

A MORPHOLOGICAL STUDY OF SINHALESE

BY

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ABBREVIATIONS AND SYMBOLS

adj	: adjective
Ag	: Agentive
ani	: animate
App	: Appendix
asp	: aspect
Aux /aux	: Auxiliary
Bib	: Bibliography
Ca	: Case
caus	: causative
Cf / cf	: compare
Ch	: chapter
cl	: class
com	: common(noun)
conc	: concessive
cond	: condition(al)
conj	: conjunction
cop	: copula verb
Dat	: Dative
Def / def	: definite(ness)
dero	: derogatory
Dir	: Directional
dir	: direct
e.g.	: exempli gratia 'for example'
ed(s)	: editor(s)
emp	: emphasis
E.S.R.	: External Sandhi Rule
fem	: feminine
ff	: following
fn	: foot note

Go	: Goal
hum	: human
ib	: ibidem 'in the same book'
IDIO	: idiosyncratic
i.e.	: id est 'that is'
Imp /imp	: Imperative
in	: infra 'below'
inani	: inanimate
Ind	: Indicative
indef	: indefinite
inf	: infinitive
I.S.R.	: Internal Sandhi Rule
lit	: literally ^l
Loc	: Locative
mas	: masculine
N	: noun
neg	: negative / negation
No	: number
nom	: nominaliser
NP	: noun phrase
Obj	: Objective
obl	: oblique
ord	: ordinary
part	: participle
phono	: phonological
pl	: plural
poss	: possessive
p(p)	: page(s)
pred	: predicate
pro	: pronoun
proper	: proper noun

Prop	: proposition
pt	: past
q.v.	: quod vide 'which see'
Q / ques	: question
Redup	: Reduplication
Refl	: Reflexive
resp	: respect
S	: sentence
sg	: singular
Sinh	: Sinhalese
Sk	: Sanskrit
So	: Source
subj	: subject
subord	: subordinate
sup	: supra 'above'
Tr	: Transitive
v	: vide 'see'
vb	: verb
vd	: voiced
vl	: voiceless
Voc	: Vocative
vol	: volitive
Vol	: Volume
1P	: First Person
2P	: Second Person
3P	: Third Person
*	: a preceding asterisk indicates an unacceptable structure.

?	: doubtful
+	: plus, 'present', positive value of binary variable; concatenation...
-	: minus, 'negative value of binary variable.'
=	: 'is equal (equivalent) to '
≠	: 'is not equal (equivalent) to '
/	: in the environment
#	: word boundary
##	: sentence boundary
⊃	: if.... then : hypothetical proposition.
⊇	: 'includes'
⇒ / >	: 'becomes'
<	: resulted from; derived from.
→	: 'realise as; rewrite as, ...'
[]	: features ; phonetic representation
()	: optional
$\begin{Bmatrix} x \\ y \end{Bmatrix}$: choice of x or y
$\begin{bmatrix} x \\ y \end{bmatrix}$: if x and y are both present.
V	: vowel
C	: consonant

ABSTRACT

'A Morphological Study of Sinhalese' is an attempt to study the relation between meaning and form of morphemes and to account for any variations of morphemes when they are combined to form 'words'; and of words when they occur in sentences.

The thesis is divided into three parts. In Part One, which comprises four chapters, an attempt is made to study different aspects of the noun phrase. A noun phrase consists of noun, number, definiteness and case. Different classes of nouns are discussed in chapter 1; pronouns in chapter 2; number and definiteness in chapter 3; and case in Sinhalese in chapter 4.

In Part Two, which has four chapters, various types of verbs and adjectives, both of which comprise the predicate of the majority of sentences, are discussed. Accordingly, the verb, the adjective and the causative verb in Sinhalese are described in chapters 5, 6 and 7 respectively. Chapter 8 deals with the auxiliary of a sentence.

Part Three, which comprises four chapters, is entitled 'Morphophonology', for its purpose is primarily to account for differences of form of morphemes and words. In chapter 9, a number of phonological noun classes are distinguished to account for the change of some associated morpheme variants. A number of these morpheme variants are also introduced. In chapter 10, syllabic structure of phonological verb is stated and its allomorphic variation is accounted for. Chapter 11 is devoted to the introduction of some phonological rules, internal sandhi rules, which account for the change of morphemes at morpheme junctures within words. Finally, in chapter 12, some further phonological rules, external sandhi rules, are introduced, their purpose being to convert the strings of words into sentences.

In a number of Appendixes, some further morphemes are introduced.

A MORPHOLOGICAL STUDY OF SINHALESE

INTRODUCTION

1. THE SINHALESE LANGUAGE

The present study is an attempt to describe the morphology of spoken Sinhalese. Of the total population of Ceylon, approximately seventy per cent speak Sinhalese.

The Sinhalese race can be traced, according to recorded history,¹ as far back as the sixth century B.C. The earliest Sinhalese inscription so far discovered belongs to the third century B.C.², however, and prior to this, evidence of the earliest form of the language is lacking.

During its evolution, Sinhalese has been influenced by Old and Middle Indic languages, as a result of learned usage, and by modern Indian languages, especially Tamil, through political and socio-cultural contacts. European contact since the beginning of the sixteenth century A.D. has also left its mark on the language.

2. THE DIGLOSSIC SITUATION

A number of studies³ have described a very broad and clear-cut diglossic situation in Sinhalese. This comprises a common

1 See Nicholas, C.W. and Paranavitana, S. 1961, p.17.

2 See Paranavitana, S. 1970, p.xlix, ff.

3 For some studies in description of the diglossic situation in Sinhalese, see De Silva, M.W.S. 1967; 1973; Gair, J.W. 1968; Dharmadasa, K.N.O. 1967.

variety, generally used by all speakers in informal situations, and a superposed literary variety, a phenomenon which results from a number of puristic endeavours that have been made during the last three centuries or so. Any differences in the spoken variety are dialectal. They are based on geographical and social (such as caste) differences, and largely pertain to the lexicon.

3. PROSE-POETRY DISTINCTION IN LITERARY SINHALESE

The language used in prose works differs considerably from that used in works of poetry. (The difference may be stated with reference to phonology, lexicon, syntax and orthography.) The language of poetry has been considered the prestige variety: while formal education introduces the speaker to the language of prose, through further training -- in such branches of poetics as rhetoric and metrics -- he strives to acquire the ability to compose poetry. The language of poetry is characterized by special usage, specific morphophonological variation, and peculiar syntactic construction, among other things. These are seldom if ever encountered in prose language. The "sīdat saṅgeraawē", the most valuable classical grammar available, which is believed to have been written in the thirteenth century A.D., is in fact a compendium of some of the rules of grammar and rhetoric which have to be learnt by the beginner in poetry.¹

4. DIFFERENCES IN THE SPOKEN VARIETY

The spoken language also has its differences, but here it is difficult to establish, as such, the distinction between

¹ For a discussion of the peculiarities of the language of poetry, see De Silva, M.W.S. 1970.

different varieties, for the following reasons:

- (a) The difference may be in the use of a different lexical item in an otherwise identical sentence. This is dialect difference.
- (b) The difference may concern a phonetic variable or a morpheme variable. This may be either because of a difference in dialect or social status, such as caused by the caste system.
- (c) The difference may be due to a deliberate attempt to employ a sort of high variety in certain situations --- using vocabulary which belongs to a special register or using a more formal hybrid variety of the language (perhaps, to demonstrate one's ability to speak in 'good Sinhalese') in sermons, lectures, radio news broadcasts, public speaking etc.

There is, however, an informal variety in every dialect which is distinguished from the more formal speech which has been created by the educated and by purists through practising the literary norms. Thus, 'formal speech' in this sense is neither the informal nor the written formal but a harmonisation of the two forming a hybrid variety.¹

5. THE LANGUAGE OF THIS STUDY

The variety of language selected for this study may be called 'informal spoken Sinhalese', and the data subject to the

¹ There are hybrid varieties within the written high variety too. These are condemned by the purists. For a discussion of some hybridisms see De Silva, M.W.S. 1973.

analysis is based primarily on the competence of the writer as a native speaker. It is true that one can not establish any clear demarcation between the informal and the formal speech in most situations. Yet one must, in some way delimit what is meant by 'informal speech'. In the course of this study the term 'informal speech' refers to the ordinary usage of the language in different situations by people of diverse social status. Furthermore, by using the term 'ordinary speech' I exclude the jargon used by specialists in the different disciplines when discussing the matters of art and science. Thus the 'informal spoken Sinhalese' includes only the structures and part of the vocabulary used by every one alike in ordinary day to day communication without the bombastic use of Sanskrit or other loan words and special literary structures ---such as the passive ---used by specialists, teachers and others in relation to specific subjects.

6. INFORMANTS AND DATA

Throughout this study, the Sinhalese which is described and analysed is based mainly on my own idiolect. It represents a variety of the dialect of Seven Korales (i.e. sat-kooralee), namely that variety spoken around Kuliyaipitiya and Kurunegala. The idiolect comprises characteristics common to thousands of speakers. The statements based on the informant's (i.e. my own)¹ idiolect have been compared with the idiolect of another speaker,

¹ Since I have acted as my own informant it may be important to state something of the social and other influences which have formed my idiolect. I am a mature speaker, educated, and

namely my wife, from the same dialect area. (She is, in fact, from Kurunegala.) I further compared my own data, and statements made, with the idiolect of another speaker, Rev. K. Mahanama, from the same dialect area. (He was a post graduate student attached to the Department of Language at the University of York at the time when this study was being made.)

Since one has to gather a sample of data before any analysis is attempted, first of all, I gathered a corpus -- a list of sentences and words -- from my own and my wife's usage. Then I compared that with the data provided in the following works:

- De Silva, M.W.S. 1957 : The Verbal Piece in Colloquial Sinhalese
--A Phonological Study (M.A. Thesis,
London University.)
- De Abrew, K.K.D. 1963 : A syntactical study of the verbal
piece in colloquial Sinhalese (M.A.
Thesis, London University.)
- Kekulawala, S.L. 1964 : The Phonology of the Noun in Colloquial
Sinhalese (M.A. Thesis, London University.)
- Wickramasuriya, B.S.S.A. 1965 : The Nominal Phrase in Sinhalese
and its bearing on Sinhalese English
(M.A. Thesis, London University.)

by profession academic. I acquired my language in the village community into which I was born and in which I was brought up. My later contacts with urban life have changed very little of my linguistic habits. I have, however, been exposed to a number of different dialects in various regions such as, Nikaweratiya, Wariyapola, Peradeniya and Colombo.

- Dharmadasa, K.N.O. 1967 :Spoken and Written Sinhalese : A
Contrastive Study (M.Phil.Thesis,
University of York.)
- Gunasekara, A.M. 1891 : A Comprehensive Grammar of the
Sinhalese Language.
- Kumaratunga, M. 1937 : Wyakarana Wiwaranaya.
- Carter, Rev.C. 1924 : A Sinhalese-English Dictionary.

This has enabled me to provide more than one morpheme variant in certain cases. However, I have made it a point to give a foot note for those variant forms which are alien to my dialect area.

7. MORPHOLOGY

According to traditional grammar as well as structural linguistics, the morphology of a language is the study of morphemes and their arrangements, and of the different morpho-logical processes those morpheme combinations enter into. The design of the theory of morphology accounts for the alternations exhibited when morphemes are juxtaposed inside the word (i.e.internal sandhi)and inside the phrase or sentence (i.e.external sandhi).

To have an understanding of what is, in general, meant by a morphological study, it may be appropriate to cite a few definitions from linguistic literature. Consider the following:

"morphology includes the construction of words and parts of words but never phrases¹".

¹ Bloomfield, L. 1933, p.207.

" Rules for word formation is morphology¹".

" It is the study of grammatical structure of words²".

Morphology is 'the description of the more intimate combinations of morphemes, roughly what are called 'words'³.

" Morphology deals with different classes of words and with different inflectional forms, syntax has as its object the functions attached to linguistic units while morphology considers only their form"⁴.

" Morphology is the study of the general rules which govern the spoken or written form of sentences of a language.

The units of morphological study are known as morphemes"⁵.

Morphology has been referred to as 'a level of structure between the phonological and the syntactic'⁶.

'it is complementary to syntax: morphology accounts for the internal structure or 'form' of words (typically as sequences of morphemes) and syntax describes how these words are 'put together' in sentences'⁷.

All these definitions embody the notion that morphology is the systematic study of the morphemes in a language and their identification and classification, as well as the specification of the order in which they occur in larger constructions;

1 Brown, R. 1958, p.22.

2 Robins, R.H. 1964, p.190.

3 Gleason, H.A. 1961, p.58.

4 de Saussure, F. 1959, p.135.

5 Langendoen, T.D. 1969, p.128ff. and p.152.

6 Lyons, J. 1970, p.22.

7 ib. p.96.

different realisations of these morphemes or words are explained in terms of the phonology.

It may be pointed out, however, that for many modern linguists, who give a rather wider interpretation to the term 'syntax' than traditionalists and do not recognise a distinct morphological level, the morpheme is the minimal unit of syntactic analysis. Thus the form of the morphemes and their alternation may be dealt with in the phonology of a language, whereas the meanings of the morphemes as underlying the phonological representations can be treated in the syntax of the language. In other words, syntactic and semantic deep structure information is indispensable in introducing the phonological representations, the morphemes that express those underlying 'contents'. In establishing underlying phonological representations, the linguist has, however, to be guided by phonetic data.

It may be stated here that the majority of the facts of traditional morphology may be handled by most generative grammarians in the phonological component of their grammar.¹ Yet if we believe that the domain of morphology is confined/^{only} to the surface structures then we have, of course, to classify and establish morphemes according to phonological criteria. However, a mere phonologically based classification, although it is less complex, does not and can not account for many syntactic and semantic facts that underlie sentences. Such a

¹ see Langacker, R.W. 1968, p.167.

description is therefore incapable of explaining the knowledge a native speaker has of his language --his intuition or competence. Thus I think that those linguists, who do not recognise morphology as a separate level of analysis, are not wrong in doing so, since they can explain the correlation between meaning and form --content and expression --even though they do not recognise such a level of analysis in their grammars.

Such a situation creates a problem for any one who chooses to study the morphology of a language: whether or not to follow the traditional and structural approach on formal criteria or to study syntax and phonology to account for the form of sentences --this includes the form of every thing, morphemes, words and sentences. I shall state in a subsequent section what I propose to do in this study of the morphology of the Sinhalese language. (v. section 11)

8. THE WORD AS A LINGUISTIC UNIT

Since most of the linguistic literature dealing with morphology, syntax or phonology employs the 'word' as an important unit, I believe a brief statement on the concept of word as a linguistic unit would not be out of place here. There are numerous definitions of the 'word' based on different criteria. Although the word is generally taken for granted and has even been considered as 'unique both in form and meaning' by some linguists,¹ a universally applicable definition is not easy to achieve. The available definitions which are based on

¹ Bolinger, D.L. 1962.

different criteria -- phonological, morphological or semantic -- have both advantages and disadvantages, but none can be considered a universal definition.

Bloomfield's definition of the word as 'a minimum free form' or 'a free form which is not a phrase is a word'¹ may be very useful, but I think, as many do, that being a phonological surface unit, its definition, if attempted, should remain arbitrary and specific to the language under observation. It may be defined according to the popular usage of the term 'word' in the community, or according to the historical development of units if there is any such possibility (in this case, perhaps, mainly in accordance with the rules laid down by the philologists) on the basis of phonological, morphological or some other criteria. Some of the criteria employed by various linguists in attempting to define the word include:

(a) semantic function :

Words may be established according to their semantic function. However, all morphemes are also meaningful units and they too have to be included under the heading words. Thus a situation would be created in which the distinction between word and morpheme could not be maintained. Yet all morphemes are not always words. This criterion is therefore defective.

(b) separability :

According to this criterion words are independent units. Those that can occur as one word sentences are words.

¹ Bloomfield, L. 1933, p. 178.

Bloomfield's definition, 'a minimum free form' is based on this criterion. However, there are many 'function' words in most languages, which can not occur on their own, hence this criterion alone can not be taken as decisive. Consider Bloomfield's unsound argument in relation to the establishing of word status of English a , the , is and and.¹

(c) replaceability :

Words may be established on the basis of ^{the possibility of} substitution.

One can substitute one morpheme for another, one word for another, one phrase for another, one word for a phrase or vice versa etc., so neither does this criterion hold good as a useful one in establishing the word units of a language.

(d) displaceability :

Words are those structures which can not be disrupted by introducing new morphemes within those structures. But we know that the processes of infixation and derivation are not uncommon in the word formation of various languages of the world, and consequently this criterion also fails to establish all word units.

(e) internal structure :

In terms of this criterion words are established on the basis of different combinations of morphemes that go to make up different structures. Here again the structures

¹ Bloomfield, L. 1933, p.179.

may consist of one morpheme or a number of morphemes producing a word, a phrase or even a sentence, depending upon the language. And as there ~~is~~ such an unlimited range of possibilities, this criterion is again universally inapplicable, although it may be used profitably, though not exhaustively, as a practical one, as Garvin has suggested.¹

(f) phonetic features :

According to this criterion words may be established on the basis of phonetic features such as stress, intonation and pitch. Here too, it is difficult to determine stress, intonation and such features of 'function words' and therefore this alone cannot on ^{its own} ~~on~~ be taken as a valid measure in determining the word units of a language.

These are some of the criteria that have been employed by various linguists in defining the concept of 'word'.² On the other hand, it may be stated emphatically that there are linguists who believe that it is a vain endeavour to seek to define the 'word' more closely in general linguistics.³ The difficulty in defining it is echoed in Bloomfield's statement that 'in the case of many languages, however, it is impossible to distinguish consistently, on the one hand, between phrases and words and, on the other hand, between words and bound forms'.⁴ This is

1 Garvin, P. 1964.

2 For a critical evaluation of the criteria employed in defining the word unit in detail, see Kramsky, J. 1969 and, Krishnamurthi, Bh. 1965. 3 Martinet, A. 1964, p. 126. 4 Bloomfield, L. 1933, p. 179.

because the word is an arbitrary unit of the surface realisation of sentences of languages which also differ one from another, if we consider only their surface characteristics.

It is natural that linguists express different views not only regarding the possibility of defining the concept of word but also as to whether any concept at all can be properly defined in linguistics.¹ Some even tend to discard the word as a linguistic unit altogether considering it only as a constituent of a surface sentence or a clause.² Some linguists speak in terms of categories and borderline categories, the former being full words complying with a given definition and the latter falling between words and morphemes.³ Some linguists, nevertheless, however, fully aware of the difficulties, have/attempted to produce a more universally applicable definitions. They, too, have failed. One such attempt of Greenberg's⁴ has been reviewed and demonstrated inapplicable as all other definitions have been, as a universal definition, by Bh. Krishnamurthi.⁵

Jiri Kramsky has made another attempt. His definition runs as follows:

"The word is the smallest independent unit of a language referring to a certain extralinguistic reality or to a relation of such realities and characterized by certain formal features (acoustic, morphemic) either actually (as an independent ~~unit~~ component of the context) or potentially (as a unit of the lexical plane).⁶

1Vladimir Skalicka quoted in Kramsky, J. 1969, p.9.

2 Hansjakob Seiler, see Kramsky, J. 1969. p.9. 3 For a detailed discussion see Bos, G.F. 1967. 4 Greenberg, J.H. 1957.

5 Krishnamurthi, Bh. 1965. 6 Kramsky, J. 1969, p.67.

Even though this elaborately and meticulously worded definition is capable, like most others, of ~~determining~~ many units as words, it can not be considered as a universal definition for the following reasons:

- (a) It also takes the word to be the smallest independent unit and therefore fails to account for many functional non-independent units found in most languages. Compare English a , an , the , and , of , etc.; Sanskrit ca , api etc.; Sinhalese da , ma , yi , t etc.
- (b) A potential unit ~~on the~~ lexical plane need not necessarily be a word or an independent unit. A dictionary of a language may be considered as the inventory of morphemes specifying semantic, syntactic and phonological information. Thus in a dictionary one finds items that may be considered as independent units --words --as well as items that do not have independent occurrence -- prefixes, suffixes, (prepositions, post-positions)etc. Even prefixes and suffixes are listed with the necessary information in dictionaries. The following are a few examples from The Shorter Oxford English Dictionary :

anti- S.O.E.D. p.75.

im- " 957.

in- " 974.

neo- " 1319.

un- " 2282.

-en " 2489.

-ese " 632.

-ess " 634.

-tion " 2197.

-tious
etc.

If we accept that these morphemes, just because they are given in the dictionary, are potential words, then the dichotomy between morpheme and word has to be discarded. Furthermore, since all these prefixes and suffixes do not have the capacity to occur independently -- the prime criterion equally accepted by all in attempting to define the word -- they can not be taken as words. So this definition, too, is no better than any other and fails as a universal definition.

We know that all the thousands of languages of the world differ from one another as far as their surface manifestations --forms-- are concerned. Yet we may find that there are some striking similarities in their deep structure. The 'contents' or 'semantic facts' that underlie those diverse surface manifestations may be identical in certain cases or very similar in others. There may be differences due to the climatic, geographical or cultural conditions etc. of the communities. This shows that even in conceptual structures -- content of expressions-- alongside a possibly great deal of similarities, there are differences due to climatic, geographical or cultural reasons. Thus any definition or specification of semantic content in relation to different communities also seems to be rather complex. And, to define a unit which is neither the smallest nor the largest definable formal unit of a language seems to me an impossibility, especially when we attempt to achieve universal applicability, knowing that most languages are not identical or similar as to their surface structures and realisations, though the deep structure may be identical or very similar -- due, for

instance, to the fact that the languages in question belong to the same family. Thus it becomes clear that the word as a surface unit has to be defined, if it is necessary to do so, arbitrarily for each language and no universal definition could possibly be achieved, and any attempt at doing so is a futile and vain endeavour.

However, we have to make use of the term 'word' in referring to some phonological structures -- lexical items, simple or complex -- in accordance with the day to day usage in the ordinary, non-technical sense. Similarly, for linguistic analysis, we may also establish a unit called a 'word', not necessarily on any precise definition but, perhaps, arbitrarily, in referring to some sound sequences. In some cases one may be able to analyse these sound sequences into a number of sub_Asequences each expressing a specific meaning. Thus the word is a phonological unit but it is neither the smallest nor the largest definable unit of any language.

9. THE MODERN TREND

~~These linguists~~ conducting research along the lines of the most recently developed Transformational Generative theory, have not attempted any proper definition of 'word' although they employ the term in describing certain phonological structures such as 'a string of formatives (one or more) contained in the context ## ## ____ ## ## and containing no occurrences of ## ##¹ A definition such as the following may be very

¹ Chomsky, N. and Halle, M. 1968, p.13; 163.

useful in understanding the way of handling such matters but it may not appear to be of much value as a definition as it is speculative and vague.

"Let us assume, as throughout this book, that surface structures are represented with labeled bracketing indicating categorization (as in Chapter One), and let us suppose further that $\#$ is introduced by convention (115) and then perhaps dropped in certain positions by whatever language specific rules there may be".¹

The convention (115) mentioned in the definition is:

"the boundary $\#$ is automatically inserted at the beginning and end of every string dominated by a major category, i.e. by one of the lexical categories 'noun', 'verb', 'adjective', or by a category such as 'sentence', 'noun phrase', 'verb phrase', which dominates a lexical category".²

One may criticise this definition as a futile one, yet as it hinges largely on the psychological aspect of language use by native speakers, it may be considered a valid one in order to explain the native speakers' identification of words.

This definition was, however, formulated for English and as far as I can see it can not be used as a definition covering all the words in Sinhalese. The lexical categories 'noun' and 'verb' are not always followed by $\#$. (cf. convention 115 above) I am not criticising the above definition in any way: it is meant for English and is a workable one for the intended purpose.

1 Chomsky, N. and Halle, M. 1968, p.367. 2 ib. p.366.

However, the authors of 'The Sound Pattern of English' have not underestimated other possibilities, as they state:

" In addition to convention 115 there are language-specific rules governing the presence of \neq . Conceivably, there may be rules that introduce \neq in various positions not specified by convention (115), although we know of no clear examples of this; but there are, as we shall see, rules that delete \neq in various positions".¹

This suggests that different languages may have different rules for establishing the phonological words of those languages. However, it is the boundary (or potential pause) that plays the most important role in defining the word in any language. Accordingly, the word in Sinhalese is postulated in Chapter eleven (v. 11.1.)taking into account the phonological criterion of potential pause (i.e., \neq).

10. TRANSFORMATIONAL GRAMMAR

The declared goal of Transformational grammar² is to construct a general linguistic theory that is capable of explaining all matters of the linguistic competence of a native speaker, i.e. an ideal speaker-hearer. Thus the theory is a device pairing meaning (content) with form (expression). The theory developed so far, amidst some differences in detail, includes basically three major components: a semantic component, a syntactic component and a phonological component.

The semantic component consists of rules that explain the meanings of sentences. This semantic component is the input

¹ Chomsky, N. and Halle, M. 1968, p. 367. ² see Chomsky, N. 1957; 1964; 1965; 1966; 1968; 1969; etc. Bach, E. 1964. Langendoen, D. T. 1969; 1970. Lakoff, G. 1970. Langacker, R. W. 1968. Lester, M. 1971 etc.

to the syntactic component which according to syntactic rules organises the meaning into syntactic structures, the output of that component which is also the input to the third, phonological, component. In this component the phonological rules convert the syntactic structures --terminal strings -- into phonetic representations -- the final output of the grammar.

It is true that the theory of Transformational grammar is in a state of flux, at present, due to dynamic processes of modification which have been started as a result of ~~XXXXXXXX~~ the tremendous amount of research that is being carried on on different languages in various parts of the world, yet it can still profitably be taken as a model for the point of departure in any attempt to study a natural language.

The researches so far carried out have been confined primarily to working out a linguistic theory to describe syntax broadly as a mediator between meaning and form. A possible 'morphological statement' of a language has received very little attention within this theory possibly due to the fact that English (which has provided the data for most studies) can, ^{to} a very large extent, be described directly under syntax. But even there we find an area called derivational morphology which deals with derivation of items from other items. If languages other than English were considered more, it would become evident, as some have already pointed out, that a morphological statement of a language can be very useful, in particular for those languages where we find very complex

word or phrase formations, when attempting to study the syntax of a language. This may be achieved without recognising morphology as a ²separate level of analysis. We may take it to be complementary to syntax in the sense that its main goal is to account for the form of morphemes, words and sentences but specifying the 'content' for which the morphemes are the expressions. Syntax works from the sentence explaining the derivation of sentences of which the terminal symbols -- lexical items or morphemes --, and their immediately dominating categories --lexical or grammatical -- and their dominating categories such as NP, VP¹, Aux. etc. may be treated as falling within the domain of lower level syntax -- for this study called morphology. The determining and establishing of deep structures of complex sentences, the transformations that map deep phrase markers on-to surface phrase markers, different processes of coordination, subordination, relativisation, nominalisation, negation, question, emphasis, etc, may be taken as the basic domain of syntax proper. However, this does not mean to say that we have to recognise two distinct levels of syntax. One can not draw a line between higher level syntax and lower level syntax -- i.e. morphology in an overall grammar, which comprises semantic, syntactic and phonological components. What I am suggesting is that if we concentrate on the realisations of the categories other than the highest unit of sentence, and if we can correlate the syntactic and semantic information of these categories with morphemes, and then if we can explain the different physical

1 I have not recognised VP as a syntactic category in this study of Sinhalese Morphology.

manifestations of those morphemes phonologically, in relation to preceding and following morphemes, or combinations of morphemes, such as words etc., then the use of the information provided in the study of morphology of that particular language would undoubtedly prove most helpful to the linguist studying different aspects of syntax.

11. SINHALESE MORPHOLOGY : THE PROPOSED DESCRIPTION

In the course of this study called A Morphological study of Sinhalese, I shall attempt to achieve a description similar to that which I have suggested above.

Although there are a few linguists who have attempted to study different aspects of the Sinhalese language, except for J.W.Gair's 'Colloquial Sinhalese Clause Structure' and R.P.T. Jayawardana's 'Case in Sinhalese', Sinhalese syntax has not been sufficiently investigated. The few studies include the contributions made by De Silva, M.W.S., De Abrew, K.K.D., Kekulawala, S. L., Wickramasuriya, B.S.S.A., De Saram, D.D., Dharmadasa, K.N.O., and others. Most of these studies have been based on the principles of structural linguistics. They are naturally based on formal criteria. My aim is different however, and I shall attempt to explain the correlation between morphemes and their underlying semantic content. But in pursuit of this I do not follow any of the three existing structural models of language description -- IA, IP or WP, because I believe them inadequate in explaining the relationship existing between form and meaning, as they rely upon form alone.

Thus, in the absence of any model to follow, I attempt to incorporate my study of the form of morphemes (and their underlying content), words and sentences within a syntactic model somewhat similar to that proposed by Fillmore, C.J. in 'Case for Case'.¹ I do not, however, follow his grammar in its totality in this description of Sinhalese 'morphology'-- lower level syntax.

Since I do not follow any specific model for reference in matters of uncertainty and difficulty, it may be found that I have incorporated some ad hoc ideas of different linguists as well as different statements of facts, and formulations as far as I can understand, express and formulate them. There are areas where I have to express my own doubts about my analysis, because I believe that a thoroughgoing study of syntax may be able to explain some surface structures better in relation to deep structures.

The two terms 'morpheme' and 'formative' are used indiscriminately in this study. They are not used in the sense that the morpheme is the 'minimal meaningful unit'² or 'minimal grammatical unit'.³ In this study I assume that the form is nothing but the symbolisation of some underlying 'content', hence the morphemes as formal units are the phonological realisations of some semantic features. They may represent one semantic feature or a complex combination of semantic features. Thus, I think, any study of morphology should attempt

1 See Bach, E. and Harms, R.T. (eds) 1968, pp. 1 - 88.

2 Nida, E.A. 1946, p. 1; 6ff.

3 Robins, R.H. 1964, p. 192; 201 ff.

to specify different semantic features in relation to some abstract syntactic categories and then relate them to the surface manifestation -- symbols, morphemes or formatives. Any further changes of these formatives may be accounted for by phonological rules such as the sandhi rules that are suggested in this study.

In this study of the morphology of the Sinhalese language I do not propose to cover the whole language. It rather attempts to relate some general semantic and syntactic features of some deep syntactic categories, noun phrase, noun, verb, aux., adjective etc. to their corresponding phonological realisations. The major concern is centered round the categories of noun phrase, verb and the auxiliary, since they form the structure of simple sentences. Complex sentences, I believe, are formed of simple sentences. When we understand the phonological realisation of the syntactic categories of simple sentences, we can make use of that information to explain complex sentences as well. Thus I believe that in a morphological study one must attempt to explain the correlation between the semantic content of syntactic categories and the phonetic form of simple sentences. Hence the noun phrase, the verb and the auxiliary must be explained in detail, as is attempted in this study.

Different complex sentence formation, -- coordination and subordination -- and derivation of different types of sentences involving negation, question, emphasis etc., which are the subject of sentence syntax, may also be mentioned as one has to introduce certain morphemes in relation to those processes.

Similarly, one may introduce other different expressions, adjuncts, idioms etc. I have added ~~four~~ appendixes to introduce some of these expressions. Furthermore, one has to discuss different processes of new item derivation -- nouns, verbs, adjectives, adverbs etc. This area of derivational morphology should be studied in detail. In this study, however, no attempt is made to study the derivational morphology of Sinhalese. The proposed programme of study is as follows:

The thesis is divided into three parts. Part One consists of four chapters. In these chapters an attempt is made to study the noun phrase in Sinhalese. A noun phrase consists of categories of noun, number, definiteness and case. Different classes of nouns are studied in the first two chapters (-- Chapter 1 : The Noun in Sinhalese; Chapter 2 : The Pronoun); the categories of number and definiteness are discussed in Chapter 3. Chapter 4 is devoted to a study of case in Sinhalese.

In Part Two, which has four chapters, I shall discuss various types of verbs and adjectives both of which comprise the predicate of the majority of sentences. Thus the verb, adjective and causative verb in Sinhalese are discussed in chapters 5, 6 and 7 respectively. The last chapter of this part, chapter 8, deals with the auxiliary ^{of} of a sentence { -or/the verb if one wishes to treat it as a category of the verb -). This chapter on the auxiliary is introduced in part two, on the evidence that in the phonological structure of the 'verb word', the auxiliary realisations are usually always attached to the verbs.

Part Three, finally, is entitled Morphophonology. This is because its purpose is primarily to explain the differences of the form of morphemes, words or sentences. This part comprises four chapters. In chapter 9, a number of noun classes are distinguished on formal criteria in order to account for the selection of some morpheme variants -- the formatives or realisations of the semantic features associated with the category of number of the major category of noun phrase. A number of morpheme variants are also introduced. In chapter 10, the structure of the phonological verb is explained and the allomorphic variation of the verb in Sinhalese is also accounted for, especially in relation to the auxiliary realisations. Chapter 11 is devoted to the statement of the phonological rules that account for the change of morphemes at morpheme junctures within words. The word in Sinhalese is established at the beginning of this chapter on a practical criterion -- the potential pause. Further phonological rules are included in this chapter which account for the optional change of some phonetic realisations. Finally in chapter 12 a few more phonological rules are introduced, their purpose being to convert the strings of words into sentences.

12. CITATION OF EXAMPLES

In citing examples, lexical items, (grammatical) morphemes, or sentences, I make use of the alphabet that is suggested in Part Three, Introduction (v. III.6. - III. 8.).

PART ONE

THE NOUN PHRASE

PART ONETHE NOUN PHRASEINTRODUCTION

I. 1 Throughout this section I assume the noun phrase to be the most relevant deep syntactic category that has to be distinguished in describing the nominal expressions of sentences (in Sinhalese or in any other language). The noun is not the deepest syntactic category: nouns in their own right do not have the potentiality to function in different relationships to the predicates of sentences. They have such functions only when they are organised into noun phrases.

I. 2 Furthermore, I assume that the noun is a category relevant for the description of some of the lexical items of a language. It occurs as the most overt and obligatory nucleus of the noun phrase. The noun as a category on the lexical plane represents sets of deep semantic feature complexes which refer to certain objects, persons, places, abstract qualities, states, feelings or concepts etc. These semantic feature matrices called 'nouns' must be organised by some other categories and their associated semantic features, in order that the resulting noun phrases may be able to perform various functions in sentences. What is called noun inflection in traditional grammars refers to this process of deriving noun phrases from nouns.

I. 3 Although noun phrases are realised in different ways in different languages of the world, the deep syntactic categories,

and the semantic features associated with them, may be considered to have taken from a set of universals, some very general components or features.

I. 4 A noun phrase should have a semantic feature matrix called 'noun' as an obligatory category in the deep structure and its corresponding phonological representation in the surface structure. It must also have an obligatory feature for the category of number to express singularity and plurality. (Plurality may have different degrees such as dual, trial, plural etc. according to the particular language). Finally, the minimum requirement of a noun phrase, is the possession of a feature for the category of definiteness. This feature for definiteness expresses the speaker's awareness of the fact that the noun in use refers to a definite, specific object or to some indefinite and unspecified object..etc. This must also be present in a noun phrase as an obligatory feature. Thus the minimum requirements of a noun phrase are features for the categories of noun, number and definiteness.

I. 5 Although these 'minimum noun phrases' are capable of expressing precise semantic contents, in order to express the different syntactic and semantic relationships that exists between the predicates of propositions and their presupposed arguments (i.e. noun phrases), we have to organise them for another category called 'Case'. Noun phrases occur in sentences, in different relationships to the predicates. These relationships are called 'Cases' (or case relations). Thus the noun

phrases are organised for case relations in order to signal these syntactic and semantic relationships.

I. 6 The category of case appears to be a category outside the noun phrase. However there are languages where case relations are not overtly realised in the surface structures. Nevertheless, I believe that it is a deep syntactic and semantic category, and also an obligatory category closely associated with the noun phrase. If noun phrases are not organised for case relations, they can not signal the relationship between one noun phrase and another or between noun phrases and the verb, or the adjective -- the predicate. Thus case may be taken as a universal category obligatorily associated with noun phrases. Hence the representation of the noun phrase is:

noun phrase ----> noun + number + definiteness [+case]¹

I. 7 This general discussion of the categories of the noun phrase, equally applicable to Sinhalese, has been in introduction to Part One of the study, in which I propose to treat these aspects of the noun phrase in Sinhalese. I now proceed, therefore, to the respective study of the noun, number, definiteness and case.

1 This does not mean that 'case' is optional; it is meant to express that 'case' is semantically associated with NPs, yet it may not be an obligatory category of an NP.

CHAPTER 1

1.0 NOUN IN SINHALESE

1.0.1. In this chapter an attempt will be made to study the noun in Sinhalese. Generally speaking, a noun is the conventional name given to one of the following 'things': it may be the name of a particular individual, object or place; it may be the name given to a whole class of living beings, objects or places; or, it may refer to an altogether abstract 'concept'. (see also 1.3 and 1.4). The abstract noun (that is, nouns referring to abstract concepts) can be described in relation to class nouns and we need not, therefore, treat them separately. Accordingly, the majority of nouns are classified into two main classes as common or class nouns¹ ([+common], that is, nouns referring to a whole class of living beings, objects or places) and non-common or Proper nouns ([- common] or [+ proper], that is, names of particular individuals, objects or places). Thus the noun in general may be represented as :

[noun	---->	+	common]
[- common	-->	+ proper]

1.1 COMMON NOUNS

1.1.1. Let us first describe the common noun (i.e.[+common]), leaving the proper noun (i.e.[-common]) to be described later in this chapter. The common nouns form the bulk of nouns of any language. They can be described by having some general semantic features assigned to them, and then being classified on the basis of different combinations of these semantic features.

1 Curme, G.O. 1935, p.1; also Zandvoort, R.W. 1962, p.97.

1.1.2. In general, common nouns refer to concrete objects, animate or otherwise. However, since they can and do refer to non-concrete concepts, such as feelings, perceptions and states etc., we have to recognise both [+concrete] as well as [-concrete] common nouns. [-concrete] nouns are always [+abstract].

We may represent this as:

[+common ----> + concrete]
 [-concrete ----> + abstract].

1.1.3. If a common noun is [+concrete], then it must be either [+count] or [-count]. Most concrete objects can be counted, hence [+count]. There are, however, certain nouns which do not refer to individual concrete objects but to a mass of such objects taken as a whole. These are usually treated as uncountable, hence [-count]. Furthermore, these [-count] nouns are [+mass]. (It should be mentioned, however, that as an exception to the general rule, these [+mass] nouns are also used as [+count] nouns, when we intend to express difference in variety). A formulation such as the following may be suggested:

[+concrete ----> + count]
 [-count ----> + mass]

1.1.4. When a common noun is [+count], in addition to those other features described above, it must denote either animate objects or inanimate objects. Thus [+count] must be marked for the [+ or - animate] feature. This can be formulated as :

[+count ----> + animate].

1.1.5. Finally, if a common noun is marked [+ animate], it must be either [+ or - human] as well as either [+ or - male].

That is :

[+ animate ----> + human; + male]

1.1.6. Although we can further develop the feature classification of common nouns on the basis of idiosyncratic semantic features, I do not propose to do so, as I consider the feature assignment suggested above sufficient for the classification of common nouns.

1.1.7. In summary, the complete feature classification of common nouns may be represented thus:

[noun	-->	+ common]	¹
[+ common	-->	+ concrete]	
[-concrete	-->	+ abstract]	
[+concrete	-->	+ count]	
[-count	-->	+ mass]	
[+count	-->	+ animate]	
[+animate	-->	+ human; + male]	

1.1.8. Let us now proceed to the classification, as suggested in 1.1.4., of common nouns in Sinhalese, formulating a number of classes taking into account the different possible combinations of the features we have assigned to common nouns in general. In the following section I have chosen to give a feature

1 [-common] feature is temporarily ignored here in this section on [+common] nouns (v. 1.2.1; 1.2.4.).

specification of the common nouns on the left and a few examples of phonological manifestations on the right. (Idiosyncratic semantic features are excluded in the feature specification, except for the cover symbol [+IDIO] to represent all those features, for obvious reasons).¹

1.1.9%	<div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 10px; display: inline-block;"> noun +common +concrete +count +animate +human +male² +IDIO </div>	-->	<div style="display: inline-block; vertical-align: middle;"> minis 'human' kolu 'boy' daru 'child' lamaa 'child' raja 'king' waDu 'carpenter' padu 'a member of the <u>padu</u> caste' roDii 'a member of the <u>roDiiya</u> " ' pirimi 'man; male ' puruse 'man; male ' : </div>
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1 If we attempt to include idiosyncratic semantic features in the feature specification, we may have to specify feature matrices for the 'content' of every expression. This can be achieved only by writing a full lexicon. For our purpose, the general features provided in the feature specification are considered sufficient. Nevertheless by recognising some further broad semantic features we may be able to expand the number of classes we have established. I have, however, limited myself to giving a minimum number of classes. The maximum number may be infinite, and every shade of meaning of every item can not be specified in a lexicon as 'creativity' and 'inventiveness' of usage can on the one hand bestow new content to existing expressions, and ^{lead people to produce} , on the other, / new items to express new 'contents'.

2 The feature [+male] is inherent in the nouns pirimi 'male' and puruse 'male'. It is either male or common (i.e. both + and - male) in relation to all other nouns given as examples.

1.1.10.	<div> <div>noun</div> <div>+common</div> <div>+concrete</div> <div>+count</div> <div>+animate</div> <div>+human</div> <div>-male</div> <div>+IDIO</div> </div>	→	<div> <div>gəanii 'woman'</div> <div>kəlii ~*kəlli 'girl'</div> <div>dərii ~dəriwi 'girl'</div> <div>rəjini 'queen'</div> <div>pəddi ¹ 'a woman of the padu caste'</div> <div>etc.</div> </div>
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1.1.11.	<div> <div>noun</div> <div>+common</div> <div>+concrete</div> <div>+count</div> <div>+animate</div> <div>-human</div> <div>+male</div> <div>+IDIO</div> </div>	→	<div> <div>balu 'dog'</div> <div>asse 'herse'</div> <div>monərə 'peacock'</div> <div>kurulu 'bird'</div> <div>maalū 'fish'</div> <div>makulu 'spider'</div> <div>ət 'elephant'</div> <div>walas 'bear'</div> <div>etc.</div> </div>
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1.1.12.	<div> <div>noun</div> <div>+common</div> <div>+concrete</div> <div>+count</div> <div>+animate</div> <div>-human</div> <div>-male</div> <div>+IDIO</div> </div>	→	<div> <div>den 'cow'</div> <div>balli¹ 'bitch'</div> <div>monəri 'peahen'</div> <div>kirilli 'hen bird'</div> <div>ətinni 'cow elephant'</div> <div>etc.</div> </div>
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1.1.13.	<div> <div>noun</div> <div>+common</div> <div>+concrete</div> <div>+count</div> <div>-animate</div> <div>+IDIO</div> </div>	→	<div> <div>ət 'hand'</div> <div>kan 'ear'</div> <div>baDe 'stomach'</div> <div>gas 'tree'</div> <div>gal 'rock, stone'</div> <div>geDi 'fruit, abscess.'</div> <div>etc.</div> </div>
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1 Feminine noun derivation in Sinhalese should be handled in a study of derivational morphology. I have used some of the derived feminine nouns here as examples and they have to be taken as complex lexical items and not as simple morphemes.

1.1.14.	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> noun +common +concrete -count +mass +IDIO </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em;">}</div> <div style="display: inline-block; vertical-align: middle;">--></div> </div>	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> piŋi 'flour' haal 'rice' wali 'sand' wature 'water' lee 'blood' kiri 'milk' etc. </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em;">{</div> </div>
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1.1.15.	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> noun +common -concrete +abstract +IDIO </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em;">}</div> <div style="display: inline-block; vertical-align: middle;">--></div> </div>	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> hoŋda 'good(ness)' moDakama 'folly, foolishness' ninda 'sleep' pissuwe 'madness' taraha 'anger' naŋiime 'dancing' naŋilla 'dancing' peniime 'sight, vision' etc. </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em;">{</div> </div>
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It seems reasonable to suggest that all the examples given above are not primary nouns. They are, in fact, nouns derived from predicates -- verbs and adjectives -- through the process of sentence nominalisation. (see Appendix C). All these abstract nouns derived through sentence nominalisation are by definition [-animate] and [+sg.].

1.1.16. However, we have to distinguished a few more sub classes of [+abstract] nouns in order to account for nouns which can not be described as [+common] and [+concrete]. In every language there are expressions which denote certain definite measurements. These may include time measures, weight measures, length or distance measures and currency measures etc. I propose to use a [+measure] feature to specify these expressions. Thus we may formulate a rule as:

noun		raattal 'pound(s)'
+common		aDi 'foot,feet'
-concrete	---->	paye 'hour(s)'
+abstract		sate 'cent(s)'
+measure		rae 'night(s)'
:		etc.

1.1.17 Although it is difficult to decide whether these nouns denote concrete 'things' or not, they denote exact measurements, and as measures, they are countable. Thus they take both [+and -sg] feature of the category of number and the features associated with other categories comprising NPs.

1.1.18. We may further recognise a class of abstract nouns, denoting certain concepts, notions or thoughts. These, too, are countable, however abstract they may be. I propose to employ a [+notion] feature to distinguish these abstract nouns from others. We may represent these nouns as:

noun		naTum 'dance'
+common		adahas 'opinion, intention..'
-concrete	--->	kalpenaa 'thought, idea..'
+abstract		etc.
+notion		
:		

1.1.19. Finally to include some other nouns I propose to recognise the following sub-class. These nouns, mostly, function as quantifiers. Thus they are quantity nouns, hence the feature [+quantity]. Under this class of abstract nouns I include, those nouns that are called collective nouns in traditional grammars and the numerals. The following formal representation is suggested :

noun		rapcu 'flock '
+common		goDe 'crowd'
-concrete		raan 'flock'
+abstract	-->	paTTi 'herd'
+quantity		ek 'one'
:		de(k) 'two'
		tun 'three'
		samahare 'some'
		Tike 'few, little'

I conclude this section on common nouns in Sinhalese by stating that most common nouns in Sinhalese can be included in one or other of these classes. Next, let us consider the non-common (i.e. [+proper]) nouns.

* * * * *

1.2.

PROPER NOUNS

1.2.1. As stated earlier (v.1.0.), proper nouns are [-common] nouns. Since these names also refer to concrete as well as abstract objects the features [+ and - concrete] are relevant for them as well. If the feature is [-concrete] then it is [+abstract] (v.1.1.2.). Thus proper nouns can be partly represented as :

[noun	---	- common]
[- common	---	+ proper]
[+ proper	---	+ concrete]
[- concrete	---	+ abstract]

1.2.2. Then, when a proper noun is [+concrete], it should be either [+count] or [-count]. However, as proper nouns denote individuals (and not classes of individuals) the feature specification of [+ or - count] may be of little importance. Nonetheless, persons or objects designated by the same name can, in fact, be counted, if the need arises. Thus, to facilitate the description to include such necessities we may profitably, retain the feature [+count]. I fail to see the validity of [-count] in this connection, however, hence the representation:

[+ concrete	---	+ count]
-------------	-----	---------	---

1.2.3. When a proper noun is [+count], it must be either [+animate] or [-animate]. If it is [+animate] then it is equally [+ or -human] as well as [+ or - male]. (cf.1.1.4; 1.1.5.). We may represent this as :

[+ count	---	+ animate]
[+ animate	---	+ human; + male]

1.2.4. We may recapitulate the complete feature specification of proper nouns thus:

[noun	-->	- common]
[- common	-->	+ proper]
[+proper	-->	+ concrete]
[- concrete	-->	+ abstract]
[+concrete	-->	+ count]
[+ count	-->	+ animate]
[+ animate	---	+ human; + male]

1.2.5. As we have already done in the sections 1.1.8.-1.1.15, let us assign proper nouns in Sinhalese into certain classes on the basis of different possible combinations of the features assigned to proper nouns in general. Here too, I give the feature specification on the left and a few examples corresponding to phonological realisations on the right.

1.2.6.	[noun	-->	{ seena 'Sena'
	-common		{ sunil 'Sunil'
	+proper		{ Tikiribanda 'Tikiribanda'
	+concrete		{ amareseekere 'Amarasekara'
	+count		{ siriseena 'Sirisena'
	+animate		{ lensuwa 'Lensuwa'
	+human		{ hoodipaale 'Bodipala'
	+male		{ etc.

1.2.7.	[noun	-->	{ maalinii 'Malini'
	-common		{ raani 'Rani'
	+proper		{ lalita 'Lalita'
	+concrete		{ sumenaawetii 'Sumanawathie'
	+count		{ kumaarihaami 'Kumarihami'
	+animate		{ pupcimenikee 'Punchimenike'
	+human		{ siriyaalataa 'Siriyaalata'
	-male		{ meerinoona 'Merinona' etc.

1.2.8.	<div> <div>noun</div> <div>-common</div> <div>+proper</div> <div>+concrete</div> <div>+count</div> <div>+animate</div> <div>-human</div> <div>+male</div> </div>	-->	<div> <div>raaja 'Raja'</div> <div>kaDiya 'Kadiya'</div> <div>Taasen 'Tazan'</div> <div>Tomiya 'Tomi'</div> <div>kiriya 'Kiriya'</div> <div>polisa 'Polisa'</div> <div>etc.</div> </div>
--------	--	-----	--

1.2.9.	<div> <div>noun</div> <div>-common</div> <div>+proper</div> <div>+concrete</div> <div>+count</div> <div>+animate</div> <div>-human</div> <div>-male</div> </div>	-->	<div> <div>cuuti 'Chuti'</div> <div>nalii 'Neli'</div> <div>ratti 'Ratti'</div> <div>beebi 'Bebi'</div> <div>kiraa Kira'</div> <div>etc.</div> </div>
--------	--	-----	---

1.2.10.	<div> <div>noun</div> <div>-common</div> <div>+proper</div> <div>+concrete</div> <div>+count</div> <div>-animate</div> </div>	-->	<div> <div>mirisawaṭṭiya 'Mirisaweti stupa'</div> <div>amaawatura 'Amawatura' (a book)</div> <div>kolamba 'Colombo'</div> <div>mahawali(gaṅga) '(river)Mahaweli'</div> <div>yoda ala 'Yodaala' (a canal)</div> <div>uttaradeewi 'Uttaradevi' (a train)</div> <div>etc.</div> </div>
---------	---	-----	---

1.2.11.	<div> <div>noun</div> <div>-common</div> <div>+proper</div> <div>-concrete</div> <div>+abstract</div> </div>	-->	<div> <div>ganite 'mathematics'</div> <div>itihaase 'history'</div> <div>siṅhala 'Sinhalese' (as a subject)</div> <div>saṅgiite 'music'</div> <div>etc.</div> </div>
---------	--	-----	--

I believe that most, if not all, of the proper nouns in Sinhalese can be included in one of these classes.

1.3.

KINSHIP NOUNS

1.3.1. In addition to common nouns and proper nouns we have to recognise a few more classes of nouns. One such class of nouns embraces kinship terms. These kinship nouns are neither common nouns nor proper nouns but belong to the class of expressions denoting certain culturally bound relationships existing among the members of the 'large' family consisting of a number of small families. (By 'large' family I mean the grouping that may comprise some seven or eight generations.)

1.3.2. The feature specification for these kinship nouns is fairly similar to that of proper nouns with [+human] feature. First, the noun is marked [+kinship]. Then it is [+concrete], [+count], [+animate], [+human] and [+or-male]. We need to have some more idiosyncratic semantic features to specify the different relationships. But these features are more relevant in compiling a lexicon, so I shall be content with a feature [+IDIO] to include all these semantic features. Thus I classify kinship nouns into two major sub-classes on the basis of [+ and - male] feature. The feature specification is given on the left and examples of phonological representations on the right.¹

¹ The expressions listed here are those currently used in my dialect area -- sat kooralee -- (see Introduction 6). However, expressions like siiya 'grand father' sacci 'grand mother' are used by those who have migrated there from the 'low country' of Ceylon. The reader may refer to Frisch's article 'A formal Analysis of Sinhalese kinship terms' in *Anthropological Linguistics*, 1971 Vol.13 No. 3, pp.100-105 for an account of kinship terms in Sinhalese.

1.3.3

noun
+kinship
+concrete
+count
+human
+male
+IDIO

-->

miimutta	'great-great-grand-father'
mutta	'great grand-father'
siiya	'grand-father'
atta	
kiri-atta	
taatta	'father'
appacci	
apucca	
^a appa	'father's younger brother'
kuDappa	
kuDappacci	
	or 'step father'
māhappa	'father's elder brother'
loku-appacci	
maama	'uncle, father-in-law'
massinaā	'uncle's son, brother-in-law'
ayya	'elder brother'
malli	'younger brother'
miniha	'husband' ¹
manusseya	
puruseya etc.	
putaa	'son'
bāna	'nephew, son-in-law'
munuburaa	'grand son'
miimunuburaa	'great grand son'

¹ It is very difficult to provide any precise general expressions to refer to 'husband' or 'wife'. The two expressions miniha 'man' and gāmi 'woman' are commonly used. However, according to different social status of persons different expressions are used by husband and wife in referring to each other. In educated and urban circles names of persons are sometimes used; in some circles some status nouns such as mahatteya, nilone, raalehaami 'gentleman' etc. for husband and noona, noona-mahatteya, manike, haaminee 'madam' etc. for wife are used (v.1.4.). Among villagers besides miniha and gāmi one may come across many other expressions such as lameyinne amma 'children's mother', lameyinne-tatta² 'children's father', gedere manusseya 'man of the house', gedere maaviya 'lady of the house', gedere ekkenaa 'the person, man or woman, of the house, etc.

into account the [+ and the - male] features. As in the previous sections, the feature specification is given on the left and the examples on the right.

1.4.2.	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> [noun +status +concrete +count +animate +human +male] </div> <div style="display: inline-block; vertical-align: middle; font-size: 3em; margin: 0 10px;">--></div> </div>	<div style="display: inline-block; vertical-align: middle;"> { mahatteya 'gentleman, sir' nilame " haamu " appuhaami " seer " etc. </div>
--------	--	---

1.4.3.	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> [noun +status +concrete +count +animate +human -male] </div> <div style="display: inline-block; vertical-align: middle; font-size: 3em; margin: 0 10px;">--></div> </div>	<div style="display: inline-block; vertical-align: middle;"> { noona 'madam' manike " haaminee " mis 'school mistress' noona-mahatteya 'madam' etc. </div>
--------	--	--

1.4.4. We may include these status nouns under [+common] nouns if we wish to do so by recognising an idiosyncratic [+status] feature. However, sociologically these expressions are very complex and not common, hence I have treated them separately. I believe that most nouns in Sinhalese can be classified into one of the sub-classes specified in this chapter. Such a classification is very useful in discussing the syntax (and semantics) of sentences. Besides the above classification, I recognise some additional classes on formal grounds, in chapter 9 to account for the distribution of some morpheme variants, namely those that are the realisation of [+ and - sg]features of the category of number in relation to common nouns (see Ch.9). Thus ending with ~~proper~~ nouns for the moment, I move on to the examination of the pronoun in Sinhalese.

CHAPTER 2

2.0. PRONOUN IN SINHALESE

2.0.1. 'Pronouns' are different from all other noun classes described in chapter 1. They do not directly belong to any of those noun classes, although they are indirectly related to the nouns of all four classes. The so-called 'pronouns' are not names of living beings or objects etc., they are pro-names-- i.e. names standing for some other names. In fact, pronouns are co-referential noun phrases referring to other noun phrases, whose nouns are the names of living beings or objects (+ common etc). In many ways it is better to consider pronouns as pronominal phrases and not as pronouns, because, in the syntactic process of pronominalisation, where these expressions replace the nominal expressions of the underlying sentences, they replace not nouns of noun phrases but whole noun phrases. However, I use the terms 'pronoun' and 'pronominal phrase' to distinguish between the lexical items (proneuns) and the organised pronominal phrases (i.e. pronoun +number +definiteness [+case]¹.

2.0.2. In an attempt to classify the pronouns of a language we have to take into account the egocentric speech situation. In such a situation we find speakers and hearers and also, perhaps, some others not directly participating in the action. The speaker is the prominent person, so he is called the First Person (= 1P). The hearer^r is second only to the speaker but not to others, so he is called the Second Person (= 2P). All others are called the Third Person (= 3P). There are three

¹ see fn. 1, p.29.

classes of expressions or pronouns referring to these three 'persons'. Let us examine them one by one.

2.1. THE FIRST PERSON PRONOUN

2.1.1. All speakers, hearers and others have names proper or common. But, in an egocentric speech situation the speaker (1P) can refer to himself and others (2P and 3P), by using different co-referential expressions avoiding the use of the corresponding proper or common nouns. The pronouns that refer to the speaker (=1P) with or without [2P] and [3P] are called First Person Pronouns. That is:

First Person Pronoun --> 1P (2P, 3P).

There are four possible situations where pronominalisation can introduce 1st Person pronominal phrases. The situation can be explained by the presence of the 1P, 2P, and 3P together. And the phonological manifestations of the pronouns in Sinhalese, also can be explained in relation to the degree of involvement between the 1P and the others, 2P and 3P. Thus pronouns in Sinhalese may be stated as suggested below. Feature specification is given on the left and the corresponding pronoun in Sinhalese is given on the right.

2.1.2. The situation where the speaker (=1P) refers to himself may be formulated as :

$\left[\begin{array}{c} \text{noun} \\ +\text{pro} \\ +1\text{P} \\ -2\text{P} \\ -3\text{P} \end{array} \right]$	-->	name 'I'
--	-----	----------

2.1.3. The situation where the speaker (=1P) refers to himself and others (=3P) may be represented as :

noun	
+pro	
+1P	----> api 'we' (I and he/she/they...)
+3P	
-2P	

2.1.4. The situation where the speaker (=1P) refers to himself and the hearer (=2P) jointly. In this situation a [3P] may be included, but optional. This situation may be formulated as follows with parenthesis () to represent option. Thus it embodies two situations [+3P], as well as [-3P].

noun	
+pro	
+1P	--> api 'we' (I and you; I, you and
+2P	him/...)
(+3P)	
(-3P)	

2.2. THE SECOND PERSON PRONOUN

2.2.1. With regard to 2P pronouns the hearer is the central personality. The speaker or 1P has no relevance at all. Thus 2P pronouns are always [-1P]. There are two situations where pronominalisation can introduce 2P pronominal phrases. That is:

Second Person Pronoun --> 2P (3P).

The realisations of 2P pronouns in Sinhalese are given below together with the feature specification.

