The student puts a hand up'

   (b) *Íntombazána ikhányisa ísíbane*

'The girl lights the lamp'

In terms of Van Rooyen (1973: 120) these can be interpreted as follows:

(i)   the basic verb stem *-phakáma* indicates a change of state, cf. Chafe (1970: 95);

(ii)   the NP that undergoes this change of state is the object NP *ísándla* which is the patient in semantic terms, cf. Wilkes (1971: 120). Van Rooyen states that because of the addition of the agent NP (*úmfúndi*) in sentence 135(a), the process of *úkuphákáma* changes into an action process *úkuphakámisa*.

As far as 135(b) is concerned, Van Rooyen's interpretation is as follows:

(i)   the basic stem *-khanya* 'shine' is stative. As a result, in sentence 135(b) the relationship contracted between the verb *ikhányisa* and the NP *ísíbane* is that of patient;

(ii)   the incorporation of the Agent NP *íntombazâna* changes the stative verb stem *-khanya* into an action-process verb stem *-khányisa*.

Van Rooyen (1973: 119) formulates the following semantic criterion, which he uses in his "... toetsing van die korpus ..."

> "Wanneer 'n werkwoordbasis wat 'n pasiënt as substantief neem, 'n agent tot die sin kan toevoeg, en daardeur self verander na 'n aksieproses, dan is die veranderde werkwoord 'n kousatief-afgeleide werkwoord."

In his study of the causative in Zulu, Van Rooyen (1973: viii) observed as follows:

> "Semantically the criterion calls for a verb which is inherently a state or a process to be changed into an action process. Verbs which are action processes from the outset, naturally do not fit the criterion. Of importance here was also the semantic features of agent, patient, etc. which substantives have, and the relation which such nouns have with the verb."

6.39 /-is-/ PLUS STATIVE VERBS

Consider the following sentences in which stative verbs have been used:

136.(a) *Útywalá bugúlisa ínxĭla*

'Liquor causes the drunkard to be/become sick'

(b) *Íntsangú iphambánisa ábafúndi*

'Dagga makes students mad'

(c) *Ímbaléla ibhítyísa íinkomó*

'Drought causes the cattle to be/become lean'

The causative verbs in 136 in their primary interpretation, express a type of causation that involves causing X to be in a certain state or to enter (become) or to reach a certain state. **To be or to become** will be sorted out by pragmatic-semantic considerations. In most cases the simple verb roots from which these /-is-/ forms originate, are what would generally be called intransitive.

In all the above sentences there is an agent noun, which is also the syntactic subject of the sentence, and the syntactic object which is the patient. The "patient" undergoes the action of the basic verb. Van Rooyen (1973: 118-119) says:

> " 'n Kousatiewe werkwoord word ook verkry deur 'n toestandwerkwoord na 'n aksieproses werkwoord te verander, weer eens deur die voorsiening van 'n agent."

Perhaps the labels used in Xhosa to describe NP1 and NP2 of sentence 136(a) reproduced here as sentence 137(a) for convenience, could help in making our point clear. Consider the following sentence:

137.(a) *Útywalá*   *bugúlisa*   *ínxilá*

    NP1   NP2

    ↓   ↓

⎛ *Umgúlisi*   ⎛ *úmguli*

⎜ i.e. 'one who causes X to be sick'   ⎜ i.e. 'one who is sick'

⎝ (Agent)   ⎝ (Patient)

Note that the semantic designation for the Agent NP is derived from the causative form of the verb as such, while that of the "patient" which is in the state indicated by the basic form (underived) of the verb, is derived from the basic verb stem -gula 'be sick'.

The basic interpretation of the causative sentences in 136 above is that:

" 'X somehow brings about Y's being in a certain ... state'."

Vide Abasheikh (1978: 130). In terms of Van Rooyen (1973: 122) the sentence:

138.   Útywalá bugúlisa ínxilá
        'Liquor makes the drunkard sick'

would be interpreted as follows:

Útywalá is the agent that brings about the state or condition, while the NP ínxilá should be interpreted as the patient of the state verb stem -gula. He (op. cit.) then adds:

"Dit word gesien in die werkwoord ... wat 'n aksieproses as semantiese eienskap het en dus 'n kousatief moet wees."

6.40   CAUSATIVES AND PROCESS VERBS

Consider the following examples in which process verbs have been used:

139.(a) Úmfâzi ubílisa ámânzi
        'The woman boils the water'
    (b) Úmmelwâne uxenga-xéngisa ízínyo
        '(My) neighbour shakes (his) tooth'

In the above sentences the only reasonable interpretation is that the agent NP causes the "patient" or Direct Object (DO) NP to undergo the process indicated by the basic verb.

In Xhosa the semantic designations for the NPs in the above sentences would be as follows:

140. *Úmfâzi*   *ubílisa*   *ámánzi*

      NP1   NP2

    ⎧*Umbílisi*   ⎧*ísíbilíswá*

    ⎩(Agent)   ⎩(Causee)

    'The woman boils the water'

It is significant that one cannot say *ísíbili* if one wants to capture the role of this NP correctly. Compare the designations used in the sentences in 136 above. Note also the selection of the -*w*- ending of the passive when NP2 is semantically characterised in Xhosa.

In terms of Van Rooyen (1973: 123), the NP *ámânzi* is the "patient" that undergoes the process indicated by the underived verb -*bila*, for example in 140. According to this analysis, therefore, the process verb -*bila* is changed into an action-process verb -*bílísa* through the addition of the agent NP *úmfâzi*.

6.41 ACTION VERBS

Let us now consider sentences in which action verbs have been used.

141.(a) *Úmfâzi uphékisa ámántombazáná úkutyá*

    'The woman makes the girls cook food'

    'The woman instructs the girls to cook food'

    'The woman permits the girls to cook food'

    'The woman helps the girls to cook food'

    'The woman compels the girls to cook food'

    'The woman supervises the girls while cooking food'

  (b) *Índoda ibhalísa ábántwana*

    'The man makes the children write'

    'The man compels the children to write'

    'The man instructs the children to write'

    'The man permits the children to write'

    'The man supervises the children while they write' (e.g. invigilator)

    'The man permits the children to write'

The examples in 141 above could be regarded as the prototype of causative forms. As Abasheikh (1978: 130) puts it:

"These are verbs which mean 'X causes Y to verb' (where the verb involves an action verb rather than referring to a mental state)."

It should be noted that causative action verbs may convey the following significances:

(i)   compulsion;
(ii)   manipulation;
(iii)   instruction;
(iv)   permission;
(v)   supervision or overseeing;
(vi)   helping;
(vii)   doing together.

In order to distinguish between these "prototype" interpretations, one could add selected adverbial phrases that help to disambiguate the sentences. For instance, in the case of compulsion *ngénkâni*, by force, could be used; *ngóbuchúle* — 'cleverly' for manipulation, etc. In addition to these adverbial phrases, competent clauses would also help in disambiguating causative sentences for the various nuances referred to above.

Probably the most important thing in this type of causation is that the causee emerges not as an experiencer causee or a patient causee of the stative and the process verbs respectively, but as agent or employee causees. In other words, as Wali (1981: 304) puts it, each of the causes in the sentences in 141 functions as:

"... a mediator NP ('prayujya') ..."

as the executors of the action(s) encoded in the base/underived verb(s).

6.42   SOME SEMANTIC NUANCES IN CAUSATION

In this section, attention will be given to the various nuances that causation may entail for expressive effect. The examples in 142 below should be interpreted as having a slightly metaphorical quality:

142.(a) *Ló mfána undibîsa ímalí yakhé*

    'The youth accuses me of stealing his money'

  (b) *Ámávila asolóko ethakáthisa ízikhúthali*

    'Lazy people always accuse hard workers of witchcraft'

In the first place, it should be emphasised that the use of /-is-/ with the semantic reading of imputation is causative. This type of causation has a metaphorical or figurative bent and its effect lies in the fact that:

(i)   the Agent NP, which is the syntactic subject, makes other people who are not mentioned in any way in the sentence, to believe that the causee does what the verb (i.e. the underived form) denotes. Imputation-causation, in other words, entails the presupposition that people other than the agent (e.g. the general public) are made to believe that the causee NP does what the verb (in its underived form) denotes.

In this type of causation, the expressive and stylistically purposeful effect is achieved by means of the elision of the causee NP in the sentence; semantically, however, the causee NP is most definitely entailed.

Such sentences, therefore, could be described as having the following rule schema:

Agent	:	Verb + *is*	:	Zero Causee	:	Patient
1		2		3		4

(This represents the most neutral structure of the sentence.)

Compare the following sentence:

143.   *Índoda ibǐsa úmfúndisi ímalí*
        'The man accuses the priest of stealing money'

There is another set of verbs which have a metaphorical causation reading. These verbs are singled out because they have been dealt with by other researchers like Van Rooyen (1973: 126) for Zulu. It will be argued below that Van Rooyen's interpretation for *-ehlisa* (descend) (Zulu) cannot be embraced for Xhosa. Consider the following examples:

144.(a) *Índoda íhlisa íntaba*
        'The man goes down the mountain'
   (b) *Índoda inyúsa íntaba*
        'The man goes up the mountain'

Both verbs in the underived form (-*hla* 'descend' and -*nyúka* 'ascend' respectively), have the concept of descending and ascending. When the causative /-*is*-/ is suffixed, the concept of descending and ascending is retained in that the subject (the agent) now performs the action of actually causing the "mountain" to "diminish" in size in front of him, and thus similarly in ascending, thereby causing the mountain to "ascend" or increase in size behind him.

The sentences in 144 above are expressive and stylistically purposeful. Both of them have a slightly metaphorical quality, their effect being based precisely on the conceptualisation outlined above. Compare also the following examples which have been taken from Siwisa (1956: 2):

145.(a) *Kúthê gqi írhaṁncwa élikhúlú lézímvú, údyakálashe, enyúsa intlánjana évelela íthafa êló ézȋbê zȋkúlo íigusha*

'The enemy of the sheep, i.e. the jackal appeared; it was going up the stream that flowed along the veld where the sheep were grazing'

(b) *"Wâphethúká wenyúsa lówo mxéthuká, éhámba étsȋbá ámátye, khangéla"*

'He turned and went up the steep hill, jumping over the stones, can you imagine!'

The conceptualisation of this type of causation as outlined above, is aptly demonstrated in this Short Story of L.K. Siwisa. In this lovely story, the author describes an unusual event when the jackal was "chased" by a lamb. The jackal was moving stealthily towards a lamb which it wanted to kill. When the lamb heard the footsteps, it apparently took it for granted that it was the mother, and jumped towards the jackal. Apparently this was such an unusual behaviour by his prey, that the jackal ran at an incredible speed up the stream, down the stream. The important point here is the incredible speed with which the jackal ran up and down the stream. The causative -*ńyúsa* and -*hlisa* capture this idea of the incredible speed with great effect.

One only has to compare the examples in 145 with the other example which has been taken from St. Matthew Chapter 5.

146. *Wâthí âkuzibóná źihlwéle wenyúka íntaba*

'When he saw the multitudes he went up the mountain'

The appropriateness of:

"... *wenyúka íntaba*"

"... he went up the mountain";

instead of the other competing phrase:

"*wenyúsa íntaba*"

"he went up the mountain"

can only be justified by taking into account pragmatic factors. Sentence 146 can be assumed to be neutral, whereas sentence 145 has some metaphorical quality.

It should be emphasised that the speaker's choice of the *-nyúsa, -hlisa* type of sentences will be determined by the expressive purpose he wants to achieve.

6.43   */-is-/* WITHOUT CAUSATION

Consider the following examples of verb stems:

147.(a) *-bheka*   (b)   *-bhékísa*

     'look back'

                   cause

                   compel

                   manipulate } to look back

                   permit

                   supervise

                   help

          (c)   *-bhékisa*

                 'refer to'

148.(a) *-búza*   (b)   *-búzísa*

     'ask'

                   cause

                   compel

                   manipulate

                   permit }

                   supervise

                   help

          (c)   *-búzisa*

                 'make enquiries'

149.(a) *-fika*   (b)   *-fikisa*

    'come'   cause ⎤

    'arrive'   compel

    'reach'   manipulate

                      permit ⎬

                      supervise

                      help ⎦

          (c)   *-fikisa*

                 'reach puberty'

The (b)-forms in the above examples, are not problematic at all. They are causative in significance. But the (c)-forms have acquired idiosyncratic properties, which cannot clearly be related to causative meanings.

6.44   THE SEMANTICS OF EXTENSION /-w-/

6.44.1 Introduction

The passive has been studied from various points of view by different linguists. However, in spite of this it is still one of the most controversial topics in linguistic studies. Nevertheless, recent studies, cf. Stanley (1975: 25) into the passive, have revealed that:

> "... usage of the passive is determined, not only by syntactic requisites, but also by contextual considerations such as focus and theme."

Stanley (*op. cit.*) further refers to Robin Lakoff (1971), who makes the following observation:

> "... no presently formulated linguistic theory is capable of relating active to passive sentences correctly, beyond accounting for superficial word order, which I hold are the least interesting aspects of the passive sentence."

6.45   PREVIOUS TREATMENTS

Some of the major inadequacies in the previous treatments of the passive, are identified by Stanley (*op. cit.*) as the following:

(i)   the passive was treated as a relatively easy matter which merely involved the characterisation of formal relationship between the active and the passive;

(ii)   (i) above gave the impression that the use of the passive was determined by syntactic considerations only; contextual factors, e.g. focus and theme, were neglected;

(iii)   the tendency to treat the passive as a random occurrence of NP-arrangement which cannot be predicted in a principled way.

Stanley (1975: 25) then makes a strong suggestion about how the passive should be handled. She says:

> "If we begin instead with an analysis of the uses of the passive, the contexts in which it occurs, the real-world situations in which we need it, and the criteria we use for judging 'permissible' agent deletion, we may come to a better understanding of the construction, and perhaps provide the basis for an intuitively satisfying grammatical description."

Early transformational treatments of the passives assumed that passive sentences were synonymous with their active counterparts. In other words, for every passive there was an underlying active version. Stanley (*op. cit.*) put it this way:

> "The assumption that passives are synonymous with their 'underlying' active versions provided one of the early demonstrations in transformational theory of the explanatory power of abstractly formulated syntactic rules. Because one could show logical equivalence between actives and passives, transformationalists constructed symbolic rules that described the movement and insertions typical of passives."

The inadequacy of the transformational account of the passives has also been discovered by one of the branches of the transformational movement itself, viz. the generative semanticists, but according to Stanley (1975: 25) they, too, have not:

> "... proposed a better or more systematic description of the structure."

According to early transformational grammar, phrase-structure rules alone cannot handle the relationship between active and passive sentences adequately. As a result, the derivation of the passives from the active sentences:

> "... necessarily involves a transformation henceforth referred to as PASSIVE. This position is based on the assumption that the active-passive relation is structural in nature and, therefore, best expressed by a transformation."
>
> Freidin (1975: 384)

The problems of the above assumptions have been discussed in great detail by Freidin (1975: 384). Freidin's (*op. cit.*) major reasons for questioning the transformational treatment of the passive, are:

(i)   that it leads to some crucial theoretical problems;

(ii)   that there are no compelling reasons for treating the active-passive relation with transformations, since there are different assumptions about the nature of that relation.

The early transformational models used an optional transformation to account for the apparent relationship between actives and passives. This transformation was said to apply to an underlying structure which was assumed to be common to both the actives and the passives. According to this assumption about the active-passive relation, cf. Freidin (1975: 384):

"... at some level of representation, actives and their corresponding passives were identical."

In the Syntactic Structures (Chomsky 1957) model, the active-passive relation was characterised as follows:

UNDERLYING STRUCTURE

T-Passive

SURFACE STRUCTURE$_1$ SURFACE STRUCTURE$_2$
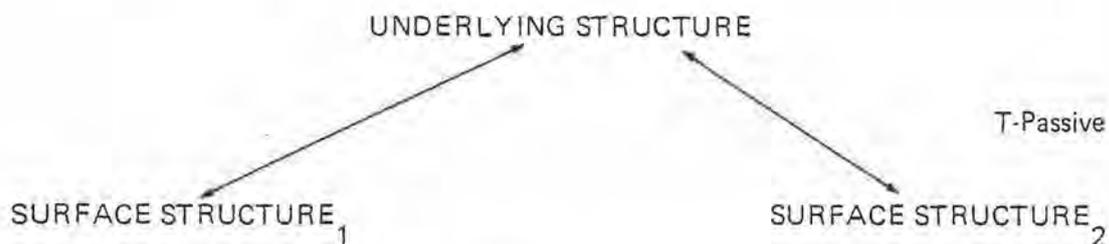
According to the diagram above, the same underlying structure can surface as either active or passive.

Later on, the assumption about a common deep structure for the active and the passive changed; this change was introduced by Katz and Postal in 1964 and Chomsky (1965). In terms of this later view (*vide* Freidin 1975: 385):

"... active and passive sentences must be derived from different underlying structures, and ... PASSIVES must be an obligatory rule."

149.(a) *-fika* (b) *-fikisa*

      'come' cause ⌉

      'arrive' compel

      'reach' manipulate

                 permit }

                 supervise

                 help ⌋

           (c) *-fikisa*

                 'reach puberty'

The (b)-forms in the above examples, are not problematic at all. They are causative in significance. But the (c)-forms have acquired idiosyncratic properties, which cannot clearly be related to causative meanings.

6.44 THE SEMANTICS OF EXTENSION /-w-/

6.44.1 Introduction

The passive has been studied from various points of view by different linguists. However, in spite of this it is still one of the most controversial topics in linguistic studies. Nevertheless, recent studies, cf. Stanley (1975: 25) into the passive, have revealed that:

> "... usage of the passive is determined, not only by syntactic requisites, but also by contextual considerations such as focus and theme."

Stanley (*op. cit.*) further refers to Robin Lakoff (1971), who makes the following observation:

> "... no presently formulated linguistic theory is capable of relating active to passive sentences correctly, beyond accounting for superficial word order, which I hold are the least interesting aspects of the passive sentence."

6.45 PREVIOUS TREATMENTS

Some of the major inadequacies in the previous treatments of the passive, are identified by Stanley (*op. cit.*) as the following:

(i)   the passive was treated as a relatively easy matter which merely involved the characterisation of formal relationship between the active and the passive;

(ii)   (i) above gave the impression that the use of the passive was determined by syntactic considerations only; contextual factors, e.g. focus and theme, were neglected;

(iii)   the tendency to treat the passive as a random occurrence of NP-arrangement which cannot be predicted in a principled way.

Stanley (1975: 25) then makes a strong suggestion about how the passive should be handled. She says:

> "If we begin instead with an analysis of the uses of the passive, the contexts in which it occurs, the real-world situations in which we need it, and the criteria we use for judging 'permissible' agent deletion, we may come to a better understanding of the construction, and perhaps provide the basis for an intuitively satisfying grammatical description."

Early transformational treatments of the passives assumed that passive sentences were synonymous with their active counterparts. In other words, for every passive there was an underlying active version. Stanley (*op. cit.*) put it this way:

> "The assumption that passives are synonymous with their 'underlying' active versions provided one of the early demonstrations in transformational theory of the explanatory power of abstractly formulated syntactic rules. Because one could show logical equivalence between actives and passives, transformationalists constructed symbolic rules that described the movement and insertions typical of passives."

The inadequacy of the transformational account of the passives has also been discovered by one of the branches of the transformational movement itself, viz. the generative semanticists, but according to Stanley (1975: 25) they, too, have not:

> "... proposed a better or more systematic description of the structure."

According to early transformational grammar, phrase-structure rules alone cannot handle the relationship between active and passive sentences adequately. As a result, the derivation of the passives from the active sentences:

> "... necessarily involves a transformation henceforth referred to as PASSIVE. This position is based on the assumption that the active-passive relation is structural in nature and, therefore, best expressed by a transformation."
>
> Freidin (1975: 384)

(ii)   (i) above gave the impression that the use of the passive was determined by syntactic considerations only; contextual factors, e.g. focus and theme, were neglected;

(iii)   the tendency to treat the passive as a random occurrence of NP-arrangement which cannot be predicted in a principled way.

Stanley (1975: 25) then makes a strong suggestion about how the passive should be handled. She says:

> "If we begin instead with an analysis of the uses of the passive, the contexts in which it occurs, the real-world situations in which we need it, and the criteria we use for judging 'permissible' agent deletion, we may come to a better understanding of the construction, and perhaps provide the basis for an intuitively satisfying grammatical description."

Early transformational treatments of the passives assumed that passive sentences were synonymous with their active counterparts. In other words, for every passive there was an underlying active version. Stanley (*op. cit.*) put it this way:

> "The assumption that passives are synonymous with their 'underlying' active versions provided one of the early demonstrations in transformational theory of the explanatory power of abstractly formulated syntactic rules. Because one could show logical equivalence between actives and passives, transformationalists constructed symbolic rules that described the movement and insertions typical of passives."

The inadequacy of the transformational account of the passives has also been discovered by one of the branches of the transformational movement itself, viz. the generative semanticists, but according to Stanley (1975: 25) they, too, have not:

> "... proposed a better or more systematic description of the structure."

According to early transformational grammar, phrase-structure rules alone cannot handle the relationship between active and passive sentences adequately. As a result, the derivation of the passives from the active sentences:

> "... necessarily involves a transformation henceforth referred to as PASSIVE. This position is based on the assumption that the active-passive relation is structural in nature and, therefore, best expressed by a transformation."
>
> Freidin (1975: 384)

(ii)   (i) above gave the impression that the use of the passive was determined by syntactic considerations only; contextual factors, e.g. focus and theme, were neglected;

(iii) the tendency to treat the passive as a random occurrence of NP-arrangement which cannot be predicted in a principled way.

Stanley (1975: 25) then makes a strong suggestion about how the passive should be handled. She says:

> "If we begin instead with an analysis of the uses of the passive, the contexts in which it occurs, the real-world situations in which we need it, and the criteria we use for judging 'permissible' agent deletion, we may come to a better understanding of the construction, and perhaps provide the basis for an intuitively satisfying grammatical description."

Early transformational treatments of the passives assumed that passive sentences were synonymous with their active counterparts. In other words, for every passive there was an underlying active version. Stanley (op. cit.) put it this way:

> "The assumption that passives are synonymous with their 'underlying' active versions provided one of the early demonstrations in transformational theory of the explanatory power of abstractly formulated syntactic rules. Because one could show logical equivalence between actives and passives, transformationalists constructed symbolic rules that described the movement and insertions typical of passives."

The inadequacy of the transformational account of the passives has also been discovered by one of the branches of the transformational movement itself, viz. the generative semanticists, but according to Stanley (1975: 25) they, too, have not:

> "... proposed a better or more systematic description of the structure."

According to early transformational grammar, phrase-structure rules alone cannot handle the relationship between active and passive sentences adequately. As a result, the derivation of the passives from the active sentences:

> "... necessarily involves a transformation henceforth referred to as PASSIVE. This position is based on the assumption that the active-passive relation is structural in nature and, therefore, best expressed by a transformation."
>
> Freidin (1975: 384)

Consider the following diagrams:

ACTIVE SENTENCE

```
              S
      NP    AUX    VP
                  V   NP
```
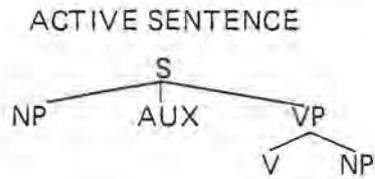
For example:

150. *Ínjá ítya ínyama*
      'Dog it-eat meat'
      'The dog eats meat'

PASSIVE SENTENCE

```
              S
        NP         VP
                V   NP   ADV-MANNER
                       Copulative  △
                       formative
```
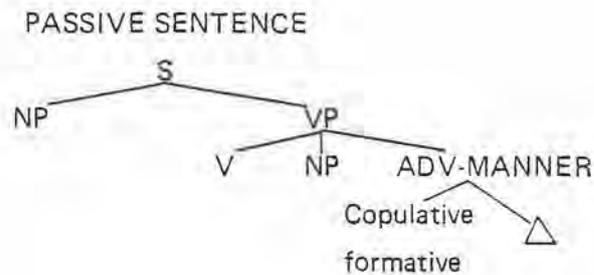
e.g. *Ínyama ityíwa yínjá*
      'Meat it-eat-PASS by the dog'
      'The meat is eaten by the dog'

The above analysis of the Passive does not relate the active and the passive. Instead of doing that, this analysis shows the clear distinction between the derivations of active and passive sentences. Compare the following diagrams:

```
SEMANTIC READING₁              SEMANTIC READING₂
       ↕                              ↕
DEEP STRUCTURE₁                DEEP STRUCTURE₂
       ↕                         T-Passive
                                      ↕
SURFACE STRUCTURE₁             SURFACE STRUCTURE₂
    (Active)                       (Passive)
```
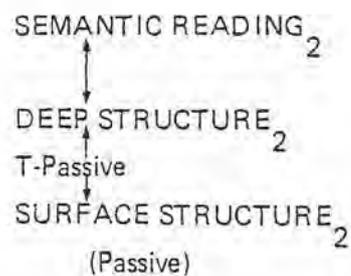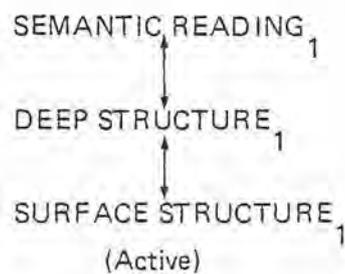
The above observations have led Freidin (1975: 385) to conclude that:

"... an argument that a syntactic rule PASSIVE is desirable in a grammar, because it reflects speakers' intuitions about the active-passive relation, cannot be supported.

Given that the underlying representations of actives and passives are not identical, the active-passive relation must be established by stating an equivalence between structures at some level of representation in Figures 4 and 5. Yet, no matter what level is chosen to state this equivalence, it will be the statement of equivalence, and not PASSIVE, that will express the active-passive relation."

Following Katz and Postal (*op. cit.* 385), Freidin argues for the similarity of underlying structures, and assumes further that Δ is semantically empty. Freidin (*op. cit.*) then concludes that:

"This would result in actives and passives being assigned the same semantic reading, but would still not relate them syntactically."

Compare also Chomsky (1965: 22). Freidin (*op. cit.*) concludes that the active-passive relation is:

"... essentially semantic, and certainly not transformational."

His solution is that a rule of interpretation should be used to handle the passive construction.

6.46 SOME PROBLEMS WITH PASSIVES

There are two other problems which the transformational analysis cannot handle:

(i)   The transformational model fails to account for:

"... the derivation and interpretation of truncated passives ..."
Freidin (1975: 386)

In Xhosa, truncated passives are those which do not have the agent phrases expressed by means of the copulative.

(ii)   The transformational approach fails to determine whether there is a lexical feature which is specified in a given predicate in order to predict the occurrence or non-occurrence of passivation in that verb.

6.47   TRUNCATED PASSIVES

Consider the following examples:

151.(a) *Zákuthúlwa íísáli ézi nkâbi azibonakalisánga maphângo*

'When the saddles were taken down from these horses, they didn't look hungry'

Vide Jordan (1940: 1)

(b)*Kanené iǵugu lákho ngôkú kúkúbá maze ungcwátywe phézu kwésaâ sízibá ...?*

'By the way your pride is that you should be buried in that lake ...?'

Vide Jordan (1940:6)

Although it has been claimed that truncated passives can be generated by means of transformations, this approach is still beset with a number of problems. If one derives truncated passives transformationally, one can invoke the ellipsis rule that deletes the copulative noun phrase. Alternatively one could employ a rule that (*vide* Freidin 1975: 386):

> "... obligatorily preposes the underlying object — thus passivising the verb — into underlying subject position when the latter is lexically and semantically empty ..."

Consider the following truncated passives which have been derived from those in 153 by means of the ellipsis rule:

152.(a) *Kha útsho, Ngxábané, yínyáni kakáde lé yókúbá úMájola wângcwatywá kwési sizibá?*

'Tell us Ngxabane, is it true that Majola was buried in this lake?'

Jordan (1940: 6)

(b)*Loô Dangázele nálóo mhlambí wônké wândilwá wáya kuláhlwá kûde*

'That Dangazele and the rest of the flock were driven off and left far away'

Jordan (1940: 7)

(c)*Kwâbalíswá ngóMhlontlo káMatíwane, íǵórhá élikhúlu kwíinkósí zámáMpondomisé*

'A story was told about Mhlontlo Matiwane, a brave man among the Mpondomise chiefs'

Jordan (*op. cit.*)

With sentences of the type illustrated in 152, a copulative noun may be incorporated as illustrated in 153 below:

153.(a) *Kha útsho, Ngxábane, yínyáni kakáde lé yókúbá úMájola wângcwatywá ngóozi-*
bâni kwési sizibá?

