LIST OF ABBREVIATIONS

!´/↓	-	Down Stepped Tone Marking
$	-	Syllable Boundary
(DH) (↓H)	-	Down Stepped High
(H!H)	-	High Hanging Tone
(HF) (^) (HL)	-	High-Falling/ Falling Tone Marking
:	-	Length of Vowel
~	-	Realised as
1P/PL	-	First Person Plural
1P/SG	-	First Person Singular
2P/PL	-	Second Person Plural
3P/PL	-	Third Person Plural
3P/SG	-	Third Person Singular
ACC	-	Accusative
ADJ	-	Adjective
ADJP	-	Adjective Phrase
ADV	-	Adverb
ADVP	-	Adverb Phrase
AGR	-	Agreement
AGR_O	-	Agreement Object
AGROP	-	Agreement Object Phrase (a feature containing bundle of agreement marking of Object)

AGR_S	-	Agreement Subject
AGR_SP	-	Agreement Subject Phrase (a feature containing bundle of agreement marking of Subject)
A-P	-	Articulatory and Perceptual
ASP	-	Aspect
ATR	-	Advanced Tongue Root
AUX	-	Auxiliary
BT	-	Binding Theory
BU	-	Boro-Ukwala
C	-	Complimentiser
CONS	-	Consonant
C-I	-	Conceptual and Intentional
CM	-	Completive Marker/Morpheme
COMP	-	Completive
COND	-	Conditional
CP	-	Complimentiser Phrase
DO	-	Direct Object
DRPR	-	Derivational Prefix
DP	-	Determiner phrase
DS	-	Deep Structure
EP	-	Emphasis
FI	-	Full Interpretation

FM	-	Future Marker/Morpheme
GB	-	Government and Binding
GG	-	Generative Grammar
H	-	High Tone Marking (´)
HH	-	High Tone (´´)
HHL	-	High High Low Tone (´´`)
IMP	-	Imperative
IMPERF	-	Imperfective
INC	-	Incompletive
INF	-	Infinitive
INFL	-	Inflection
IO	-	Indirect Object
KSN	-	Kisumu South Nyanza
L	-	Low Tone Marking (`)
L1	-	First Language
L2	-	Second Language
LF	-	Logical Form
LH	-	Low-Rising Tone
LOC	-	Locative
MOD	-	Mood, Modal Adverb
MP	-	Minimalist Programme
MUH	-	Morphological Uniformity Hypothesis

N	-	Noun
NEG	-	Negation
NF	-	Near Future
NOM	-	Nominative
NP	-	Noun Phrase
NRP	-	Near Remote Past
O	-	Object
PA	-	Perceptual Articulatory
PASS	-	Passive
PERF	-	Perfective
PF	-	Phonological Form
PL	-	Plural
PM	-	Past Marker/Morpheme
PP	-	Prepositional Phrase
PR	-	Pronoun
PRE	-	Preposition
SM	-	Subject Marker
PS	-	Phrase Structure
REL	-	Relative Pronoun, Relativiser
RF	-	Remote Future
RFL	-	Reflexive
RP	-	Remote Past

S	-	Subject
SD	-	Structural Description
SG	-	Singular
SPEC	-	Specifier
SS	-	Surface Structure
SVO	-	Subject Verb Object
T	-	Tone
TA	-	Tone of Adverb
TADJ	-	Trace Adjective
TADV	-	Trace adverb
TAM	-	Tense Aspect Mood
TCM	-	Trace Completive Marker
TM	-	Tone Mood
TMA	-	Trace Mood, Modal Adverb
TNEG	-	Trace Negation
TNF	-	Trace Near Future
TNS	-	Tense
TO	-	Trace Object
TPR	-	Tone of Preposition
TPRE	-	Trace Preposition
TREL	-	Trace Relativiser
TRM	-	Trace Mood

TS	-	Trace Subject
TV	-	Trace Verb
UG	-	Universal Grammar
V	-	Verb, Vowel
VP	-	Verb Phrase
θ	-	Theta

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CHAPTER 1: INTRODUCTION

1.1 Context of the study

Although African languages have been the subject of theoretical and descriptive studies, there is still a paucity of studies in these languages, including Dholuo, a Nilotic language spoken in western Kenya, Uganda and Tanzania. It is therefore within the context of contributing to the description and addressing the existing gap in research on African languages in general, and on Dholuo in particular, that this study should be viewed.

1.2 Research problem

As stated in section 1.5 below, one of the main motivations for this study was to address the gap left by the lack of exhaustive studies on Dholuo. No research has been done on structural ambiguity in Dholuo under the Minimalist Programme. In Dholuo, ambiguity occurs when modal auxiliaries have the same form and pronunciation as words belonging to different grammatical categories. Therefore, the study is set to carry out a morphosyntactic analysis of ambiguity of mood in Dholuo.