2.2.2. However, we have to recognise three classes of 2P pronouns on a sociological basis. If the 2P belongs to a higher class of the social organisation, religious, professional etc.,

he is referred to with respect. Let us have a [+resp(ect)] grade feature to refer to this class. If the 2P is treated as an equal with the speaker, another type of pronouns is used. Let us call this [+ord(inary)] grade. If the 2P is referred to without respect, or with anger etc., a third type of pro-nominal expression is selected. We may call this [+dero(gatory)] grade. Having introduced this three fold grade distinction, let us formulate the realisation of different 2P pronouns accordingly.

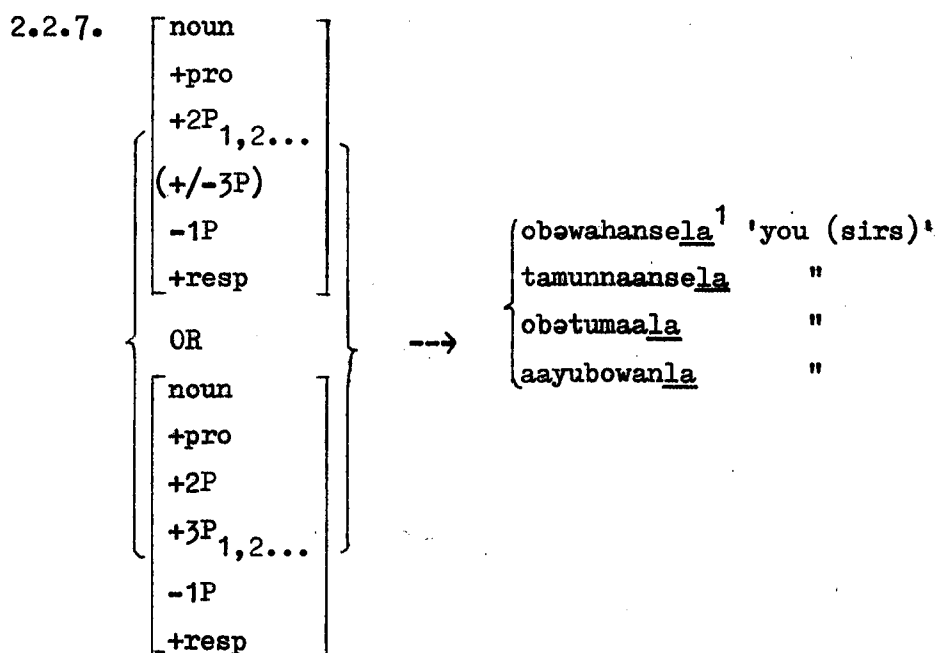
2.2.3. In a situation where only one hearer [2P+[+sg]] is implied, the following are possible formulations for Sinhalese.

noun		obawahanse	'you (sir)'
+pro		tamunnaanse	"
+2P		obe-tuma	"
-1P	---->	aayubowan	'you(gentleman)'
-3P			
+resp			

2.2.4.	noun		tamuse	'you'
	+pro		ohee	"
	+2P	---->	oyaa	"
	-1P		umbe	"
	-3P		tamaa	"
	+ord		umbehe	"

2.2.5.	noun			
	+pro			
	+2P	-->	too	'you'
	-1P			
	-3P			
	+dero			

2.2.6. There are situations where more than one hearer [2P] is involved. Accordingly, we can formulate such situations and pronoun realisations differently. The hearers may be two or more individual [2P]s; or, there may be one [2P] and one or more [3P]s. This type of pronoun realisation in Sinhalese is formulated in the following sections. Here too, we have to take into account the three grades recognised earlier (v.2.2.2.).



1 la at the end of each of these expressions is the plural marker (v.3.1.8.).

2.2.8.	$\left\{ \begin{array}{l} \text{noun} \\ +\text{pro} \\ +2\text{P}_{1,2\dots} \\ (+/-3\text{P}) \\ -1\text{P} \\ +\text{ord} \end{array} \right\}$	-->	$\left\{ \begin{array}{ll} \text{tamusela}^1 & \text{'you'pl. (you and you/} \\ & \text{you and him/...)} \\ \text{cheela} & " \\ \text{eyaala} & " \\ \text{u\`mb\`ela} & " \\ \text{u\`mb\`ahela} & " \end{array} \right\}$
	$\left\{ \begin{array}{l} \text{OR} \\ \left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +2\text{P} \\ +3\text{P}_{1,2\dots} \\ -1\text{P} \\ +\text{ord} \end{array} \right] \end{array} \right\}$		

2.2.9.	$\left\{ \begin{array}{l} \text{noun} \\ +\text{pro} \\ +2\text{P}_{1,2\dots} \\ (+/-3\text{P}) \\ -1\text{P} \\ +\text{dero} \end{array} \right\}$	-->	$\left\{ \begin{array}{l} \text{topi 'you'pl. (you and you/you} \\ \text{and him/...)} \end{array} \right\}$
	$\left\{ \begin{array}{l} \text{OR} \\ \left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +2\text{P} \\ +3\text{P}_{1,2\dots} \\ -1\text{P} \\ +\text{dero} \end{array} \right] \end{array} \right\}$		

2.3. THE THIRD PERSON PRONOUN

2.3.1. The Third Person Pronouns are more complex than the 1P and 2P pronouns. In the process of pronominalisation, noun phrases in the underlying sentences are replaced by 3P pro-nominal phrases. We may forget about 1P and 2P pronouns

1 see fn. 1, p.49.

altogether in this section. In the feature matrices that follow [+3P] implies both [-1P] and [-2P], hence these features are not specified. As far as 1P and 2P pronouns are concerned the features [+ or - male] are mostly irrelevant. They are marked [+def] only as to the category of definiteness. Thus we can describe 1P and 2P pronouns without positing features such as [+/- male]. Neither do we need to distinguish a [-def] feature to account for pronominal phrases in relation to their pronouns. However, the facts are quite different when we consider 3P pronouns. To describe 3P pronouns we have to recognise the features [+/- animate] and [+/- male]. In describing phrases we may have to recognise both [+ and - def] feature of the category of definiteness. Furthermore a three fold grade distinction, such as [+resp], [+ord] and [+dero] (v.2.2.2.) may be recognised. Accordingly, to describe 3P pronouns in Sinhalese, the following features may be noticed, namely [+pro], [+3P], [+/-animate], [+/- human], [+/-male], [+/-resp], [+/-ord] and [+/-dero]. Taking into consideration different possible combinations of these features we can account for the different pronominal expressions in the manner suggested below. Some 3P pronouns are formally complex. However I do not attempt to describe their derivation as I have excluded matters of derivation in Sinhalese from this study.

2.3.2.	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">noun</div> <div style="display: inline-block; vertical-align: middle;">+pro</div> <div style="display: inline-block; vertical-align: middle;">+3P</div> <div style="display: inline-block; vertical-align: middle;">+animate</div> <div style="display: inline-block; vertical-align: middle;">+human</div> <div style="display: inline-block; vertical-align: middle;">+male</div> <div style="display: inline-block; vertical-align: middle;">+resp</div> </div> <div style="display: inline-block; vertical-align: middle; font-size: 3em; margin: 0 10px;">}</div> <div style="display: inline-block; vertical-align: middle;">--></div> </div>	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">unwahanse</div> <div style="display: inline-block; vertical-align: middle;">&'hed'</div> </div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">unnæhe</div> <div style="display: inline-block; vertical-align: middle;">"</div> </div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">unda</div> <div style="display: inline-block; vertical-align: middle;">" (cf.2.3.3.also)</div> </div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">etuma</div> <div style="display: inline-block; vertical-align: middle;">"</div> </div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">ee-kenaa</div> <div style="display: inline-block; vertical-align: middle;">", the one'</div> </div>
--------	--	---

2.3.3. $\left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +3\text{P} \\ +\text{animate} \\ +\text{human} \\ -\text{male} \\ +\text{resp} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{unda} \text{ 'she' (cf.2.3.2.)} \\ \text{etumii} \text{ ''} \end{array} \right.$

2.3.4. $\left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +3\text{P} \\ -\text{animate} \end{array} \right] \rightarrow \text{eeke 'it, the one'}$

Grade distinction is irrelevant for [-animate] 3P pronouns.

2.3.5. $\left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +3\text{P} \\ +\text{animate} \\ +\text{human} \\ +/\text{-male} \\ +\text{ord} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{eyaa} \text{ 'he / she'} \\ \text{ee-kenaa} \text{ ''} \\ \text{ehee}^1 \text{ ''} \end{array} \right.$

2.3.6. $\left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +3\text{P} \\ +\text{animate} \\ +\text{human} \\ -\text{male} \\ +\text{ord} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{aa} \text{ 'she'} \\ \text{ee-tanatti} \text{ 'she'} \\ \text{ee-haadi} \text{ ''} \end{array} \right.$

1 Not commonly found in my dialect area; common in dialects of southern Ceylon.

2.3.7. $\left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +3\text{P} \\ +\text{animate} \\ \left[\begin{array}{l} +\text{human} \\ +\text{male} \\ +\text{dero} \end{array} \right] \\ \text{OR} \\ \left[\begin{array}{l} -\text{human} \\ +\text{male} \end{array} \right] \end{array} \right]$ $\rightarrow \left\{ \begin{array}{ll} \text{uu} & \text{'he, it'} \\ \text{eeka} & \text{"} \end{array} \right.$

2.3.8. $\left[\begin{array}{l} \text{noun} \\ +\text{pro} \\ +3\text{P} \\ +\text{animate} \\ \left[\begin{array}{l} +\text{human} \\ -\text{male} \\ +\text{dero} \end{array} \right] \\ \text{OR} \\ \left[\begin{array}{l} -\text{human} \\ -\text{male} \end{array} \right] \end{array} \right]$ $\rightarrow \text{eeki 'she, it'}$

2.3.9. In the above account I have not attempted to discuss the process of pronominalisation in Sinhalese because I was not discussing syntax at sentence level. I have, however, attempted to correlate the content with the form of pronominal expressions which are introduced on to structures as a result of pronominalisation. Yet categories such as number, definiteness and case associated with the pronouns remain to be discussed. This will be attempted in subsequent chapters.

2.3.10. Reflexivisation in Sinhalese is a very complex process. It is marked in the verbal expression, as well as

in the pronominal phrase. I am, at present, unable to give a satisfactory explanation of reflexivisation in Sinhalese. Therefore, I can do nothing more than indicate the following pronominal phrases which occur in reflexivised sentences which usually have a ? 'reflexivised' verbal expression too.

Reflexive pronominal phrase --> pronominal phrases with 1P, 2P, or 3P pronouns + $\left\{ \begin{matrix} wə_1 \\ Tə_1 \\ \vdots \end{matrix} \right\} + mə^2 / \text{---Refl.verb}^3$.

Consider the following examples:

mamə eegamə maTəmə dos-kiyaa-gatta.

I about it my(self) accused (one self)

I accused myself about it.

eyaa $\left\{ \begin{matrix} eyaaTəmə \\ tamaaTəmə \end{matrix} \right\}^4$ weDi-tiyaa-gatta
he him(self) shot (one self)

He shot himself.

With this brief account on the realisation of reflexivisation, I conclude the chapter.

1 wə and Tə ...are two case markers (see Ch. 4).

2 mə may be related to the emphatic mə (see Appendix 8).

3 ?'Reflexive verbs' are complex verbs and are not discussed in this study.

4 tamaa seems to be a reflexive pronoun associated with the 3P only.

CHAPTER 3

3.0. NUMBER AND DEFINITENESS

3.0.1 In this chapter I attempt to study the categories of number and definiteness as two obligatory grammatical categories of a noun phrase. Number can be studied independently of definiteness. Furthermore, both of these categories have independent phonological realisations. Let us first discuss the category of number and its formal manifestation in the following sections and later the category of definiteness and its realisations.

3.1. NUMBER IN SINHALESE

3.1.1. By number is understood the singularity or the plurality of the objects referred to by nouns. All nouns in Sinhalese are either singular or plural. Plurality may vary in different languages, but for Sinhalese we need to recognise only a two term number classification as singular ($[+sg]$) denoting single objects, and plural ($[-sg]$) denoting two or more objects. Thus number in Sinhalese is either $[+sg]$ or $[-sg]$:

[Number \rightarrow $\begin{matrix} + \\ - \end{matrix} sg$].

3.1.2. When the number is $[+sg]$, it may be realised in various phonological forms. The selection of one alternant in preference to another is determined mostly by the $[+/- \text{ male}]$ or the $[-\text{animate}]$ feature of the noun, if the noun belongs to the class of common nouns ($[+common]$). Otherwise the selection of alternants depends upon membership of the different classes of nouns such as proper nouns, kinship nouns, status nouns and pronouns.

3.1.3. However, if we employ the [+/-male] or [-animate] feature alone, we are unable to account for all realisations of [+sg] and [-sg]. Morpheme alternants of [+sg] and [-sg] realisation are so different that their selection can not be satisfactorily explained by mere phonological conditioning, such as the vocalic or consonantal nature of the phonological nouns. To enable us to account for all morpheme alternants as different realisations of both [+sg] and [-sg] features of the deep structure category of number, I, therefore, propose to set up a number of phonological noun classes on observable data.

3.1.4. I shall establish a number of phonological noun classes for common nouns. Some are set up taking into consideration the differences in formal manifestation of the category of plural number (= [-sg]). Since the classes set up on this criterion alone can not account for all differences in the realisation of the category of singular number, some additional classes are recognised on the basis of the differences in the realisation of singular number (= [+sg]). Thus, to account for all morpheme alternations resulting as realisations of [+sg] and [-sg] features with regard to common nouns, I propose to establish ten phonological noun classes (see Ch. 9).

3.1.5. When a particular noun is selected from the lexicon (where the feature specification and the base form are given), one must then know to which phonological noun class it belongs. It is only then that the correct morpheme realisation of the [+sg] or the [-sg] feature of the category of number can be chosen. I have not classified non-common nouns into phonological

noun classes, because without so doing we can account for the different realisations of the category of number(both [+sg] and [-sg] features).

3.1.6. Having stated the practice to be adopted here, let us now formulate a rule to account for the realisation of [+sg] feature of the category of number in Sinhalese. Employing the ten phonological noun classes set up for common nouns, and also other non-common lexical noun classes as environments, we may formulate a context sensitive rule as the following:

[No. [+sg]]	→	{ aa /	phono. noun class 1	___
			" " "	2 ___
			" " "	3 ___
			" " "	4 ___
		{ (ə) /	" " "	5a ___
			" " "	6 ___
		{ e /	" " "	5b ___
			" " "	7a ___
			" " "	7b ___
			" " "	8 ___
		{ /	proper noun	___
			kinship "	___
			status "	___
			pronoun	___
		ee /	phono. noun class 9	___
		eka /	" " "	10 ___

3.1.7. Different realisations in different contexts are illustrated in the following examples:

aa / cl. 1 : haa+aa> haa^waa '(the) hare'

(cf. 1.1.11; 11.2.5-6(a)).

wadi+aa> waddaa 'Vedda (man)'

(cf. 1.1.9; 11.2.7-8i).

aa / cl. 2 : rilaa+aa> rila^waa '(the) ape'

(cf. 1.1.11; 11.2.5-6(a), also fn 1).

horə+aa > horaa 'thief'

(cf. 1.1.9; 11.2.3-4(a)ix).

ət+aa > ətaa 'elephant'

(cf. 1.1.11; 11.2.10.)

aa / cl. 3 : koTi+aa > koTi^yaa 'leopard'

(cf. 1.1.11; 11.2.5-6(b)ii).

harak+aa > harekaa 'ox'

(cf. 1.1.11; 11.2.10.).

aa / cl. 4 : sarəpə+aa > sarəpə^yaa 'serpent'

(cf. 1.1.11; 11.2.5-6(b)vi).

{^ø/_(ə)} / cl. 5a : bælli+^ø > bælli 'bitch'

(cf. 1.1.12;)

bælli+(ə) > bælle 'bitch'

(cf. 1.1.12; 11.2.3-4(a)xi).

{^ø/_(ə)} / cl. 6 : den+^ø > den 'cow'

(cf. 1.1.12.)

den+(ə) > dene 'cow'

(cf. 1.1.12; 11.2.10.)

ə / cl. 5b : maataa+ə > maataa^wə 'mother, lady'

(cf. 1.1.10; 11.2.5-6(a)).

ə / cl. 7a : geDi+ə > geDi^yə 'fruit'

(cf. 1.1.13; 11.2.5-6(b)ii).

aŋg+ə > aŋge 'horn'

(cf. 1.1.13; 11.2.10.)

ə / cl. 7b : maaligaa+ə > maaligaa^wə 'palace'

(cf. 1.1.13; 11.2.5-6(a)ʔ).

ø / cl. 8 : kaTə+^ø > kaTə 'mouth'

(cf. 1.1.13.)

ø / proper noun : sunil +^ø > sunil 'Sunil' (cf. 1.2.6.)

raani+^ø > raani 'Rani' (" 1.2.7)

raaja+^ø > raaja 'Raja' (" 1.2.8.)

nəlii+^ø > nəlii 'Neli' (" 1.2.9.)

koləmbə+^ø > koləmbə 'Colombo' ("1.2.10.)

ø / kinship noun : taatta+^ø > taatta 'father' (cf. 1.3.3.)

amma+^ø > amma 'mother' (cf. 1.3.4.)

ø / status noun : mahatteya+^ø > mahatteya 'gentleman'

(cf. 1.4.3.)

noona+^ø > noona 'madam' (cf. 1.4.4.)

- ϕ / pronoun : mama+ ϕ > mama 'I' (cf.2.1.2.).
 tamunnaanse+ ϕ > tamunnaanse 'you' (cf.2.2.3.).
 tamuse+ ϕ > tamuse 'you' (cf.2.2.4.)
 too+ ϕ > too 'you' (cf.2.2.5.)
 unnæhe+ ϕ > unnæhe 'he' (cf. 2.3.2.).
 undæ+ ϕ > undæ 'she/he ' (cf.2.3.3.;2.3.2.)
 eyaa+ ϕ > eyaa 'he/she' (cf.2.3.5.)
 eekæ+ ϕ > eekæ 'it' (cf. 2.3.4.)
 ææ+ ϕ > ææ 'she' (" 2.3.6.)
 uu+ ϕ > uu 'he/ it' (" 2.3.7.)
 eeki+ ϕ > eeki 'she' (" 2.3.8.)
- ee /cl.9 : alæ+ee > alææ 'yam' (cf.1.1.3;11.2.3-4(a))
 saddæ+ee > saddææ 'sound' (cf.1.1.13;11.2.3-4(a))
- ekæ/cl.10 : kaant+ekæ > kaarekæ 'car' (cf.1.1.13;11.2.10.?)
 bas+ekæ > bas(s)ekæ 'bus' ("1.1.13;12.1.4.?)
 reeDiyoo+ekæ > reeDiyoo-ekæ 'radio'
 (cf.1.1.13.;12.1.1.?).

3.1.8. Adopting the principle chosen in formulating the phonological realisation of the [+sg] feature (v,3.1.6.), let us now formulate a rule to represent the different realisations of the [-sg] feature of the category of number in Sinhalese. Here too, we may employ the concept of context sensitivity. Thus, the following rule is suggested:

<div> <div>No</div> <div>[-sg]</div> </div> <div>--></div>	{	o /	phono. N. cl. 1	1	_____	
			"	(3)	_____	
			"	5a	_____	
			"	5b	_____	
		hu /	"	2	_____	
			"	6	_____	
		i /	"	4	_____	
			"	3	_____	
		ø /	"	7a	_____	
			"	(7b)	_____	
			"	9	_____	
			"	10	_____	
		wal /	"	(7b)	_____	
			"	8	_____	
		la /	proper N [-ani]			_____
			proper N [+ani]			_____
kinship N			_____			
status N			_____			
2P pronoun			_____			
3P pro[+ani]			_____			
wa /	3P pro[-ani]			_____		

These [-sg] realisations, or plural morpheme alternants, also have further variants. They will be discussed in Part Three on Morphophonology (see chapter 9.3).

3.1.9. In the following section let us illustrate these numerous realisations in different contexts:

- o / cl. 1 : haa+o > haa^wo 'hares'
- wadi+o > waddo 'Veddas'
- o / cl.(3) : koTi+(o) > koTi^yo 'leopards'
- *harak+(o) > *harək(o)
- o / cl.5a : balli+o > balli^yo 'bitches'
- o / cl.5b : maataa+o > maataa^wo 'mothers'
- hu / cl.2 : rilaa+hu > rila^wu 'apes'
- hore+hu > horu 'thieves'
- at+hu > attu 'elephants'

- hu / cl.6 : den+hu > denu 'cows'
i / cl.4 : sarəpə+i > sarəpa^yi 'serpents'
ϕ / cl.3 : koTi+ϕ > koTi 'leopards'
harak+ϕ > harak 'oxen'
ϕ / cl.7a : geDi+ϕ > geDi 'fruits'
aŋg+ϕ > aŋ 'horns'
ϕ / cl.(7b) : maaligaa+ϕ > maaligaa 'palaces'
ϕ / cl.9 : alə+ϕ > alə 'yams'
sadde+ϕ > sadde 'sounds'
ϕ / cl.10 : kaar+ϕ > kaar 'cars'
bas+ϕ > bas 'bus'
reeDiyoo+ϕ > reeDitoo 'radios'
wal/cl.(7b) : maaligaa+wal > maaligaawal 'palaces'
wal/cl.8 : kaTə+wal > kaTəwal 'mouths'
wal/proper
[-ani] : maadampe+wal > maadampəwal 'Madampes'
la/ proper
[+ani] : sunil+la > sunilla 'Sunil and others ..'
raani+la > raanila 'Rani and others..
la/kinship : taat+la > taattəla 'fathers,father and
others.'
amma+la > amməla 'mothers,mother and others'
la/2P pro : tamunnaanse+la > tamunnaansela 'you'pl.
tamuse+la > tamusela 'you'pl.
uṁbə+la > uṁbəla 'you' pl.
la/3P pro
[+ani] : unnahe+la > unnahela 'they'(males)
undə+la > undəla 'they'
eyaa+la > eyaala " "
eeka+la > eekəla " (males)
æ+la > ələ " (females only)
uu+la > uula¹ " (males)
eeki+la > eekila " (females)
wa/3P pro eewa 2
[-ani] : ee+wa>/ 'they, those '

1 This is infrequently found in some peoples' idiolects. It is not found in my own. The most commonly used pl. of uu is un 'they'. 2 eeke 'it' is considered to be a formally complex pronoun consisting of the deictic ee 'that, it' plus eke 'one'. Similarly eewa 'they, those' consists of ee + wa pl. marker.

I conclude this study of number in Sinhalese with the information that the phonological rules that must be applied at morpheme junctures (i.e. between the noun and the number realisation etc.) are introduced in Part Three on Morphophonology ~~XXXXXXXX~~. The reader is referred to the chapter on 'internal sandhi' for the specification of these rules.

3.2. DEFINITENESS IN SINHALESE

3.2.1. By definiteness we generally mean two things. One is the reference to an object or objects with exact or definite identity. This is definite, specific reference. [+definite] may be used to represent this. The other is the reference to an object or objects without any specific identity. 'Any' or 'some' of the objects but not 'the' or 'all the' objects. This is indefinite or unspecified reference. We may use [-definite] to represent this. Thus definiteness in general is two fold, definite [+def] and indefinite [-def]. I suggest the following formulation to represent the category of definiteness:

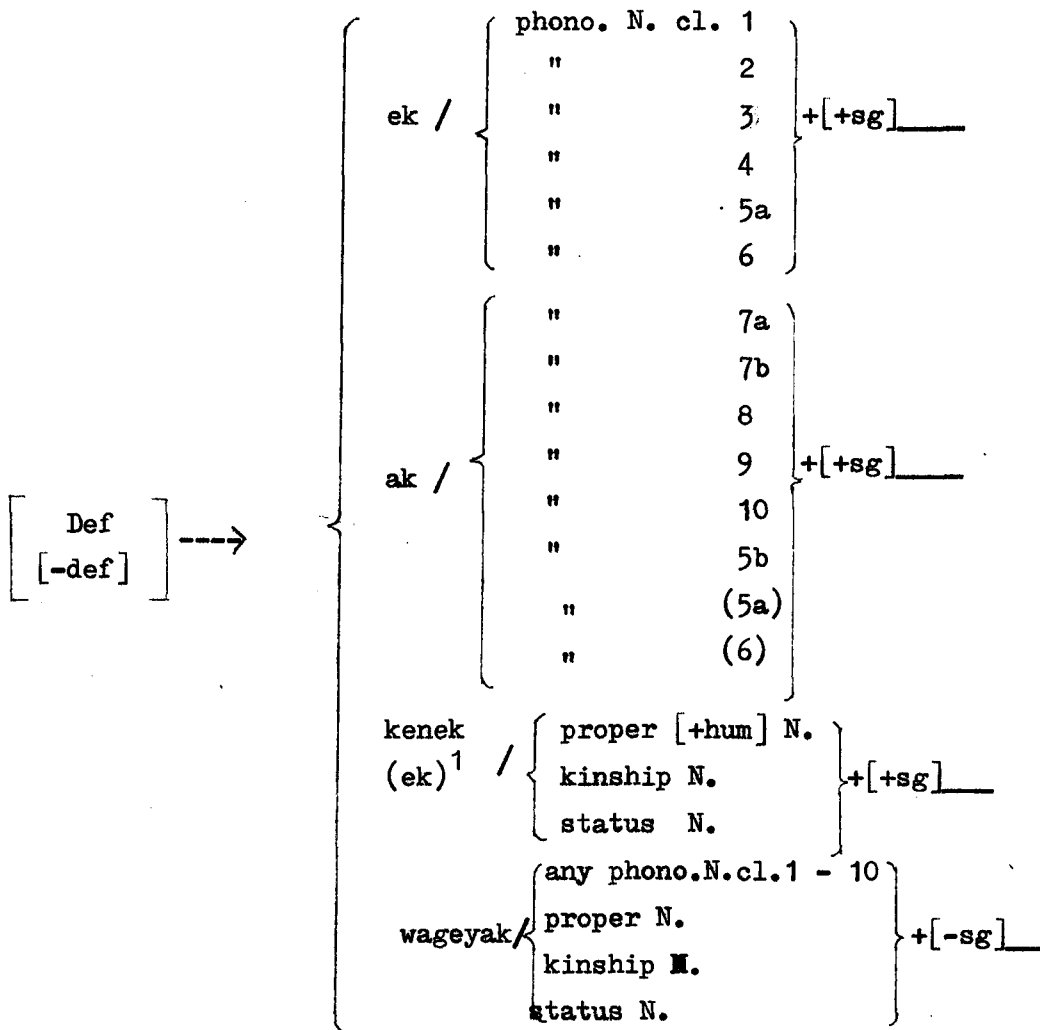
$$[\text{Definiteness} \quad \rightarrow \quad \begin{matrix} + \\ - \end{matrix} \text{definite}]$$

3.2.2. There are number of realisations of [+def] and [-def] features. If the feature is [+def] the realisation is mostly as zero. Thus:

$$\begin{bmatrix} \text{Def} \\ [+def] \end{bmatrix} \rightarrow \emptyset$$

e.g. balu + aa + \emptyset > ballaa 'the dog'
 amma + \emptyset + \emptyset > amma 'the mother'
 gas + \emptyset + \emptyset > gas 'the trees'
 at + hu + \emptyset > attu 'the elephants'
 etc.

3.2.3. The realisation of [-def] feature is not so simple, however. In accounting for the conditioning factors that select different variants as realisations of the [-def] feature of the category of definiteness, we have to take into account the phonological noun classes for common nouns (cl.1 - 10) as well as other lexical noun classes and also the number category, both [+sg] and [-sg] features. Employing all these, we can formulate the following phonological representation:



3.2.4. To illustrate the different variant forms of [-def] realisation, some examples are given below:

ek : haa+aa+tek > haawek 'a hare'
 horə+aa+tek > horek 'a thief'
 æt+aa+tek > ætek 'an elephant'
 koTi+aa+tek > koTiyek 'a leopard'
 sarəpə+aa+tek > sarəpəyek 'a serpent'
 bælli+~~ø~~+tek > bælliyek 'a bitch'
 dent+ $\left\{ \begin{smallmatrix} \text{ə} \\ \emptyset \end{smallmatrix} \right\} + \text{tek} > \text{denek}$ 'a cow'

ak : geDi+ə+ak > geDiyak 'a fruit'
 maaligaa+ə+ak > maaligaawak 'a palace'
 kaTə+~~ø~~+ak > kaTak 'a mouth'
 alə+ee+ak > aleyak 'a yam'
 kaar+ekə+ak > kaarekak 'a car'
 maataa+ə+ak > maataawak 'a mother'
 (bælli+ə+ak > bællak 'a bitch')
 den+ə+ak > denak 'a cow'

kenek: sunil+~~ø~~+kenek > sunil kenek 'a person named Sunil'
 raani+ " " > raani kenek " girl/lady " Rani'
 amma+ " " > amma kenek 'a mother '
 noona+ " " > noona kenek ' a lady'

wageyak : kolu+ $\left[\begin{smallmatrix} \text{ə} \\ \text{an} \end{smallmatrix} \right] + \text{wageyak} > \left[\begin{smallmatrix} \text{kollo-wageyak} \\ \text{kollan-wageyak} \end{smallmatrix} \right]$ 'some boys'
 horə+ $\left[\begin{smallmatrix} \text{hu} \\ \text{hun} \end{smallmatrix} \right] + \text{wageyak} > \left[\begin{smallmatrix} \text{horu-wageyak} \\ \text{horun-wageyak} \end{smallmatrix} \right]$ " thieves'
 æt +hu+wageyak > ættu-wageyak 'some elephants'
 geDi+~~ø~~+wageyak > geDi-wageyak 'some fruits'
 kaTə+wəl+wageyak > kaTəwəl_Λwageyak 'some mouths'
 amma+la+wageyak > amməla-wageyak 'some mothers'
 etc.

3.2.5. Syntactically, some nouns denoting quantity (= [+quantity]; see 1.1.19.) together with number and definiteness may be used with some other preceding nouns, usually in plural (i.e. [-sg]) number, to denote definite and indefiniteness in Sinhalese. If the noun preceding the quantity noun is [-ani] (or one of classes 7a, 7b, 8, 9 and 10; see Ch.9), then the quantity nouns, especially numerals ~~(XXXXXX)~~ take [+sg] → ə, Ø (v.3.1.6) and [+def] → ø (v.3.2.2.) to express number and definiteness respectively.

e.g. gas-dek-ə-ø > gas dekə 'the two trees'

To denote indefiniteness the quantity nouns take [+sg] → ə, Ø (v.3.1.6.) and [-def] → ak (v.3.2.3.) in a situation where the noun preceding the quantity noun is [-ani] (or one of classes 7a, 7b, 8, 9 or 10; see Ch.9).

e.g. gas-tun-ə-ak > gas tunak '(some) three trees'

3.2.6. It must be stated here that the numeral ek 'one' is rarely used in this situation, because the indefinite with singular number denotes the same thing. Thus:

gas +ekə +ak > gas ekak 'one tree' is similar in meaning to gas+ə+ak > gahak 'a tree'. Instead of gas ekak we usually find ekə gahak 'one tree' in Sinhalese, but *dekə gahak, *tunə gahak etc. are impossible. However, numerals (= [+quantity] nouns) can occur without having number and definiteness realisation before noun phrases with nouns denoting time, and features [+sg] and [+/-def].

e.g. ek(ə) pəyə + $\begin{bmatrix} \emptyset \\ \text{ak} \end{bmatrix}$ → ek(ə) $\begin{bmatrix} \text{pəyə} \\ \text{pəyak} \end{bmatrix}$ 'the one hour' / 'an hour'

tun awuruddə + $\begin{bmatrix} \emptyset \\ \text{ak} \end{bmatrix}$ → $\begin{bmatrix} \text{tun awuruddə} \\ \text{tun awuruddak} \end{bmatrix}$ 'the three years' / 'three years'

etc.

3.2.7. However, if the noun preceding the quantity noun (= numeral etc.) is a [+animate] (or one of phonological noun classes 1 - 6 (see Ch. 9)), then it has a special realisation for [+/-sg]features as: [+sg] → kenaa'one'/ek___ and [-sg] → denaa 'more than one' / de___'two' tun___'three' etc., plus [+def] → ∅ and [-def] → ek. Thus we can account for such expressions as:

minissu ekkenek 'one man'

minissu pas-denek 'five men'

" pas-denaa 'the five men' etc.

In every case all nouns before numerals or other quantity nouns are associated with the plural number (i.e. [-sg] as given in 3.1.8.).

I believe that this behaviour of quantity nouns suggests that there is some semantic relationship between the categories of number and definiteness on the one hand and the quantifiers of a language on the other.

CHAPTER 44.0. CASE IN SINHALESE

4.0.1. It was stated in the Introduction to Part One of this thesis (v.I.2. and I.5-6.) that noun phrases must be organised for a number of syntactic and semantic relationships called case relations, in order that they may function as the subjects, objects, indirect objects etc. of sentences.

4.0.2. The categories of noun and pronoun of different classes (see Chapters 1 and 2)of the lexical plane and the grammatical categories such as number and definiteness associated with them in forming syntactic units called noun phrases(see Introduction to Part One, v.I.2. and I.4.;also see Ch. 3)can be semantically defined. However, it is difficult to define case relations on semantic grounds alone, because the main function of case relations is to bind together the meanings of the noun phrases as arguments of sentences with their predicates (i.e. verbs and adjectives;(see II.1.)and also noun phrases in the case of 'equational' sentences). Thus the major function of case relations is to organise noun phrases into complete nominal expressions that can signal different relationships holding between them and the predicates of sentences. Accordingly, case relations are both syntactic -semantic relationships rather than purely syntactic or semantic relationships.

4.0.3. Furthermore, predicates, especially, both verbs and adjectives presuppose some obligatory arguments (i.e.NPs)and, without these, the predicates can not express the semantic

content they are supposed to signal. Predicates denote actions, processes, experiences and states etc. These non-linguistic events are associated with objects, places, time etc. The expressions denoting objects, places, time etc, belong to the noun classes. These nouns are organised for number and definiteness to form noun phrases. Then they are further organised for case relations to express different relationships holding between them and the predicates. The speaker has the option in choosing certain expressions as additional information, namely those expressions denoting time and place etc., but he has no option in the selection of certain obligatory expressions (namely those denoting objects which must be present in a proposition). I adopt the term 'nuclear constituents' for minimally obligatory propositions, and 'extranuclear constituents'¹ for the optional expressions. I do not propose to go into detail here. I think it sufficient to state that whether the noun phrases belong to nuclear constituents or extranuclear constituents, they signal different case relations. In this chapter I shall attempt to study the case relations in Sinhalese as deep syntactic and semantic relationships and their corresponding surface realisations-- the phonological realisations.

4.0.4. Any proper attempt to explain case relations of a language should result from a thorough-going study of syntax. Except for R.P.T. Jayawardana's pioneering attempt to study case in Sinhalese on the model of C.J. Fillmore's 'Case for Case' no further research has been carried out, so far, to

¹ see Lyons, J. 1968, p. 334 for these terms.

study this area in Sinhalese. Neither does Jayawardana's study of Case in Sinhalese cover all areas of syntax where 'case' has a role to play. Thus until the category of case in Sinhalese is studied in more detail, it is difficult to provide a complete account of Case in Sinhalese. I, therefore, suggest a tentative treatment of Case in Sinhalese leaving further research in the study of syntax in Sinhalese to uncover more concrete facts about case relations in Sinhalese.

4.0.5. If one attempts to describe the category of case in Sinhalese on formal criteria by analysing paradigmatic sets of nominal expressions, then one can easily distinguish two sets of cases, one associated with animate nouns and the other with inanimate nouns. Thus one has to recognise a six term case system for animate nouns and a four term case system for inanimate nouns. By recognising six or four cases on the basis of form alone, it is my opinion that we can not account for all the functions attached to noun phrases in sentences. Furthermore, it is a mistake to classify case on the basis of form alone, for, on the one hand, there is every possibility that a particular case form (or marker) may signal different functions, while on the other, a particular syntactic semantic function (= a case relation) be realised in more than one form owing to different reasons, which can be specified. Furthermore, the category of case can not be studied without taking into account the syntax of a language. Hence any classification of case of a language, on the basis of form alone by segmentation of 'affixes' in paradigmatic sets of

nominal expressions, is of little use in understanding the deep syntactic and semantic relationships they are supposed to convey.

4.0.6. The establishment of six cases for animate nouns and four cases for inanimate nouns in Sinhalese is, therefore, made without taking into consideration the fact that the case forms are the realisations of deep syntactic and semantic relations. However, before going on to my account of the study of case in Sinhalese, in the following sections I attempt to give a brief account of the way the category of case is studied on a formal basis.

4.0.7. It is always assumed that a noun consists of a base plus an ending; the base may be simple, derived or complex (including compounding); the endings are simultaneously associated with the categories of number, definiteness and case; these endings differ according to animateness or inanimateness of the bases. Further, if the bases are animate, the endings are different for masculine bases from those of feminine ones in some cases. Thus masculine bases take : aa ~ a as singular, definite and direct case ending; ek as singular indefinite and direct case ending; and o ~ u ~ \emptyset as plural definite and direct case endings. There are no plural indefinite cases in Sinhalese. We may formulate the above case forms as:

sg.,def.,dir. case	---->	aa ~ a	} / mas. bases _____
sg.,indef.,dir.case	---->	ek	
pl.,def., dir.case	---->	o ~ u ~ \emptyset	

4.0.8. Similarly, feminine bases, which are mostly derived

from masculine bases with the addition of feminine derivative suffixes, i,ii, ini, inni, ni, issi, icci etc, take either e or ø as singular, definite and direct case ending; ek ~ak as singular, indefinite direct case ending; and o ~ u as plural definite direct case ending. The following formal representation is suggested:

sg., def., dir.case	-->	e ~ ø	} /fem. bases ____
sg., indef., dir,case	-->	ek ~ ak	
pl., def., dir.case	-->	o ~ u	

4.0.9. Then there are five oblique cases for both masculine and feminine bases. These will be called oblique case 1, 2, 3, 4 and 5 in the description below: masculine bases take aa(wə) ~ a(wə) as singular definite oblique case 1; they take eku(wə) as singular indefinite oblique case 1; and they take an(wə), ~ un(wə), ~ in(wə) ..as plural definite oblique case 1. Thus the oblique case 1 (together with other categories) may be formulated as:

sg., def., obl.case 1	-->	aa(wə) ~ a(wə)	} /mas.bases ____
sg., indef., obl.case 1	-->	eku(wə)	
pl., def., obl,case 1	-->	an(wə) ~ un(wə) ~ in(wə) ..	

4.0.10. Similarly, feminine bases take a(wə) ~ ø(wə) as singular definite oblique case 1; they take eku(wə) ~ əkə(wə) as singular indefinite oblique case 1; and they take an(wə) ~ un(wə) as plural definite oblique case 1. We may state the oblique case 1 in relation to feminine bases thus:

sg., def., obl.case1	->	a(wə) ~ ø(wə)	} / fem.bases ____
sg., indef., obl.case1	->	eku(wə) ~ əkə(wə)	
pl., def., obl.case1	->	an(wə) ~ un(wə)	

4.0.11 In a similar manner we can formulate the other oblique cases 2 - 5 as well, for both masculine and feminine bases. I suggest the ^{following} formulation to represent them:

sg.,	def.,	obl.case 2	---	aaTə ~ aTə	} /mas.bases__
sg.,	indef.,	obl.case 2	---	ekuTə	
pl.,	def.,	obl.case 2	---	anTə ~ unTə ~ inTə	

Similarly:

sg.,	def.,	obl.case 2	---	əTə ~ øTə	} /fem.bases__
"	indef.,	"	---	ekuTə ~ əkəTə	
pl.,	def.,	"	---	anTə ~ unTə	

sg.,	def.,	obl.case 3	---	aagen ~ agen	} /mas.bases__
"	indef.,	"	---	ekugen	
pl.,	def.,	"	---	angen ~ ungen ~ ingen	

Similarly:

sg.,	def.,	obl.case 3	---	əgen ~ øgen	} /fem.bases__
"	indef.,	"	---	ekugen ~ əkəgen	
pl.,	def.,	"	---	angen ~ ungen	

sg.,	def.,	obl.case 4	---	aage ~ age	} /mas.bases__
"	indef.,	"	---	ekuge	
pl.,	def.,	"	---	ange ~ unge ~ inge	

Similarly:

sg.,	def.,	obl.case 4	---	əge ~ øge	} /fem.bases__
"	indef.,	"	---	ekuge ~ əkəge	
pl.,	def.,	"	---	ange ~ unge	

sg., def., obl.case 5	-->	oo ~ o	} /mas.bases ____
pl.,def., "	-->	ənee~unee~inee	

Similarly:

sg., def.,obl.case 5	-->	e	} /fem. bases ____
pl., " "	-->	ənee~unee	

4.0.12. There are no endings for singular indefinite oblique case 5 . However, I draw attention to the fact that some of oblique case endings may have free variants, specially where the ending has a -g- element which may occur either as -y- or as homorganic with the preceding consonant specially when it is a nasal.

e.g. aagen ~agen as aa(y)en ~a(y)en
 ekugen as eku(y)en
 angen ~ ungen ~ingen as annen ~unnen ~innen
 aage ~age as aa(y)e ~a(y)e
 ekuge as eku(y)e
 ange ~unge ~inge as anne ~ unne ~ inne

Similarly anTə~unTə~inTə may have anDə~ unDə~ inDə as free variants but Tə does not change to Də in other cases such as aaTə ~ aTə ; ekuTə; əTə~ øTə ; ekuTə ~ əkəTə etc.

The existence of free variations may be explained as a dialect difference.

4.0.13. Finally to conclude this discussion of case on formal criteria, the case endings should be considered in relation to inanimate noun bases. When the base is inanimate the following are the endings occurring as direct case forms:

ə ~ ø ~ ee ~ ekə as singular definite direct case; ak ~ eyak~
ekak as singular indefinite direct case; and ø ~ wal as
plural definite direct case. We may represent this in a
formulation :

sg., def., dir.case	-->	ə ~ ø ~ ee ~ ekə	} /inani.bases__
sg., indef., "	-->	ak~eyak~ekak	
pl., def., "	-->	ø ~ wal	

4.0.14. There are only three oblique cases in relation to
inanimate noun bases. However, assuming that we have to recog-
-nise, at least, six cases syntactically (see Kekulawala 1964),
We may allocate these three oblique cases to the oblique cases
2, 3 and 4. Thus we may say that the oblique case 1 is identical
with the direct case (v.sup.). The oblique case 5 is very
artificial if we want to recognise it, so let us leave the
oblique case 5 aside as very unusual in relation to all inani-
-mate noun bases. Having said that, let us formulate the case
endings for the other oblique cases namely 2, 3 and 4.

sg.,def.,obl.case2	-->	əTə~øTə~eeTə~ekəTə	} /inani.bases__
" indef., "	-->	akəTə~eekeTə~əyakeTə~ ekəkeTə	
pl.,def., "	-->	øwələTə~ walwələTə	

sg.,def.,obl.case 3	-->	en ~ in ~ eken	} /inani.bases__
" indef., "	-->	əkin~eekin~əyekin ~ ekəkin	
pl.,def., "	-->	øwəlin~ walwəlin	

sg., def.,obl.case 4	-->	ee~ e ~ekee	} /inani.bases ____
" indef., "	-->	akə~eekə~əyəkə~ ekəkə	
pl., def., "	-->	Øwələ~ walwələ	

4.0.15. It must be admitted that the foregoing account is a fairly oversimplified statement of facts, but, except for most proper nouns, kinship nouns, status nouns and pronouns, and a few specific exceptions, it is a quite general statement of case endings of common nouns in Sinhalese so long as we rely upon the form of the 'noun word' and its formal scatter as the sole data in recognising case endings.

4.0.16. Throughout the foregoing section on case endings we have accepted that the category of case is simultaneously associated with the other categories of number and definiteness. But we can treat case separately from number and definiteness. I have already dealt with the categories of number and definiteness independently of case in chapter 3. Even on form alone we can discuss case independently of number and definiteness if we study carefully the paradigmatic sets of nouns --masculine, feminine and inanimate. Historically, we can substantiate the fact that the case markers in modern Sinhalese, even in the written language, came into existence at a later date in the course of the evolution of Sinhalese. At first, the case markers appeared as some auxiliary elements attached to noun phrases which already included the categories of nouns, number, definiteness and case in them, as the category of case had ceased to mark of its functions clearly in a formal way, owing to phonological changes resulting in

the course of evolution. Later on these auxiliary elements evolved phonologically, yielding to the case markers existing today. Accordingly, I believe that the case markers can be separated from the markers of number and definiteness. In the beginning, at the Prakritic stage, the categories of number, definiteness and case, all occurred together in a single marker. But later, new case markers were introduced when the markedness of the category of case in the endings of noun phrases was not clear enough. Thus the endings of those earlier noun phrases may be taken to represent number and definiteness only. Furthermore, in the course of evolution, number and also definiteness markers seem to have evolved independently. The definiteness is always unmarked whereas indefiniteness is marked separately beside the number marker. Thus we are not unjustified in dealing with number and definiteness independently in chapter 3.

4.0.17. Having justified the treatment of case independently of number and definiteness, I shall attempt to discuss case in Sinhalese not so much on a formal basis but rather on a syntactic and semantic basis. In this pursuit, I recognise the underlying syntactic semantic relationships as case relations and then attempt to account for the phonological realisations of these underlying case relations in Sinhalese. By doing so, the case relations of all noun phrases can be explained, whether they consist of common nouns or not.

4.0.18. It is worth while to bear in mind at the outset,

the valid theoretical observation made by John Lyons :

"Any general theory of case must recognize two facts:(i) that the same case may realize more than one syntactic function; and (ii) that a particular syntactic function may be realized by a variety of means in the same language ----- in particular, that there is a 'deeper' relationship between cases and prepositional phrases in Latin than the traditional analysis of inflexion would suggest. Both of these facts are relevant to the description of many other languages, both within and outside the Indo-European family".¹

4.0.19. In Sinhalese, case relations are realised in a number of ways. Some of them are realised as case (inflections or) suffixes. (These are the forms, but mostly with the preceding number and definite markers, ^{that} have been treated as case suffixes in most grammars of Sinhalese.) There are some other case relations which are realised as postpositions in Sinhalese. Furthermore, some case relations are sometimes realised as postpositions containing (inflectional) suffixes in them. In the subsequent sections, I discuss case in Sinhalese in the attempt to account for most of these realisations.

4.0.20. Agreeing with J.Lyons, who states :

"Furthermore, these 'grammatical' and 'local' functions may be realized in the same language partly by case inflexions and partly by other means -- most commonly by prepositions or postpositions, or by word order. This means that the category of case can not be discussed solely from a morphological point of view."² I propose

to discuss case in Sinhalese taking into account the syntax

1 Lyons, J. 1968, pp. 292 - 293 ; 2 ib. p. 302

of the language and not simply the paradigmatic sets of 'noun words'. We may recognise a set of case forms, on formal criteria, to include six suffixes and their variants and a number of postpositions.

4.0.21. In this study I recognise six case suffixes but some with variants occurring in complementary distribution. The case suffixes and their variants are not named on any notional grounds but are referred to as case form 1, 2, 3, 4, 5 and 6 respectively. These are given below:

case form 1	-->	∅
" " 2	-->	wə
" " 3	-->	Tə
" " 4a	-->	gen
" " 4b	-->	en
" " 4c	-->	in
" " 5a	-->	ge
" " 5b	-->	ee
" " 5c	-->	e
" " 6a	-->	o(o)
" " 6b	-->	e(e)

4.0.22. We have further to recognise a set of postpositions such as, atin 'by', laŋgə 'near', gaawə 'near' laŋgəTə 'to near by', laŋgin 'from near by', atulə 'in', uDə 'on', yaTə 'under', pahələ 'back'....etc. to account for the realisation of some case relations. I shall introduce them in the relevant sections of this chapter.

4.1. CASE RELATIONS IN SINHALESE

4.1.1. On the basis of different relationships holding between noun phrases, either as nuclear constituents of propositions or as extranuclear adjuncts, and the predicates of sentences, I distinguish a number of case relations in Sinhalese.

They may be stated thus:

Case relation -->	{	Agentive 1 case
		Agentive 2 "
		Objective "
		Experiencer "
		Dative "
		Source "
		Goal "
	{	Locative "
		Directional "
		Instrumental "
		Comitative "
		Time "
		Purpose "
		Cause "
		etc.

4.1.2. In subsequent sections of this chapter we shall examine these case relations one by one, and in some detail. However, before attempting to explain the underlying case relations and their corresponding phonological representations, a brief account of the process of 'subjectivisation' in Sinhalese is necessary.

4.2. SUBJECTIVISATION IN SINHALESE

4.2.1. Every proposition consists of a predicate with its presupposed arguments, namely the nuclear constituents of the

proposition. These arguments may be agents, patients, recipients or experiencers etc. depending upon the predicates (which are sometimes classified as one place, two place and three place predicates). If the predicate presupposes two arguments (i.e. a two place predicate), an agent and a patient, the agent argument (i.e. NP in Agentive Case relation) is usually selected as the subject of the sentence. This logical selection of one argument or an NP in a particular case relation as the subject may be called the subjectivisation process. Except perhaps for stylistic or other reasons when transformations such as emphasis etc. alter the favoured structure of sentences, the subject of a Sinhalese sentence is its logical subject. (To account for sentences where the subjects are not the logical subjects, we may recognise a 'thematic'¹ subject. The thematic subject may be either a nuclear constituent (but not the logical subject) or an extranuclear adjunct. The logical subject may or may not occur in ^{the surface structure of} such sentences. I do not wish to go into details of discussing the selection of a thematic subject as it is a matter for dispute and a knowledgeable study of stylistics as well as syntax would be required before it could properly be understood. I therefore limit myself to the selection of the logical subject of a sentence by the process of subjectivisation.)

4.2.2. I have already stated above that when a predicate presupposes an agent and a patient (objective) arguments with or without a recipient argument, the agent argument is subjectivised to be the deep subject of such sentences. If a predicate presupposes only one argument, an agent (i.e. NP in Agentive

¹ see Halliday, M.A.K., 1970, pp. 158 ff.

case) or a patient or an object (i.e.NP in Objective case) then that argument is automatically subjectivised to be the deep subject of such sentences. Similarly when a predicate presupposes an Experiencer argument (i.e.NP in Experiencer case) with or without a (cognitive) object argument (i.e.NP in Obj.case) then that Experiencer argument is selected as the logical subject. Also when a predicate presupposes a recipient argument (i.e.NP in Dative case) and an object argument (i.e. NP in Obj.case) but without any agent arguments, then the recipient argument is subjectivised. This is true for all predicates -- both verbs and adjectives. Thus the selection of the logical subject as the deep subject of sentences in Sinhalese, through the process of subjectivisation may be stated in terms of case relations as suggested below:

Agentive \Rightarrow subj. if Prop. = Ag. (+Obj.)(+Dat.)+verb[action].

Objective \Rightarrow subj. if Prop. = Obj. (...) + verb [process/state].
adj [stative] ..

Experiencer \Rightarrow subj. if Prop. = Exp. (+Obj.) + verb [perception]
adj [perception].

Dative \Rightarrow subj. if Prop. = Dat...+Obj...+verb[possession ?]

4.2.3. In this study I have distinguished two Agentive cases, Agentive 1 (v.4.3.) and Agentive 2 (v.4.4.) to include both volitive agents and involitive agents respectively. The Objective case (v. 4.5.) is a very wide case relation and it includes objects or patients, including cognitive objects as well, both animate and inanimate. Dative case includes the role of the recipient.

4.2.4. It is true to say that the Agentive 1 and 2, the Objective, the Experiencer and the Dative case relations are

the most widely occurring case relations of nuclear constituents of propositions. In relation to some predicates a few more case relations may be recognised as being constituted within the nuclear propositions. They are the Source, the Goal, the Locative, the Directional, the Instrumental and the Comitative case relations. Most other case relations express the relation between extranuclear adjuncts and the predicates or the sentences. These will be dealt with in the relevant sections below. Opinions may differ as to whether all these are actually case relations or not. Nevertheless until Sinhalese syntax is fully explored and studied, we can not arrive at any reasonable decision as to what they are or how structures containing such expressions may be explained.

4.2.5. The subject of a sentence is the topic about which a comment or a statement is made, according to many linguists of the past and the present. However, in this study I have no alternative but to accept that the concept of subject in Sinhalese is an aspect of the deep structure. The subject of a sentence may thus be selected on a logical basis as I have suggested above (v. 4.2.2.). As far as all kernel sentences are concerned, by the process of subjectivisation we select the logical subject. It may or may not occur in the initial position of sentences although it is more likely to occur in that position than any other. For emphasis or some other stylistic reasons we may alter the word order and select some other constituent of the sentence to assume the initial position. This constituent is also taken to be a subject as it begins

the sentence. Thus bearing in mind the different possible selections of the initial constituents of sentences in different languages, we may have to recognise a number of surface subjects. For English Halliday recognises a number of subjects such as logical subject, grammatical subject and psychological subject.¹ For Sinhalese too, I believe we may recognise at least two subjects, namely a logical subject, and a psychological subject (i.e. a thematic subject). I do not intend to discuss subjectivisation any further at present as it will only lead us into insoluble problems. So let us therefore examine the deep case relations and their corresponding phonological ~~relations~~^{-ali-} in the rest of this chapter.

4.3. AGENTIVE CASE 1

4.3.1. All volitive action verbs (V.5.1.1., 5.1.3., 5.1.7. and 5.1.8.) presuppose agent arguments (i.e. NPs in Agentive case 1) among other possible arguments and these agents act volitively and actively. Thus the Agentive case 1 may be defined as the relationship holding between those volitive agent arguments and the predicates. In all cases this volitive agentive case relation (or Agentive case 1)_k^{is} realised as zero. That is:

Agentive Case 1 \rightarrow \emptyset

e.g.

balla+ \emptyset burenawa

the dog bark

The dog barks./ The dog is barking.

sarat+ \emptyset potak kiyawenawa

Sarath a book read

Sarath reads a book./ Sarath is reading a book.

¹ Halliday, M.A.K., 1970, pp. 158 ff.

For some more examples see 5.1.7. and 5.1.8. Thus the Agentive case 1 always takes the case form 1 (v. 4.0.21.) as its realisation.

4.4. AGENTIVE CASE 2

4.4.1. All involitive action verbs (v. 5.1.2., 5.1.3., 5.1.9. and 5.1.10.) also presuppose agent arguments (i.e. NPs in Agentive case 2) besides other possible arguments and these agents act involitively (or perhaps, passively) and unintentionally or accidentally. Thus the Agentive case 2 may be defined as the relationship between the involitive agent arguments and the predicates. The realisation of the Agentive case 2 is two-fold. It is as -Te if the verb is involitive intransitive. Or, it is either as -Te in relation to some involitive transitive verbs or as atin in relation to some other involitive transitive verbs. We may summarise this realisation as:

$$\text{Agentive case 2} \rightarrow \begin{cases} \text{Te if the verb} = \text{verb} \begin{bmatrix} +\text{action} \\ -\text{vol} \\ -\text{Tr} \end{bmatrix} \\ \left\{ \begin{array}{l} \text{Te} \\ \text{atin} \end{array} \right\} \text{ if the vb.} = \text{vb.} \begin{bmatrix} +\text{action} \\ -\text{vol} \\ +\text{Tr} \end{bmatrix} \end{cases}$$

e.g.

lameyaTe aNDenəwa

The child cries (unintentionally)

minihaTe nayaawe pəəgunaa

the man the cobra trampled accidentally

The man trampled the cobra accidentally.

putaa atin mal pəlee kəpuna

(the)son the flower plant cut unintentionally

(The) son cut the flower-plant unintentionally.

(see also 5.1.9. - 5.1.11.)

This shows that the Agentive case 2 is realised either by case form 3 (v.4.0.21.) or by the postposition¹ atin .

4.5. OBJECTIVE CASE

4.5.1. The Objective case relation is one which exists between an objective argument (i.e. an NP in Objective case relation) as the affected or effected participant or object of an action, process or state etc. and the predicate in question. Thus Objective case relation is a very wide spread case relation in any language. All verbs which are transitive presuppose arguments in Objective relation besides the other Agentive, Dative or Experiencer arguments. Verbs which are either process verbs or stative verbs ,too, presuppose Objective arguments. Stative adjectives also presuppose Objective arguments. Objective case relation may be realised in a number of forms. It is realised as zero in relation to the majority of verbs and adjectives. It may be realised as -we in relation to animate nouns. However this -we realisation is optional. It is realised as -Te in relation to certain verbs and adjectives such as those given in the formulation below :

1 'Postpositions' are a class of phonologically recognisable 'words'. They are so called as they occur after noun phrases but never as suffixes. They perform different case functions but are different from suffixes in that they are potential 'words' whereas suffixes are not.

Obj. case -->	{	\emptyset	
		(wə) / NP__ if NP \supseteq [N _{ani}]	
		{	if verbs = bani 'abuse'
			kaa 'bite'
		{	koTə 'peck'
			etc.
		{	if adj. = kəməti 'like'
			aasa 'desire'
			aadəree 'love,
			be fond of'

e.g.

balla { haawek \emptyset } məruwa
 the dog { haawek wə } killed
 The dog killed a hare.

miniha gas+ \emptyset kapənəwa
 the man trees cut
 The man cuts trees.

seenə baNDaTə banna
 Sena Banda abused
 Sena abused Banda.

laməyaTə balla kəwa
 the child the dog bit
 The dog bit the child.

gaŋge- \emptyset galənəwa
 The river flows .

miniha- \emptyset gedərə innəwa
 the man at home is
 The man is at home.

gee- \emptyset loku-yi
 the house big is
 The house is big.

It will be clear from the foregoing account and examples that the Objective^{Case} may be realised in one of three case forms, the case forms 1, 2, and 3 (v.4.0.21.). (For more examples see 5.1.7., 5.1.9., 5.2.1., 5.3.3. etc.)

4.6.

EXPERIENCER CASE

4.6.1. Most verbs of perception (v. 5.4.), except for those marked for volition (i.e. deliberate mental activity) presuppose an experiencing 'patient' and that 'patient' is said to be in Experiencer case relation to the verb. An Experiencer is not a recipient of any object, so I think it is reasonable to treat it as a separate relation independent of the Dative relation (v.4.7.). However, we may take the volitive perception verbs to be equal with action verbs, as these verbs express mental activities. Thus the 'Experiencers' in relation to volitive perception verbs may be treated as agents (i.e. Ag. Ca. 1). Similarly we may treat the neutral perception verbs as having some neutral agentive arguments, like Agentive case2 (i.e. 'involitive agents'; v.4.4.). However, involitive agents , or neutral agents, are not the same as neutral experiencers as they are not agents of any actions, so I recognise the Experiencer case relation as a relevant one. The phonological realisation of this Experiencer case relation is as -Tə, the case form 3 (v.4.0.21.). That is :

Experiencer case --> Tə

e.g.

minihaTə saddeyak ahuna
 the man a noise heard
 The man heard a noise.

ballaTə riduna
 the dog hurt
 It hurt the dog.

taattaTə keenti-giyaa
 (My)father got angry.

maTə baDəgini-yi
 I hungry am
 I am hungry.