'Tell us Ngxabane, is it true that Majola was buried by so-and-so in this lake?

(b) *Lóo Dangázelé nálóo mhlambí wônke wândilwá* ⎡*ngõozibâni* ⎤*wâya kulâhlwá*
kûde ⎨*ngôoziphêqe* ⎬
⎣ ⎦
by so-and-so

(c) *Kwábaliswá ngóMhlontlo káMatíwane,* ⎡*ngóozibâni* ⎤*ígórhá élikhûlu kwiín-*
kosí ⎨*ngóoziphêqe* ⎬
⎣ ⎦
by so-and-so

zámáMphondomisé

Jordan (*op. cit.*)

In Freidin's (1975: 387) terms, the truncation of the noun phrases *ngóozibâni* or
ngóoziphêqe does not:

> "... violate the recoverability condition on deletions, since the deleted elements
> can be considered pronominal representatives of the general categories HUMAN
> and NON-HUMAN noun ..."

The inadequacy of the ellipsis rule is exposed when one considers the well-formed ex-
amples in 154 below. The ellipsis analysis fails to account for the possible derivation of
the examples in 154 from those in 155 below. Recall also that the examples in 154 are
the same as those in 153; while the examples in 155 are the same as those in 153, ex-
cept for the change in the copulative noun phrase.

154.(a) *Kha útsho, Ngxábané, yínyáni kakáde lé yókúbá úMájola wângcwatywá kwési*
sizibá?

(*Ibid.*)

(b) *Lóo Dangázelé nálóo mhlambí wônke wândilwá wáya kulâhlwá kûde*

(*Ibid.*)

(c) *Kwábalíswá ngóMhlontlo káMatíwane, ígórhá élikhûlu kwiínkosí zámáMpondo-*
mísé

(*Ibid.*)

155.(a) *Kha útsho, Ngxábane, yínyáni kakáde lé yókúbá úMájola wângcwatywá kwési*
sizibá ngámawâbo?

(b)*Lóo Dángázelé nálóo mhlambí wônke wándilwá ngámaséla wáya kuláhlwá kûde*

(c) *Kwábaliswá ngúNgxábané ngóMhlontlo káMatíwane, ígórhá élikhûlu kwîinkosí*
zámáMpondomisé

Following Freidin (1975: 387) it would be argued that it is impossible to derive the examples in 154 from those in 155:

"... because this would violate the recoverability condition on deletions ..."

The copulative noun phrases in 155 do not contain pronominal representatives of general categories of nouns.

Freidin (1975: 387) also tests truncated passives against another alternative approach which he refers to as "the empty-node analysis". In terms of this analysis truncated passives could be derived from deep structures like the one shown in Figure I below:
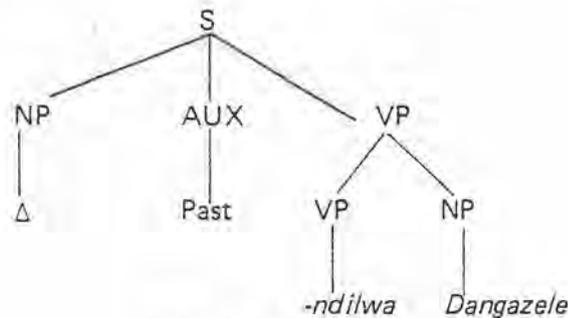
FIGURE I

In Freidin's (1975: 388) terms, the empty node in the above diagram would be interpreted as:

"... lexically empty and therefore not subject to semantic interpretation ... The empty subject triggers obligatory preposing of the object into subject position and passivisation of the verb. Given this analysis, the problem of ... the ellipsis analysis never arises."

Compare the examples in 154 and 155. In spite of this rather encouraging characterisation of the ellipsis analysis, there are still problems in this approach. The use of empty nodes to handle truncated passives would appear to be an *ad hoc* solution since the use of transformational rules is still plausible in other areas of the grammar where deletion processes are concerned, cf. Freidin (1975: 388).

Besides the problems presented above, Freidin (*op. cit.*) also points out that a rule of PASSIVE cannot handle some crucial problems relating to the lexical entries of verbs. He says that, cf. Freidin (1975: 388-389):

> "Most transformationalists agree that the ability to passivise is a lexical property of verbs — disregarding for the moment the question of derived nominals (see Chomsky 1970). Yet there is serious disagreement as to what sort of lexical feature marks this ability ..."

6.48   A LEXICAL-INTERPRETIVE APPROACH TO PASSIVES

At least one thing has become clear from the discussion above: no rule from the syntactic or the semantic component can handle adequately the apparent synonymy of active and passive sentences. In terms of the lexicase framework, cf. Freidin (1975: 391):

> "... the synonymy of actives and passives can be specified in terms of the semantic equivalence of predicates and the semantic functions associated with them."

It is further assumed in this analysis that any predicate (*vide* Freidin (*op. cit.*)):

> "... governs a particular set of semantic functions which is determined according to the conceptual structure of the semantic class of the predicate."

Consider the following examples:

156.(a) *Úmfâzi uphéka úkutyá*

'Woman she-cook food'

'The woman cooks food'

   (b) *Úkutyá kuphékwa ngúmfâzi*

'Food it-cook+PASS by woman'

'The food is cooked by the woman'

In 156(a) above, the predicate *uphéka* governs the semantic function's "agent", i.e. the agency that is responsible for the act of cooking, hence the feature [+ AGT]; "Object" i.e. the thing that is acted upon, hence the feature [± OBJ]. In 156 (b), i.e. the passive version of this sentence, the NPs are still doing the same functions in spite of the fact that the verb has undergone passivisation, and in spite of the changed syntactic (and

even morphological shape in the case of the agent) positions of NPs. The above exposition confirms the fact that:

> "... two sentences can be interpreted as synonymous if the two predicates are semantically equivalent."
>
> (*vide* Freidin 1975: 391)

The rule of semantic interpretation that is used above to account for the synonymy of active and passive sentences, can be formulated as follows (*vide* Freidin 1975: 392):

> RULE I
>
> "Si is synonymous with Sj if (a) the predicates of Si and Sj are semantically equivalent — in which case it follows that the predicates govern the same semantic functions — and (b) each semantic function is filled by the same lexical material for either predicate."

According to this analysis, the active and the passive are not derived from the same phrase marker; it is therefore assumed that their relationship should be captured in the lexicon.

There are a few verb stems in Xhosa which are only found in the passive, namely -*nxánwa* 'be thirsty', -*bâtywa* 'be sexually aroused', -*vûthwa* 'become ripe'. This appears to confirm the above statement that the passive is already in the lexicon.

6.49 S.A. MCHOMBO ON THE PASSIVE

Mchombo (1978: 136 *et seq.*) has also demonstrated the inadequacy of the treatment of the passive transformationally. He argues that if it is accepted that the /-*an- -ek- -el- -is- -w-*/ verbs are derived verbs, that derivation process must have occurred in the lexicon, cf. Freidin (1975: 392). Mchombo (*op. cit.*) goes so far as to claim that:

> "Besides, if any one of these derived verbs can be input to, say, a nominal derivational rule, then it becomes even more imperative that we accept their analysis as lexically derived forms."

In the vast number of studies of these extended verbs that have appeared, there has been a general tendency to treat them as syntactic rules. However, some problems in the transformational approach have made it imperative for other models to be tried, cf. Freidin (1975), Mchombo (1978). The controversy about which model can best handle the passive, has led Mchombo (1978: 136) to declare that:

226

"... we need to deal with the problems arising from the intimate tie-up there appears to be between these derived verbs, and what appear to be well-motivated and well-established syntactic rules, viz. the rules of Dative and Passive Formation, and Predicate Raising."

In transformational grammar (T.G.), a syntactic rule of passive formation has been studied extensively, cf. Culicover (1976: 160). The passive transformation can be formalised roughly as follows:

S.D.:	NP1	V	NP2

T-Passive ➡

S.C.:	NP2	V	NP1
		+ pass	+ Copulative
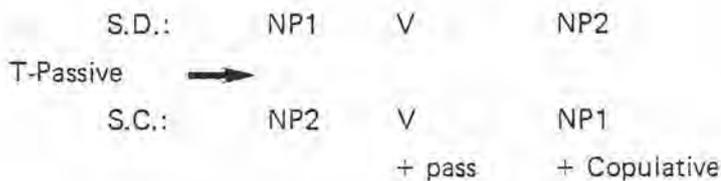
Mchombo (1978: 136) rightly points out that this rule actually suggests that the passive verb, or the attachment of a passive morpheme to a verb, arises as a "side effect" or as a consequence of the application of that syntactic rule. If one accepts the assumption that the passive verb is obtainable after the application of a syntactic rule called passive, then in Mchombo's terms (1978: 136):

"... it would conflict with any attempt to treat the passive verb as a lexically derived verb."

Mchombo (*op. cit.*) further points out that such an analysis (viz. that the passive extended verb is obtainable after the application of a syntactic rule), would create problems:

(i)   with regard to the claims made in his thesis about the organisation of the grammar (*vide* Mchombo 1978:87);

(ii)   the claim that he makes in his work, viz. that:

"... lexical derivational rules are confined to the lexicon ..."

Compare also Vitale (1982: 115 *et seq.*).

The re-analysis of the passive above, reveals that many previous treatments failed to do justice to certain essential properties of passive constructions that are inherent to their status as instruments in the communicative interaction between speakers and their

hearers. This present analysis supports the view held by Schoorl (1978: 331) that linguists who study the passive, should base their theories:

> "... on 'pragmatic occurrences' of linguistic expressions as they can be observed in publications about language and that comes close to being totally devoid of meaning."

Chapter 7

COMBINATIONS OF EXTENSIONS

7.1   INTRODUCTION

This section deals with the productive extensions when they occur in a sequence. Following the strategy that has been used throughout this research, sequences of extensions are analysed here from the points of view of phonology, morphology, syntax and semantics. Previous treatments of combinations of extensions, especially in Xhosa, cf. Cantrell (1967: 197-216) have merely been treated from a morphological point of view. Hardly any in-depth study of these has been done beyond this level of investigation. This chapter is arranged under the following headings:

(a)   phonology;

(b)   morphology;

(c)   syntax;

(d)   semantics.

7.2   PHONOLOGY

In this section no attempt will be made to deal with the phonology of the radical or root, since this has already been done in Chapter 2. For details, the reader is referred to par. 2.4 *et seq.* of this thesis. Here, attention will be focussed on sequences of extensions only.

7.2.1   Types of phonological sequences

The following phonological types of extension series generally occur:

(i)   VC VC
          1   2

(ii)   VC VC VC
          1   2   3

(iii)   VC VC VC VC
          1   2   3   4

(iv)   VC VC VC VC VC
          1   2   3   4   5

Where extension /-w-/ occurs, the syllable contains C only.

Although phonologically there is nothing to prevent the occurrence of longer extension sequences than five, it was noted that such sequences are characterised by a relatively low frequency.

Here are some examples to show the above combinations:

(a) VC VC
    1   2

   -thand-án-el-a   'to love each other for/at'
        1 2

   -abél-an-a   'to give reciprocally; to divide between two'
   1 2

(b) VC VC VC
    1   2   3

   -áhlúk-án-ís-el-a   'to cause to be separated from each other for/at'
      1 2 3

   -fund-is-él-an-a   'to teach for one another'
   1 2 3

(c) VC VC VC C
    1   2   3   4

   -áhlúk-án-ís-el-w-a   'to be caused to be separated for'
     1 2 3 4

   -ngqutyan-ís-el-w-a   'to be knocked against each other at/for'

(d) VC VC VC VC C
    1   2   3   4   5

   -phiny-is-el-ís-el-w-a   'to be made to articulate (a speech sound) at (a
    1 2 3 4 5   certain point)'

7.2.2 Palatalisation

Palatalisation on the final syllable of the basic root still persists across the intervening extensions if the last extension in a series is /-w-/. Compare the following examples:

(a)   *-thamsánqela*   *-thanyusanqéliswa* *(m > ny)*
     'to bless'   'to be made to be blessed'

(b)   *-thomalálisa*   *-thonyalálíswa* *(m > ny)*
     'to reduce'   'to be reduced'

(c)   *-cambálala*   *-canjalalíselwa (mb > nj)*

        'to lie flat'   'to make to lie flat for'

(d)   *-khéphula*   *-khetshúlelwa (ph > tsh)*

        'to cut a big slice'   'to have a big slice cut for'

Other details about this process have already been given in Chapter 2.

7.2.3 Tonal behaviour

As far as tone is concerned, these series of extensions fit into the tonal behaviour patterns outlined in par. 2.13.

7.3 MORPHOLOGY

7.3.1 Reduplication

All five productive extensions have been tested for reduplication and the following results emerged:

(a)   As far as */-w-/* is concerned, no examples could be found in which either of these could be reduplicated. (The non-reduplication of this extension is phonologically obvious).

        Extension */-an-/* is reduplicated only in verb stems which appear to have a fossilised */-an-/* extension.[1] Compare the following examples:

             -fumán-a   *-fumán-an-a*

             'find'   'find each other'

(b)   */-ek-/*, */-el-/* and */-is-/* permit reduplication.

(i)   */-ek-/*

        In the paragraphs which follow, various combinations of extensions are merely listed together with examples. Thereafter, syntactical observations are made of selected combinations. The semantics of sequences of extensions concludes this chapter.

        It was found that only the verb stem *-xhoma* (hang) permits the reduplication of the extension */-ek-/*. Compare:

-xhoma 'hang', *-xhómeka* 'possible to be hung', *-xhomékeka* 'be in a hanging position; be dependent upon'.

Tests with all other Xhosa verb stems yielded negative results.

(ii)   Tests with */-el-/* and */-is-/* proved that there is a high frequency of occurrence of the reduplication of these extensions. Consider the following examples:

/-el-/	*/-is-/*
-bon-él-el-a	*-bon-ís-is-a*
'provide for or make provision for'	'see well/observe well'
-theth-él-el-a	*-theth-ís-is-a*
'speak on behalf of'	'speak thoroughly'
-phind-él-el-a	*-phind-ís-is-a*
'do/go repeatedly'	'cause to repeat well/thoroughly'

7.3.2   Combinations of different extensions

7.3.2.1   Combinations of */-an-/*

(a)   */-an-/* + */-ek-/*
        /-an-/ + */-el-/*
        /-an-/ + */-is-/*
        /-an-/ + */-w-/*

(i)   */-an-/* + */-ek-/*
        This combination is attested. Consider the following examples:

-bon-án-ek-	'able to see each other/one another'
-buz-án-ek-	'possible to ask one another/each other'

(ii)   */-an-/* + */-el-/*
        Examples:

-thand-án-el-	'love each other at or for'
-thuk-án-el-	'insult each other at or for'
-qundan-án-el-	'assemble at or for'

(iii)   /-an-/ + /-is-/
         Examples:

        -hlúk-án-is-   'cause to separate'
        -khand-án-is-   'cause to hit each other'

(iv)   /-an-/ + /-w-/
        Examples:

        -xaty-án-w-   'clash among themselves'
        -thand-án-w-   'show love among themselves'

(b)   /-an-/ + /-el-/ + /-an-/
        /-an-/ + /-el-/ + /-ek-/
        /-an-/ + /-el-/ + /-el-/
        /-an-/ + /-el-/ + /-is-/
        /-an-/ + /-el-/ + /-w-/

(i)   /-an-/ + /-el-/ + /-an-/
        Examples:

        -thand-an-él-an-   'like exclusively for one another'
        -buz-an-él-an-   'ask exclusively on behalf of another'

(ii)   /-an-/ + /-el-/ + /-ek-/
        Examples:

        -bon-an- + -él- + -ek-   'possible to see for another'
        -thand-an-él-ek-   'possible to love for another'

(iii)   /-an-/ + /-el-/ + /-el-/
        Examples:

        -bon-an-él-el-   'see for one another at or for'
        -thand-an-él-el-   'love/like for one another at or for'

(iv)   */-an-/ + /-el-/ + /-is-/*
Examples:

        -bon-an-él-is-   'cause to see for one another'
        -cuk-an-él-is-   'cause to come together for'

(v)   */-an-/ + /-el-/ + /-w-/*
Examples:

        -bon-án-el-w-   'meet at' (passive)
        -thand-án-el-w-   'love one another at or for' (passive)

(c)   */-an-/ + /-is-/ + /-an-/*
       /-an-/ + /-is-/ + /-ek-/
       /-an-/ + /-is-/ + /-el-/
       /-an-/ + /-is-/ + /-is-/
       /-an-/ + /-is-/ + /-w-/

(i)   */-an-/ + /-is-/ + /-an-/*
Examples:

        -bon-an-ís-an-   'make each other/one another see'

(ii)   */-an-/ + /-is-/ + /-ek-/*
Examples:

        -bon-an-ís-ek-   'possible to make each other see'

(iii)   */-an-/ + /-is-/ + /-el-/*
Examples:

        -bon-an-ís-el-   'cause (others) to meet at or for'
        -hlab-an-ís-el-   'pin down at or for'

(iv)   */-an-/ + /-is-/ + /-is-/*
Examples:

-bon-an-ís-ís-   'ensure that others meet or see each other'

(v)   /-an-/ + /-is-/ + /-w-/
       Examples:

       -bon-án-is-w-   'be made to meet'

(d)   */-an-/ + /-w-/ + /-an-/
       */-an-/ + /-w-/ + /-ek-/
       /-an-/ + /-w-/ + /-el-/
       /-an-/ + /-w-/ + /-is-/
       */-an-/ + /-w-/ + /-w-/

(i)   */-an-/ + /-w-/ + /-an-/
       This combination is not attested.

(ii)   */-an-/ + /-w-/ + /-ek-/
       This sequence is not attested.

(iii) /-an-/ + /-w-/ + /-el-/
       Examples:

       -bon-án-w-el-   'meet at or for'
       -thand-án-w-el-   'love one another at or for'

(iv)   /-an-/ + /-w-/ + /-is-/
       This combination is the reverse of /-an-/ + /-is-/ + /-w-/.

(v)   */-an-/ + /-w-/ + /-w-/
       This combination is not permissible.

7.3.2.2   Combinations of /-ek-/

(a)   /-ek-/ + /-an-/
       /-ek-/ + /-ek-/
       /-ek-/ + /-el-/
       /-ek-/ + /-is-/
       /-ek-/ + /-w-/

(i)   /-ek-/ + /-an-/

This combination is characterised by a strikingly low frequency of occurrence. More details about the scarcity of the occurrence of this sequence will be given under semantics.

Examples:

        -boph-ék-an-   'get entangled or warped'
        -monx-ék-an-   'collapse into an entangled mess'

(ii)   /-ek/ + /-ek-/

This combination has been dealt with under reduplication, *vide* par. 7.3.1.

(iii)   /-ek-/ + /-el-/
Examples:

        -boph-ék-el-   'be/become tied at or for'
        -cul-ék-el-   'be sung at or for'

(iv)   /-ek-/ + /-is-/
Examples:

        -phump-ék-is-   'make blunt'
        -qhaqh-ék-is-   'cause to tear off'

(v)   /-ek-/ + /-w-/
Examples:

        -lahl-ék-w-   'lose or be eluded by ...'

This combination is restricted to only a few radicals.

(b)   */-ek-/ + /-an-/ + /-an-/
        */-ek-/ + /-an-/ + /-ek-/
        */-ek-/ + /-an-/ + /-el-/
        /-ek-/ + /-an-/ + /-is-/
        /-ek-/ + /-an-/ + /-w-/

(i)   /-ek-/ + /-an-/ + /-is-/
       Examples:

        -boph-ek-án-is-   'cause to become entangled or warped'
        -phing-ek-an-is-   'cause to become warped'

(ii)   /-ek-/ + /-an-/ + /-w-/
       Examples:

        -botsh-ék-an-w-   'become entangled; warped'
        -photh-ék-an-w-   'become entangled; warped'

(c)   */-ek-/ + /-ek-/ + /-an-/
       /-ek-/ + /-ek-/ + /-ek-/
       /-ek-/ + /-ek-/ + /-el-/
       /-ek-/ + /-ek-/ + /-is-/
       /-ek-/ + /-ek-/ + /-w-/

(i)   /-ek-/ + /-ek-/ + /-ek-/
       Example:

        -xhom-ek-ék-ek-[2]   'become utterly dependent or suspended ...'

This is the only example that could be found with this sequence. (Compare par. 7.5.1 and footnote 1 of this chapter.)

(ii)   /-ek-/ + /-ek-/ + /-el-/
       Example:

        -xhom-ek-ék-el-

This is the only example that could be found.

(iii) /-ek-/ + /-ek-/ + /-is-/
       Example:

        -xhom-ek-ék-is-   'cause to be suspended/dependent on ...'

(iv) */-ek-/ + /-ek-/ + /-w-/*
      Example:

              -xhony- + -ék- + -ek- + -w-   '(one) depends on ...' (passive)

(d)   */-ek-/ + /-el-/ + /-an-/*
      /-ek-/ + /-el-/ + /-ek-/
      /-ek-/ + /-el-/ + /-el-/
      /-ek-/ + /-el-/ + /-is-/
      **/-ek-/ + /-el-/ + /-w-/*

(i)   */-ek-/ + /-el-/ + /-ek-/*
      Examples:

              -boph-ek-él-ek-   'have been tied at or for'

(ii) */-ek-/ + /-el-/ + /-el-/*
      Example:

              -finc-ek-él-el-   'become exhausted or dried up at or for'

(iii) */-ek-/ + /-el-/ + /-is-/*
      Example:

              -finc-ek-él-is-   'cause to be dried up or exhausted at or for'

(e)   */-ek-/ + /-is-/ + /-an-/*
      /-ek-/ + /-is-/ + /-ek-/
      /-ek-/ + /-is-/ + /-el-/
      /-ek-/ + /-is-/ + /-is-/
      /-ek-/ + /-is-/ + /-w-/

(i)   */-ek-/ + /-is-/ + /-an-/*
      Example:

              -mfam-ek-ís-an-   'deceive one another/each other'

(ii)   */-ek-/ + /-is-/ + /-ek-/*
         Example:

             -mfam-ek-is-ek-   'become   deceived/possible to be deceived'

(iii)   */-ek-/ + /-is-/ + /-el-/*
         Example:

             -mfam-ek-īs-el-   'deceive at or for'

(iv)   */-ek-/ + /-is-/ + /-is-/*
         Example:

             -mfam-ek-is-is-   'deceive thoroughly'

(v)   */-ek-/ + /-is-/ + /-w-/*
         Example:

             -mfany-ék-is-w-   'be deceived'

7.3.2.3 Combinations of */-el-/*

(a)   */-el-/ + /-an-/*
         /-el-/ + /-ek-/
         /-el-/ + /-el-/
         /-el-/ + /-is-/
         /-el-/ + /-w-/

(i)   */-el-/ + /-an-/*
         This combination has a very high frequency of occurrence.

         Examples:

             -vum-él-an-   'agree among themselves'
             -bhal-él-an-   'write to one another/each other'
             -sebez-él-an-   'whisper to one another/each other'

(ii)   */-el-/ + /-ek-/*
         Examples:

-cing-él-ek-	'be suspected/assumed'
-krokr-el-ek-	'be suspected'
-buk-él-ek-	'be admirable'

(iii)   */-el-/ + /-el-/*
This combination has already been dealt with under reduplication, *vide* par. 7.3.1.

(iv)   */-el-/ + /-is-/*
         Examples:

-bhal-él-is-	'cause to write to'
-qumb-él-is-	'cause to be angry with'
-coth-él-is-	'make someone/something approach ...'

(v)   */-el-/ + /-w-/*
This combination occurs freely. Consider the following examples:

-cóth-el-w-	'be approached'
-phak-él-w-	'be dished up for'

(b)   **/-el-/ + /-an-/ + /-an-/*
       /-el-/ + /-an-/ + /-ek-/
       /-el-/ + /-an-/ + /-el-/
       /-el-/ + /-an-/ + /-is-/
       /-el-/ + /-an-/ + /-w-/

(i)   */-el-/ + /-an-/ + /-ek-/*
         Example:

-bon-el-an-ek-	'possible to see each other at'

(ii)   */-el-/ + /-an-/ + /-el-/*
         Example:

-bon-el-án-el-	'see each other at or for'

(iii)   */-el-/ + /-an-/ + /-is-/*
Example:

       -bon-el-án-is-   'cause to see each other at or for'

(iv)   */-el-/ + /-an-/ + /-w-/*
Example:

       -bon-él-an-w-   'meet at or for' (passive)

(c)   */-el-/ + /-ek-/ + /-an-/*
      /-el-/ + /-ek-/ + /-ek-/
      /-el-/ + /-ek-/ + /-el-/
      /-el-/ + /-ek-/ + /-is-/
      /-el-/ + /-ek-/ + /-w-/

(i)   */-el-/ + /-ek-/ + /-an-/*
Example:

       -cing-el-ék-an-   'be suspicious about one another'

(ii)   */-el-/ + /-ek-/ + /-ek-/*
Example:

       -cing-el-ék-ek-   'be regarded with suspicion'

(iii)   */-el-/ + /-ek-/ + /-el-/*
Example:

       -cing-el-ék-el-   'be estimated at or for'

(iv)   */-el-/ + /-ek-/ + /-is-/*
Example:

       -cing-el-ék-is-   'cause to be estimated at or for'

(d)   /-el-/ + /-el-/ + /-an-/
        /-el-/ + /-el-/ + /-ek-/
        /-el-/ + /-el-/ + /-el-/
        /-el-/ + /-el-/ + /-is-/
        /-el-/ + /-el-/ + /-w-/

(i)   /-el-/ + /-el-/ + /-an-/
        Examples:

        -bon-el-él-an-   'provide/make provision for one another'
        -theth-el-él-an-   'speak on behalf of one another'

(ii)   /-el-/ + /-el-/ + /-ek-/
        Examples:

        -bon-el-él-ek-   'be worthy of being provided for'
        -theth-el-él-ek-   'be worthy of being defended'

(iii)   /-el-/ + /-el-/ + /-el-/
        Examples:

        -bon-el-él-el-   'make provision (for someone) for a reason or
                                at ...'
        -theth-el-él-el-   'speak on behalf of (someone) for a reason or
                                at ... (place)'

(iv)   /-el-/ + /-el-/ + /-is-/
        Examples:

        -bon-el-él-is-   'have (someone) provided for'
        -theth-el-él-is-   'have (someone) defended'

(v)   /-el-/ + /-el-/ + /-w-/
        Examples:

        -bon-él-el-w-   'be provided for'
        -theth-él-el-w-   'be defended'

The sequences /-el-/ + /-el-/ tends to take on a figurative extension of the meaning of /-el-/. As a result, all sequences that start with /-el-el-/ are highly constrained.

(e)   /-el-/ + /-is-/ + /-an-/
        /-el-/ + /-is-/ + /-ek-/
        /-el-/ + /-is-/ + /-el-/
        /-el-/ + /-is-/ + /-is-/
        /-el-/ + /-is-/ + /-w-/

(i)   /-el-/ + /-is-/ + /-an-/
        Examples:
                -bhal-el-ĩs-an-   'cause, make (encourage, instruct) others to cor-
                                         respond or write to one another/each other'
                -xol-el-ĩs-an-   'reconcile one another'

(ii)   /-el-/ + /-is-/ + /-ek-/
        Example:

                -tyityimb-el-ĩs-ek-   'warrant being pointed a finger at'

(iii)   /-el-/ + /-is-/ + /-el-/
        Examples:

                -tyityimb-el-ĩs-el-   'point a finger at'
                -bhal-el-ĩs-el-   'cause (someone) to write (e.g. a letter) to
                                         another for (a reason) or at ... (a place)'

(iv)   /-el-/ + /-is-/ + /-is-/
        Examples:

                -tyityimb-el-ĩs-is-   'warn in no uncertain terms'
                -tyhal-el-ĩs-is-   'push thoroughly towards'

(v)   /-el-/ + /-is-/ + /-w-/
        Examples:

-tyityinj-él-is-w-	'be threatened'
-bhal-él-is-w-	'be made to be written to or for'

(f) /-el-/ + /-w-/ + /-an-/
    */-el-/ + /-w-/ + /-ek-/
    */-el-/ + /-w-/ + /-el-/
    */-el-/ + /-w-/ + /-is-/
    */-el-/ + /-w-/ + /-w-/

(i) /-el-/ + /-w-/ + /-an-/
    Examples:

-qunj-él-w-an-	'become angry with one another'
-setyenz-él-w-an-	'work for each other'

7.3.2.4 Combinations of /-is-/

(a) /-is-/ + /-an-/
    /-is-/ + /-ek-/
    /-is-/ + /-el-/
    /-is-/ + /-is-/
    /-is-/ + /-w-/

There is a very high frequency of occurrence of combinations of extensions in which /-is-/ is the initial component of a string.