(See 5.4. especially 5.4.3.-4. and 6.2.4. for further examples.)

4.7. DATIVE CASE

4.7.1. There are verbs which among other arguments presuppose a beneficiary or recipient. If the verb is an action verb, then the logical subject agent is usually subjectivised. If the verb is one like laɓe 'receive, get' hambə-we 'meet, find..'etc. then the recipient argument which is said to be in the Dative case relation is subjectivised. Thus the beneficiary or the recipient of an action or a result of an action is in Dative case relation to the verb. The most common action verbs which presuppose Dative case relation arguments are de 'give,' gaha 'hit, beat', ewə 'send (to 2P/1P)' yawə 'send (to 3P)', kiyə 'tell'etc. The Dative case relation^{is} realised with the case form 3, namely Tə (v.4.0.21.) and we may state this as:

Dative case --> Tə

e.g.

siriseenə amərəsinhəTə potak dunna
 Sirisena to Amarasinha a book gave
 Sirisena gave Amarasinha a book.

gurutumaa laməyinTə lassənə katandəreyak kiwwa
 the teacher to the children lovely a story told
 The teacher told the children a lovely story.

amma malliTə liyəmənak yəwwa
 mother to younger brother a letter sent
 (My) mother sent a letter to (my)younger brother.

laməya ballaTə gəhuwa
 the child to the dog hit
 The child hit the dog.

maTə taattagen liyumak ləbuna
 to me from (my)father a letter received
 I received a letter from my father.

seenəTə nidaaneyak hambə-unaa
 to Sena a treasure found
 Sena found a treasure.

4.8.

SOURCE CASE

4.8.1. There are verbs such as ləbe 'receive', ille 'beg, ask for', ille-gan 'borrow', galəwe 'remove (a bark etc.) etc. and some verbs of motion that presuppose arguments as sources of the actions or the motions etc. These arguments are said to be in the Source case relation. The realisation of the Source case relation is fairly complex. It is realised as one of the case forms 4a, 4b, or 4c (v.4.0.21.) (or as some other postpositions such as iddəla 'from', hiTan 'from' etc.). The choice of case form 4a over 4b and 4c depends upon the animate-ness of the noun in the noun phrase, The choice of 4b against 4c is based on the vocalic or consonantal character of the final sound of the phonological noun phrase. I suggest the

case relation (v.4.11.). Goal case relation is realised by the case form 3, Tə in most cases. That is:

Goal case \rightarrow Tə

e.g.

seena kaDeeTə giyaa

Sena to the shop went

Sena went to the shop.

api kandeTə nagga

we to the mountain climbed

We climbed to (the top of) the mountain.

siril koləmbə iñdela kurunəgələTə aawa

Siril Colombo from Kurunegala to came

Siril came from Colombo to Kurunegala.

4.10.

LOCATIVE CASE

4.10.1. In Sinhalese, existential verbs, iñdi 'exist, be' and tibe 'exist, be, there is/are ...' mostly seem to presuppose arguments in Locative relation to the verbs, besides other arguments such as those in the Objective relation etc. Usually the noun phrases that occur in this Locative case relation consist of nouns which are mostly inanimate. Locative case relation is realised in one of two forms, 5b or 5c. We may state the realisation of the Locative case as:

$$\text{Locative case} \rightarrow \left\{ \begin{array}{l} \text{ee / } \left[\begin{array}{l} \text{NP} \\ \text{N.} \\ \text{-ani} \\ \vdots \\ \text{..CV} \end{array} \right] \\ \text{ə / } \left[\begin{array}{l} \text{NP} \\ \text{N.} \\ \text{-ani} \\ \vdots \\ \text{...C} \end{array} \right] \end{array} \right.$$

e.g.

galee sellipiyak tiyenawa
on the rock a rock inscription there is
There is an inscription on the rock.

wawee bohoma maalu innawa
in the tank many fish there are
There are plenty of fish in the tank.

watte¹ lassena pokunak tiyenawa
in the estate beautiful a pond there is
There is a beautiful pond in the estate.

kalaawale wal-sattu innawa
in forests wild animals live/there are
There are wild animals in forests.

4.10.2. However, it is difficult to suggest any precise principle for the choice of ee against e in relation to place names (i.e. proper nouns) which are mostly vowel final. Consider the following examples:

anuraadepuree +ee \Rightarrow anuraadepuree 'at/in Anuradhapura'
kurunagale +e²(?) \Rightarrow kurunagale 'at/in Kurunegala'
(* " +ee \Rightarrow *kurunagelee but gale+ee \Rightarrow galee
'in/on the rock' is natural.
kaagalle +ee \Rightarrow kaagalle¹ 'in/at Kegalla'
(*kaagalle+e \Rightarrow *kaagalle).
puttalame +ee \Rightarrow puttalame¹ 'in/at Puttalam'
(*puttalame+e \Rightarrow *puttalame).
alutgame +e \Rightarrow alutgame 'in/at Alutgama'
pasyaale +ee \Rightarrow pasyaale¹ 'in/at Pasyala'

1 e is short as the structure is not CVCVV; see 11.3.2.

2 This may be zero and if we accept \emptyset as one of the realisations of the Loc.case, our rule 4.10.1. must include \emptyset besides other markers.

4.10.3. Although it may not be absolutely consistent, one would not be wrong in suggesting that if the penultimate syllable of the place name is a heavy one then there is every reason to believe that such noun phrases take ee as Locative marker. If the penultimate syllable is a light one but not with u as syllabic vowel and the consonant of the final syllable is not y, there is more likelihood that such noun phrases take e as Locative case realisation. Yet cf. puttelame against alutgame above. When the penultimate syllable has u as syllabic vowel or when the final syllable has y as its consonant then such place names too take ee as the Locative marker.

4.10.4. Finally it may be stated that there is some semantic link between the Locative case and the Directional case relations, perhaps one may find some link among Locative and Dative (?), Source, Goal, and Directional cases, because all these case relations express some relation to, from, near, at etc. of a location.

4.11. DIRECTIONAL CASE

4.11.1. Directional relation is not very different from the Locative relation. Yet, we may distinguish two case relations, since by directional relations we can refer to certain directions in relation to certain locations (i.e. Locative). Thus by Locative case relation we mean reference to a location whereas by Directional case we mean reference to a direction in relation to a location. Within this 'direction' too we may recognise a number of relations such as Locative - i.e. the

direction as the location but in relation to another location-, Source - i.e. the direction as the source but in relation to a location - , and Goal - i.e. the direction as the goal in relation to a location etc. Thus we may state the sub divisions of the Directional relation as :

$$\text{Directional case} \rightarrow \begin{cases} \text{Dir. Locative} \\ \text{Dir. Source} \\ \text{Dir. Goal} \end{cases}$$

Let us examine these different directional case relations in the subsequent sections, and formulate a statement of their phonological realisation.

4.11 A.

DIRECTIONAL LOCATIVE CASE

4.11 A.1. When a direction in relation to a location is referred to as a location, it is expressed by the Directional Locative case relation. Whenever a locative relation argument is presupposed by a verb a directional locative argument may also be a substitute. In most cases this Directional Locative relation is realised by a number of expressions -- postpositions in traditional grammar -- indicating different directions. Most of these direction indicating expressions are inherently associated with Locative case relation. However, some of these expressions can also take a locative realisation. Therefore, we may recognise the realisation of the Directional Locative case relation as :

Dir. Loc. \rightarrow direction indicator + Loc. case (v.4.10.)

4.11 A.2. Similarly for Directional Source and Goal case relations we may recognise a direction indicating expression

plus the Source case realisation or Goal case realisation.

4.11 A.3. Different direction indicating expressions may be introduced as suggested in the formulation below with the specified semantic content they express.

Direction	-->
[near,by']	[{ laŋgə }]
	[{ gaawə }]
['lower part']	[{ pahale }]
	[{ palləhə }]
['back']	[{ passə }]
	[{ piTipassə }]
['up']	[uḷə]
['upper part']	[{ uḷaha }]
	[{ iḷəle }]
	[{ ismatte }]
['in,inside']	[{ atule }]
	[{ atul-patte }]
[{ 'front' }]	
[{ 'in front' }]	[{ isseraha }]
[{ 'down' }]	
[{ 'beneath' }]	[{ yaṭe }]
[{ 'below' }]	[{ pahale }]
[{ 'through' }]	
[{ 'across' }]	[{ haraha }]
	[{ mādin }]
['side']	[{ patte }]
['along']	[{ digə, digee }]
[{ 'edge' }]	[{ ayinə }]
[{ 'corner' }]	[{ mulle }]
[{ 'out' }]	[{ piṭe }]
[{ 'out side' }]	[{ piṭe-patte }]
['north']	[{ uturə }]
['south']	[{ dakunə }]
['east']	[{ nāgenəhire }]
['west']	[{ basnaahirə }]
etc.	

4.11 A.4. Then the Locative case relation is in some cases $\emptyset(?)$ (i.e. unmarked), in others ee (v. Loc. case 4.10.). Here too ee is selected if the penultimate syllable is either a closed (i.e. long) one or one where the syllable vowel is u or i but i is not the i of piTe 'out' (v. 4.10.3.).

$$\text{Loc.} \quad \rightarrow \left\{ \begin{array}{l} \left\{ \begin{array}{l} \text{ee} \\ (\text{en}) \end{array} \right\} / \left\{ \begin{array}{l} \text{..CVCCV} \\ \text{..CuCV} \\ \text{..CiCV}_1 \end{array} \right\} \text{ ---} \\ \text{cond. CiCV}_1 \neq \text{piTe} \\ \left\{ \begin{array}{l} \emptyset \\ (\text{in}) \end{array} \right\} / \text{ else where ---} \end{array} \right.$$

e.g.

geə laŋge wəwak tiyenəwa

house near a tank there is

There is a tank near the house.

liŋdə tiyenne wəttə pahale

the well is estate in the lower part

The well is in the lower part of the estate.

guhaawə stule lassənə pilimeyak tiyenəwa

the cave inside beautiful an image there is

There is a beautiful image inside the cave.

mamə almariyə uDin potə tibba

I of the cup board on top the book placed

I placed the book on top of the cup board.

4.11 B.

DIRECTIONAL SOURCE CASE

4.11 B.1. As stated earlier (v. 4.11.1.) when the direction of a location is referred to as the source of an action or process, such a relation is expressed by this case relation. The realisation of this case is as 'direction indicators' followed by Source case realisation (v. also. 4.11 A.3. for direction

indicating expressions). That is :

Dir. Source case --> direction indicators + Source case
 direction indicators --> as given in 4.11 A.3.

Source case -->
$$\left\{ \begin{array}{l} \text{in} / .\text{CVC}\text{a}______ \\ \text{en} / \left\{ \begin{array}{l} .\text{CVCC}\text{a}______ \\ .\text{C}\left\{ \begin{array}{l} \text{u} \\ \text{i} \end{array} \right\} \text{C}\text{a}______ \end{array} \right. \\ \left\{ \begin{array}{l} \text{i}\check{\text{n}}\text{d}\text{ə}\text{l}\text{a} \\ \text{h}\text{i}\text{T}\text{a}\text{ŋ} \end{array} \right\} \end{array} \right.$$

e.g.

gee ətulen gaṇdak enəwa
 the house from inside a smell come
 There is a smell coming out of the house.

wattə pahalin dolak paṭaŋgannəwa
 (of)the estate from the lower part a stream start
 A stream starts (to flow) from the lower part of the estate.

kandə pahələ iṇdələ paarəTə hətakmak tiyenəwa
 the mountain foot from to the road a mile there is
 It is one mile from the foot of the mountain to the road.

4.11 C. DIRECTIONAL GOAL CASE

4.11 C.1. Certain verbs such as those denoting activities or processes involving motion, presuppose, among others such as agents and objects etc., arguments in Goal relation (v.4.9.). Directional Goal relation is related to the Goal relation of 4.9.: the Goal relation expresses the relation to a particular location and the Directional Goal relation expresses the relation to a particular direction of a location. The Directional Goal case relation too is realised by direction indicator plus Goal case marker. That is:

Dir. Goal case --> direction indicator + Goal case

direction indicator --> as given in 4.11 A.3.

Goal case --> Tə (v.4.9.)

e.g.

miniha galə uDəTə nəgga

the man the rock top to climbed

The man climbed on (to the) top of the rock.

sunil kaaməree ətuləTə giyaa

Sunil the room into went

Sunil went into the room.

amma wəttə palləhəTə yannə əti

mother the estate to the lower side (have) go(ne) may

(My) mother may have gone to the lower side of the estate.

4.11 C.2. I am rather sceptical about my Directional case. The actual case relations involved there, are in fact those of the Locative, the Source and Goal . Should someone attempt to show clearly that the noun phrases involved are some complex noun phrases comprising NP + directional NP (?) or some thing similar, then I should be prepared to consider such an account, unable as I am at present, to offer a more acceptable explanation. In such a case we need not recognise a different Directional case relation. Thus, leaving further research in Sinhalese to accept or reject the Directional case relation (and perhaps, some other case relations as well) postulated here, we move on to the next section.

4.12.

INSTRUMENTAL CASE

4.12.1. It seems reasonable to suggest that there are some

action verbs such as kape 'cut', ire 'saw' etc. that obligatorily presuppose instruments as arguments besides other possibilities. There is also reason to believe that the Instrumental case relation is obtained in relation to extranuclear adjuncts of sentences too. In that case 'Instrumental case relation' has to be explained as a result of lexicalisation involved in the process of coordination. I am inclined to believe that it would be better if we could explain the adjunct expressions containing the 'so called Instrumental case' markers in terms of coordination. However, I leave this for a researcher in coordination to decide. The Instrumental case relation is realised by one of the case forms 4a, 4b or 4c (v.4.0.21.). The choice of 4a over 4b and 4c depends upon the animate and inanimate feature of the noun of the NP. The choice of 4b against 4c is decided by the vocalic or consonantal nature of the final phone of the phonological noun phrase. We may formulate the realisation of the Instrumental case relation in Sinhalese as :

$$\text{Instrumental case} \rightarrow \left\{ \begin{array}{l} \text{gen} / \left[\begin{array}{l} \text{NP} \\ \text{N.} \\ +\text{ani} \end{array} \right] \underline{\quad} \\ \text{en} / \left[\begin{array}{l} \text{NP} \\ \text{N.} \\ -\text{ani} \\ \dots\text{CV} \end{array} \right] \underline{\quad} \\ \text{in} / \left[\begin{array}{l} \text{NP} \\ \text{N.} \\ -\text{ani} \\ \dots\text{C} \end{array} \right] \underline{\quad} \end{array} \right.$$

e.g.

miniha porəwen gahak kapənəwa

the man with the axe a tree cut

The man cuts a tree with the axe.

[porəwə + en \Rightarrow porəwen]

kolla kooTuwəkin ballaTə gəhuwa
 the boy with a stick (to) the dog beat
 The boy beat the dog with a stick.
 [kooTuwak + in ==> kooTuwəkin]

miniha harəkungen¹ kumburə haanəwa
 the man with the cattle the field plough
 The man ploughs the field with cattle.

4.13.

COMITATIVE CASE

4.13.1. Certain verbs like kataa-kərə 'talk (with)', saakaccaa-kərə 'discuss' etc. seem to presuppose arguments as co-agents where one agent is subjectivised, and the other agent is expressed by this Comitative case relation. There is reason to believe that even with other verbs, 'co-agents and co-patients..' etc. may occur in sentences. In all cases one co-agent or co-patient is expressed by this case relation. This may be explained as noun phrase coordination. But, intuitively one feels that this is not simply joining of two NPs with a conjunction ekkə ' (together) with'. The subject agent is always the initiator whereas the other comitative agent is not so. Similarly, with regard to objective arguments one object is also primary and the accompanying or comitative object is secondary. The realization of the Comitative case relation may be represented as:

Comitative case --> (t)ekkə(la)

1 Instrumental case relation, however, is rarely or very infrequently used in relation to noun phrases with animate nouns.

e.g.

miniha prasne mama-t(t)ekke(la)saakaccaa-keruwa
 the man the problem me with discussed
 The man discussed the problem with me.

miniha ekke mama hoŋdə nəə
 the man with I good no
 I am not on good terms with the man.

sarat wattat ekkəmə gee wikka
 Sarath the estate with(too) the house sold
 Sarath sold the house together with the estate.

4.14.

TIME CASE

4.14.1. Noun phrases as expressions referring to different time spans hold different syntactic relationships with the predicates. Usually noun phrases in this time case relation occur as extranuclear adjuncts to propositions. Sometimes these noun phrases are accompanied^a by a numeral as a quantifier.

4.14.2. While admitting extreme difficulty in specifying these different relationships that hold between time denoting noun phrases and predicates, I shall still attempt to account for some of them as suggested in the following representation. This may be a great oversimplification of facts, but since I am unable to go into deep syntax at present, I limit myself to this formulation. In pursuit of this, I recognise a number of shades of time relation as:

'specified time', 'for a limited period time', 'from one limit to another', 'before a limit of time', 'after a limit of time',

' through out a period or(long)duration of time', 'specified fixed duration' etc..

4.14.3. I propose the following formulation:

Time case	---
'specified time' (at, by')	{ -Tə wenəkoTə }
'for a limited period' ('for ')	-Tə
'from one limit to another' ('from ..to')	{ iñdəla hiTə } .. wenəkal
'before a limit' ('before')	{ Tə } + { issərowela en } { issella }
'after a limit' ('after')	{ Tə } passe en }
'a duration of time' ('through out')	{ puraa } (mə) tisse }
'fixed duration' ('during, within')	{ in /... C en /... CV ətuləte }
	etc.

e,g.

mamə havəsə tunəTə/(tunə wenəkoTə) etenTə ennan
I in the afternoon 3 at (3 when it is) there shall come
I shall come there at 3 O'clock in the afternoon.

miniha awuruddəkəTə gamen piTə yanəwa
the man for a year from the village out go
The man goes away from the village for one year.

lamayi udee hiTə ræ wenəkal sellan-kəronəwa
 the children from morning till night play
 The children play from/^{morning}till night.

hawəsə tunəTə issərəwela ennə balannə
 in the afternoon 3 before to come try
 Try to come before 3 o'clock in the afternoon.

ræ dahayəTə passe ennə epaa
 in the night 10 after come do not
 Do not come after 10 o'clock at night.

adə dawəsə puraa(mə) wəssa
 today day throughout rained
 It rained all day today.

mee wəDee dawəsəkin kəranne oonə
 this work a day within do must
 (We) must do this work in a day.

eyaa pəyen eekə iwərə keruwa
 he in an hour it finished
 He finished it in an hour.

mamə dawəsak stulətə ee wəDee kərədennan
 I within a day that work shall do for you
 I shall do the work for you within a day.

4.15. PURPOSE CASE

4.15.1. There is apparently some reason to suggest that
 certain verbs such as suudaanam-we 'get ready, prepare (oneself)',
idiripāt-we 'run, come forward', læasti-we 'get ready' etc.
 presuppose certain arguments as purpose of the activity.

However, there are other NPs which occur as adjuncts but express-
 -ing a similar relationship. Such noun phrases, I believe have

to be explained in relation to coordination or subordination. In most cases this case relation is realised by the case form 3, Tə (v.4.0.21.). However, the same 'notion' is expressed by such expressions (? connectives) as wenuwen 'for, on the event..', saṇdahaa 'for' etc. To include all these realisations we may then postulate a rule as :

$$\text{Purpose case} \rightarrow \begin{cases} \text{Tə} \\ (\text{wenuwen}) \\ (\text{saṇdahaa}) \end{cases}$$

e.g.

$$\text{eyaa cande} \left\{ \begin{array}{l} \text{-Tə} \\ \text{wenuwen} \\ \text{saṇdahaa} \end{array} \right\} \text{huṅgak wiyədam keruwa}$$

he on the election a great deal spent
He spent a great deal on the election.

nimal B.A. wibahage Tə suudaanam-wenəwa/læsti-wenəwa
Nimal for the B.A.examination get ready/prepare.
Nimal prepares for the B.A.examination.

4.16.

CAUSE CASE

4.16.1. One may attempt to recognise a (pseudo ?)(v.4.16.2. in.) case relation called the Cause case because one may come across some NPs occurring in sentences as adjuncts and which seem to be the arguments as the cause of the actions or processes denoted by the verbs. If we can establish such a case relation, then we may postulate its possible phonological realisation as :

$$\text{Cause case} \rightarrow \begin{cases} \text{Tə} \\ \text{en} \\ \text{nisaa} \\ \text{hinda} \end{cases}$$

e.g.

minissu unen marenəwa
 man/people from fever die
 People die from/(because of) fever.

wassəTə gaṅgə piruna
 because of rain the river got filled
 The river was full as a result of rain.

awwen	}	pəlee məruna
awwə <u>Tə</u>		
awwə-nisaa		
awwə-hinda		

because of sun shine the plant died
 The plant died due to sun shine.

4.16.2. It seems reasonable to suggest that, despite unen 'due to fever', wassəTə 'due to rain', awwəTə 'due to sun shine' etc. appear to be noun phrases with en and Tə case forms, these sentences have resulted through subordination. This is justified when we get the subordinate conjunctions nisaa 'because of', hinda 'because of' performing the same function of Tə and en. Tə and en, I presume, may have survived from the underlying sentence connectives eekəTə 'as a result of it, because of it' and eeken 'out of it, from it, because of it' respectively, where the pronoun eekə 'it' has been deleted in the process of subordination. Thus the so-called Cause case relation may be taken not as a true case relation but as a 'pseudo' relation which in fact may be explained in relation to subordination in Sinhalese. The subordinate conjunctions nisaa and hinda after NPs may have remained as a result of a predicate deletion rule in this process.

4.1.3. I have discussed under a number of case relations some of the syntactic and semantic relationships that hold between NPs and predicates. One may postulate some more case relations or may reduce the number I have discussed here, when one attempts to study the syntax of Sinhalese exhaustively. My study is not directed towards any exhaustive study of case in Sinhalese. I think it is sufficient to state that my attempt is only preliminary to a description of case in Sinhalese on a notional basis rather than on a formal or a paradigmatic basis.

4.1.4. Furthermore, as suggested above, some of these case relations occur in relation to certain NPs outside the nuclear constituents of the propositions. These adjunct constituents may be explained differently when the syntax of Sinhalese is better understood. Certain expressions usually called adverbs have been discussed here under certain case relations simply because they can be so described. However, as I have already suggested when discussing 'Cause case relation'(v.4.16.), some of these case relations are undoubtedly not case relations. They appear to be NPs in some case relations because in the application of different processes of coordination, subordination, nominalisation, relativisation etc., the underlying structures have changed drastically. Thus when we attempt to construct the deep structure of these 'disguised constructions', we may find that revision is necessary of some of the material included in the discussion of case relations. Some special cases, such as different Directional case relations(4.11;4.11A;4.11B;

4.11C.), Comitative case relation (4.13), Time case relation (4.14.), Purpose case relation (4.15.) and Cause case relation (4.16.), may be mentioned as those which are more likely to be subject to revision.

4.15. To conclude this chapter we must, however, ^{describe} ~~two more~~ markers that are different from those discussed in the above sections. These are the so-called Possessive or Genitive marker and the Vocative marker. The former is related to the process of nominalisation and the latter is concerned with addressing others to draw their attention to what one is going to say. Thus these two are not deep syntactic semantic relations. These two surface markers will be discussed in the following sections.

4.17. POSSESSIVISATION AND THE POSSESSIVE MARKER

4.17.1. What is generally called the 'Possessive case' is not a syntactic semantic case relation similar to those like Agentive case relation (v.4.3.;4.4.), Objective case relation (4.5.) etc. It does not express any dependency holding between an NP as an argument and a predicate. It rather shows an adnominal dependency. Thus its function is mostly similar to the adjective of a derived nominal phrase resulting from the process of relativisation.

4.17.2. However the possessive marker is introduced into noun phrases derived through the process of nominalisation where possessivisation plays an important role. In the process

of relativisation as well, especially when the predicate is ayiti 'belong', possessivisation introduces the possessive marker when the predicate is deleted in the process. The possessivisation does not apply to nominalised clauses but only to nominalised phrases.

4.17.3. Thus the phrasal nominalisation introducing possessivisation may be formulated as:

S: NP(subj) +(NP) +pred + Aux \Rightarrow NP: NP_{poss} +(NP)+pred+nom.

e.g.

miniha bat ka+nə-wa	\Rightarrow	minihage bat <u>kaəmə</u>
the man rice eat		the man's rice eating
The man eats rice.		The man's eating rice...

but, cf.

miniha bat kanəwa	\Rightarrow N.clause: miniha bat <u>kanə-ekə</u>
The man eats rice.	The fact that the man eats rice.....

4.17.4. Then possessivisation in relation to relativisation may be stated as :

S: NP_{Tə} +NP+ ayiti -yi \Rightarrow Rel.clau: NP_{Tə} +ayiti +NP \Rightarrow
 NP : NP_{ge} +NP.

e.g.

maTə wəttə <u>ayiti</u> -yi	\Rightarrow	maTə <u>ayiti</u> wəttə \Rightarrow
to me the estate belong		to me belong the estate
The estate belongs to me.		The estate which belongs to me.
<u>mage</u> wəttə		
my estate.		

4.17.5. Thus an NP with a possessive marker does not have an underlying case relation similar to those case relations

discussed earlier in this chapter. It only has a surface marker introduced to it in the process of nominalisation and relativisation, where possessivisation has a role to play. The possessive marker is ge if the NP to which it is introduced, has an animate noun in it, or it is mostly zero or sometimes ee if the NP has an inanimate noun in it. Thus the possessive marker is:

$$\text{possessive marker} \rightarrow \begin{cases} \text{ge} / \begin{bmatrix} \text{NP} \\ \text{N.} \\ +\text{ani} \end{bmatrix} \text{ ---} \\ \emptyset / \begin{bmatrix} \text{NP} \\ \text{N.} \\ -\text{ani} \end{bmatrix} \text{ ---} \\ \text{ee} / \begin{bmatrix} \text{NP} \\ \text{N.} \\ -\text{ani} \end{bmatrix} \text{ ---} \end{cases}$$

e.g.

mage ge pote

My book.

pansalee ee kumbura

temple's paddy field

(The paddy field which belongs to the temple.)

4.18.

THE VOCATIVE MARKER

4.18.1. A Vocative expression is a nominal expression (i.e. NP +Voc. marker) lying out side those NPs with the syntactic semantic case relations. A noun phrase, especially one with an animate noun, together with this vocative marker is used only in addressing a person in drawing the hearers' attention towards the speaker. However, the Vocative has a number of markers which may be represented thus:

Vocative case -->

o /	{	NP]	—
		N.		
		+com		
		•		
		+āni		
	{	+male]	—
		[+sg]		
e /	{	NP]	—
		N.		
		+com		
		•		
		+āni		
	{	-male]	—
		[+sg]		
	{	NP]	—
		N.		
		+kinship		
		[+sg]		
ø /	{	NP]	—
		N.		
		+proper		
		•		
		+āni		
	{]	—
ee /	{	NP]	—
		N.		
		+com		
		•		
		+āni		
	{	+/-male]	—
		•		
		[-sg]		

e.g.

lameyo (lameya + o)
child,

kelle (kelle + e)
girl,

taatte (taatta + e)
father,

subasinha (subasinha + ø)
Subasinha,

kollanee (kollan + ee)
boys,

4.18.2. There are a few special expressions in Sinhalese, which are sometimes called 'Vocative words' as they are used in addressing a person without using his/her name. These may be explained as 2P pronouns with Vocative marker \emptyset . However, all 2P pronouns do not occur as 'Vocative words'. Consider the following examples:

ooyi , tamuse koheda yanne

ayise , " " "

bolat , " " "

(you) you where go

(You), Where are you going ?

4.1.6. Finally, in a conclusion to this chapter on Case in Sinhalese, I draw attention to the fact that it is an extremely difficult task for anyone to describe the case system of a language precisely and accurately establishing exact boundaries between one case and another, and defining and establishing each case on syntactic and semantic functions they are supposed to signal. Until we understand more about the syntactic and semantic facts about the category of case as a universal, we shall be unable to explain many surface differences found in various languages. Thus Jespersen's statement that "cases form one of the most irrational part of language in general" may be considered true so long as we consider only the surface differences and so long as we remain ignorant of the rational or logical basis of case as a universal.

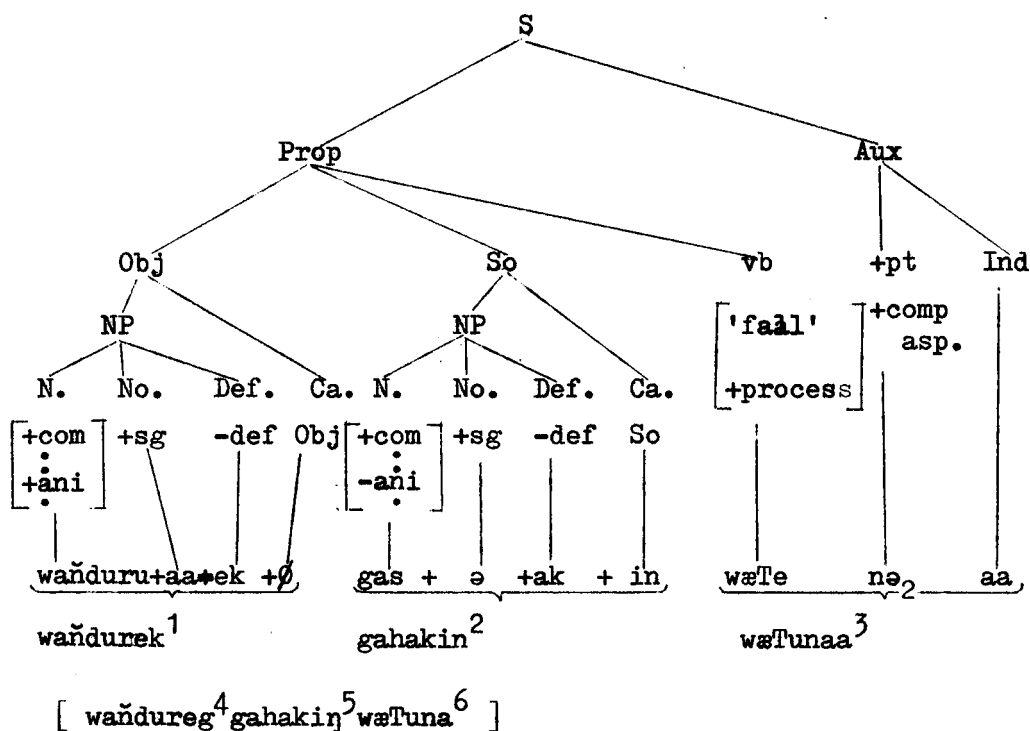
4.1.7. Having discussed different aspects of the noun phrase,

from its deep structure to the surface structure phonological representation in Sinhalese in the foregoing chapters, let us now derive a surface (phonological) structure of some noun phrases of a sentence as a conclusion to Part One. (Then by the application of some internal (see Ch.11.) and external (see Ch.12.) sandhi rules we arrive at the phonetic form of words, and the sentence). Let us take the following sentence:

waṇḍurek gahakin wəṭuna

a monkey from a tree fell

A monkey fell from a tree.



1 waṇḍurek has resulted through a number of combinations. First the noun waṇḍuru + aa combine to form waṇḍuraa (v.11.2.3- 11.3.4(a)), then waṇḍuraa + ek combine to form waṇḍurek (v.11.2.3 - 11.2.4(b)) and finally waṇḍurek + ∅ produce waṇḍurek. All these sandhi rules occur within the word.

2 gahakin too has resulted through the application of a number of internal sandhi rules. First the noun gas + ə are combined

to produce gasə (v.11.2.10.); then gasə + ak are joined to form gasak (v.11.2.3. - 11.2.4(b)); then gasak + in are joined to produce gasəkin (v. 11.2.10., and for the change of -a- to -ə- v.11.3.6.iii) and finally (this could have been applied earlier after the first combination had it been so desired) -s- of gasəkin is changed to -h- producing gahakin (v.11.3.3. Rule 9; now the change of -ə- to -a- is due to h, v.11.3.4. Rule 10).

3 wəʔunaa is from wəʔe + nə¹₂ + aa : wəʔe (or CVCe) before nə₂ is wəʔu (or CVCu); wəʔu + nə produce wəʔunə and when wəʔunə is followed by aa the combination produces wəʔunaa.

4 waṇdureg is the result of k \Rightarrow g / — \neq g.. (see ESR 5, 12.1.5.).

5 gahakin is the result of n \Rightarrow ṇ / — \neq g.. (see ESR 7, 12.1.5.).

6 wəʔuna is from wəʔunaa by rule 8 ii (v.11.3.2.).

Let us conclude Part One which deals with the syntactic and semantic properties and their corresponding phonological realisation of the noun phrase in Sinhalese at this point, leaving the setting up of some phonological noun classes to account for the choice of some morpheme variants and the account of some morpheme variants to be introduced later in Part Three, the section on Morphophonology, notably in chapter nine (9).

PART TWOPREDICATE

PART TWOPREDICATEINTRODUCTION

II.1. In Part One I attempted to discuss different aspects of the noun phrase. In this part, I propose to examine different aspects of predicates. By predicates, I mean both verbs and adjectives. In the case of equational sentences NPs also occur as predicates. In such sentences both NPs refer to the same object, the relation being expressed by the copula verb which is present as an auxiliary. Apart for this relation, however, these noun phrases are no different from those discussed in Part I. I only add that the NPs in equational sentences occur in a neutral, possibly in the Objective case relation. Thus, leaving aside the noun phrase in equational sentences, we discuss as predicates of propositions verbs and adjectives only. We may, then, expand the predicate of a proposition, thus:

$$\text{predicate} \quad \dashrightarrow \quad \left\{ \begin{array}{l} \text{verb} \\ \text{adjective} \end{array} \right\}$$

II.2. In the chapters that follow, I shall attempt to discuss different types of verbs and adjectives and their corresponding phonological representations in relation to Sinhalese.

CHAPTER 5

5.0. THE VERB IN SINHALESE

5.0.1. The verb is an abstraction referring to one of the following: an action (or an activity), a process (or an event), a state or a 'perception'. These actions, processes, states and perceptions are non-linguistic events and verbs are therefore expressions signalling those actual situations.

5.0.2. There are situations in which some participants or agents perform certain actions. These actions are expressed by action verbs. To perform different actions, agents -- with or without patients -- are a primary requirement. Similarly action verbs as expressions which symbolise those actions presuppose agent arguments (NPs), with or without patient arguments, depending upon the action referred to by the verb.
(v.5.1.).

5.0.3. There are situations where some patients, both animate beings and inanimate objects, are subject to different processes. These processes are expressed by process verbs. Process verbs naturally presuppose patient (or objective) arguments (v.5.2.; also cf. 4.5.).

5.0.4. There are situations where some patients are subject to remain in or to possess certain conditions or states. Verbs expressing these states are called stative. Since they denote some idea of existence or prevalence over a considerable period of time, I think we can include the 'existential verbs' within this class of verbs. Thus, these verbs presuppose patient (or

objective) arguments with or without locative arguments in accordance with the situation referred to by the verb(v.5.3.).

5.0.5. There are also situations in which an animate being experiences certain feelings, perceptions or concepts. In all such situations, someone experiences something -- a 'perception'. If we associate the notion of 'patient (or object)' with this experiencing of 'perception', then an experiencer (i.e. a being) and a patient (or an object) are prerequisites of the situation. Accordingly, the verbs expressing such situations are called verbs of perception and they presuppose an experiencer argument as well as an (experiencing) patient (object) argument in relation to many such verbs (v.5.4.).

5.0.6. In accordance with the foregoing account we may establish four major classes of verbs, which may be represented as :

$$\text{verb} \longrightarrow \begin{cases} \text{verb [+action]} \\ \text{verb [+process]} \\ \text{verb [+stative]} \\ \text{verb [+perception]} \end{cases}$$

We shall examine these verbs in the following sections.

5.1. ACTION VERBS

5.1.1. There are situations in which actions are performed by agents, consciously, deliberately, actively or volitively. I propose to call the verbs denoting these actions 'volitive' (i.e. [+vol]).

5.1.2. There are other situations where agents perform different actions but not very consciously, unintentionally or involitively. The verbs denoting such actions we shall call 'involitive'(i.e.[-vol]).

5.1.3. Both these classes of action verbs (i.e.[+vol] or [-vol]) may also presuppose patients. If a verb presupposes a patient (/Object) it is called transitive (i.e.[+Tr] and if it does not presuppose any patient(/object) it is called intransitive (i.e.[-Tr])

5.1.4. According to the foregoing account all action verbs are either volitive or involitive as well as either transitive or intransitive. A formal representation of action verbs is here suggested:

verb [+action] --> [\pm vol ; \pm Tr]

5.1.5. Semanticists argue that 'the nature of the verb (we may use predicate instead of verb to account for predicative adjectives as well) determines what the rest of the sentence will be like; in particular, that it determines what nouns (better noun phrases) will accompany it, what the relation of these nouns to it will be,...etc.¹ Assuming this to be a valid argument, I shall recognise the predicate -- both verb and adjective -- to be the most dominating constituent of a sentence. All the arguments, noun phrases, presupposed by verbs must be specified for all the verbs of a language, also taking into account the different semantic contents a particular verb may have as an expression signalling different situations. Thus,

¹ Chafe, W.L. 1970,p.97.

in addition to agents and patients(/ objects), action verbs may presuppose additional arguments. However, a full specification of all these arguments should be dealt with in a lexicon, although a few generalisations can be stated in relation to case relations of a language (see Ch.4 for some discussion of case in Sinhalese). A full specification of noun phrases that accompany verbs is, then, left to the lexicon of Sinhalese.

5.1.6. Following the minimum specification I have suggested for action verbs, we may recognise four possible classes of action verbs. These four classes of action verbs are formulated below, and some examples given.

5.1.7. If the verb [+action] is [+vol] and [+Tr] it may have realisations similar to the verbs given below depending upon the action referred to:

$\left[\begin{array}{l} \text{verb } [+action] \\ [+vol] \\ [+Tr] \end{array} \right] \longrightarrow$	}	gili 'swallow'
		marə 'kill'
		kape 'cut'
		sarəse 'decorate'
		ari 'open, send'
		ille 'beg, request'
		de 'give'
		ewe 'send'
		wikuna 'sell'
		kiye 'tell'
		galle 'smear'
		elle 'hang'
		ule 'rub'
		amuna 'attach, annex...'
		hoyə 'search, look for'
		bani 'abuse'
		etc.

e.g.

maama pirit maNDappe gok-koləwəlin sarəsenəwa
uncle pirit-pavilion with gok leaves decorate
(My) uncle decorates the pirit-pavilion with gok leaves.

hiŋganna magen kanDə mokut illuwa (<ille 'beg')
the beggar from me something to eat begged
The beggar begged something to eat, from me.

kiri-amma nandəniitə kaTandəreyak kiyanəwa
grand mother to Nandani a story tell
(My) grand mother tells a story to Nandani.

5.1.8. If the verb [+action] is [+vol] but [-Tr], its realis-
-ation may be as one of these given below according to the action
referred to :

[verb [+action]] -->
[[+vol]]
[[-Tr]]

aŋDə 'cry'
naTə 'dance'
ete 'crawl'
elle 'cling to'
nagi 'climb up, ascend'
bahi 'climb down, descend'
duwə 'run'
pani 'jump'
e 'come'
ya 'go'
nagiTi 'wake up, get up, rise..
burə 'bark '
piŋbi 'hiss'
hiŋəshe 'laugh'
etc.

e.g.

laməya aŋDənəwa
the child cry
The child cries / The child is crying.

naŋ^{tu}wa hoŋdeTə naTənəwa
 the dancer well dance
 The dancer dances well.

balla kaaTədə burənəwa
 the dog at someone bark
 The dog barks at someone.

lamayi okkomə hinəhuna (< hinəhe 'laugh')
 children all laughed
 All the children laughed.

5.1.9. When an action verb is involitive and transitive it may be realised as one among the following class of verbs:

$\left[\begin{array}{c} \text{verb } [+action] \\ [-vol] \\ [+tr] \end{array} \right] \rightarrow$	{	alle 'touch unconsciously'
		kəhe 'scratch " "
		kəpe 'cut " "
		pəage 'trample " "
		etc.

e.g.

laməyaTə nikammə naahe allenəwa
 the child without any reason nose touch unconsciously
 The child unintentionally touches his nose without any reason.

seekərə^u atin gas pahak kəpila (< kəpe)
 Sekara (by) trees five has cut unintentionally
 Sekara has cut five trees unintentionally.

maŋ atin eyaage pote iruna (< ire 'tear unintentionally')
 I (by) his the book tore
 I tore his book unintentionally.

5.1.10. One may observe some overlapping between certain involitive action and process verbs. The difference lies in the fact that involitive action verbs presuppose agents

although they perform these actions without any consciousness of this whereas process verbs do not presuppose any agents as such. Compare the following sentences :

seenə wiiduruwə binda (= [+vol; +Tr])

Sena the glass broke

Sena broke the glass.

seenə atin wiiduruwə biñduna (= [-vol; +Tr])

Sena (by) the glass broke unintentionally

Sena broke the glass unknowingly(/by an accident)

wiiduruwə biñduna (= [+process])

The glass broke.

5.1.11. When an action verb is involitive and intransitive, its phonological manifestation may be as one of the following:

$\left[\begin{array}{c} \text{verb } [+action] \\ [-vol] \\ [-Tr] \end{array} \right] \rightarrow$	{	añDe 'cry unintentionally'	
		nəTe 'dance "	'
		kəəgəhe 'scream/ cry "	'
		bəle 'see "	'
		nəgiTTe 'rise, stand up "	'
		etc.	

e.g.

berə saddeTə ləmeyaTə nəñenəwa

drum sound (for) the child dance unintentionally

The child begins to dance unintentionally when he/she
hears the sound of a drum.

horaawə dəkkamə maTə kəəgəhuna

the thief when saw I screamed unintentionally

I could not help screaming when I saw the thief.

5.2.

PROCESS VERBS

5.2.1. As these verbs presuppose a patient (or object)

which is subject to the process denoted by the verb, the concepts

of volition and transitivity have no relevance here. However, these verbs may occur with adjunct noun phrases, apart from the obligatory objective argument of the proposition. We can formulate the process verbs simply as:

verb [+process] -->	ide 'ripen'
	wade 'grow (as in 'trees grow')'
	kape 'cut'(as in 'the knife cuts well').
	rat-we 'heat..'
	wate 'fall'
	ale 'stick'
	karake 'rotate'
	palewe 'shoot'
	gale 'flow'
	une 'ooze'
	etc.

e.g.

aṃbē idenəwa

The mangoes ripen.

meheē eləwəlu bohōmē hōndəTə wədenəwa

here vegetables very well grow

Vegetables grow very well here.

gahen biməTə leenek wəṭuna

from the tree to the ground a squirrel fell

A squirrel fell from the tree to the ground.

gal deke atəren waturə unənəwa

the two rocks from between water ooze

Water oozes from between the two rocks.

5.3.

STATIVE VERBS

5.3.1. As mentioned earlier (v.5.0.4.) Stative verbs also presuppose a patient (or object) mostly with a locative argument. However, Stative verbs may presuppose -- in certain situations -- a patient (or object) as possessor and another patient (or object) as the possessed. Thus, allowing ourselves to use the concept of transitivity, we may recognise two types of Stative verbs as transitive stative verbs and intransitive stative verbs. Most intransitive stative verbs are accompanied by locative arguments. Thus we may formulate the stative verb as :

verb [+stative] \rightarrow [\pm Tr.]

5.3.2. If the stative verb is [+Tr], its realisation is as:

$$\left[\begin{array}{c} \text{verb [+stative]} \\ [+Tr] \end{array} \right] \rightarrow \begin{array}{c} \text{dan 'know'} \\ ? \end{array}$$

e.g.

mahatteya hoñdeTe itihaase dannawa
 the gentleman well history knows
 The gentleman knows History well.

5.3.3. If the stative verb is [-Tr], then it may be realised as one among the following verbs:

$$\left[\begin{array}{c} \text{verb [+stative]} \\ [-Tr] \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{iñdi 'be, exist, live...'} \\ \quad \left/ \begin{array}{c} \text{NP} \\ \text{N.} \\ \text{+ani} \end{array} \right. + \text{---} \\ \text{tibe 'be, exist'} \\ \quad \left/ \begin{array}{c} \text{NP} \\ \text{N.} \\ \text{.} \\ \text{-ani} \end{array} \right. + \text{---} \end{array} \right.$$

e.g.

gale uDe ballek innawa
 the rock on a dog is
 There is a dog on the rock.

taatta gedere innawade lameyo
 father at home is child
 Is your father at home, child?

apee welə ayine naane liṇḍak tiyenəwa
 our field edge by a bathing well is
 There is a bathing well by the side of our field.

5.3A.

POSSESSIVE VERB

5.3A.1. I think it reasonable to include the two 'possessive verbs' in Sinhalese, iṇḍi 'have' and tibe 'have' under stative verbs, as they are similar in form as well as related in meaning. As possessive verbs, iṇḍi and tibe presuppose a possessor and a object noun phrase, and as stative verbs iṇḍi and tibe presuppose a locative and a patient(/object) noun phrase. The locative noun phrase remains in that case relation but the possessor is mostly in the Dative case relation, as the beneficiary or the recipient of the 'object or patient'. There is also the possibility of treating the 'possessor' as a location when we consider such sentences such as:

maTe potak tiyenəwa
 to me a book have /(there is)
 I have a book.

and

mane laṅge potak tiyenəwa
 me with a book have / (there is)
 I have a book with me./ There is a book with me.

Compare also:

mee gameTe wawak tiyenewa

to this village a tank has/(there is)

This village has a tank. /There is a tank for this village.

and,

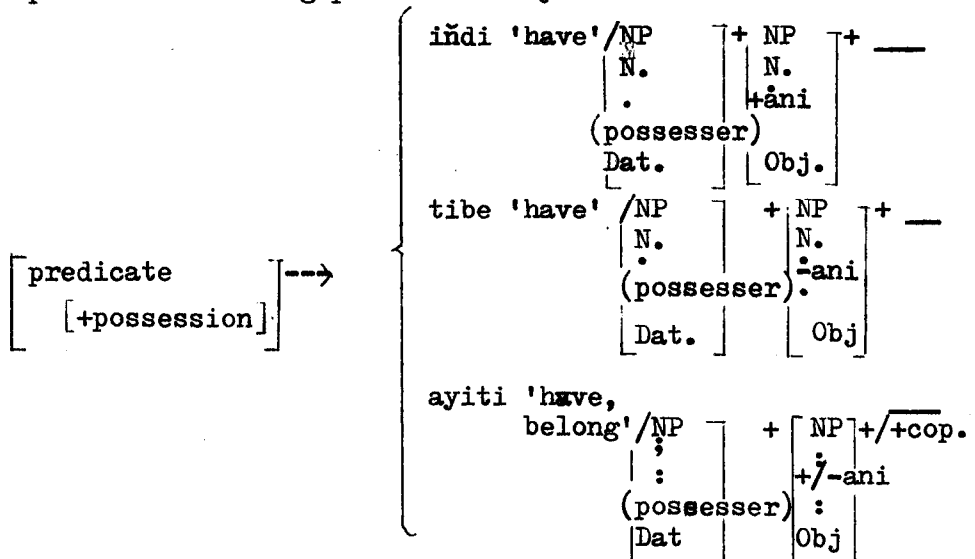
mee gamee wawak tiyenewa

this in village a tank there is

There is a tank in this village

5.3A.2. Whichever view is taken the fact remains that in expressing inalienable possession, the two possessive verbs iñdi and tibe are always used. In expressing alienable possession there are two possibilities, either the use of those possessive verbs iñdi and tibe or the use of the predicate adjective ayiti 'belong'. Verbs iñdi and tibe occur in complementary distribution; iñdi when the patient(/Objective) noun phrase is marked [+animate] and tibe when the same is marked [-animate].

Thus predicate denoting possession may be stated as :



e.g.

eyaaTe putek innewa (in < iñdi v. 10.6A4)

to him a son has

He has a son.

minihaTe geyak tiyenewa

to the man a house has

The man has a house.

5.3A.3. There are a few more classes of verbs which apparently exhibit some relationship with stative verbs. I shall attempt to discuss them later in this chapter (see 5.5. and 5.6.).

5.4.

VERBS OF PERCEPTION

5.4.1. As suggested earlier (v.5.0.5.) these verbs express situations involving mental activities, processes or states -- perceptions. When sense organs come in contact with the outside world where we find objects, sounds, smells etc., the cognitive capacity of the mind is capable of perceiving those objects of contact. In situations where cognition plays an important role, a living being, usually human, must be present. Furthermore his sense organs, eyes, mouth, ears, tongue, nose, hands, feet, whole body and above all his mind must be perfect and undamaged. Sometimes the man uses his brain (mind) to act, and verbs expressing such mental activities may be called [+vol] perception verbs. In addition all such activities require a subject (= a topic) about which a being can employ his mind to act. This requirement of a 'concept' (a (cognitive) object) may be represented by a [+Tr] feature. Thus there are verbs which are [+vol] and [+Tr]. We may represent them as:

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">verb [+perception]</div> <div style="display: inline-block; vertical-align: middle;">--></div> </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <div style="display: inline-block; vertical-align: middle;">[+vol]</div> <div style="display: inline-block; vertical-align: middle;">[+Tr]</div> </div>	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">hita 'think, consider,...'</div> <div style="display: inline-block; vertical-align: middle;">kalpanaa-kəre 'think,....'</div> <div style="display: inline-block; vertical-align: middle;">matak-kəre 'recollect,...'</div> <div style="display: inline-block; vertical-align: middle;">adahas-kəre 'mean,...'</div> </div> <div style="display: inline-block; vertical-align: middle;">}</div> </div>
--	---

e.g.

lameya tissema amma gəne hitanəwa

the child always (his/her)mother about think

The child always thinks about his/her mother.

5.4.2. I may state here that whether the verb denotes mental activity or physical activity, all verbs of perception or otherwise, denoting activities behave syntactically alike in Sinhalese. Thus the experiencing agent is subjectivised in relation to verbs of perception which are volitive. The 'concept' the cognitive object occurs mostly in the Objective case relation.

5.4.3. However, the majority of perception verbs are neutral as to volition, since if one's sense organs are not damaged, one can not help but perceive things, have feelings -- both processes and states of the body. Thus using 'object' as to denote the (cognitive) objects (or concepts) of sensory perception, we see these verbs as mostly presupposing two arguments, an experiencer subject as well as an object of sensory perception. Employing the concept of neutral volition and transitivity these verbs can be spscified as:

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">verb [+perception]</div> <div style="display: inline-block; vertical-align: middle;">[neutral vol]</div> <div style="display: inline-block; vertical-align: middle;">[+Tr]</div> </div> <div style="display: inline-block; vertical-align: middle; font-size: 2em;">}</div> <div style="display: inline-block; vertical-align: middle;">--></div>	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">ahe 'hear'</div> <div style="display: inline-block; vertical-align: middle;">pene 'see , perceive,...'</div> <div style="display: inline-block; vertical-align: middle;">daki¹ 'see'</div> <div style="display: inline-block; vertical-align: middle;">dane 'feel'</div> <div style="display: inline-block; vertical-align: middle;">waŋahe 'understand'</div> <div style="display: inline-block; vertical-align: middle;">hite 'occur,...'</div> <div style="display: inline-block; vertical-align: middle;">teene 'understand'</div> <div style="display: inline-block; vertical-align: middle;">kalpanaa-we 'occur'</div> <div style="display: inline-block; vertical-align: middle;">etc.</div> </div>
--	--

e.g.

maŋe lassene sinduwak ahenewa

I lovely a song hear

I hear a lovely song.

1 daki behaves differently. With all other verbs of this class the experiencer subject appears with Te case form; with daki, the experiencer subject appears with \emptyset case marker.

kollaTə eyaage kataawə teeruna
 the boy his speech understood
 The boy understood his speech.

5.4.4. There are a few verbs of perception which are neutral as to volition and are intransitive. The following representation may be suggested:

$\left[\begin{array}{c} \text{verb [+perception]} \\ \text{[neutral vol]} \\ \text{[-Tr]} \end{array} \right]$	-->	ride 'hurt, pain, ache'
		nagi 'get angry, lose temper'
		keenti-ya 'lose temper'
		yaku-nagi 'lose temper'
		etc.

e.g.

poDDak əttan minihaTə naginəwa
 a little if there is the man get angry
 If there is a small(fault) the man gets angry.

5.4.5. We may recognise another sub class of perception verbs as volitive and intransitive. That is:

$\left[\begin{array}{c} \text{verb [+perception]} \\ \text{[+vol]} \\ \text{[- TR]} \end{array} \right]$	-->	duk-we 'feel sorry'
		kipe 'get angry'
		keenti-gan 'get angry'
		taraha-we ' " " '
		satutu-we 'become happy'
		etc.

e.g.

mee kataawə kiwwot miniha man ekke taraha-wenəwa
 this story if tell the man me with get angry
 If I tell him this story he will be angry with me.

malli pəredunaaTə amma duk-wenəwa
 younger brother for (he) was defeated (my) mother feel sorry
 (My) mother feels sorry about the the fact that (my)younger
 brother was defeated.

5.4.6. Although intransitiveness of some of these verbs may be a matter for dispute, their volitiveness is clear, because syntactically the experiencer is realised with \emptyset case form just as it is the case with the Agentive case in relation to volitive action verbs.

5.4.7. If we attempt to study these verbs individually while undertaking to explain the facts of syntax and semantics connected with them, we may have to establish some more sub classes. In the present study, however, such a detailed account can not be expected due to the present lack of information about syntactic and semantic facts of Sinhalese.

5.4.8. There are many formally complex verbs in Sinhalese. These, too, must be included in the relevant verb classes. Semantically and syntactically they are similar to those verbs discussed in the above sections. Phonologically, however, their difference has to be recognised and explained. (This has to be achieved in relation to Derivation in Sinhalese, which is beyond the scope of this study.).

5.5. COPULA VERB

5.5.1. It is extremely difficult to explain what is called the 'copula verb' in Sinhalese, without going into details of syntax where such verbs occur and then without tracing the semantic content they express. It seems to me that the copula verb is a representation of a deep stative verb -- the existential stative verbs are mostly represented by the copula verb;

furthermore, the stative verbs which the copula verb represents may have resulted from process verbs. In all such cases these stative verbs are deleted and the copula verb is introduced to mark the auxiliary component -- especially the categories of non past tense, generic aspect and indicative mood. Thus the copula verb as an auxiliary component of a sentence will be introduced in the chapter on the Auxiliary component (see 8.12.). Because of the complexity of deep facts of the copula verb, however, I do not propose to discuss any syntactic and semantic facts about it in the present study.

5.6.

STATIVE MODAL PREDICATES

5.6.1. Let us consider another class of predicates, which may be called stative modal predicates. These predicates exhibit some relationship to stative verbs, as they always denote a non past, prevailing or would be state. The past tense form may be used in establishing the stative character of these predicates. In addition to this predicative function, these expressions function as modal auxiliaries -- as realisations of the auxiliary component of a sentence to signal modality. This function will be discussed in the relevant section of the chapter on the Auxiliary component of a sentence (see Ch.8).

5.6.2. J.W.Gair (1970, p.38) has treated these predicates as quasi-verbs on a formal basis, taking into consideration the few forms of their paradigmatic set of forms which show some similarity with the corresponding forms of verbs in their formal scatter. They may be called verbs or adjectives on

semantic grounds as they express states or conditions, but to include both I prefer to use the term predicate.

5.6.3. The stative modal predicate may be formulated with its phonological manifestations as:

stative modal pred. -->	{	oona 'want, need' puluwani 'can' ati 'may be; (is) sufficient '
-------------------------	---	---

e.g.

maalaTə pəənək oona
 Mala a pen want
 Mala wants/needs a pen.

putaaTə ganən puluwani
 son Arithmetic can (do)
 (My) son can do Arithmetic.

5.7. PASSIVE(VERB) IN SINHALESE

5.7.1. Passive sentences in Sinhalese are highly problematic. Jespersen (1933, p.120) states that "one and the same idea can often be expressed in two different ways, by means of an active, and by means of a passive construction ". This may not be true for Sinhalese. All action verbs which are volitive and transitive (v 5.1.7) can have declarative (active) sentences with an agent argument and an objective argument. It is only these sentences that are potentially capable of being made passive sentences. In spoken Sinhalese most declarative sentences with volitive transitive action verbs can not be expressed in the passive. I believe that most propositions with predicates consisting of volitive transitive action verbs in Sinhalese

can be expressed only by active declarative sentences and not by passive ones.

5.7.2. In place of expressing 'one and the same idea..' by a passive sentence, some sort of passive action by the agent involved is expressed by what I have called the involitive transitive verbs in Sinhalese. If we can call this passive, then passive sentences in Sinhalese are different from active sentences semantically.

5.7.3. In the case of spoken Sinhalese passive sentences even as stylistic variations of active sentences may be lacking. If there are cases where both active and passive sentences are available, it may be either due to the influence of the written variety, or an attempt to use the written variety for speech as well (mostly in very formal situations).

5.7.4. However, there may be occasions when an educated person may use a passive construction in place of the more natural and predominant active usage. To accomodate such rare sentences in the study of spoken Sinhalese, I propose to derive passive verbs from the active volitive transitive verbs as resulting from the process of passivisation. I propose the following rule, employing the syllabic structure of volitive transitive action verbs to derive passive verb forms:

verb[+action]	+ passivisation	⇒ passive verb
[+vol]		
[+Tr]		
.(C)VC _e	change of syllable	.(C)VfCe
.(C)VCi	vowels except the	.(C)VfCe
≠ CVC	final <u>e</u> and <u>i</u> to	≠ CVfCe
≠(C)V	front vowels plus	≠(C)Vf ₁ ^w e
	the addition of <u>e</u>	
		cond:1Vf=front V.

e.g.

kape ⇒ (kəpə+e) ⇒ kape 'be cut'
 ari ⇒ (əri+e) ⇒ are 'be opened'
 gan ⇒ (gəne+e) ⇒ gane 'be counted, be bought;..
 ka ⇒ (kə+e) ⇒ ka^we 'be eaten'

5.7.5. With this deliberately short account of passive verb formation and passive construction in Sinhalese, I conclude the chapter on verb in Sinhalese.