(i) /-is-/ + /-an-/
    Consider the following examples:

-gxagx-ís-an-	'render each other poor'
-bhushul-ís-an-	'degrade each other'
-thulul-ís-an-	'compete or take turns'

(ii) /-is-/ + /-ek-/
     Examples:

-qin-ís-ek-	'become sure'
-phos-ís-ek-	'become badly done'
-qhum-ís-ek-	'become puffed'

(iii) */-is-/* + */-el-/*

Examples:

-qhum-ís-el-	'puff at or for'
-sebenz-ís-el-	'cause to work at or for'
-theth-ís-el-	'make to speak at or for'

(iv) */-is-/* + */-is-/*

This combination has been dealt with under reduplication. For details see par. 7.3.1 in this Chapter.

(v) */-is-/* + */-w-/*

Examples:

-qúnj-is-w-	'be angered by'
-mangál-is-w-	'be surprised by'
-lúng-is-w-	'be made right by'

The "sequences of three extensions" in the case of */-is-/* combinations will not be listed here, because their occurrences are relatively productive. For details about the restrictions to the combinations of extensions, the reader is referred to par. 7.11. All the combinations listed above represent only a sample analysis.

7.3.2.5 Combinations of */-w-/*

(a) */-w-/* + */-an-/*

  /-w-/ + */-ek-/*

  /-w-/ + */-el-/*

  /-w-/ + */-is-/*

  /-w-/ + */-w-/*

(i)   /-w-/ + /-an-/
        Examples:

-béth-w-an-	'fight among one another'
-búz-w-an-	'ask among one another'
-sik-w-án-	'tear among one another'

(ii)   /-w-/ + /-ek-/
        This combination is not attested.

(iii)   /-w-/ + /-el-/
        Example:

-bhal-w-él-	'be written for'

This combination is rather restricted in its occurrence. It is used alternatively or interchangeably with its reverse /-el- + -w-/ without any semantic changes or differences. In this behaviour, it resembles the combinations /-an-/ + /-w-/ and /-w-/ + /-an-/ mentioned above, *vide* par. 7.3.2.1.

(iv)   /-w-/ + /-is-/
        This combination is interchangeable with /-is-/ + /-w-/.

7.4   SYNTACTICAL USAGES

7.4.1   Combinations with extension /-an-/

(i)   /-an-/ + /-ek-/
        The following sentences illustrate the syntactic behaviour that is effected by the attachment of the above combination to a root:

1.(a)   *Kubonáneka lúla emadódeni*
        Lit. 'It is seen each other easily by men'
        'Men   see   each other/one another easily'
             recognise

(b)   *Kubonáneka ubúdengé kúbasukúzani*

ngábasukúzani

Lit. 'Opponents always accuse each other of stupidity'

Syntactically, the consequences of the attachment of */-an-/ + /-ek-/* are the following:

— The subject position is not normally filled by an overt subject NP; the usual available filler for this position is the impersonal subject concord (SC) *ku-*.

— The position of object NP can be filled subject to the rule of relationship of possession between object and agent NP.

— It should also be emphasised here that, whereas the relationship of possession outlined in Chapters 5 and 6 obtains between a subject NP and an object NP, here this relationship occurs between an object NP and an agent NP which is characteristically realised in its copulative or locative form. This agent NP never fills the subject slot.

— The semantic object can be allowed to fill the syntactic subject position as in the following example:

2.   *úbúdenge bubonáneka kúbasukúzani*

'Foolishness is always seen in the other by rivals'

(ii)   */-an-/ + /-el-/*

It is interesting to note that the */-an-/* component in the sequence */-an-/ + /-el-/ /-el-/* triggers off certain restrictions on the type of subject that can be allowed where this combination is used. These restrictions are the same as those of any */-an-/* extended basic roots. The */-el-/* part influences the post verbal co-occurring NPs in the same way as any other */-el-/* extended verbal root. Consider the following sentences:

3.   *Ábafúndi bathandánela*
$$\left\{ \begin{array}{l} \textit{ésikólweni} \\ \textit{ukuncédana} \\ \textit{úkúze bancédané} \\ \textit{ísóno} \end{array} \right\}$$

'The students show love

for each other   at school

so that they can help each other

to help each other

for a sin'

(iii)   */-an-/* + */-is-/*

In this combination where */-is-/* is the terminative component, the syntactic structure of the sentence will satisfy all the requirements of a causative sentence as outlined in par. 5.21 under Syntax of */-is-/* in this thesis. */-an-/* makes its presence felt by ensuring that the NP in the accusative or object slot is either plural or a conjoined NP or an NP that is singular in form but plural in meaning. Consider the following sentence:

4.   *Índoda ikhandánisa ámátye ngómatshíni*

       'The man makes the stones grind each other by means of a machine'

(iv)   */-an-/* + */-w-/*

This combination permits only the impersonal subject concord *ku-* as the subject of a sentence. Overt NPs as subjects are strictly prohibited. Compare the following sentences:

5.(a)   *Kúyaxatyánwa (ngámánxilá)*

       'There is a clash among the drunkards'

  (b)   **Amanxila ayaxatyanwa*

Ngámánxilá in 5(a) has been put in brackets because it is optional.

As this is a kind of a passive sentence, the agentive copulative NP may be used. Its occurrence or non-occurrence is governed by the general rules outlined for passives and truncated passives in par. 5.24. The effect of the initial */-an-/* component in this combination is felt in the fact that the noun(s) that is/are used as the base of the copulative NPs is/are subject to the constraints of the subject NPs that co-occur with */-an-/* extended verbs.

(v)   */-an-/* + */-el-/* + */-an-/*

As far as the subject NPs are concerned, this */-an-/* ending combination operates

subject to the rules established for all /-an-/ extended verbs. But as far as the object slot is concerned, there is a definite relaxation of the constraints that normal /-an-/ extended verbs impose; the above /-an-/ ending combination is definitely transitive. One could attribute this transitivity to the presence of /-el-/ in this combination. This becomes even clearer when one takes into account that NP2 may in some cases be ambiguous for Accusative and Dative. Compare the following sentence:

6.   *Índoda nómfâzi bazithandánélana ízintó ézíntlé*
      NP1   VP   NP2
      'The man and the woman like good things for each other'
      'The man and the woman like each other for the good things'
      (i.e. because of the good things that each does for the other)

If the first interpretation is preferred, then NP2 receives the Accusative interpretation. On the other hand, if the second reading is chosen, NP2 receives the Dative interpretation. The choice of interpretation of the sentence is governed by pragmatic factors.

(vi) */-an-/ + /-el-/ + /-ek-/*

The subject slot is never filled by an overt subject NP. Only the indefinite SC-*ku-* is used. The influence of /-el-/ in the syntactic structure of this sentence is observed in the occurrence of locative NPs after the verb. Typical of the passive tendencies of /-ek-/, an NP in its copulative form may appear as agent. Also important is that an NP marked for purpose or reason may appear in the slot immediately after the verb — another possible influence of the /-el-/ component being expressed in syntactic terms. Consider the following examples:

7.(a) *Kubonanéleka kwiïndawó ézínámathêko*
       'People usually meet each other during festivals'
   (b) *Kucukanéleka kwiïkóna ézínéntsangú zízígwintá*
       'Thugs meet in groups in corners where dagga is available'

(vii) */-an-/ + /-el-/ + /-el-/*

This combination behaves just like any /-el-/ extended basic root with respect to syntax. Compare the following examples:

8.(a) *Íbíbhuqwá yíĺaá njá lé ntambo úkúze íze kubophanélela ápha njé*

'This rope was pulled up and down by that dog; that is how it came to be warped together here'

(b) *Bathandanélela ntóní boná bésází njé úkúbá óMhlophé nóNtsúndu abá-vumelekĩlé úkúba bénze njáĺo?*

'Why do they love each other when they know that it is illegal for a black and a white to do so?'

(viii) */-an-/ + /-el-/ + /-is-/*

Here again one observes how the syntactic requirements of */-an-/, /-el-/* and */-is-/* work interdependently. Consider the following sentences:

9. *Óotĩtshala babonanélisa ábadláĺĩ ébáĺéni*

'The teachers make the players meet on the playground'

In sentences where this combination is used, the following syntactic occurrences are permitted:

(aa) All subject NPs are subject to the restrictions imposed by */-an-/* extended verbal basic (simple or underived roots).

(bb) NPs that appear post-verbally may be selected subject to the syntactic requirements of either */-is-/* or */-el-/* or both, depending on pragmatic factors.

(ix) */-an-/ + /-el-/ + /-w-/*

Consider the following sentences:

10. *Kubonánelwa éláyĩbrarí ngábafúndi*

'Students meet in the library'

11. *Kubukánelwa émidlalwéni ngábadláĺi*

'Players admire each other during games'

These are impersonal passives where no overt NP ever appears as subject. The subject slot is filled by the impersonal SC *ku-*. The position after the verb may be filled either by a locative NP or a complement clause that expresses purpose or reason, or an NP that expresses reason or purpose. The final slot (that can be

filled optionally) may be occupied by an NP that is a copulative agent. The NPs that serve as bases of the copulatives are subject to the restrictions that /-an-/ imposes on subject NPs that co-occur with it in the case of a simple root plus this extension.

(x)   /-an-/ + /-is-/ + /-an-/

Consider the following sentences:

12.   *Amádoda abonanísana íthole némazí énkámpini*
       'The men make the calf and the cow see each other in the camp'

The syntactic structures of /-an-/ and /-is-/ have been combined in the above example.

(aa)   The presence of /-is-/ in the sequence makes it possible for the subject slot to be filled by any kind of NP — irrespective of whether it is singular or plural or conjoined.

(bb)   Secondly, there is also a relaxation on the constraints that /-an-/ usually imposes on the filling of the object slot. For details about these constraints, the reader is referred to par. 5.4 in this thesis. It is interesting to note that the restrictions which /-an-/ usually imposes on subject NPs, now affect the NPs in the object slots. This happens because in the context of /-is-/ their function is that of an instructed agent.

(xi)   /-an-/ + /-is-/ + /-ek-/

Consider the following sentence:

13.   *Ínkúnzi némâzi zíyabonaníseka xá úmninízó évúma*
       'The bull and the cow can be made to see each other when the owner agrees to that'

There is no crucial conflict between /-an-/ and /-ek-/ as far as the filling of the subject slot is concerned. Both extensions reduce the degree of transitivity of a radical. It is probably the combined influence of /-an-/ and /-ek-/ that undercuts the "expected" influence of /-is-/ in making a verb transitive. The position

of /-is-/ in this combination might also have something to do with it. The only impact that /-is-/ has in this combination is semantic.

(xii)   /-an-/ + /-is-/ + /-el-/

Let us look at the syntax of the following sentence:

14.   *Ámádoda abonanísela úmlimi ínkúnzí némází ébúhlánti*

	NP1	Verb	NP2	NP3	NP4
	Subject		Dative	Accusative	Locative
			object	object	NP

'The man makes the bull and the cow see each other in the kraal on behalf of the farmer'

The syntactic rules affecting each of the combined extensions have been meticulously amalgamated in the above sentence:

(aa)   The subject slot is filled by an agent NP because of the presence of /-is-/ in the combination.

(bb)   NP2 is marked for dative as a result of the present of /-el-/.

(cc)   NP3 is the accusative object whose position is most probably determined by /-el-/, especially in the light of the preceding dative object. Another important observation concerning NP3, is the fact that it must obligatorily meet the condition of being either conjoined or plural or singular in form but plural in meaning — a condition that is triggered by the /-an-/ extension.

(dd)   NP4, which is locative, is clearly determined by the presence of /-el-/.

(xiii)   /-an-/ + /-is-/ + /-is-/

Consider the following sentence:

15.   *Ámádoda abonanísisa ínkúnzí némâzi*

   'The men ensure that the bull and the cow see each other'

The overall syntactic structure of the sentence satisfies the usual demands or requirements of /-is-/ extended verbs. A constraint that is superimposed by

/-an-/ is that the NP that fills the object slot must meet the requirements set out in par. 5.3 for NPs that co-occur with */-an-/* extended verbs.

(xiv)   */-an-/ + /-is-/ + /-w-/*

Basically, this is the passive of the previous structure */-an-/ + /-is-/ + /-is-/* and the overall syntactic structure is that of passive. The */-an-/* and */-is-/* extensions impose the same restrictions on the NPs that are used, as has already been outlined in par. 5.3 and par. 5.4 respectively — only this happens in reverse positions since */-an-/ + /-is-/ + /-w-/* is a passive combination.

7.4.2 Combinations with extension */-ek-/*

(i)   */-ek-/ + /-an-/*

Here one comes across an interesting combination of extensions which largely reduce the degree of transitivity of a given verbal root. Consider the following sentences:

16.(a)   *Le ntsóntela ísúkê yábóphékana*
'The rope has become warped together'

(b)   **Abantwana bayabonekana*

A singular NP is allowed to be the subject of the */-an-/* ending verb above for the important reason that */-an-/* in this instance, does not imply reciprocity. The (b)-sentence is unacceptable, and its rejection can only be explained in semantic terms.

(ii)   */-ek-/ + /-ek-/*

Syntactically this combination allows a subject NP and a locative NP. The position after the verb can never be filled by an object or accusative NP or a copulative NP or an instrumental NP. Compare the following sentences:

17.(a)   *Úmntwana úxhomekekê kúmzáli wâkhe*
'The child is dependent on her mother'

(b)   **Umntwana uxhomekeke* $\begin{Bmatrix} umzali \\ ngumzali \\ ngomzali \end{Bmatrix}$

(iii) */-ek-/ + /-el-/*

In this combination the effect of the initial component */-ek-/* remains the same as in all */-el-/* extended basic roots, especially with respect to the subject NP. The */-el-/* component triggers the insertion of NPs and/or components that are typical of */-el-/* basic roots. Consider the following sentences:

18. *Íbhánti libophékelé ézántsi*

    'The belt has been tied at a low point'

19. *Íbhánti libophékele*
    $\begin{cases} úkuqinísa úmbhínqo \\ úkúba úmbhínqo úqiné \\ úkúze úmbhínqo úqiné \end{cases}$

    'The belt has been tied $\begin{cases} \text{to fasten the skirt} \\ \text{so that the skirt can be tight'} \end{cases}$

20. *Ínjá ibophékela ábahámbi*

    'The dog is kept chained to protect visitors'

(iv) */-ek-/ + /-is-/*

Consider the following sentence:

21.(a) *Ígángxá liphumpékisa ízembe ngabántwana*

    'The unskilled person makes the children blunt the axe'

It could be suggested that the sentence above entails the following:

(b) *Ízembe liyaphúmpeka*

    'The axe becomes blunt'

(c) *Ígángxá liphumpékisa ízembe*

    'The unskilled person makes the axe blunt'

If one looks at example (a) once more, one finds that */-is-/* as a terminative component, in the sequence */-ek--is-/*, imposes the usual syntactic structure of a causative sentence. Hence sentence (a) is of the following pattern:

NP1	Verb + *ek-is-*	NP2	NP3
Subject		Object	Copulative agent

It is, however, interesting that the semantic relationship between the verb and the NP *ízembe* which is now NP2 (instead of NP1 as in *ízembe liyaphúmpeka*), remains unchanged. In other words, the syntactic re-arrangement that is triggered by the terminative component /-is-/ in the sequence /-ek-is-/ does not affect the semantic relationships between the verb and the NP *ízembe*.

(v) /-ek-/ + /-w-/

This combination is a type of passive. This kind of passive has some interesting peculiarities in syntactic terms. Passives with the sequence /-ek-w-/ show a distinct inclination to prefer the following syntactic structure:

ku- + Root + *-ek-* + *-w-* (+ Agentive Copulative)

In other words, the subject slot is always filled by the impersonal subject concord *ku-*, followed by the verb, and then the optional agentive copulative. Compare the following examples:

22. *Kuyachíthekwa zíímbaléki*
    'Athletes run very fast'
23. *Kuyachithákalwa yíntlangániso*
    'A meeting disperses'
24. *Kúyalahlékwa zíímfamá*
    'Blind people get lost'

(vi) /-ek-/ + /-an-/ + /-is-/

In a few verbs, this combination has been found to operate. Compare the following sentences:

25. *Ísivúnguváne sêmkisá ízíndlu, sabophekánisa óozingcingo nóomazinki kwáyílóo ntó*
    'A hurricane ripped off roofs (lit. houses) and caused fences and sheets of iron to be twisted together'

(vii) /-ek-/ + /-an-/ + /-w-/

Consider the following sentence:

26.   *Émva kwésivúnguváne kuselê kubotshekenwê zízintó ngézintó*
      'After the hurricane a number of things have been left twisted together'

This is the kind of impersonal passive which requires the following syntactic structure:

Impersonal +	Verb	NP
Subject Concord	Passive	Copulative
ku-		

Note that (probably as a result of /-ek-/), the optional copulative NP is not an agent — it is rather the thing that undergoes the process indicated by the verb.

(viii) */-ek-/ + /-ek-/ + /-ek-/*
        Compare the following example:

27.   *Ízínki liphaphathekê nómóya láya kuxhomekekeka émthíni wépésika*
      'The sheet of iron has been blown off by the wind and has been left hanging (in a hanging position) on a peach tree'

The use of /-ek-ek-ek-/ instead of /-ek-ek-/ is mainly stylistic. Recall also that this is the only verb that allows the attachment of this combination.

(ix) */-ek-/ + /-ek-/ + /-el-/*
      Syntactically, this combination behaves just like any other /-el-/ extended basic root.

(x) */-ek-/ + /-ek-/ + /-is-/*
      This combination also behaves like any other /-is-/ extended verbal root (i.e. root + /-is-/) in syntactic terms.

(xi) */-ek-/ + /-ek-/ + /-w-/*
      This combination generally uses the syntactic framework of impersonal passives. Compare the following sentence:

28.   *Kuxhonyékekwa kúsíbonda ngábántu*
      'People are dependent on the headman'

7.4.3 Combinations with extension /-el-/

(i) /-el-/ + /-an-/

Consider the following sentences:

29. *Manéne náni manenékazi, íntlángániso iyavumélana ngáló mcîmbi*
    'Ladies and gentlemen, does the meeting agree on this matter?'

30. *Abáhlobo babonélana ízintó ézíntlé*
    'Friends choose good things for one another'

The dominant influence of /-an-/ as the terminative component in the sequence /-el- + -an-/ is only seen in NPs which fill the subject slot. All NPs which are used in this slot are subject to the constraints of /-an-/ extended verbs as outlined in par. 5.1 of this thesis. The influence of /-an-/ on the object slot appears to be eclipsed by that of the initial /-el-/ component in this sequence.

Hence the object slot can be filled by any accusative NP, irrespective of the usual constraints that are commonly triggered by /-an-/ extended basic roots. In other words, the combination of /-el-/ and /-an-/, in that order, relaxes the syntactic restrictions triggered by the /-an-/ extension when it is not in a combination. Otherwise, other normal influences of /-an-/ on post-verbal NPs, remain unchanged. Compare the following sentence:

31. *ÚThémba úyabhalélana nomhlobo wâkhe*
        NP1   NP2
    'Themba and his friend write to each other'

(ii) /-el-/ + /-ek-/

This combination causes some peculiar syntactic behaviour in sentences. This syntactic behaviour is described as being peculiar in relation to the syntactic behaviour of sentences where a basic root is extended by /-ek-/ only. The following behavioural patterns have been observed:

(aa) Most sentences where the sequence /-el-/ + /-ek-/ is used, appear to prefer the following syntactic pattern:

Impersonal SC + Verb + *ukuba* introduced complement
ku- clause or NP-Dative

Consider the following examples:

32. *Kucingéleka úkúbá úArmstrong ufíkíle ényangéni*
   'It is assumed that Armstrong has arrived on the moon'
33. *Kusebenzéleka úṁntu óhlawulayó*
   'A man who pays well can be worked for'

Depending on pragmatic factors, the following types of sentences can also be used:

34. *ÚArmstrong ucingéleka úkúbá ufíkile ényangéni*
   'Armstrong is assumed to have arrived on the moon'
35. *Úṁntu óhlawulayó úyasebenzéleka*
   'The person who pays well can be worked for'

Details about the semantic relationship between each of the subject NPs and the verbs, are given in par. 6.13 *et seq.*

It is interesting to note that once the impersonal subject concord *ku-* is used, the NP *umntu* occupies the object slot. Compare the sentences above.

(iii) */-el-/ + /-el-/*
Syntactically, this combination behaves in the same manner as any */-el-/* extended verb. For details about the syntax of */-el-/* extended verbs, the reader is referred to par . 5.16 *et seq.* Consider the following example:

36. *Ndimkhethélela izíhlangú kúbá éyímfamá*
   'I choose shoes for him because he is blind'

Once again, one comes across an interesting combination of the syntactic rules for */-el-/* and */-is-/* extended basic roots. Consider the following examples:

37. *Útîtshala ubhalélisa îkomîti îléta ngónóbhálá*

    NP1   Verb   NP2 NP3 Instr.

'The teacher causes the secretary to write a letter to the committee'

The above sentence displays the following syntactic structure:

NP1	Verb	NP2	NP3	NP4
Subject		Dative/	Accusative/	Causee/
		Recipient	Object	Instrumental

Compare the above syntactic structure with the following normal /-el-/ sentence:

38. *Útîtshala ubhaléla îkomîti   îléta   ngesichwéthezi*

    NP1   Verb NP2   NP3   NP4

    Subject   Dative/ Accusative/ Instrumental

                       Recipient Object

'The teacher writes a letter to the committee on a typewriter'

Note that NP4 in the above sentence is also instrumental, as in 38 above. But one must realise that that is where the similarity ends. Otherwise the instrumental in this latter sentence (i.e. sentence 38) indicates the instrument as such, whereas that in sentence 37 implies a causee agent.

Compare also the following causative sentence:

39. *Útîtshala ubhalîsa îkomîti   îléta*

    NP1   Verb NP2   NP3

    Subject   Accusative   Accusative

                       Causee   Object

(iv) /-el-/ + /-w-/

This sequence largely behaves just like any other passive sentence in syntactic terms. Consider the following pair of sentences:

40. *Ingónyama icóthela îxhoba layó*

    'The lion stalks its prey'

41.   *Ixhoba licóthelwa yingónyama*
       'The prey is stalked by the lion'

In the following sentences, however, there are some interesting syntactic innovations in the structure of each. The sequence /-el- + -w-/ appears to trigger a regular occurrence of the following syntactic structure:

NP1	Verb	NP2	NP3
Subject		Accusative/	Agentive
		Object	Copulative

e.g.

42.   *Ábántwana baphékelwa úmngqúsho   ngúmfâzi*

NP1	Verb	NP2	NP3
Subject		Accusative	Copulative
		object	agent

       Lit. 'The children are cooked for samp by the woman'
       'The woman cooks samp for the children'

In ordinary passives (i.e. basic root + /-w-/), if the NP2 object is used at all, the sentence is always of this nature:

NP1	Verb	NP2	NP3
Impersonal		Accusative	Agentive
Subject SC		Object	Copulative
ku-			

e.g.

43.   *Kuphékwa úmngqúsho ngúmfâzi*
       'The woman is cooking samp'

In the above sentence, no overt syntactic subject NP is ever allowed to surface.

(v)   /-el-/ + /-el-/ + /-an-/
       Syntactically, all /-el-/ + /-el-/ series behave exactly the same as other /-el-/ series.

-enzelélana   'do each other a favour'

(vi) /-el-/ + /-is-/ Series

Syntactically, this series behaves like the /-el-/ + /-is-/ combination above. The only difference is that once /-an-/ or /-ek-/ or /-el-/ or /-is-/ or /-w-/ is added, the usual semantic consequences follow.

7.4.4 Combinations with extension /-is-/

(i) /-is-/ + /-an-/

Consider the following sentences:

44. ÁmáXhosa nábéLungu bathethísana ífánakáló

   'Xhosas and the Whites make one another to speak Fanakalo'

45. Isízwe ésílúmkíléyo sifundísana úkuziphátha

   Lit. 'A wise nation teaches everyone to behave themselves well'

Here the syntactic consequences of the attachment of /-an-/ as the terminating component in the sequence /-is-/ + /-an-/ are more or less the same. But this statement needs an important qualification: the constraints on the filling of the object slot that are imposed by /-an-/, are relaxed. In fact, the transitivity of the /-an-/ ending verbs, babethísana/sifundísana, is increased as a result of the /-is-/ component in the /-is-an-/ combination.

(ii) /-is-/ + /-ek-/

Syntactically, this combination follows the rules of other /-ek-/ extended simple or basic roots. Consider the following sentences:

46. Úṁsi uqhumíseka lúla

   'It is easy to puff smoke'

47. Ítáfile ilungíseka úmphézulu

   'The table top can be repaired'

Two reasons could be suggested for the appearance of the object NP in sentence (b) above:

(aa)   the transitivising quality of */-is-/*; and

(bb)   the relationship of possession between the object NP and the subject NP.

(iii)   */-is-/* + */-el-/*

All sentences where the verb is extended by */-is-/* + */-el-/* behave just like any */-el-/* extended verb. Compare the following examples:

48.   *Ábazingéli baqhumísela ïinyôsi*

      'Hunters plague bees with smoke'

49.   *Úmfúndisi uwasebenzísela ukúlima amábanjwá*

      'The pastor uses the prisoners for ploughing'

(iv)   */-is-/* + */-is-/*

Syntactically, this combination behaves like any other */-is-/* extended verb. Consider the following sentences:

50.   *Índoda ibonísisa abántwana izíbalo*

      'The man shows the children the sums very clearly'

51.   *Útítshala uqondísisa izíbalo ngabántwana*

      'The teacher ensures that the children follow the sums well'

(v)   */-is-/* + */-w-/*

Syntactically, verbs extended by */-is-/* + */-w-/* behave just like any passive verbs.

52.   *-tyétyisw-*   'be made fat'

7.4.5 Combinations with extension */-w-/*

(i)   */-w-/* + */-an-/*

Consider the following sentences:

53.(a)   *Kwâbethwáná ngamákhwenkwé*

      'The boys fought among themselves'

(b)   **Amakhwenkwana abethwana*

54. *Kwâbethwáná îindúma ngamákhwenkwé*
     'The boys opened wounds on one another'

55. *Kubúzwana ímibúzo*
     'Questions are asked among themselves'

Syntactically, the subject position can never be filled by an overt NP. This combination uses the impersonal SC *ku-* in subject position. There is no doubt that this is the influence of the passive extension */-w-/*. There is always room for the agentive NP which is invariably in the copulative form. Another important fact is that the object slot may be filled. This is particularly interesting in the light of the terminating component */-an-/* in the combination */-w-/* + */-an-/*. Note also the underlying influence of */-an-/* in the syntactic usage of the NPs.

(aa) they may be conjoined NPs; or

(bb) plural NPs; or

(cc) even if they are singular in form, they must be plural in meaning.

(ii) */-w-/* + */-el-/*

Consider the following sentence:

56. *Íigusha zibhalwéla úkúbá zíngadukí ngábafûyí*
     'Farmers mark the sheep (with their initials) so that they should not get lost'

All sentences with the combination */-w-/* + */-el-/* prefer the following syntactic structure:

NP1	Verb	NP2	NP3
		or	Agentive
		Reason/	Copulative
		Purpose	
		Clause	

In the above syntactic structure, one can see clearly that two syntactic structures have been collapsed together, namely:

(aa)   the passive structure:

       NP1   Verb   NP2

       Subject   Agentive

                            Copulative

(bb)   */-el-/* verb syntactic structure:

       NP1   Verb   NP2   NP3

       Subject   Dative/   Accusative

                             Recipient   Object

In the usual passive syntactic structure:

       NP1   Verb   NP2

       Subject   Copulative

A typical element of the syntactic structure of */-el-/* extended verbs has been inserted immediately after the verb, but before the agentive copulative NP. Compare sentence 56 above.