CHAPTER 6

6.0. ADJECTIVES IN SINHALESE

6.0.1. It is rather difficult to explain and define the expressions called adjectives precisely on semantic and syntactic criteria. Some grammarians prefer to include adjectives under nouns. Most modern linguists attempt to explain adjectives as predicatives. Assuming that most adnominal attributive expressions can be derived either from predicative adjectives and verbs through relativisation or from some other sentences through nominalisation and lexicalisation (this includes compound nouns), I shall attempt to discuss here only those adjectives which are predicatives and not adnominals.

6.0.2. In most cases when these predicative adjectives occur as predicates of propositions, the auxiliary of sentences with such propositions occurs as a 'copula verb'. Thus the auxiliary marks the tense, aspect and mood categories and the adjectives are similar to verbs. Accordingly, in this study, adjectives are studied in a similar way to the verbs in the previous chapter.

6.0.3. It seems reasonable to suggest that most adjectives are stative predicates denoting different states and are thus inherently [+stative]. Taking into consideration the number of arguments they presuppose, I propose to recognise two classes of predicative adjectives: transitive and intransitive. All [+stative] adjectives are either [+quality], [+perception] or [+measure] if they are intransitive. They are either [+desire] or [+possession] if transitive. Thus the features of adjectives

in general may be formulated as:

[adjective]	-->	[+stative]
[+ stative]	-->	[⁺ Transitive]
[+ Transitive]	-->	{ [+desire] [+possession] }
[-Transitive]	-->	{ [+quality] [+perception] [+measure] }

In the following sections we shall examine these classes with examples.

6.1. STATIVE TRANSITIVE ADJECTIVES

6.1.1. Adjectives which are called transitive presuppose two arguments comprising the proposition. One an experiencer or an owner or possessor argument which is [+animate] is mostly subjectivised. We may formulate transitive adjectives as suggested below:

[adjective +stative +Transitive +desire]	-->	{ kameti 'like' aasa 'desire,crave,...' aadere 'fond of,(in)love,..' etc. }
---	-----	--

e.g.

balallu dii-kiriwələTə kameti-yi
cats to curd like (is)
Cats like curd.

lamayi miipəniwələTə aasa-yi
children honey fond of are
Children are fond of honey.

ammala daruwanTə aadere-yi
mothers to children fond of are
Mothers are fond of their children.

And:

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">adjective</div> <div style="display: inline-block; vertical-align: middle;">+stative</div> <div style="display: inline-block; vertical-align: middle;">+Transitive</div> <div style="display: inline-block; vertical-align: middle;">+possession</div> </div> <div style="display: inline-block; vertical-align: middle; font-size: 3em; margin: 0 10px;">]</div> </div> <div style="display: inline-block; vertical-align: middle;">--></div> <div style="display: inline-block; vertical-align: middle;">ayiti 'belong'</div>

e.g.

minihaTə watu gaanak-mə ayiti-yi
 to the man estates a number of belong(are)
 A number of estates belong to the man.

6.2.

INTRANSITIVE ADJECTIVES

6.2.1. All intransitive adjectives of different semantic content (v.6.0.3.) presuppose Objective arguments, which are naturally subjectivised. According to the formulation suggested under 6.0.3, we have established three classes of intransitive adjectives. Different realisations of these three classes are illustrated in the following sections.

6.2.2. If the stative intransitive adjective denotes a quality, one among the following may be taken as the corresponding adjective form.

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">adjective</div> <div style="display: inline-block; vertical-align: middle;">+ stative</div> <div style="display: inline-block; vertical-align: middle;">- Transitive</div> <div style="display: inline-block; vertical-align: middle;">+quality</div> </div> <div style="display: inline-block; vertical-align: middle; font-size: 3em; margin: 0 10px;">]</div> </div> <div style="display: inline-block; vertical-align: middle;">→</div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">alut 'new'</div> <div style="display: inline-block; vertical-align: middle;">mahalu 'old'</div> <div style="display: inline-block; vertical-align: middle;">meoDə 'foolish'</div> <div style="display: inline-block; vertical-align: middle;">kalu 'black'</div> <div style="display: inline-block; vertical-align: middle;">bayə 'fear', afraid'</div> <div style="display: inline-block; vertical-align: middle;">hoñdə 'good'</div> <div style="display: inline-block; vertical-align: middle;">etc.</div> </div> <div style="display: inline-block; vertical-align: middle; font-size: 3em; margin: 0 10px;">}</div> </div>
--

e.g.

apee kiri-amma dən huŋgak mahalu yi
 our grand mother now very old is
 Our grand mother is very old now.

mee pote bohoma hoñda-yi
 this book very good is
 This book is very good.

6.2.3. If the stative intransitive adjective denotes the perception of an experiencing being, one of the following expressions may be selected as signals of those states of perception.

<div style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px; display: inline-block;"> adjective +stative -Transitive +perception </div>	→	<div style="display: inline-block; vertical-align: middle;"> { siitələ '(feel)cold' baDəgini ' " hungry' rasne usnə ' " hot' unu taraha ' angry' satuʔu 'happy' duke 'sorry' etc. </div>
--	---	---

e.g.

maʔə hari siitələ - yi
 I very cold (am)
 I feel very cold.

laməyinʔə bohoma baDəgini- yi
 the children very hungry are
 The children are very hungry.

seekərə seenə ekkə taraha-yi
 Sekara Sena with angry is
 Sekara is angry with Sena.

6.2.4. If the stative intransitive adjective denotes a measure of different objects, places or time etc., one of the following forms may be taken as the associated expression.

<div style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px; display: inline-block;"> adjective +stative -Transitive +measure </div>	→	<div style="display: inline-block; vertical-align: middle;"> { barə 'heavy' use 'high; tall' digə 'long' palələ 'wide' jām̃burə 'deep' etc. </div>
---	---	--

e.g.

mee puṭuwə hari bara-yi
 this chair very heavy is
 This chair is very heavy.

kaaməree aDi siiyak witərə diga -yi
 the room feet 100 about long is
 The room is about 100 feet long.

apee liṇḍə bām̃bə pahak jām̃bura -yi
 our well fathoms five deep is
 Our well is ten yards deep.

6.2.5. We have to include many more, formally complex, derived adjectives among the classes recognised above. Syntactically most derived adjectives also behave like the primary adjectives discussed above. Semantically and thereby syntactically also, some of the derived adjectives may be explained as results of lexicalisation in the process of relativisation.

6.3. DEICTICS IN SINHALESE

6.3.1. As a sub section to this chapter on adjectives, I propose here a brief account of a few expressions usually referred to as deictic expressions. These expressions denote different degrees of proximity in relation to both the speaker or hearer or both. Employing + and - symbols and [1P],[2P] to represent speaker and hearer respectively, we may suggest the

following representation of deictics in Sinhalese:

$$6.3.2. \left[\begin{array}{l} \text{deictic} \\ + 1P \\ - 2P \end{array} \right] \longrightarrow \left\{ \begin{array}{l} \text{mee 'this'} \\ \text{mennə " } \\ \text{meen " } \end{array} \right.$$

e.g.

$$\text{potə} \left\{ \begin{array}{l} \underline{\text{mee}} \\ \underline{\text{mennə}} \\ \underline{\text{meen}} \end{array} \right.$$

The book (is) this.

$$6.3.3. \left[\begin{array}{l} \text{deictic} \\ - 1P \\ + 2P \end{array} \right] \longrightarrow \left\{ \begin{array}{l} \text{oyə 'that near you'} \\ \text{onnə " " } \\ \text{oon " " } \end{array} \right.$$

e.g.

$$\text{potə} \left\{ \begin{array}{l} \underline{\text{oyə}} \\ \underline{\text{onnə}} \\ \underline{\text{oon}} \end{array} \right.$$

The book (is) that one near you.

$$6.3.4. \left[\begin{array}{l} \text{deictic} \\ - 1P \\ - 2P \\ + \text{vicinity} \\ \text{of both} \end{array} \right] \longrightarrow \left\{ \begin{array}{l} \text{arə 'that (over there)'} \\ \text{anne " " } \\ \text{aan " " } \end{array} \right.$$

e.g.

$$\text{potə} \left\{ \begin{array}{l} \underline{\text{arə}} \\ \underline{\text{anne}} \\ \underline{\text{aan}} \end{array} \right.$$

The book (is) that one (over there).

$$6.3.5. \left[\begin{array}{l} \text{deictic} \\ - 1P \\ - 2P \\ - \text{vicinity} \\ \text{anaphoric} \end{array} \right] \longrightarrow \text{ee 'it'}$$

However, this deictic ee does not occur alone as the ones above in 6.3.2., 6.3.3. and 6.3.4. It always occurs with the

3P pronoun eka 'one' or eewa 'ones'. Thus we get:

e.g. potə eeka

The book (is) that one (=it)(in question).

Semantically or situationally it is impossible to show an object which is not within the vicinity of both the speaker and the hearer. Thus this anaphoric or co-referential deictic is more pronominal in function than the other deictics that we have recognised above.

6.3.6. In addition to these four deictics, we may recognise a further question deictic common to all four of these. When the idea is 'which' one or ones of these, or those near you, or over there or in question, it occurs with the 3P pronouns eka 'one' or eewa 'ones'. It is used to express 'where' as well. I suggest the following formulation where [+/- pro] besides [+question] feature distinguishes the two usages.

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> deictic + question (+/- 1P) (+/- 2P) + pro </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em; margin: 0 10px;">}</div> </div>	-->	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> koy 'which' mone " </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em; margin: 0 10px;">{</div> </div>
--	-----	--

e.g.

potə { mone eka-də
 koy
the book which one?
Which (is)(the) book?

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> deictic +ques. (+/-1P) (+/-2P) - pro </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em; margin: 0 10px;">}</div> </div>	-->	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> koy 'where' koo " kohe " </div> <div style="display: inline-block; vertical-align: middle; font-size: 4em; margin: 0 10px;">{</div> </div>
--	-----	--

e.g.

$$\text{pota} \left\{ \begin{array}{l} \underline{\text{kohe}} \\ \underline{\text{koy}} \\ \underline{\text{koo}} \end{array} \right\} (\text{d}\text{ə})$$

the book where?

Where is the book.

6.3.7. I conclude this chapter on adjectives in Sinhalese by repeating the fact that from these predicative adjectives and deictics, adnominal adjectives and deictics (or demonstrative adjectives) can be derived through the process of relativisation. Thus most 'endocentric constructions' must be assumed to have resulted from some underlying structures which have been subject to the process of relativisation, nominalisation or some other.

CHAPTER 7

7.0. CAUSATIVE VERBS

7.0.1. What are generally called 'Causative verbs' in Sinhalese, have, in fact, resulted from the application of a very complex process called 'causativisation' to a number of underlying structures. For each causative sentence, one always has to recognise more than one underlying sentence, possibly two, three or even more. Causativisation, therefore, may find its legitimate treatment in a grammar of Sinhalese coordination and subordination.

7.0.2. Syntactically all sentences with 'causative verbs' are complex sentences and are never simple sentences. There are verbs which are semantically causative and these action verbs may be described differently as derived from the related process verbs which denote most natural situations or events. Although there is reason to suggest that many action verbs denote caused processes in the semantic structure, nevertheless we are at present unable to explain how all action verbs are related to process or similar verbs. The hypothesis that from process verbs action (or causative) verbs can be derived by causativisation is, however, semantically valid.

7.0.3. There are languages, especially most Indic languages, where causativisation can be applied to action verbs, which may (or may not) have been derived from process verbs by a previous causativisation, and for them, we have to recognise two stages of causativisation. We may use First causativisation

to explain action verbs derived from process or stative verbs, and Second causativisation to explain those 'causative' verbs derived from action verbs, already derived from other verbs.

7.0.4. When First causativisation is applicable, I believe that the underlying structure must have at least two sentences -- an agent doing something + a patient subject to a process or state etc., or an agent acting (i.e. intransitive verb). By causativisation (? subordination) we get 'agent causes a patient subject to a process, state or to act etc.'. The verb CAUSE is a cumulative verb representing the agent's act (which may be clear from the situation but not necessary to be expressed specifically). Thus the agent cause + patient process \Rightarrow agent patient act. Consider :

agent causes + patient dies \Rightarrow agent kills a patient.

In Sinhalese we get:

miniha marenəwa

The man dies.

seene causes + miniha marenəwa \Rightarrow seene miniha marenəwa
Sena kills the man

seene miniha marenne salassenəwa

Sena causes the man to die.

Thus we have two possibilities -- the agent directly and actively causing the man to die or the agent indirectly preparing the circumstances of the man's death. However, when direct confrontation of the agent is expressed, the verb is said to be an action verb as discussed earlier (v.5.1.). When the verb salasse 'prepare' is used the two sentences are recognisable:

the sentence denoting the process embedded in the sentence denoting caused action, (a matter of subordination).

7.0.5. When the sentences contain action verbs derived from other verbs they may undergo Second causativisation. In such cases the causative sentence consists of at least three underlying sentences in the deep structure. Agent causing a patient (to act) + the command or request etc. + (the patient now as) agent acting / or causing a process etc.. Compare the following sentence with its proposed deep structure:

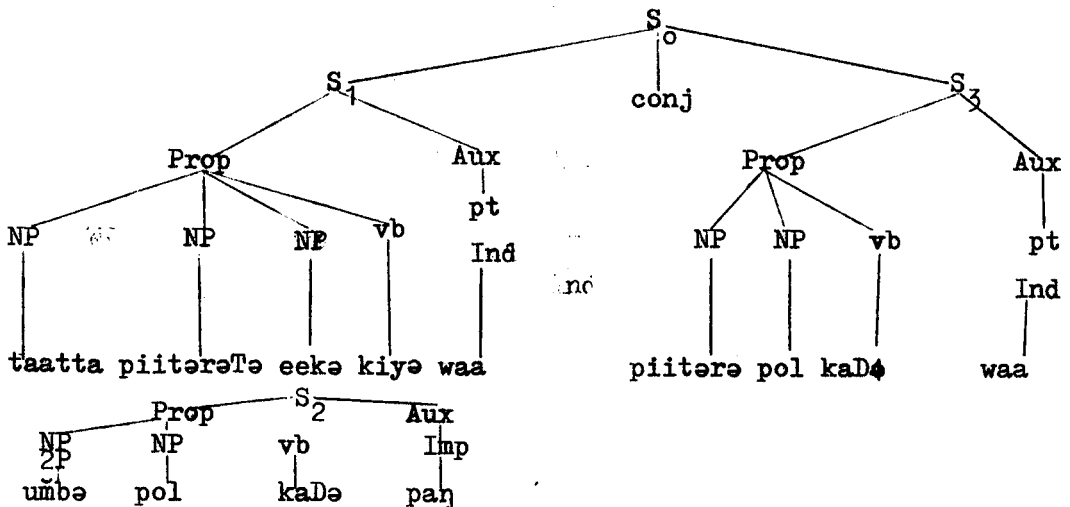
taatta piitərəTə kiyəla pol kaDewwa
 father Pitara having told coconuts picked
 (My) father having told Pitara got him to pick coconuts.

This sentence consists of the following sentences:

taatta piitərəTə (..) kiwwa
 father Pitara (it) told
 (uṁbə)
 piitərə/pol kaDəpaŋ
 Pitara, (you) pick coconuts

 piitərə pol kaDuwa
 Pitara coconuts picked / Pitara picked coconuts.

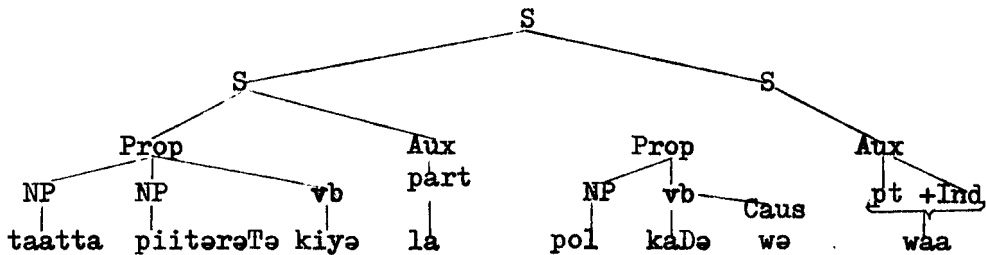
Although I do not go into details, I propose the following deep structure for the above sentence.



By causativisation:

- 1 Imperative S_2 deletion erasing the NP dominating it.
- 2 Aux. of S_1 deletion and introduction of the participle for coordination.
- 3 Equi NP deletion : NP of S_3 .
- 4 Causativiser wə introduction after the verb of S_3 .

The result would be:



taatta piiterəTə kiyəla pol kaDewwa.

(MY) father having told Pitara got him to pick coconuts.

7.0.6. There are verbs which denote activities and are not related to process, stative or other verbs. Most action verbs (v.5.1.) which are intransitive are pure action verbs. When such verbs occur in causative sentences (with the causativiser wə), the causative sentences are the result of causativisation applied to two or three underlying sentences which have been embedded or conjoined. Compare the sentence:

i balla burənəwa
The dog barks.

ii lameya balla burəwənəwa
the child the dog bark causes
The child causes the dog bark.

The causative sentence ii consists of two underlying structures namely, (a) lameya 'causes' (= does something to the dog)
(b) balla burənəwa 'The dog barks.'

By deleting verb 'causes' and introducing 'causativiser' wə to the verb of the second conjunct, the two sentences are combined to form the causative complex sentence.

7.0.7. All this suggests that 'causativisation' is a complex process involved in complex sentence formation -- subordination and coordination. Furthermore, a purely formal description of so called 'causative verbs' can not explain any of these syntactic and semantic facts and the complexity involved in the deep structure of those sentences where they occur. Thus, I believe, any attempt to explain 'causative verbs' in Sinhalese (or in most Indic languages) should start from syntax and semantics. Although I am unable to go into detail and suggest the stages of causativisation systematically, nonetheless, I state that all causative sentences are complex sentences and that causativisation is a process involved in complex sentence formation -- subordination or coordination (or both).

7.0.8. Assuming that, in the process of causativisation the causativiser wə is added to the verb of the last conjunct, I propose the derivation of such 'causative verbs' from the different classes of verbs discussed earlier(see Ch. 5).

7.0.9. Before deriving causative verbs by adding the causativiser wə to other verbs, it has to be stated that, when the causative verb salasse 'cause' is used , the other conjunct sentences are embedded in that 'causative proposition' as an expansion of the patient argument.

7.0.10. The causativiser in Sinhalese is wə:

causativiser \rightarrow wə

Wherever causativiser wə can not be introduced the causative verb salasə occurs in the matrix sentence of the causative sentence. Having said that, let us look at some examples of causativised verbs derived from the (simple or) primary verbs in the following sections.

7.0.11. Theoretically most verbs -- action, process, stative and perception -- can be causativised by the wə causativiser, but there are limitations. Thus:

verb [+action]	+ [causativiser] \rightarrow causative <u>wə</u> verb
verb [+process]	
verb [+stative]	
verb [+perception]	

However with regard to some involitive action and non-action verbs wə causativiser is sensitive or less productive and in such cases the causative verb salasə 'cause' is selected instead. Consider the following examples:

gale 'flow' : *gale+wə but gala-nne salasə 'cause to flow'

wəDe 'grow' : *wəDe+wə but wəDe-nne salasə 'cause to grow'

e.g.,

mame wature paare watte mēdin galanne salassuwa

I stream of water estate through to flow caused

I made the stream of water flow down through the estate.

but never * mame wature paare watte mēdin galewwa.

7.1. CAUSATIVE VERBS FROM ACTION VERBS

7.1.1. We have already seen that action verbs can belong to one of four classes as [+vol,+Tr]; [+vol,-Tr]; [-vol,+Tr] and [-vol, -Tr] (v.5.1.). The causativiser wə can be added to form causative verbs only to [+vol, +Tr] and [+vol,-Tr] verbs, and the causative verb salassə should be used with regard to involitive action verbs. Thus we get:

$\text{kapə} + \text{wə} \Rightarrow \left\{ \begin{array}{l} \text{kapoo} \\ \text{kappə}^1 \end{array} \right\} \text{'cause (someone) to cut'}$

$\text{naTə} + \text{wə} \Rightarrow \text{naTəwə} \text{'cause (someone) to dance'}$

but,

alle-nnə salassə 'cause someone to touch unintentionally'

əŋDe-nnə salassə ' " " " come to tears '

7.1.2. Action verbs as primary verbs are either monosyllabic or di- or polysyllabic in structure. They are either vowel final or consonant final. All non-monosyllabic structures end in one of three vowels, namely a, i or e. (Since these final vowels undergo changes such as deletion etc. before other structures (morphemes), they are considered less important and are referred to here as 'conjugation vowels' where ever the term syllable vowel is used, the reference is to vowels of those syllables other than the final syllable with the conjugation vowels a , i or e).

1 -əwə \Rightarrow [oo] phonologically . see 11.3.10. rule 16 (d).

2 -pəw- \Rightarrow pw \Rightarrow pp phonologically. see 7.1.3.and 11.2.11.
rule 6 (b)i.

7.1.3. When a di- or polysyllabic verb is causativised by wə the result may be stated as :

$$\begin{bmatrix} \dots C_e \\ \dots C_i \\ \dots C_e \end{bmatrix} + w_e \Rightarrow \begin{bmatrix} \dots C_1 e w_e \text{ if } C_1 \neq \underline{h}, \underline{s}, \underline{p} \text{ or } \underline{m}. \\ \dots C_2 w_e \Rightarrow CC_e \text{ if } C_2 \neq \underline{T} \text{ or } \underline{r} \dots \\ \dots C w_e \Rightarrow CC_e \end{bmatrix}$$

And,

$$\begin{bmatrix} \dots C_1 e \\ \dots C_2 i \end{bmatrix} + w_e \Rightarrow \begin{bmatrix} \dots C w_e \Rightarrow CC_e \\ \dots C e w_e \end{bmatrix}$$

e.g.

kəre + wə ⇒ kərəwə 'cause ... to do '

adi + wə ⇒ adwə ⇒ adde 'cause .. to pull'

wəlle + wə ⇒ wəllwə ⇒ wəllTə 'cause ...to fall'

And,

kəpə + wə ⇒ kəppə (or kəpoo) 'cause ..to cut'

ari + wə ⇒ arəwə 'cause ..to open'

7.1.4. When a monosyllabic verb is causativised by wə they are simply joined together, however the verb final C + w of wə assimilate (progressive). This may be stated as :

$$\begin{bmatrix} (C)V \\ CVC \end{bmatrix} + w_e \Rightarrow \begin{bmatrix} (C)V^w e \\ CVCw_e \Rightarrow CVCC_e \end{bmatrix}$$

e.g.

ka. + wə ⇒ kawə 'feed, cause ...to eat'

naa + wə ⇒ naawə 'cause ..to bathe'

gan + wə ⇒ ganne 'cause/to take '

7.1.5. As stated in 7.1.3., there are special cases where the general pattern is not observed. There are a few ..C_e verbs following the pattern similar to ..C_i verbs, if the .C before final e is h, s, p or m. (That is, final e deletion and then the C + w of wə assimilation (progressive)). Some verbs that

belong to this exceptional class are the following:

aha 'ask'	causative vb =	asse ' cause ..	to ask '
kape 'cut'	"	kappe ' "	to cut '
kaha 'scratch'	"	kasse ' "	to scratch'
gaha 'beat, hit'	"	gasse ' "	to beat,..'
dape 'lie on one's back'	"	dappe ' "	to lie on one's back '
dame 'put'	"	damme ' "	to put '
name 'bend'	"	namme ' "	to bend'
waha 'close'	"	wasse ' "	to close '
maha 'sew'	"	masse ' "	to sew '
hape 'bite'	"	happe ' "	to bite '
paaha 'weld'	"	paasse ' "	to weld'
etc.			

7.1.6. There are a few ..Ci verbs which behave differently. i is deleted before wə, and the preceding C which is mostly a retroflex does not bring about assimilation of w to the retroflex. The cluster is unusual for the language to accept, so an epenthetic ə splits the cluster to produce ..Cəwə structure. The following are some verbs¹ of this class.

ari 'open'	caus. vb =	arəwə 'cause...to open '
hiTi 'stay'	"	hiTəwə ' " to stay '
keli 'play'	"	keləwə ' " to play'

7.1A.

DOUBLE CAUSATIVES

7.1A.1. When the causativiser wə has assimilated with the final consonants (resulted from conjugation vowel deletion) of verbs, as discussed in 7.1.3. and 7.1.5., the resulting

1 waDi 'go' is a special respect verb; the causative form is waDaməwə or waDammə 'cause (the priests..etc.)to go or come'.

structure ..CCə is similar to that of the non-causative verbs like dakke 'drive' alle 'touch, catch,...' with ..CVCCə structure. Since these primary verbs can take wə causativiser, to form the corresponding causative verbs, those already causative verbs but disguised due to assimilation, are capable of adding wə causativiser again to result in a formally causative verb. Whether these verbs are formally double causatives or not, they are only syntactically and semantically causative. A few examples of double causative verbs are given below:

$\text{adi} + \text{wə} \Rightarrow \text{addə} \text{ (v.7.1.3.)}$

$\text{addə} + \text{wə} \Rightarrow \text{addəwə}$ 'cause ..to pull'

Except for the verbs discussed in 7.1.6., most other ..Ci verbs are capable of forming double causatives. Verbs discussed in 7.1.5. are also capable of taking wə causativiser for a second time.

$\text{aha} + \text{wə} \Rightarrow \text{assə} \text{ (v 7.1.5.)}$

$\text{assə} + \text{wə} \Rightarrow \text{assəwə}$ 'cause ..to ask ';

$\text{damə} + \text{wə} \Rightarrow \text{dammə} \text{ (v.7.1.5.)}$

$\text{dammə} + \text{wə} \Rightarrow \text{damməwə}$ 'cause..to put'

It may be mentioned, further, that when the verb ends/ⁱⁿ ..wə whether it be causative or primary, no further causativisers can be added to it.

7.2. CAUSATIVE VERBS FROM PROCESS VERBS

7.2.1. Causative verbs can also be derived from process verbs. Such causative verbs refer to actions where an agent causes a process to happen. Generally all causative verbs are

action verbs. They express an agent causing something plus an action, process, perception or state. When a process verb undergoes First causativisation (with the addition of wə) the resulting causative verb is similar to an action verb -- as the causing agent acts himself. In Sinhalese, as well as in many Indic languages, the so-called causative verbs are supposed to express a proposition where an agent causes another agent to act or cause a process to take place or cause someone to feel a sensation or cause some condition to prevail. Thus actual causative verbs are related to two agents and cause processes with one agent are considered similar to action verbs. Thus:

verb [+process] + causativiser [wə] \Rightarrow First causative
(or = action verb)

verb [+process] + caus. [wə] + caus[wə] \Rightarrow Second caus.

e.g.

wəTte+wə \Rightarrow wəTtwə \Rightarrow wəTTTe (v. 7.1.3.) 'drop, cause to fall...'

wəTTTe+wə \Rightarrow wəTTTewə (v.7.1.3.) 'cause someone to drop or cause to fall something...'

7.2.2. However, if the causative verb salassə is used without causativising the verb of the adjunct sentence, the latter is usually embedded into the causative proposition with predicate salassə.

7.2.3. With regard to complex verbs , the dependent verbs decide whether they denote processes, actions, or causatives etc.

e.g. hoñdə-we 'heal' (-we marks [+process])

hoñdә-kәrә 'cause to heal, cure' (kәrә = [+action])

hoñdә-kәrә+wә 'cause someone to heal/cure' (kәrәwә = [+caus]).

7.2.4. It may be mentioned that whenever the causative verb salassә is used in a causative complex sentence, without causativising the verb of the conjunct sentence, some idea of indirect action is implied. Verbs like gale 'flow' and hame 'blow' can not be causativised by wә and in such cases salassә must be used in the caused action proposition.

gañgә galannә salassәnәwә

the river to flow cause

(They) cause the river to flow down.

7.3. CAUSATIVE VERBS FROM PERCEPTION VERBS

7.3.1. Causative verbs can also be derived from verbs of perception. Such causative verbs express an agent causing a patient to experience something -- a sensation, object etc. Thus propositions of causing action + experience produce action like causative verbs if wә causativiser is introduced. Usually by Second causativisation causative verbs expressing 'someone causes someone else to experience ..' are derived. Here too there are some verbs like hite 'occur' and әhe 'hear' with which wә causativiser does not colligate. Consider the following examples:

e.g.

pene +wә ⇒ penwә ⇒ pennә (v.7.1.3.) 'show'

pennә +wә ⇒ pennәwә 'cause someone to show'

but,

hite +wә ⇒ *hitwә ⇒ *hittә (impossible)

7.3.2. Propositions with perception verbs can be embedded in propositions with causative action verb salasse and it is more common to do so.

7.4. CAUSATIVE VERBS FROM STATIVE VERBS

7.4.1. The most common stative verbs are iñdi 'be' and tibe 'be'. By adding wə to iñdi causative verb ind-wə = inde 'cause a being to be' (by First causativisation) and further by adding wə, (by Second causativisation) verb inde +wə = indəwə 'cause someone to cause a being to be' can be derived.

7.4.2. With regard to tibe, wə is less likely to occur and such propositions are usually embedded in propositions with salasse. With regard to other stative verbs as dan 'know', matekə-tibe 'remember' etc. the causativisation is a matter of embedding as discussed with verb tibe above.

7.4.3. The copula verb, the possessive verb and modal stative predicates do not have causative verbs, as they are not deep structure verbs.

7.4.4. The foregoing account should be sufficient to suggest that causative sentences are complex sentences consisting of two, three or four underlying sentences in them. Causativisation is a matter related to complex sentence formation --- subordination and co-ordination -- and has, therefore, to be studied in detail in relation to the same. Thus any superficial attempt to describe 'causative verbs' by deriving them from formally 'primary' verbs may contribute very little towards an understanding of the complexity of causativisation.

CHAPTER 88.0. THE AUXILIARY OF A SENTENCE

8.0.1. The auxiliary as ^aconstituent common to the whole sentence can be described syntactically and semantically independently of predicates. In Sinhalese, as in most other languages, the auxiliary, however, occurs attached to predicates phonologically. Furthermore when there is a choice of alternative forms in the realisation of the auxiliary, the choice is made according to the form of the predicate, especially the verb. It is, therefore, reasonable to discuss the auxiliary component of a sentence in this section on predicates.

8.0.2. In this chapter on the Auxiliary of a sentence, I propose to discuss the grammatical categories of tense, aspect and mood, and their corresponding phonological manifestation(s). Every sentence must be associated with these categories in different degrees, so that it can convey the attitudes of the speaker as well as time relations in relation to the time of utterance, besides its proposition(s).

8.0.3. In Sinhalese these categories are realised by different exponents. Sometimes one finds it difficult to correlate each of these categories with a different realisation as there is a tendency for more than one category to be realised by one exponent (-- as portmanteau morphemes). First, let us introduce these categories as relevant to Sinhalese. Auxiliary as a whole can be stated as:

Auxiliary ---> (tense + aspect)+ mood

8.1.

TENSE

8.1.1. The category of tense denotes time relations associated with the utterance to the speech situation. In other words, the essential characteristic of this category is that it relates the time of the action, process etc. referred to in the proposition to the time of utterance. To describe time relations associated with the auxiliary of a sentence in Sinhalese, I recognise two tenses as :

- (a) past tense -- referring to events that took place in the past in relation to the time of utterance, and
- (b) non-past tense -- referring to events, at present and in time to come, and also in referring to eternal and timeless events etc.

Thus tense in Sinhalese is :

$$\text{tense} \rightarrow \begin{cases} + \text{past} \\ + \text{non-past} \end{cases}$$

8.1.2. However, in relation to certain moods, the category of aspect must be considered simultaneously with tense.

8.2.

ASPECT

8.2.1. The category of aspect refers to different degrees of time relations. On the one hand it is related to the category of tense and on the other it may be related to the category of mood -- especially to the 'indicative mood', as these time relations are relevant mostly for declarative sentences only. I, therefore, propose to treat the category of aspect as related to both the categories of tense and 'indicative mood'.

8.2.2. In this study, I recognise, two aspects for non-past

tense and three aspects for past tense, both in relation to the 'indicative mood'.

8.2.3. The two aspects of non-past tense are :

- (a) the generic aspect denoting eternal, timeless and habitual events as well as actions , processes etc. of the present time in general. (Even the progressive aspect (v.(b). in.) in Sinhalese is mostly expressed by this generic aspect), and
- (b) the progressive aspect denoting contemporaneous and continuous actions, processes etc.

Thus aspect in Sinhalese in relation to non-past tense and indicative mood is:

$$\text{aspect} \rightarrow \left\{ \begin{array}{l} + \text{generic} \\ + \text{progressive} \end{array} \right\} / \left[\begin{array}{c} +\text{npt} \\ \underline{\quad} \end{array} \right]$$

8.2.4. Similarly the three aspects of the past tense are:

- (a) the completive aspect referring to completed actions, processes etc.,
- (b) the progressive aspect referring to actions, processes etc. lasted continuously some time in the past, and
- (c) the perfective aspect to refer to states resulted through actions, processes etc. in the past.

Thus aspect in Sinhalese in relation to past tense and indicative mood is :

$$\text{aspect} \rightarrow \left\{ \begin{array}{l} +\text{completive} \\ +\text{progressive} \\ +\text{perfective} \end{array} \right\} / \left[\begin{array}{c} +\text{pt} \\ \underline{\quad} \end{array} \right]$$

8.2.5. Furthermore, the completive aspect may be subcategorised as general and emphatic. That is:

$$\text{completive} \rightarrow \begin{cases} + \text{ general} \\ + \text{ emphatic} \end{cases}$$

8.2.6. Thus we may formulate the category of aspect in Sinhalese as:

$$\text{aspect} \rightarrow \left\{ \begin{array}{l} \left\{ \begin{array}{l} +\text{generic} \\ + \text{ progressive} \end{array} \right\} / \left[\begin{array}{l} +\text{npt} \\ \text{---} \end{array} \right] \\ \left\{ \begin{array}{l} +\text{completive} \left\{ \begin{array}{l} +\text{general} \\ +\text{emphatic} \end{array} \right\} \\ +\text{progressive} \\ +\text{perfective} \end{array} \right\} / \left[\begin{array}{l} +\text{pt} \\ \text{---} \end{array} \right] \end{array} \right.$$

Next let us discuss the category of mood.

8.3. MOOD

8.3.1. Mood is a category denoting the attitude of the speaker towards what he says. When a speaker produces statements of facts, simple declarative sentences, the category of mood associated is said to be the 'indicative mood'. This modality is realised independently of the fused realisation of the categories of tense and aspect, in the language.

8.3.2. Although interrogative sentences can be considered as constituting a separate mood, the interrogative mood (see Lyons, J. 1968, pp. 307 - 308), I do not propose to recognise such a mood for Sinhalese for the reason that most interrogative sentences can be derived transformationally (see Appendix B. 1.).

8.3.3. To describe the auxiliary component of a sentence in Sinhalese, I propose to recognise a number of moods besides the indicative mood already referred to (v.8.3.1.).

8.3.4. There are sentences called imperative sentences. They express commands, requests, instructions etc. Such sentences are said to be in the imperative mood. This mood will be examined in some detail later (v. 8.4.1. - 8.4.8.).

8.3.5. There are sentences expressing wishes both benevolent and malevolent. I propose to recognise a mood called 'benedictive mood' to refer to such sentences.

8.3.6. There are sentences expressing probability and they are included under a mood called the 'inferential mood'.

8.3.7. Then, there are sentences expressing possibility, certainty and obligation etc. These will be treated individually as these modalities are usually realised as discreet modal auxiliaries together with the infinitive auxiliary.

8.3.8. According to the foregoing account, the category of mood can be represented as:

mood	-->	{	+ indicative
			+ imperative
			+ benedictive
			+ inferential
			+ possibility
			+ certainty
			+ obligation

8.4. THE IMPERATIVE MOOD

8.4.1. As stated earlier (8.3.4.) the imperative mood has to be discussed in some detail. Imperative sentences in any language usually occur in face-to-face situations. Such sentences are used to urge, command, request or instruct the hearer (=2P) to act in the required manner. Although imperative sentences look like simple sentences in surface structures, they are, in fact, complex sentences having two or more underlying sentences. Depending upon the number of persons involved in the face-to-face situation, I propose to distinguish three sub classes of imperative mood.

8.4.2. Firstly, in a speaker - hearer situation, the speaker commands or requests the hearer to act accordingly. This direct speaker - hearer confrontation is called simple imperative. In all such situations, the subject of the proposition of the imperative sentence is the hearer (i.e. 2P).

8.4.3. As the agent NP of the proposition of the imperative sentence is realised by one of the 2P pronominal expressions, we have to anticipate some sort of concordial relationship between the different grades to which the 2P pronoun is classified (v.2.2.) and the imperative auxiliary realisations. Thus we have to recognise a number of grades for simple imperative at least corresponding to the grades of the 2P pronoun. Hence I propose to recognise the following grades for simple imperative modal auxiliary:

- (a) respect grade
- (b) ordinary grade and
- (c) derogatory grade.

the
Thus/simple imperative mood can be stated as:

$$\text{simple imperative} \rightarrow \begin{cases} + \text{ respect} \\ + \text{ ordinary} \\ + \text{ derogatory} \end{cases}$$

8.4.4. Now let us examine the two other aspects of the imperative mood. According to traditional grammars, there is a mood called 'hortative'. The sentences, where this 'hortative' modality occurs, refer to situations where the speaker requests or proposes the hearer either to permit the speaker himself to act (i.e. exclusive of the hearer) or to join him to act jointly (i.e. inclusive of the hearer). I use 'hortative imperative' to refer to this type of complex exhortations to include both exclusive as well as inclusive reference to the hearer. Exclusiveness or inclusiveness of the hearer may be stated as suggested below:

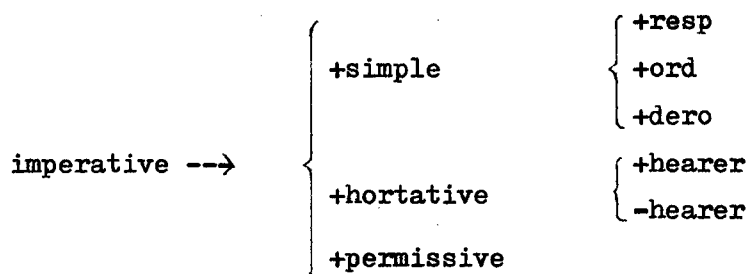
$$\text{hortative} \rightarrow \begin{cases} + \text{ hearer (i.e.inclusive)} \\ - \text{ hearer (i.e.speaker(s) only)} \end{cases}$$

8.4.5. Finally, the third aspect of the imperative mood, namely the 'permissive mood' as called by the traditional grammarians, refers to a situation where the speaker commands, requests or proposes the hearer to permit or allow a third person (i.e. neither the speaker nor the hearer) to act etc. The third person subject in this situation may be an agent, patient or an experiencer depending upon the verb. Categories of tense and aspect play no role in relation to imperative as well as most other moods except for the indicative mood. (However, if we want to include time relations, tense and

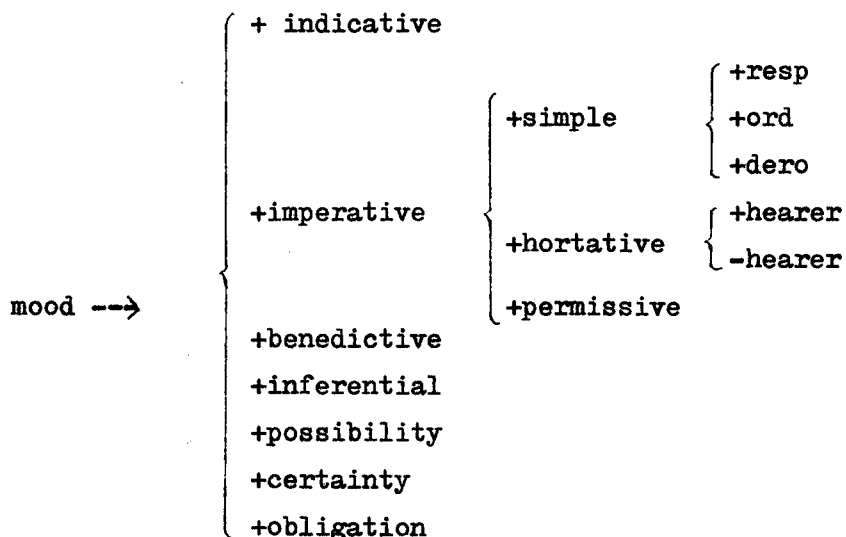
aspect, we may say that all these modalities are non-past and generic).

8.4.6. It may be repeated, that if we examine the deep structure of these different imperative sentences properly, we are bound to realise that all imperative sentences are complex sentences. Just as causative sentences are complex sentences (see Ch. 7), all simple, hortative and permissive imperative sentences are also complex sentences, although most of the complexities are hidden or disguised in the auxiliary expressions attached to the verb forms.

8.4.8. Thus we may represent the imperative mood in full as:



8.4.9. To recapitulate all aspects of the category of mood, one can summarise the rules suggested above thus:



8.4.10. Leaving some more facts to be introduced later in this chapter, I propose at this stage, to introduce the different phonological realisations of the categories discussed above. This will be done taking into account the different possible combinations of the categories and features that constitute the auxiliary of a sentence. Let us begin with the indicative mood, and then take account of the categories of tense and aspect simultaneously.

8.5. REALISATIONS OF THE AUXILIARY

8.5.1. As stated earlier, the auxiliary realisations are added to predicates -- especially verbs. The choice of alternative realisations is decided by the phonological form of the verb. I therefore propose to suggest some context sensitive rules to account for the choice of alternative realisations where relevant.

8.5.2. The realisation of the indicative mood may be stated to include two forms, one used in ordinary (non-emphatic etc.) statements and the other in emphatic and/or negated statements, as:

$$\text{indicative mood} \rightarrow \begin{cases} \text{ee} / \text{if } S = \text{emp and/or neg } S \\ \text{aa} / \text{elsewhere} \end{cases}$$

e.g.

amma wattəTə giyaa
 mother to the estate went
 (My) mother went to the estate.

wattəTə giyee amma
 to the estate went mother
 It was my mother who went to the estate.

amma wattəTə giyee nəə
 mother to the estate went not
 (My) mother did not go to the estate.

8.5.3. If the tense category is [+non-past], it may be either [+generic] or [+progressive] as regarding aspect. Thus we get two possible combinations as [+non-past and +generic] and [+non-past and +progressive]. The phonological manifestations of these two are suggested in the following formulations.

8.5.4. $\left[\begin{array}{l} +\text{non-past} \\ +\text{generic} \end{array} \right] \rightarrow n\bar{e}_1$

e.g.

seene potak kiyewenewa (nē + aa > newa)
 Sena a book read
 Sena reads a book.

minissu maalu allənewa
 The men fish catch
 The men catch fish.

8.5.5. $\left[\begin{array}{l} +\text{non-past} \\ +\text{progressive} \end{array} \right] \rightarrow \left[\begin{array}{l} \text{Reduplication of the verb (v.10.5)} \\ \text{or } \underline{m\bar{i}n} / \underline{y\bar{a}}_, \underline{e}_ \text{ plus } \underline{inn\bar{e}/tiy\bar{e}n\bar{e}} \\ \text{(cf.5.33.; 5.3A.2.)} \end{array} \right]$

e.g.

miniha pol biñde biñde innewa
 the man coconuts breaking is
 The man is breaking coconuts.

ruuna karaki karaki tiyenewa
 the fan rotating is
 The fan is rotating.

kandə naaye-yamin tiyenəwa

the mountain sliding is

The mountain is sliding.

bassekə nagorefo əmin tiyenəwa

the bus to the city coming is

The bus is coming to the city.

However, the use of this progressive aspect especially with the non-past tense indicative is less productive in comparison to its use with the past indicative, where in most cases generic and progressive aspects are indistinguishable when nəwa (= nə + aa) form is used (v.8.2.3(a)). The stative verbs iñdi ([in]) and tibe ([tiye]) do not combine with continuous aspect auxiliary expressions, because they actually refer to continuous states either in the past or present. This may be the reason for them to be used in forming continuous aspect expressions in relation to verbs which are non-stative.¹

8.5.6. If the tense is [+pt] there are a number of possible combinations of tense and aspect. These are formulated in the following sections.

8.5.7.
$$\left[\begin{array}{l} +\text{past} \\ +\text{completive} \\ +\text{general} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{nə}_2 / \text{verb} \cdot (\text{C})\text{VCe} ___ \\ \text{yə} / \text{verb} \cdot (\text{C})\text{VT/ri} ___ \\ \text{ya} ___ \\ \text{wə} / \text{elsewhere} \end{array} \right.$$

e.g.

miniha gaha kəpuwa (< wə + aa > wa)

the man the tree cut

The man cut the tree

¹ For a theoretical discussion see Chafe, W.L. 1970, p.99.

lameya dore ariya (yə + aa > ya)

the child the door opened

The child opened the door.

potə meese uDə tibuna (nə₂ + aa > na)

the book the table on was

The book was there on the table.

$$8.5.8. \left[\begin{array}{l} +\text{past} \\ +\text{completive} \\ +\text{emphatic} \\ (+\text{ind. ?}) \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{cci/ccə} / \dots (\text{C}) \text{VCe} ___ \\ \text{pi}^1 / \text{elsewhere} \end{array} \right.$$

(This is less productive than the general completive past tense (8.5.7.) usage; indicative mood does not realise in its aa form here; modality may be inherent in pi and cci/ccə.)

e.g.

kolla duwəpi

The boy did run.

malə pipicci

The flower did open.

$$8.5.9. \left[\begin{array}{l} +\text{past} \\ +\text{progressive} \end{array} \right] \rightarrow \left[\begin{array}{l} \text{Reduplication of the verb (v.10.5) or} \\ \text{miŋ / ya __, e__ + \underline{unne}/\underline{tibune}} \\ (\text{also cf. 8.5.5.}) \end{array} \right]$$

e.g.

mamə mokaddə kərə kərə unna

I something doing was

I was doing something .

1 pi has two forms in complementary distribution: as pi in sentence final position and pu as aux. without modality: as in relative phrases, and before deŋ , aawe etc. v.8.6.10.).

oruloosuwa hoṇḍəTə wəḍə kərə kərə tibuna
 the watch well working was
 The watch was working well.

koocciyə mehaaTə emiṇ tibuna
 the train to this direction coming was
 The train was coming towards this direction.

8.5.10. $\left[\begin{array}{l} +\text{past} \\ +\text{perfect} \end{array} \right] \longrightarrow \text{la (+ tiyenə)}$

The notion of recent past is expressed by the use of tiyenə (i.e. tibe + npt.generic [ne]) and distant past by the use of tibunə (i.e. tibe + pt. completive [ne₂]) respectively.

e.g.

lameya malə kaḍəla tiyenəwa
 the child the flower has picked
 The child has picked the flower.

lameya malə kaḍəla tibuna
 the child the flower had picked
 The child had picked the flower.

8.5.11. In the above sections (8.5.2. - 8.5.10.) we have formulated the realisation of the auxiliary of simple sentences in Sinhalese. It is in relation to these indicative or declarative sentences that the categories of tense and aspect play a role. In the next section let us attempt to formulate the different realisations of the three classes of the imperative mood.

8.6. REALISATION OF THE IMPERATIVE MOOD

8.6.1. As stated earlier, (8.4.2.,8.4.3.) we have to

recognise three grades in relation to simple imperative modality. Realisations, therefore, have to be established according to these grades.

8.6.2. $\left[\begin{array}{c} \text{simple Imp} \\ +\text{respect} \end{array} \right] \rightarrow \left\{ \begin{array}{l} nDə \\ nnə_1 \\ nTə \end{array} \right.$

e.g.

obətumaa $\left\{ \begin{array}{l} \underline{yanDə} \\ \underline{yanne} \end{array} \right.$
(Will)you (please) go.

mahatteya haTə $\left\{ \begin{array}{l} \underline{enDə} \\ \underline{enne} \end{array} \right.$
Sir (will) you (please) come tomorrow.

8.6.3. $\left| \begin{array}{c} \text{simple Imp} \\ +\text{ord} \end{array} \right| \rightarrow \left\{ \begin{array}{l} nəwa / \text{any verb} __ \\ yaŋ / \text{verb}..(C)V\text{Ce} __ \\ maŋ / \text{verb } ya __^2 \\ iŋ / \text{verb } gan __ \\ paŋ / \text{any verb} __, \text{but} \\ \text{verb } \neq ..(C)V\text{Ce} __ \\ \text{ya} __ \\ \text{e} __^3 \\ \text{gan} __ \end{array} \right.$

e.g.

tamuse poləTə yanəwa
you to the fair go
You 'd better go to the fair.

1 nTə form is found in the dialects of Kandyan up country.

2 paleyaŋ 'go' is another Imp. expression similar to yamaŋ 'will you go'

3 e 'come' has a special Imp. expression wareŋ 'come(will you)' just as ya 'go' has paleyaŋ (w. fn.2 sup.).

e.g.

uṃbə eekə kərəpaŋ
 you it do
 You 'd better do it.

uṃbə uge ʔŋgee elliyaŋ
 you his body cling on
 You 'd better cling on to him.

uṃbə gedərə { yamaŋ
 paleyaŋ
 you home go
 You 'd better go home.

uṃbə potə gaŋiŋ
 you the book take
 You 'd better take the book.

uṃbə heTə udee waŋeŋ
 you tomorrow morning come
 You 'd better come tomorrow morning.

8.6.4. To express politeness and intimacy, the so-called 'polite particle' ko may be used after any of the imperative realisations, simple, hortative or permissive. Compare the following sentences:

tamuse yaŋəwa-ko
 Will you please go.

uṃbə yamaŋ-ko
 Will you please go.

miniha { aadeŋ-ko
 { aawaawe-ko
 Let the man come.

api yamu-ko
 Let us go.

$$8.6.5. \left[\begin{array}{l} \text{simple Imp} \\ +\text{dero} \end{array} \right] \longrightarrow \left\{ \begin{array}{l} u / \dots(C)VCi_ \\ yə / \dots(C)VCe_ \\ \emptyset / \dots(C)VCe_ \\ \quad \quad \quad CVC_ \\ mə / ya^1_ \\ piyə / \text{any verb}_, \text{ but} \\ \quad \quad \quad \text{verb} \neq \dots(C)VCe_ \\ \quad \quad \quad \quad \quad \quad e^2_ \\ \quad \quad \quad \quad \quad \quad ya_ \end{array} \right.$$

e.g.

too kapəpiyə
you cut
Cut (it..)

too ədəpiyə
you pull
Pull (it..)

too ookə ədu
you the thing near you pull
Pull that one (near you).

too wətiyə
(You) fall.

too kaə \emptyset
(You) pick.

too { yamə
 pələ
(You) go.

mehaatə wərə
Come here .

1 ya, besides its yamə Imp. form, has a special Imp. form pələ 'go will you' as well.

2 e has a special Imp. with +dero as wərə 'come will you'.

8.6.6. All 'causative verbs' can be followed by an imperative modal auxiliary. However, we shall find such imperative causative sentences are even more complex than the causatives discussed in chapter 7, when we attempt to explain them by applying causativisation to the underlying deep structure sentences. I do not propose to discuss the syntax and semantics of such complex sentences in this study. But the realisation of imperative after 'causative verbs' is similar to those forms after $..(C)VCə$ verbs as all causative verbs are $...Cə$ verbs in structure.

e.g.

$kappə + \begin{bmatrix} nDə \\ nnə \end{bmatrix} \Rightarrow \begin{bmatrix} kappanDə \\ kappanne \end{bmatrix}$ 'may you please cause someone to cut'

$kappəwə + \begin{bmatrix} nDə \\ nnə \end{bmatrix} \Rightarrow \begin{bmatrix} kappəwanDə \\ kappəwanne \end{bmatrix}$ " " "

(This is when the grade is +resp).

$kappə + nəwa \succ kappənəwa$ 'please cause someone to cut'

$kappəwə + nəwa \succ kappəwənəwa$ " " "

$kappə + paŋ \succ kappəpaŋ$ " " "

$kappəwə + paŋ \succ kappəwəpaŋ$ " " "

(This is when the grade is +ord).

$kappə + piyə \succ kappəpiyə$ 'get someone to cut'

$kappəwə + piyə \succ kappəwəpiyə$ " "

(This is when the grade is +dero).

8.6.7. Next let us introduce the phonological manifestation of the hortative imperative modal auxiliary.

8.6.8. $\begin{bmatrix} \text{hortative Imp} \\ - \text{hearer} \end{bmatrix} \dashrightarrow nnaŋ$

e.g.

mamə yannan

I let go /shall go

Let me go /(I shall go).

mamə kaarekə geennan

I the car let bring

Let me bring the car /(I 'll bring the car).

api eekə kərannan

we it let do

Let us (exclusive of the hearer) do it/(We 'll do it).

I assume that 'let me ' and 'I 'll' as well as 'let us' and ' we 'll ' express similar notions. This has been discussed in some detail in a paper 'Let's solve let's ' by R.M.Costa (see Bib.).

8.6.9. $\left[\begin{array}{l} \text{hortative Imp} \\ +\text{hearer} \end{array} \right] \rightarrow \text{mu}$

e.g.

api wadə kərəmu

we work let do

Let us work.

api naTəmu

we let dance

Let us dance .

8.6.10. Finally to conclude this section on imperative realisations, let us take the permissive imperative modal auxiliary. Semantically this modality expresses some non-past tense relationship although the realisation is more formally complex where both npt. (generic) and pt.(completive) realisations plus two other expressions --den and --aawe are realised

together under permissive imperative modality. Thus the realisation of the permissive imperative mood may be represented as:

$$\text{permissive mood} \rightarrow \left[\begin{array}{l} n\acute{e}_1 \text{ (v.8.5.4.)} \\ \left\{ \begin{array}{l} n\acute{e}_2 \\ y\acute{e} \text{ (v.8.5.7.)} \\ w\acute{e} \\ pu^1 \text{ (v.8.5.8.)} \\ cci \end{array} \right\} \end{array} \right] + \left[\begin{array}{l} den \\ \left\{ \begin{array}{l} den \\ aawe \end{array} \right\} \end{array} \right]$$

e.g.

eyaa eekə kəradden (kərə+nə+den ⇒ kərət+den ⇒ ..dden)

he it let do

Let him do it.

uu eekə { keruweden
keruwaawe
kərəpuwaawe

he it let do

Let him do it.

putuwə { perəluneden
perəlicceden
perəlunaawe
perəliccaawe

the chair let fall

Let the chair fall.

8.6.11. It seems to me that in the deep structure of these permissive sentences we may find sentences with both past or non-past, indicative mood auxiliary. In the complex sentence formation, this tense category remains. However, its semantic value has changed to a natural state to express some non-past notion. Nevertheless, in my own idiolect, I use sentences

1 see fn. 1, p.167.

similar to the following in approving of or in forgiving some action, process etc. brought to my attention by somebody else.

To me:

My response:

lameya potə iruwa	ohe { irəpu } { den }
The child tore the book	{ iruwe } { aawe }
	Let it be so .

kolla potak balənwə	ohe baladden
the boy a book reads	baləpuden
The boy reads a book,	baluwaawe
	baləpuwaawe
	baluwəden
	Let him do so.

However, I can not use iradden instead of iruwəden or irəpu-den in the first example where the reference is to an activity in the past.

8.7. THE BENEDICTIVE MOOD

8.7.1. This is also neutral as to tense. However, it is associated with some non-past notion -- as in Sinhalese we can not wish for past events. Benedictive mood is realised mostly as yaŋ (or as paŋ in relation to a few verbs), although there are a few idiomatic usages with weewaa 'let there be , may it be '. Thus the benedictive mood may be represented as:

benedictive mood -->	{	yaŋ
		paŋ / wahi '___' 'rain'
		daki ___ 'see'
		etc.

e.g.

anee deyyənee ehəmə weyaŋ

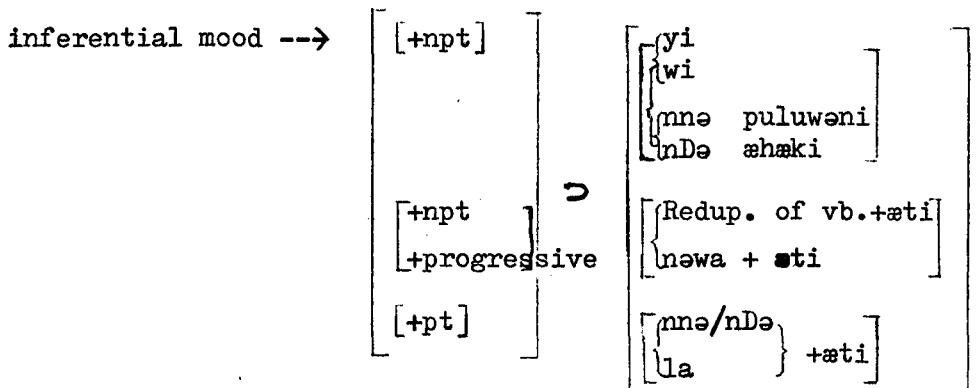
O God, may it be so !

mage putaa niwan dakapan
 my son Nirvana see may you
 May (you) my son attain Nirvana.

Idiomatic usage : jayeweewaa 'wish victory, hail...'
bangeweewaa 'wish defeat'etc..

8.8. THE INFERENTIAL MOOD

8.8.1. The inferential mood is realised in a number of forms; either as two suffixes or as participles plus independent modal auxiliaries etc. (see stative modal predicates for their non-modal usage v.5.6.) The realisations yi and wi are non-past always. However ati after past participle may denote past inferential modality. Thus the inferential mood may be represented as :



e.g.

lameya waDee kerayi/kerawwi¹
 the child the work may do
 The child may do the work.

lameya waDee keranne puluwani/ ahaki
 the child the work do may
 The child may do the work.

lameya waDee keranewa ati
 the child the work do may
 The child may be doing the work. or,

lameya wæDee kərə kərə əti
 the child the work doing may be
 The child may be doing the work.

lameya wæDee kərela əti
 the child the work have done may
 The child may/might have done the work.

lameya wæDee kəranne/kəranDe əti
 the child the work do may have
 The child may have done the work.

8.9. POSSIBILITY MOOD

8.9.1. The idea of 'can' or possibility is expressed in Sinhalese by this modal auxiliary which is realised as infinitive plus puluwəni or əhəki. This may be stated as:

possibility mood $\rightarrow \begin{Bmatrix} \text{nne} \\ \text{nDe} \end{Bmatrix} + \text{puluwəni/əhəki}$

e.g.

tamuseTə dən yanne/yanDe puluwəni/əhəki
 you now go can
 You may / can go now.

8.10. MODALITY OF CERTAINTY

8.10.1. The idea of 'must' is expressed by this modality. It is realised as infinitive + oonə. We may represent this as:

modality of certainty $\rightarrow \begin{Bmatrix} \text{nne} \\ \text{nDe} \end{Bmatrix} + \text{oonə}$

e.g.

tamuse heTə enne/enDe oonə
 you tomorrow come must
 You must come tomorrow.

8.11. MODALITY OF OBLIGATION

8.11.1. The idea that 'one is obliged to' etc. is expressed by this modality. This and the modality of certainty sometimes, seem like overlapping. It is realised in a number of ways as shown below:

modality of obligation -->	{	nnə/nDə +oonə
		nnə/nDə +waTinəwa
		nnə/nDə +epaayə
		nnə/nDə +wela +tiyenəwa

e.g.

mamə eekəTə yanne/yanDe (mə) oonə
 I to that go should
 I should go to that (meeting etc.).

miniha yanne/yanDe waTinəwa
 the man go should
 The man should go/ (It is his duty to go ?)

amma ispiritaaleTə yanne(mə) epaayə
 mother to the hospital go has got to
 (My) mother has got to go to the hospital.

maTə eekə kəranne wela tiyenəwa
 I it to do got have to
 I have got to do it.

8.12. COPULA VERB AUXILIARY

8.12.1. It has been stated (v.5.5.) that the copula verb is not generally considered as similar to other verbs such as those denoting actions, processes etc. The copula is considered as a 'dummy' verb, usually marking the tense, aspect and modality -- the auxiliary of a sentence.

8.12.2. In most cases the copula occurs in sentences with propositions having attributive predicatives or with equation-al propositions. In Sinhalese the copula verb seems to be either non-past or has to be treated as neutral to tense. However, we can explain the copula realisation in Sinhalese to include both past and non-past tenses. Aspect may be generic or completive. Modality is indicative. Accordingly the copula auxiliary may be realised as shown below:

$$\left[\begin{array}{l} \text{Aux. cop.} \\ +\text{npt} \\ +\text{generic} \\ +\text{Ind} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{yi} / \text{adj...CV} _ \\ \emptyset / \left\{ \begin{array}{l} \text{adj...C} _ \\ \text{NP} + _ \end{array} \right. \end{array} \right.$$

e.g.

mee potə hoŋda-yi
 this book good is
 This book is good.

mee potə alut- \emptyset
 this book new (is)
 This book is new.

eyaa mage putaa- \emptyset
 he my son (is)
 He is my son.

tisaahaami dassə daDəyakkaarəyek- \emptyset
 Tisahami efficient a hunter (is)
 Tisahami is an efficient hunter.

8.12.3.

$$\left[\begin{array}{l} \text{Aux. cop.} \\ +\text{pt.} \\ +\text{completive} \\ +\text{Ind.} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \text{wə} \\ \text{wela} \end{array} \right\} \left\{ \begin{array}{l} \text{unna} \\ \text{tibuna} \end{array} \right\}$$

Tə tibuna

e.g.

mamə guruwəreyək wela unna

I a teacher was

I was a teacher.

issərə mee gee kaDeyak (wə tibuna)

in the past this house a shop(was)

In the past, this house was a shop.

issərə mee ələ lokuwəTə tibuna

in the past this canal large was

In the past this canal was large.

However, copula auxiliary in the past tense,²⁵ given above is very uncommon. Even the given realisations are periphrastic usages. There are many other idiomatic periphrastic usages similar to these. But in most cases, we are likely to find a stative verb. Thus, I believe that the copula verb, although in its formal manifestation seems to be a dummy verb signalling mostly the contents of the auxiliary, related to some deep stative verb (v.5.5.).

8.12.4. So far I have attempted to formulate the realisations of the auxiliary usually attached to phonological verbs in simple sentences or to verbs in matrix sentences. There are some more realisations of the auxiliary (component) of a sentence to be discussed and introduced in relation to coordinate and subordinate sentences, where in some cases modality usually disappears when sentences are joined and embedded. I propose to introduce, in the next section, some auxiliary realisations that occur in relation to such sentences (non finite suffixes in traditional terminology).

8.13. THE AUXILIARY OF CONJOINED SENTENCES

8.13.1. We may recognise three participles as infinitive, non-past or past progressive and past participles. All these occur in complex sentences or in complex verbs (which may have resulted from complex sentences; even the modal auxiliaries may have complex structures in a deeper level).

8.13.2. In Sinhalese, these participles occur in conjoined sentences. Coordination and subordination in Sinhalese require a lengthy discussion. I do not propose to do so here. My aim is ^{to} explain the three participles I have recognised. Thus, this covers only that area of coordination where participles function as coordinate conjunctions.

8.13.3. When two sentences are joined by the participle auxiliary, first, the auxiliary (marked for tense, aspect and indicative mood) of one of the underlying sentences is deleted, and then one of the three participles is introduced to fill the gap created by the auxiliary deletion. The result is a conjoined sentence. The three participles will be introduced in the following sections.

8.13.4. We can join two simple sentences by introducing the infinitive auxiliary in place of the deleted auxiliary of the sentence if the deleted auxiliary of the sentence is marked for non-past tense, generic aspect and indicative mood and if the activity or process etc. denoted by the same sentence refers to a resulting or later event in relation to the activity or process etc. denoted by the other sentence.

The infinitive is realised as:

$$\text{infinitive} \rightarrow \begin{cases} \text{nnə} \\ \text{nDə} \\ \text{nTə}^1 \end{cases}$$

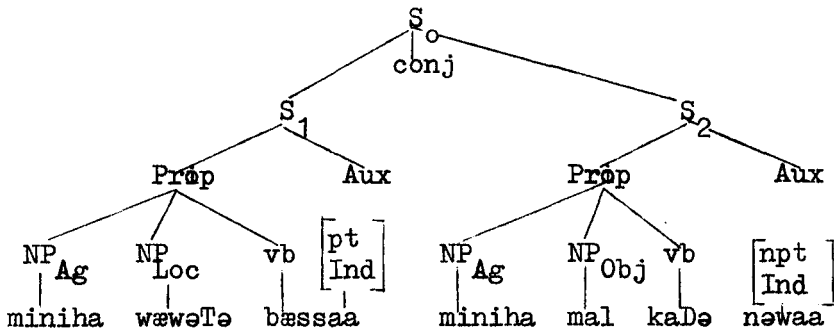
e.g.

miniha mal kaDanne/kaDanDe wəwəTə bəssa

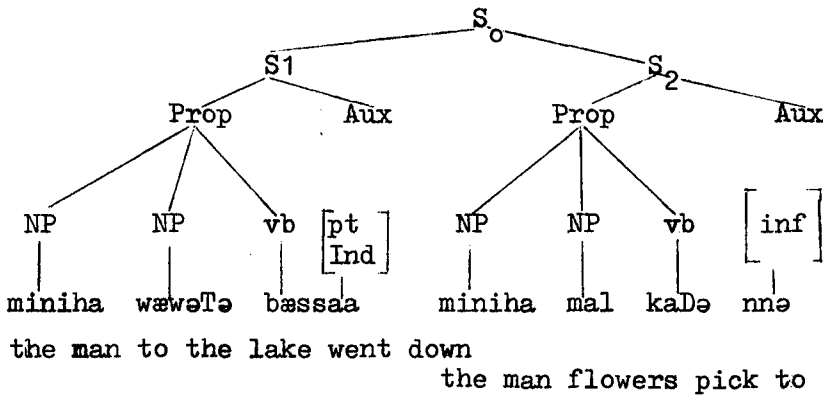
the man flowers to pick to the lake went down

The man went down to the lake to pick flowers.

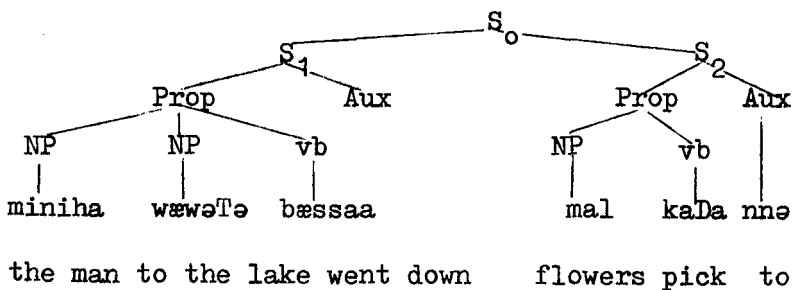
The deep structure of the sentence may be as suggested below:



Then the Aux. of the S_2 is deleted and the infinitive is introduced in the process of coordination resulting the following structure:



By equi NP deletion we get:



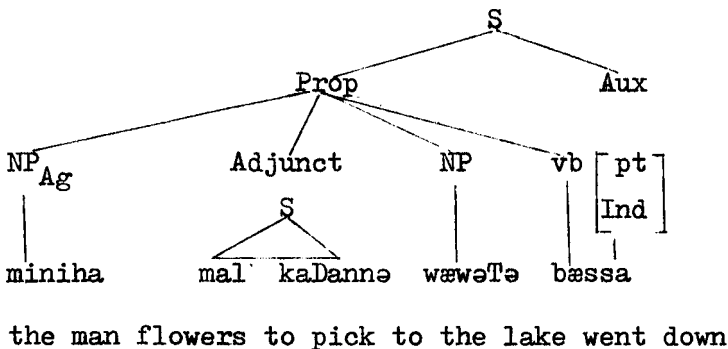
¹ v. fn. 1, p.169.

Then finally S_2 is now shifted to the right of the subject Agent NP of the S_1 . The result is the sentence given at the beginning of this section. However, it may be mentioned that S_2 can be shifted not only to the right of the Agent NP of S_1 but also to the left of it as well as to the right of the Locative NP of S_1 . Thus the following sentences are also possible and acceptable:

miniha wəwəTə mal kaDanne bəssa
 the man to the lake flowers to pick went down
 The man went down to the lake to pick flowers.

mal kaDanne miniha wəwəTə bəssa
 flowers to pick the man to the lake went down
 The man went down to the lake to pick flowers.

The surface structure of our sentence given at the beginning may be represented as :



8.13.5. When we have two sentences where the auxiliary of one is non-past or past progressive, that auxiliary is replaced by the non-past or past progressive participle to join the sentences. The realisation of the progressive participle is :

npt. or pt.progressive part. aux. --> [Redup.of the vb.
 minj / ^eya + Redup. of
 the whole -
 construction.]

e.g.

miniha p̣nduru ^akapə kapə waləkəTə damənəwa
 the man bushes cutting to a pit puts
 The man cuts the bushes and puts them into a pit.

lameya yamiŋ yamiŋ raTəkaju kanəwa
 the child going peanuts eat
 The child eats peanuts while going.

8.13.6. When sentences with npt. generic (v.8.2.3) or pt. general (v.8.2.4.,8.2.5.) indicative auxiliaries and identical subject NPs are joined, the auxiliary of the first conjunct sentence is replaced by the past participle auxiliary. If the second sentence, then the third etc. refers to the result of the event denoted by the first sentence (or the previous one), then the subject NPs need not be identical. It must be remembered, however, that past participle auxiliary is introduced to take the place of the auxiliary associated with the verb denoting the former event whereas the infinitive is introduced to take the place of the auxiliary of the sentence expressing the latter (resulting) event. The past participle auxiliary is realised as:

pt. part. aux. --> $\begin{cases} \text{la} \\ \text{ə /gan_} \end{cases}$

However, the past participle has different forms in relation to verbs ya 'go' and e 'come'. Verb ya 'go' has gihiŋ or gihilla (gihiŋ+la) 'go and, went and, having gone ' and verb e 'come' has əwit or əwilla (əwit+la) 'come and, came and, having come' as full past participle forms.

e.g.

sunil redi hoodəla naanəwa

Sunil clothes washed and is bathing

Sunil washed his clothes and is bathing.

(Having washed his clothes Sunil takes a bath).

baləla miiyek allagəə kussiyəTə diwwa

the cat a rat caught and to the kitchen ran

The cat caught a rat and ran to the kitchen.

(Having caught a rat the cat ran to the kitchen).

gaha wəTila gee kəDuna

The tree fell and the house broke down .

maama giyə sumaane gedərə əwilla iiye aapahu giyaa

uncle last week home came and yesterday back went

(My) uncle came home last week and went back yesterday.

8.13.7. More syntactic and semantic facts about these participles may be uncovered in an exhaustive study of coordination in Sinhalese, beyond the scope of this study.

8.14.

THE AUXILIARY OF CONSTITUENT SENTENCES

8.14.1. In the process of subordination in Sinhalese, certain expressions denoting functions such as condition, concession, temporal and cause etc. are added to the auxiliary of the constituent sentence whose modality is sometimes deleted. Since the auxiliary is attached to the phonological verb, these complex expressions consisting of verb + aux + subordinate conjunction have been treated as 'non-finite verbs' in traditional and structural descriptions of the verb in Sinhalese. Without studying subordination in Sinhalese in detail, it is extremely difficult to explain these so-called 'non-finite

verbal' expressions. There are some expressions which need historical explanations. Side by side with such historically surviving usages, there are some very common expressions which can be explained in relation to some underlying sentences which are in current usage.

8.14.2. Since this is not an attempt to study subordination in Sinhalese, I do not propose to go into any details. However, I propose to recognise four classes of subordinate conjunctions on semantic function as conditional, concessive, temporal and cause. In the following section I list the expressions in relation to these four functions.

8.14.3. Conditional function: -- (a) (h)ot 'if' after the aux without Ind. modality.

Historically hot was added to an already existing conditional form with tə, wə, yə, nə etc. This usage has disappeared. However, as I have given, we may, in the modern usage, relate the wə, yə, nə etc. to the tense and aspect realisations (v.8.5.4. - 8.5.10.). Nevertheless, we have to treat tə either as an alternative of nə₁ (i.e. npt. generic.v.8.5.4.) or as a special case where tə can not be related to any tense and aspect categories, but a historical form. nə₁ never occurs before (h)ot. This is a problem in all cases where tə is found. I prefer to treat tə as a variant of nə₁ in relation to a few morphemes such as -den, di, (h)ot and t.

e.g.

seekərə koləmbə yanəwa + cond.subord.conj.+ maTə kiyannə ⇒
 Sekara Colombo go if me tell
 seekərə koləmbə yate-(h)ot maTə kiyannə
 Sekara Colombo go if me tell.

If Sekara goes to Colombo, (please) tell me.

eyaa aawa + cond. subord. conj. + maama enəwa ⇒
 he came if uncle come

eyaa aawa-(h)ot maama enəwa
 he came if uncle come
 If he came uncle would come.

(b) nan 'if'/after the aux.

e.g.

seekərə koləmbə yanəwa + cond. subord. conj. + maTə kiyannə ⇒
 Sekara Colombo go if me tell

seekərə koləmbə yanəwa nan maTə kiyannə
 Sekara Colombo go if mw tell
 Tell me if Sekara goes to Colombo.

Also:

eyaa aawa + cond. subord. conj. + maama enəwa ⇒
 he came if uncle come

eyaa aawa nan maama enəwa
 he came if uncle come
 If he came uncle would come.

8.14.4. Concessive function:

(a) t 'even if'/ after the aux. without Ind. modality
 (cf. 8.14.3.).

e.g.

balla marenəwa+ conc. subord. conj. + mamə uuTə beet denəwa ⇒
 the dog die even if I to it medicine give

balla mare-ta-t mamə uuTə beet denəwa
 the dog die even if I to it medicine give
 Even if the dog dies, I(11) give it the medicine.

gonaa wəTə kəDuwa + conc.subord.conj.+gonaa weləTə bəsse nəə
 the bull the fence broke although the bull to the field
 went into not

⇒

gonaa wəTə kəDuwa-t weləTə bəsse nəə
 Even though the bull broke the fence, it did not go into
 the field.

(b) unat'even if; even though'/after the aux.

e.g.

balla mərenəwa unat mame beet denəwa
 Even if the dog dies, I (ll) give it the medicine.

gonaa wəTə kəDuwa unat weləTə bəsse nəə
 Even though the bull broke the fence it did not go into
 the field.

8.14.5. Temporal function subordinate conjunctions are introduced after the indicative modality is deleted from the auxiliary of the underlying sentence. There are several expressions such as the following which function as subordinate conjunctions:

(a)	<u>di</u> 'while, when'	} / after <u>nə</u> ₁ — (v.8.5.4.;8.14.3.)
	<u>koTə</u> " "	
	<u>gaman</u> "while"	
	<u>kal</u> 'till, until'	

e.g.

TawuməTə yaddi maTə kataa-kəranne (yaddi yatə+di tə nə)
 to the town when go me call
 Call me when you go to the town.

Also:

TawuməTə yanə koTə maTə kataa-kəranne
 Call me when you go to the town.

pansələTə yanə gamaŋ kaDeeTat gihiŋ enne
 to the temple go while to the shop too go and come
 When you go to the temple go to the shop too.

kantooruwə wahənə-kal mame innə oonə
 the office close till I stay must
 I must stay till the office is closed.

(b) $\left. \begin{array}{l} \{ \text{hame} \} \text{ 'when' } \\ \{ \text{aame} \} \\ \{ \text{hæTiye} \} \text{ 'immediately after' } \\ \{ \text{gamaŋ} \} \\ \text{koTə 'when'} \end{array} \right\} / \text{ after } \left\{ \begin{array}{l} \text{nə}_2 \\ \text{yə} \\ \text{wə} \\ \text{pu} \end{array} \right\} \begin{array}{l} \text{--- (v.8.5.7.)} \\ \text{--- (v.8.5.8.)} \end{array}$

e.g.

lameya $\left\{ \begin{array}{l} \text{aawahame} \\ \text{aawaame} \end{array} \right\}$ hoŋdeTə saŋgaraha kərepalla
 the child when did come well entertain do
 When the child has come do entertain him well.

gameTə giyə-hæTiye/gamaŋ mame pansələTə yanəwa
 to the village immediately after going I to the temple go
 Immediately after going to (my) village, I pay a visit to
 the temple.

pissu balla $\left\{ \begin{array}{l} \text{kəawə-koTə} \\ \text{kaapu-koTə} \end{array} \right\}$ beet no-kəŋə hoŋde nəə
 the rabid dog when did bite medicine not doing good not
 When the rabid dog has bitten it is no good avoiding
 treatment.

8.14.6. Cause function subordinate conjunctions too are introduced after deleting the indicative modality of the aux. of the underlying constituent sentence. There are two conjunctions such as:

$\left\{ \begin{array}{l} \text{hinda} \\ \text{nisaa} \end{array} \right\}$ 'because, as' / $\left\{ \begin{array}{l} \text{nə}_1 \\ \text{nə}_2 \\ \text{yə} \\ \text{wə} \\ \text{pu} \end{array} \right\}$ —
 ..

e.g.

aadere-yi

lameya hoñdeTə wəDe kərəne-hinda/nisaa guruwəreya eyaaTə/

the child well work because the teacher(to) him fond is

The teacher is fond of the child because he learns well.

Before concluding this chapter by introducing a few more sentence connectives and conjunctions, it must be mentioned clearly that the sections 8.13. and 8.14. are not to be considered as complete accounts of coordination and subordination in Sinhalese. In addition to the participles and subordinate conjunctions introduced in the above mentioned sections, one has to take into account the process of relativisation, nominalisation and a reasonable number of connectives and conjunctions in any thoroughgoing study of coordination and subordination. Since the limited period of time available to me does not permit me to embark upon an exhaustive study of this aspect of syntax in Sinhalese, I simply propose to introduce a few sentence connectives and conjunctions in the next section without going into details.

8.15. SOME SENTENCE CONNECTIVES AND CONJUNCTIONS

8.15.1. There is a class of connectives, some of which are listed below, which function sometimes either as subordinate conjunctions or as connectives.

(ee)misak 'except (that), although'

e.g.

miniha aawa (ee) misak kisi deyak keruwe nəə

the man came except that any thing did not do

Even though the man came, he did not do any thing.

(ee) arə 'except (that)'

(ee) arunaame 'except (that), although'

namut 'but, though,..'

eet 'nevertheless, yet,..'

arat 'moreover, furthermore!

ee-unat 'however, but , yet, '.

ee-unaaTə ' " " " , although..'

itin 'then, so,..'

ii laŋgəTə }
ii gaawəTə } 'then, next, after that,..'

iiTə-passe 'after that'..

iiTə { issella
issərə(wela) } 'before that'

oyə widiyəTə 'thus, ..'

mehemə 'in this way'

həbəy 'but, yet,..'

ee-atəredi 'in the meantime'

etəkoTə 'then'

ee-anuwə 'accordingly'

eet-ekkəla 'besides that'

etc.

8.15.2. One may find a few coordinative conjunctions as well.

They are listed below:

t 'too, also, and'

e.g. :

mamə kaDeeTə giyaa, baDut genaawa

I to the shop went goods too brought

I went to the shop, (and) brought goods too.

yi.... yi 'and (in phrasal conjunction) '

e.g.

minihayi putayi gedərə innəwa
the man and (his)son and at home are
The man and his son are at home.

hari hari 'either or '

e.g.

pəxənə hari pənsələ hari dennə
pen or pencil or give

• Give me either the pen or the pencil .

ekko.... nəttan
nəti nan 'either or'

e.g.

ekko tamuse enəwa nəttan lemeya ewənəwa
either you come or the child send
Either you 'd better come or send the child.

t ... t ' and, as well as'

e.g.

maTə potatə oonə sallitə oonə
I the book want money and want
I want the book as well as money.

8.15.3. All these connectives and conjunctions and many more must be taken account of in any study of coordination and subordination. However, I conclude this chapter with this very brief account on the domain of 'complex sentences'.

P A R T T H R E E

M O R P H O P H O N O L O G Y

PART THREE
MORPHOPHONOLOGY

INTRODUCTION

III. 1. The purpose of this section on Morphophonology, the study of phonological shape of morphemes, 'words' and sentences, is in the attempt of a discussion of some phonological considerations relevant to the account of phonetic representation of sentences in Sinhalese.

III.2. To account for the choice of one of different realisations of the [+ and - sg] features of the category of number (see Ch.3.) I propose to establish a number of noun classes.

III.3. Syllabic structures are established for the explanation of the verb. (In the discussion of the NP and Verb, additional explanations than furnished under the syntactic discussion have been included as appropriate.) Verbs always combine with auxiliary in forming the phonological 'verb word'. A number of processes basically associated with verb forms are also discussed in the chapter on verb.

III.4. In another chapter, called Sandhi 1 (Internal sandhi) an attempt is made to introduce a number of phonological rules that must be applied in the production of the phonetic form of the units usually called 'words'. Finally in a yet another chapter, called Sandhi 2 (External sandhi), some additional phonological rules are introduced to account for the phonetic representation of whole sentences.

III.5. As an introduction to the study of morphophonology of Sinhalese it may be appropriate to introduce the inventory of vowels and consonants of spoken Sinhalese. Since a specification of possible vowel and consonant clusters may be useful, attempt is also made to provide a brief specification. The inventory of vowels and consonants given below is, except for a few modifications, mostly in agreement with the phonemes recognised by Coates, W.A. and De Silva, M.W.S.¹. Modifications such as the recognising of five nasals instead of three and four prenasalised stops enable us to represent data more clearly.

III.6. VOWELS IN SPOKEN SINHALESE

There are three front vowels - high, mid and low - [i, e and æ], and three corresponding back vowels - high, mid and low - [u, o and a] and one mid central vowel -shwa -[ə]. All these seven vowels may occur as long vowels. The length is represented throughout this thesis by doubling the vowel in question. We may tabulate the vowels in Sinhalese thus:

Table 1

Vowels	Front		Central		Back	
	long	short	long	short	long	short
High	ii	i	—	—	uu	u
Mid	ee	e	əə	ə	oo	o
Low	ææ	æ	—	—	aa	a

III. 7. Any vowel, short or long, except the mid central

¹ see Coates, W.A. and De Silva, M.W.S., 1960.

vowel, short and long (= [ə, əə]) can occur initially. Any vowel but the mid central long vowel [əə], can occur finally. All vowels can occur medially. (ə, əə can occur in the initial syllable when preceded by a consonant.)

III.8. CONSONANTS IN SPOKEN SINHALESE

There are eight plosives (or stops) of which four are voiceless and four are voiced. They are either bi-labial ([p, b]), dental and alveolar ([t, d]), retroflex ([ʈ, ɖ]) or velar ([k, g]). There are two palatal affricates, one voiceless and the other voiced ([tʃ and dʒ]). There are five nasals corresponding to the four classes of plosives and the palatal affricates. Nevertheless, the retroflex nasal ([ɳ]) occurs only in clusters where the second consonant is a retroflex stop ([ʈ or ɖ]). There are restrictions in relation to other nasals as well, and some of these are introduced later. The five nasals are the bi-labial ([m]), dental and alveolar ([n]), retroflex ([ɳ]), palatal ([ɲ]) and velar ([ŋ]). Then there is one lateral dental and alveolar ([l]), one rolled, dental and alveolar ([r]), four fricatives, labio-dental ([f]), dental and alveolar ([s]), palato-alveolar ([ʃ]) and glottal ([h]) and two continuants and semivowels, labial ([w]) and palatal ([j]).¹ Finally we have to recognise potentially five prenasalised stops such as, bi-labial prenasalised stop ([ṁb]), dental and alveolar prenasalised stop ([ṁd]), retroflex ([ṁND]), palatal ([ṁj]) and velar ([ṁg]). However, productively we get only four prenasalised stops as the palatal prenasalised stop [ṁj] is most rare,

¹ Terminology used here is that of the International Phonetic Association.

possibly for historical reasons (-cf. j's evolving to d as in Sk.,Pali, ṇj to ṇd in aṇjəṇə > aṇḍun (Sinh.) 'antenomy, cosmetic'). Yet [ṇj] occurs at least in one expression, namely [iṇjə] 'come', used in calling dogs and cattle etc.

However, as this prenasalised stop does not occur in any other word in Sinhalese, it may be excluded leaving only four prenasalised stops as given in the table 2 below.

Table 2

Consonants	bi-labial		labio-dental	dental and al-veolar		retro-flex		palato-alveolar	palat-al		velar		glo-ttal
	vl	vd	vl	vl	vd	vl	vd	vl	vl	vd	vl	vd	vl
plosive	p	b	-	t	d	T	D	-	-	-	k	g	-
affricate	-	-	-	-	-	-	-	-	c	j	-	-	-
prenasali- sed stop or plosive	-	(ṁb) ¹	-	-	(ṇd) ¹	-	(ṇD) ¹	-	-	-	-	(ṅg) ¹	-
nasal	-	m	-	-	n	-	(N) ¹	-	-	ɲ	-	(ŋ) ¹	-
lateral	-	-	-	-	l	-	-	-	-	-	-	-	-
rolled	-	-	-	-	r	-	-	-	-	-	-	-	-
fricative	-	-	f	s	-	-	-	ʃ	-	-	-	-	h
continuant and semi-vowel	-	w	-	-	-	-	-	-	-	y	-	-	-

¹ Those consonants within parentheses may not be recognised as separate phonemes. Yet their alphabetic recognition is necessary in this study to represent data orthographically and/or phonetically.

III.9. Throughout this thesis I have used the notation of the tables 1 and 2.

III.10. Of these consonants, the four prenasalised stops, ([mb, nd, ŋd, and ŋg]), the retroflex nasal ([N]) and velar nasal ([ŋ]) do not occur initially. All the consonants occur medially. The bi-labial and retroflex prenasalised stops, retroflex and palatal nasals and the palato-alveolar fricative do not occur word finally, however. Furthermore when bi-labial and dental and alveolar nasals occur word finally, they are usually ~~velarised~~, except perhaps in the educated usage where the elite tend to pronounce words more closer to the ~~reading~~ pronunciation, or the original pronunciation if the words in question are either loan words or from special registers. When prenasalised stops dental and alveolar and velar, ([nd, ŋg]), occur finally, the final stops usually always drop giving way to a full velar nasal [ŋ]. Consider these examples:

liṇd + e ⇒ liṇde 'the well', but liṇd + ∅ ⇒ *lin ⇒ liŋ 'wells'

aṅg + e ⇒ aṅge 'the horn', but aṅg + ∅ ⇒ *ang ⇒ aŋ 'horns'

cf. also:

poloṅg+aa ⇒ poloṅgaa ⇒ poləṅga 'the viper'

poloṅg+hu ⇒ polongu 'vipers' but

poloṅg ⇒ poloŋ in poloŋ telissa 'a kind of viper'

(poloŋ telissa by external sandhi, v. ESR7 in 12.1.5.)

III.11. Finally it must be mentioned that there are some consonants which occur in word final position only in a few direct loan words where original pronunciation is preserved; otherwise consonants such as b, d, T, D, c, j, g, m, n and r

usually do not occur word finally in native or derived Sinhalese words. However they occur in loan words as illustrated below.

- b : hab 'hub(s)'
job 'job(s)'
balb 'bulb(s)'
- d : ?
- T : biit ruuT 'beet root'
kærəT 'carrot(s)'
- D : huD 'hud(s)'
- c : biic 'beach(es)'
s(u)wic 'switch(es)'
pæc 'patch(es)'
- j : koleej 'college(s)'
loj 'lodge(s)'
- g : jag 'jug(s)'
- r : kaar 'car(s)'
baar 'bar(s)'
- n : Tin 'tin(s)'
pin 'pin(s)'
- m : kəlsiyəm 'calcium'
Tiim 'team(s)'

All these examples make it clear that these consonants -b, (d), T, D, c, j, g, r, n and m etc. occur in word final position only in loan words from English.

III.12. Next we have to examine the vowel clusters and consonant clusters in Sinhalese. It is assumed that no two non identical vowels can occur together. One may argue that there are diphthongs in Sinhalese, but throughout this study I

maintain that where^{vowels}ver two/are heard together as diphthongs, there exists a semi-vowel y or w in between those two vowels, however slight its pronunciation. In other words I hold the view that no two vowels except the same where a long vowel is the result, can occur together without an intervening semi-vowel, a consonant or a cluster. However, when we hear vowel clusters we must realise that all of them contain an intervening light accentuated semi-vowel y or w. Thus we may state the possible quasi-vowel combinations with the intervening semi-vowel as suggested below:

$$(a) \quad (i)i + \begin{bmatrix} \text{ə}(\text{ə}) \\ \text{e}(\text{e}) \\ \text{o}(\text{o}) \\ \text{æ}(\text{æ}) \\ \text{a}(\text{a}) \end{bmatrix} \Rightarrow (i)i \text{ y } \begin{bmatrix} \text{ə}(\text{ə}) \\ \text{e}(\text{e}) \\ \text{o}(\text{o}) \\ \text{æ}(\text{æ}) \\ \text{a}(\text{a}) \end{bmatrix}$$

$$(i)i + \text{u}(\text{u}) \Rightarrow (i)i \text{ w } \text{u}(\text{u})$$

$$(b) \quad (\text{e})\text{e} + \begin{bmatrix} \text{ə}(\text{ə}) \\ \text{i}(\text{i}) \\ \text{o}(\text{o}) \\ \text{æ}(\text{æ}) \\ \text{a}(\text{a}) \end{bmatrix} \Rightarrow (\text{e})\text{e} \text{ y } \begin{bmatrix} \text{ə}(\text{ə}) \\ \text{i}(\text{i}) \\ \text{o}(\text{o}) \\ \text{æ}(\text{æ}) \\ \text{a}(\text{a}) \end{bmatrix}$$

$$(\text{e})\text{e} + \text{u}(\text{u}) \Rightarrow (\text{e})\text{e} \text{ w } \text{u}(\text{u})$$

$$(c) \quad (\text{æ})\text{æ} + \begin{bmatrix} \text{ə}(\text{ə}) \\ \text{i}(\text{i}) \\ \text{e}(\text{e}) \end{bmatrix} \Rightarrow (\text{æ})\text{æ} \text{ y } \begin{bmatrix} \text{ə}(\text{ə}) \\ \text{i}(\text{i}) \\ \text{e}(\text{e}) \end{bmatrix}$$

$$(\text{æ})\text{æ} + \begin{bmatrix} \text{o}(\text{o}) \\ \text{a}(\text{a}) \end{bmatrix} \Rightarrow (\text{æ})\text{æ} \begin{bmatrix} \text{y} \\ \text{w} \end{bmatrix} \begin{bmatrix} \text{o}(\text{o}) \\ \text{a}(\text{a}) \end{bmatrix}$$

$$(d) \quad \text{ə} + \begin{bmatrix} \text{i}(\text{i}) \\ \text{e}(\text{e}) \\ \text{o}(\text{o}) \\ \text{æ}(\text{æ}) \\ \text{a}(\text{a}) \end{bmatrix} \Rightarrow \text{a} \text{ y } \begin{bmatrix} \text{i}(\text{i}) \\ \text{e}(\text{e}) \\ \text{o}(\text{o}) \\ \text{æ}(\text{æ}) \\ \text{a}(\text{a}) \end{bmatrix}$$

$$\begin{array}{l}
 \text{ə} + \text{u(u)} \Rightarrow \text{a w u(u)} \\
 \\
 \text{(e) (u)u} + \begin{bmatrix} \text{e(e)} \\ \text{æ(æ)} \\ \text{o(o)} \\ \text{a(a)} \\ \text{ə(ə)} \end{bmatrix} \Rightarrow \text{(u)u w} \begin{bmatrix} \text{e(e)} \\ \text{æ(æ)} \\ \text{o(o)} \\ \text{a(a)} \\ \text{ə(ə)} \end{bmatrix} \\
 \\
 \text{(u)u} + \text{i(i)} \Rightarrow \text{(u)u y i(i)} \\
 \\
 \text{(f) (o)o} + \begin{bmatrix} \text{e(e)} \\ \text{æ(æ)} \\ \text{u(u)} \\ \text{a(a)} \\ \text{ə(ə)} \end{bmatrix} \Rightarrow \text{(o)o} \begin{matrix} \left\{ \begin{matrix} \text{y} \\ \text{w} \end{matrix} \right\} \\ \text{w} \\ \text{w} \\ \text{w} \end{matrix} \begin{bmatrix} \text{e(e)} \\ \text{æ(æ)} \\ \text{u(u)} \\ \text{a(a)} \\ \text{ə(ə)} \end{bmatrix} \\
 \\
 \text{(o)o} + \text{i(i)} \Rightarrow \text{(o)o y i(i)} \\
 \\
 \text{(g) (a)a} + \begin{bmatrix} \text{i(i)} \\ \text{e(e)} \\ \text{æ(æ)} \\ \text{ə(ə)} \end{bmatrix} \Rightarrow \text{(a)a y} \begin{bmatrix} \text{i(i)} \\ \text{e(e)} \\ \text{æ(æ)} \\ \text{ə(ə)} \end{bmatrix} \\
 \\
 \text{(a)a} + \begin{bmatrix} \text{u(u)} \\ \text{o(o)} \\ \text{ə(ə)} \end{bmatrix} \Rightarrow \text{(a)a w} \begin{bmatrix} \text{u(u)} \\ \text{o(o)} \\ \text{ə(ə)} \end{bmatrix}
 \end{array}$$

If we accept the facts stated above we have to admit that there are no vowel clusters in Sinhalese, only long or short vowels.

III.13. Now let us examine the different possible consonant clusters in Sinhalese. We find two-part consonant clusters occurring both word initially and medially but never finally; a few three-part consonant clusters occur mostly medially, except for one or two cluster(s) such as str in strii 'female,

woman' which occur initially. Most, but not all, of the consonants may occur doubled medially, however. Many more clusters are confined either to loan words or educated speech. The two-consonant clusters that occur medially are given in table 3 (q.v.) where the clusters within parentheses occur in learned usages.

III.14. Both consonant clusters that occur word initially are found in loan words -- mostly in the speech of the educated. The double-consonant clusters occurring initially in Sinhalese are given in table 4(q.v.).

III.15. As stated earlier (v.III.13), there are a few possible three-part consonant clusters which occur medially in most cases, in Sinhalese. If we examine tables 3 and 4 we see that the cluster consisting of r as its second consonant seems comparatively productive in the language. The same cluster occurs in many three-part consonant clusters as well. In most cases the two-part consonant cluster with a second r (i.e. Cr) is preceded by either a homorganic nasal consonant, or a homorganic stop. There may be other combinations such as in -str- and -ksm- etc. All of the clusters with -Cr as the second and third consonants may be stated as given in table 5 (q.v.).

When assimilation produces three-part consonant clusters, one consonant is dropped, usually the last(v.11.2.11 e.).

Table 3

	p	b	t	d	T	D	c	j	k	g	m	n	N	ɲ	ɳ	l	r	f	s	ʃ	h	w	y
p	pp	-	(pt)	-	-	-	-	-	-	-	pm	pn	-	-	-	(pl)	pr	-	(ps)	-	-	-	-
b	-	bb	-	(bd)	-	-	-	-	-	-	-	-	-	-	-	(bl)	br	-	-	-	-	-	(by)
t	(tp)	-	tt	-	-	-	-	-	(tk)	-	tm	tn	-	-	-	tl	tr	-	(ts)	-	-	(tw)	(ty)
d	-	(db)	-	dd	-	-	-	-	-	(dg)	dm	-	-	-	-	-	dr	-	-	-	-	(dw)	(dy)
T	-	-	-	-	TT	-	-	-	-	-	-	(Tn)	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-	-	-	DD	-	-	-	(Dg)	-	-	-	-	-	-	-	-	-	-	-	-	-
c	-	-	-	-	-	-	cc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
j	-	-	-	-	-	-	-	jj	-	-	-	-	-	(jp)	-	-	(jr)	-	-	-	-	(jw)	(jy)
k	-	-	(kt)	-	-	-	-	-	kk	-	km	kn	-	kp	-	(kl)	kr	-	ks	(kf)	-	kw	(ky)
g	-	(gb)	-	(gd)	-	-	-	-	-	gg	gm	gn	-	gp	-	(gl)	gr	-	-	-	-	-	(gy)
m	mp	mb	-	-	-	-	-	-	-	-	mm	-	-	-	-	ml	(mr)	-	-	-	-	-	-
n	-	-	nt	nd	-	-	-	-	-	-	-	nn	-	-	-	nl	-	-	ns	-	-	nw	ny
N	-	-	-	-	NT	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɲ	-	-	-	-	-	-	ɲc	ɲj	-	-	-	-	-	ɲɳ	-	-	-	-	-	-	-	-	-
ɳ	-	-	-	-	-	-	-	-	ɳk	ɳg	-	-	-	-	ɳɳ	-	-	-	ɳs	(ɳf)	ɳh	ɳw	ɳy
l	lp	lb	(lt)	ld	-	-	-	-	lk	lg	lm	-	-	-	-	ll	-	(lf)	(ls)	-	-	lw	ly
r	(rp)	(rb)	rt	rd	-	-	(rc)	rj	rk	rg	rm	rn	-	-	-	rl	-	-	rs	(rf)	-	rw	ry
f	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
s	sp	sb	st	sd	sT	-	sc	-	sk	sg	sm	sn	-	-	-	(sl)	sr	-	ss	-	-	sw	sy
ʃ	-	-	-	-	(ʃT)	-	(ʃc)	-	(ʃk)	-	(ʃm)	(ʃn)	-	-	-	(ʃl)	(ʃr)	-	-	-	-	(ʃw)	(ʃy)
h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(hr)	-	-	-	-	-	-
w	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(wr)	-	-	-	-	ww	(wy)
y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	yw	yy

Two-part consonant clusters (medial)

Table 4

	p	b	t	d	T	D	c	j	k	g	m	n	N	ɲ	ɳ	l	r	f	s	ʃ	h	w	y
p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	pr	-	-	-	-	-	-
b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	bl	br	-	-	-	-	-
t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	tr	-	-	-	-	-	ty
d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	dr	-	-	-	-	dw	-
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Tr	-	-	-	-	-	-
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dr	-	-	-	-	-	-
j	-	-	-	-	-	-	-	-	-	-	-	-	-	jp	-	-	-	-	-	-	-	jw	jy
k	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	kr	-	-	kʃ	-	-	-
g	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	gl	gr	-	-	-	-	-
m	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ml	-	-	-	-	-	-
n	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ny
f	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	fr	-	-	-	-	-	-
												sn	-	-	-	sl	sr	-	-	-	-	sw	-
												-	-	-	-	ʃl	ʃr	-	-	-	-	ʃw	-
h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	hr	-	-	-	-	-	-
w	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	wr	-	-	-	-	-	wy

Two-part consonant clusters (initial)

Table 5

	pr	br	tr	dr	jr	kr	gr	sr	ʃr
m	mpr	mbr	-	-	-	-	-	-	-
n	-	-	ntr	ndr	-	-	-	-	-
ŋ	-	-	-	-	-	ŋkr	ŋgr	-	-
p	ppr	-	-	-	-	-	-	-	-
b	-	bbr	-	-	-	-	-	-	-
t	-	-	ttr	-	-	-	-	-	-
d	-	-	-	ddr	-	-	-	-	-
j	-	-	-	-	jjr	-	-	-	-
k	-	-	-	-	-	kk̐r	-	-	-
g	-	-	-	-	-	-	ggr	-	-
s	-	-	-	-	-	-	-	ssr	-
ʃ	-	-	-	-	-	-	-	-	ʃʃr

Three-part consonant clusters (medial)

III.16. Ending the introduction at this point, I turn to the discussions of different shapes of nouns and verbs which comprise the next two chapters. The nouns have one basic form: certain changes that occur when feminine nouns are derived from masculine (or neutral) nouns will not be discussed, as derivational morphology is not included in this study. All other changes nouns are subject to, can be explained in relation to sandhi between the nouns and the number realisations. In chapter 9, to explain the choice between different number realisations, nouns are classified into a number of classes. Verbs deserve a thorough study as they have different shapes in different contexts. Thus, the verb

is studied in detail in chapter 10.

Adjectives, conjunctions, connectives and different other morphemes introduced as realisations of different functions or processes (see also Appendixes) etc. have no further separate discussion, the relevant syntactic and semantic discussions themselves are considered sufficient. In most cases there is just one basic form and any changes in that form may be due to sandhi between two morphemes: this is the subject of chapter 11. Finally sandhi between 'words' is discussed in chapter 12.

CHAPTER 29.0. (THE PHONOLOGICAL) NOUN PHRASE

9.0.1. In chapters one and two, I have discussed nouns -- common, proper, kinship and status -- and pronouns from a syntactic point of view. I there attempted to introduce phonological nouns **together** with a specification of some syntactic and semantic features that constitute the deep structure of those nouns and pronouns.

9.0.2. Not all proper nouns, kinship nouns, status nouns and most pronouns need be discussed here as they may be introduced and explained within the syntactic description itself (as we have attempted in the relevant sections of this thesis). One or two pronouns which need further explanation will be discussed later. Meanwhile, to account for the factors that govern the selection of alternative realisations of the category of number (i.e. [+sg] and [-sg] features) in relation to common nouns, we have to classify the latter. We may be able to account for some of the class choices phonologically, taking into account the vocalic or consonantal nature of the final phonetic element of the noun. While doing so, we must also account for certain exceptions in some other way. If we set up some noun classes phonologically, taking into account the associated number realisations, we can account for all nouns without much difficulty. In the next section, I propose to establish a number of phonological noun classes for the common noun.

9.1. A SET OF PHONOLOGICAL NOUN CLASSES FOR THE COMMON NOUN

9.1.1. All common nouns, abstract or otherwise, are associated

either with singular number only, plural number only, or with both. Taking into account only the plural (i.e. [-sg]) number realisation in establishing noun classes we find that we may be able to set up five broad classes of common nouns. We must then proceed to subclassification to account for the difference in singular number realisation. Thus embracing both singular and plural forms, we are able to establish a number of noun classes on the basis of the uniformity existing throughout the whole class.

9.1.2. On the basis of different [+sg] and [-sg] realisations, I propose to recognise ten classes of phonological nouns in the description of common nouns and their choice of number realisation in Sinhalese. These ten classes are discussed with examples in the subsequent sections of this chapter.

9.1.3. Class 1

All nouns of class 1 take o as [-sg] realisation and aa as [+sg] realisation. The class consists of a large number of vowel final nouns and a few consonant final nouns as illustrated below:

-aa	: haa 'hare'	taaraa 'duck'
	kaa 'moth'	apjilaa 'a kind of fish'
-i	: diwi 'leopard'	geṃbi 'frog'
	ibi 'tortoise'	māsi 'fly'
	(koṭi 'tiger') ¹	
-ææ	: nææ 'relation'	urulææ 'civet cat'
	kæsbææ 'turtle'	pattææ 'centipede'

1 This is given in parenthesis because it can belong to another class - class 3 (v.9.1.5.).

-u	: balu 'dog'	yaalu 'friend'
	kolu 'boy'	wasu 'calf'
	buuru 'ass'	uuru 'pig'
	kapuTu 'crow'	makunu 'bug'
-ee	: wee 'termite'	
-ə	: muwə 'deer'	garuDe 'centipede'
	asse 'horse'	naagə 'cobra'
-C	: kaak(k) 'crow'	mayin 'myna '
	nimun(n) 'twin'	

9.1.4. Class 2

All nouns that belong to this class select hu as the [-sg] realisation. The [+sg] is aa as in class 1. This class includes many consonant final nouns as well as some vowel final nouns -- especially some-aa final and -ə final with or without a preceding r -- as illustrated :

-aa	: giraa 'parrot'	rilaa 'ape'
	radaa 'washerman'	pilaa 'larva'
-rə	: hore 'thief'	eŋDeere 'herdsman'
	kore 'lame'	toore 'seir fish'
	debere 'hornet'	bamere 'wasp'
	monere 'peacock'	moore 'shark'
-ə	: aañde 'eel'	wedə 'physician'
	goone 'elk'	(samənele 'butterfly') ¹
-C	: æt 'elephant'	kok 'crane'
	kææral 'wood pecker'	kiŋbul 'crocodile'
	gon 'ox'	balal 'cat'

1 This may belong to another class as well, class 4 (v.9.1.6.).

minis 'man'	walas 'bear'
sat 'beast; being ...'	kukul 'fowl'
wawul 'bat'	kowul 'cuckoo'
poloŋg 'viper'	luul 'a fresh water fish'

9.1.5. Class 3

The nouns of this class combine with zero (=∅), the [-sg] realisation, and aa the [+sg] realisation. However, as suggested above (v.9.1.3.), most -i final nouns can take o as the plural realisation as well. One finds both vowel final (-i) and consonant final nouns in this class. They include:

-i	:	koTi 'tiger'	ali 'elephant'
		kaDi 'large black ant'	kaawaaTi 'oyster'
		kuum̃bi 'ant'	gærəŋDi 'rat snake'
		geri 'black ant'	nari 'fox'
		mugəTi 'mongoose'	pirimi 'male;man'
		daŋDi 'a fresh water fish'	
		(also v. 9.1.3. <u>-i</u> final nouns.)	
-C	:	harak 'cattle'	nay 'cobra'
		taləgoy 'iguana'	kabərəgoy 'spotted iguana'
		kurulugoy 'falcon'	baTəgoy 'orange breasted green pigeon'

9.1.6. Class 4

There are a few nouns that take i as the [-sg] realisation. They too select aa as [+sg] realisation. Most of these nouns are -ə final, as listed below:

-ə	:	sarəpə 'serpent'	kabərə 'spotted iguana'
		balə 'a sea fish'	(samənələ 'butterfly') ¹

1 cf. 9.1.4.

9.1.7. Class 5

These nouns also combine with the o plural marker but they take either -ə if the nouns end in any vowel except i(i), or -ə or ∅ if the nouns are -i(i) final. Thus to account for the optional $\left\{ \begin{smallmatrix} \emptyset \\ \text{ə} \end{smallmatrix} \right\}$ selection of -i(i) final nouns and obligatory ə selection if they are not i(i) final, I propose to sub divide class 5 into 5a. to include i(i) final nouns and 5b to include other nouns, as illustrated below:

5a

<u>-i(i)</u> :	bəlli 'bitch'	kikili 'hen'
	iiri 'sow'	kaakki 'hen crow'
	kirilli 'hen bird'	girəwi 'hen parrot'
	rilewi 'female ape'	wəssi 'heifer'
	kelii 'girl'	daasi 'servant woman'
	ətinni 'cow elephant'	wələhinni 'she bear'
	həpinni 'female cobra'	yassəni 'female demon'

5b

<u>-aa</u>	: maataa 'mother'	mahilaa 'woman'
	upaasikaa 'female devotee'	kaantaa 'lady, woman'
<u>-u</u>	: aṁbu 'wife'	

9.1.8. Class 6

This class includes only a few nouns. They take hu as plural marker but, as pointed out in relation to class 5, they take either ∅ or ə as singular marker. Most of these nouns end in a consonant as the examples show: there is just one noun which ends in a vowel. Consider the following examples:

<u>-C</u>	: koTi-den 'tigress'	siṁhə-den 'lioness'
	mii-den 'female buffalo'	den 'cow'
<u>-i</u>	: gəəni 'woman'	

9.1.9. Class 7

This class, too, is sub divided, (a) and (b), to account for the difference in selection of plural markers. Certain nouns of this class take \emptyset only as the plural marker whereas certain other nouns take either \emptyset or wal optionally. In both cases a, is the singular realisation. The sub class 7(a) which has only the \emptyset plural marker, consists of both vowel final and consonant final nouns. 7(b), it seems, is confined to certain long vowel final nouns. The two sub classes are illustrated below:

7a

- | | | |
|-----|--------------------------------------|----------------------|
| -i | : geDi 'fruit, abscess' | iri 'line' |
| | pæni 'syrup' | paTTi 'herd' |
| | lori 'lorry' | piTi 'flour, ground' |
| -ii | : lii 'wood, timber' | ii 'dart, arrow' |
| | mii 'hive' | hii 'ploughing' |
| -ææ | : bææ 'half (of a nut)' | wææ 'adze' |
| -u | : aTu 'granary' | oru 'boat' |
| | kaDu 'sword' | puTu 'chair' |
| | kopu 'case' | pokunu 'pond' |
| -oo | : poroo 'axe' | soloo 'stanza' |
| | reeDiyoo 'radio'(cf. class 10 also.) | |
| -ee | : lee 'blood' | |
| *C | : aŋg 'horn' | liŋd 'well' |
| | gas 'tree' | gal 'rock' |
| | kan 'ear' | agal 'ditch' |
| | pas 'sail' | |

7b

- | | | |
|-----|---------------------|-----------------|
| -aa | : maaligaa 'palace' | upæmaa 'simile' |
| | gabæDaa 'store' | gaataa 'stanza' |

guhaa 'cave'	panaa 'comb'
sañgeraa 'magazene'	bāsaa 'language'

-ææ : horeñææ 'trumpet'	kælææ 'forest'
kurulææ 'pimple'	

9.1.10. Class 8

This class includes those nouns that have wal only as plural marker and \emptyset as singular marker. Most of these nouns are e final. Some are given below:

-e : kaTē 'mouth'	añdē 'bed' ¹
ælē 'canal'	gañgē 'river'
kañdē 'stem, log' ¹	dorē 'door'
paarē 'road, blow'	baDē 'belly'
wætē 'fence'.	

9.1.11. Class 9

Those nouns that have ee as singular marker and \emptyset as plural marker belong to this class. Most of these nouns are either e final or consonant final. They include:

-e : alē 'yam'	ætē 'bone, seed'
añē 'nail'	kurē 'hoof'
gætē 'knot'	kolē 'leaf'
pilimē 'image, idol'	benē 'hollow of a tree'
leDē 'sickness'	wanē 'sore'
wæDē 'work'	hætTē 'jacket'
henē 'thunder'	aasənē 'seat'
-C : banis 'bun'	kos 'jak'(fruit)
pol 'coconut'	naaram 'mandarin'
bayisikal 'bicycle'(v.cl. 10 also.)	

¹ These nouns may take -an as plural marker instead of wal. e.g. añdan 'beds', kañdan 'logs'.

9.1.12. Class 10

This class consists of many nouns which are loan words from English. They combine with the \emptyset plural marker (cf. classes 7a and 9 above) and the ekə singular marker. These nouns may be either vowel final or consonant final. A few examples are given below:

- C : kaar 'car' bayisikal 'bicycle' (v.cl. 9 above)
 bas 'bus' keek 'cake'
 sup 'soup'
- V : reeDiyoo 'radio' (cf. cl. 7a above)

9.1.13. I believe that most nouns that belong to the broad class called common noun, can be included in one or other of these ten classes. The choice of the appropriate number realisation from the different possible alternative realisations, can also be easily explained in relation to these ten classes. As I indicated earlier (v.III.16) all the changes these nouns undergo in different contexts can be stated in terms of sandhi between morphemes or 'words'. Thus we conclude the section on noun classes.

9.2. ALLOMORPHIC VARIATION OF 1P PRONOUN AND 2P DEROGATORY PRONOUN

9.2.1. Proper nouns, kinship nouns and status nouns need not be discussed at all as the changes they are subject to can be accounted for in terms of sandhi. Most pronouns can also be dealt with under sandhi but with regard to 1P pronouns (v.2.1.2.-2.1.4.) and 2P derogatory pronouns (v.2.2.5. and 2.2.9.) we have to introduce some allomorphic variations of the basic form of the pronoun introduced in the syntactic discussion (v.2.1.2.-2.1.4; 2.2.5.; 2,2,9.).

9.2.2. We have introduced two forms mame 'I' (v.2.1.2.) and api 'we' (2.1.3. - 2.1.4.) as the realisations of the different 1P pronouns. Phonologically mame and api have a number of alternative forms which occur in certain contexts. These allomorphic variations of the two basic forms may be stated in a context sensitive rule of the following form:

$$\begin{array}{lcl}
 \text{mame} & \longrightarrow & \left\{ \begin{array}{l} \left\{ \begin{array}{l} \text{mame} \\ \text{maŋ} \end{array} \right\} / ___ \# / +\text{laŋge} \text{ etc.} \\ \\ \text{maa} & / ___ \text{wə} / \# +\text{laŋge} \text{ etc.} \\ \\ \text{ma} & / ___ \text{Tə/gen /ge.} \end{array} \right. \\
 \\ \\
 \text{api} & \longrightarrow & \left\{ \begin{array}{l} \text{api} & / ___ \# / (\text{wə}) / +\text{laŋge} \\ \\ \left\{ \begin{array}{l} \text{api} \\ \text{ape} \end{array} \right\} & / ___ \text{Tə/gen /ge.} \end{array} \right.
 \end{array}$$

9.2.3. We also have introduced two derogatory 2P pronouns too 'you' and topi 'yuo pl.'. With regard to these two forms also, there are a few allomorphic variations that must be recognised. They may be stated as suggested in the following rule, similar to that given above for allomorphic variations of mame and api.

$$\begin{array}{lcl}
 \text{too} & \longrightarrow & \left\{ \begin{array}{l} \text{too} / ___ \# / \text{wə} / + \text{laŋge} \\ \\ \text{to} & / ___ \text{Tə/gen /ge.} \end{array} \right. \\
 \\ \\
 \text{topi} & \longrightarrow & \left\{ \begin{array}{l} \text{topi} / ___ \# / \text{wə} / + \text{laŋge} \\ \\ \left\{ \begin{array}{l} \text{topi} \\ \text{tope} \end{array} \right\} & / ___ \text{Tə/gen /ge.} \end{array} \right.
 \end{array}$$

9.2.4. There is no need to discuss all nouns and pronouns phonologically apart from those that have already been discussed, as they can be satisfactorily explained in the appropriate syntactic discussion (see Ch. 1 and 2). Let us, therefore, here conclude our discussion on nouns and consider some allomorphic variations in relation to some of the number realisations.

9.3. ALLOMORPHIC VARIATION OF SOME [-sg] NUMBER REALISATIONS

9.3.1. The basic realisation of [-sg] number category has been represented in 3.1.8.. Yet, some alternants of those basic forms must be introduced in relation to certain contexts of occurrence. As far as [+sg] realisation is concerned we need not recognise any allomorphs for the different basic realisations. However, when we take into consideration the different realisations of [-sg] feature, we see that most of them have two variants, one occurring before word boundary and the other before certain morphemes which the language does not recognise as having the status of 'word' which is a very arbitrary unit (see 11.1.). These variants are discussed in the subsequent sections.

9.3.2. We have already recognised seven alternative realisations of the [-sg] feature of the number category in Sinhalese (v.3.1.8.) as:

$$\left[\begin{array}{c} \text{No} \\ [-sg] \end{array} \right] \rightarrow \left\{ \begin{array}{l} o \\ hu \\ i \\ \emptyset \\ wal \\ la \\ wa \end{array} \right.$$

Of these seven formatives six have two forms each, one before $\#$ and the other before a formative where no word boundary ($\#$) between the two is possible. The only one not having two forms is la, which occurs in any context.

9.3.3. All these seven formatives can occur before $\#$, but when they, except la, occur before certain formatives such as the case realisations Tə, gen, en, in, wə, ə, e(e) etc.(v.Ch. 4) they are manifested in different other forms when compared with the six which occur before $\#$. Let us now introduce the variant realisations for plural number in the non-word boundary context.

9.3.4. $[-sg] \rightarrow$ o has o before $\#$ and an before Tə, gen, wə, ge etc. This may be stated as:

$$[-sg] \rightarrow \begin{cases} o / _ \# \\ an / _ Tə/gen / etc. \# \end{cases}$$

When there is a possible $\#$ before a case realisation such as laŋgə, gaawə etc. o and an may occur indiscriminately. Consider the following examples:

balu + o $\# \Rightarrow$ ballo $\#$ 'dogs' (v.3.1.9.)

balu + an + Tə \Rightarrow ballanTə 'to the dogs'

balu + an + gen \Rightarrow ballangen 'from the dogs'

balu + ^o_{an} $\#$ laŋgə \Rightarrow ball ^o_{an} $\#$ laŋgə 'near the dogs'

9.3.5. hu has hu and hun forms in the two environments. This may be stated, in a similar way to the above formulation:

$$[-sg] \rightarrow \begin{cases} hu / _ \# \\ hun / _ Tə/gen / etc. \# \end{cases}$$

horə +hu ## ⇒ horu ## 'thieves' (v.3.1.9.)
 horə +hun+Tə ⇒ horunTə 'to the thieves'
 horə + $\begin{Bmatrix} \text{hu} \\ \text{hun} \end{Bmatrix}$ ## laŋgə ⇒ hor $\begin{Bmatrix} \text{u} \\ \text{un} \end{Bmatrix}$ ## laŋgə 'with the thieves'

9.3.6. i has i and in forms in the two contexts. This may be formulated as follows:

[-sg] → $\begin{cases} i & / _ \# \\ in & / _ Tə/gen \text{ etc. } \# \end{cases}$

sarəpə + i ## ⇒ sarəpayi ## 'serpents' (v.3.1.9.)
 sarəpə + in+Tə ⇒ sarəpəyinTə 'to the serpent s'
 sarəpə + $\begin{Bmatrix} i \\ in \end{Bmatrix}$ ## ⇒ sarəp $\begin{Bmatrix} ayi \\ əyin \end{Bmatrix}$ ## laŋgə 'with the serpents'

9.3.7. \emptyset has to be explained differently. It may be treated under two sections (a) and (b).