7.5   THE SEMANTICS OF COMBINED EXTENSIONS

7.5.1 Introduction

In this section an attempt will be made to give some answers to numerous questions about the semantics of extension sequences. It will be interesting to find out, for instance, whether:

(i)   some rules could be formulated in order to account for the various possible combinations of extensions;

(ii)   there is such a thing as a neutral or unmarked string versus a marked one;

(iii)   there is any interdependence of semantic and pragmatic functions, which affects the sequence of extensions in a string;

(iv)   there are many grammatical characteristics relating to the foregrounding and backgrounding of component parts.

7.5.2 Combination of extensions in semantic terms

This concept has not been defined in semantic terms in the literature. Various terms

have been used to refer to this phenomenon, but they all have a clear morphological bias. The following are some of the terms that have been used:

(i)   sequence of verbal suffixes;

(ii)   combinations of extensions;

(iii)   extension sequences.

Semantically, a possible working definition could be formulated as follows:

> A combination of extensions is the concatenation of any two or more extension concepts which function as a third concept.

7.5.3   Semantic and morphological regularity

Virtually all studies in Bantu radical extension have implicitly or explicitly suggested that a combination of extensions can be broken down into its constituents, such that the meaning of the whole can be deduced from its parts. To a certain extent, this observation may hold water, as the examples in 57 below show:

57. *-bhal-*   'write'

     set of extended radicals

     -bhalel-   'write to, for, at, on account of, on behalf of, so that'

     -bhalelan-   'write to, etc ... another'

     -bhalis-   'cause, make to write; to help to write'

     -bhalisan-   'cause, etc ... another to write'

     -bhalelisan-   'cause, make (encourage, instruct) others to correspond or write to one another/each other'

     -bhalelisw-   'causing another to be written to, etc. ... by a third party'

EXAMPLES OF SENTENCES

58.(a)   *Índoda ibhála ĩléta*

         'The man writes a letter'

   (b)   *Índoda ibhalĕla úṁfázi ĩléta*

         'The man writes a letter to/for/on behalf of the woman'

(c) *Índoda nómfázi babhalélana ííléta*

'The man and the woman write letters to/for/on behalf of another'

(d) *Índoda ibhalísa úmfází íléta*

'The man makes (instructs, encourages) the woman to write a letter'

'The man assists the woman in writing a letter'

(e) *Índoda nómfází babhalísana ííléta ézíyá kúbáhlobo bâbo*

'The man and the woman make (encourage, instruct) each other to write letters to their respective friends'

(f) *ÚMfúndisi ubhalelísane izíhlobo ebezixabêne úkúze zibuyélané*

'The pastor makes (encourages, instructs) estranged friends to write letters to each other so that they can be reconciled'

(g) *ÚThémba uyibhaleliswê lé léta ngómhlobo wâkhe ábebexabéne ngúmfúndisi*

'The pastor has made it possible for Themba to receive a letter from his friend with whom he had a quarrel'

Lit. 'Themba has been made to be written to a letter by his estranged friend through the pastor'

The point that one would like to emphasise, is that the sample of extended forms of the simple radical *-bhal-* is morphologically and semantically parallel to, for instance, the sample of extended forms of *-hlamb-* in 127 below:

59. *-hlamb-*   'wash'

    Sample of extended forms

    -hlambel-   'wash for, at, on behalf of, so that ...'

    -hlambelan-   'wash for, etc. ... another'

    -hlambis-   'cause to, make to wash; help to wash'

    -hlambisan-   'cause, etc. ... another to wash; assist another to wash'

    -hlambelisan-   'cause, make (encourage, instruct) others to wash for another'

    -hlanjelisw-   'causing another to wash for a third party (passive)'

The morphological and semantic regularity shown by the two samples of 58 and 59 works so systematically, that one could even consider some rules as follows:

RULE I

$$R + 1 + 11 > X$$

where R is the simple (or underived) radical, to which is attached extensions 1 and 11, in that order. X is the semantic realisation that is predictable from the sum of extensions 1 and 11. This rule would then account for both *-bhalelan-* and *-hlambelan-* in 58 and 59 respectively.

RULE II

$$R + 7 + 11 > Y$$

where R is the simple (or underived) radical, to which extensions 7 and 11 are attached, in that order. Y is the semantic realisation that is predictable from the sum of extensions 7 and 11. This rule would then, in general terms, account for both *-bhalisan-* and *-hlambisan-* in 58 and 59 respectively.

RULE III

$$R + 1 + 7 + 11 > Z$$

where R is the simple (or underived) radical, to which is attached extensions 1, 7 and 11, in that order. Z is the semantic realisation that is predictable from the sum of extensions 1, 7 and 11. This rule would then, in general terms, account for both *-bhalelisan-* and *-hlambelisan-* in 58 and 59 respectively.

RULE IV

$$R + 1 + 7 + 2 > P$$

where R is the simple (or underived) radical, to which is attached extensions 1, 7 and 2, in that order. P is the semantic realisation that is predictable from the sum of extensions 1, 7 and 2. This rule would then, in general terms, account for both *-bhalelisw-* and *-hlanjelisw-* in 58 and 59 respectively.

The morphological and semantic regularity demonstrated above, occurs fairly extensively in Xhosa. In these cases, each extension in a string still contains enough morphological and semantic identity, such that the meaning of the string is in fact the sum total of its components.

The above characterisation of combined extensions appears so deceptively easy, that it has led many investigators in this area to ignore numerous problem areas. These problems will be seen if one considers the number of extensions in a string, the meaning content of a radical to which a combination of extensions is attached, and the frequency of occurrence of a particular radical in idiomatic expressions. If more examples are put to a rigorous test, these problems come to light. These problems will now be investigated under different headings. But first of all, attention will be given to some basic notions.

7.5.4 Some basic notions

The semantics of the combinations of extensions will be studied on the basis of four basic standards of acceptability, namely, morpho-phonological cohesion, semantic compatibility, informativity and context.

7.5.4.1 Morpho-phonological cohesion

This standard concerns the ways in which the components of the combination, i.e. RADICAL plus the STRING OF EXTENSIONS are connected within a sequence. Since details about this standard have already been treated under phonology, its analysis will not be pursued here. For details, see Chapter 2.

7.5.4.2 Semantic compatibility

The second standard will be called semantic compatibility. This concerns the way in which the configuration of concepts and relations, which underlie the surface combination, are mutually accessible and relevant. De Beaugrande & Dressler (1983: 4) define a concept as follows:

> "A concept is definable as a configuration of knowledge (cognitive content), which can be recovered or activated with more or less unity and consistency in the mind."

A few examples will now be considered to demonstrate how this standard (i.e. semantic compatibility) operates. Consider the following verb stems and the various extensions that may or may not be attached to them:

-an-	-ek-	-el-	-is-	-w-
60.		*-chama* 'urinate'		
*-chamana	*-chámeka* 'possible to urinate'	*-chámela* 'urinate on or in a special place or vessel'	*-chámisa* 'cause to ...'	*-chanywa* (passive)
	*-chamekana	*-chamélana* 'wet each other/ one another with urine'	*-chamísana* 'cause another to ...' 'assist another to ...'	**-chanywana*
	*-chameleka	*-chaméleka* 'be in a position where it is possible for one to be ...'	*-chamísela* 'cause to ... for, etc.' 'assist to ...'	*-chánywisa* 'be made to ...'
61.		*-ncwina* 'moan, etc.'		
*-ncwinana	*-ncwíneka* 'possible to ...'	*-ncwínela* '... for, at, etc.'	*-ncwínisa* 'cause to ...' 'help to ...'	*-ncwinwa* (passive)
	*-ncwinekana	*-ncwinélana* '... for, etc.'	*-ncwinísana* 'cause another to ...'	**-ncwinywana*
	*-ncwinekeka	*-ncwinéleka* 'possible to ... at, for, etc.'	*-ncwinísela* 'cause to ...' 'to the detriment of ...'	*-ncwíniswa* 'to be made to moan'
62.		*-lila* 'cry'		
*-lilana	*-líleka* 'possible to ...'	*-lílela* '... for, at, etc.'	*-lílisa* 'cause to ...' 'assist in ... i.e. to express condolences'	*-lilwa* (passive)
	*-lilekana	*-lilélana* '... for, etc. another'	*-lilísana* 'cause another to exchange words of sympathy'	**-lilwana* *liliswa/lilwisa* 'be made to ...'
	*-lilekela	*-liléleka* 'to be worthy of crying for'	*-lilísela* 'cause another to cry to the detriment of a third party'	*-lilíselwa* passive of *lilísela*

63. -phefúmla
     'breathe'

*-phefumlana	-phefúmleka 'possible to breathe'	-phefúmlela '... for, at, etc.'	-phefúmlisa 'cause, etc. to ...' 'assist in ...'	-phefúmlwa (passive)
	*-phefumlekana —	-phefumlélana 'breathe into another's mouth'	-phefumlísana 'cause to ...' 'help to ...' 'resuscitate'	*-phefumlwana —
	*-phefumlekeka	-phefumléleka 'capable of being breathed into, i.e. capable of being resusci- tated'	-phefumlísela 'cause to ... for, etc.' 'to assist to ... for, at, etc.'	-phefúmliswa (passive)

64. -lala
     'sleep'

*-lalana	-láleka 'possible to ...'	-lálela '... for, at, etc.'	-lálisa 'cause to ...' 'assist to ...'	-lálwa (passive)
	*-lalekana —	-lalélana 'lie in wait for another'	-lalísana 'cause another to sleep' 'keep each other company over- night'	-lálwana 'have sex with another'

Under this heading, we could also consider the notion of semantic incompatibility. As an example, we may refer to intransitive verbs and verbs whose transitivity is guaranteed in idiomatic usages. Such verbs do not normally allow the attachment of /-an-/ when this extension implies reciprocal action. This semantic incompatibility is logical if one considers the fact that it takes two or more parties to reciprocate. That is why extended verb stems like those in 65 below, are not attested.

65. *-chamana

     (-chama = 'urinate')

     *-ncwinana

     (-ncwina = 'to moan, sigh, whine; to utter an exclamation of pain or a groan')

     *-lilana

     (-lila = 'cry')

*-phefumlana

(-phefûmla = 'breathe')

*-lalana

(-lála = 'sleep')

*-cingana

(-cinga = 'think')

*-futhana

(-futha = 'blow in puffs and gusts; take in deep breaths')

7.5.4.3 Restoration of semantic compatibility

While the intransitive verb stems above are semantically incompatible with /-an-/ when this extension implies reciprocal action, once another extension intervenes between the radical and /-an-/, semantic compatibility is restored. Consider the following example:

| 66. | -chama | 'urinate' |
| | *-chamana | |

but

	-chamélana	'wet one another/each other with urine'
	-chamisana	'cause each other/one another to urinate'
	-chanyélwana	'wet each other/one another' (passive)
	-chanyíswana	'cause each other/one another to urinate'

| | -cinga | 'think' |
| | *-cingana | |

but

| | -cingélana | 'care about the other' |

| | -futha | 'blow in puffs and gusts, to breathe in and out audibly' |
| | *-futhana | |

but

| | -futhélana | 'blow in puffs against another' |

The interesting thing about these verb stems is that, while they are semantically incompatible with /-an-/ when this extension implies reciprocal action, once one of the other extensions intervenes between the radical and /-an-/, semantic compatibility is restored.

67. Sentences

(a) *Ámákhwenkwé achamélana xá eńxilîle*

'Boys wet each other with urine when they are drunk'

(b) *Ámákhwenkwáná ám áyakhúla; náḿhlánje avukê kwakusásá achamísana élé*

'My little boys are really growing; today they woke up early and helped each other to void urine in the loo'

(c) *Óonkâbi basébancínáne yíyo lóo ntó kúchányélwana njé naxá kúlélwéyo*

'The little fellows are still young; that is why they wet each other (i.e. each other's blankets) when they are in bed'

(d) *Yíntó yabó léyo yókúthi bâkunxila ufíke kuhánjwe kuchanyíswana nasé-sidlángaláleni*

'It is very common to find them helping each other to pass water even in public once they are drunk'

Consider also the following samples for the other intransitive verbs:

68. *-ncwina*   'moan'

  *-ncwinana

but

  -ncwinélana   'moan for each other/one another'

  -ncwinísaña   'cause each other/one another to moan'

  -ncwinélwana   'moan for each other/one another (passive)'

  -ncwiníswana   'cause each other/one another to moan (passive)'

69. *-lila*   'cry'

  *-lilana

but

  -lilélana   'cry for each other'

  -lilísana   'cause each other to cry'

  -lilélwana   'cry for each other/one another (passive)'

  -lilíswana   'cause each other/one another to cry (passive)'

70. *-phefúmla*   'breathe'

  *-phefumlana

but

  -phefumlélana   'breathe on'

-phefumlísana	'cause/make each other/one another to breathe'
-phefumlélwana	'breathe on one another/each other (passive)'
-phefumlíswana	'cause each other/one another to breathe (passive)'

71. *-lala*   'sleep'

 *-lalana

 *-lalelana

but

-lalísana	'cause/make each other/one another to sleep'
-lalélwana	'sleep for another' i.e. to keep another's sleeping place by sleeping in it while he is away'
-lalíswana	'share sleeping accommodation'

There is quite a revelation in the fact that it is chiefly the transitivating extensions */-is-/* and */-el-/* that mainly bring about the restoration of semantic compatibility between intransitive verb stems and */-an-/*. (It should be remembered at this point that */-an-/* and */-ek-/* have earlier been characterised as reducing the degree of transitivity of a given verb stem.) Note that where the intervening extension between a given intransitive verbal radical and */-an-/* is either */-ek-/* or */-an-/*, the result is an unacceptable form. Compare 72 below:

72. **-chamanana*   **-chamekana*

 *-ncwinana   **-ncwinekana*

 *-lilanana   **-lilekana*

 *-phefumlanana   **-phefumlekana*

 *-lalanana   **-lalekana*

The question of */-w-/* as an intervening extension, is not considered here because */-w-/* is mainly a terminative extension, except in those cases where it is metathesised with either */-el-/* or */-is-/*, e.g.:

73. *-ncwinwela*   *-ncwínelwa*

 (See sentences below for translations)

 -lílwela   *-lílelwa*

 (See sentences below for translations)

74. Sentences

(a) *Kuncwĩnwela ntóní ná ngâba bantu?*
     Kuncwĩnelwa ntóní ná ngâba bantu?
     'Why are these people moaning?'

(b) *Kulĩlwela ntóní ná zêzi ntsána?*
     Kulĩlelwa ntóní ná zêzi ntsána?
     'Why are these babies crying?'

It should be emphasised that /-an-/ attachment to the roots -*cham*- 'urinate', -*ncwin*- 'moan, etc.', -*lil*- 'cry', -*phefuml*- 'breathe', -*lal*- 'sleep', etc. will not be blocked by semantic incompatibility if the meaning it bears in a given context does not imply reciprocity (but continuity, cf. Chapter 6). Hence the following sentences are acceptable in Xhosa:

75. (a) *Kúthéní úchámana nénto éngapheliyó njé?*
         'Why do you take such a long time to pass water?'

    (b) *Kúthéní ába bantu bencwĩnana néntó éngapheliyó njé?*
         'Why are these people always moaning?'

    (c) *Kúthéní ló mntwana elĩlana néntó éngapheliyó njé?*
         'Why does this child persist in crying?'

    (d) *Kwézi lokíshí siphefumlana nómóyá ónukayó kûba sakhelwê ngakwízigqubu zenkúnkuma*
         'We constantly breathe in bad air in the townships because these places are situated near dumping grounds'

    (e) *Hé mfóndĩni, uxolelê ukulálana nóbúthongo obungapheliyo ngénxa yeziyóbisi?*
         'Friend, are you so addicted to drugs that you don't mind sleeping for long periods because of them?'

Semantic compatibility between intransitive radicals and /-an-/ may further be salvaged if the meaning realised is either metaphorical or idiomatic. This aspect is dealt with in par. 7.8 and 7.9 in this Chapter.

7.5.4.4 Informativity

The third standard may be referred to as informativity. This standard concerns the extent to which the occurrence of given combinations are expressive or communicative

versus vacuous. In other words, caution should be exercised as far as the length of a combination is concerned. Consider the following examples:

76.   *-thûtha*   'take and carry away things from one place to another; to carry off people'

77.   *-thuthéla*   '... for, at, etc.'

        1

    -thuthélisa   'cause to ... for, at, etc.'

        1 2

    -thuthelísana   'ensure among themselves that each other's x is transported by a third party'

        1 2 3

    -thuthisélana   'cause a third party to ... for one another'

        1 2 3

    -thutheliselánisa

        1 2 3 4 5

    -thutheliselaníselwa

        1 2 3 4 5 6 7

It is fairly obvious from the examples used above that strings of two and three extensions are common and are not controversial. Strings of four and five are restricted if one compares their frequency of occurrence with those of two and three. Strings of six and over are highly restricted. The reasons for this grading of accepted sequences, has a lot to do with semantics. The more extensions one includes in a string, the more overloaded it becomes in terms of semantic content, it becomes relatively more difficult to decode the message conveyed, thus one's perception of the information weakens. Should this happen, the speaker/hearer's processing may become so overloaded that communication will be endangered. Should a sequence of extensions be so long that it blurs communication, then it will be undermining the very essence of such string — informativity. Every combination is at least informative; no matter how predictable form and content may be, there will always be a few variable occurrences that cannot entirely be foreseen. These are idiomatic and metaphorical extensions of meaning of the components of a combination.

Let us consider the following examples and note the number of extensions in each case:

78.   *-phala*   'go about in search, go to and fro, gallop'

-phálana '... continu- ously'	*-pháleka* 'possible to ...'	*-phálela* '... towards, at, etc.'	*-phálisa* 'cause to ...' 'assist in ...'	*-phalwa* (passive)
	-phalékela 'possible to ... towards'	*-phalélisa* 'make to ... towards for'	*-phalísela* 'make to ... for'	*-phalíselwa* passive of *phalisela*

79.   *-lunga*   'be right, good, suitable, fitting, becoming'

*-lungana	**-lungeka*	*-lúngela* 'be right, good, ready for; be better for; suit, fit, pass, deserve'	*-lúngisa* 'make right, good ready, suitable; repair, mend; do the right'	
-lungisélela 'make right for; transact for (another); do service to'	*-lungélana* 'suit each other; do harmonise with each other; agree'	*-lungelelánisa* 'make equal or parallel to each other; adapt to each other, ar- range in order'		
		-lungélela 'be equal, even, level, parallel'	*-lungelélisa* 'make even, equal, level, parallel, fill up details of a story'	
		-lungelélana 'be parallel to, abreast, even, with each other; corres- pond'	*-lungísana* 'reform each other; settle a matter amicably'	
			-lungísela 'make right, prepare, arrange for'	

80.   *-qîna*   'be fixed, firm, tight; steadfast

*-qinana	**-qineka*	*-qinéla* 'be fixed, firm, tight, steadfast, for, at'	*-qinísa* 'make firm, tight; estab- lish, confirm; act firmly, energetically'	*-qînwa* (passive)
			-qiníseka 'possible to be ... be fixed firmly, be established; be firmly con- vinced, sure'	
			-qinísela 'make firm for, establish for'	
			-qiniséleka 'be made firm'	
			-qinisélela 'make firm on behalf of'	
			-qinísisa 'establish firmly'	

It should be emphasised that the degree of informativity should determine the number of extensions one can have in a combination. This condition, I think, is justifiable if one accepts the suggestion of a functional approach to the study of these combinations of extensions.

7.5.4.5 Context

The fourth standard of acceptability can be designated context. This standard concerns the factors which make a combination relevant to a situation or context of occurrence. There is a tendency among strings of four and more to be institutionalised, cf. Lyons (1977: 524). Once these strings are institutionalised, they acquire, more or less, specialised meanings. This point can be illustrated by taking the following examples:

81. *ukukhandaniseleka*   'possible to be subdued'
       1 2 3 4

e.g. *Izízwe zikhandaniséleka phántsí kwézínye xá zilámba*
              1 2 3 4

'Nations can be subdued by others when they are poor'

The above multiple extended verb can be said to have been derived from the simple radical *-khand-* as follows:

-khand-an-is-el-ek-
       1 2 3 4

If the meanings of */-an-/, /-is-/, /-el-/* and */-ek-/* were still easily isolable in this multiply extended radical, the meaning of this radical could be characterised as a sum total of the component extensions. However, the meaning of *-khandanisélek-* is now 'possible to be subdued or crushed'. How can one handle this problem? Probably the answer lies in an observation made by Lyons (1977: 524) about "complex lexemes"; he says:

> "... complex lexemes are like simple lexemes, in that, once they are created or introduced into the language system and pass into general currency, they may be institutionalised and by virtue of their use in particular contexts, develop more or less specialised senses."

Consider other examples like the following:

-futha	'blow in puffs and gusts; move the air by breathing or by a pair of bellows'
-futhaniseleka 1 2 3 4	'become smothered, by being covered with a blanket or by pressing hard upon a person who is lying down' (2) 'tie a riem round the nose of a bullock that stubbornly lies down when being trained and to tighten the riem till the bullock feels itself being smothered and stands up on its legs'

-futhaniselek-, like many other examples in Xhosa, shows that what constitutes the meaning of a particular word may be determined by certain cultural practices. In other words, one cannot be said to know the meanings of such words until one has some knowledge of such cultural practices, cf. Lyons (1977: 524). The language user's knowledge of the meanings of */-an-/, /-is-/, /-el-/* and */-ek-/* will not help him to decode the meaning of *-futhanisélek-*; (nor that of *-futh-*, for that matter). He can only know what this word means by looking for its specialised sense, and not by finding out the sum total of the components of the string of extensions.

7.6   SPECIALISED SENSES

In the section below, an attempt will be made to give an exposition of a sample of verb stems with specialised senses. This will be done in terms of some insights gained in Lyons (1977: 524 *et seq.*) in his analysis of complex and compound lexemes. In his analysis of "compound lexemes", Lyons (1977: 536) says that these can be assigned special senses through "institutionalisation". He says that this process of institutionalisation has been:

"... aptly called petrification, cf. Leech (1974)."

Lyons (*op. cit.*) goes on to explain this term as follows:

"... this metaphorical term is intended to suggest two distinguishable aspects of the process in question; solidification and shrinkage. As soon as any regularly constructed expression is employed on some particular occasion of utterance, It is available for use again by the same person or by others as a ready-made unit which can be incorporated in further utterances; and the more frequently it is used, the more likely it is to solidify as a fixed expression, which native speakers will presumably store in memory, rather than construct afresh on each occasion."

Lyons (*op. cit.*) emphasises that the process of "solidification" results from the normal use of language, and:

> "... just as naturally, though by no means inevitably, it leads to the other aspect of the process of petrification, shrinkage or semantic specialisation."
>
> Lyons (*op. cit.*)

Consider also the following multiply extended radicals in Xhosa:

82. *-khupha*
     'to take, bring, put or throw out; to draw out, extract;'
     Fig. 'vomit'

    -khuphisanéleka
     1 2 3 4
     'possible to outbid each other in *íkhâzi* for a bride'

    -khutshisanéliswa
     1 2 3 45
     'be made to outbid each other in *íkhâzi* for a bride'

The meanings of the above multiply extended verbs are determined by accepted cultural conventions.

Here is another interesting example in this connection:

83. *-lunga* (a) 'be good, right, becoming, ... etc.'
          (b) 'be parallel or alongside of'
          (c) 'belong to'
          (d) 'be prepared or ready'

    -lungélana
     'reciprocate good and kind acts towards each other; correspond with; to be congruous; to agree'

    -lungélela
     'be good or fit for'

e.g. *Lé ntó íya kulungelela kwathiná*
     'This shall be for our good'

    -lungelélana
     'be parallel to each other; be abreast or side by side with each other; to correspond to each other; to be equally straight, right, good, etc.'

Compare, for instance, the meanings of *ukulungelélana* with those of *ukulungélana* above.

84.   Sentences

Lá mádoda mabinī alungélene

'The two men reciprocate good and kind acts towards each other'

Êzi ndongá zimbinī zilungelélene

'These two walls are parallel to each other'

Another interesting example in this connection, is:

-lungelelánisa   'make even; to make straight with each other'

If one tries to retrieve the meaning of *ukulungelelánisa* from the sum total of /-el- -el- -an- -is-/, one will certainly end up with some absurdities. The whole string has a specialised meaning.

The verb stem *-lunga* is also important from the point of view of neologism. Consider the following multiply extended form:

-lungisélela   'transact or perform a business properly for another; to be ready to serve others'

New connotation: 'minister, preach the Gospel'. Hence *ukulungiselélana* means to minister to one another. It is important to note that this extension of the meaning of *ukulungiselélana* involves Lyons's (1977: 524) institutionalisation, solidification and finally, the assignment of a special meaning to the individual components of the string /-iselelan-/.

The four standards that have been outlined above characterise and create the form of behaviour identifiable as communicative or expressive value of sequences of extensions. Should these principles be tempered with or violated, the communicative or expressive value of the combinations of extensions breaks down.

(i)   If a string (whatever the number of its constituent extensions) communicates with a minimum of expenditure of effort among speakers/hearers, then such a string is efficient.

(ii) If a string leaves (whatever the number of its constituent extensions) an indelible impression once it is used, then such a string is effective.

(iii) If a string (whatever its length) is suitable for the situation in which it is utilised, then such a string is appropriate.

Defining these combinations in a dictionary becomes a monumental task if one does not use certain entries in good sentences. This is particularly the case in bilingual dictionaries.

7.7 ORDER OF EXTENSIONS IN COMBINATION

The behaviour of extensions in a string is governed by certain conditions. Virtually any order (after semantic compatibility with the radical, semantic compatibility among themselves and phonological constraints have been taken into consideration) may be chosen. Consider the *-bon-* examples below:

85.   *-bon-*   'see'

        -bonanek-   /-an-/ + /-ek-/

                               'possible to see one another/each other'

e.g.   *Kubonáneka étíni kúphêla kúbá êlówo únéófisi yâkhe*

'It is only possible to see one another during tea time because each one sits in his office'

        -bonekan-   /-ek-/ + /-an-/

                               'possible to see something in another'

e.g.   *Báthê behlángana njé kwábe sekubonékana ízinto ábángqinelanayó ngázo*

'As soon as they met, they quickly saw in each other the things on which they agreed'

86.   *-bon-an-el-*   /-an- + -el-/

                                     1   2

                               'see one another at, for, etc.'

e.g.   *Siya kubonánela phí ngáló mcîmbi?*

'Where shall we meet about this business?'

        -bon-el-an-   /-el- + -an-/

                                     1   2

                               'meet each other for, at'

e.g.   *Siza kubonélana ló mcîmbi pháyá ébhotwé*

'We shall be meeting for this business at the palace'

The foregrounding of /-an-/ in /-bonanel-/ has the effect of bringing into prominence the idea of 'seeing each other', whereas in -bonelan-, /-el-/ is foregrounded in order to emphasise the idea 'see/meet for'. Put differently, in the case of:

-bon-an-el-
 1 2

it is the extended radical -bonan- that is further modified (semantically) by the attachment of /-el-/, whereas in -bonel-, it is the extended radical -bonel- that is modified (in semantic terms) by the attachment of /-an-/. The position of an extension in a sequence effectively defines the perspective from which an event, process or state is viewed by the speaker/hearer.

Let us look at a few more examples in order to test this claim further.

87. -thânda-   'love/like'
     -thandanísel-   'cause other to love/like each other for, etc.'
          1 2 3

e.g. Àbazáli bámáXhosa babathandanísela ntónȉ́ ábántwana naxá béngafûni? Kálóku bafúna ȉ́khâzi
      'Why do Xhosa parents force (make) their children to like/love each other even if they are not interested in that? It is because they want *lobola* cattle'

The sequence of events is as follows:

1
love for each other   -thandan-
2
is forced   -thandanis-
3
for ...   -thandanel-
-thandisanel-   'cause to love each other for, etc.'
     1 2 3

e.g. Thíná bazáli sibathandisánela úkúze bálȉ́qhelé êli sȉ́ko, bafúndisé nézabó ȉ̄ntsáphó ngényé ímíni
      'We parents make them love each other so that they get used to this custom, and that they, too, should teach it to their offspring one day'

In the above sentence, /-is-/ precedes /-an-/ in order to effectively communicate the idea that "we parents" are the agents of the reciprocated action. The sequence of events could be characterised in this order:

1
cause   -thandis-
2
love for each other   -thandisan-
3
for ...   -thandisanel-

The choice of a specific sequence in a string serves to influence the way in which the ultimate meaning of the simple radical and the sequence of extensions are successfully integrated into the total content of a given radical. The manoeuvring of these extensions in a sequence has the associated change in communicative value. In other words, the order that one selects in a combination reflects appropriately the manner in which an idea is conceptualised. Let us consider one more sample:

88.   -thandelanisela

       -thandelanisa

Although -thandelanisela looks possible, it is unacceptable on the grounds that it is overloaded and finally vacuous; it also fails to communicate with a minimum expenditure of effort among speakers.