(a) When \emptyset occurs with class 3 nouns (v.9.1.5.) it has \emptyset and in or in a few cases un in the two environments. This may be stated with such examples as:

[-sg] → $\begin{cases} \emptyset & / _ \# \\ in & / _ Tə / \# \\ un & / harak _ Tə / \dots \# \end{cases}$

koTi + \emptyset ## ⇒ koTi ## 'tigers'
 koTi +in +Tə ⇒ koTinTə 'to the tigers'
 harak +un+Tə ⇒ harəkunTə 'to the cattle'
 koTi + $\begin{Bmatrix} \emptyset \\ in \end{Bmatrix}$ ## laŋgə ⇒ $\begin{Bmatrix} koTi \\ koTin \end{Bmatrix}$ ## laŋgə 'near the tigers'
 harak + $\begin{Bmatrix} \emptyset \\ un \end{Bmatrix}$ ## laŋgə ⇒ $\begin{Bmatrix} harak \\ harəkun \end{Bmatrix}$ ## laŋgə 'near the cattle'

(b) When \emptyset occurs with nouns of classes 7, 9 and 10 (v.9.1.9., 9.1.11 and 9.1.12.), it has \emptyset and wal in the two contexts.

We may represent this in the following formulation:

$$[-sg] \rightarrow \begin{cases} \emptyset & / _ \# \\ wal & / _ Tə / \text{ en etc.} \end{cases}$$

gas + \emptyset # \Rightarrow gas # 'trees'

gas + wal + Tə \Rightarrow gaswəl-ə-Tə 'to the trees'

gas + \emptyset # laṅgə \Rightarrow gas # laṅgə 'near the trees'

*gas + wal # laṅgə \Rightarrow *gaswal # laṅgə. (unacceptable)

9.3.8. wal has wal and walwal in the two contexts. This may be stated as :

$$[-sg] \rightarrow \begin{cases} wal & / _ \# \\ walwal & / _ Tə / \text{ in etc.} \end{cases}$$

ələ + wal # \Rightarrow ələwal # 'canals'

ələ + walwal + Tə \Rightarrow ələwalwəl-ə-Tə 'to the canals'

ələ + wal # laṅgə \Rightarrow ələwal # laṅgə 'near the canals'

*ələ + walwal # laṅgə \Rightarrow *ələwalwal # laṅgə (unacceptable)

9.3.9. wa has wa and wa-wal in the two environments. We may formulate this as :

$$[-sg] \rightarrow \begin{cases} wa & / _ \# \\ wawal & / _ Tə / \text{ in.etc.} \end{cases}$$

ee + wa # \Rightarrow eewa # 'those things'

ee + wawal + Tə \Rightarrow eewawəl-ə-Tə 'to those things'

ee + wa # laṅgə \Rightarrow eewa # laṅgə 'near those things'

*ee + wawal # laṅgə \Rightarrow *eewawal # laṅgə (unacceptable)

9.3.10. It now only remains to discuss the sandhi rules which account for the phonetic representation of noun phrases in Sinhalese. This will be done in chapters 11 and 12 and so we may conclude the chapter with a summary of the complete realisation of [-sg] feature of the number category in Sinhalese including noun classes :

[Nc
[-sg]] →

{	{ o /___# an /___ Tə/gen..# }	/ phono. N.cl. 1	5a 5b	} — (v.9.1.)
	{ hu /___# hun /___ Tə/gen..# }	/ phono.N. cl. 2	6	} — (v.9.1.)
	{ i /___# in /___ Tə/gen..# }	/ "	4	} — (v.9.1.)
	{ ∅ /___# [in] /___ Tə/gen..# [un] /___ Tə/gen..# }	/ [" harak	3	} — (v.9.1.)
	{ ∅ /___# wal /___ Tə/en.. }	/ phono.N. cl.	7a 7b 9 10	} — (v.9.1.)
	{ wal /___# walwal /___ Tə/in.. }	/ "	8 (7b)	} — (v.9.1.)
	{ wa /___# wawal /___ Tə/ in.. }	/ [3P pro -ani]	—	
	la /___ #/Tə/gen.../	proper N. kinship N. status N. pronoun ₁	}	—

1pronoun ≠ [1P pro]
[2P pro]
[+dero]
[3P pro]
[-ani]

For [1P pro] v. 9.2.2.

For [2P pro
+dero] v. 9.2.3.

CHAPTER 1010.0. (THE PHONOLOGICAL) VERB

10.0.1. As stated earlier (v.III.3.) the phonological description of the verb in this chapter will consist of the establishment of the general syllabic structure of the verb.

10.0.2. Since the syllabic structure of causative verbs formed with the causativiser wə may be included with other non-causative verbs when certain context based verb form changes are being explained, an attempt will first be made here to study the syllabic structure of the causative verb, prior to any attempt to study the syllabic structure of the phonological verb in general -- to include both causative and non-causative.

10.1. CAUSATIVE VERB

10.1.1. We need to discuss only those causative verbs which are formed with the introduction of the causativiser wə. As far as the pure causative^{verb} salasse is concerned we need merely mention that its behaviour is similar to any other verb of CVCVCCə structure (v.10.2C.2.). The following are the resulting structures when causativiser wə is added to different verbs to form causative verbs.

10.1.2. When wə is added to monosyllabic verbs the result is:

$$(C)V \left(\begin{Bmatrix} V \\ C \end{Bmatrix} \right) wə \text{ but } * \begin{Bmatrix} VC \\ VV \end{Bmatrix} wə .$$

This includes the following structures .

Vwə : e.g. ewə 'send'

CVwə : kawə 'feed , cause to eat'
 powə¹ 'feed, cause to drink'

¹ po is a variant of bo 'drink' (v. 10.6A.3(f)).

CVVwə : naawə 'cause to bathe'

CVCwə : ganwə > gannə 'cause to buy, take '

10.1.3. When wə is added to disyllabic (C)VCi verbs, the final i is dropped before wə and the remaining (C)VC + wə are joined together involving progressive assimilation between C + w producing -CCə (i.e. (C)VCCə) except when the (C)VCi is (C)VTi or (C)Vri. When the structure is (C)VTi or (C)Vri assimilation does not take place but the final i is changed to shwa (ə). This may be stated as:

$$(C)VC_1i + wə \Rightarrow (C)VC_1wə \Rightarrow (C)VCCə$$

$$C_1 \neq \underline{t} \text{ or } \underline{r}.$$

$$(C)VTi + wə \Rightarrow (C)VTəwə$$

$$(C)Vri + wə \Rightarrow (C)Vrəwə.$$

e.g.

gili + wə \Rightarrow gilwə \Rightarrow gille 'cause to swallow'

ari + wə \Rightarrow arəwə 'cause to open...'

10.1.4. However the (C)VCCə resulting from (C)VCwə is similar to any (C)VCCə disyllabic verb. (C)VCCə from (C)VT/rəwə are now trisyllabic structures. The causative (C)VCCə can take wə again as disyllabic (C)VCCə structures can take wə to form (C)VCCəwə structures (see below).

10.1.5. When wə is added to disyllabic (C)VC(C)ə structures, no changes take place in most cases, except when the C immediately preceding the final ə is one of p, b, m, s or h, and (C)VC(C)ə + wə are joined to form trisyllabic structures of (C)VC(C)əwə type. However, when the C preceding the final ə is one of p, b,

m, s or h, the final ə is deleted before wə and the structure (C)VC + wə are joined together involving progressive assimilation producing another disyllabic (C)VCCə structure. Just like any other (C)VCCə, it can also undergo further changes till the final syllable becomes wə (i.e. (C)VCCəwə) because a verb in Sinhalese can be expanded until the final syllable is wə whether it occurs in disyllabic, trisyllabic or quadrisyllabic structures. The final syllable wə may or may not be the causativiser wə. In most cases after wə no further elements other than auxiliaries can be added. The basic summary of this section is:

$$(C)VC_1(C)ə + wə \Rightarrow (C)VC_1(C)əwə$$

$$C_1 \neq p, b, m, s \text{ or } h$$

$$(C)VC_2ə + wə \Rightarrow (C)VC_2wə \Rightarrow (C)VC_2C_2ə$$

$$C_2 \neq p, b, m, s \text{ or } h$$

e.g.

kərə + wə \Rightarrow kərəwə 'cause to do '

alle + wə \Rightarrow allewə ' " to catch'

but,

kapə + wə \Rightarrow kapwə \Rightarrow kappə 'cause to cut'

10.1.6. When wə is added to verbs of (C)VCə structure, the final ə is either deleted and the remaining (C)VC + wə are joined together incurring progressive assimilation (= C + w \Rightarrow CC) or changed to ə and the resulting (C)VCə + wə are joined. In certain cases, however, the front vowels of the initial syllable change to the corresponding back ones. If the first syllable nucleus vowel is ə(ə), it must be changed to a(a) in all contexts.

cf. pəde \Rightarrow paadəwə 'cause to become clear'

əde \Rightarrow addə 'cause to pull'

If the initial syllable nucleus vowel is either i(i) or e(e) (in all CVCe structures the initial vowel nucleus is a front vowel), that i(i) or e(e) may remain unaltered even when wə is added, and therefore, one finds it difficult to arrive at a rule to account for the change of i(i) and e(e) to u(u) and o(o) respectively. With regard to i, at least, in a particular environment, I could find some consistency of i changing to u when wə is added. If i of the initial syllable is followed by p in (C)VVCe structures before wə, it is changed to u in most (if not all) contexts. That is:

$i \Rightarrow u / C_p ()wə.$

e.g. pipe +wə \Rightarrow pupwə \Rightarrow puppe 'cause to open'

However, with regard to many other verbs such a consistent formation seems impossible. Consider these examples, for instance, where i remains unchanged in ide 'mellow' but changes to u in mide 'curdle, freeze':

ide +wə \Rightarrow idəwə 'cause to ripen'

ride +wə \Rightarrow ridəwə/ridde 'hurt'

mide +wə \Rightarrow mudəwə 'cause to curdle'

Similarly with regard to e's changing to o in the first syllable, one finds it very difficult to find any consistency. In the case of pene 'see', teme 'get wet' etc., e of the first syllable remains unaltered before wə:

pene +wə \Rightarrow penwə \Rightarrow penne 'show'

teme +wə \Rightarrow teməwə 'wet, water'

However, whether or not, the front vowels of the initial syllables change to the corresponding back ones, if the structure becomes (C)VCCe type by assimilation (e.g. penne 'show'), then its

behaviour is similar to any other (C)VCCə structure verb. (It can take wə again). A summary of the whole section may be represented as :

$$(a) \quad (C)V_1Ce + wə \Rightarrow \begin{cases} (C)V_2Cwə \Rightarrow (C)V_2CCə \\ (C)V_2Cəwə \end{cases}$$

$$V_1 = æ(æ) ; V_2 = a(a).$$

$$(b) \quad (C)V_1pe + wə \Rightarrow (C)V_2pwə \Rightarrow (C)V_2ppə$$

$$V_1 = i(i) ; V_2 = u(u).$$

$$(c) \quad (C)V_1Ce + wə \Rightarrow \begin{cases} (C)V_2Cwə \Rightarrow (C)V_2CCə \\ (C)V_2Cəwə \end{cases}$$

$$V_1 = i(i), e(e); V_2 = i(i), e(e), u(u), o(o).$$

e.g.

$$(a) \quad wæTe + wə \Rightarrow wæTwe \Rightarrow wæTTə \text{ 'cause to fall'}$$

$$æle + wə \Rightarrow æləwə \text{ 'cause to stick'}$$

$$(b) \quad pipe + wə \Rightarrow pupwə \Rightarrow puppe \text{ 'cause to open(a flower)}$$

$$(c) \quad pene + wə \Rightarrow penwə \Rightarrow penne \text{ 'show'}$$

$$mide + wə \Rightarrow mudəwə \text{ 'cause to curdle'}$$

10.1.7. When wə is added to a trisyllabic (C)VCVCi structure, the final i drops before wə and the remaining (C)VCVC+wə are joined to produce a (C)VCVCCə structure (cf. 10.1.3.also), which behaves like any other (C)VCVCCə structure verb. This may be formulated as:

$$(C)VCVCi + wə \Rightarrow (C)VCVC+wə \Rightarrow (C)VCVCCə$$

e.g.

$$æwidi + wə \Rightarrow æwid+wə \Rightarrow æwidde \text{ 'cause to walk'}$$

10.1.8. When wə is added to a trisyllabic (C)VC(C)V(V)C(C)ə

structure no changes take place and the two are joined together to result a (C)VC(C)V(V)C(C)əwə structure. That is:

$$(C)VC(C)V(V)C(C)ə + wə \Rightarrow (C)VC(C)V(V)C(C)əwə$$

e.g.

$$kalatte + wə \Rightarrow kalattəwə \text{ 'cause to stir'}$$

10.1.9. When wə is added to a trisyllabic (C)VCVCe structure, in some cases, the final ə is deleted and the remaining (C)VCVC and wə are joined to produce a (C)VCVCCə structure. However, there are problems and it must be stated that the (C)VCVCe structures to which causativiser wə can be added are very few; and there are verbs to which wə can not be added at all. Moreover, alongside verbs of (C)VCVCe structure, there are (C)VCVCi structure verbs which are syntactically and semantically the same. In such cases wə is added to (C)VCVCi structures to produce a (C)VCVCCə structure which then behaves similarly to any other trisyllabic structure of the same type.

However, when wə can be added to (C)VCVCe structures as in hinahe 'laugh', the front vowels of the first and the second syllables are sometimes changed to the corresponding back ones. Thus hinahe + wə produce

$$\begin{aligned} *hinah + wə &\Rightarrow *hinah + wə \Rightarrow hinaswə \Rightarrow \\ &hinassə \text{ 'cause to laugh'} \end{aligned}$$

(C)VCVCe verbs are comparatively few in number in Sinhalese. It is fairly difficult to make a precise generalised statement about causative verb formation of these verbs, for a number of reasons, e.g.:

- (a) With regard to some verbs like delehe 'hesitate', gilihe 'become unfix', pirihe 'decline', wətire 'lie prone', wələnde 'get (a disease)', wəhare 'emaciate' etc, wə causativiser is unproductive and causative verbs from these verbs are not found in the language.
- (b) With regard to some verbs such as pərede 'be defeated', wələke 'refrain', wələpe 'lament', ipede 'be born', wərede 'mistake' etc., there exist syntactically and semantically identical but phonologically different verbs such as parədi 'be defeated', wələki 'refrain', wələpi 'lament', upədi 'be born' and warədi 'mistake' respectively. In forming causative verbs, the causativiser wə is added to the latter forms and not the former.
- (c) With regard to some verbs such as wəTəhe 'understand', wisire 'scatter', wəhese 'strive' etc., when wə is added the final e is changed to ə and the two formatives are joined together. Here too ə of the first syllable of wəTəhe changes to a (cf. 10.1.6.). We may summarise this section thus to include only the possible structures:

$$(C)V_1CV_1Ce + wə \Rightarrow \begin{cases} (C)V_2CV_2Cwə \Rightarrow (C)V_2CV_2CCə \\ (C)V_2CV_2Cəwə \end{cases}$$

((C)VVCVci : v. 10.1.7.).

V_1 = front vowels

V_2 = front or back vowels

$V_1 = a \supset V_2 = a.$

- e.g. $hinahe + wə \Rightarrow *hinahwə \Rightarrow hinasse$ 'cause to laugh'
 $wəTəhe + wə \Rightarrow wəTəhəwə (= wəTəhawə)$ 'cause to understand'

10.1.10. There are no quadri-syllabic structures where wə can be added to form causative verbs. All quadri-syllabic verbs in the language have wə as the final syllable after which no more wə causativisers can be added. Thus the quadri-syllabic structures are always of (C)VC(C)V(V)C(C)əwə structure.

10.1.11. As a conclusion to this section, it may be mentioned that all causative verbs discussed above follow a pattern similar to that of many ...Cə final verbs in terms of the changes they are subject to in various contexts, notably before auxiliary realisations. Thus one need not treat causative verbs independently of non-causative ...Cə verbs in discussing the different phonological shapes -- allomorphs -- of verbs, as they all follow the same pattern so long as they are ...Cə final verbs. I do not differentiate between the syllabic structure of causative verbs and that of non-causative ...Cə final verbs in the following section, where I propose to introduce different possible syllable structures of the verb in Sinhalese. Complex verbs are excluded from this study, for they should be discussed under derivation, which is beyond our present scope. However, complex verbs do not pose any problems because all of them can be described by the use of the discussions of non-complex verbs, as all complex verbs have a dependent verb as the final member, which is always one of the non-complex verbs, and it is only these dependent verbs that undergo changes, the same as those they undergo when independent, and the preceding elements remain constant always.

10.2. SYLLABIC STRUCTURE OF THE VERB IN SINHALESE

10.2.1. The verb in relation to its phonological form can be stated in terms of syllabic structures. To describe the simple and the causative verbs (v.10.1.) I propose to recognise four broad classes of syllabic structures :

- i monosyllabic structure verbs
- ii disyllabic structure verbs
- iii trisyllabic structure verbs and
- iv quadri-syllabic structure verbs.

These structures will be fully explained in the following sections.

10.2A. MONOSYLLABIC STRUCTURE VERBS

10.2A.1. All monosyllabic structure verbs may be stated as

$$(C)V \left(\begin{Bmatrix} V \\ C \end{Bmatrix} \right) \text{ but } \neq V \begin{Bmatrix} V \\ C \end{Bmatrix} .$$

This formulation includes the following four structures:

- i V
- ii CV
- iii CVV
- iv CVC

There are not many verbs belonging to each of these four structures. They are introduced in the following paragraphs:

10.2A.2. There is just one verb in the whole language which has the structure V , and that is:

V : e 'come'

10.2A.3. One may list several verbs that have the structure CV as given below. (The eight most common, perhaps, are given here.)

CV	:	ka 'eat'	da 'burn'
		de 'give'	bo 'drink'
		ya 'go'	re 'evacuate the bowels'
		la 'put,place'	we 'become, be'

10.2A.4. The verbs that have the CVV structure include the following:

CVV	:	gaa 'smear...'	naa 'bathe'
		paa 'exhibit'	haa 'plough'
		baa 'lower,unload'.	

One may include some verbs, which in fact are contracted verbs from disyllabic (or even complex) verbs, such as:

daa	<	dame	'put, place'
doo	<	dowə	'milk'
pee	<	pene	'see'
loo	<	lowi/lowə	'lick' and
gee	<	gene (< genə + e)	'bring'

10.2A.5. There are just two verbs which have a partial CVC structure, partial because in certain contexts they appear in their original disyllabic structure CVCi. However, dan is formally a 'defective' verb.

CVC	:	gan 'take, buy'	dan 'know'
-----	---	-----------------	------------

10.2B. DISYLLABIC STRUCTURE VERBS

10.2B.1. Disyllabic structure verbs may be stated in terms of three sub classes such as:

- i (C)V(V)C(C)ə but ≠ VVCCə
- ii (C)V(V)Ci but ≠ VVCi and
- iii (C)V(V)C(C)e but ≠ VVCCe .

10.2B.2. The sub class i, (C)V(V)C(C)ə includes the following structures. I have given one example for each of these structures, where()ver possible, against the particular structure:

i	(C)V(V)C(C)ə	but	≠	VVCCə.
	VCə	:		anə 'knead'
	CVCə	:		kapə 'cut'
	VVCə	:		eedə 'mix (in cooking)'
	CVVCə	:		suurə 'scratch'
	VCCə	:		alle 'seize, catch'
	CVCCə	:		puccə 'bake, burn'
	CVVCCə	:		yaallə 'measure (grain)'
	*VVCCə	:		? (unacceptable)

10.2B.3. The sub class ii, (C)V(V)Ci includes the following few structures:

ii	(C)V(V)Ci	but	≠	VVCi
	VCi	:		ani 'prick, sting, stab'
	CVCi	:		gani 'count'
	CVVCi	:		paahi 'polish grain(by pounding), lop off (branches)'
	*VVCi	:		?(unacceptable)

10.2B.4. The sub class iii, (C)V(V)C(C)e consists of the following structures:

iii	(C)V(V)C(C)e	but	≠	VVCCe.
	VCe	:		æhe 'hear'
	CVCe	:		wæTe 'fall'
	VCCe	:		elle 'hang down'
	CVCCe	:		pædde 'swing to and fro, oscillate'
	CVVCCe	:		weele 'become dry, wither'
	VVCCe	:		æænde 'become linked'
	CVVCCe	:		pææsse 'become welded'
	*VVCCe	:		? (unacceptable)

10.2C. TRI-SYLLABIC STRUCTURE VERBS

10.2C.1. Trisyllabic structure verbs too can be stated in relation to three sub classes such as:

- i (C)V(V)C(C)V(V)C(C)ə but ≠ (C)V(V)CCVVC(C)ə
- ii (C)VCVVCi and
- iii (C)VCV(V)C(C)ə but ≠ (C)VCVVCCə.

10.2C.2. The sub class i, (C)V(V)C(C)V(V)C(C)ə includes the following structures:

- i (C)V(V)C(C)V(V)C(C)ə but ≠ (C)V(V)CCVVC(C)ə.
- | | | |
|------------|---|------------------------------|
| VCVCə | : | uhulə 'sustain' |
| CVCVCə | : | galəpə 'join, link' |
| VVCVCə | : | eedəwə 'cause to mix' |
| CVVCVCə | : | weeləwə ' " to dry' |
| VCCVCə | : | alləwə ' " to seize' |
| CVCCVCə | : | passəwə ' " tā ripen' |
| CVVCCVCə | : | passəwə ' " to weld' |
| VCVCCə | : | awusse 'stir up, exasperate' |
| CVCVCCə | : | pawattə 'hold, maintain' |
| CVCVVCə | : | kakaare 'decoct' |
| VCCVCCə | : | assaddə 'till, cultivate' |
| VCVVCə | : | } |
| CVCCVCCə | : | |
| VCCVCə | : | |
| VVCVCCə | : | |
| CVVCVCCə | : | |
| *VCCVVCə | : | } |
| *VVCCVVCə | : | |
| *CVCCVVCə | : | |
| *CVVCCVVCə | : | |
| *VCCVVCə | : | |
| *VVCCVVCə | : | } |
| *CVCCVVCə | : | |
| *CVVCCVVCə | : | |
| *VCCVVCə | : | |
| *VVCCVVCə | : | |
- ?
- (unacceptable)

10.2C.3. The sub class ii, (C)VCVCi consists of the following two structures:

ii	(C)VCVCi	
	VCVCi	: əwidi 'walk'
	CVCVCi	: nəgiTi 'arise, wake'

10.2C.4. The sub class iii, (C)VCV(V)C(C)e represents the structures exemplified below:

iii	(C)VCV(V)C(C)e	but	≠	(C)VCVVCCe.
	VCVCe	:		əkile 'shrink'
	CVCVCe	:		hinəhe 'laugh'
	VCVCCe	:		əwisse 'become roused, become irritated'
	CVCVCCe	:		kəlätte 'become stirred up'
	CVCVVCCe	:		kəkəəre 'become decocted'
	VCVVCCe	:		?
	*VCVVCCe	:		? (unacceptable)
	*CVCVVCCe	:		

10.2D. QUADRI-SYLLABIC STRUCTURE VERBS

10.2D.1. There is just one class of quadri-syllabic structure verbs and that may be stated as follows:

(C)VC(C)V(V)C(C)əwə but ≠ (C)VCCVVC(C)əwə.

This includes the structures specified below:

(C)VC(C)V(V)C(C)əwə BUT ≠ (C)VCCVVC(C)əwə.

VCVCəwə	:	ahurəwə 'cause to pack'
CVCVCəwə	:	karəkəwə 'spin, make revolve'
CVCVVCəwə	:	kakaarəwə 'cause to decoct'
VCVCCəwə	:	awussəwə 'provoke, cause to stir up'
CVCVCCəwə	:	kalattəwə 'cause to stir'
VCCVCCəwə	:	assaddəwə 'cause to till or cultivate'
VCVVCəwə	:	?

CVCCVCCəwə	:	}	?
VCCVCəwə	:		
CVCCVCəwə	:		
*VCCVVCəwə	:	}	(unacceptable)
*CVCCVVCəwə	:		
*VCCVVCəwə	:		
*CVCCVVCəwə	:		

Having stated the different syllabic structures of the verb in Sinhalese in general, let us next concentrate upon their different possible vowel nuclei.

10.3. VOWEL NUCLEI OF DIFFERENT SYLLABLES OF THE VERB

10.3.1. Every syllable, open (i.e. (C)V(V)) or closed (i.e. (C)V(V)C) must have a nucleus vowel. In Sinhalese, monosyllabic verb structures consist of the following vowels as their nuclei vowels:

(C)V : e ; e.g. e 'come' (cf. 10.2A.2.)

de 'give' (cf. 10.2A.3.)

re 'evacuate the bowels'

a ; da 'burn'

ka 'eat' (cf. 10.2A.3.)

o ; bo 'drink' (")

CVV : aa ; e.g. naa 'bathe'

paa 'exhibit' (cf. 10.2A.4.)

(oo) ; loo 'lick'

(ee) ; pee 'see' (cf. 10.2A.4.)

CVC : a ; gan 'take' (cf. 10.2A.5.)

dan 'know' "

10.3.2. Next, let us state vowel nuclei of syllables in relation to disyllabic, trisyllabic and quadrisyllabic structures. Not all fourteen vowels in Sinhalese (v.III.6, Table 1) occur in all syllables and we must, therefore, state which occur in the first syllable of disyllabic structures, which occur in the first and second syllables of trisyllabic structures and which in first, second and third syllables of quadrisyllabic structures.

10.3.3. All disyllabic verbs have either a, i or e as the nucleus vowel of the second syllable. Therefore, we can state the vowels that occur as syllable nuclei of the first syllable in relation to the three nuclei vowels of the second syllable. If the second syllable has the nucleus vowel a, then the first may have a, aa, i, ii, u, uu, e, ee, o, oo, (a) and (æ).

This may be represented as:

$$\left[\begin{array}{l} a, aa, i, ii, u, uu, - \\ -e, ee, o, oo, (a)_1, (\text{æ})_2 \end{array} \right] / (C)_C(C)a. \text{ (cf. 10.2B.2.)}$$

If the second syllable consists of i as its nucleus vowel, the first may consist of a, aa, i, uu, e and o. We may state this as:

$$[a, aa, i_3, uu, e_3, o_3] / C_Ci \text{ (cf. 10.2B.3.)}$$

When the second syllable nucleus vowel is e, the first may have a, aa, e, ee, i and ii. That is:

1 aa does not occur; a too occurs in one verb kəre 'do'.

2 aa is not attested; a too occurs in a very few cases such as kande 'call'

3 ii, ee and oo are not attested.

[æ, ʌ, e, ee, i, ii] / C__C(C)e (cf.10.2B.4.)

10.3.4. Just as disyllabic structures, the trisyllabic structures too have either ə, i or e as the nucleus vowel of the final syllable, namely the third. Thus we may state the nuclei vowels of the first and the second in relation to the third. If the third syllable consists of ə the first may consist of a, aa, i, ii, e, ee, o, oo, u, uu, (ə) and (æ). We may state this as:

$$\left[\begin{array}{l} a, aa, i, ii, e, ee, o, oo, \\ u, uu, (ə)_1, (æ)_2 \end{array} \right] / C_C(C)V(V)C(C)ə \text{ (cf.10.2C.2.)}$$

If the third syllable nucleus is i, then the first may be æ or a. That is:

[æ, a] / C__CVCi (cf.10.2C.3.)

When the third syllable has e as its nucleus vowel, the first may have i, e or æ. That is:

[i, e, æ] / C__CV(V)C(C)e (cf.10.2C.4.)

10.3.5. Next, let us state the nuclei vowels that occur in the second syllable. When the third nucleus vowel is ə and the first is one of a, aa, i, ii, e, ee, o, oo, u, uu, (ə) and (æ), the second may have one of ə, a, aa, u and i. However, there are limitations. For instance, when the first syllable has a long vowel as its nucleus, the second is usually ə. These facts

1 æə does not occur; ə too is limited to one verb kəwə 'cause to do' 2 ææ is not attested; æ too occurs in a few cases as kəndəwə, kəndəwə 'cause to call'

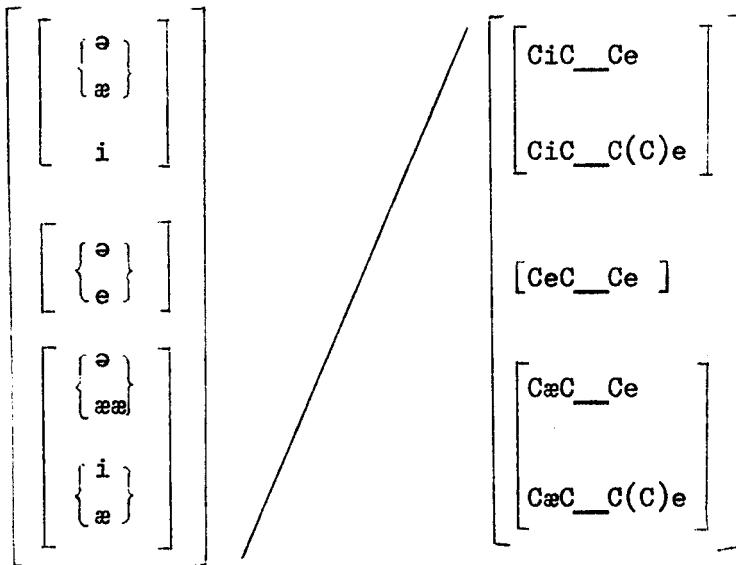
must be studied in greater detail in a thoroughgoing study of phonology. Tentatively, I suggest the following formulation in accordance with the data I have gathered for analysis.

[a]		[(C)aC__CCə]
		$\left[\begin{array}{c} a \\ aa \\ ii \\ uu \\ (C) \left\{ \begin{array}{c} ee \\ oo \\ ə \\ æ \\ e \end{array} \right\} C_Cə \end{array} \right]$
[ə]		
[aa]		[(C)aC__Cə]
$\left[\begin{array}{c} i \\ ə \end{array} \right]$		$\left[(C) \left\{ \begin{array}{c} a \\ u \\ o \end{array} \right\} C_Cə \right]$
[u]		
$\left[\begin{array}{c} u \\ ə \end{array} \right]$		$\left[\begin{array}{c} (C) \left\{ \begin{array}{c} a \\ u \end{array} \right\} C_C(C)ə \\ (C) i C_Cə \end{array} \right]$

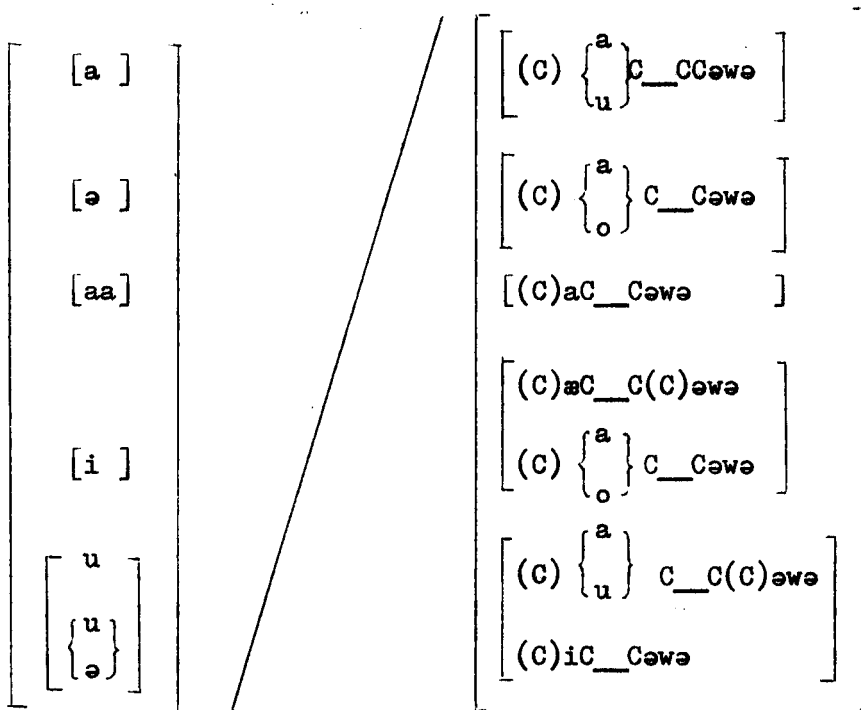
When the third syllable vowel nucleus is i and the first is one of æ and a, the second may consist of i or ə. This may be stated to include different combinations as well, as follows:

$\left[\begin{array}{c} i \\ ə \end{array} \right]$		$\left[\begin{array}{c} CæC_Ci \\ CæC_Ci \end{array} \right]$
--	--	--

When the vowel nucleus of the third syllable is e and of the first is one of i, e or æ, one of ə, æ, ææ, i or e may be the second vowel nucleus. We may represent the different combinations of syllables as follows:



10.3.6. All quadri-syllabic verbs have ə as the nucleus vowel of the final syllable. Actually the final syllable is wə preceded by a syllable with a ə vowel nucleus. Thus we can state the vowel nuclei of first and second syllables taking into account the third and fourth. When the third and the fourth syllables are ..Cəwə the first may consist of one of a, i, o, u and æ. The second may have one of ə, a, aa, u and i (cf. the second syllable of trisyllabic structures, 10.3.5.).



10.3.7. Having stated the different vowel nuclei of different syllables of verbs, let us now discuss an important process called 'back to front vowel change'.

10.4. BACK TO FRONT VOWEL CHANGE

10.4.1. Verbs are combined with the auxiliary realisations in the phonological structure. When this takes place, the final vowels a, i, e of disyllabic, trisyllabic and quadrisyllabic verbs undergo changes -- such as, deletion or vowel change -- in certain contexts -- i.e. before certain auxiliary realisations. Simultaneously, sometimes, the syllabic nuclei vowels, if they are back vowels only, change to their corresponding front vowels. This sort of vowel change from back vowels to front ones is discussed in the following sections.

10.4.2. Monosyllabic verbs must be treated separately as some of them show irregular characteristics. However, some back vowels of monosyllabic verbs, especially those with a, aa and (oo) as the syllable nuclei vowels, also change to their corresponding front ones, however a changes to a long æ. Thus the change of back vowels of some of the monosyllabic verbs may be stated as:

$$\begin{bmatrix} CV_1(V)_1 \\ a \\ aa \\ oo \end{bmatrix} \Rightarrow \begin{bmatrix} CV_2V_2 \\ \text{æ} \\ \text{æ} \\ ee \end{bmatrix} / \text{--- certain Aux.}^1 \text{ nominalisers (v.App.C)}$$

¹ Different contexts where back vowels change to front ones etc., will be introduced later in the section on allomorphic variation of verbs (.. see 10.6.).

10.4.3. With regard to disyllabic verbs, the back vowels of the first syllable, namely a, aa, o, oo, u and uu as well as the mid central vowel ə are changed to æ, ææ, e, ee, i, ii and e respectively when the particular auxiliary realisations that will be specified later (v.10.6.), are combined with them.

Thus we may state:

$$(C)V_1(V)_1C(C)ə \Rightarrow (C)V_2(V)_2C(C)() / \text{---} \begin{cases} \text{certain Aux.}^1 \\ \text{nominalisers} \end{cases}$$

V_1 = back vowels or ə

V_2 = front vowels.

10.4.4. As far as trisyllabic and quadrisyllabic structures are also concerned, the change of back vowels to the front ones of the initial syllable is similar to that given above. All back vowels, long or short, are changed to their corresponding front ones in most cases. If the second syllable also consists of a back vowel but not ə before wə, then that too is changed to the corresponding front one. ə before wə whether in the second or third syllable is always changed to e. However, ə in the second syllable but not before wə remains unchanged. We may formulate this as:

$$CV_1(V)_1 \begin{Bmatrix} CV_1(V)_1Cə \\ CV_1(V)_1Cəwə \\ Cəwə \end{Bmatrix} \Rightarrow CV_2(V)_2 \begin{Bmatrix} CV_2(V)_2C() \\ CV_2(V)_2ew() \\ Cew() \end{Bmatrix} / \text{---} \begin{cases} \text{certain} \\ \text{Aux.} \\ \text{nom.} \end{cases}$$

V_1 = back vowels or ə in syllable 1.

V_2 = front vowels.

10.4.5. However, there are a few verbs where back vowels do

¹ see fn. 1, p.239.

not change to front ones even in the contexts where they should do so. Consider the following verbs and their 'word forms' when non-past indicative and past indicative auxiliary realisations are added:

budiye 'sleep' : budiye + ne +(w)aa(i.e.npt. Ind. v.8.5.2.
[budiyenewa]'sleep' and 8.5.4.)

: budiye + we + aa (i.e.pt.Ind. v.8.5.2.and
8.5.7.)
[budiyaewa] 'slept'

kakiye 'ache' : kakiye + ne * (w)aa
[kakiyenewa] 'ache'

: kakiye +we +aa
[kakiyaewa] 'ached '

The following two verbs , naliye 'wriggle' and
popiye 'quiver, tingle' also
belong to this special class of verbs.

10.4.6. In all cases front vowel nuclei of syllables remain unchanged when these auxiliary realisations are added to the verbs containing them.

10.5. REDUPLICATION OF VERBS

10.5.1. Verbs in Sinhalese are reduplicated to perform different syntactic and semantic functions (cf. progressive aspect of the auxiliary, 8.5.5.;8.5.9.). When verbs of different syllabic structures undergo the process of reduplication the resulting reduplicated structures are as follows:

10.5A. REDUPLICATION OF MONOSYLLABIC STRUCTURE VERBS

10.5A.1. Monosyllabic verbs are reduplicated as suggested below

either in relation to different monosyllabic structures or special monosyllabic verbs within different structures.

10.5A.2. CVV + reduplication \Rightarrow CV CVV.

e.g. naa 'bathe' : na naa .

All CVV verbs follow this pattern.

10.5A.3. CV + reduplication \Rightarrow CV CVV.

We have to distinguish four sub classes of verbs within this structure as:

i ka 'eat' : ka kaa.

Verbs ka 'eat', da 'burn', la 'put' belong to this sub class.

ii de 'give' : di dii .

Verbs re 'evacuate the bowels', bo 'drink' also belong to this sub class.

iii we 'become, be' : we wii .

This is the only verb of this sub class.

iv ya 'go' : ? (ya yaa ;then sub class i above)

I am not familiar with the reduplicat-
-ed forms of ya as ya yaa, which exist
neither in my own usage nor in that
of my dialect area. The same is true
for e 'come' which has no reduplicat-
-ed forms like e ee or i ii (?).

10.5A.4. CVC + Redup. \Rightarrow CVCə CVCə (cf. CVCi in 10.5B.2. in.).

e.g. gan 'take' : genə genə

dan 'know' : danə danə .

There are no more verbs of this sub class.

10.5B. REDUPLICATION OF DISYLLABIC STRUCTURE VERBS

10.5B.1. Disyllabic structures have the following reduplicated structures:

$$(C)VCə + \text{Redup.} \Rightarrow (C)VCə (C)VCə .$$

e.g. kapə 'cut' : kapə kapə.

All possible (C)V(V)C(C)ə verbs (v.10.2B.2.) follow this pattern.

$$10.5B.2. (C)V(V)Ci + \text{Redup.} \Rightarrow (C)V(V)Cə (C)V(V)Cə \text{ (cf. 10.5A.4.)}$$

e.g. ari 'send ' : əre əre.

paahi 'polish grain' : pəəhə pəəhə.

(Back vowels are changed to front ones when final i is changed to ə in the process of reduplication)

All possible (C)V(V)Ci (v.10.2B.3.) follow this pattern.

$$10.5B.3. (C)V(V)C(C)e + \text{Redup.} \Rightarrow (C)V(V)C(C)i (C)V(V)C(C)i.$$

e.g. wəʔe 'fall' : wəʔi wəʔi.

weele 'dry up' : weeli weeli.

All possible (C)V(V)C(C)e verbs (v.10.2B.4.) follow this pattern.

10.5C. REDUPLICATION OF TRISYLLABIC STRUCTURE VERBS

10.5C.1. Trisyllabic verbs are reduplicated as follows:

$$\begin{aligned} (C)\overset{(V)}{V}C(C)V(V)C(C)ə + \text{Redup.} &\Rightarrow (C)V(V)C(C)V(V)C(C)ə \\ &- (C)V(V)C(C)V(V)C(C)ə. \end{aligned}$$

e.g. akulə 'fold' : akulə akulə.

pawatte 'hold' : pawatte pawatte.

All possible (C)V(V)C(C)V(V)C(C)ə verbs (v.10.2C.2.) follow this pattern.

10.5C.2. (C)VCVCi + Redup. \Rightarrow (C)VCVCə (C)VCVCə.

e.g. əwidi 'walk' : əwide əwide.

All (C)VCVCi verbs (v.10.2C.3.) follow this pattern.

10.5C.3. (C)VCV(V)C(C)e + Redup. \Rightarrow (C)VCV(V)C(C)i (C)VCV(V)C(C)i.

e.g. hinəhe 'laugh' : hinəhi hinəhi.

All possible (C)VCV(V)C(C)e verbs (v.10.2C.4.) follow this pattern.

10.5D. REDUPLICATION OF QUADRISYLLABIC STRUCTURE VERBS

10.5D.1. Quadrisyllabic structure verbs are reduplicated as follows:

(C)VC(C)V(V)C(C)əwə + Redup. \Rightarrow (C)VC(C)V(V)C(C)əwə -
- (C)VC(C)V(V)C(C)əwə .

e.g. hinassewə 'cause to laugh':

hinassewə hinassewə.

assaddəwə 'cause to till' :

assaddəwə assaddəwə .

All possible (C)VC(C)V(V)C(C)əwə verbs (v.10.2D.1.) follow the same pattern.

10.5.2. Having discussed the reduplication of verbs in Sinhalese, let us next examine the verbs and their alternation -- allomorphic variation .

10.6. ALLOMORPHIC VARIATION OF THE VERB

10.6.1. Verbs undergo certain changes when they are combined with certain auxiliary realisations. I propose to state allomorphic variation of verbs of different syllabic structure in

relation to certain contexts, which are auxiliary realisations.

10.6A. ALLOMORPHIC VARIATION OF MONOSYLLABIC STRUCTURE VERBS

10.6A.1. We have to state allomorphic variation of monosyllabic verbs in some length as these verbs belong to a number of sub classes -- i.e. V, CV, CVV, CVC structures. Sometimes even within a single class (v. CV in 10.5A.3.) we find verbs following different patterns. I therefore state allomorphs of verbs in relation to syllabic structures.

10.6A.2. V structure verbs : There is just one verb e 'come' which has this structure in Sinhalese. Its variation may be stated as suggested:

e 'come' \Rightarrow	{	aa	/	—	{	wə -	
					{	pi	#
						pu -	
		e	/	elsewhere but/	—	paŋ	
						piyə	
		special uses:					
		əwit(1a) 'having come'					
		wareŋ 'come' (Imp. ord.)					
		warə 'come' (Imp. dero.)					

10.6A.3. CV structure verbs: We have to recognise a number of sub classes within this CV structure verbs. Allomorphic variation of CV verbs are therefore stated in relation to these sub classes of verbs, as suggested in the following sections.

- (a)
- | | | |
|-------------------|---|-----------------|
| Ca \Rightarrow | { | Caa /__ wə |
| | | |
| | | |
| | | |
| | | Caa /__ |
| | | pi ≠ |
| | | pu |
| | | la |
| | | paŋ |
| | | piyə |
| ∅ | | |
| wi | | |
| Ca /__ elsewhere. | | |

Verbs of this class are ka 'eat', da¹ 'burn' and la 'put'.

- (b) ya 'go' is a special verb of CV structure verbs.

- | | | |
|------------------|---|--------------------------|
| ya \Rightarrow | { | gi /__ yə |
| | | ya /__ elsewhere but /__ |
| | | |
| | | |
| | | special usea: |
| | | yamaŋ 'go' (Imp.ord.) |
| | | paleyaŋ " " |
| | | yame 'go' (Imp. dero.) |
| | | pale " " |
| | | gihiŋ(la) 'having gone' |

- (c) de 'give' is another special verb of CV structure verbs in Sinhalese.

¹ da 'burn' is a process verb, and therefore Imp. Aux. such as paŋ, piyə, ∅, nnə, nəwa, nnaŋ, mu ..etc. do not occur with it. Hence *daapaŋ, *daapiyə, *daa, *danne, *danəwa, *dannaŋ and *damu are impossible in the sense of burning. However, daapaŋ, daapiyə, damə etc. frpm daa (damə 'put') (v.10.2A,4.) should not be confused with da 'burn'.

$$de \Rightarrow \left\{ \begin{array}{l} \text{dun} / _wə \\ \text{dii} / \left\{ \begin{array}{l} \text{pi} \# \\ \text{pu} \\ \text{la} \\ \text{paŋ} \\ \text{piyə} \\ \emptyset \end{array} \right. \\ \text{di} / _ \left\{ \begin{array}{l} \text{yə} \\ \text{yaŋ} \end{array} \right. \\ \text{de} / _ \text{elsewhere.} \end{array} \right.$$

However, compare the existing partial similarity between de and re and bo (cf. (d) and (f) in.).

- (d) re 'evacuate the bowels' is another special verb of CV structure verbs.

$$re \Rightarrow \left\{ \begin{array}{l} \text{rii} / _ \left\{ \begin{array}{l} wə \\ \text{paŋ} \\ \text{piyə} \\ \text{pi} \# \\ \text{pu} \\ \text{la} \\ \emptyset \end{array} \right. \\ (\text{run}^1 / _ wə) \\ \text{re} / _ \text{elsewhere.} \end{array} \right.$$

Compare also the partial similarity between re and bo (cf. (f) in.) and also de (cf. (c)sup.).

- (e) we 'become, be' is also another special verb of CV structure verbs.

$$we \Rightarrow \left\{ \begin{array}{l} (w)u / _ nə_2 \\ \text{we} / _ \text{elsewhere.} \end{array} \right.$$

1 run instead of rii is found in certain dialects.

(f) bo 'drink' is also another special verb of CV structure verbs.

$$\text{bo} \implies \left\{ \begin{array}{l} \text{bii} / ___ \left\{ \begin{array}{l} \text{wə} \\ \text{pi} \neq \\ \text{pu} \\ \text{la} \\ \text{paŋ} \\ \text{piyə} \\ \emptyset \end{array} \right. \\ \\ (\text{bun}^1 / ___ \text{wə}) \\ (\text{po} / ___ \text{wə} \text{ causativiser (v.10.1.2.)}) \\ \text{bo} / ___ \text{elsewhere.} \end{array} \right.$$

10.6A.4. CVV structure verbs : Here too we need to recognise a number of sub classes of CVV verbs especially to account for the allomorphic variation of CVV verbs which are actually the result of contraction of disyllabic or complex structures (v. 10.2A.4.). CVV verbs which are not the result of any contraction of some underlying structure can be stated as (a) and the other contracted verbs as (b),(c) and (d) below.

$$(a) \quad \text{Caa} \implies \left\{ \begin{array}{l} \text{Caa} / ___ \text{wə} \\ \text{Caa} / ___ \text{elsewhere.} \end{array} \right.$$

Verbs that belong to this sub class are , gaa 'smear', naa 'bathe', paa 'exhibit', baa 'unload' and haa 'plough' (v.10.2A.4. also) (daa *dame* 'put' also follows the same pattern).

1 bun instead of bii is found in certain dialects.

(b) loo 'lick' may be stated as:

$$\text{loo} \Rightarrow \begin{cases} \text{lee} / _\text{wə} \\ \text{loo} / _\text{elsewhere.} \end{cases}$$

doo 'milk' is another verb that belongs to this class.

(c) pee 'see' may be stated as:

$$\text{pee} \Rightarrow \begin{cases} \text{penu}^1 / _\text{nə}_2 \\ \text{peni}^1 / _\begin{cases} \text{cci/ə} \\ \text{la} \\ \text{yaŋ} \\ \text{yə} \end{cases} \\ \left. \begin{matrix} \text{pee} \\ \text{pene}_1 \end{matrix} \right\} / _\text{elsewhere.} \end{cases}$$

There are no other verbs of this class (cf. 10.6B.3.).

(d) gee 'gene' 'bring' is a complex verb consisting of $\text{genə} + \text{e}$.

However, its allomorphic variation may be stated as:

$$\text{gee} \Rightarrow \begin{cases} \text{genaa}^2 / _\begin{cases} \text{wə} \\ \text{pi} \neq \\ \text{pu} \\ \text{paŋ} \\ \text{piyə} \end{cases} \\ \left. \begin{matrix} \text{gee} \\ \text{gene} \end{matrix} \right\} / _\text{elsewhere but } \neq \text{ in} \\ \text{special uses.} \\ \text{special uses: } \text{genat(la)} \text{ 'having -} \\ \text{genawit(la)} \text{ brought '} \\ \text{genen 'bring' (Imp.ord.)} \end{cases}$$

1 It must be clear from these forms that this is not a monosyllabic verb (cf. 10.2A.4.).

2 genaa is from $\text{genə} + \text{aa}$ e 'come' (v. aa e, 10.6A.2). Forms like genaa, gene show that this too is not a monosyllabic verb (cf. 10.2A.4.).

10.6A.5. CVC structure verbs: There are two CVC verbs but they belong to two sub classes as given below: gan 'take' and dan 'know' are the two verbs.

(a)

$$\text{gan} \Rightarrow \left\{ \begin{array}{l} \text{gani}^1 / _ \left\{ \begin{array}{l} \text{wi} \\ \text{yi} \\ (\text{mu}) \\ \text{pi} \# \\ \text{pu} \\ \text{piy}\text{ə} \end{array} \right. \\ \text{gat} / _ \text{w}\text{ə} \\ \text{gen} / _ \text{ə} \\ \text{gan} / _ \text{elsewhere.} \end{array} \right.$$

(cf. CVCi alternation in 10.6B.2.)

(b)

$$\text{dan} \Rightarrow \left\{ \begin{array}{l} \text{dani}^2 / _ \left\{ \begin{array}{l} \text{wi} \\ \text{yi} \end{array} \right. \\ \text{dan} / _ \text{n}\text{ə}_1 \\ \text{d}\text{an} / _ \text{ə} \\ \text{d}\text{an}\text{ə-gan} \Rightarrow \left\{ \begin{array}{l} \text{d}\text{an}\text{ə-gani} / _ \left\{ \begin{array}{l} \text{wi} \\ \text{yi} \\ (\text{mu}) \\ \text{pi} \# \\ \text{pu} \\ \text{piy}\text{ə} \end{array} \right. \\ \text{d}\text{an}\text{ə-gat} / _ \text{w}\text{ə} \\ \text{d}\text{an}\text{ə-gen} / _ \text{ə} \\ \text{d}\text{an}\text{ə-gan} / _ \text{else -} \\ \text{where} \end{array} \right. \end{array} \right.$$

1 This shows that gan has actually resulted from a CVCi (gani) verb (v.10.2A.5.). It has preserved its disyllabic character here before these auxiliary forms.

2 dan too has resulted from a CVCi(dani) verb ; however, it has evolved into a complex verb, as shown here.

10.6A.6. There is one more verb, which is partly monosyllabic and partly disyllabic, to be introduced. I believe that it must be treated as a CVCi structure verb, but in certain 'word forms' it appears as a monosyllabic structure verb. However, since this verb iñdi [in] 'be' shows some monosyllabic structures, I shall state here its allomorphic variation.

VC / VCi structure verb, iñdi [in] 'be'.

$$iñdi \Rightarrow \left\{ \begin{array}{l} iñdi / __ \left\{ \begin{array}{l} wi \\ yi \\ (mu) \\ n\bar{e} \quad t\bar{e} / __ \left\{ \begin{array}{l} ot \\ t \end{array} \right\} \end{array} \right. \\ \\ iñd\bar{e} / __ \left\{ \begin{array}{l} pi \neq \\ pu \\ paŋ \\ piy\bar{e} \\ la \\ u \end{array} \right. \\ \\ un / __ w\bar{e} \\ in / __ \text{elsewhere.} \end{array} \right.$$

(cf. (C)V Ci allomorphic variation in 10.6B.2.)

10.6B. ALLOMORPHIC VARIATION OF DISYLLABIC STRUCTURE VERBS

10.6B.1. We may state allomorphic variation of disyllabic structure verbs in relation to the three possible disyllabic structures. Thus (C)V(V)C(C)e structure verbs and their allomorphic variation may be stated as:

$$(C)V_1(V)_1C(C)e \Rightarrow \left\{ \begin{array}{l} (C)V_2(V)_2C(C)u / __ w\bar{e} \\ (C)V_1(V)_1C(C)e / __ \text{elsewhere} \end{array} \right.$$

V_1 = back or front vowels

V_2 = front vowel (of the corresponding back vowel of the basic structure).

Some of the verbs that follow this pattern are:

(C)V(V)Ci verbs:

adi 'pull'	añdi 'draw, wear '
ari 'send, open'	iñbi 'kiss, smell'
gili 'swallow'	nagi 'climb'
pani 'jump, leap'	bani 'abuse'
badi 'fry, roast'	biñdi 'break, crack'
mani 'measure'	raki 'guard'
wañdi 'bow, worship'	widi 'pierc e , shoot an arrow'
etc.	

10.6B.3. The allomorphic variation of (C)V(V)C(C)e verbs may be introduced as follows:

$$(C)V(V)C(C)e \Rightarrow \begin{cases} (C)V(V)C(C)u / __ n\text{ə}_2 \\ (C)V(V)C(C)i / __ \begin{cases} cci/\text{ə} \\ ya\eta \\ y\text{ə} \\ la \end{cases} \\ (C)V(V)C(C)e / __ \text{elsewhere.} \end{cases}$$

A few verbs of this class are listed below: (Imp. Aux. paŋ, piyə, u, ∅ do not occur with these verbs even when they are used to denote volitive actions; instead yaŋ, yə, nəwa, nne may occur.)

(C)V(V)C(C)e verbs:

æle 'stick'	ide 'ripen, mellow'
ere 'sink in'	kipe 'be angry'
pæhe 'ripen, boil, ferment'	pipe 'open (as flowers)'
pene 'see, appear, seem'	mære 'die, expire'
ride 'hurt, ache'	wæTe 'fall'
wæDe 'grow, develop, increase'	Wæde 'strike'
hære 'turn'	helle 'shake'
weele 'become dry, wither'	etc.

10.6C. ALLOMORPHIC VARIATION OF TRISYLLABIC STRUCTURE VERBS

10.6C.1. Here too the statement is very similar to that given for disyllabic structures. By taking into account the three basic structures (i.e. a, i and e final), we may state the possible verb alternation as suggested below. Alternation in relation to (C)V(V)C(C)V(V)C(C)a is as follows:

$$(C)V_1(V)_1C(C)V_1(V)_1C(C)a \Rightarrow \begin{cases} (C)V_2(V)_2C(C)V_3(V)_3C(C)u / __w a \\ (C)V_1(V)_1C(C)V_1(V)_1C(C)a / __else a \end{cases}$$

where.

V_1 = back or front vowels

V_2 = front vowels (of the corresponding back vowels of the basic structure)

V_3 = front vowels or a if the basic structure

$V_1 = a$ but not followed by w .

A few verbs that belong to this class are listed here:

akula 'roll up, fold'	apulla 'wash clothes'
ugulla 'root up, pull out'	tawara 'smear'
naggawa 'cause to climb'	puppawa 'cause to open '
pulusa 'burn, bake'	bindawa 'cause to break'
marawa 'cause to kill'	wapura 'sow'
wikuna 'sell'	sarasa 'decorate'
salasa 'cause'	etc.

10.6C.2. Allomorphic variation of (C)VVCV*i* verbs is as follows:

$$(C)V_1CV_1Ci \Rightarrow \begin{cases} (C)V_2CV_3C / __w a \\ (C)V_2CV_3Ca / __ \begin{cases} paŋ \\ piya \\ pi \\ pu \\ la \\ u \end{cases} \\ (C)V_1CV_1Ci \end{cases}$$

V_1 = back or front vowels,

V_2 = front vowels (of the corresponding back ones of the basic structure,

V_3 = front vowel or a if the basic structure

$V_1 = a$.

A few verbs that belong to this class are:

ahiñdi 'pick up'	awidi 'walk'
nagiTi 'arise, awake'	palēñdi 'wear, put on'
etc.	

10.6C.3. Allomorphic variation of (C)VCV(V)C(C)e verbs may be stated as follows:

$$(C)VCV(V)C(C)e \Rightarrow \begin{cases} (C)VCV(V)C(C)u / _ n\mathfrak{e}_2 \\ (C)VCV(V)C(C)i / _ \begin{cases} cci/\mathfrak{e} \\ ya\eta \\ y\mathfrak{e} \\ la \end{cases} \\ (C)VCV(V)C(C)e / _ \text{elsewhere.} \end{cases}$$

Some verbs of this class are given below. (However, Imp.Aux. paŋ, piyē, u, ∅ do not occur with these verbs even when they (are used to) denote volitive actions; yaŋ, yē, nne and nēwa may occur as Imp. Aux. in such cases (cf. also.10.6B.3.).)

(C)VCV(V)C(C)e verbs:

alēwe 'bend'..	ilippe 'float..,rise to the surface'
pirihe 'decline'	parēde ¹ 'be defeated'
warēde ¹ 'err, mistake'	watēhe 'understand'
wehese 'strive'	satepe 'sleep, rest, relax(in bed)'
hinēhe 'laugh'	walēke ¹ 'abstain, refrain'

10.6D. ALLOMORPHIC VARIATION OF QUADRISYLLABIC STRUCTURE VERBS

10.6D.1. There is just one class of quadrisyllabic structures, namely (C)VC(C)V(V)C(C)ewē, in Sinhalese. Allomorphic variation

¹ These verbs have some semantically identical but i final verbs such as warēdi 'err', parēdi 'be defeated' and walēki 'abstain' etc. . However, these i final verbs do not follow the CVCVCi structure pattern introduced in 10.6C.2.

of the verbs of this class may be stated as follows. This too is very much similar to that of trisyllabic structures (cf. 10.6C.1.).

$$(C)V_1C(C)V_1(V)_1C(C)əwə \Rightarrow \begin{cases} (C)V_2C(C)V_3(V)_3C(C)əwu / _wə \\ (C)V_1C(C)V_1(V)_1C(C)əwə / _else - \end{cases}$$

where .

V_1 = front or back vowels,
 V_2 = front vowels only,
 V_3 = front vowel or a .

A few verbs of this class are the following:

akuləwə 'cause to roll up, cause to fold'

apulləwə 'cause to wash clothes'

diwurəwə 'cause to swear'

pulusəwə 'cause to burn or bake'

wapurəwə 'cause to sow'

wikunəwə 'cause to sell'

sarəsəwə 'cause to decorate'

salassəwə 'cause to cause'

etc.