7.8   METAPHORICAL USAGE

There is a class of extended and multiply extended radicals which would appear, on the surface, to be a violation of the principles of radical extensions in that the meaning is entirely unpredictable. However, a closer study of this class of extended or multiply extended radicals reveals that this is not so much a violation of extension rules of the Xhosa language system, more than it is a creative way of extending or transcending them. Figurative or metaphorical use is the traditional expression under which such a class of radicals is accounted for.

Consider the following examples:

	Literal	Figurative
89.	*ukulálisa*	*ukulálisa*
	'To cause to lie down;	'To pass the night;
	to put to sleep'	to encamp for the night'
e.g.	*Lalísa úmntwana*	*Ndâlalisá éDĭkeni*
	'Put the child to sleep'	'I lodged at Alice for a night'
90.	*ukubáneka*	*ukubáneka*
	'to light, lighten'	'to illuminate, enlighten, instruct'
e.g.	*Banéka ĭsĭbane*	*Ndiza kuzama úkubabanekĭsela*
	'Light a lamp'	*kúlé ndimá ĭbéyĭsayó*
		'I am going to try to enlighten them in this area where they find most difficulty'

Metaphors and idiomatic expressions always introduce unexpected meanings. It is only logical, therefore, that these terms often show some overlap. Julia S. Falk (1978: 43) says about them:

> "Idiom, proverb and metaphor are all terms that describe expressions with unexpected meanings, and it should not be surprising that there is often some overlap among these terms."

According to Dillon (1977: 37), metaphor generally:

> "... involves a novel or creative act of mind in user and hearer."

Dillon (*op. cit.*) goes on to say that metaphor should be viewed as:

> "... the creation, ..., of adjusted sense for certain words."

He further narrows the notion of adjusted sense:

> "... by saying that the adjustment must include cancellation of some definitional component of the usual sense."

Compare each of the examples in 89-90 and their English glosses. Lyons (1968: 405 *et seq.*) also deals with the problem of the metaphorical extensions of the meanings of words. Lyons (1968: 406) says:

"... the Greeks introduced a number of principles to account for the extension of a word's range of meaning beyond its 'true' or 'original' meaning. The most important of these was **metaphor**, (transfer), based on the 'natural' connection between the primary referent and the secondary referent to which the word was applied."

According to Lyons (1968: 406):

"Meanings that are more or less clearly 'related' in accordance with such principles, are not traditionally regarded as being sufficiently different to justify the recognition of distinct words."

Let us look at the following examples:

91. *-béka*

(a) 'set, lay, place, deposit, put down in a certain place'

(b) 'lead, guide'

(c) 'honour, esteem'

Note how each meaning with each extension suffix will undergo a modification in meaning:

92. *-béka*

A-meaning	B-meaning	C-meaning
Reciprocity	Reciprocity	Reciprocity
Continuous action		

e.g.

Músa úkubékana namátye éndleléni	*Bâbekaná éndleléni*	*Lá mádoda ábékene*
'Don't continue putting stones on the road'	'They lead each other on the way' (Continuous action also possible)	'These men respect each other'

Other examples of metaphorical extension in Xhosa might be found in the application of such verb stems as the following:

	A	B
	Literal	Figurative

93. *-bhĩnqa*
   'gird the loins;
   to bind anything around the hips,
   to buckle on'

   -bhĩnqa
   'get ready, to brace oneself up
   for ...'

94. *-bhúla*
   'thrash or beat out corn with
   sticks, bullocks or horses'

   -bhúla
   'ascertain/discover the person who
   caused a man's sickness by beating
   the ground with sticks in response
   to the incantations of the witch-
   doctor'

95. *-khânda*
   'beat out by hammering as iron
   on anvil'

   úkukhânda
   'tread hard with the feet on the
   ground'

In each case it is possible to discern some similarity in the performance or execution of the action denoted by the verb stem. When each of the verbs in columns A and B above is extended, this will be done on the basis of whether the literal or the metaphorical meaning is implied. Each meaning will be extended respectively, albeit literal or figurative.

Consider the following sample of *-ma* derivatives:

96. *-ma*
(a) 'stand in an erect position; to stand still, to stop'
e.g. *Yimá!*   'Stop!'
      Yima ngéenyawo!   'Stand on your feet!'
(b) 'be stationed; to dwell, live, exist'
e.g. *Ndĩmi kwélábaThêmbu*
      'I live among the Thembus'
      Êli lizwe limiwê ngábaTswâna
      'This land is inhabited by Tswanas'

97. **Derivatives**

úkuméka

'the being or substance of a person or thing'

e.g. *úkuméka kukáQámáta*

'The being of Qamata'

98. **Literal**

-méla

'stand at a place or for a purpose, or instead of another person as witness, god-father, surety'

e.g. *Ndimelê únyáná wám ápha*

'I am standing on behalf of my son here'

Figurative

-méla

'stand against, withstand, oppose, defy, importune, urge'

e.g. *Undimelê ngání ná?*

'Why do you importune me?'

99. *-mélana*

'stand next to or near each other, i.e. to be neighbours'

(a) *Ndimelenê nóQhínebe*

'I live near Qhinebe's place', i.e. 'Qhinebe is my neighbour'

-mísa

'cause to stand; to set, plant, fix, put in an erect posture'

(b) *Yímísé ípáli*

'Put the pole in upright position'

-mísela

'set, fix, put, etc. for'

(c) *Uwamísela ntóní láa mádoda?*

'Why are you stopping those men?' (i.e. for what purpose /-el-/ are you making/causing/instructing those men to stop?)

This is a clear and uncontroversial combination of /-is-/ and /-el-/.

(d) *Kwâmisélwá ábaThémbú ínkôsi*

'A chief was appointed for the Thembu'

The meaning of "appointed" is not easily predictable from /-is- -el- -w-/. Therefore, /-miselw-/ in the above sentence has been assigned a specific meaning in the language system.

(e)   *Wâzîmîsélá úkuwénza lóo msebênzi*
      'He offered himself to do that job'

The meaning of "offer" is also not predictable from the combination of extensions (in the same way that it is predictable in sentence 99(c).

      Metaphorical
100. *-mísela*
(i)   'allot a child of a prolific woman to one who has no children'
(ii) 'restore, compensate, redeem, ransom'

(a)   *Akúkho mfázî únókumîsela ómnye ngénzála béngazalâni*
      'No woman can allot another a child if they are not related'
(b)   *Makamísele îñáshe ngéháshe, asifúni mbongolo thiná*
      'Let him pay horse for horse, we don't want a donkey'

101. *-mísélana*
      'stand up to one another, match'
      Akánakhó úkumisélana nám kúmsebénzí wézándla
      'He is no match to me in handwork'

102. *úkumiséleka*
      'that which has stood the test'
      Înêne ámazwî ówakha wáwáthétha ámîsélékile
      'Indeed, the words which you once uttered have stood the test'

The events or actions or processes referred to by the metaphorical usages, are far more complex and abstract; they have to do with figurative factors and not literal ones.

7.9   IDIOMATIC USAGE
Following Taverner (1977: 94), an idiom will be defined as:

"... a surface syntactic construction which can be broken down into two or more constituents, such that the meaning of the whole cannot be deduced from its parts. A syntactic construction is not an idiom if its meaning can be deduced from its structure on the basis of similar grammatical forms."

The scope of this section, already limited for the most part to the semantics of multiply extended verb stems, will further be restricted to a sample of verbs designated as idiom-forming verbs. Taverner (*op. cit.*) says about idiom-forming verbs:

"Idiom-forming verbs are verbs whose presence in a sentence is indicative of a discrepancy between what constitutes a verb in surface structure and the use of the term 'verb' (or 'verboid') to designate a semantic unit ..."

Taverner (*op. cit.*) mentions the following "typical properties of such verbs":

(i)   each of them occurs in a large number of idioms, e.g. *-lála, -béka, -qîna*;

(ii)   each of them has a wide variety of meanings;

(iii) a number of idiom-forming verbs are used as auxiliary verbs in some cases and as main verbs in others, e.g.:

-suka	*-fumána*	*-bûya* etc.
'leave'	'get'	'return'

Taverner (*op. cit.*) rightly points out that the number of idioms in which a particular verb occurs can be determined, at least tentatively, by consulting published lists.[3]

The high frequency of occurrence of any verb stem in idiomatic expressions, results in an equally high frequency of metaphorical or idiomatic interpretation(s) of its extended (or multiply extended) forms. Consider the following examples:

103.   *-lála*

(This verb stem has a high frequency of occurrence in idiomatic expressions.)

(a)   *-lálana*

*This form is unacceptable on the literal level, if the intended meaning is that of mutual action.

However, this form is acceptable on the metaphorical or idiomatic level when it means: "to live in uncleanness; to commit adultery".

(b)   *-zálana*   (*-zála* 'give birth')

*This form is absurd on the literal level, if the intended meaning is that of mutual action. Metaphorically/idiomatically it is acceptable and it means "to be related".

(c)   *-lalánisa*

*This form is unacceptable on the literal level, if the intended meaning is that of mutual action, instigated by a third party.

On the metaphorical or idiomatic level, this form is appropriate. It means: "to put someone off his guard, draw his attention away; to dissuade one from a purpose; to cheat by dissembling and hypocrisy".

Note that on the literal level, the combination of *-lal-* + *-an-*, and *-is-*, etc. is semantically vacuous if not absurd. But at the metaphorical/idiomatic level, it is appropriate and communicates an idea efficiently and effectively. It should also be emphasised that whereas *-lalánisa*, on the literal level, is absurd, some extended (or multiply extended) forms of *-lal-* do have acceptable meanings both on the literal and the metaphorical levels. Compare the examples below:

(d)   *-lálela*
       'sleep for, at'
       Metaphorically: 'lie in wait for, at'

(e)   *-lalísela*
       'make to sleep for, at'
       Metaphorically: 'make provision for any eventuality'

Here are other examples of extended radicals with idiomatic meanings:

104.   BASE RADICAL: *-fan-*

(a)   *-fanelékis-*
       'make proper, decent'

e.g.   *Kuthátha íxésha élide úkufanelékisa náyiphí ná íntó*
       'It takes a long time to make anything proper'

(b)   *-fanisélan-*
       'dress alike, i.e. to put on clothes, or dresses of the same colour'

e.g.   *Àba bantu báfánĭsélene*

'These people have dressed alike'

105.   BASE RADICAL: *-futh-*

'blow in puffs and gusts; to move the air by breathing or by a pair of bellows'

(a)   *-futhelan-*

(i)   'be in a state of suffocation'

(ii)   'be swollen; inflated'

(iii)   'meet privately for a discussion'

e.g.

(a)   *Lé ndoda bayifakê éséfíni yátsho yafuthélana*

'They put this man in a safe and as a result he was in a state of suffocation'

(b)   *Ndihlangenê nayé éfuthéléné ngúmsîndo*

'I found him almost swollen with anger'

(c)   *Àmálungu éSebe ngalĭnye aqála afuthélané phámbi kókúbá áye kwintlangániso yéfakhalithĭ*

'Members of a department first meet privately for discussions before they attend a faculty meeting'

106.   BASE RADICAL: *-zal-*   I

'become full'

(a)   *-zalisek-*

'be fulfilled, accomplished' (a promise, prophesy)

e.g.   *Sĭdê sázalĭseka ĭsithémbiso sâkhe*

'His promise has been fulfilled, at last'

107.   BASE RADICAL: *-zal-*   II

'bear young; to beget, generate'

(a)   *-zalelan-*

'to beget for one another; used of brothers or relatives'

e.g.   *Nómfázĭ óngazalĭyo kwáXhosa únabó ábántwana kûbá ábánakwâbo nábásak-*
        wâbo bómnĭka ábabó ábántwana besĭthi: "dadé kûyazalélwana!"

'Even a barren woman in Xhosa society does have children because her brothers and sisters will give her theirs saying: "sister, man begets for another!" '

7.10   SYNTACTICO-SEMANTIC FUNCTIONS: A SAMPLE ANALYSIS[4]

In the next few pages, I shall examine a number of sentences in which combinations of

extensions are used. It will become clear that the exact semantic function of each extension in a string may remain unchanged. This function will somehow be manifested on the co-occurring NPs. This position reiterates the important observation that was made in Chapter 3 that Xhosa is an agglutinative language with a rich and complex morphology of formal transparency and semantic specialisation.

Consider the following sentence in which the combination /-an-/ + /-ek-/ has been used:

108.   *Kubonáneka lûla ézikátini nókúbá kúmnyáma*
       'Cats see each other easily even if it's dark'

As a starting point, let us recall the following semantic characterisation of /-ek-/ by Poulos (1975: 34):

109.   "This extension indicates that the subject of the verb enters into or is in some
       state or condition resulting from the action, or has the potentiality for under-
       going the action expressed by the base radical. There is no implication that any
       agency is responsible for such state, condition or potentiality."

Let us assume that sentence 108 above could be paraphrased as follows:

110.(a) *Ikati$_1$ iboneka lula kwikati$_2$ nokuba kumnyama*
        'Cat$_1$ can be seen by cat$_2$ even if it is dark'
    (b) *Íkáti$_2$ ibonéka lûla kwîkáti$_1$ nókúbá kúmnyáma*
        'Cat$_2$ can be seen easily by cat$_1$ even if it is dark'

In the light of sentences 110(a) and (b), it is clear that the semantic relationship be-
tween the verb and the NP *kwîkáti* follows the semantic characterisation of /-ek-/ as
given by Poulos (1975: 34); the only difference is that *ézikátini* is not the subject of
the sentence in sentence 108. Sentence 108 demonstrates an important fact which has
been raised by Peter Cole (1983: 115):

       "One of the major questions in contemporary linguistics is the extent to which
       syntactic facts — the distribution of morphemes in a sentence — are determined
       by semantic rather than purely syntactic principles."

ézikátini as the NP that is related to the verb in 108, is specially marked as the locus of
the action/activity of the verb, *kubonáneka* — hence it is in the locative. There is a

further semantic constraint on the NP *ézikátini* which is imposed by the /-an-/ compo-
nent in the string /-an-ek-/. The base from which the locative *ézikátini* is derived, is ob-
ligatorily a plural NP, viz. *íikati* 'cats'. At this point one should remember how Poulos
(1975: 54) characterises /-an-/ in semantic terms:

111.   "This extension has two main significances:

(a)   It indicates that the participants in the action of the verb carry out the action
        denoted by the base radical reciprocally or mutually;
(b)   It indicates the drawing together, mixing or parting of persons or things."

The only striking difference between sentence 176 above and genuine reciprocal sen-
tences is that the NP *ézikátini* is not the subject of the sentence.

/-an-/ + /-el-/
Consider the following sentence:

112.   *Ábáhlobo babonánela úbumnândi*
        NP1   NP2
        'Friends see one another (i.e. meet) for pleasure'

The semantic relationship between NP2 and the verb is the same as that of any /-el-/
extended verb. There are constraints on the NP that is allowed to fill the subject slot.
These constraints are determined according to the (a)-part of 111.

/-an-/ + /-is-/
This /-is-/ ending combination satisfies the semantic requirements of a normal causative
sentence, cf. par. 6.34 *et seq.* The presence of /-an-/ in the combination, imposes some
semantic constraints on NP2, i.e. the secondary agent. The semantic constraints im-
posed by /-an-/ are those outlined in 111; the only difference is that the NP concerned
in this case is in the accusative or direct object slot, whereas 111 refers to a subject NP.
In fact; it is logical that 111 should apply to NP2 in the sentence below because, sem-
antically, this NP refers to the "participants" which are involved in the action denoted
by the verb. Consider the following sentence:

113.   *Ínkwenkwé ingqubánisa ámazínyo ngénqindi*
        NP1   NP2   NP3
        'The boy makes the teeth hit one another with his fist'

/-an-/ + /-w-/

This combination occurs in contexts implying that the parties indicated by the copulative NP, are jointly engaged or combine in performing an action, or are conjointly involved in a state, often with a connotation of exclusion, viz. that the action or state concerns all the participants but no more than them. Compare the following sentence:

114. *Kucénganwa ngábadlâli xá kúqhambukê úḿlo*
     'Players plead among themselves when a fight has broken out'

Note also that one can have a sentence of this nature:

115. *Kucénganwa ngábadlâli nósómpémpe xá kúqhambukê úḿlo*
     'Players and the referee plead among themselves when a fight breaks out'

The phrase *ngabadlâli nósómpémpe* clearly shows the influence of the */-an-/* component in the combination */-an-/ + /-w-/*. It should also be mentioned here that */-an-/ + /-w-/* is often realised as */-w-/ + /-an-/*. This process has no semantic consequences.[5]

/-ek-/ + /-an-/

This combination appears in contexts implying strictly constrained or contained or arrested development; in other words, a development that remains constantly in the state specified. Consider the following sentence:

116. *Ímityá yethú yézîhlangú îsúkê yáphóthékana yáyîlóo ntó*
     'Our shoe laces have suddenly become entangled into one mass'

This combination indicates a change in state, and further denotes that the state or condition specified is entered into or is being initiated. A further special implication of */-ek-/ + /-an-/* is the idea that the result attained or to be attained, through the Subject NP(s) being conjointly involved in a state, is distributed among the parties involved. Furthermore, there is a suggestion of contiguity among the participants.

/-ek-/ + /-ek-/

In this example, there is also the suggestion of arrested development, remaining constantly in the state specified, and by extension, stationary.

Consider the following sentence:

117.   *Úmfúndi úxhomekekê kúmhlohli*
       'The student depends on the lecturer'

Rather than indicate "entering into a state or condition", this combination implies a completed, accomplished or perfected state.

/-ek-/ + /-el-/

This combination occurs in contexts where the implication is that the subject NP enters into a state or condition at a certain point or locality, or for a certain purpose or reason. In cases where reference is made to a certain point or locality, there may be a suggestion of physical contact as given by the locative NP.

Compare the following sentences:

118.   *Îqhîna libophekelê éhémpeni*
       'The tie is fastened to the shirt'

119.   *Îqhîna libophekelê úkuhómbisa*
       'The tie is fastened for purposes of decorating'

Sentence 118 above, shows the use of this combination to denote extension since the locative NP *éhémpeni* indicates the ending point or limit of something that is thought of to be extending; sentence 119 indicates entering into a condition or state for a purpose.

/-ek-/ + /-is-/

The semantic value of this combination is simple. It indicates that the subject NP is caused/made to change in state or that it is caused or made to enter into the state or condition specified.

/-ek-/ + /-w-/

This combination is not productive. In those contexts where it occurs, the verbs concerned have taken on a figurative or metaphorical extension. Compare the following sentences:

120. *Kuyachíthekwa zíinjuza*
      'Athletes run very fast'

121. *Kuyalahlékwa zíigusha*
      'Sheep get lost'

This combination attaches only to a selected number of verbal roots, especially those that imply evaporation, dispersal, vanishing, disappearance, to elude, to come to naught, etc.

It should also be emphasised that this combination is often metathesised and is realised as */-w-/* + */-ek-/* with no change in semantic value.

/-el-/ + */-an-/*
The dominant influence of */-an-/* as the terminative component in the sequence */-el-/* + */-an-/* has some important semantic consequences. These are:

1)   All NPs which fill the subject slot are subject to the constraints of the */-an-/* extended verbs.

2)   Besides indicating the participants in the action denoted by the verb, the subject NP is at the same time agent and benefactive or agent and recipient; instead of being agent and patient simultaneously, as it always happens in ordinary */-an-/* extended simple radicals. The Xhosa language behaves logically here because when this combination is used, the verb is always transitive; as a result there is no need for the idea of patient to be incorporated in the subject. Once the subject is relieved of the burden of incorporating the "patient", then this semantic slot is left open for the incorporation of the "benefactive/recipient" semantic function.

Consider the following sentence:

122. *Ábáfâzi bakhethélana íílókhwe*
      'Women choose dresses for one another'

The women *ábáfâzi* choose the dresses; so they are the agents. The women are also going to benefit from this action — so they are the benefactors, or they are going to

receive the dresses — in which case they would be recipients. The action of choosing does not transit to the NP *ábáfâzi*, so they cannot be said to be "patients" at the same time. *Íilókhwe* (dresses) is the NP to which the action transits; therefore it is the "patient". Recall also that the Patient NP *íilókhwe* is not related on a part-to-whole basis to the subject NP; therefore it does not indicate the extent to which the subject NP is affected by the action of the verb.

/-el-/ + */-ek-/*

This combination normally occurs in contexts where the verb has taken on a figurative meaning. Compare the sentences with the impersonal subject concord *ku-* above.

Consider also the following sentences:

123.   *Ítítshala ékhútházayó íyasebenzéleka*

        'A teacher who encourages, prompts one to work for him'

This combination is found in contexts where the subject NP does something which prompts others to bless or condemn him.

/-el-/ ÷ */-el-/*

This reduplicated extension can have the following semantic functions:

(i)   Intensification:

e.g.   *-phindélela*

       'to do repeatedly'

(ii)   Perfective:

e.g.   *ukugqibélela*

       'to be perfected'

In other words, it indicates an action that is completed, accomplished or perfected.

/-el-/ + */-is-/*

Consider the following examples:

124.   *Útítshala   ubhalélisa   ínqúnunu   íléta   ngábafúndi*

NP1	Verb	NP2	NP3	NP4
Subject		Object	Object	Instrumental
(Agentive)		Recipient/	Accu-	secondary
		Benefactive	sative	agent

'The teacher makes the students write a letter to the principal'

Let us compare the above sentences with the following /-el-/ and /-is-/ sentences:

125. *Ábafúndi*   *babhaléla* *ínqúnunu*   *íléta* *ngesichwéthezi*

      NP1   VP   NP2   NP3   NP4

      Subject   Indirect object   Direct Instrumental

      only agent   Recipient   object

      'The students write a letter to the principal with a typewriter'

126. *Útítshala*   *ubhalĩsa* *ábafúndi*   *íléta* *ngesichwéthezi*

      NP1   VP   NP2   NP3   NP4

      Subject   Object of   Object Instrumental

      Agent   causative verb   of *-bhal-*

      'The teacher makes the students write a letter with a typewriter'

The combination /-el-/ + /-is-/ causes the correlated NPs to have some extra semantic functions in order to express or communicate particular information. The extra semantic functions which are assigned to some correlated NPs, are selected from the semantic functions of each individual extension in a combination. For instance, NP2 *ínqúnunu* in sentence 125, is the recipient or benefactive object because of /-el-/, while NP4 *ngábafúndi* is an instrumental that serves as a secondary agent as a result of /-is-/.

7.11 RESUMÉ
The following observations can now be made.[6]

(i)   No extension loses its semantic content when it occurs in a string (except in cases of metaphorical extension of meaning).

(ii)   In a string where extensions concatenate in the following manner: A B A, the second A component will, by force of repetition, invariably imply an action/event that is accomplished, perfected.

(iii)   Every extension in a string superimposes some semantic constraints on some co-occurring NPs for purposes of communicative effect. A single NP may be constrained by more than one extension in semantic terms.

(iv)   The number of extensions in a combination is governed by the speaker's ability to decode the sequence.

(v)   Combinations occur freely (after all semantic and phonological constraints have been taken into account), up to three in a sequence with regular semantic predictability. With regard to four extensions in a sequence, the semantic predictability is still retained on condition that the fourth extension is either /-w-/ or a reduplication of /-el-/ or /-is-/.

(vi)   Bearing in mind point (v) above, combinations involving four, five and (rarely) six tend to be less predictable in meaning, these show a gentle curve towards lexicalisation in their development. But rather than refer to them as lexicalised forms, I merely refer to them as being figuratively or metaphorically extended. They take on too many idiosyncratic properties to be considered in the same way as the combinations of two and three, for instance.

(vii)   Beyond six extensions in a sequence, the meaning becomes incomprehensible.

Chapter 8

NON-PRODUCTIVE EXTENSIONS

8.1 NON-PRODUCTIVE EXTENSIONS

8.1.1 Introduction
This chapter deals with unproductive extensions.[1] These non-productive extensions will be analysed from various angles: phonologically, morphologically, syntactically and semantically.

8.1.2 Non-productive extensions
The following is a list of non-productive extensions (and the names traditionally associated with them) that will be analysed:

(a)   the causative /*-Y-/;

(b)   the neuter /-akal-/;

(c)   the stative /-al-/;

(d)   the dispersive /-alal-/;

(e)   the stative-positional /-am-/;

(f)   the contactive /-ath-/;

(g)   the persistive /-ezel-/;

(h)   the reversive:

        (i)   /-ul-/ (the reversive extension);

        (ii)   /-uk-/ (neuter-reversive);

        (iii)   /-ulul-/ (the reversive-repetitive extension);

        (iv)   /-uluk-/ (the neuter-reversive extension).

8.2 THE CAUSATIVE /*-Y-/

8.2.1 Morphology
This extension, which is realised as a morphophonemic change, occurs with a restricted number of radicals. In Xhosa, these radicals end in /l, k/. There is a feeling that the radicals with which /*-Y-/ occurs are all extended by origin. In some cases the /-is-/ extension may occur with the same radicals. Where this occurs, the semantic differences

between /-is-/ and /*-Y-/ forms can be explained in terms of either dialectal preferences or specialised senses.

The following is a list of morphophonemic changes associated with /*-Y-/:

l + Y > z
k + Y > s

and there are a few causative verbs ending in /-y-/ as such.

EXAMPLES

-séla	-séza
'drink'	'cause to ...'
-limála	-limáza
'hurt, injure'	'cause to be ...'
-góduka	-gódusa
'go home'	'cause to ... or send home'
-fudúka	-fudúsa
'move from one place to another'	'to cause to ...'

In the section below, I shall demonstrate that there are some semantic differences between /*-Y-/ forms and their /-is-/ ending counterparts.

-séla	-séza
'drink; to absorb, empty'	'cause to ...; take an animal to a river or any kind of drinking place where it can get water; make an animal/or a person drink medicine'

e.g.

1. *Hámba uýe kuséza íbhókhwe emlánjeni*
   'Take the goat to the river for a drink'

-sélisa	'cause to ...; help to ...'

In standard Xhosa, -sélisa is generally used when it refers to humans:

e.g.

2. *Umfâzi usélisa úmntwana ûbîsi*

   'The woman makes the child drink milk'

or 'The woman feeds the child with milk'

or 'The woman assists the child in drinking milk'

The version in 3 below would only be permissible if milk was given to the child as a kind of medicine, e.g. when a child has swallowed a poisonous substance and is made to drink milk so that he can vomit,

e.g.

3. *Umfâzi uséza úmntwana ûbîsi kúbá utyê ítyhéfu*

   'The woman gives the child milk to drink because he has swallowed a poisonous substance'

The use of *-séza* in this instance is justified on two important grounds:

(i) to underscore the use of the liquid for medicinal purposes;

(ii) to disambiguate the sentence for a possible reading of "feeds the child with milk".

If a child, for instance, is given milk as a kind of medicine and the speaker prefers to use the */-is-/* form, then such a sentence presupposes that the child had to be physically aided in drinking the liquid, either because he couldn't drink it on his own or because he was refusing or resisting to do so voluntarily,

e.g.

4. *Umfâzi usélisa úmntwana ódlisiwéyo ûbîsi ngókumána émcófa úmqala*

   'The woman makes the poisoned child drink milk by intermittently pressing his/her throat'

Even if the above sentence ended after the NP *ûbîsi* 'milk', the meaning given to it above would be guaranteed by the presupposition of "physical aiding" which it entails. The clause ... *ngókumána émcófa úmqala* helps to remove any vestiges of doubt by specifying the actual physical aid applied.

Now consider the following examples:

-khumbúla	'come to memory, recollect, remember'
-khumbúza	'remind'
-khumbúlisa	'remind someone by offering him/her certain clues'
-phúmela	'go through'
-phúmeza	'cause to come or bring out; to go through or pass over'
-phumélisa	'assist (someone/something) to go through'
-phálala	'spill, overflow, flow, rush out, as water from a vessel'
-phálaza	'empty, pour out, spill, shed; to cause to run over; to throw away water from a vessel'
-phalálisa	'cause to ... by physically making some kind of operation, e.g. by putting a vessel in a standing position, etc.'
-phúmla	'take a rest; to cease from labour; to be quiet, at peace'
-phúmza	'give rest for a while; to cause to rest; to relieve from toil'
-phúmlisa	'assist someone who want to take a rest, etc.' e.g. 'a patient in hospital'

The examples above demonstrate the following important facts:

(i)   the */-z-/* ending forms show real causative significance; while

(ii)   the */-is-/* ending alternatives generally have the assistative significance.

Compare the following sentences and the syntactic-semantic functions of the co-occurring NPs:

5.   *Unési uphúmza úgqirha*
       'The nurse relieves the doctor from toil'
       In other words, she affords him a chance to rest by taking over his duties.

6.   *Unési uphúmlisa isigúlana (ésíngakwazíyo úkuzikhwélela ébhédini)*
      'The nurse assists the patient who wants to take a rest (the patient who is un-
      able to climb into bed on his own)'

The above verbs have been specially selected for analysis in order to correct a wrong
impression created by Pahl (1967: 85). In his book Pahl (*op. cit.*) wrongly suggests that
the verb stems:

-*séla, -limála, -khathála, -khumbúla, -phúmela, -phálala, -phúmla*

can never be used with the extension /-*is*-/, whereas the opposite is true. In Pahl's (*op.
cit.*) analysis, these verb stems can only use extension /*-Y-/.

Some grammars in Xhosa usually list the following verb stems as exemplifying those
that can take both the non-productive /*-Y-/ and the productive extension, /-*is*-/ to sig-
nify the causative:

Verb	Causative forms
-*vela*	-*vélisa, véza*
'come forth from; to appear, come into sight; originate'	
-*khwéla*	-*khwélisa, -khwéza*
'climb'	
-*phêla*	-*phelîsa, -phêza*
'come to an end; terminate, cease'	
-*fudúmala*	-*fudumálisa, -fudúmeza*
'be warm, hot'	

In standard Xhosa there are definite semantic differences between the /-*is*-/ and the
/*-Y-/ causative forms above. Compare the meanings below:

(i)   -*vélisa*
       'cause to come out, make to appear; bring forth or out; produce; introduce a
       subject or point, hence to propose'
whereas

(ii) *-veza*

'expose one's private parts; expose what should be hidden'

EXAMPLES

7. *Ukúbá ulwénzê ngényáméko úphando lwákho uya kuvelisa ïingontséntse ngéengontséntse*

'If you have done your research well, you will reveal a number of hitherto hidden truths'

8. *Hî! Wethú, súkúza kusivézela lá mazinyó ǎkho ánénkunkqa!*

'Hi! Don't come and expose for us your teeth which are full of plaque'

8.3 DIALECTAL PROBLEMS

Some dialects of Xhosa do not appear to recognise the */-velis-/* form of the causative; they only employ */-vez-/*. Such dialects are Embo or Mfengu, Thembu, amongst others. I believe that this has led to the confusion between the meanings of the */-is-/* and the */-z-/* version. However, this confusion does not exist in standard Xhosa. Compare the following sentences:

STANDARD XHOSA

9. *Velîsa îsándla ndîboné*

'Show me your hand so that I can see it'

EMBO/THEMBU

10. *Vezá îsándla ndîboné*

'Show me your hand so that I can see it'

-khwélisa/-khwéza

In standard Xhosa, these two forms do not cause any confusion. *-khwélisa* means 'cause to make to mount or climb'

e.g.

11. *Bámkhwelîsa ésikhótshini*

'They made him ride in a cart'

-khwéza means 'ascend a river along its banks'.

e.g.

12. *Sábábóná bekhwéza úmlambo*
     'We saw them go up the river'

Some dialects of Xhosa (e.g. IsiMpondo) appear to recognise */-khwez-/*, where standard Xhosa prefers */-khwelis-/*. In other words, */-khwez-/* covers both the standard Xhosa meanings of */-khwelis-/* and */-khwez-/*.

-phelísa/-phêza

In standard Xhosa there is a clear semantic difference between these forms. *-phelísa* means 'cause to cease, or fail; wear out, bring to an end, terminate; to put an end to; to annul, abolish, exterminate, destroy'.

-phêza, on the other hand, means 'stop, leave off, cease, desist'.

EXAMPLES

13. *Ndiza kuziphelísa íintlungu ngéli yeza*
     'I am going to stop the pain with this medicine'
e.g. 'I am going to put an end to the pain ...'

14. *Utítshala úthi masíphezé úkubhâla*
     'The teacher says we must stop writing'

Ukufudumálisa/ukufudúmeza

In standard Xhosa, *ukufudumálisa* means 'to make warm; to cause to be warm'.

15. *Íingubo zifudumálisa ímizimbá yethú*
     'Blankets make our bodies warm'

Ukufudúmeza, on the other hand, means 'to warm up food'.

16. *Fuduméza úkutya kwám*
     'Make my food warm'

What is evident in the above examples, is the judicious use of each of the two causative extensions for a specialised causative connotation. Other dialects of Xhosa which prefer the use of one extension only, even in the above cases, operate within the general framework of one extension with several meanings.

8.4 THE NEUTER /-akal-/

Many researchers have implicitly or explicitly suggested that this extension has the same significance as /-ek-/. The extension /-akal-/ is non-productive, whereas /-ek-/ is productive. Although this extension may have some similarity with /-ek-/ (in that it is neuter, among others), it is my firm belief that /-ek-/ and /-akal-/ forms of a given radical cannot be used interchangeably. The /-ek-/-/-akal-/ case appears to reiterate the principle that one hardly finds an extension that is associated with ONE meaning only. There is always a need to resort to other strategies in order to isolate the required meaning of a given extension. However, it has also been established that there are a few instances where Xhosa has a special extension (usually a non-productive variant of a productive extension) for a particular sense or connotation, e.g. the /-is-/:/*-Y-/ dichotomy outlined in par 8.2 et seq. It would appear that the /-ek-/-/-akal-/ problem operates on the same broad principles as /-is-/:/*-Y-/. In other words, whereas /-ek-/:

> "... indicates that the subject of the verb enters into or is in some state or condition resulting from the action, or has the potentiality for undergoing the action expressed by the base radical."
>
> Poulos (1975:34)

/-akal-/ invariably indicates that the subject of the verb is in some state or condition. In other words, /-akal-/ is not polysemous like /-ek-/; it (/-akal-/) stands for one specialised sense of the neuter.

All Xhosa verbs which form the neuter by means of /-ek-/ only, are necessarily ambiguous for all the connotations of the neuter outlined in Poulos (1975: 34). On the other hand, all those Xhosa verbs which employ both /-ek-/ and /-akal-/ for the neuter, use /-akal-/ specially for the sense of: "a subject of the verb that is in some state or condition".

The rest of the other connotations will be taken care of by the /-ek-/ form. The /-akal-/ extension can also be distinguished from /-ek-/ forms by its perfective significance. It always indicates that the action of the verb has been carried out completely.

Compare the following sentences:

-éyísa	'overcome, convince'
-éyíseka	'become convinced, subdued'

17. *Háyí ké, ndiyeyíseka xá úsítsho*
'Well then, I'm convinced if you say so'

-éyísákala	'become convinced, subdued'

18. *Ámá-Ajentína eyisakelê lúla*
'The Argentinians have been easily subdued'

-fíhla	'hide, conceal, keep secret, suppress'
-fihléka	'become hidden, capable of concealment'

19. *Nkúlúmbúso ébékékíléyo, lingáthini úkúze lifíhleke ínyalá lóMphathíswá wákho?*
'Honourable Prime Minister, how can the disgrace of your Minister be concealed?'

-fihlákala	'be secret, mysterious, not easily revealed, explained, or understood'

20. *Nkúlúmbúso ébékékíléyo, ínyalá lóMphathíswá wákho alínakufihlákala xá íkrexé lakhé língafunjathiswánga*
'Honourable Prime Minister, the disgrace of your Minister will not be kept secret if his mistress is not bribed to keep quiet'

-nceda	'help, assist, aid'

-ncédeka/ukuncedákala
Ukuncédeka is ambiguous for all the connotations of /-ek-/ outlined in Poulos (1975: 34), except the connotation associated with /-akal-/.

-ncedákala	'be helped, assisted'
	Euph. 'be safely delivered of a child'

EXAMPLES

21.   *Akusóze uncédeke búbuxôki*
      'Telling lies will not help you'

22.   *Akusóze uncedákale búbuxôki*
      'You will never be completely saved by telling lies'

-wénza	'do, make, perform, act, practise, execute, discharge, fulfil, bring a thing to pass'
-énzeka	'come to pass; to take effect; to be done; to be in action or motion'

Íntándó yákho mayénzeké émhlabéni
'Thy will be done on earth'

-enzákala	'be hurt or injured by an accident'

Although in languages like Lozi, cf. Gowlett (1967: 61) there is still a clear relationship between:

-énza	*-énzeka*	*-enzákala*
'do'	'get done'	'get hurt'

Such a relationship, at least in semantic terms, is rather tenuous in Xhosa.

8.5   THE REVERSIVE /-ul-/

This extension indicates that the subject of the verb undoes or nullifies the results of the action expressed by the base radical, or performs some action opposite in function to that expressed by the base radical, cf. Gowlett (1967: 62) and Poulos (1975: 37).

EXAMPLES

-vala	*-vula*
'close'	'open'
-ándlala	*-ándlula*
'lay or spread a mat or carpet on the ground; make a bed'	'roll up the mat; make up one's bed, put it in order'

Many of these radicals do not have extant simplex radicals corresponding with the /-ul-/ forms. Compare the following sentences:

-khulul-	'loosen, untie, unharness; to free from restraint'
-siphul-	'run away all at once; to pull up a plant by the roots'
-hlubul-	'strip off, as to pull off the sheath or covering from the maize cob'
-khaful-	'render warriors invulnerable (and thieves undetectable) by making them pass through the smoke of certain herbs and sprinkling them with the gall of certain animals given as offerings to the doctor'
-guqul-	'turn over; to cause to turn back; to cause one to change his mind and conduct; to convert'
-phakul-	'take honey from a bees' nest or hive'
-landul-	'refuse a request, make an excuse from disinclination to comply; to deny, disown; to withhold from'
-qethul-	'turn over'

Syntactically, these verbs do not behave differently from ordinary simplex or underived verbs. Consider the following sentences:

23. *Íntombazâna yándlala ûkhûko*
    'The girl spreads the mat'

24. *Úmfâzi wándlula îbhédi*
    'The woman makes up the bed'

25. *Índoda ikhulûla íntambo*
    'The man unties the rope'

26. *Amákhwenkwé agúqula îlítye*
    'The boys turn the stone over'

Like simplex verbs, some of these /-ul-/ extended verbs are transitive while others may be intransitive. For instance, all the verbs in the sentences above are used transitively. /-khaful-/ is the only radical that is intransitive in the sample above. Compare the following sentence:

27.   Lé ndoda íyakhafúla

'This man renders himself invulnerable by practising úkukhafúla'

8.6   THE REVERSIVE-REPETITIVE /-ulul-/

This extension is not only reversive in significance, but also repetitive. In other words, it indicates that the action expressed by the base radical is carried out over and over again or is redone. Referring to this extension and its significance in Venda, Poulos (1975: 49) comments:

> "Fundamentally however, there is a relationship between the repetitive and reversive ideas. Thus, an action may be said to commence at point A and proceed to point B. In reversing it, one proceeds from B to A; in repeating it, one proceeds from A to B, back to A, then to B, etc."

Other connotations of this extension are those of an action that is carried out extensively, forcefully or violently, cf. Gowlett (1967: 62).

Compare the following examples:

-phulul-	'stroke, rub gently with the hand in one direction any part of the body suffering pain, so as to soothe it; massage; stroke (a cat, hair, wool, the beard)'
-thulul-	'pour out, empty, especially applied to pouring thick milk from the milk bag'
-mbulul-	'investigate, examine, search, especially to find out and bring forth to view the charms by which people have been bewitched; confiscate entirely, leaving nothing'
-hlambulul-	'cleanse, purify thoroughly by removing all impurities from the person; to cleanse dirty linen, rinse vessels; fig. to clear from fault or guilt'

-qangqulul-	'tear open; rip up with a knife'
-vumbulul-	'open to view, e.g. to turn up anything (e.g. stone, etc.) in ploughing or digging; bring to light, as a hen something out of a dung hill for its chickens'
-combulul-	'disentangle, loosen a string, rope; unwind a coil; fig. to explain'
-sombulul-	'escape or slip from the grasp; to pull oneself away from the hold of another person by a twist or wrench'
-namulul-	'separate things which are glued together or intertwined'
-phengulul-	'search out thoroughly; examine, investigate'

Syntactically, these radicals behave like any other simplex radicals.

EXAMPLES

28. *Ábafúndi baphengúlula íncwadí*
'The students are examining the book thoroughly'

29. *Amápolísa âfiká anamúlula izígebenga*
'The police arrived and separated the thugs'

8.7   THE REVERSIVE-NEUTER /-uluk-/

This extension indicates that the subject of the verb undergoes the action expressed by the base radical. This extension combines the significance of the reversive extension with that of the neuter one. All radicals incorporating this extension are intransitive.

EXAMPLES

-sombuluk-	'be released from grasp'
-combuluk-	'become disentangled, to be made loose'
-vumbuluk-	'be opened to view, e.g. a stone turned up in ploughing or digging'
-qangquluk-	'be torn open'
-danduluk-	'call loudly'

30. *Wâdanduluká úYêsu ngélizwï élikhûlu, "Thíxó wám, Thíxó wám undishíya ngání ná"*

'Jesus called loudly, "My God, My God, why do you forsake me" '

31. *Yâcombulúká ïnyóka yâkuvá úbúshushu bélanga*

'The snake started stretching out when it felt the heat of the sun'

8.8 THE STATIVE /-al-/

This extension appears to express some of the connotations associated with /-ek-/. Specifically, this extension indicates that the subject of the verb undergoes a change of state. /-al-/ is non-productive, and therefore most radicals incorporating it, do not have extant simplex radicals corresponding to them.

EXAMPLES

-khukhumal-	'to rise, swell'
-fiphal-	'become dim, indistinct, obscure; be dark and cloudy; change colour; grow pale from any cause (anger, sickness, death)'
-fudumal-	'be warm, hot'
-thunukal-	'be hurt in an old wound'

EXAMPLES

32. *Ílanga liyafíphala xá kûkhó úŕnnyáma*

'The sun becomes dim when there is an eclipse'

33. *Ísílonda ésísélúnyáweni síza kuthunúkala xá ndínxibê ísíhlangú*

'My old wound in the foot will become hurt if I put on a shoe'

8.9 THE DISPERSIVE /-alal-/

This extension appears to be a reduplication of /-al-/. It indicates that the subject of the verb extends, stretches out or disperses.

EXAMPLES

The extending or stretching out significance:

-cambálal-	'lie as cream on milk; lie stretched out in a half drowsy, indolent manner'

34. *Ndidiniwe; ndiza kukhe ndicambálale élukhukwéni ókómzuzwána*
    'I am tired, I shall lie stretched out on the mat for a few minutes'

-thabalal-	'of a rolling extent of country, lie stretched out'

35. *Ló mhlâba uthabálele kámnândi*
    'This land lies stretched out very well'

-phangalal-	'be broad, wide'

36. *Yênzé iphangálalé lé ndlu úkúze nónwabe*
    'Build a spacious house, if you want to be happy'

The dispersing significance:

-sabalal-	'be scattered or dispersed'

37. *Wâthí wâkubhudla úmôya, ímbewu yásábálala*
    'When the wind blew, the seeds were dispersed'

-nyamalal-	'disappear'

38. *Wâbhudlá úmôya kwanyamálala úkúngcola*
    'The wind blew and as a result litter disappeared'

8.10 THE STATIVE-POSITIONAL /-am-/

The significance of this extension is that it indicates that the subject of the verb enters into some bodily position, posture, attitude, condition or state. Radicals incorporating this extension, do not have extant simplex radicals corresponding to them, cf. Gowlett (1967: 53).

EXAMPLES

-khotham-	'stoop, bow down; hide; sit or lie down doing nothing'

39. *Lé ndoda iyakhóthama émsebenzíni*
'This man shirks work'

-phakam- 'stand up'
Phakáma, síhambe
'Stand up, so that we can go'
-vungam- 'snarl, growl, show the teeth like a dog'

40. *Ínjá iyavúngama*
'The dog is growling'

-ngqiyam- 'lean against'

41. *Músa úkungqiyáma élúdongéni*
'Do not lean against the wall'

-nqumam- 'cease operations'

42. *Údubúlwano lúza kunqumama xá kúthéthá-théthwána*
'Shooting will cease as soon as peace talks start'

-fukam- 'brood, as a hen in hatching; also used of a woman lying in, or a serpent coiled up after biting'

43. *Lé nkûku íyafukáma*
'The fowl is brooding (its eggs)'

-ncatham- = 'hide, conceal oneself behind an object or in the grass'

44. *Siza kuncathama phí ísína njé?*
'Where shall we find shelter, since it's raining?'

-phapham- 'wake, to be wakeful'

45. *Niya kutsho nipháphamé!*
'You will learn to be alert!'

8.11   THE CONTACTIVE /-ath-/

The significance of this extension is that it indicates physical contact of some sort between the subject of the action and the object, whether the latter is stated or implied, Gowlett (1967: 59). Radicals incorporating this extension do not have extant radicals corresponding to them.

EXAMPLES

-fumbath-	'clench the fist; grasp and keep, or retain in the closed hand'
-singath-	'take or carry (a child) in the arms; take into one's arms a child sitting on one's lap'
-mumath-	'keep something in one's mouth'
-ambath-	'cover the body, put on garments, dress oneself'
-qulath-	'contain'

Sentences

46.   *Úmntwana ufumbethê îlékese*
'The child is holding a sweet'

47.   *Úmfâzi úsingethê úmntwana*
'The woman is carrying a baby in her arms'

48.   *Ínkwenkwé imumethê âmânzi ngómlomo*
'The boy is holding water in his mouth'

49.   *Yambátha kúyabánda*
'Cover your body; it's cold'

50.   *Lé mbizá iqulethê óoní nóoní*
'This pot contains a number of items'

8.12   THE PERSISTIVE /-ezel-/

Doke (1927: 153) says that:

"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."

EXAMPLES

-bambezel-	'delay'
-gqibezel-	'round off'
-bandezel-	'inflict pain, to persecute'
-cinezel-	'oppress'
-nyamezel-	'have patience'

Sentences

51. *Musáni úkundibambézela, îbhási îza kundishîya*
     'Don't delay me, otherwise I'll miss the bus'

52. *Ndisagqibézela ló msebênzi*
     'I am still rounding off this work'

53. *Ndâbandezelwá ngúmfó ówayéngandikháthálélánga*
     'I was persecuted by a man who did not care for me'

54. *Kúmnándi ukucinézela ábángéndâwo*
     'It is a pleasure to oppress the evil'

55. *Nyamezéla, ókwákho kókwézándla*
     'Have patience because you are helpless'

8.13 SUMMARY AND CONCLUSIONS

The non-productive extensions are generally characterised by the fact that most of them do not have any extant simplex radicals corresponding to them. Furthermore, non-productive radicals generally behave like simplex verbs in syntactic terms. This similarity in behaviour is further underscored by the fact that they all allow the various productive extensions to be attached to them, subject to the restrictions outlined in the course of this research, viz. semantic compatibility, informativity and context. The employment of combinations of productive extensions to these radicals is also permitted, subject to the conditions given above.

CONCLUSION

Originally, I intended writing this thesis within the framework of a single, established, formal theory, like the Transformational Generative one. As the research progressed, it became abundantly clear that no such theory could adequately account for the multi-faceted phenomenon of verbal extension in Xhosa. In fact, the advisability of adopting a mono-theoretical approach, has been questioned in a number of recent studies.[1]

Some important observations have been made in the course of this research. The thesis conveniently handles phonological, morphological, syntactical and semantic aspects. Even the chapter on combinations of extensions follows this pattern. In each chapter an attempt is made to show where previous analyses of verbal extension failed; an alternative analysis has then been provided where it has been necessary.

Verbal extension is one of the major areas in Bantu grammar which has been researched by many scholars. Proof of this can be seen in the vast number of M.A. and Ph.D. dissertations and theses that have appeared on this topic.

Previous research in this area of grammar, not only in Xhosa, but also in Bantu generally, has concentrated primarily on morphological phenomena. Consequently, comparatively little attention has been given to the syntax and semantics of extended verbs. This is where, I believe, this thesis has made its contribution.

Some important issues have been raised in connection with the syntax and semantics of /-an-/, /-ek-/, /-el-/, /-is-/ and /-w-/. Here also, an attempt has been made to highlight the importance of some issues raised by, for example, /-an-/, /-ek-/ and /-w-/ in the now popular topic of the syntax of body parts. Extended verbs are closely bound both syntactically and semantically with their co-occurring NPs. These syntactic-semantic relations do not exist in isolation, but should always be viewed as closely knit relations between the extended verbs and the relevant NPs.

A radical or root defines the properties of a certain state or action or process, and the extension suffix or a set of extension suffixes (i.e. combination(s)), will narrow the applicability of that given radical or root to the subset that has the property attributed by the extension suffix or combination of extension suffixes. It is fairly obvious that a language user must learn to combine these extension suffixes in a number of different ways for communicative effect.

Each of the four productive extensions /-an-/, /-ek-/, /-el-/, /-is-/ has a considerable variety of meanings. These meanings are all related, whether it is in terms of sense relations or synonymy, polysemy, hyponymy or metaphorical extension. I have also shown that context and pragmatic considerations play an important role in the determination of the final meaning of an extended verb form.

The combinations of extension suffixes are governed by four basic notions:

> phonological compatibility;
> semantic compatibility;
> informativity; and
> context.

The more extension suffixes one finds in a string, the lesser it becomes possible to retrieve their individual meanings. In other words, their perceptibility weakens.

Finally, evidence has been presented in this thesis, that the various types of combinations do indeed have a significant communicative function. Each sequence of extensions is governed by a general principle of communicative effectiveness by which speakers/hearers ensure a particular interpretation of a message.

NOTES

CHAPTER 1

1. The following is a list of morphophonemic changes associated with /*-Y-/:

   l + y > z

   k + y > s

EXAMPLES:

-séla	*-séza*
'drink'	'cause to drink'
-limála	*-limáza*
'hurt, injure'	'cause to be ...'
-góduka	*-gódusa*
'go home'	'cause to ...'

There are a few causative verbs ending in /*-Y-/ as such. More details about this appear in Chapter 8.

See also Cantrell (1967: 5-27), Kropf and Godfrey (1915: x-xix) and Pahl (1967: 93-97).

2. The verb *úkubátywa* (to be sexually aroused), does appear in Xhosa. It has no active counterpart. It is also not related to the verb *úkubâba* (to be bitter).

3. The various significances of this extension suffix are dealt with in par. 6.6 ff.

4. More details about the terms morph, morpheme and allomorph are readily available in the following works: Brown & Miller (1980: 167 *et seq.*), Lyons (1968: 183 *et seq.*), Matthews (1974: 16).

5. These include: A.C. Jordan, *Ingqumbo Yeminyanya*, 1940, Lovedale Press. G.B. Sinxo, *Umzali Wolahleko*, 1976, O.U.P.

L.K. Siwisa, *Ndibuzen' amathongo*, 1956, A.P.B.

S.M. Burns-Ncamashe, *Masibaliselane*, Oxford University Press.

6. Wilkes (1978) does not mention any particular linguist by name. But it can be assumed that he refers to Doke and his followers.

CHAPTER 2

1. Taken from unpublished notes by Prof. J.A. Louw (1981).

2. The distinction between delayed breathy voice and breathy voice, has been put forward by Prof. J.A. Louw. This distribution, however, requires further investigation which would be beyond the scope of this present study.

3. Prof. J.A. Louw has suggested to me in private communication, that these stems have possibly non-productive suffixes.

4. Cf. Louw (1963b: 26).

5. Cf. Louw (1963b: 34).

6. The tonal changes reflected in this chapter do not purport to reflect a detailed analysis of tonal behaviour in Xhosa, since this would involve research beyond the scope of this thesis. They should be treated as brief summaries of changes in specific environments only.

CHAPTER 3

1. In other languages, e.g. Tobote, a West African language, cf. Gregersen (1977: 56), an affix may function as both a prefix and a suffix at the same time. Such

an affix is referred to as a circumfix. Gregersen (1977: 56) notes, for example, the following:

ké-jî-ké   'knife'

The stem is -jî-, and the plural is ń-jî-ḿ, where ké--ké and ń-ḿ are circumfixes.

See also Gregersen (1977: 57 *et seq.*) about the term suprafix which is not relevant in Xhosa.

2.   Although a claim has been made that generally aspect formatives occupy the slot immediately after the subject prefix, the exclusive formative *se-* precedes the SP. One reason that one can give for this is that *se-* is actually a shortened form of the auxiliary verb *sele*, already, cf. Louw (1963: 116).

3.   This extension is semantically related to another extension, which is sometimes represented by the symbol /*-Y-/. This symbol represents various phonological realisations, which are discussed in detail in Chapter 8, par. 8.2, and occurs with a restricted number of radicals. It is hence regarded as an unproductive extension in this study. In Xhosa, the radicals affected end in /l, k/, and /*-y-/ and are manifested as a morphophonemic change of these consonants. There is even a feeling that the radicals with which /*-y-/ occurs, are all extended by origin. In some cases /-is-/ extension may occur with the same radicals. Where this occurs, the semantic differences between /-is-/ and /*-y-/ forms can be explained in terms of either dialectal preferences of specialised senses (cf. par. 8.4) in this thesis.

4.   In a personal communication, Prof. J.A. Louw has suggested to me that the formation of certain tonal rules appears to favour the word-based model and not the root-based one. Clarification on this viewpoint would, however, require research beyond the scope of this thesis. As an example, we may consider the following rule:

S.D.

  úkubôna   *úkubonísa*

  [+h] [−h] [+h −h] [−h] + [−h] [−h]

  PP   P   m₁ m₂   Z   2   1

  ú   ku   bóon   a   + i   sa

S.C.

[+h] [−h] [O −h] [+h] + O [−h]

PP   P   ∅ R   Z∅   2$ 1$

ú   *ku*   *bóon*   *a* + *i* *sa*

Where PP	=	preprefix
P	=	prefix
$m_1 m_2$	=	first mora and second mora
Z	=	terminative vowel
2 and 1	=	indicate the extension and the final vowel

(The double *o* vowel in *-bóona* here indicates the presence of two moras.)

In the Structural Change line (S.C.), the new symbols introduced should be interpreted as follows:

> [∅ −h] means that the first mora has been deleted and we are left with a low tone only. The high tone has shifted to the penultimate syllable, with the result that the *a*-vowel of *bôna* has been deleted; the low tone of *i* of *-is-* has become high.

> [Z∅] indicates that the terminative vowel has been deleted.

5.   Compare also the tonal rule in footnote 4 above, as suggested by Prof. J.A. Louw.

6.   In terms of Booij (1977: 40), a rule like:

        $[R(+TV)]_v$ $[R + Ext + TV]_{Ve}$

should be interpreted as follows:

> The parenthesis-notation on the left of the arrow, implies that the maximal expansion of the base (i.e. the concatenation of the radical/root and the terminative vowel) is "disjunctively ordered" before the further expansion by means of the extension suffix on the right of the arrow.

7. In my opinion, this observation also applies to the tonal rule suggested to me by Prof. J.A. Louw, cf. footnote 6 above. Note, however, that in Prof. Louw's tonal rule, the terminative vowel on the right of the arrow is assumed to be automatically present after the attachment of the extension suffix; in other words, no mechanism is supplied to insert it.