With this account of allomorphic variations of different classes of verbs belonging to different syllabic structures I conclude the chapter on the phonological verb. With the help of the account given in this chapter, I believe, that one should be able to select the proper form of the verb -- the suitable allomorphic variant -- in relation to the immediately following auxiliary realisation, or the process, such as reduplication, involved in any sentence. However, we have to introduce some further phonological rules -- sandhi 1 and 2 -- to account for the phonetic form of 'words' and sentences. These rules will be introduced in the next two chapters.

CHAPTER 11

11.0. SANDHI 1 - INTERNAL SANDHI

11.0.1. I shall attempt to introduce two types of rules in this chapter. First introduced are some obligatory sandhi rules - 'internal', which must be applied between one formative and another within a word. They are called 'internal' sandhi rules because they combine formatives within words. Secondly, I propose to introduce some optional phonological rules by which certain phonological structures can be contracted to form other structures. By employing these two types of rules, I believe it possible to explain the phonetic representation of words. Although I have not attempted the derivation of lexical items from other items --i.e. noun derivation, verb derivation, adjective derivation, adverb derivation etc.-- in this study, these rules are applicable there also.

11.1. THE WORD IN SINHALESE

11.1.1. The word as a linguistic unit has already been discussed in the introduction to this study (v. Introduction, 8) . There I have pointed out how difficult it is to define the word as a linguistic unit broadly to fit any 'word' in any language. I therefore propose to recognise the word in Sinhalese as a phonological unit -- a sequence of phonemes -- preceded and followed by a potential pause. It may be a minimum free form or it may be a minimum free form plus some other elements attached to it where pause comes after or before these elements. Thus a word may be a single morpheme or it may consist of more than one morpheme. We may discuss the different possible words in Sinhalese together with various sequences of morphemes that go to

make up certain words.

11.1.2. A noun phrase, apart from a few exceptions given below (v.11.1.3 - 11.1.5.), generally comprises a word in Sinhalese.

Thus the phonological realisation of $\#$ noun + number + definite-ness (+case) $\#$ forms the noun phrase word in the language. The four morphemes are combined together by sandhi rules which will be described below. Hence $\#$ NP $\#$ is a word.

11.1.3. However, if the NP is [noun] + [-sg] + [-def] + [Ca], the resulting phonological representation is not a word but a complex construction with two words - an adnominal and an NP.

Consider these two examples:

i minissu wageyak
 men some
 Some men.

ii minihek
 A man.

11.1.4. Again the same is true if the NP contains a quantifier (v. Appendix A.1). The quantifier itself is an NP, so any NP with a quantifier consists of more than one word, one or more adnominals and an NP. Consider these examples:

i mas raattal deka
 meat pounds two
 Two pounds of meat.

pot deka
books two
Two books.

iii potak
A book.

11.1.5. There is another exception where an NP consists of more than a word. When the case relations, especially most directional case relations, are realised not as the case forms, wə, Tə, gen .. etc. given in 4.0.21., but as 'postpositions', laŋgə, gaawə, uDə, digee, mədin, atəre etc. (v. 4.11A.3.), all of which can have a potential pause at the beginning. Thus we have to recognise a word boundary within the NP between the definite marker and the case marker. Consider the following examples:

miniha laŋgə salli tiyenəwa
the man with money has/(there)is
There is money with the man./ The man has (got)money.

gale uDə daagəbak tiyenəwa
the rock on a pagoda (there)is
There is a pagoda on(top of) the rock.

galee pokunak tiyenəwa
on the rock a pool (there)is
There is a pool on the rock.

11.1.6. According to the foregoing account we may state that a phonological NP is a word; an adnominal within a deep syntactic NP is also a word (11.1.3. and 11.1.4.) and postpositions are also words.

11.1.7. All adnominals appearing before noun phrases whether they have resulted through processes of relativisation, nominalisation etc. or not are different words. Consider these examples:

hoñdæ loku goDənægillak
 good large a building
 A good large building.

apee mallige noonage taattage amma
 our younger brother's wife's father's mother.

11.1.8. The verb is always combined with the following auxiliary. The auxiliary may be the tense and aspect marker in the case of adnominal verbals. This is a word. The auxiliary may be both tense and aspect and mood. This is the verb word (i.e. verb + tense aspect + mood).

11.1.9. The adjective is combined with the immediately following copula verb if it has the yi manifestation. Thus adjective + copula forms a word. (The adnominal adjective is also a word.)

11.1.10. Modal auxiliaries such as puluwəni 'can', ahaki 'can', oonæ 'need, must', əti 'may, might' etc. are separate words as they can have a pause before and after.

11.1.11. When participial auxiliaries -- infinitive, npt. or pt. progressive or pt. participle aux.-- follow the verb, the two are combined to form a word.

11.1.12. When subordinate and coordinate conjunctions are introduced into sentences, they are in most cases added to tense markers that follow the verbs and they (i.e. verb + tense + conj) together form a word. However, when sentence connectives occur to link sentences, they are not attached to any other constituents

of the surface sentence, so are different words.

11.1.13. The negative markers nææ ~~##~~ ~~##~~ / næti / neweyi ~ nemeyi; bææ ~~##~~ ~~##~~ / bæri and epaa etc. are separate words.

11.1.14. All quantifiers and modifiers and most emotional expressions are separate words. Some emotional expressions may consist of more than one word .

11.1.15. most question words (v. App.B)including the tag question word are also words in our sense.

11.1.16. In addition to these, we come across a few other formatives introduced into sentences by different transformations such as emphasis, question etc., and these are usually added to the preceding word. However, no 'not' as a negative marker is prefixed to a verb or an adjective in a relativised nominal phrase (i.e. an NP with an embedded relative clause). All 'prefixes' including the negative marker no should be discussed in a study of derivational morphology. Since this study does not cover that domain I shall not discuss 'prefixes' in Sinhalese here.

11.1.17. According to the foregoing account we have to recognise a number of word classes in Sinhalese, such as:

nouns (as adnominals)

noun phrases (i.e. noun + No. + Def.(+Ca))

quantifiers (i.e. quantity N.+No +Def.(+Ca))

postpositions (case realisations)

adjectives (adnominals)

adjective+(yi) (predicative adjectives)

verb + tense and aspect (relativised verbal, adnominal)

verb + Aux. ((tense ,aspect and)mood : verb word)

modal auxiliaries

infinitive verbals (verb + infinitive aux.)

npt.progressive part. verbal (verb + progressive part.
aux.)

pt. part. verbal (verb + pt. part. aux.)

verb + tense and asp.+ subord.conj.

verb + (tense and asp.)mood +coordinate conj.

verb + (tense and asp.) mood +(emp.)(+ ques.)

noun phrase $\left\{ \begin{array}{l} \text{(emp)} \\ \text{+(coordinate conj.)} \end{array} \right\} \text{+(ques.)}$

negative marker (+ emp.) (+ ques.)

modifiers

emotional words

question words

tag question word

connectives

11.1.18. Some of these word classes will consist of a sequence of formatives. Consider for example:

noun phrase : ~~##~~ N.+No +Def. +(Ca.)+ (emp)+ (ques.) ~~##~~

verb word : ~~##~~ vb. +tense asp. + mood + (emp)+ (ques) ~~##~~

When such a formative sequence occurs within a word, the formatives are combined into one unit through the application of certain sandhi rules (which will be discussed later) between the formatives. First applying them between the two left most formatives and then recursively between the resulted structure

and the following formative till the final formative in the sequence is combined, we can account for the formation of the word unit.

11.1.19. The sandhi rules that are applied between the formatives of a word unit are called 'internal' -- Sandhi 1. These are discussed in the subsequent sections.

11.2. SANDHI 1 -- INTERNAL SANDHI

11.2.1. First of all we may state for clarity that all formatives are either vowel initial or consonant initial and either vowel final or consonant final. (For constraints of initial and final vowels see III.7, 10. and 11.)

11.2.2. Having stated that, let us examine the sandhi that takes place mostly when two dissimilar vowels¹ as formative final and formative initial come together (i.e. $-V_1 + V_2^-$). There are a few possible ways of combining the two formatives as illustrated below.

11.2.3. I.S.R.² 1. : Final vowel deletion rule.

When a vowel final formative is followed by a vowel initial formative, the final vowel of the preceding formative is, sometimes deleted and the resulting consonant final formative is combined with the vowel initial formative. That is:

$$..CV_1 + V_2 .. \Rightarrow ..C(\emptyset) + V_2 .. \Rightarrow ..CV_2...$$

1 There are a few cases where similar vowels occur. e.g. haa 'hare', kaa 'moth' etc. When followed by aa, they produce haawaa 'the hare', kaawaa 'the moth' etc. (cf. 11.2.6(a)).

2 I.S.R. for Internal Sandhi Rule.

11.2.4. However it is extremely difficult to state precisely when a formative final vowel before a formative/^{initial}vowel is deleted. Nevertheless, I suggest the following contexts where the final vowel deletion is more usual.

(a) If the structure of the preceding formative or construction is one of $\#(C)aCuC_1u$ where $C_1 = \underline{n}, \underline{r}, \underline{t}, \underline{d}$; $\#CVf^1C(C) \begin{Bmatrix} u \\ i \end{Bmatrix} C\bar{e}$; $\#CVf^1CVf^1CVf^1CuC\bar{e}$; $\#(C)eC\bar{e}$; $\#CuC\bar{e}$; $\#CiCi$; $\#CoC\bar{e}$; $\#CaC\bar{e}$ etc., then the final vowel u, e or i is deleted before a vowel initial formative. e.g.

- i $(C)aCuCu^2$: bamunu + aa \Rightarrow bamunaa 'the brahamin'
makunu + aa \Rightarrow makunaa 'the bug'
- ii CVfCuC \bar{e} : wəʔtunə + aa/ee \Rightarrow wəʔtun-aa/ee 'fell'
bəluwə + aa/ee \Rightarrow bəluw-aa/ee 'looked'
penunə + aa/ee \Rightarrow penun-aa/ee 'saw'
- iii CVfCiC \bar{e} : əriyə + aa/ee \Rightarrow əriy-aa/ee 'opened..'
- iv CVfCVfC(C)uC \bar{e} : kəʔəttuwə +aa \Rightarrow kəʔəttuwaa 'stirred'
pəwəttunə +aa \Rightarrow pəwəttunaa 'was held'
- v CVfCVfCVfCuC \bar{e} : pipirewuwə +aa \Rightarrow pipirewuwaa 'exploded'
kəkəərewuwə+aa \Rightarrow kəkəərewuwaawe 'let -
(him) decoct (it)..'
- vi CeC \bar{e}^3 : wedə + aa \Rightarrow wedaa 'physician'
- vii CuC \bar{e} : muwə + aa \Rightarrow muwaa 'deer'
- viii CiCi : iri + e \Rightarrow ire 'line'
piiri + e \Rightarrow piire 'rasp'
- ix CoC \bar{e}^4 : hore + aa \Rightarrow horaa 'thief'
- x CaC \bar{e}^5 : kalə +ee \Rightarrow kalee 'pot'

1 Vf = front vowels.

2 makulu has makuluwaa 'spider' but makulaa also in some peoples' usage (see also, 11.2.6(b)).

3 CeC \bar{e} \neq enə in enəwaa (enə +aa) 'come'; renə in renəwaa ;
denə in denəwaa ; peenə in peenəwaa ; geenə in geenəwaa.

4 CoC \bar{e} \neq bonə in bonəwaa 'drink'.

5 CaC \bar{e} \neq danə in danəwaa 'burn'; kanə in kanəwaa 'eat'.

(b) In most of the above cases the initial vowel is one of aa, ə or ee which occur always after dissimilar formative final vowels. Taking into account the initial vowel too we may state the deletion of some final vowels. If the initial vowel is u (cf. dero. Imp. u / CVCi__ v.8.6.5.) the final vowel of the preceding formative is deleted. Also when the initial vowel is e or a of ek and ak respectively, the final vowel except e(e) or i(i) as in kalee 'pot', maale 'necklace', bælli 'bitch', wæssi 'female calf' etc. is deleted. e.g.

ari + u \Rightarrow æru 'do open' (Imp.)
 nægiTi + u \Rightarrow nægiTu 'do get up' (Imp.)
 kaakkaa + ek \Rightarrow kaakkek 'a crow'
 wedaa + ek \Rightarrow wedek 'a physician'
 galə + ak \Rightarrow galak 'a rock'

but,

kalee + ak \Rightarrow kaleyak 'a pot' (see 11.2.6.(b)i)
 wæssi + ak \Rightarrow wæssiyak 'a female calf' (see 11.2.6 (b)ii)

11.2.5. I.S.R. 2 . Semivowel insertion rule

When a vowel final formative is followed by a vowel initial formative, the two vowels are combined together with an intervening semivowel y or w. The semivowel is determined by the formative final vowel. If the final vowel is a back one (i.e. u, o, a) the semivowel is mostly w and if the final vowel is a front one (i.e. i, e, ə) or ə the semivowel is y. We may state this rule as:

..CV₁ + V(C).. \Rightarrow ..CV₁yV(C)..

..CV₂ + V(C).. \Rightarrow ..CV₂wV(C)...

V₁ = front vowels or ə

V₂ = back vowels.

11.2.6. As mentioned in 11.2.4., here too, one finds it very difficult to make a precise statement as to when the semivowel insertion rule (= I.S.R.2) is applied. Nevertheless, I suggest the following contexts where semivowel insertion is mostly productive.

(a) If the preceding formative ends in a long vowel, in most cases it is followed by a semivowel before a vowel initial formative. e.g.

haa + aa	⇒	haawaa	'hare'
haa + ii	⇒	haawii	'she hare'
maataa + ə	⇒	maataawə	'mother'
giraa + aa	⇒	gire ¹ waa	'parrot'
siilaa + aa	⇒	siilaawaa	'a kind of sea fish'
maaligaa + ə	⇒	maaligaawə	'palace'
huu + ə	⇒	huuwə	'hoot'
buu + ə	⇒	buuwə	'hair, nap'
nææ + aa	⇒	næayaa	'kinsman'
wææ + ə	⇒	wæayə	'adze'
wee + aa	⇒	weeyaa	'termite'
ii + ə	⇒	iiyə	'dart, arrow'
mii + aa	⇒	miiyaa	'rat'

There are some exceptions where w follows a front vowel and y follows a back one. cf.

kælææ + ə	⇒	kælæawə	'forest'
kurulææ + ə	⇒	kurulæawə	'pimple'
kæsbææ + aa	⇒	kæsbæawaa	'turtle'

¹ A long vowel in a syllable before a syllable with a long vowel and after a syllable with a short vowel is shortened if the structure is a single unit (aa > a > ə /CVC₁—C₁VV where C₁ ≠ h.).

berəwaa + aa \Rightarrow berəwaayaa 'drummer'
 kabaa + ə \Rightarrow kabaayə 'jacket'
 lamaa + aa \Rightarrow laməyaa¹ 'child'

(b) If the preceding formative has one of the following structures, namely, ..CVCe(e); ..CVC₁(C)i where C₁ is one of l, r, T, D, w, n, m.; ...C(V)VC₁u where C₁ = l, r, T, D, w, p, n. (cf. 11.2.4(a)); ...(C)VVCə; ...(C)VCCə; CuCuCə; CəCə etc., in most cases, they are followed by a semivowel before a vowel initial formative. However, it has to be stated that there are exceptions to most of these structures. e.g.

- i ..CVCe(e) : malee + ak \Rightarrow maale²yak 'a necklace'
 kalee + ak \Rightarrow kaleyak 'a pot'
 gee + ak \Rightarrow geyak 'a house'
- ii ..CVC₁(C)i : C₁ = l, r, T, D, w, n, m.
 CVl(C)i : bælli + ak \Rightarrow bælliyak 'a bitch'
 ali³ + aa \Rightarrow aliyaa 'elephant'
- CVri : nari + aa \Rightarrow nariyaa 'fox'
 saari + ə \Rightarrow saariyə 'sari'
 ilandaari+aa \Rightarrow ilandaariyaa 'youth'
- CVT(C)i : mugəTi + aa \Rightarrow mugəTiyaa 'mongoose'
 paTTi + ə \Rightarrow paTTiyə 'herd'
- CVDi : kaDi + aa \Rightarrow kaDiyaa 'large black ant'
 geDi + ə \Rightarrow geDiye 'fruit'
- CVwi : diwi + aa \Rightarrow diwiyaa 'leopard'
 kawi + aa \Rightarrow kawiyaa 'poet'
- CVni⁴ : mulaadaani + aa \Rightarrow mulaadaaniyaa 'headman'

1 see fn. 1, p.266. 2 ee is usually shortened to e before a vowel (e.g. ak) where y is inserted between the two but wee+aa = weeyaa is an exception. 3 beli 'shell fish' is an exception. 4 hini +aa = hinnaa 'ant' is different.

CVMi : dimi + aa \Rightarrow dimiyaa 'red ant'
 pirimi +aa \Rightarrow pirimiyaa 'man , male'
 kemi + ə \Rightarrow kemiya 'spout, funnel'

iii ..C(V)VC₁u : C₁ = l, r, T, D, w, p, n.

.. l .. : golu + aa \Rightarrow goluwaa 'dumb man'
 kolu¹ + aa \Rightarrow koluwaa 'boy'
 yaalu + aa \Rightarrow yaaluwaa 'friend'
 makulu + aa \Rightarrow makuluwaa 'spider'

..r.. : maduru + aa \Rightarrow maduruwaa 'mosquito'
 buuru² + aa \Rightarrow buuruwaa 'ass'
 oru + ə \Rightarrow oruwə 'canoe'

...T.. : kaTu¹ + ə \Rightarrow kaTuwə 'shell, thorn'
 oTu + aa \Rightarrow oTuwaa 'camel'
 nəTTu + aa \Rightarrow nəTTuwaa 'dancer'

...D.. : uguDu + aa \Rightarrow uguDuwaa 'wild cat'
 waDu + aa \Rightarrow waDuwaa 'carpenter'
 kaDu + ə \Rightarrow kaDuwə 'sword'

...w.. : ətgowu + aa \Rightarrow ətgowuwaa 'elephant trainer'
 awu + ə \Rightarrow awuwə 'sun shine'

...p.. : kapu + aa \Rightarrow kapuwaa 'marriage breaker'
 kopu + ə \Rightarrow kopuwə 'case'
 kapəpu + aawe \Rightarrow kapəpuwaawe 'let (him) cut..'

...n... : panu + aa \Rightarrow panuwaa 'worm'
 lanu + ə \Rightarrow lanuwə 'rope'

iv ..(C)VVCə yoodə³ + aa \Rightarrow yoodəyaa 'giant'
 ..(C)VCCə : naagə + aa \Rightarrow naagəyaa 'cobra'
 asse + aa \Rightarrow 'horse' asseəyaa

1 see I.S.R.3 (v.11.2.8.ii). 2 But uuru +aa \Rightarrow uuraa (by I.S. R.1) 'pig'; cf. also wañduru 'monkey', piñburu 'python' etc. where vowel deletion takes place.

3 But goone +aa \Rightarrow goonaa 'elk', leene +aa \Rightarrow leenaa 'squirrel'.

- v CuCuCe : murugə + aa ⇒ murugəyaa 'beast'
 purusə + aa ⇒ purusəyaa 'man, husband'
- vi ..CeCe : ɛmbələ + aa ⇒ ɛmbələyaa 'a small red ant'
 sarəpə + aa ⇒ sarəpəyaa 'serpent'

(c) If the preceding formative consists of a verb + ne and also if the structure of the verb does not end in u, then the semi-vowel that is inserted before the vowel initial formative, which must be aa, is w and not y, although the preceding vowel is e.

[If ne occurs in a non verbal structure as kanə 'a kind of fish', then the usual y semivowel is inserted before a vowel initial formative: e.g. kanə + aa ⇒ kanəyaa 'a fresh water fish' (cf. 11.2.6(b)iv, v and vi.).] e.g.

- enə + aa ⇒ enəwaa 'come'
 kanə + aa ⇒ kanəwaa 'eat'
 kaDənə + aa ⇒ kaDənəwaa 'break,...'
 wəTənə + aa ⇒ wəTənəwaa 'fall'
 adinə + aa ⇒ adinəwaa 'pull,...'
 pupurənə + aa ⇒ pupurənəwaa 'explode'
 etc.

If ne is preceded by u¹, e of ne is deleted before aa or any other vowel initial formative. e.g.

- kəpʉnə + aa ⇒ kəpʉnaa 'got cut'
 wəTʉnə + aa ⇒ wəTʉnaa 'fell'
 etc. (cf. 11.2.4(a)ii)

11.2.7. I.S.R. 3. Final vowel deletion and consonant gemination rule.

When a vowel final formative is followed by a vowel initial formative, sometimes the final vowel is deleted simultaneously geminating the immediately preceding consonant and then the two

1 The vowel may be i before-cci/e or yə as in wəTicci+aa ⇒ wəTiccaawe 'let(it) fall' and ɛriyə+aa ⇒ ɛriyaa 'opened' etc., but never before nə.e.g. adinə etc.

formatives are combined together to form one unit. This may be represented as:

$$..CV + V(C).. \Rightarrow ..CC(\emptyset) + V(C).. \Rightarrow ..CCV(C)..$$

11.2.8. Here, too, one may not be able to specify any precise environments where this sort of sandhi takes place. Yet one could suggest a few contexts where the application of this sandhi rule is more usual than the other two types discussed earlier.

- i If the preceding formative ends in i or u preceded by one of d, t, s, then the final i or u are usually deleted geminating d, t or s, and finally the following vowel initial formative is combined to it. Further the vowel nuclei of the syllable preceding d, t, s should be short. e.g.

wædi	+	aa	\Rightarrow	wæddaa	'Vædda man'
pæti ¹	+	e	\Rightarrow	pætte	'side'
mæsi	+	aa	\Rightarrow	mæssaa	'fly'
mæsi	+	e	\Rightarrow	mæsse	'platform'
hodi ²	+	e	\Rightarrow	hodde	'broth'
madu	+	e	\Rightarrow	madde	'noose'
padu	+	aa	\Rightarrow	paddaa	'man of the <u>padu</u> caste'
aṭu	+	e	\Rightarrow	' <u>branch</u> '	attəṭ
kæṛəpotu	+	aa	\Rightarrow	kæṛəpottaa	'cockroach'
wasu	+	aa	\Rightarrow	wassaa	'male calf'

- ii There are a few formatives where a final u before a vowel initial formative is preceded by l and T etc., but yet, they too are subject to the vowel deletion and consonant gemination rule. Consider these examples:

1 But peti + aa \Rightarrow petiyaa 'a fresh water fish'.

2 But podi + e \Rightarrow podiye 'parcel'

balu + aa \Rightarrow ballaa 'dog'
 kolu¹ + aa \Rightarrow kollaa 'boy'
 mahalu + aa \Rightarrow mahallaa 'old man'
 kurulu + aa \Rightarrow kurullaa 'bird'
 kakku^TTu + aa \Rightarrow kakku^TTaa 'crab'

Also cf.

padu + aa \Rightarrow $\left\{ \begin{array}{l} \text{paddaa} \\ \text{paduwaa} \end{array} \right\}$ 'man of the padu caste'
 (cf. 11.2.8i and 11.2.6(b)iii)
 ka^TTu + ə \Rightarrow $\left\{ \begin{array}{l} \text{ka^TTə (11.2.8ii)} \\ \text{ka^TTuwə (11.2.6(b)iii)} \end{array} \right\}$ 'shell'

iii When final u or i is preceded by a prenasalised stop, mb,
nd etc., and if u or i is deleted before a vowel initial
 formative, the gemination of the prenasalised stop produces
 a full nasal and a consonant cluster as illustrated below:

gēmbi + aa \Rightarrow gembaa 'frog'
 naāmbu + aa \Rightarrow naambaa 'youth'
 lañdu + ə \Rightarrow landə 'low jungle'
 kañdu + ə \Rightarrow kandə 'hill'
 añDu + ə \Rightarrow aNDə 'limb'
 dañDu + ə \Rightarrow daNDə 'stick, pole,...'

These are the three possible combinations when two vowels
 are combined within a 'word'. Next let us examine the other possi-
 -ble combinations when a vowel final formative is followed by a
 consonant initial formative or vice versa.

11.2.9. I.S.R. 4.

(a) If a vowel final formative is followed by a consonant
 initial formative other than wi (v.8.8.1.) and hu(n), the

1 Also kolu + aa = koluwaa 'boy' (v. 11.2.6(b)iii).

two formatives are combined together without involving any change.

- (b) When the consonant initial formative is wi (v.8.8.1.) which occurs only after a verb, the final vowel of the verb, if short, is always lengthened. e.g.

e + wi \Rightarrow eewi 'may come'
 naa + wi \Rightarrow naawi 'may bathe'
 kərə + wi \Rightarrow kəraawi 'may do'
 adi + wi \Rightarrow adiiwi 'may pull'
 wəʔe + wi \Rightarrow wəʔeewi 'may fall, drop'
 gan(i)+wi \Rightarrow ganiwi 'may take, buy'

- (c)i. When the following formative is hu(n) which occurs only after a noun with either a rə final syllable or a Caa final syllable, h is dropped and the resulting vowels are combined in accordance with the vowel sandhi discussed above (cf. I.S.R. 1,2 and 3.). e.g.

horə + hu(n) \Rightarrow horə + u(n) \Rightarrow horu(n) 'thieves'
 (cf. 11.2.4(a).).
 giraa + hu(n) \Rightarrow giraa + u(n) \Rightarrow girəwu(n) 'parrots'
 (cf. 11.2.6(a); also fn.1, p.266)

- ii. However, if the preceding formative ends in a preceded by d, D, n, l but not by r, then a is deleted before hu(n) and the resulting Ch (i.e. dh, Dh, nh, lh) cluster assimilates to CC (i.e. dd, DD, nn, ll). e.g.

wedə + hu(n) \Rightarrow wed + hu(n) \Rightarrow weddu(n)
 'physicians'
 goonə + hu(n) \Rightarrow goon + hu(n) \Rightarrow goonmu(n) 'elks'.
 etc.

We may state this rule as:

$$..CV + C_1 \Rightarrow ..CVC_1 \text{ if } C_1 \neq \begin{matrix} \underline{w} \text{ of } \underline{wi} \\ \underline{h} \text{ of } \underline{hu(n)} \end{matrix}$$

$$..CV(V) + wi \Rightarrow ..CVVwi \text{ (v. (b) sup.)}$$

$$..Cə + hu(n) \Rightarrow Cə+u(n) \Rightarrow Cu(n) \text{ if } C = \underline{r}.$$

$$..Cāa + hu(n) \Rightarrow .Ca+u(n) \Rightarrow ..Cəwu(n) .$$

$$..Cə + hu(n) \Rightarrow ..C* hu(n) \Rightarrow ..CCu(n) \text{ if } C = d, D, \\ \text{n or l.}$$

11.2.10. I.S.R. 5.

If a consonant final formative is followed by a vowel initial formative, the two are simply combined together. That is:

$$...VC + V... \Rightarrow ..VCV..$$

e.g. $\text{æt} + \text{aa} \Rightarrow \text{ætaa}$ 'elephant'

$\text{aŋg} + \text{ə} \Rightarrow \text{aŋgə}$ 'horn'

etc.

11.2.11. I.S.R. 6.

If a consonant final formative is followed by a consonant initial formative, they are combined by applying a number of phonological rules such as those given below, if the cluster formed by the combination of the two consonants does not match the consonant cluster pattern of the language (see III.13 -15).

(a) $....C + C... \Rightarrow ..CC..$ if CC = acceptable cluster.

e.g. $\text{kollan} + \text{Tə} \Rightarrow \text{kollaNTə}$ 'to the boys'

$\text{ballan} + \text{wə} \Rightarrow \text{ballaŋwə}$ 'the dogs'

$\text{gewal} + \text{wələ} \Rightarrow \text{gewalwələ}$ 'in houses'

$\text{gan} + \text{nəwə} \Rightarrow \text{gannəwa}$ 'take'

$\text{dan} + \text{nə} \Rightarrow \text{danne}$ 'know(ing)'

but

$*\text{gahak} + \text{Tə} = *\text{gahakTə}.$

(b) Progressive assimilation:

i $..C_1 + w .. \Rightarrow ..C_1C_1$ but $C_1 \neq h$.

e.g.

gan + wə \Rightarrow ganwə \Rightarrow gannə 'cause to take'

adi + wə \Rightarrow adwə \Rightarrow addə 'cause to pull'

adi + wə \Rightarrow ədwə \Rightarrow əddə 'pulled'

etc.

ii $....h + w .. \Rightarrow ..ss ..$

e.g.

bahi + wə \Rightarrow baswə \Rightarrow bassə 'cause to go down'

bahi + wə \Rightarrow bəswə \Rightarrow bæssə 'gone down, descended'.

etc.

iii $....C_1 + h .. \Rightarrow ..C_1C_1 ...$

e.g.

æt + hu(n) \Rightarrow ættu(n) 'elephants'

walas + hu(n) \Rightarrow walassu(n) 'bears'

den + hu(n) \Rightarrow dennu(n) 'cows'

(c) Regressive assimilation :

$..C_1 + C_2 .. \Rightarrow ...C_2C_2...$

e.g.

gan + mu \Rightarrow gammu 'let us take'

kəɾəpaŋ+la \Rightarrow kəɾəpalla '(you pl.) do '(Imp.)

yaddenŋ + la \Rightarrow yaddella '(you pl.) let(him..) go'

æwit + la \Rightarrow æwilla 'having come, come and'

gihiŋ + la \Rightarrow gihilla 'having gone, went and'

etc.

(d) When a cluster can not be assimilated, it may be split

by an epenthetic vowel u or e.

i $....V_1k + C .. \Rightarrow ..V kuC..$ if $V_1 = \underline{e}$.

e.g.

ballek + Tə \Rightarrow ballekuTə 'to a dog'

bəlliyek + gen \Rightarrow bəlliyekugen 'from a bitch'

etc.

- ii $\dots V_1 \begin{Bmatrix} k \\ l \end{Bmatrix} + C \dots \Rightarrow \dots V_1 \begin{Bmatrix} k \\ l \end{Bmatrix} aC \dots$ if $V_1 = a$.
 e.g.
 galak + Tə \Rightarrow galəkəTə 'to a rock' (v.11.3.6.iii)
 potwal + Tə \Rightarrow potwələTə 'to/for books' (")
 balliyak +Tə \Rightarrow balliyəkəTə 'to a bitch' (cf.(d)i,
 above; v.11.3.6.iii)

- iii $\dots C + C(i) \Rightarrow \dots CuC(i)$.

e.g.

- gas + t \Rightarrow gasut 'trees also'
 gas + yi \Rightarrow gasuyi 'trees and'
 bat + t \Rightarrow batut 'rice too'

(e) Consonant reduction:

- i $\dots C + CC \dots \Rightarrow \dots CC() \dots$

e.g.

- gan + nnaŋ \Rightarrow gannaŋ 'I 'll take'
 gan + nne \Rightarrow ganne 'take'

- ii $\dots (\check{n}C) \dots nC + wə \Rightarrow \dots nCCə \Rightarrow \dots nCə$.

e.g.

- añdi + wə \Rightarrow and +wə \Rightarrow *anddə \Rightarrow andə 'dressed'
 añdi + wə \Rightarrow and +wə \Rightarrow andwə \Rightarrow andə 'cause to
 dress'
 imbi + wə \Rightarrow imb +wə \Rightarrow *imbbe \Rightarrow imbə 'kissed'

In the next section I introduce a few more general phonological rules.

11.3. Some additional phonological rules.

11.3.1. Rule 7:

All prenasalised stops when doubled or fully nasalised, the result is a nasal plus consonant cluster.

- e.g. ṁb \Rightarrow mb ; cf. gēmbi \Rightarrow gembaa 'frog'
 ṁd \Rightarrow nd ; cf. kaṁdu \Rightarrow kanda 'hill'

$\check{N}D \Rightarrow ND$; cf. $da\check{N}Du \Rightarrow daNDə$ 'stick, stem'
 $\check{\eta}g \Rightarrow \eta g$; cf. $na\check{\eta}gi \Rightarrow næŋgə$ 'climbed'

11.3.2. Rule 8.

Except for some potential disyllabic structure words with a short syllabic vowel in the first syllable, if there is a long vowel in the second syllable, it is changed to a short one in the phonetic representation. If the first syllable is a long one¹, then the second must be a short one in potential disyllabic words, but the second may have long vowels in potential trisyllabic words.

i $\neq CVCVV^2(CV..) \neq$: e.g.

$\text{ə}t\text{aa}$ 'elephant'
 $\text{ə}t\text{aa}Tə$ 'to the elephant'
 $wed\text{aa}$ 'physician'
 $giy\text{aa}$ 'went'
 etc.

ii $\left\{ \begin{array}{l} (C)V\check{V}(C) \\ (C)\check{V}C \end{array} \right\} CVV \Rightarrow \left\{ \begin{array}{l} (C)V\check{V}(C) \\ (C)\check{V}C \end{array} \right\} CV$.

e.g.
 $haawaa \Rightarrow haawa$ 'hare'
 $haawaTə$ 'to the hare' .
 $ballaa \Rightarrow balla$ 'dog'
 $kæawaa \Rightarrow kæawa$ 'ate'
 $dunnaa \Rightarrow dunna$ 'gave'
 $gattee \Rightarrow gatte$ 'took' (emp.)
 etc.

1 A long syllable (or a heavy syllable) is $\left\{ \begin{array}{l} (C)V\check{V}(C) \\ (C)\check{V}C \end{array} \right\}$.

2 These structures are not primary (e.g. stems etc.) forms, which occur in adnominal position. e.g. *rilaa*, *radaa* etc.

$$\text{iii } \neq \left\{ \begin{array}{l} \text{CVV(C)} \\ \text{(C)VC} \end{array} \right\} \text{CVVCVV} \Rightarrow \left\{ \begin{array}{l} \text{CVV(C)} \\ \text{(C)VC} \end{array} \right\} \text{CVVCV}$$

e.g.

siilaawaa \Rightarrow siilaawa 'a kind of sea fish'

heewaayaa \Rightarrow heewaaya 'soldier'

pattæyaa \Rightarrow pattæya 'centepede'

ittæwaa \Rightarrow ittæwa 'porcupine'

$$\text{iv } \neq \text{CVCV} \left\{ \begin{array}{l} \text{(C)} \\ \text{(V)} \end{array} \right\} \text{CVV} \Rightarrow \text{CVCV(C)CV.}$$

e.g.

giraawaa \Rightarrow girəwa 'parrot'

radaawaa \Rightarrow radəwa 'washerman'

yanəwaa \Rightarrow yanəwa 'go'

nariyaa \Rightarrow nariya 'fox'

kərannee \Rightarrow kəranne 'do' (emp.)

etc.

$$\text{v } \neq \text{CVVCVCVV} \Rightarrow \text{CVVCVCV.}$$

e.g.

naanəwaa \Rightarrow naanəwa 'bathe'

maaluwaa \Rightarrow maaluwa 'fish'

yaaluwaa \Rightarrow yaaluwa 'friend'

$$\text{vi } \neq \text{(C)V(C)CV(C)CV(V)CVV} \Rightarrow \text{(C)V(C)CV(C)CV(V)CV.}$$

e.g.

apjilaawaa \Rightarrow apjilaawa 'a kind of sea fish'

kəbəllæwaa \Rightarrow kəbəllæwa 'ant eater'

kapənəwaa \Rightarrow kapənəwa 'cut'

11.3.3. Rule 9.

When a formative final s is combined with a vowel initial formative by sandhi rule I.S.R.5 (v.11.2.10.), in most situations, s is changed to h. e.g.

minis¹ + aa \Rightarrow minihaa \Rightarrow miniha 'man'.

gas + ə \Rightarrow gaha 'tree' (cf. 11.3.4.)

¹ kos + ee \Rightarrow kosee 'jak fruit', but never as *kohee.

$\text{as} + \text{ə} \Rightarrow \text{əhə}$ 'eye' (cf.11.3.5.)
 $\text{pas}^1 + \text{ə} \Rightarrow \text{paha}$ 'five' (cf.11.3.4.)

[Where ver h is doubled the result is ss and never *hh .
 Cf. $\text{kahi} + \text{wə} \Rightarrow \text{kəssə}$ 'coughed'; $\text{wahi} + \text{wə} \Rightarrow \text{wəssə}$
 'rained' etc.]

11.3.4. Rule 10.

When ə occurs after h, it is changed to a if h is preceded by a or o, and o, too, before h is simultaneously changed to a. e.g.

$\text{patas} + \text{ə} \Rightarrow \text{pataha}$ 'small pond'
 $\text{polos} + \text{ə} \Rightarrow \text{polaha}$ 'young jak fruit'
 $\text{ekolos} + \text{ə} \Rightarrow \text{ekolaha}$ 'eleven'
 $\text{koros} + \text{ə} \Rightarrow \text{koraha}$ 'large pan'

11.3.5. Rule 11.

When ə occurs after h, it is changed to æ if h is preceded by æ. e.g.

$\text{as} + \text{ə} \Rightarrow \text{əhæ}$ 'eye'
 $\text{pas} + \text{ə} \Rightarrow \text{pəhæ}$ 'basket'

11.3.6. Rule 12.

i When ə occurs before a consonant cluster, it is changed to a. e.g.

$\text{kərə} + \text{nnaŋ} \Rightarrow \text{kəraŋnaŋ}$ 'I 'll do'
 $\text{kəpə} + \text{nne} \Rightarrow \text{kəpanne}$ 'do cut'(Imp.) , 'to cut'

ii Also ə is changed to a if it occurs before a final consonant or yi or (w)u. e.g.

$\text{potə} + \text{t} \Rightarrow \text{potat}$ 'the book also'
 $\text{potə} + \text{yi} \Rightarrow \text{potayi}$ 'the book and'
 $\text{yamə} + (\text{w})\text{u} \Rightarrow \text{yamawu}$ 'go' (Imp. Pl.)

1 pas 'soil' never become *paha .

iii Similarly a before final consonants is changed to e when vowel initial formatives are combined with them, and also when an epenthetic vowel is inserted. e.g.

gewal + ə ⇒ gewələ 'in houses'
 harak + aa ⇒ harəkaa ⇒ harəka '(ox, cow)cattle'
 galak + Tə ⇒ galəkəTə 'to a rock'
 etc.

11.3.7. Rule 13.

No word can occur with a final prenasalised stop.

When there are situations where prenasalised stops occur finally, the stop consonant is always deleted simultaneously fully nasalising the half nasal of the prenasalised stop. e.g.

aŋg + ə ⇒ aŋgə but *aŋg ~~⇒~~ ⇒ aŋ ~~⇒~~ 'horns'
liŋd + ə ⇒ liŋdə but *liŋd ~~⇒~~ ⇒ lin ⇒ liŋ ~~⇒~~ 'wells'
kalaŋd + ə ⇒ kalaŋdə but *kalaŋd ⇒ kalaŋ ~~⇒~~ 'a small
measure'
poloŋg + aa ⇒ poləŋga but *poloŋg ~~⇒~~ ⇒ polon ~~⇒~~ 'viper'

It seems that the final stops of some prenasalised stops drop before consonant initial formatives also, where assimilation does not take place. e.g.

aŋg + wələ ⇒ aŋwələ 'in horns'
liŋd + wələ ⇒ liŋwələ 'in wells'
etc.

11.3.8. Rule 14.

A nasal before a stop is always homorganic with the stop. It may be η/\underline{n} before $\underline{y}, \underline{w}, \underline{s}$, and \underline{l} , and η before \underline{h} . e.g.

ballan + Tə ⇒ ballanTə 'to the dogs'
 ballan + gen ⇒ ballangen 'from the dogs'
 paalam + wəleTə ⇒ paalanwəleTə 'to/for the bridges'
 etc.

11.3.9. Rule 15.

A nasal before ~~##~~ (i.e. word boundary) is usually velarised. (However, it may undergo some other changes before other words according to external sandhi rules.) e.g.

toran \Rightarrow toraŋ ~~##~~.
 paalam \Rightarrow paalaŋ ~~##~~
 etc.

11.3.10. Rule 16.

Finally, I introduce a few more rules by which certain underlying phonological representations can be converted to certain other phonetic representations. The application of these rules is, however, optional, so even the phonological representations may appear as phonetic representations as well. Most of these are certain contractions of some underlying structures.

(a) ..eyə.. \Rightarrow ..ee.. (e by rule 8.ii etc.)

e.g.

kaleyəkin \Rightarrow kaleekin 'from a pot'
 maale^{yə}kin \Rightarrow maalekin 'from a necklace'
 etc.

(b) ..əy. . \Rightarrow ..ey..

e.g.

yoodəyaa \Rightarrow yoodeya 'giant'
 duutəyaa \Rightarrow duuteya 'messenger'
 etc.

(c) ... eye .. \Rightarrow .ee ..

e.g.

duuteyek \Rightarrow duuteek 'a messenger'

(d) ...əwə.. \Rightarrow ..oo..

e.g.

porəwə \Rightarrow poroo 'axe'
 paTəwənəwa \Rightarrow paToonəwa 'load'
 karəwələ \Rightarrow karoolə 'dried fish'

(e) ...əwa... \Rightarrow ..owa..

e.g.

porəwak \Rightarrow porowak 'an axe'

paTəwannaŋ \Rightarrow paTowannaŋ 'I 'll load'

(f)aha .. \Rightarrow ..aa..

e.g.

daha \Rightarrow daa in daahatə '17' etc.

paha \Rightarrow paa in paalohə/ paalaha '15' etc.

(g) .. iiw... \Rightarrow ..iww...

e.g.

biiwə \Rightarrow biwwə 'drank'

riiwə \Rightarrow riwwə 'evacuated the bowels'

(h) $\begin{bmatrix} \text{iyuw} \\ (\text{ə})\text{əyuw} \end{bmatrix}$,... \Rightarrow .. $\begin{bmatrix} \text{iww} \\ (\text{ə})\text{əww} \end{bmatrix}$..

e.g.

liyuwə \Rightarrow liwwə 'wrote'

pəəyuwə \Rightarrow pəəwwə 'ceased (raining),...'

etc.

(i) .. $\begin{bmatrix} \text{iwuw} \\ (\text{ə})\text{əwuw} \\ \text{ewuw} \end{bmatrix}$.. \Rightarrow .. $\begin{bmatrix} \text{iww} \\ (\text{ə})\text{əww} \\ \text{eww} \end{bmatrix}$..

e.g.

diuwə \Rightarrow diwwə 'ran'

nəəwuwə \Rightarrow nəəwwə 'washed, bathed'

kəwuwə \Rightarrow kəwwə 'fed'

gewuwə \Rightarrow gewwə 'paid'

etc.

CHAPTER 1212.0. SANDHI 2 - EXTERNAL SANDHI

12.0.1. In this last chapter, an attempt will be made to introduce some optionally applicable sandhi rules called external sandhi. They are so called because they are applied between words and not between morphemes within a morpheme sequence of a word. It is possible in deliberately slow speech to avoid the application of all these external sandhi rules. But in normal, rapid speech people speak freely, mostly without much interruption of pauses or word boundaries. In the previous chapter we discussed the word in Sinhalese and also introduced certain internal sandhi rules that must be applied between morphemes (or formatives) in producing the different possible words. In the following sections let us introduce another set of sandhi rules that may be applied between the words in producing continuous utterances or the phonetic representation of sentences.

12.0.2. A word in Sinhalese is either vowel or consonant initial and vowel or consonant final. For constraints of initial and final vowels and consonants see III.7 and III.10 and 11. Taking into account this initial and final sounds of words, let us examine sandhi between words.

12.1. EXTERNAL SANDHI RULES

12.1.1. All words beginning or ending in a vowel can have word boundary before and after them. Therefore, even in ordinary, or perhaps in rapid, speech when a vowel final word is followed by a vowel initial word, the boundary may remain.

E.S.R.¹ 1. ... CV ~~##~~ VC.. \Rightarrow ..CV ~~##~~ VC..

e.g.

~~##~~ ~~##~~ miniha ~~##~~ gaha ~~##~~ adinewa ~~##~~ ~~##~~

the man the tree pull

The man pulls the tree.

~~##~~ ~~##~~ horaa ~~##~~ iiye-t (t)²awilla ~~##~~ ~~##~~

the thief yesterday too had come

The thief had come yesterday too.

~~##~~ ~~##~~ kaareke ~~##~~ eləwanna ~~##~~ epaa ~~##~~ ~~##~~

the car drive do'nt

Do not drive the car.

12.1.2. However, in certain environments where a vowel final word and a vowel initial word come together the boundary is removed by combining the two vowels as postulated below:

E.S.R. 2. ..CV(V) ~~##~~ (V)VC.. \Rightarrow CV(V) (~~##~~)(V)VC \Rightarrow .C(V)VC..

i

.. Cə ~~##~~ V(V)C .. \Rightarrow ..CVVC..

e.g.

hate ~~##~~ aTak \Rightarrow hataaTak

seven eight some seven or eight.

maDe ~~##~~ aara \Rightarrow maDaara

mud a fish 'a fresh water fish.'

ate ~~##~~ arinewa \Rightarrow ataarinewa

hand release 'drop '

hoñde ~~##~~ əwəriyə \Rightarrow hoñdəəwəriyə

good bunch the good bunch(of bananas)

1 E.S.R. for External Sand hi Rule.

2 see E.S.R.4 in 12.1.4.

- ii .. CV₁ # V₁ C.. \Rightarrow ..CV₁V₁C.. if V₁ = the same vowel;
(long or short)

e.g.

gaha # adine \Rightarrow gahaadine
tree pulling tree pulling

kiri # itirene \Rightarrow kiritirene
milk boiling milk boiling (= prosperous)

giyaa # aawa \Rightarrow giyaawa
went came went and came

- iii ..CV₁# V₂C.. \Rightarrow ..CV₂C..

e.g.

maha # amma \Rightarrow mahamma
big mother 'mother's elder sister'

pupci # amma \Rightarrow pupcamma
small mother mother's younger sister'

- iv .. CV # VC .. \Rightarrow ..CV₁y/wVC.. if V₁ =frontV then y
V₁ = back V then w.

e.g.

aacci # amma \Rightarrow aacciyamma
grand mother grand mother

kaTu # alə \Rightarrow kaTuwələ
'a kind of yam'

- v ..C₁V₁ # V₂C.. \Rightarrow ..C₁C₁V₂C..

e.g.

loku # ayiya \Rightarrow lokkayiya
big elder brother 'big elder brother'

12.1.3. When a vowel final word is followed by a consonant initial word they remain as two words -- there is no involvement

of sandhi here. This may be stated as:

E.S.R. 3. ..CV ~~##~~ ʈ.. \Rightarrow ..CV ~~##~~ C..

e.g.

~~##~~ ~~##~~ miniha ~~##~~ gaḥaTə ~~##~~ nægga ~~##~~ ~~##~~

the man to the tree climbed

The man climbed on to the tree.

~~##~~ ~~##~~ lameya ~~##~~ naTənəwa ~~##~~ hoṇdayi ~~##~~ needə ~~##~~ ~~##~~

the child dance well doesn't he

The child dances well. Doesn't he?

12.1.4. When a consonant final word is followed by a vowel initial word, the two words may be combined by doubling the final consonant and joining the two words together letting ~~##~~ to disappear. That is:

E.S.R.4. ..VC ~~##~~ V.. \Rightarrow ..VCCV..

e.g.

gok ~~##~~ attə \Rightarrow gokkattə

gok branch 'young coconut branch'

haT~~##~~ awuruddak ~~##~~ unnu ~~##~~ ekaa ~~##~~ \Rightarrow
seven years for stayed one

hattawuruddak~~##~~ unnu ~~##~~ ekaa~~##~~.

one who stayed for seven years.

12.1.5. Sandhi between a consonant final word and a consonant initial word needs to be stated in some detail. First of all it has to be mentioned that not all consonants are very productive in word final position. Only a few such as k, t, ṇ, l and s are productive. Others occur finally in loan words¹ and there these

¹ see III.11. for a few examples.

consonants tend to remain mostly unchanged before consonant initial words. Consequently we may state sandhi between consonant final and consonant initial words taking into consideration the words ending in k, t, ŋ, l and s. A number of sandhi rules are proposed to cover the sandhi between words ending in those consonants and consonant initial words. First, let us take k final words.

E.S.R. 5. i $..k^1 \nrightarrow C_1 \Rightarrow ..C_1(\nrightarrow)C_1..$

$C_1 = k, c, T, t, p, g, j, D, d, b, (s)$

ii $..k^1 \nrightarrow C_2.. \Rightarrow ..k(\nrightarrow)C_2..$

$C_2 \neq C_1.$

i e.g.

harak \nrightarrow koTuwə \Rightarrow harak(\nrightarrow)koTuwə
cattle stall cattle stall

puwak \nrightarrow gobee \Rightarrow puwak(\nrightarrow)gobee
areca-nut young branch young areca-nut branch.

puwak \nrightarrow Tike \Rightarrow puwaT(\nrightarrow)Tike
areca-nut little little amount of areca-nut.

kaak \nrightarrow pəTiya \Rightarrow kaap(\nrightarrow)pəTiya
crow chick chicken crow.
etc.

ii. eg.

harak \nrightarrow maDuwə \Rightarrow harak(\nrightarrow)maDuwə
cattle shed cattle shed

minihek \nrightarrow naanəwa \Rightarrow minihek(\nrightarrow)naanəwa.
a man bathe a man is bathing

Sandhi between t final words and C initial words may be stated as :

1 Word final p in a few Sinhalese words such as lip 'hearth', kap 'post' etc. behave like final k.

E.S.R. 6. i .. t ~~##~~ C₁ ⇒ ..C₁(~~##~~)C₁..if C₁ = c, T, D, j.

ii ..t ~~##~~ C₂ ⇒ .. d(~~##~~)C₂..if C₂ = g, b, d.

iii ..t ~~##~~ C₃ ⇒ .. t(~~##~~)C₃..if C₃ ≠ C₁, C₂.

i e.g.

bat ~~##~~ Tikak ⇒ baT(~~##~~)Tikak
rice a little a little rice.

bat ~~##~~ cuTTak ⇒ bac(~~##~~)cuTTak
rice a little a little rice

bat ~~##~~ Dingak ⇒ baD(~~##~~)Dingak
rice a little a little rice

bat ~~##~~ juNDak ⇒ baj(~~##~~)juNDak
rice a little a little rice.

ii e.g.

pot ~~##~~ goDə ⇒ pod(~~##~~)goDə
books heap heap of books

pot ~~##~~ bañdinəwa ⇒ pod(~~##~~)bañdinəwa
books bind bind books.

palaat ~~##~~ dekə ⇒ palaad(~~##~~)dekə
provinces two two provinces

iii e.g

pot ~~##~~ kaDee ⇒ pot(~~##~~) kaDee
books shop book shop

dat ~~##~~ nəti ⇒ dat(~~##~~) nəti
teeth less toothless

bat ~~##~~ mule ⇒ bat(~~##~~) mule
rice parcel parcel of rice.

Sandhi between η final words and C initial words may be stated as :

E.S.R. 7. .. $\eta \neq C.. \Rightarrow N_1 (\neq) C..$

$$N_1 = \left\{ \begin{array}{l} \eta / _ (\neq) \left\{ \begin{array}{l} k \\ g \\ y \\ w \\ h \end{array} \right. \\ \eta _ (\neq) \left\{ \begin{array}{l} c \\ j \\ n \end{array} \right. \\ N _ (\neq) \left\{ \begin{array}{l} T \\ D \end{array} \right. \\ \eta _ (\neq) \left\{ \begin{array}{l} t \\ d \\ n \\ r \\ l \\ s \end{array} \right. \\ m _ (\neq) \left\{ \begin{array}{l} p \\ b \\ m \end{array} \right. \end{array} \right.$$

e.g.

seenə doDaŋ(\neq)kaDeŋəwa

Sena oranges pick

Sena picks oranges.

seena doDaŋ(\neq)ganinəwa

Sena oranges count

Sena counts oranges.

paalaŋ (\neq) yaTə

bridges under

under the bridges.

piŋ(\neq) wəttə

merit estate

estate donated (to a temple as a meritorious deed)

liŋ (\neq) hiŋdila

wells have gone dry

dəŋ(\neq)candə-kaale

now election time

this is the election period.

lin(~~/~~)jaṃburayi
wells deep are
wells are deep.

up(~~/~~)paanəwantayi
they intelligent are
They are intelligent.

doDaN(~~/~~)Tikə
oranges few
the few oranges.

paaN(~~/~~)Dingak
bread a little
a little amount of bread.

paan(~~/~~)təTiyə
bread tray
tray for baking bread.

an(~~/~~)deke
horns two
two horns.

an(~~/~~)nəti
horn less

kan(~~/~~)ratu
ears red
red eared,

lin(~~/~~)laŋgə
wells near
near wells.

ran(~~/~~)sembuwə
golden small pot
small golden pot.

ham(~~/~~)paTiyə
leather belt

gom(~~/~~)baanə
bulls two / two bulls .

nelum(~~##~~)malə
lotus flower

Sandhi between l final words and C initial words may be stated as:

E.S.R. 8. ... l ~~##~~ C.. \Rightarrow ..l(~~##~~)C..

e.g.

pol(~~##~~)kaTu
coconut shells

pol(~~##~~)gaha
coconut tree

gal(~~##~~)Tikak
stones a few
a few stones.

kal(~~##~~)tiyenəwa
time there is
there is time

mal(~~##~~)dekə
flowers two
two flowers.
etc.

Sandhi between s final words and C initial words is as follows:

E.S.R. 9.s ~~##~~ C.. \Rightarrow ..s(~~##~~)C..

e.g.

mas(~~##~~)kaDee
meat stall (= butcher's shop)

pas(~~##~~)tel
five oil
five kinds of oil

kos(~~##~~)geDiye
jak fruit
etc.

Sandhi between non-productive C final words and C initial words may be stated as:

E.S.R. 10. ...C₁ ~~#~~ C.. \Rightarrow ..C₁(~~#~~)C..

e.g.

mæc(~~#~~) deke

matches two

two matches.

biiTruut(~~#~~)baage

beetroot half

half a pound of beet-root.

kilip(~~#~~)kæli

clip pieces

pieces of a clip

Tiim(~~#~~)tunak

teams three

three teams.

etc.

12.1.6. Finally, I conclude this chapter by stating that, although the word boundary is removed in rapid speech, the stress remains mostly on the first syllable of each word if the second syllable is not a heavy¹ one. However, if the word consists of a number of combined morphemes and the sandhi produces a heavy second syllable, then the first is stressed, as in:

æt + aa = ætaa 'elephant'

gon + aa = gonaa 'bull'

etc.

Cf. also: wilaape 'lamentation'; balla 'dog'

karatte 'cart'; assaddenewa 'till, asweddumise' etc.

¹ A heavy syllable is one with a long syllabic vowel or a vowel followed by a consonant which does not belong to the following syllable. (C)VVC/(C)VC are heavy syllables.

A P P E N D I X E S

APPENDIX A

A.O. QUANTIFIERS AND MODIFIERS

A.O.1. In this section I propose to introduce some quantifiers and modifiers in Sinhalese. I shall not, however, indulge in any long discussion in to the syntax and semantics of them. Quantifiers are different from modifiers. As far as I understand them, quantifiers are a part of complex noun phrases, whereas modifiers are related to whole sentences. The same form may appear as a quantifier as well as a modifier. If it modifies a sentence (or a proposition) then it is a modifier and if its function is to quantify the noun phrase, then a quantifier. Thus it is not the form that decides whether a particular form is a quantifier or a modifier but the semantic function.

A.O.2. Modifiers are usually treated as adverbs. They modify whole sentences. Predicates and arguments of propositions are related together by case relations, so, when we say a modifier modifies a predicate, it actually means that it modifies the whole proposition -- i.e. the sentence when the auxiliary is included.

A.1. QUANTIFIERS IN SINHALESE

A.1.1. As just stated quantifiers form a part of complex noun phrases. All numerals and a few quantity nouns together with singular number and definiteness (i.e. + or -) categories (i.e. quantity noun phrases) can be added to other noun phrases which are marked for [-sg] number and [+ def] to form complex (quantity) noun phrases. Furthermore, in certain cases, another noun phrase with a noun marked [+measure] and [-sg] and [+def]

may occur after/^acommon noun phrase and before the quantity noun phrase in forming a complex noun phrase with three noun phrases in one. Although all constituent noun phrases are marked for number (i.e.[-sg]) and definiteness (i.e.[+def]), actually the number and definiteness of the final member, the noun phrase with a quantity noun, or the quantifier, should be considered as the number and definiteness of the whole complex noun phrase (see Lakoff, G. 1970, p.180.).

A.1.2. Some examples to illustrate the different possible noun phrases with quantifiers are given first, there then follows a list of quantifiers.

i galak < gal + ə + ak = N + [+sg] + [-def].

a rock / a stone

Here the [-def] may be considered as some quantification -
one rock.

ii gal + dek + ə + ak \Rightarrow gal deka

rocks two (some)

two rocks. (indefinite reference) .

The definite reference is:

gal + dek + ə + \emptyset \Rightarrow gal deka

rocks two (the)

the two rocks.

iii alə + raattal + tun + ə + ak \Rightarrow alə raattal tuna

potatoes pounds three (some)

three pounds of potatoes (+ indefinite)

Compare the definite quantity NP:

alə + raattal + tun + ə * ∅ = alə raattal tune

potatoes pounds three the

the three pounds of potatoes.

Cf. also:

gewal saməharak

houses some

some houses.

redi yaarə tunə haterak

cloths yards three four

three or for yards of cloth.

A.1.3. It seems reasonable to believe that there is some semantic relation between definiteness and quantifiers. However, quantifiers are more definite thanⁱⁿ⁻definite and they stress the quantity more than that can be expressed by definiteness.

A.1.4. All numerals belong to this class of quantifiers. They are similar to nouns. Some numerals are the following:

ek ' 1 '

de(k) ' 2 '

tun ' 3 '

haterə ' 4 '

pas ' 5 '

hayə ' 6 '

hat ' 7 '

aTə ' 8 '

namə ' 9 '

daha ' 10 '

ekolos ' 11 '

dolos ' 12 '

daha - tun ' 13 '

daha daa- haterə ' 14 '

pahalos ' 15 '

daa-səyə '16'

daa- hat '17 '

....

wisi '20'

tis ' 30 '

hatəlis '40'

panas ' 50 '

hæŋə '60'

hættə ' 70'

asuu ' 80 '

anuu ' 90 '

siyə '100'

ek(ə)-siyə-ek '101'

de-siyə- ek '201'

daas '1000'

ek(ə)-daas-ek(ə)-siyə-ek '1101'

etc.

A.1.5. A few quantifiers which are not numerals are listed below: both definite and indefinite forms are given (where they are found).

def.

huŋgə 'the lot '

Tikə 'the little/few'

goDə ' many'

(no def.form)

kiipe 'the few'

ganəne 'the amount'

?

okkomə 'all'

seerəmə "

indef.

huŋgak ' a lot'

Tikak 'a little/few'

goDak ' much, a lot'

saməharak 'some'

kiipeyak 'a few, some'

ganənak 'several'

ganənaawak "

?