8. Compare the details about the semantics of /-ek-/ in Chapter 6.

9. Compare Chapter 7.

CHAPTER 4

1. See also Hansjakob Seiler's article, *Possessivity, subject and object*, in Studies in Language 7.1. 89-117 (1983).

2. See Chapter 6 of this study. In my analysis of conceptions of locality in Chapter 6, I benefited from the following studies: Karl-Gunnar Lindkvist (1976), Nancy W. Shumaker (1977) and Betsy K. Barnes (1979).

3. Consider the following sentences where an object NP has been included:

1.(a) *Útítshala ubóna úmfúndi*
'The teacher sees the pupil'

(b) *Útítshala úyambóna úmfúndi*
'The teacher does see the pupil'

First of all, a comparison of sentences (a) and (b) in 1 above shows quite clearly that, whereas the SC is obligatory, the object concord (OC) is optional. If one could be allowed to use the English glosses for one's argument, it appears as though the incorporation of the OC in the verb brings about some definiteness in the meaning of the sentence. In a simple sentence, the incorporation of the OC is usually accompanied by the use of the present tense formative -ya-. However, one should hasten to add that in complex sentences, the use of the -ya- formative of the long form of the present tense, is not obligatory. Compare the following sentences in which OCs are incorporated.

2.(a)   *Útĩtshala umbóna úmfúndi xá énxibê ízipékisí*

       'The teacher sees the pupil when he (the teacher) has his glasses on'

(b)   **Utitshala umbona umfundi*

(c)   *Útĩtshala úyambóna úmfúndi xá énxibê ízipékisí*

       'The teacher does see the pupil when he (the teacher) has his glasses on'

(d)   *Útĩtshala úyambóna úmfúndi*

       'The teacher does see the pupil'

CHAPTER 5

1.   By changes in the number of arguments of a given verb, Vitale (1981: 188) refers to the increase or decrease in the number of co-occurring NPs.

2.   Full details of Bhat's characterisation of reciprocal meaning are given in Chapter 6, which deals with semantics.

3.   The systematic ambiguity of /-an-/ extension for reciprocity, the durative, etc., is handled under semantics in Chapter 6.

4.   See also Satyo (1983a).

5.   A phonological process known as vowel coalescence, accounts for the fusion of the -a- of na+, and the u- of *UNomsa* which results in -o-.

6.   The relationship which exists in sentence 39(e) is not clearly isolable. Inalienable possession may not be a true reflection of the relationship which exists between "wound and woman", but it is being used here for lack of a better characterisation. More research will need to be done in the whole area of "inalienable possession".

7.   Roger Epée (1976: 56) says about the term "dependency":

> "I use the term dependency here in the sense of Chomsky and Halle (1968: 76-77). A dependency relation is said to exist between two elements X and Y, if either both or none must occur. This type of dependency is expressed through the use of angled brackets enclosing each of the elements involved in the dependency. I am aware of the difference between the use of dependency in the sense above, and its use in syn-

> tactic systems which go by the name of Dependency Grammar (see Tesnière 1959, Hays 1964, Robinson 1970)."

8.　　Cf. Vitale (1981).

9.　　Cf. Mchombo (1978).

10.　　Cf. Trithart (1979).

11.　　See works mentioned in Vitale (1981), Mchombo (1978) and Trithart (1979).

CHAPTER 6

1.　　Both Poulos (1975: 25) and Gowlett (1967: 37) state that the numbers they allocate to extensions are those used by D.T. Cole in his unpublished notes on Comparative Bantu Linguistic Structures. This numbering has been adopted for Venda and Lozi by Poulos and Gowlett respectively.

2.　　Cf. Pahl (1978 & 1967) and Wilkes (1971).

3.　　Refer to Scotton (1967(a): 74) — her ideas about "skewed" meanings.

4.　　It should be noted that the agency in such an example could be construed as being instrumental, e.g.:

> *Umfúndi uyamangalíseka yímibúzo*
> 'The pupil was amazed at the large number of questions'

5.　　Cf. Van Rooyen (1978: 65).

CHAPTER 7

1.　　Note that the verb stem for 'find' is *kuma* in Tsonga.

2.　　It has been suggested to me by Prof. Louw that *-xhoma* is probably a borrowing from *NAMA*; perhaps this is why it behaves differently.

3.　　Note that /-an-/ and /-ek-/ have been found to behave slightly different from the other extensions. See par. 5.1 - 5.15.

4.   Ziervogel (1952: 83) makes the following observation:

> "... No hard and fast rules can be laid down for the sequence of the suffixes, because different shades of meanings may be expressed by the changing of the position of a suffix."

5.   Ziervogel (1952: 83-84) made a similar observation in his Swazi grammar. He says:

> "... the passive suffixes are also final, except that -wa with -ana (reciprocal) may have two combinations: a reciprocal of the passive (-wana) as well as a passive of the reciprocal (-anwa). Unfortunately no distinction in meaning between these two forms is possible in English."
>
> -bonanwa   (reciprocally being seen)
> -bonwana   (being seen reciprocally)."

6.   The observation made by John Lyons (1977: 574) has been consistently borne in mind in this analysis:

> "No one person, of course, has a perfect mastery of any language; there are degrees of fluency, and there are variations of different kinds in any language community. Our model of language competence, however, will be based upon the knowledge possessed by what might be described as an ideal omnicompetent speaker of a language, where 'Omnicompetence' implies, not only perfect mastery of the rules which determine the well-formedness of sentences, but also the ability to contextualise them appropriately in terms of the relevant variables."

CHAPTER 8

1.   For an explanation of the notion "unproductivity", and how it differs from "productivity", see par 1.4 on page 4.

CONCLUSION

1.   Compare the following studies:

> Givón, T., 1979, *On understanding grammar*; Hendrikse, A.P., 1983, *Linguistiese Ideologieë*; Moore, T. & Christie Carling, 1982, *Understanding language: Towards a post — Chomskyan Linguistics;* Newmeyer,

F.J., 1980, *Linguistic Theory in America: The First Quarter-Century of Transformational Generative Grammar*; Poulos, G., 1981, *Issues in Zulu Relativization*; Robinson, I., 1975, *The New Grammarians' Funeral: A critique of Noam Chomsky's linguistics.*

BIBLIOGRAPHY

Abasheikh, M.I.
1978:   *The Grammar of Chimwini Causatives*, unpublished Ph.D.
            thesis, University of Illinois at Urbana — Champaign.

Abernathy, R.
1974:   "An often-solved problem: Indo-European kt in Slavic." In
            Topics in Slavic Phonology, edited by D.J. Koubourlis, Cam-
            bridge University Press, Cambridge.

Adjemian, C.J.
1978:   *A Functional Generative Theory of the Structure of French:
            Intonation and Problems in Syntax*, Ph.D. dissertation, Univer-
            sity of Washington.

Ainsley, A.D.
1974:   *An examination of the uses of concord in Xhosa, with respect
            to conjoined noun phrases used as subject and object*, unpub-
            lished Honours article, Unisa, Pretoria.

Aissen, J.
1979:   *The Syntax of Causative Constructions*, Garland Publishing Inc.,
            London.

Akmajian, A.;
R.A. Demers &
R.M. Harnish.
1984:   *Linguistics: An Introduction to Language and Communication*,
            the MIT Press, Massachusetts.

Alexandre, P.
1972:   *An introduction to language and languages in Africa*, Heine-
            mann, London.

Allen, Margaret, R.
1978:   *Morphological Investigations*, Ph.D. thesis, University of Con-
            necticut.

Allerton, D.J.
1978:   "Generating indirect objects in English", *Journal of Linguistics*,
            14: 21-33.

1982:   *Valency and the English Verb*, Academic Press, London.

Anderson, J.M.
1977:   *On Case Grammar*, Croom Helm Ltd, London.

Armborst, D.
1977:   The case for a separate morphological component in the gram-
            mar: Some evidence from Germanic, *Leuvense bijdragen*, 66
            (1977), 155-172.

Aronoff, M.
1976: *Word Formation in Generative Grammar*, MIT Press, Cambridge, Massachusetts and London, England.

Austen, Cheryl L.
1974: *Aspects of Bukusu Syntax and Phonology*, Ph.D. thesis, Indiana University.

Axelrod, Melissa;
Marjorie Kurtz &
Gail Shanta
1978: *Passive in Sotho*, unpublished MS.

Ayres, G.
1983: The anti-passive "voice" in IXIL, *International Journal of American Linguistics*, Vol. 49, No. 1, January 1983, 20-45.

Azevedo, M.M.
1980: *Passive Sentences in English and Portuguese*, Georgetown University Press, Washington, D.C.

Bach, E. &
R.T. Harms (eds.)
1968: *Universals in linguistic theory,* Holt and Winston, New York.

Ballard, Jr., D.L.
1974: "The Semantics of Inabaloi Verbal Affixes", *Lingua*, 34: 181-218.

Barnes, Betsy K.
1979: *The notion of "Dative" in Linguistic Theory and the grammar of French*, unpublished Ph.D. thesis, Indiana University.

Battle, J.H. &
J. Schweitzer (eds.)
1975: *Mid-America Linguistics Conference Papers*, Oklahoma State University, Stillwater, Oklahoma.

Baumbach, E.J.M. (ed.)
1978: *Second African Languages Congress of Unisa*, University of South Africa, Pretoria.

Bazell, C.E.
1952: "The Correspondence Fallacy on Structural Linguistics". In Hamp, E., Householder, F. & Austerlitz, R. (eds.), 1966, *Readings in Linguistics II*, 271-298, University of Chicago Press. Chicago and London.

1954: "The Semene". In Hamp, E., *et al.*, 1966, 329-340.

Beach, D.M.
1923: "The Science of Tonetics and its application to Bantu Languages," *Bantu Studies*, Vol. 2, 1923-1926.

Beard, R.
1976: "A semantically based model of a generative lexical word-formation rule for Russian adjectives", *Language*, 52: 108-120.

Beard, R.E.
1981: "On the question of lexical regularity," *Journal of Linguistics*, 17 (1981) 31-37.

Beedham, C.
1981: "The passive in English, German and Russian," *Journal of Linguistics*, 17 (1981) 319-343.

Bhat, D.N.S.
1977: "Multiple case roles", *Lingua*, 42: 365-377.

1978: *Pronominalization*, printed by Shri M.S. Latkar at SMS Letter Press, Pune, India.

Boadi, L.A.
1971: "The Passive in Akan", *Journal of African Languages*, 10: 34-41.

Bokamba, E.G.
1975: "On the syntax and semantics of derivational verb suffixes in Bantu languages". In Battle, J.H. & J. Schweitzer (eds.), Mid-America Linguistics Conference Papers, Oklahoma State University, Stillwater, Oklahoma, 1975.

1976: *Question Formation in Some Bantu Languages*, Ph.D. thesis, Indiana University.

Bolkenstein, A.M.
1981: *Predication and Expression in Functional Grammar*, Academic Press, New York.

Bonvillain, Nancy
1981: "Locative Semantics in Mohawk: Time and Space", *International Journal of American Linguistics*, 47: 58-65.

Booij, G.E.
1977: *Dutch Morphology: A study of word formation in Generative Grammar*, Delran N.J. Foris Publications, Dordrecht, Holland.

Botha, R.P.
1974: *Problematic aspects of the exception filter in Prof. Halle's Morphology*, Indiana University Linguistics Club, Bloomington.

Brown, E.K. &
J.E. Miller
1980: *Syntax: A linguistic introduction to sentence structure*, Hutchinson, London.

Buckingham, H.W.
1973: "The Comitative and Case Grammar," *Foundations of Language*, Vol. 10, 1973.

Burns-Ncamashe, S.M.
1968:   *Masibaliselane*, Oxford University Press, Cape Town.

Byarushengo, E.;
A. Duranti &
L. Hyman (eds.)
1977:   *Haya Grammatical Structure: Phonology, Grammar, Discourse*,
                        University of Southern California, Los Angeles, California.

Cantrell, J.V.
1967:   *The verbal root in Xhosa: Its component Radicals and exten-
                        sions*, D.Litt. et Phil. thesis, Unisa, Pretoria.

Cardona, G.
1971:   "Some Features of Paninian Derivations". In Parret, H. (ed.)
                        1971, *History of Linguistic Thought and Contemporary Lin-
                        guistics*, 137-58, Berlin-New York: De Gruyter.

Carlson, B.F.
1980:   "Two-goal transitive stems in Spokane Salish", *International
                        Journal of American Linguistics*, 46: 21-26.

Carlson, G. &
T. Roeper
1979:   "Morphology and Subcategorisation: Case and the unmarked
                        Complex Verb", *Glot*, Jaargang 2, (1979) 3/4: 123-164.

Carrier, J.L.
1979:   *The interaction of morphological and phonological rules in
                        Tagalog: A study in the relationship between rule components*,
                        Academic Press, New York.

Chafe, W.L.
1970:   *Meaning and Structure of Language*, The University of Chicago
                        Press, Chicago.

Chalmers, J.A. &
T.B. Soga
1971:   *UTiyo Soga*, Lovedale Press, Alice.

Chomsky, N.
1957:   *Syntactic structures*, The Hague: Mouton (Janua Linguarum,
                        Series Minor, 4).

1965:   *Aspects of the theory of syntax*, Cambridge, Mass: MIT Press,
                        Massachusetts.

1970:   Remarks on nominalisation. In Jacobs, R. & P.S. Rosenbaum
                        (eds.), 1970, *Readings in English Transformational Grammar*,
                        Ginn, Waltham, Massachusetts.

1982:   *The Generative Enterprise: A discussion with Riny Huybregts
                        and Henk van Riemsdijk*, Foris Publications, The Hague.

Cole, D.T.
1975:   *An Introduction to Tswana Grammar*, Longman, Cape Town.

Cole, P.
1983: "The grammatical role of the causee in universal grammar," *International Journal of American Linguistics*, Vol. 49, No. 2, April 1983.

Cole, P. &
J.L. Morgan (eds.)
1975: *Syntax and Semantics: Speech Acts*, Vol. 3, Academic Press, New York.

Cole, P. &
J.M. Sadock
1977: *Syntax and Semantics: Grammatical Relations*, Academic Press, New York.

Cole, P.;
W.H. Harbert;
G. Hermon &
S.N. Sridhar
1978: "On the acquisition of subjecthood", *Studies in Linguistic Sciences*, 8.1.: 42-71.

Coleman, D.W.
1982: *Discourse Functions of the active-passive dichotomy in English*, D.Phil. dissertation, University of Florida.

Comrie, B.
1976: "The Syntax of Causative Constructions: Cross-Language Similarities and Divergences". In Shabatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

1981: *Language Universals and Linguistic Typology: Syntax and Morphology*, Basil Blackwell, Oxford.

Cook, W.A. (s.j.)
1979: *Case Grammar: Development of the Matrix Model (1970-1978)*, Georgetown University Press, Washington, D.C.

Cooper, R.
1976: "Lexical and Non-lexical Causatives in Bantu". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Couper-Kuhlem,
Elizabeth
1979: *The Prepositional Passive in English: A Semantic-syntactic analysis, with a lexicon of prepositional verbs*, Max Niemeyer Verslag, Tübingen.

Cranmer, D.J.
1977: "Valence and verb morphology," *Leuvense Bijdragen*, 66: (1977) 9-30.

333

Cressey, W.W.
1978:   *Spanish Phonology and Morphology: A Generative View*, Georgetown University Press, Washington, D.C.

Cruse, D.A.
1973:   "Some thoughts on agentivity", *Journal of Linguistics*, 9: 11-23.

Crystal, D.
1980:   *A first Dictionary of Linguistics and Phonetics*, Andre Deutsch.

Culicover, P.W.
1976:   *Syntax*, Academic Press, New York.

Dalgish, G.M.
1976:   "Locative NPs, Locative suffixes, and grammatical relations", *Proceedings of the second annual meeting of the Berkeley Linguistics Society*, Feb. 14-16, Berkeley, California.

Dalgish, G.M. &
Gloria Sheintuch
1977:   "On the justification for language-specific sub-grammatical relations," *Studies in African Linguistics*, 8.3.: 219-240.

Davey, A.S.
1973:   *Moods and tenses in Xhosa*, unpublished M.A. dissertation, Unisa, Pretoria.

1981:   *Aspects of the tonology of SiSwati*, D.Litt. *et* Phil. thesis, Unisa, Pretoria.

Davison, Alice
1982:   "On the form and meaning of Hindi Passive sentences", *Lingua*, 58: 149-179.

De Beaugrande, R. &
W. Dressler
1983:   *Introduction to Text Linguistics*, Longman, New York and London.

De Klerk, W.J. &
F.A. Ponelis (eds.)
1976:   *Gedenkbundel H.J.J.M. van der Merwe*, J.L. van Schaik, Pretoria.

De Guzman, V.P.
1976:   *Syntactic derivation of Tagalog verbs*, unpublished Ph.D. thesis, University of Hawaii.

Dell, F.
1980:   *Generative Phonology*, Cambridge University Press, Cambridge.

Dik, S.C.
1978:   *Functional Grammar*, North-Holland Publishing Company, Amsterdam.

1979:   "Raising in a Functional Grammar", *Lingua*, 47: 119-140.

1980:   *Studies in Functional Grammar*, Academic Press, New York.

Dillon, G.L.
1977:   *Introduction to Contemporary Linguistic Semantics*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Dinsmore, J.D.
1979:   *Pragmatics, Formal Theory, and the Analysis of Pre-supposition*, Ph.D. thesis, University of California, San Diego.

Doke, C.M.
1927:   *Textbook of Zulu Grammar*, Longman, Southern Africa.

1938:   *Textbook of Lamba Grammar*, Wits University Press, Johannesburg.

1943:   *Outline Grammar of Bantu*, Communication No. 12, Department of African Languages, Rhodes University, Grahamstown, 1982.

1954:   *The Southern Bantu Languages*, Oxford University Press, Cape Town.

1955:   *Zulu Syntax and Idiom*, Longmans, Green and Co, Cape Town.

Doke, C.M. &
S.M. Mofokeng
1957:   *Textbook of Southern Sotho Grammar*, Longman, Cape Town.

Dougherty, R.C.
1974:   "The Syntax and Semantics of EACH OTHER Constructions", *Foundations of Language*, 12: 1-47.

Dowty, D.R.
1978:   "Governed Transformations as Lexical Rules in a Montague Grammar", *Linguistic Inquiry*, 9.3.: 393-426.

Droste, F.G.
1976:   "Semantics as a dynamic device: Redundancy rules in the lexicon", *Linguistics*, 182: 5-33.

Dryer, M.S.
1982:   "In defence of a Universal Passive," *Linguistic Analysis*, Vol. 10, No. 1, 1982, 53-60.

Du Plessis, J.A.
1978:   *IsiXhosa 4*, Oudiovista, Goodwood.

Duranti, A. &
E.R. Byarushengo
1977:   "On the notion of 'Direct Object' ", Byarushengo, E., *et al.* (eds.), 1977, *Haya Grammatical Structure*, University of Southern California, Los Angeles, California.

Duranti, A.
    1979:   "Object Clitic pronouns in Bantu and the topically hierarchy,"
                  Studies in African Linguistics, Vol. 10, No. 1, March 1979,
                  31-45.

Eastman, Carol M.
    1967:   *An Investigation of Verbal Extension in Kenya Coastal Dialects
                  of Swahili with Special Emphasis on Kimvita*, Ph.D. disserta-
                  tion, University of Wisconsin.

    1969:   "The Status of the reversive extension in Modern Kenya Coastal
                  Swahili", *Journal of African Languages*, 8: 29-39.

Eckman, F.R.
    1974:   "Agentive and Agentless Passives", *Working Papers on Language
                  Universals*, 14: 59-74.

Ellington, J.E.
    1977:   *Aspects of the Tiene Language*, Ph.D. dissertation, University of
                  Wisconsin-Madison.

England, Barbara R.
    1978:   *Glossarized Charts of Noam Chomsky's Grammar*, publisher:
                  Physsardt, Bloomington, Indiana.

Epée, R.
    1976:   *Generative Syntactic Studies in Duala*, Ph.D. thesis, Cornell
                  University.

Faber, Judith
    1976:   *The Semantics of Causative Verbs*, Ph.D. thesis, Rutgers Univer-
                  sity, The State University of New Jersey.

Falk, Julia S.
    1978:   *Linguistics and Language: A Survey of Basic Concepts and Im-
                  plications*, John Wiley & Sons, London.

Fellbaum, Christiane D.
    1980:   *Functional Structure and Surface Structure*, Ph.D. dissertation,
                  Princeton University.

Fiengo, R.
    1980:   *Surface Structure*, Harvard University Press, Harvard.

Fillmore, C.J.
    1968:   "The case for case". In Bach, E. and R.H. Harms (eds.), *Uni-
                  versals in linguistic theory*, Holt and Winston, New York, 1968.

Fischer, Olga C.M. &
F.C. van der Leck
    1983:   "The demise of the Old English impersonal construction,"
                  Journal of Linguistics, 19: (1983) 337-368.

Fortescue, M.D.
1980:   "Affix Ordering in West Greenlandic derivational process",'
         International Journal of American Linguistics, Vol. 46, No. 4,
         October 1980, 259-78.

Fortune, G.
1955:   *An Analytical Grammar of Shona*, Longmans, Green and Co,
         Cape Town.

Foulkes, Irene M.
1979:   *Meaning Components in the Structure of a Semantic Field.
         Volume I*, Ph.D. dissertation, Georgetown University.

Fox, Barbara
1981:   "Body part syntax: Towards a universal characterisation",
         Studies in Language, 5.3.: 323-342.

Frajzyngier, Z.
1982:   "Indefinite agent, Passive and impersonal passive: a functional
         study", *Lingua*, 58: (1982) 267-290.

Freidin, R.
1975:   "The analysis of passives", *Language*, Vol. 51, No. 2.

Fromkin, Victoria &
R. Rodman
1974:   *An Introduction to Language*, Holt, Rinehart and Winston, Inc.,
         New York.

Gak, V.G.
1976:   "The semantic structure of the word as a component of the
         semantic structure of the utterance", *Linguistics*, 180: 27-41.

Gary, Judith O.
1977:   "On collapsing grammatical relations in universal grammar". In
         Cole, P. & J.M. Sadock (eds.), 1977, *Syntax and Semantics:
         Grammatical Relations*, Academic Press, New York.

Givón, T.
1969:   *Studies in ChiBemba and Bantu Grammar*, Ph.D. thesis,
         U.C.L.A.

    1976a: "Some Constraints on Bantu Causativisation". In Shibatani, M.
             (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of
             Causative Constructions*, Academic Press, New York.

    1976b: "Topic, pronoun and grammatical agreement". In Li, C.N.,
             1976, *Subject and Topic*, Academic Press, New York.

    1979a: *Syntax and Semantics. Volume 12. Discourse and Syntax*, Aca-
             demic Press, New York.

    1979b: "Language Typology in Africa: A Critical Review", *Journal of
             African Languages and Linguistics*, 1: 199-224.

1979c: *On Understanding Grammar*, Academic Press, New York.

1980:   "The binding hierarchy and the typology of complements", *Studies in Language*, 4.3.: 333-337.

1984:   *Syntax: A functional-typological introduction*, John Benjamins Publishing Company, New York.

Gowlett, D.F.
1967:   *Morphology of the verb in Lozi*, unpublished M.A. dissertation, University of the Witwatersrand, Johannesburg.

1970:   "Verbal Extensions in Mbuunda", *African Studies*, Vol. 29, No. 3, 47-69.

Green, G.M.
1974:   *Semantics and Syntactic Regularity*, Indiana University Press, Indiana.

Gregersen, E.A.
1977:   *Language in Africa: An Introductory Survey*, Gordon and Breach, New York.

Guthrie, M.
1967:   *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*, Vol. 1, Gregg Press Ltd., London.

1970a: *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*, Vol. 3, Gregg International Publishers Ltd., England.

1970b: *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*, Vol. 4, Gregg International Publishers Ltd., England.

1970c: *Collected Papers on Bantu Linguistics*, Gregg International Publishers Ltd., England.

1971:   *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*, Vol. 2, Gregg International Publishers Ltd., England.

Halle, M.
1973:   "Prolegomena to a Theory of Word Formation", *Linguistic Inquiry*, Vol. 4, No. 1 (Winter, 1973), 3-16.

Halle, M.;
J. Bresnan &
G.A. Miller
1978:   *Linguistic Theory and Psychological Reality*, MIT Press, Cambridge, Massachusetts.

Hammond, D.L.
1977:   *Word Formation In Generative Grammar: Spanish Derivational Morphology*, Ph.D. dissertation, Georgetown University.

Hamp, E.;
F. Householder &
R. Austerlitz (eds.)
1966: *Readings in Linguistics II*, 271-298, University of Chicago Press, Chicago & London.

Harris, Z.S.
1951: *Structural linguistics*, University of Chicago Press, Chicago.

Hawkins, R.
1981: "On Generating indirect objects in English: A reply to Allerton", *Journal of Linguistics*, 17: 1-9.

Hawkinson, Annie &
L.M. Hyman
1974: "Hierarchies of natural topic in Shona", *Studies in African Linguistics*, 5.2.: 147-169.

Hendrikse, A.P.
1975: *Topics in Xhosa Relativization — Some traditional analyses re-examined*, Communications No. 4, Rhodes University, Grahamstown.

1983: *Linguistiese Ideologieë*, Universiteit van Suid-Afrika, Pretoria.

Henry, F.
1972: "Bantu Lexical Classes and Semantic Universals (with some remarks on how not to write phonological rules)", *Studies in African Linguistics*, Vol. 3, No. 2, August.

Herbert, R.K. (ed.)
1975: *Proceedings of the Sixth Conference on African Linguistics*, The Ohio State University, Columbus Working Papers in Linguistics, No. 20.

Hetzron, R.
1973: "Conjoining and Comitativisation in Hungarian — A study of rule ordering", *Foundations of Language*, Vol. 10, 1973.

1974: "The Presentative Movement or Why the Ideal Word Order is V.S.O.P." In Li, G.C.N. (ed.), 1974, *Word Order and Word Order Change*, University of Texas Press, Austin.

1976: "On the Hungarian Causative Verb and Its Syntax". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Hinnebusch, T. &
Ima Mbaye
1971: Inalienable possession in Swahili and related matters. Draft version (mimeo) 14 pp.

Hinnebusch, T. &
R. Kirsner
1980:   "On the inference of 'inalienable possession' in Swahili",
        Journal of African Languages and Linguistics, 2: 1-16.

Hirschman, Lynette
1972:   *Formalism for Transformational Grammar: A comparative
        study, with special reference to quantifiers and adverbs*, unpub-
        lished Ph.D. thesis, University of Pennsylvania.

Hlongwane, J.B.
1976:   *A Study of the predicate in its relationship to the subject, ob-
        ject and adjunct in Zulu*, unpublished M.A. dissertation, Unisa,
        Pretoria.

Hoekstra, T.;
H. van der Hulst &
M. Moortgat
1980:   "Lexical Grammar", *Glot — Lexical Grammar*, (1980), 1-48.

Hopper, P.J. &
Sandra A. Thompson
1980:   "Transitivity in grammar and discourse", *Language*, 56.2.:
        251-299.

Horton, A.E.
1949:   *A grammar of Luvale*, Wits University Press, Johannesburg.

Hudson, R.
1984:   *Invitation to Linguistics*, Martin Robertson, Oxford.

Hutchison, J.P.
1977:   *Aspects of Kanuri Syntax*, Ph.D. dissertation, Indiana Uni-
        versity.

Hyman, L.M.
1972:   "A phonological study of FE?FE?-BAMILEKE", University of
        California, Los Angeles, *Studies in African Linguistics*, Sup-
        plement 4.

1975:   *Phonology: Theory and Analysis*, Holt, Rinehart and Winston,
        New York.

1977:   "The Syntax of body parts". In Byarushengo, E., Duranti, A.
        & Hyman, L. (eds.), *Haya Grammatical Structure*, 99-117,
        University of California Papers in Linguistics No. 6.

Jackendoff, R.S.
1975:   "Morphological and Semantic Regularities in the Lexicon",
        Language, Vol. 51, No. 3 (1975).

1976:   "Toward an Explanatory Semantic Representation", *Linguistic
        Inquiry*, Vol. 7, No. 1 (Winter 1976), 89-150.

1972:   *Semantic interpretation in generative grammar*, MIT Press, Cambridge, Massachusetts.

1977: $\overline{X}$ *Syntax: A study of phrase structure*, MIT Press, Cambridge, Massachusetts.

Jaggar, P.
1981:   "Varieties of Passive in Hausa", *Studies in African Linguistics*, Supplement 8: 73-77.