?

A.2.

MODIFIERS IN SINHALESE

A.2.1. By modifiers I mean those expressions that are generally called adverbs. Since I do not attempt to study these

expressions in detail in relation to their deep syntax and semantics, I merely propose to recognise a number of classes of modifiers to introduce some expressions from Sinhalese.

A.2.2. Propositions of sentences consist of predicated -- verbs and adjectives -- and a number of obligatory arguments presupposed by or determined by them. In addition to these nuclear constituents the propositions may contain extranuclear adjuncts, expressing such additional information as how, why, when, where etc. the events take or took place. Some such expressions may be explained in relation to case relations. (Compare the Time and Locative case relations, for instance.) However, there are expressions that may be explained differently. They may have resulted through lexicalisation or some similar processes from some underlying sentences. Furthermore, there are some expressions which can not be explained in relation to both case relations and underlying sentences. Thus, the adjuncts, as modifiers of propositions, appear to be some complex expressions, which require a careful study before any classification is attempted.

A.2.3. In this study of morphology, I do not propose to discuss these modifiers in relation to deep facts of syntax and semantics. These must be studied in a study of syntax of Sinhalese. Yet, although I restrict myself from going into any detailed discussion of syntax and semantics of modifiers (= adverbs) I shall, at least, list some of the expressions used as modifiers. These will be found below under a number of classes, set up according

to the semantic function of the expressions, together with a short note.

A.2A.

TIME MODIFIERS

A.2A.1. Most time modifiers can be explained with a time case relation. There is a class of nouns denoting different periods of time. Thus adə 'today', heTə 'tomorrow' etc. and udee 'morning', hawaha 'afternoon', rææ 'night' etc., and many other such nouns when occur as adjuncts, their function is as time modifiers. Noun phrases with these time denoting nouns in different time case relations are time modifiers -- adjuncts. However, they may be explained differently, possibly as resulted through subordination.

A.2A.2. Then there are a few expressions which are not noun phrases in time case but are some special forms functioning as modifiers denoting 'repetition', 'frequency' etc. e.g.

hæmætissemə 'always'
 aaye(mə)(t) 'again'
 næwətə(t) 'again'
 nitərə(mə) 'always, often'
 etc.

A.2B.

PLACE MODIFIERS

A.2B.1. Some of the place modifiers are noun phrases in the Locative case relation, apparently occurring as adjuncts to propositions. It seems to me, that these NPs are not simply added to propositions, but have remained in such propositions (as adjuncts) through the process of relativisation of an embedded sentence or through coordination. Thus:

miniha watte gaha kapənəwa
 the man in the estate the tree cut
 The man cuts the tree in the estate.

This may mean two things as:

- (a) The man is in the estate and he cuts the tree, or,
- (b) The man cuts the tree which is in the estate.

miniha watte innəwa + miniha gaha kapənəwa
 the man in the estate is. the man the tree cut
 The man is in the estate . The man cuts the tree.,when conjoined
 give the sentence:

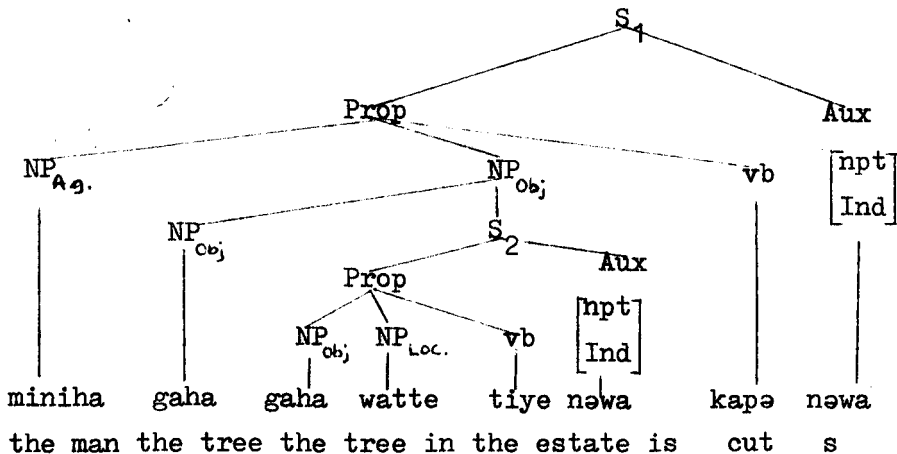
miniha watte gaha kapənəwa
 The man(is)in the estate(and)(he)cuts the tree.

This sentence can be explained in relation to relativisation as:

- (a) miniha (miniha watte innəwa) gaha kapənəwa
 the man (the man in the estate is)the tree cut
 The man(who is in the estate)cuts the tree.
- (b) miniha gaha (gaha watte tiyenəwa) kapənəwa
 the man the tree (the tree in the estate is) cut
 The man cuts the tree(which is in the estate).

Let us examine the deep and surface structure relation of the sentence (b) : miniha watte gaha kapənəwa.

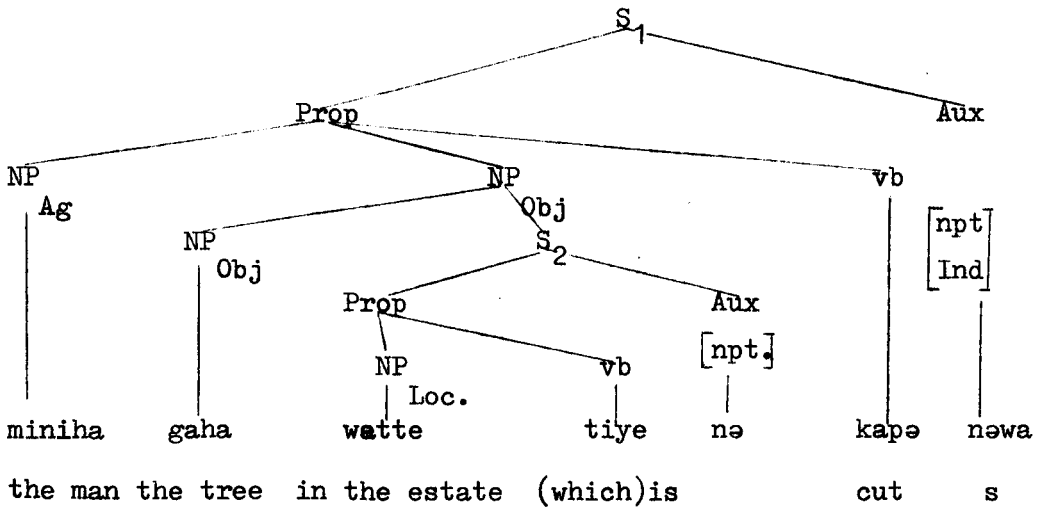
The deep structure of the above sentence may be suggested as:



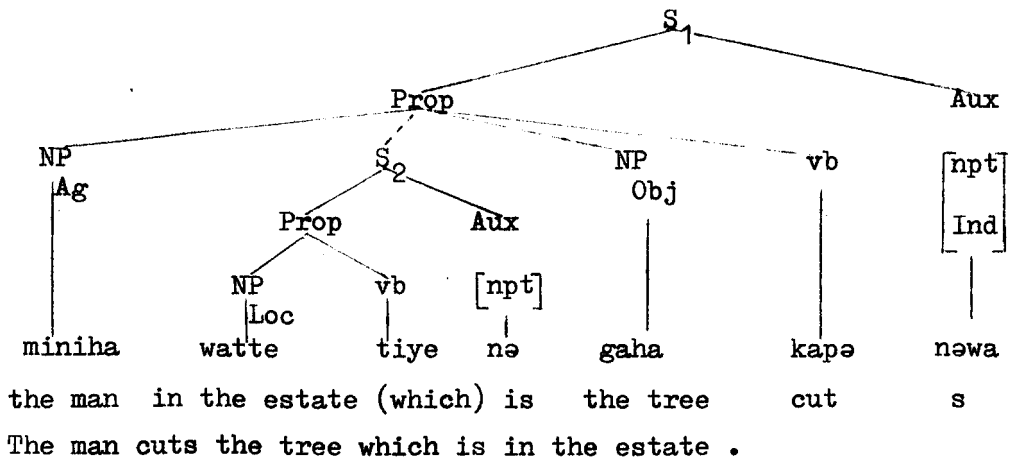
- 1 Equi-NP deletion deletes the NP/^{Obj.}of S_2 ;
- 2 Modality of S_2 is deleted ;
- 3 The remaining S_2 is added before NP Obj, of the Prop. of S_1 ; and the repetitive node deletion;
- 4 Verb + Aux. of S_2 deletion if verb is tibe([tiye]) or indi 'be'; this is optional.

The result is the sentence given above (i.e.(b)). Let us see these stages in diagram:

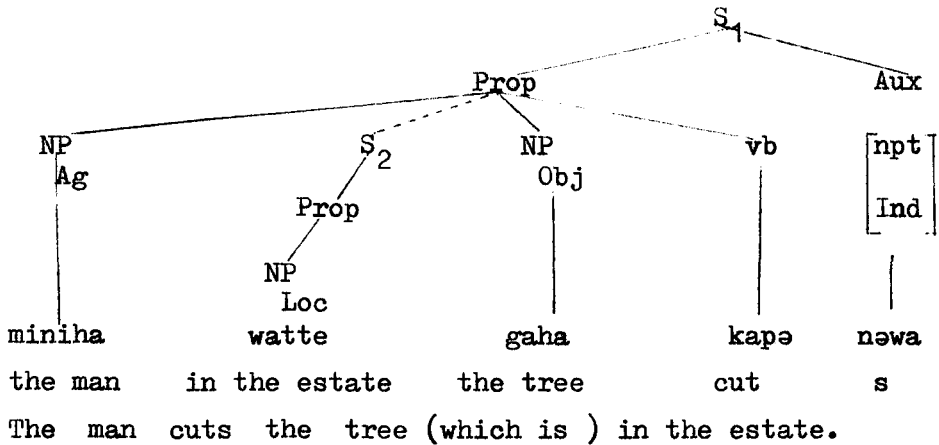
By 1 and 2 :



By 3 :



However, by applying rule 4, which is optional, we get:



This elucidates the fact that the NP in Locative case is not merely a kind of modifier added to the proposition from outside, but a result of relativisation where a sentence has been embedded in the proposition of the matrix sentence. Thus place modifiers of NP Loc. nature are not independent place modifiers (i.e. a special class of lexical items) but have resulted through relativisation.

A.2B.2. Then there is another class of place modifiers such as watte di 'when/ while in the estate', gamee di 'while/when in the village' etc., where an NP Loc. + di constitute the modifier. These, too, have resulted from some underlying subordinate sentences where subordination denotes some temporal relationship such as 'while, when, 'at the time when..'etc..

Compare the following sentences.

sisil gedərə di pintuure aṇḍinəwa

Sisil at home while pictures draw

Sisil draws pictures while (he is) at home.

sisil gedərə innə-koTə pintuure aṇḍinəwa and

sisil gedərə iddi / indədi pintuure aṇḍinəwa

Sisil at home while he is pictures draw(s).

Accordingly I believe that gedare di and similar expressions have resulted from subordinate sentences like sisil gedare innawa + subordinate conjunction di, etc. Therefore, neither is this type of place modifier a mere adjunct to propositions, but results from some underlying sentences in the process of subordination.

Since we can explain all (or^{or}/most) place modifiers syntactically, I think we need not list them as a class of expressions used as adjuncts, because they are more complex than simply adjuncts.

A.2C.

MANNER MODIFIERS

A.2C.1. The manner in which an activity or event takes (or took) place is expressed by a class of expressions called manner adverbs (or modifiers). These, too, may be explained differently.

A.2C.2. The majority of these manner adverbs are derived from adjectives. Therefore, I list a few expressions here and leave a fuller investigation to a study of the derivation of modifiers in Sinhalese.

hoñdin	}	' well, in a proper manner'
hoñdeTə		

hemin	}	'slowly'...
hemihitə		

ikmenin	}	'quickly'...
ikmenəTə		

duken	}	'with sorrow'...
dukə- see		

satuṭin } 'happily'...
 santoosen }

paressəmen 'carefully'

dassə- leṣə / widiyəṭə 'cleverly'. .
 etc.

A.2C.3. These, and many similar constructions in Sinhalese may be explained as having resulted from some underlying structures as Lakoff has discussed (see Lakoff, G. 1970. pp.157 ff.). However, I do not attempt to demonstrate manner adverbs in Sinhalese in a similar way, because my research into Sinhalese syntax is so far very limited, and furthermore, it is not my aim to go into deep areas of syntax in this thesis.

A.2D. QUANTIFYING MODIFIERS

A.2D.1. Besides the different classes of modifiers discussed so far, we have to recognise another class of expressions used as adjuncts in propositions to quantify the whole proposition. They include:

bohoma 'very'
 hari 'very'
 huṅgak 'a good deal,...'
 Tikak 'a little,...'
 tarəmak 'somewhat,...'
 səəhenna 'considerably,...'
 eti- tarām 'as many / much as possible,...'
 eti-padam ' " " " "
 etc.

A.2D.2. One may recognise further classes of modifiers. However, I limit myself to those few classes stating the fact

that many other similar constructions can be explained either in relation to case relations or in relation to coordination or subordination. We have seen, even in the above cases, that they may have resulted from some underlying structures. This suggests that many so-called modifiers or ~~ad~~verbs have to be carefully studied syntactically and semantically before they are classified as modifiers etc. We may have to recognise a number of sentence connectives and conjunctions -- both coordinate and subordinate -- expressing a wide range of relationships. Then by making use of these conjunctions and connectives we may be able to account for many surface 'adjuncts', when we study different processes involved in subordination and coordination. However, to refer to certain expressions at least, we have to use the term adverb or modifier whatever they may be in deep syntactic structures.

APPENDIX BB.0. QUESTION, EMPHASIS, NEGATION, ETC. IN SINHALESE

B.0.1. The purpose of this account is not to discuss problems of syntax involved in question formation, negation or emphasis and such other areas in Sinhalese. The aim is to introduce a number of expressions, 'particles' as sometimes they are called, in relation to those processes. When the deep structure sentences or the constituents (i.e. NP, verb, etc.) are marked for question, emphasis, negation etc., the different expressions signalling these deep properties are manifest in surface structures in different places in the sentence according to the place of their attachment in the deep structures. Without exploring the complexity of the syntax of these areas let us simply introduce some forms in relation to them.

B.1. QUESTION FORMATION

B.1.1. As in some languages, a sentence in Sinhalese can be used as a question when it is used with a rising or high intonation at the end. Thus intonation is a marker of 'question'.

B.1.2. Besides high intonation, a sentence (a simple declarative or a negative one) may be converted to a question by adding a question marker də at the end of a sentence. Compare these examples:

S: mahatteya gedərə innəwa
the gentleman at home is
The gentleman is at home.

Q: mahatteya gedərə innəwa də
the gentleman at home is (?)
Is the gentleman at home?

Also :

mahatteya gedere innəwa

Is the gentleman at home ?

Thus any declarative sentence can be transformed into a question either by introducing a rising intonation, or by adding the question marker də¹. This includes equational sentences and sentences with categorial propositions -- propositions with predicative adjectives determining argument NPs. Compare these examples:

i sumənəpaalə guruwəreyek
Sumanapala (is) a teacher.

Q: sumənəpaalə guruwəreyek də
Is Sumanapala a teacher?

ii. asookaa ganarwələTə dassa -yi
Asoka at Arithmetic good is
Asoka is good at Arithmetic.

Q: asookaa ganarwələTə dassə-(yi)-də
Is Asoka good at Arithmetic?

iii mee potə hoŋdə nəə
this book good is not
This book is not good.

Q: mee potə hoŋdə nəddə (< nət(i)də)
Is this book not good?

B.1.3. In Sinhalese there is a class of expressions which are usually referred to as question words, which occur in certain

1 də may occur as yə or y in some dialects.

question sentences. Some of these expressions also contain the question marker də in them. However, in certain cases this də element may occur attached to some NP or the verb of the sentence and the rest of the question word -- mostly the question deictic (see 6.3.6.) -- remains without it. Some of these expressions with a few examples are given below, as a syntactically based explanation is beyond the scope of this study.

B.1.4.

kaa : kawudə 'who'

kawudə gedərə

Who (is) at home ?

but,

kaat kawurut nəti (= idiom)

without any (relatives etc....)

: kawuru 'who'

kawuru kawuru aawa də / kawuru kawurudə aawe

who who came who who came

Who and who did come?

: kaawə-də 'who(m)'

miniha kaawədə alla-gatte

the man who caught hold of

Who did the man catch hold of?

: kaaTədə 'to whom'

uŋbə kaaTədə kiwwe

you to whom did say

To whom did you say (it) ?

: kaagen-də 'from whom'

kaagendə baDu gatte
form whom goods bought
From whom did you buy goods?

: kaa laŋgədə 'with/at whom'

kaa laŋgədə yaturu
with whom the keys
With whom are the keys?

: kaa ekkədə 'with whom'

tamuse kaa ekkədə giyee
you with whom went
With whom did you go?

B.1.5. In all these cases kaa with its variants kawu- and kawuru, functions as a pronoun. It is similar to koy-kenaa 'which one'; koy-ekaa 'which one' (kooka koyka koyekaa 'which one') or mone-kenaa or mone-ekaa 'which one'. Although these interrogative pronouns (?) are inherently capable of expressing 'interrogation', still the question marker də occurs in most cases. I believe that kaa is a complex interrogative pronoun, neutral as to [+ or - male] property and has resulted through lexicalisation of some underlying complex interrogative pronominal noun phrases like koy-kenaa 'which one', koy-ekaa 'which one', koy-ekii 'which female' etc., which in fact have resulted through the pronominalisation of such constructions as koy miniha 'which man', koy balla 'which dog' or koy kelle 'which girl' etc..

B.1.6. I have already introduced, under deictics, the two question deictics koy 'which' and mone 'which' (v.6.3.6.).

I now introduce a few more question words:

ayi(də) 'why'

mokədə }
mokoo } 'why'

kiiyə-də 'how much, what (time is it)'

kiiyak-də 'how much (money etc.); how many,...'

Compare the following examples:

miniha giyee ayi / mokədə / mokoo

the man went why

Why did the man go?

ayi(də) tamuse yanne nətte

why you go not

Why do'nt you go?

mee potə kiiyədə

this book how much

How much is this book?

dəŋ welaawə kiiyədə

now the time what

What is the time now?

tamuse minihaTə kiiyak-də dunne

you to the man how much gave

How much /many did you give the man?

kii in kii-yə 'how much', kii-yak 'how much' or kii-denaa 'how many' ... etc., may be considered as an interrogative quantifier. If too, as other quantifiers (see App. A.1.) should be associated with number and definiteness. Thus kiiyə 'how much' and kii-denaa 'how many' (animate beings) are definite forms and kiiyak 'how much' and kii denek 'how many' are indefinite forms.

kohe 'where', kotənə 'where' etc. may be explained as consisting of the interrogative deictic koy 'which' plus ehe 'place' or tənə 'place'.

B.1.7. One may come across similar forms, but most of them may have either the interrogative deictics koy or monə 'which' or the interrogative quantifier kii 'how(many/much)' as the interrogative element in them. However, the following two expressions are somewhat complex.

kohomədə 'how' (? koy+homə hənə)

eyaa kohomədə dənə-gatte
 he how did come to know
 How did he know?

kawadda-də } 'when' (? kawərə + daa+də)
kawəda-də }

səər kawadda-də / kawəda-də yanne
 sir when do go
 Sir, when are you going?

B.2. EMPHASIS

B.2.1. Most deep syntactic units such as NPs, verbs, adjuncts, and some conjunctions, and also question and negative sentences can be emphasised to produce emphatic sentences simple or complex, emphatic questions and emphatic negative sentences etc..

B.2.2. A simple declarative sentence is non emphatic. It can be transformed into an emphatic sentence by introducing the emphatic marker tamay¹ 'indeed, yes' after the sentence. Consider

¹ another free variant is tamaa.

the following declarative sentence with the emphatic one:

miniha kollaTə gahanəwa
the man to the boy beat
The man beats the boy.

Emphatic:

miniha kollaTə gahanəwa tamay
the man the boy beats indeed
The man beats the boy indeed.

B.2.3. A simple negative sentence is also non-emphatic. By the introduction of tamay 'definitely, indeed', negative sentences can be emphasised. Compare the following two sentences, simple negative one and emphatic negative one.

Simple neg.:

sarat liyanne nəə
Sarat write not
Sarat does not write

Emphatic :

sarat liyanne nəə tamay
Sarat write not definitely
Sarat does not write indeed.

B.2.4. Any NP of a sentence, of a question or of a negative sentence, can be emphasised. An NP of a simple sentence can be emphasised by adding either -y or tamay 'it is...' emphatic markers after the full NPs (i.e. NP including case markers).

Compare the examples given below:

- (a) lameya gahak kapənəwa
the child a tree cut
The child cuts a tree.

- (b) lameya-y } gahak kapanne
 lameya tamay }

it is the child a tree cut

It is the child who is cutting a tree.

- (c) lameya { gahak-u-y } kapanne
 { gahak tamay }

the child it is a tree cuts

It is a tree that the child is cutting.

- (d) lameya pihiyen tamay gahak kapanne

the child it is with the knife a tree cut

It is with the knife that the child is cutting a tree.

B.2.5. One must notice that the indicative modal marker (w)a(a) of sentence (a) changes to its emphatic ex form in sentences (b), (c) and (d). Thus the modality itself is capable of signalling emphasis. However, when y or tamay are not used, the emphasised NP is usually placed or shifted to the right of the verb with the auxiliary marked for emphasis besides other properties. Thus instead of (b), (c) and (d) we may have (e), (f) and (g).

- (e) gahak kapanne lameya { { -y } }¹
 { tamay }

It is the child who is cutting a tree.

- (f) lameya kapanne gahak { { -u-y } }¹
 { tamay }

It is a tree that the child is cutting.

- (g) lameya gahak kapanne pihiyen (tamay)¹

It is with the knife that the child is cutting a tree.

1 The occurrence of the emp. markers is optional.

B.2.6. When an NP of a question is emphasised the question marker də is shifted to the right of the emphasised NP from the sentence final position, simultaneously changing the indicative modality to its emphatic realisation. Compare these examples:

- (a) taatta kaDee yanəwa-də
 father to the shop go
 Is the father going to the shop?
- (b) taatta-də kaDee yanne
 is it the father to the shop go
 Is it the father who is going to the shop?
- (c) taatta kaDee-də yanne
 father is it to the shop go
 Is it to the shop the father is going?

B.2.7. It must be stated that wherever the question marker də is shifted from its usual place, the most final place in a sentence after aux., the indicative modality appears in its emphatic realisation. Thus when the so called question words (v. B.1.3.- B.1.7.) are used to derive questions, the aux. of the underlying sentence, if it appears after a verb, it normally takes the emphatic indicative modal form ek, e.g.

kawudə gedərə (inneə)

Who is at home?

eyaa kohedə yanneə

he where go

Where is he going?

etc.

The change of modality in the above cases to emphatic form may be a special language specific feature which may have no

relevance to the 'emphasis' we are discussing. However, the change is semantically necessary, for, if we do not change the modality to its emphatic e(e)form the resulting sentences are not questions. The so called question words do not function as question words if the change is not observed. Instead they express some indefinite and uncertain identity of objects, places etc..

B.2.8. If we want to emphasise the antecedent of a question derived from an equational sentence, the question marker də may be shifted to the right of the antecedent NP, however, in all such cases the consequent NP must be [+def] (it should be made [+def] if it was [-def] when emp. transformation is applied). Consider the following examples:

subəsiŋhə ɤmɤtiwəɤyɤk (newey/nemey)
Subasinha is (n't) a minister.

Q:

subəsiŋhə ɤmɤtiwəɤyɤk (newey/nemey) də
Is (n't) Subasinha a minister?

emp.Q:

subəsiŋhə-də ɤmɤtiwəɤyɤ
Is it Subasinha who is the minister?

emp.Q.neg.:

subəsiŋhə newey/nemey -də ɤmɤtiwəɤyɤ
Is it not Subasinha who is the minister?

B.2.9. However, when a question derived from a sentence with categorial proposition is emphasised, də, always with auxiliary deletion, is placed after an NP associated with the predicative

adjective. Compare the following sentences:

miniha wəDeTə kəməti (yi)-də
 the man the work like does
 Does the man like the work?

emp. Q:

miniha-də wəDeTə kəməti
 Is it the man who likes the work? or,

miniha wəDeTə-də kəməti
 Is it the work that the man likes?

Q. neg:

miniha wəDeTə kəməti nədde (/ nāti +də)
 the man the work like not
 Does the/^{man}not like the work?

emp.Q. neg:

miniha newy/nemey də wəDeTə kəməti
 Is it not the man who likes the work?

B.2.10. It must be stated that in the case of last example, when nədde from the sentence final position, is shifted to the right of miniha (= NP), nāti has changed to newey/nemey. This suggests that nāti and newey/nemey are semantically same but occur in complementary distribution determined by the position of occurrence.

B.2.11. mə is another marker of emphasis in Sinhalese. It may accompany the other y or tamay (/ tamaa) emphatic markers to express the idea of 'the very', definite ' etc. Compare the following sentences:

- i. mahatteya eekə gəne ahanəwa ma-y / mə-tamay .
 the gentleman it about question/ask definitely
 The gentleman (will) ask/question about it definitely.

- ii wedəmahatteya-mə tamay kataawə kiwwe
 the physician himself the story told
 It was the physician himself who told (us) the story.
- iii miniha-mə tamay mamə dəkke
 the man the very same I saw
 It is the very same man that I saw.
- iv mamə-mə ee wəDee kəranne oonə
 I myself that work do must
 I must do that work myself .
- v tamuse-mə gihilla Tikak hoyəla balənəwa
 you yuorself go and a little inquire about
 You yourself go (there) and inquire a bit about (it).

B.2.12. There may be some other ways of expressing emphasis. I believe that expressions such as wat 'at least', t 'too, also' etc. also express some degree of emphasis. Besides all these, stress, intonation and even word order may also function as signalling emphasis.

B.3. NEGATION

B.3.1. I do not propose to go into discussions of deep structure syntax and semantic of negation in Sinhalese here. However, I do attempt to introduce a number of negation markers of surface sentences, which are introduced on to terminal strings of underlying deep structures.

B.3.2. When we want to negate a simple declarative sentence, that is, when the deep structure of the sentence is marked for

negation, we introduce nææ (\sim næti) or newey/nemey according to the proposition of the sentence. If the proposition consists of noun phrase(s) plus a verb or an adjective as the predicate, nææ is introduced after the aux., which is either changed to the emphatic indicative -- ee form, if the predicate is a verb, or deleted completely (= this is the copula aux.) if the predicate is an adjective. Consider these examples:

i lameya paaDam kærænewa
 the child study do
 The child is studying.

neg:

 lameya paaDam kæranne nææ
 the child study do not
 The child does not study/ The child is not studying.

ii mee malə lassəna- yi
 this flower beautiful is
 This flower is beautiful.

neg:

 mee malə lassənə nææ
 this flower beautiful (is) not
 This flower is not beautiful.

B.3.3. The negative marker nææ 'no' may occur alone as a response sentential expression. Then it must be understood that nææ 'no' as a response utterance is equivalent to a complete negative sentence in the deep structures. nææ here is an elliptical negative sentence. In some instances, this sort of negation is followed by the complete negative sentence as well. Thus nææ as a response utterance signals negation, whereas the actual negated sentence may be either deleted or retained. However this type of sentences with presentential response expressions are

usually encountered as replies to questions. Consider the following examples:

Q: tamuse yanəwa-də
 you go
 Are you going?

Response:

nəə 'No'
nəə, mamə yanne nəə
no I go not
No, I am not going.

bəə 'can not' and epaa 'do not'(v. B.3.8.) too may occur in a similar way. Compare:

bəə, maTə yanne bəə
no I go can't
No, I can not go.

epaa, uṃbə yanne epaa
no you go don't
No, do not go.

B.3.4. If the verb of the proposition is the stative, especially existential or possessive verb, iṇdi or tibe 'be', when negative marker nəə is introduced the whole verb and the aux, are usually deleted. Consider the examples given below:

i amma kaaməree innəwa
 mother in the room is
 (My) mother is in the room.

neg:

amma kaaməree nəə
mother in the room (is) not
(My) mother is not in the room.

ii bayisikēlee gərəj ekee tiyenəwa
 the bicycle in the garage is
 The bicycle is in the garage.

neg:

 bayisikēlee gərəj ekee nəə
 the bicycle in the garage (is) not
 The bicycle is not in the garage.

iii eyaaTə lamayi dennek innəwa
 he children two has
 He has two children.

neg:

 eyaaTə lamayi dennek nəə
 he children two (has) not
 He does not have two children.

iv mee ətaaTə dalə tiyenəwa
 this elephant tusks has
 This elephant has tusks.

neg:

 mee ətaaTə dalə nəə
 this elephant tusks (has) not
 This elephant does not have tusks.

B.3.5. When a sentence consisting of an equational proposition is negated, the negative marker newey is introduced deleting the aux. (which is mostly zero). With regard to these sentences, the negative marker nəə can not be introduced. Consider these illustrations:

i mee mahatteya apee palaate graaməseewəkə
 this gentleman our of area the headman (is)
 This gentleman is the headman of our area.

neg:

 mee mahatteya apee palaate graaməseewəkə newey/nemey
 This gentleman is not the headman of our area.

- ii mage putaa dostərə kenek
 my son a doctor (is)
 My son is a doctor.

neg:

mage putaa dostəra kenek newey
My son is not a doctor.

B.3.6. When an NP is negated for emphasis, the negative marker newey is always introduced after the emphasised NP. Observe the following examples:

- i lameya newey paaDam kəranne (v. B.3.2.)
the child not study do
It is not the child who is studying.
- ii mee malə newey lassənə
this flower not beautiful
It is not this flower that is beautiful.
- iii amma newey kaaməree (cf. B.3.4.)
mother not in the room
It is not (my) mother who is in the room.
- iv mee mahatteya newey apee palaate graaməseewəkə
this gentleman not our of the area the headman
It is not this gentleman who is the headman of our
area.

B.3.7. Negation is marked differently in relation to certain other moods. If the mood is 'Inferential'(v.8.8.), the negation of such a sentence is usually marked by a negative marker no introduced before the verb. e.g.

seekərə paərə { hada-yi / hadaa-wi
hadanne puluwəni }

Sekara the road may construct
Sekara may construct the road.

neg:

seekərə paarə {no-hada-yi /no-hadaawi}
 {no-hadanne puluwəni}

Sekara the road not may construct

Sekara may not construct the road.

There are different periphrastic ways of saying the same thing.

A sentence like,

seekərə paarə hadəne ekak nəə

Sekara the road any construction not

Sekara may not construct the road.

is similar to,

seekərə paarə no-hadaawi (see above), in meaning.

Unless one attempts to explain negation ⁱⁿ Sinhalese in detail,
 one is unable to draw attention to all aspects negation in
 Sinhalese syntactically.

B.3.8. When an imperative sentence is negated, a special
 imperative negative marker epaa 'do not' is introduced after
 the aux., which is transformed into the infinitive form after
 deleting the imperative modality. Observe the difference of the
 two sentences given below:

i uṁbə heTə uden-mə wəTə bāṇḍə-pan
 you tomorrow early in the morning the fence make
 You 'd better make the fence early tomorrow morning.

ii uṁbə heTə uden-mə wəTə bāṇḍinne epaa
 you tomorrow early in the morning the fence make not
 You 'd better not }
 Don't } make the fence early tomorrow morning.

B.3.9. When a hortative or permissive imperative sentence
 is negated, the negation marker no is introduced before the verb,

as illustrated in the examples:

i api ee wæDee no-kərəmu
 we that work not let do
 Let us not do that work.

ii mame ehaaTə no-yannan
 I there not shall go
 Let me abstain from going there (?)
 (Or, I shall not go there)

(A periphrastic usage mame ehaaTə no-gihin innan
 I there without going shall remain
 Let me remain without going there
 I 'll remain without going there , is
 quite common.)

iii miniha maalu no-genaapuden
 the man fish not let bring
 Let the man^{not}/bring (any) fish.

There are several periphrastic usages which should be accounted for in a detailed study of negation in Sinhalese.

B.3.10. Before concluding this brief section on negation, I introduce a positional variant of nææ, namely næti 'not' as the negative marker occurring in relativised nominal phrases. Side by side with this næti form, the negation of relative constructions may be marked by no marker, introduced before the relativised predicate, verb or adjective. Observe the difference in the two usages from the examples cited:

i yanne næti miniha (< miniha yanne nææ)
 going not the man the man go not
 The man who doesn't go The man does not go

ii no-yane miniha (<miniha yanne næ)
 not go the man
 The man who does not go.

iii giyee næti } miniha
 no-giyæ }
 The man who did not go.

B.3.11. There are a few special negative markers yet to be introduced. In relation to modal auxiliary verbs puluwəni 'can, may' and oonæ 'must, want, need', the negation is realised differently. puluwəni has a special form bææ (~ bəri) as its negative realisation whereas oonæ has two possibilities. Negative marker nææ (~næti) may occur after oonæ as oonæ-nææ 'do not want', or a special form epaa 'do not want' (cf. B.3.8. for imperative negation) may be manifest to mark the negation of sentences with the modal verb oonæ. Compare the examples given below:

i maTə yanne puluwəni
 I go can
 I can go.

neg.:

maTə yanne bææ
 I go can not
 I can not go.

Cf. also :

yanne bəri miniha
 go can not the man
 The man who can not go.

ii maTə bayisikəleyak oonæ
 I a bicycle want
 I want a bicycle.

neg.: maTə bayisikəleyak { oonə nəə
 epaa }

I a bicycle do not want

I do not want a bicycle.

B.3.12. However, epaa as the neg. marker of Imp. negation, as well as the negation of modal verb oonæ, must not be confused. There is also some overlapping between the two usages , because the modal verb oonæ is capable of expressing some degree of command etc., denoted by the Imp. modality.

B.3.13. Since this is not an attempt at a detailed study of negation in Sinhalese, I conclude my discussion at this point. My aim has been to introduce a number of expressions used to mark different aspects of negation in Sinhalese. The neg. marker no undergoes phonological change. Negation has to be discussed in relation to nominalisation in Sinhalese and some other areas such as coordination and subordination etc. All these must be studied in greater detail if we were to have a proper understanding of the negative constructions in Sinhalese. The next

B.4. TAG QUESTION FORMATION IN SINHALESE

B.4.1. Tag question formation in Sinhalese is very simple. Tag is realised as nee(də). It is added to any declarative -- simple or complex -- or a negative sentence. (It is interesting to note ~~that~~ the fact that the tag in Ceylon English is different from that in British English. Instead of the different tags of British English, Ceylon English has 'no' as its tag, which may have undoubtedly resulted owing to the influence of

the Sinhalese tag formation . e.g.

You went to Colombo, no?

We are unable to go there, no? etc.)

A few examples for Sinhalese tag formation are given below:

tamuse heTə gamee yanəwa nee(də)

you tomorrow home go no ?

You go home tomorrow, don't you?

minissu adə wəDəTə aawe nəə nee(də)

the men today to work came not no?

Men did not come to work today, did they?

apəTə yannə puluwəni nee(də)

we go can no ?

We can go, can't we?

etc.

B.5.

REPORTED SPEECH

B.5.1. When the speaker reports some news he has heard from someone else, the reporting expression -lu 'I heard' is usually used. e.g.

lan̄kaawəTə mee dawaswələ hayyen wahinəwa - lu

to Ceylon in these days heavily raining heard

It was heard } that Ceylon is having heavy rain these days.
I heard }

miniha gee-yi iDəma-yi dekamə wikka - lu

the man the house and the estate (and) both sold (I heard)

I heard that the man has sold both the house and the estate.

apee mahatteya labənə maase raTə yanəwa - lu

our 'teacher' next month abroad go (I heard)

I heard that our teacher would be going abroad next month.

B.5.2. If one is reporting somebody else's speech, it can be done by using one of the following expressions, as illustrated:

yi (kiyəla) ' said that'

kiyəla ' " '

e.g.

sarat heTə koləmbə yanəwa- yi kiwwa

sarat heTə koləmbə yanəwa kiyəla kiwwa

sarat heTə koləmbə yanəwa-yi kiyəla kiwwa

Sarat tomorrow Colombo go that said

Sarat said that he would go to Colombo tomorrow.

mahatteya heTə enəwa-yi kiyəla seenə taattaTə kiwwa - lu

the master tomorrow come that Sena to (my) father said (I heard)

I heard that Sena has told (my) father that the master would come
tomorrow.

B.5.3. One has to go into details of syntax of these complex sentences in an attempt to explain the deep syntactic and semantic facts they embody. I leave for a detailed study of the syntax of Sinhalese to discuss such matters.

APPENDIX CC.0. NOMINALISATION IN SINHALESE

C.0.1. In the process of sentence embedding we come across nominalised phrases as well as nominalised clauses. Thus we have to recognise nominalised phrase formation and nominalised clause formation as two distinct processes.

C.1. NOMINALISED PHRASES

C.1.1. Let us suppose that simple sentences consist of a proposition and an aux. The proposition has a verb as the predicate and its associated arguments. The aux. is in the indicative mood besides having other tense and aspect features. In the process of phrase nominalisation, first of all, the aux. (i.e. tense+aspect +Ind) is deleted and then a nominaliser iime (or ille) is introduced. The logical subject NP of the proposition is usually possessivised. The result is a nominalised phrase. However, if the predicate of the proposition is an adjective, the nominaliser that is introduced is not iime but either e or kəmə . The phrase nominalisers in Sinhalese may be introduced as :

$$\text{phrase nominaliser} \rightarrow \left\{ \begin{array}{l} \left\{ \begin{array}{l} iime \\ ille \\ umə \\ mənə^1 \end{array} \right\} / \text{verbs } \underline{\hspace{1cm}} \\ mə / \text{monosyllabic verb } \underline{\hspace{1cm}} \\ \left\{ \begin{array}{l} e \\ kəmə \end{array} \right\} / \text{adj. } \underline{\hspace{1cm}} \end{array} \right.$$

1 mənə occurs with a few verbs only. e.g. pihəmənə 'cooking', liyəmənə 'writing', kiyəməne 'saying' etc.

C.1.2. The derivation of the nominalised phrase,

miniha gaha kəpiime

the man's the tree cutting

The man's cutting (of) the tree, from the

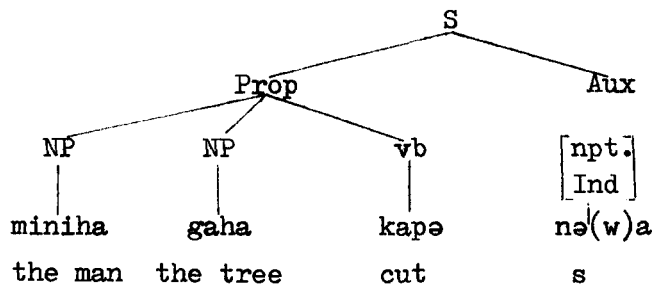
sentence,

miniha gaha kapənəwa

the man the tree cut

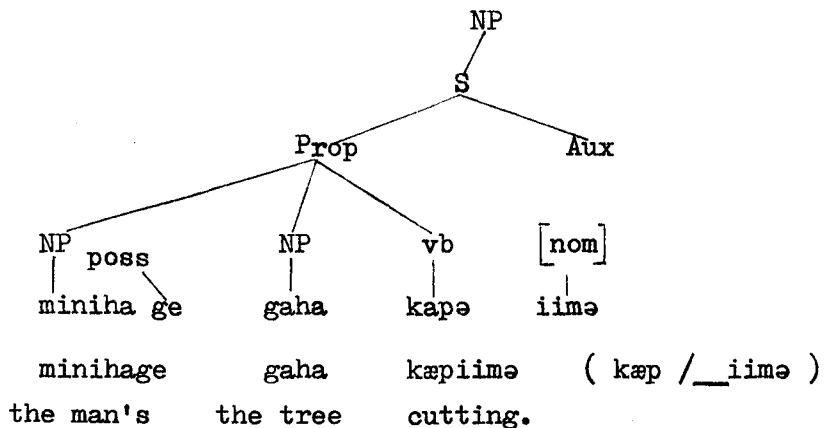
The man cuts the tree, may be derived as follows:

The sentence may be represented as :



By aux. deletion, and

by nominaliser iime introduction together with possessivis-
-ation of the subject NP, we get:



In certain cases, although possessivisation takes place, it may not be overtly marked by a possessive marker ge or e etc. in the surface sentence.

C.2.

NOMINALISED CLAUSES

C.2.1. Just as nominalised phrases are derived from simple sentences, the embedded clauses called nominalised clauses are also derived from underlying simple sentences. In doing this in Sinhalese, we have to apply the following rules:

- i deletion of the modality (i.e. Ind. mood) and
- ii introduction of the clause nominaliser.

However, there are constraints such as:

- (a) if the aux. of the sentence is the copula aux., it is deleted and a clause nominaliser is introduced;
- (b) if the nominaliser introduced is zero, the aux. may remain without undergoing any changes such as modality deletion etc.

C.2.2. There are a number of clause nominalisers and they may be introduced as:

clause nominaliser -->	{	eke /but not after adj____. bawe wage wittiye ∅
------------------------	---	---

These nominalised clauses may be found embedded in NPs as subject complements or object complements of predicates. Since I am not discussing complex structures in this study I shall simply derive one nominalised clause from an underlying sentence as an illustration. Let us derive the nominalised clause,

siriseena pot liyana-eka

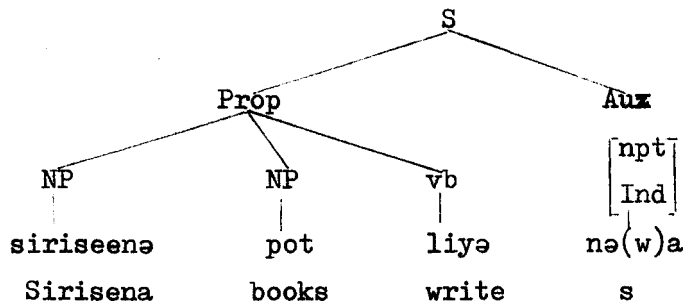
Sirisena books write the fact

The fact that Sirisena writes books,

from the underlying sentence,

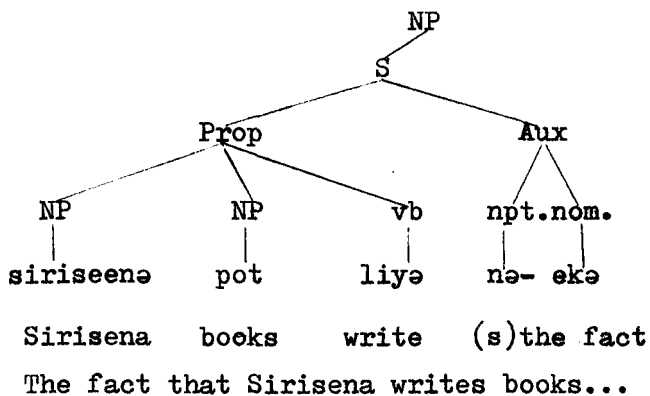
siriseena pot liyənəwa
 Sirisena books write
 Sirisena writes books.

The sentence may be diagrammed as:



By modality deletion, and

clause nominaliser introduction, we get:



In addendum to this short Appendix, I have a brief account on the so called compounds in Sinhalese.

C.3. COMPOUND NOUNS

C.3.1. The majority of complex nouns, traditionally called compounds, in Sinhalese can be explained as resulting from a process of lexicalisation applied to underlying relativised nominal phrases. Let us by way of example, compare the following complex nouns with their possible underlying relativised nominal phrases and their underlying sentences.

kiri bat 'milk rice'

pol tel 'coconut oil'

waw wature 'lake water'

muudu-maalu 'sea fish' etc. are complex nouns. I think the first members of these complex nouns, kiri 'milk', pol 'coconut', waw 'lake' and muudu 'sea' are not adjectives on the assumption that they can not occur as attributes predicatively. Thus kiri-bat is a lexicalised noun from the relativised nominal phrase, kiren uyənə bat

with milk cook rice

rice that is cooked in milk., which in turn

is the relativised NP of the sentence,

kiren bat uyənəwa

with milk rice cook

(People) cook rice with milk.

The sentence is relativised; the verb deletion takes place (= kiren bat); and finally, the number, definiteness and case markers are deleted of the first member; the result is kiri bat 'milk rice, rice cooked with milk'. Similarly pol tel etc. may be explained as follows:

pol tel 'coconut oil' is from polwəlin hiñdine tel 'oil extracted from coconuts'. This nominal phrase may have as its underlying sentence,

polwəlin tel hiñdinəwa

from coconuts oil (is) extract(ed)

(People) extract oil from coconuts!

By relativisation we get, polwəlin hiñdine tel; then by verb deletion, polwəlin tel; and finally by the deletion of number, definiteness and case marker, we get pol tel 'coconut oil'.

waw wature 'lake water' may be the lexicalisation of wawee
tiyene wature 'water in the lake' or wawen genaa wature 'water
 brought from the lake' etc. The underlying sentences may be
wawee wature tiyenewa 'there is water in the lake' or wawen
wature genaawa '(someone) brought water from the lake' etc. The
 process of derivation of waw wature is similar to the way pol
tel was derived (pol tel q.v.).

muudu maalu 'sea fish' is the lexicalised form of muude inne
maalu 'fish that live in the sea' or of muuden allene maalu
 'fish that is caught in the sea', etc. The underlying sentences
 may be : muude maalu innewa 'fish live in the sea or there are
 fish in the sea', or muuden maalu allanewa '(People) catch fish
 in the sea' or some similar. The derivation of muudu maalu is
 similar to that of pol tel (q.v.)

C.3.2. Consider also a few more examples like the following:

elu mas 'goat meat, mutton'

kos gaha 'jak tree'

maalu dale 'fishing net'

makulu dale 'cob web'.

elu mas is from eluwange mas 'meat of goats' which may be from
eluwante ayiti mas 'meat the goats have' (= inalienable possess-
 -ion) and which may be from eluwante mas tiyenewa or ayiti-yi
 'The goats have meat'. Then the process of derivation is: first
 relativisation; then predicate deletion; the possessivisation of
 the subject NP; finally, number, definiteness and case deletion
 (i.e. eluwante tiyene/ayiti mas > eluwante mas > eluwange mas
elu mas). However, in the case of alienable possession, this
 process usually comes to an end at the stage of possessivisation

(cf. minihaTə putək innəwa ('the man has a son') > minihaTə innə putaa ('the son the man has got') > *minihaTə putaa > minihage putaa ('the man's son') but *minis putaa is impossible).

kos gaha 'jak tree' may be from kos jaatiyəTə ayiti gaha 'the tree that belongs to the variety named jak'. The underlying sentence, then may be, gaha kos jaatiyəTə ayiti-yi 'the tree belongs to the variety of trees called jak'. From kos jaatiyəTə ayiti gaha 'the tree that belongs to the variety of trees called jak', we get kos gaha by predicate deletion and the deletion of the expression denoting the 'idea' of 'variety' (=jaatiyə). Thus any name of a tree, plant, fruit etc. can be explained. The so called compounding is a surface phenomenon and lexicalisation etc. explains how such forms have come into being.

maalu dələ 'fishing net' is the lexicalised form of the relativised nominal phrase, maalu allənə ^{paawicci-kərənə} dələ 'the net used in catching fish'. The underlying sentence may be maalu allənə dəl paawicci-kərənəwa '(People) use nets to catch fish'. By the deletion of both predicates of the relativised nominal phrase we get maalu dəl(ə).

makulu dələ 'cob web' is similar to elu mas (q.v.). The derivation may be stated as: makuluwaTə dələk tiyənəwa ('the spider has a web') makuluwaTə tiyənə dələ ('the web that the spider has') makuluwage dələ ('spider's web') > makulu dələ. One may be able to explain these differently. However, all these complex lexicalised nouns can be explained as having resulted from some underlying structures.

C.3.3. Except for a few expressions which are formally complex but semantically denote specific objects where apparently no underlying structures are involved -- the so called epithetic compound nouns -- most other complex nouns can be explained as in the above discussion.

All 'epithetic compound nouns' such as, haalmassa 'sprat' (literal meaning : 'rice fly'), siwuru-horaa 'name of a bird' (lit. 'robe thief'), gon-kawəDiya 'myna' (lit. 'ox bird') etc. must be treated as any other noun as denoting some object.

APPENDIX DD.O. CONCORD IN SINHALESE

D.O.1. I have not recognised the category of number as relevant in the description of either the predicate -- verb and adjective -- or the auxiliary in Sinhalese, because I believe that the category of number has little or no relevance semantically as far as verbs, adjectives or the aux. are concerned. Number is a grammatical category of the noun phrase. However, in certain languages, including some areas of syntax in Sinhalese as well, the 'verbal expressions' show some markedness associated with number. I believe that this number markedness is an additional redundant characteristic. An additional marker is added to sentences, usually after the aux., purely by a surface process which we may call 'concord'. Assuming that this is correct, (at least, for Sinhalese) let us examine the areas where concord has a part to play in Sinhalese.

D.O.2. Concord in Sinhalese^{is} not complex at all. There is no concord between adnominals and head nouns in so called endo-centric constructions which have resulted through the process of relativisation or in some cases, through the process of nominalisation. Furthermore, there is no concord between any (grammatical ?) subject NP and the 'verbal expressions' (i.e. both verb + aux.) of sentences when the auxiliary of the sentences in question is marked, among other features for the moods such as, the indicative, benedictive, inferential, certainty, obligation and possibility. This leaves us with the major domain of concord in Sinhalese, namely the imperative mood.

Concord is relevant for equational sentences as well, and this will be discussed later in the chapter. Let us first examine concord in Sinhalese in relation to imperative sentences.

D.1. CONCORD OF IMPERATIVE SENTENCES

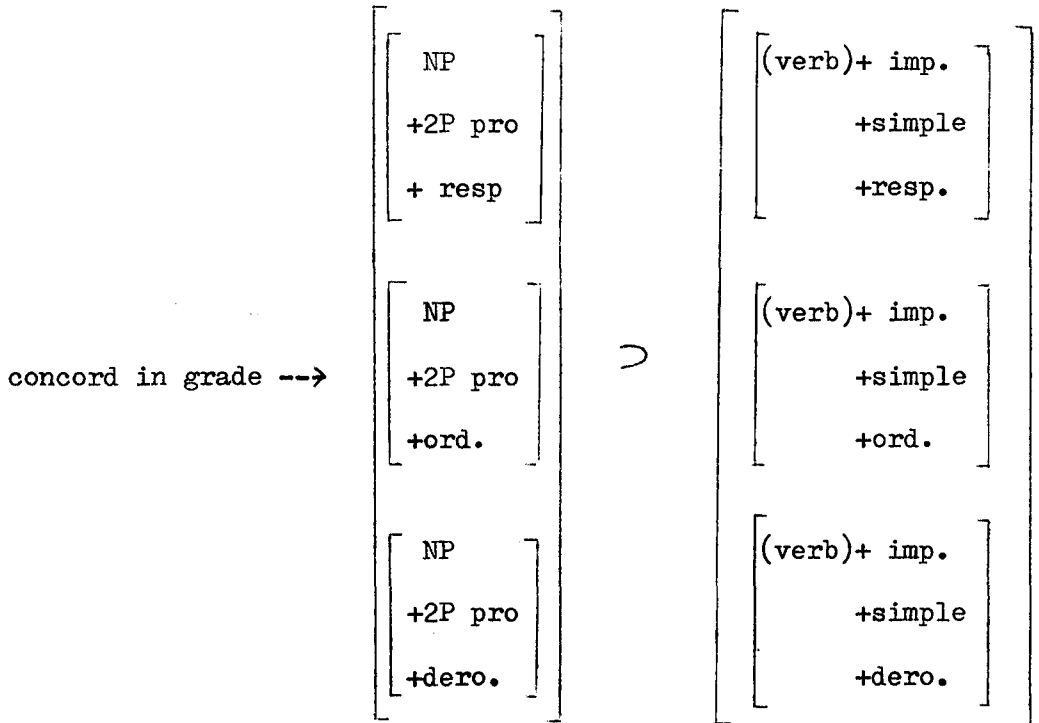
D.1.1. We have already recognised three classes of imperative sentences. They are :

simple imperatives (v.8.4.2.,8.4.3.;8.6.2. - 8.6.6.)
hortative imperative (v.8.4.4.; 8.6.8.,8.6.9.) and
permissive imperative (v.8.4.5.;8.6.10.,8.6.11.).

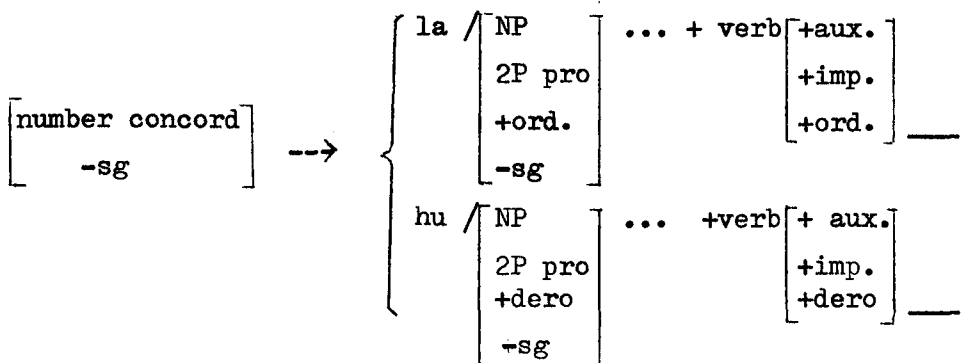
Then within the simple imperative modality we recognised a three-fold grade distinction such as,

respect grade (v 8.4.3.; 8.6.2.)
ordinary grade (v. 8.4.3.; 8.6.3.) and
derogatory grade (v. 8.4.3.; 8.6.5.).

D.1.2. I take it for granted that wherever a simple imperative verbal expression (i.e. verb + simple Imp. aux.) is used in a sentence, a 2P pronoun appears as the agent of the action the speaker requests or commands him to do. In an earlier section we also recognised a three-fold grade distinction within the 2P pronoun (v.2.2.). When we have three identical grades for both 2P pronoun and the simple imperative mood(v.8.4.3.), we may expect some interdependency between them. And this is true . To whatever grade the 2P pronoun belongs, imperative modality must belong to the same grade. Thus 2P pronouns agree in grade with simple imp. mood and this grade concord may be represented as follows:



D.1.3. Then there is number concord as well. The concord in number between the subject NP, namely the 2P pronoun, and the verbal expression consisting of verb + imp. aux., is zero(=0) or unmarked if the number is singular. Further, even if the number is plural(i.e. [-sg]), no concord is marked with regard to simple imperative sentences which are marked for [+resp] grade. However, in relation to the remaining two grades, simple imperative sentences are marked for concord in number -- that is if the subject NP, 2P pronoun, is [-sg], the imp. aux. is followed by the [-sg] concord marker la if the imp. aux. is [+ord], and hu if the imp. aux. is [+dero]. Thus number concord may be stated as :



e.g.

tamuse yanəwa
You go. (ord)

tamusela yanəwala
uṁbəla paleyalla (< paleyaŋ+la)
You (pl) go (pl. ord)

too gaha kapəpiyə
you the tree cut
You cut the tree (= dero)

topi gaha kapəpiya(w)u (< -piyə +hu > piyə+u > piya(w)u)
you (pl) the tree cut
You cut the tree (= dero; pl.)

D.1.4. However, there are a few imperative expressions of the derogatory grade where plural number concord is absent. These are inherently singular. All forms like adu 'pull', gilu 'swallow' etc, from ..CVCi structure verbs and monosyllabic kaa 'eat', naa 'have a bath' etc., as imp. expressions belong to this special class.

D.1.5. Next let us examine the number concord of permissive imp. sentences. Here, too, the singular number concord is unmarked whereas the plural number concord is marked with some restrictions, for it is marked only after the aux. den (v.8.6.10.). The concord marker is la. This la never occurs after the other permissive imp.aux. aawe (v.8.6.10.). Thus [-sg] concord of permissive imp. sentences may be stated as:

[number concord -sg]	--> la /.....	[aux. +imp. +permissive <u>den</u>]	—
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(However, syntactically the facts are more complex; if we examine the deep syntax of the permissive sentences, we are bound to realise that this la plural marker after den has survived from la of an embedded simple imperative sentence.)

e.g. :

kolla giyəden

the boy let go

(You sg.) let the boy go.

kolla giyədella (< -den+la)

the boy let go

(You pl.) let the boy go.

D.1.6. No special concord is marked for hortative imp. sentences, especially when the subject is 1P pronoun with hearer exclusive reference. However, when the subject is 1P pronoun [-sg], with hearer inclusive reference, the [-sg] concord is realised fused in the imp. hortative mu (v.8.6.9.) realisation. e.g.

mamə yannaŋ

I 'll go (or let me go)

api yannaŋ

We 'll go (or let's go). ([-hearer])

api yamu

we let go

Let us go ([+hearer]).

D.2. CONCORD IN EQUATIONAL SENTENCES

D.2.1. There is another class of sentences in Sinhalese, where agreement in number and case has an important role to play. With

regard to equational sentences, the subject NP and the predicate NP must agree in number and case(which is always Objective). One may not find any aux. realisations in equational sentences in Sinhalese. Since both NPs refer to the same object(s), it is natural that they should be marked for number and case in both places. Consider the following examples:

i miniha wedek
 the man a physician
 The man is a physician.

ii minissu guruwəru
 the men teachers
 The men are teachers.

However, the following combinations are ungrammatical, because the NPs do not have the number agreement:

* miniha guruwəru
 the man teachers . or,

* minissu wedek
 the men a physician .

We can not speak of agreement in definiteness, because an NP marked for indefinite feature can not occur as the subject of an equational sentence.

D.2.2. In most linguistic treatises on Sinhalese, these concordial relationships have been treated as singular and plural inflections of verbs. This may not be true, because, for one reason, no verbs in/Sinhalese inflect for singular and plural number, and for another, the verb can (as in this study) be described independently of the aux. as well as these concordial

number relationships. Furthermore, in most cases, where plural 'verbal expressions' are encountered, the plural marker is mostly a separate element (= a morpheme) that has been added to the unmarked singular form. Semanticallyⁿ, I believe, the right place for number is the NP where the reference^{is} to 'things', and not to the verb, and therefore, I think, it is reasonable to explain the concord in number between subject NPs and 'verbal expressions' as some redundant surface characteristic only. In relation to equational sentences, the concord is between ~~the~~ co-referential NPs, where non observance of concord does not produce an equation-al sentence.

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