Jordan, A.C.
1940:   *Ingqumbo Yeminyanya*, Lovedale Press, Alice.

1956:   *A phonological and grammatical study of Literary Xhosa*, Vols. I and II, Ph.D. thesis, Cape Town.

Joseph, B.D. (ed.)
1982:   *Grammatical Relations and Relational Grammar*, The Ohio State University, Ohio.

Kachru, Y.
1976:   "On the Semantics of the Causative Construction in Hindi-Urdu". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Katz, J.J. &
P. Postal
1964:   *An Integrated Theory of Linguistic Description*, MIT Press, Cambridge, Massachusetts.

Katz, J.J. &
J.A. Fodor
1963:   "The Structure of Semantic Theory", *Language*, 39: 170-210.

Kaufman, T.
1971:   *Tzeltal Phonology and Morphology*, University of California Press, California.

Kempson, Ruth M.
1977:   *Semantic Theory*, Cambridge University Press, Cambridge.

Kilby, D.
1981:   "On case grammar", *Lingua*, 54: 101-133.

Kimenyi, A.
1980:   *A Relational Grammar of Kinyarwanda*, University of California Press, California.

Kisserberth, C.W. &
M.I. Abasheikh
1977:   The object Relationship in Chimwini, a Bantu language. In *Syntax and Semantics: Grammatical Relations*, Vol. 8, edited by Peter Cole & J.M. Sadock, Academic Press, 1977, New York.

Koubourlis, D.J. (ed.)
1974:   *Topics in Slavic Phonology*, Cambridge University Press, Cambridge.

Krauthamer, Helene
1981:   "The prediction of passive occurrence", *Linguistics*, 19: 307-324.

Kreiman, Jody (ed.)
1980:   *Papers from the Sixteenth Regional Meeting Chicago Linguistic Society*, Chicago Linguistic Society, Chicago.

Kropf, A. &
R. Godfrey
1915:   *Kafir — English Dictionary*, Lovedale Press, Alice.

Lakoff, G. &
M. Johnson
1980:   *Metaphors We Live By*, The University of Chicago Press, Chicago.

Lambrecht, K.
1981:   *Topic, antitopic and verb agreement in non-standard French*, Amsterdam/John Benjamins B.V., Amsterdam.

Langacker, R.W.
1976:   *Non-distinct arguments in Uto-Aztecan*, University of California publication in Linguistics, No. 82.

Lanham, L.W.
1960:   *The Comparative Phonology of Nguni*, unpublished Ph.D. thesis, Wits University.

Leben, W.R.
1971:   "Suprasegmental and segmental Representation of tone", *Studies in African Linguistics*, Supplement 2.

Lee, D.A.
1973:   "Stative and Case Grammar", *Foundations of Language*, 10: 545-568.

Leech, G.
1974:   *Semantics*, Penguin Books, Harmondsworth.

Lees, R.B.
1960:   "The Grammar of English Nominalisations", *International Journal of American Linguistics*, Publication 12, The Hague, Mouton.

Lehrer, A. &
K. (eds.)
1970:   *Theory of Meaning*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Lekach, Ann F.
1979-1980:   "Speculation on the interaction of Morphology and Syntax: A look at complex verbs in Japanese", *Cunyforum: Proceedings of the Ninth Annual Meeting of the North East Linguistic Society*, 7-8: 76-87.

Leonard, R.A.
1980:   "Swahili *e*, *ka*, and *nge* as signals of meanings", *Studies in African Linguistics*, Vol. II, No. 2, August 1980, 209-226.

Leslau, W.
1958:   *The verb in Harari* (South Ethiopic), University of California Publications in Semitic Philology, Vol. 21.

Levin, S.R.
1977:   *The Semantics of Metaphor*, The John Hopkins University Press, Baltimore and London.

Levine, R.D.
1980:   "On the lexical origin of the Kwakwala passive", *International Journal of American Linguistics*, Vol. 46, No. 4, October 1980, 240-258.

Levinson, S.
1983:   *Pragmatics*, Cambridge University Press, Cambridge.

Lewis, D.
1973:   "Causation", *Journal of Philosophy*, 70: 17, 556-567.

Li, C.N. (ed.)
1974:   *Word Order and Word Order Change*, University of Texas Press, Austin, London.

1976a: *Subject and topic*, Academic Press, New York.

1976b: *Mechanisms of Syntactic Change*, University of Texas Press, Austin, London.

1976c: Embedded topic in French. In Li, C.N. (ed.), 1976a, *Subject and Topic*, Academic Press, New York.

Lieber, Rochelle
1981:   *On the Organisation of the Lexicon*, Indiana University Linguistics Club, Bloomington, Indiana.

Lindkvist, K.G.
1976:   *A comprehensive study of conceptions of Locality in which English prepositions occur*, Almqvist & Wiksell International, Stockholm, Sweden.

Loogman, A.
1965:   *Swahili Grammar and Syntax*, Duquesne University Press, Duquesne.

Loring, E. &
A.H. Lawley
    1980:   English Language Today, Hutchinson, London.

Louw, J.A.
    1963a: 'n Vergelykende studie van die definisiënte verbum in die
                         Ngunitale, unpublished D.Litt. thesis, Stellenbosch University.

Louw, J.A. &
J.B. Jubase
    1963b: Handboek van Xhosa, Bonapers Beperk, Johannesburg.

Louw, J.A.;
D. Ziervogel &
J. Ngidi
    1967:   A Handbook of the Zulu Language, J.L. van Schaik Limited,
                         Pretoria.

Louw, J.A.
    1968:   The Intonation of the sentence and its constituent parts in
                         Xhosa and Tsonga, Unisa, Pretoria.

    1969:   Tone sequences of the potential in Zulu and Xhosa. In Ethnolo-
                         gical and Linguistic Studies in honour of N.J. van Warmelo,
                         Department of Bantu Administration and Development, Pre-
                         toria.

    1971a: The tonal paradigm of the verb in Xhosa. In Afrikansche
                         Sprachan Und Kalturen, ein Overschnitt Deutsches Institut, for
                         Afrikaforschung, Hamburg, 102-113.

    1971b: "The validity of case as a semantic feature in the Bantu Lan-
                         guages", Limi, 11: 1-26.

    1975:   Palatalisation of bilabials in the passive, diminutive and locative
                         in Xhosa and Tsonga, Afrika und Ubersee, Band LIX.

    1979:   Some remarks on Nguni tone, Limi, 7.1 & 7.2, Unisa, Pretoria.

    1981:   Palatalisation in Xhosa, unpublished notes for first-year stu-
                         dents, University of South Africa, Pretoria.

Louwrens, L.J.
    1979:   Naamwoordfunksies in Noord-Sotho, D.Litt. thesis, University
                         of Pretoria.

    1980:   "Woordvolgorde en volgordeverandering in Xhosa: 'n ondersoek
                         na die verband tussen pragmatiek en taaltipologie", Studies
                         in Bantoetale, Jaargang 7.1: 70-112.

Lowenstamm, Jean
    1979:   Topics in Syllabic Phonology, Ph.D. dissertation, University of
                         Massachusetts.

Lyons, J.
1968:   *Introduction to Theoretical Linguistics*, Cambridge University Press, Cambridge.

1977:   *Semantics*, Vol. I and II, Cambridge University Press, Cambridge.

1981a: *Language and linguistics: An introduction*, Cambridge University Press, Cambridge.

1981b: *Language, Meaning and Context*, Fontana Paperbacks, London.

Mackenzie, J.L.
1978:   "Ablative-locative transfers and their relevance for the theory of case grammar", *Journal of Linguistics*, 14: 129-156.

Madugu, I.S.G.
1982:   "The Yoruba ni-Object Construction in Pragmatic Perspective", *Journal of African Languages and Linguistics*, 4: 43-58.

Mallinson, G. &
B.J. Blake
1981:   *Language typology: cross-linguistic studies in syntax*, North-Holland Publishers, Amsterdam.

Maran, L.R. &
J.M. Clifton
1976:   "The Causative Mechanism in Jinghpaw". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Marchand, H.
1960:   *The categories and types of present-day English Word formation: A Synchronic-Diachronic approach*, Otto Harrassowitz, Wiesbaden.

1969:   *The categories and types of present-day English Word formation*, München.

Matisoff, J.A.
1976:   "Lahu Causative Constructions: Case Hierarchies and the Morphology/Syntax Cycle in a Tibeto-Burman Perspective". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Matthews, P.H.
1974:   *Morphology: An Introduction to the theory of Word Structure*, Cambridge University Press, Cambridge.

1978:   "Notes on the typology of verbal constructions", *Glot*, Leids Taalkundige Bulletin, Vol. 1, Nos. 3-4.

Mattina, A.
1982:   "The Colville-Okanagan Transitive System", *International Journal of American Linguistics*, 48: 421-435.

Mbadi, L.M.
1983:   "Affixation in Xhosa", *Stellenbosch Studies in Afrika-tale/ African Languages*, 1: 1-78.

McCawley, N.A.
1976:   "On Experiences Causatives". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Mchombo, S.A.
1978:   *A critical appraisal of the place of derivational morphology within Transformational Grammar, considered with primary reference to Chichêwa and Swahili*, Ph.D. thesis, S.O.A.S. University of London.

1979:   *"Surface grammar and Stylistic Analysis"*, unpublished MS.

1980:   "Dative and passive in Chichêwa: An argument for surface grammar", *Third Africa Languages Congress of Unisa*, edited by P.J. Wentzel, University of South Africa, 1980.

Mchombo, S.A. &
Rosemary M. Ngalande
n.d.   *"Reciprocal verbs in Chichêwa: A case for Lexical Derivation"*, unpublished MS.

McIntosh, C.
1975:   "The Semantics of Stativity", *Journal of Literary Semantics*, 4: 35-42.

McLaren, J.
1963:   *A New Concise Xhosa-English Dictionary*, Longman, Southern Africa.

Mellema, P.
1974:   "A Brief against Case Grammar", *Foundations of Language*, 11: 39-76.

Mesatywa, E.W.M.
1954:   *Izaci Namaqhalo EsiXhosa*, Longman, Southern Africa.

Mokgokong, P.C.M.
1975:   *Context as a determinant of meaning with special reference to Northern Sotho*, unpublished D.Litt. et Phil. thesis, Unisa, Pretoria.

Mohanan, K.P.
1982:   *Lexical Phonology*, Indiana University Linguistics Club, Bloomington, Indiana.

Moore, R.A.C.
1966:   *Verbal Derivations in Swahili*, Ph.D. thesis, University of Texas.

Moore, T. &
Christine Carling
1982:   *Understanding language: Towards a post-Chomskyan Linguistics*, The Macmillan Press Ltd., London.

Moortgat, M.;
H. van der Hulst &
T. Hoekstra (eds.)
1981:   *The scope of Lexical Rules*, Foris Publications, Dordrecht, Holland.

Moravscik, Edith A.
1974:   "Object-verb Agreement", *Working Papers on Language Universals*, 15: 25-140.

Morolong, M. &
L.M. Hyman
1977:   Animacy, objects, and clitics in Sesotho. Paper presented to U.S.C., Seminar in Historical Bantu Syntax.

Mould, M.
1972:   "On reconstructing the modified base of Bantu verbs", *Studies in African Linguistics*, 3.1.: 107-125.

Mourelatos, A.P.D.
1978:   "Events, processes, and states", *Linguistics and Philosophy*, 2: 415-434.

Mqhayi, S.E.K.
1915:   *Ityala Lamawele*, Lovedale Press, Alice.

1978:   *Ityala Lamawele* (Verwerk deur P.M. Mzileni en geredigeer deur S.J. Neethling onder redaksie van A.P. Hendrikse), Oxford University Press, Cape Town.

Mufwene, S.S.
1981:   "Bantu class prefixes: Inflectional or derivational?" *Papers from the sixteenth Regional meeting*, Chicago Linguistic Society.

Nathan, G.S.
1978:   *The Syntax and Semantics of the English Existential Construction*, Ph.D. dissertation, University of Hawaii.

Newmeyer, F.J.
1980:   *Linguistic Theory in America: The First Quarter-Century of Transformational Generative Grammar*, Academic Press, New York.

Nida, E.
1971:   *Morphology*, University of Michigan, Ann Arbor.

Nuessel, Jr., F.H. (ed.)
1978:   *Linguistic Approaches to the Romance Lexicon*, Georgetown University Press, Washington D.C.

Oakeshott-Taylor, J.
1983: "Idioms, Metaphors and Prototypes", *Journal for Language Teaching: South African Association for Language Teaching*, 17.1.: 36-40.

O'Grady, W.D.
1980: "The derived intransitive construction in English", *Lingua*, 52: (1980) 57-72.

Oluikpe, B.O.
1971: *The Grammatical Structure of English and Igbo: A Contrastive Analysis*, Ph.D. dissertation, Howard University.

Ono, K.
1982: "Causative constructions in Japanese", *Linguistics*, 20: 97-121.

Pahl, H.W. &
E.W.M. Mesatywa
1963: *Ulwimi LwesiXhosa. Ibanga 8*, Bona Press Ltd., Johannesburg.

Pahl, H.W.
1967: *IsiXhosa*, A.P.B. Johannesburg.

1978: "The Functions of Verbal Extensions in Xhosa", *Fort Hare Papers*, 6.5.: 395-406.

Palmer, F.R.
1971: *Grammar*, Penguin, Harmondsworth.

1981: *Semantics*, Second Edition, Cambridge University Press, Cambridge.

Pandharipande, R.
1978: "Exceptions and rule governments: The case of the Passive Rule in Hindi", *Studies in the Linguistic Sciences*, 8.1.: 153-173.

Paul, P.
1982: "Homonyms, semantic divergence and valency", *Lingua*, 58: 291-307.

Pei, M. &
F. Gaynor
1980: *Dictionary of Linguistics*, Littlefield, Adams & Co., Totowa, New Jersey.

Peters, A.M.
1966: *A computer Oriented Generative Grammar of the Xhosa Verb*, Ph.D. thesis, University of Wisconsin.

Phiri, A.G.
1980: *A Description of Derivational Forms in Tumbuka*, Ph.D. dissertation, The University of Texas at Austin.

Pike, K.L.
1948: *Tone languages: a technique for determining the number and type of pitch contrasts in a language with studies in tonemic substitution and fusion*, University of Michigan Press, Ann Arbor.

Polak-Bynon, Louise
1975: *A SHI Grammar: Surface Structures and generative phonology of a Bantu language*, Musee Royal De L'Afrique Centrale — Tervuren, Belgique annales — Serie in — 8° — Sciences Humaines — No. 86, 1975.

Port, R.F.
1981: "The Applied Suffix in Swahili", *Studies in African Linguistics*, Vol. 12, No. 1, April 1981.

Poulos, G.
1975: *The Morphology of the verb in Venda*, unpublished M.A. dissertation, University of the Witwatersrand, Johannesburg.

1981: *Issues in Zulu Relativization*, Communication No. 11, Rhodes University, Grahamstown.

Pullum, G.K.
1976: "The Duke of York Gambit", *Journal of Linguistics*, 12: 83-102.

1979: *Rule interaction and the organisation of a grammar*, Garland, New York.

Pulman, S.G.
1983: *Word meaning and belief*, Croom Helm Linguistics Series.

Quicoli, A.C.
1982: *The Structure of Complementation*, E. Story-Scientia, P.V.B.A. Brussels.

Radford, A.
1978: "Agentive Causatives in Romance: accessibility versus passivation", *Journal of Linguistics*, 14: 35-38.

Ritter, J.S.
1978: *The Status of Chomsky's Theory of Transformational Generative Grammar as a Mentalist Theory of Language*, Ph.D. dissertation, The City University of New York.

Robinson, I.
1975: *The New Grammarians' Funeral: A critique of Noam Chomsky's linguistics*, Cambridge University Press, Cambridge.

Roca, I.
1975: *Foundations of General Linguistics*, George Allen and Unwin, London.

Rycroft, D.K.
1980:   "Nguni tonal typology and Common Bantu", *African Language Studies XVII*, School of Oriental and African Studies, University of London.

Saksena, A.
1980:   "The Source of Causative Contrast", *Lingua*, 51: 125-136.

1980:   "The Affected Agent", *Language*, 56.4.: 812-826.

1982:   "Contact in Causation", *Language*, 58: 820-831.

1982:   *Topics in the Analysis of Causatives with an Account on Hindi Paradigms*, University of California Press, California.

1982:   "Case-marking Semantics", *Lingua*, 56: 335-343.

1983:   "A semantic model of causative paradigms", *Lingua*, 59: 77-94.

Sampson, G.
1980:   *Schools of linguistics: competition and evolution*, Hutchinson, London.

Satyo, S.C.
1983a: *The Syntax of body parts: A critical Review with special reference to Xhosa*, (MS).

1983b: *Igrama Noncwadi LwesiXhosa*, Via Afrika, Goodwood.

Schoorl, S.
1978:   "Pragmatic observations on the active-passive controversy", *Journal of Pragmatics*, Vol. 2 (1978), 331-359.

Schroten, J.
1981:   "Subject Deletion or Subject Formation: Evidence from Spanish", *Linguistic Analysis*, 7.2.: 121-169.

Scotton, C.M.M.
1967a: *Aspects of the Swahili Extended verb system with special reference to some deep structure syntactic and semantic restrictions*, Ph.D. thesis, The University of Wisconsin.

1967b: "Semantic and Syntactic Subcategorisation in Swahili Causative Verb Shapes", *Journal of African Languages*, 6: 249-267.

1981a: "Rethinking inalienable possession in Swahili: The extensive case", *Studies in African Linguistics*, Supplement 8: 121-124.

Scotton, Carol M.
1981b: "Extending Inalienable Possession: The Argument for an Extensive Case in Swahili", *Journal of African Languages and Linguistics*, 3: 159-174.

Sebba, M.
    1981:   "Derivational regularities in a Creole lexicon: the case of Sranan", *Linguistics*, (1981), 101-117.

Sedlak, P.A.S.
    1975:   "Direct/Indirect object word order: A cross-linguistic analysis", *Working Papers on Language Universals*, 18: 117-164.

Seiler, H.
    1974:   "The principle of concomitance: instrumental, comitative, and collective", *Foundations of Language*, Vol. 12, 1974, 69-82.

    1983:   "Possessivity, Subject and Object", *Studies in Language*, 7.1.: 89-117 (1983).

Selkirk, Elizabeth O.
    1982:   *The Syntax of Words*, The MIT Press, Cambridge, Massachusetts.

Sharman, J.C.
    1963:   *Morphology, morphonology and meaning in the word verb forms in Bemba*, unpublished D.Litt. *et* Phil. thesis, University of South Africa.

Shepardson, K.N.
    1982:   "Toward a structural definition of direct and indirect objects: Support from Swahili", *Word*, 32.2.: 109-131.

Shibatani, M.
    1972-73:   "Semantics of Japanese causativisation", *Foundations of Language*, 9: 327-373.

    1973:   "Lexical versus periphrastic causatives in Korean", *Journal of Linguistics*, 9: 209-383.

    1976:   "The Grammar of Causative Constructions: A Conspectus". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

    1976:   *Syntax and Semantics: The Grammar of Causative Constructions*, Vol. 6, Academic Press, New York.

Shumaker, Nancy W.
    1977:   *A Conceptual Analysis of Spatial Location as indicated by certain English Prepositions*, Ph.D. dissertation, University of Georgia.

Siegel, Dorothy
    1974:   *Topics in English Morphology*, MIT Press, Cambridge, Masachusetts.

    1979:   *Topics in English Morphology*, Garland Publishing, Inc., New York and London.

Sinxo, G.B.
1976: *Umzali Wolahleko* (Verwerk deur P.M. Mzileni en geredigeer deur S.J. Neethling onder redaksie van A.P. Hendrikse), Oxford University Press, Cape Town.

1979: *UNojayiti Wam*, Lovedale Press, Alice.

Siwisa, L.K.
1956: *Ndibuzen' Amathongo*, A.P.B. Johannesburg.

Sloat, C.;
S.H. Taylor &
J.E. Hoard
1978: *Introduction to phonology*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Smith, N.V. (ed.)
1982: *Mutual Knowledge*, Academic Press, London and New York.

Sommerstein, A.H.
1977: *Modern Phonology*, Edward Arnold, London.

Stalker, G.H.
1975: *A Syntactically Based Deep Case Grammar*, Ph.D. dissertation, University of Michigan.

Stanley, Julia P.
1975: "Passive Motivation", *Foundations of Language*, Vol. 13, 1975, 25-39.

Stubbs, M.
1983: *Discourse Analysis: A Sociolinguistic Analysis of Natural Language*, Basil Blackwell, Oxford.

Suner, Margarita (ed.)
1978: *Contemporary Studies in Romance Linguistics*, Georgetown University Press, Washington, D.C.

Swanepoel, C.F.
1970: *Sintagmatiese kombineerbaarheid van verbale suffigale morfeme in Suid-Sotho*, unpublished M.A. dissertation, Randse Afrikaanse Universiteit.

Sylla, Y.
1979: *Grammatical Relations of Fula Syntax*, Ph.D. dissertation, University of California, Los Angeles.

Talmy, L.
1976: "Semantic Causative Types". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Taverner, T.G.
1977: *Idioms and Idiom-forming verbs: A case Grammar Analysis*, Ph.D. dissertation, Georgetown University.

Telemans, G.M.
1978: *A Morphotactical Sector analysis of the Swahili Verb with implications for the teaching of English to Speakers of Swahili*, Ph.D. thesis, Columbia University.

Tenenbaum, Sarah
1977: "Left- and Right-Dislocation". In Byarushengo, E., *et al.* (eds.), 1977, *Haya Grammatical Structure*, University of Southern California, Los Angeles.

Thelin, N.B.
1975: *Notes on General and Russian Morphology*, Almqvist & Wiksell, Uppsala.

Thompson, Sandra A.
1974: "Approaches to the Lexicon", *U.C.L.A. Papers in Syntax*, No. 6, November 1974.

Trithart, L.
1977a: "Locatives". In Byarushengo, E., *et al.* (eds.), 1977, *Haya Grammatical Structure*, University of Southern California, Los Angeles, California.

1977b: "Causatives and instrumentals". In Byarushengo, E., *et al.* (eds.), 1977, *Haya Grammatical Structure*, University of Southern California, Los Angeles, California.

1979: On topicality as an alternative to the relational view of Bantu Passive. In Givón, T. (ed.), 1979a, *Syntax and Semantics*, Vol. 12, New York, Academic Press, New York.

Vail, Hazel L.
1973: *Aspects of the Tumbuka Verb*, Ph.D. dissertation, University of Wisconsin.

Valin, Jr., R.D.
1981: "Toward understanding grammar: Form, Function, Evolution: Review of Talmy Givón, On Understanding Grammar", *Lingua*, 54: 47-83.

Van der Hulst, H. &
N. Smith (eds.)
1982: *The Structure of phonological representatives*, Part 1, Foris Publications, Dordrecht, Holland.

Van der Merwe, D.F.
1941: *On the morphology and semasiology of the Sotho verbal stem, with special reference to the derivative verbal species*, unpublished Ph.D. thesis, University of Cape Town.

Van Dijk, T.A.
1981: *Studies in the Pragmatics of Discourse*, Mouton Publishers, The Hague.

Van Eeden, B.I.C.
1956: *Zoeloe-Grammatika*, Die Universiteitsuitgewers en -boekhande-laars (Edms.) Bpk., Stellenbosch.

Van Rooyen, C.S.
1973: *Die Kousatief in Zoeloe*, M.A. proefskrif, Unisa, Pretoria.

1978: *Die Zoeloe-predikaat en enkele verskynsels wat daarmee saam-hang*, unpublished D.Litt et Phil. thesis, University of South Africa, Pretoria.

Van Valin, Jr., R.D.
1980: "On the distribution of passive and antipassive constructions in universal grammar", *Lingua*, 50: 303-327.

Van Wyk, E.B.
1967: Northern Sotho. In *Lingua*, 17: (1967), 230-261.

Vichit-Vadakan, R.
1976: "The Concept of Inadvertence in Thai Periphrastic Causative Constructions". In Shibatini, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Visser, M.W.
1983: "Case-assignment in Xhosa", *Stellenbosch Studies in Afrikatale/African Languages*, 2: 1-50.

Vitale, A.J.
1981: *Swahili Syntax*, Foris Publications, Dordrecht, Holland.

Voeltz, E.F.K.
1976: "Inalienable possession in Sotho",.*Studies in African Linguistics*, Supplement 6 (Papers in Honor of William E. Welmers), 255-66.

Wali, K.
1981: "Cause, Causer and Causee: A semantic perspective", *Journal of Linguistics*, Vol. 17, No. 2, September 1981.

Warburton, Irene
1975: "The Passive in English and Greek", *Foundations of Language*, Vol. 13, 1975, 563-578.

Weiner, Judith E. &
W. Labov
1983: "Constraints on the agentless passive", *Journal of Linguistics*, 19: 29-58.

Wentzel, P.J. (ed.)
1980: *Third Africa Languages Congress of Unisa*, University of South Africa, Pretoria.

Westphal, E.O.J.
1951: The tone of the verb stem in Xhosa, *African Studies X*, 3: 108-112.

Westphal, E.O.J. *et al.*
1967a: *Tonal profiles of Xhosa nominals and verbo-nominals*, University of Cape Town, Communications from the School of African Studies.

Westphal, E.O.J.;
M. Notshweleka &
S.M. Tindleni
1967b: *Tonal Profiles of Xhosa Verbo-Nominals*, Communications from the School of African Studies, New Series No. 32, University of Cape Town.

Westphal, E.O.J.
1981: "The nature of 'S' in a self-generating Bantu grammar", *Linguistic Society of Southern Africa Congress Papers*, 461-471.

Whiteley, W.H.
1972: "Case complexes in Swahili", *Studies in African Linguistics*, 3: 1-46.

Wierzbicka, Anna
1975: "Why 'kill' does not mean 'cause to die': the semantics of action sentences", *Foundations of Language*, 13: 491-528.

Wilkes, A.
1971: *Agtervoegsels van die werkwoord in Zulu*, unpublished D.Litt. thesis, Randse Afrikaanse Universiteit, Johannesburg.

1973: "Werkwoorde met die Resiprokale agtervoegsel in Zulu: 'n Grammatiese Studie", *Limi*, 1973, 1.1.: 26-33.

1976: "Die direkte (applikatiewe) werkwoordagtervoegsel in Zulu", In De Klerk, W.J. & F.A. Ponelis (eds.), 1976, *Gedenkbundel H.J.J.M. van der Merwe*, J.L. van Schaik Bpk., Pretoria.

1978: "Some notes on the semantic case relations in sentences with applicative verbs in Zulu". In Baumbach, E.J.M., 1978, *Second Africa Languages Congress of Unisa*, University of South Africa, 59-97.

Wilkinson, R.W.
1976: "Modes of predication and implied adverbial complements", *Foundations of Language*, 14: 153-194.

Williams, E.
1981a: "Argument Structure and Morphology", *The Linguistic Review*, 1: 81-114.

1981b: "On the notions 'Lexically Related' and 'Head of a Word'", *Linguistic Inquiry*, Vol. 12, No. 2, (Spring 1981).

Wormald, R.D.
1951: *Longmans Latin Course: Grammar and Exercises*, complete edition, Longmans, Green & Co., London.

1980:   *Xhosa Terminology and Orthography*, No. 3. The Government Printer, Republic of South Africa.

Yang, I.
1976:   "Semantics of Korean causation", *Foundations of Language*, 14: 55-87.

Zide, A.R.K.
1972:   "Transitive and Causative in Gorum", *Journal of Linguistics*, 8.1.: 201-357.

Ziervogel, D.
1952:   *A Grammar of Swazi*, Witwatersrand University Press, Johannesburg.

Ziervogel D.;
J.A. Louw &
J. Ngidi
1967:   *A Handbook of the Zulu Language*, J.L. van Schaik Ltd., Pretoria.

Zimmer, K.
1964:   Affixal Negation in English and Other Languages: An Investigation of Restricted Productivity, supplement to *Word*, Monograph 5, New York.

Zimmer, K.E.
1976:   "Some Constraints on Turkish Causativisation". In Shibatani, M. (ed.), 1976, *Syntax and Semantics Volume 6: The Grammar of Causative Constructions*, Academic Press, New York.

Zsilka, J.
1981:   *Dialects of the Motion forms in Language*, Mouton Publishers, The Hague.