Considering the objectives of this study as presented in section 1.3 below, the research problem, which the study intends to investigate includes:

1. The lexical function tone plays to distinguish the meaning of ambiguous words or structures in the morphology of mood in Dholuo.
2. The syntactic role word category plays in marking the difference in meaning between modal auxiliaries and similar word forms.
3. The role context plays when elements that express mood in Dholuo have the same form and pronunciation as words belonging to different grammatical categories causing ambiguity to occur.
4. The adequacy of the Minimalist Programme in accounting for the arguments and features manifested by Dholuo modal structure.

1.3 Objectives/aims of the study

The following objectives will guide the study:

1. Explore whether tone assignment has a lexical function of distinguishing the meaning of ambiguous words or structures in the morphology of mood in Dholuo.
2. Assess the syntactic role word category plays in marking the difference in meaning between modal auxiliaries and similar word forms.
3. Examine the role context serves in resolving ambiguity when elements that express mood in Dholuo have the same form and pronunciation as words belonging to different grammatical categories.
4. Determine how the Minimalist Programme can adequately account for the arguments and features manifested by Dholuo modal structure.

1.4 Methodology

This is a qualitative study on mood and ambiguity in Dholuo. In order to understand mood and ambiguity in this language, data is required. The study used descriptive research design to describe the state of affairs as they exist. A descriptive study ascertains and describes the characteristics of the variables of interest in a situation. Desk research was carried out including gathering data from various library sources on Dholuo as reflected in the literature review.The researcher's knowledge of the language has been of great importance in this study of mood and ambiguity in Dholuo. Being a native speaker of the language, I also used my intuitive knowledge for generation of data. For accuracy and avoidance of bias, I counter-checked the data against other native speakers of Dholuo. The data have been analysed within the theoretical framework. Radio Ramogi, 107.10 FM, was useful in gathering more data to avoid bias.

1.5 Motivation

As mentioned in section 1.1 above, this study is motivated by the paucity of studies on Dholuo in general and in particular on the role tone plays in providing clear or precise meaning in ambiguous structures involving mood. Furthermore, the study also examines the role tone plays in determining mood in Dholuo. This research thus contributes not only to the study of Dholuo, but also to the understanding of the Minimalist Programme.

1.6 Scope and limitations

The study cannot cover all areas of study in this language. This research study concentrates on mood and ambiguity. A major limitation imposed is that the study focuses only on Dholuo as spoken in western Kenya; Dholuo as spoken in Tanzania and Uganda does not form part of this research.

1.7 The language situation in Kenya

This section discusses the number of languages spoken in Kenya and their families and the dialectal variations of Dholuo spoken in western Kenya around Lake Victoria. The languages spoken in Kenya, their status in education and the challenges presented are explained. The provisions of the Kenyan Constitution (2010) are also discussed with regard to the official languages, national language and other languages, the languages of parliament and the role of language and culture.

1.7.1 Languages of Kenya and their families

According to the 2009 census, Kenya is home to 38,610,097 people (Daily Nation Newspaper, September 1, 2010). It is difficult to establish the number of languages in Kenya, but it is generally estimated that there are between 42 and 44 languages; according to the official 1999 census, Kenya has 44 languages. Kenyan languages belong to one of three families: the Bantu family, the Cushitic family or the Nilotic family.

The Bantu family is a sub-family of the Niger Kordofanian family. According to geographical proximity, Kenyan Bantu languages are divided into Western (e.g. Luyia, Gusii), Central (e.g. Gikuyu, Embu, Meru and Kamba) and Coastal (e.g. Taita and Swahili Mijikenda). Whitely (1974:21) states that Guthrie's (1967) numerations add to the grouping of Bantu languages in Kenya where relevant. The second language family is the Cushitic family (Afro-Asiatic) which includes Eastern and Southern Cushitic languages. Thirdly, there is the Nilotic (Nilo-Saharan) family, a sub-family subdivided into Western (Luo), Eastern and Southern Nilotic. Chebett (2006:2) provided a genetic classification of Nilotic languages as shown below:

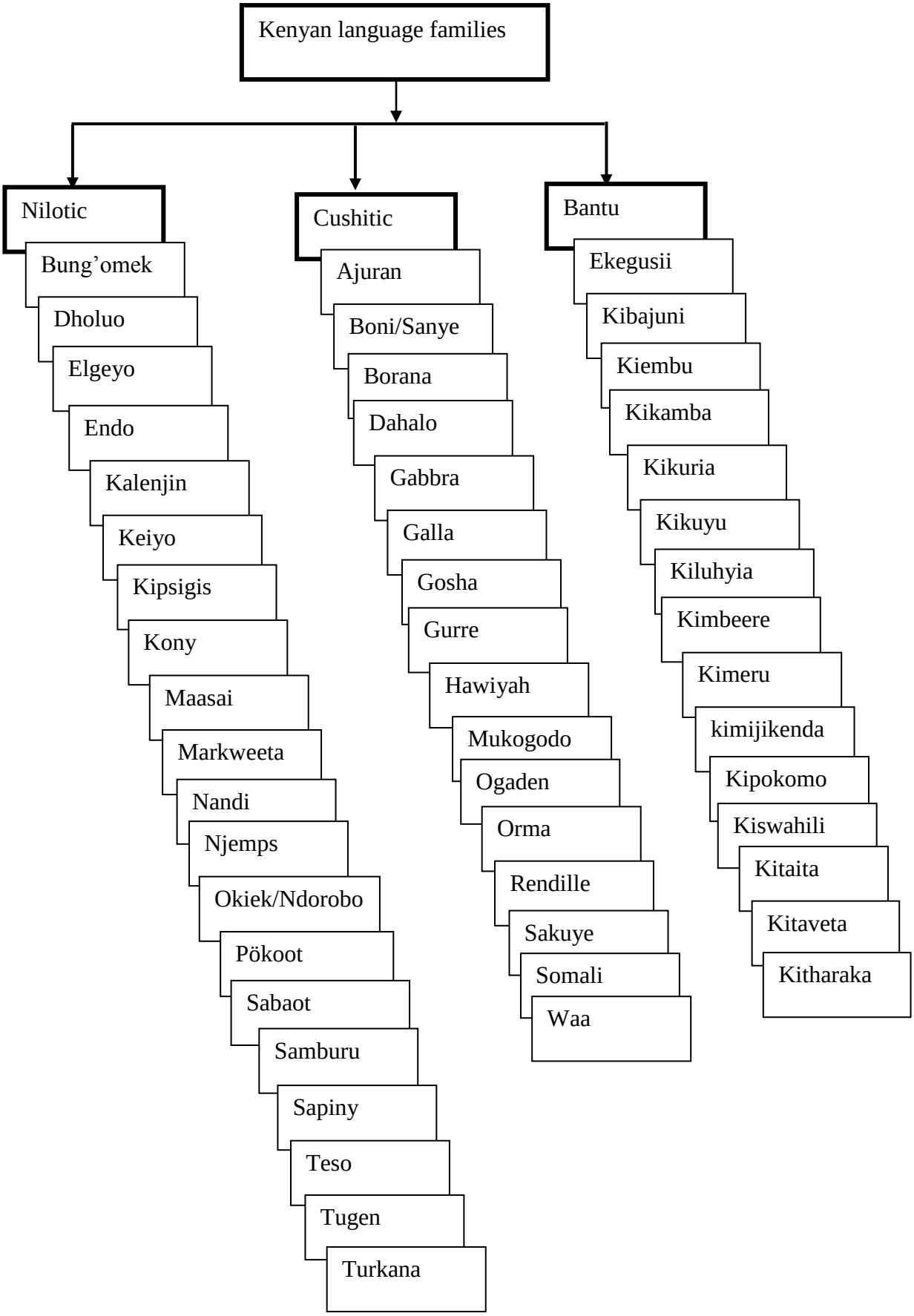
a) Eastern Nilotic — Bari, Lotuho, Maasai, Teso, Turkana, Karamajong and Toposa.

b) Southern Nilotic — Kalenjin (Kipsigis, Nandi, Tugen, Keiyo, Marakwet, Pokot, Saboot, Ogiek, and Sengwer), Tatooga, Datooga and Omotik.

c) Western Nilotic — Luo, Nothern, Anywai, Pari, Shilook, Southern-Lang'o, Acholi, Dinka and Nuer.

Figure 1 below classifies the Kenyan languages into the three specific language families namely the Nilotic, Cushitic and Bantu with their sub-groups.

Figure 1: Families of the Languages Spoken in Kenya



The above figure represents the families of the languages spoken in Kenya as identified in Whiteley (1974:23, 24, 27, 29). It is difficult to classify Kenyan languages, because the distinction between dialect and language is not clear-cut. Crystal (1991:102) defines a dialect as a regionally or socially distinctive variety of language, or if there are social class divisions. One dialect may predominate as the official or standard form of the language and this may be the variety that is documented.

Crystal (2010:24-25) states that the term 'dialect' refers to grammatical and vocabulary contrasts and notes that speakers of different dialects usually have different accents or pronunciations than speakers of the same dialect. Dialects of the same language share a common written language. They are generally intelligible when written, although dialects belonging to the same language are not always mutually intelligible in their spoken form. It can be difficult for someone speaking a regional dialect to understand some regional varieties of other areas. The spoken varieties would be intelligible, but a problem arises where there is a geographical dialect continuum and a chain of dialects is spoken throughout an area. Speakers can understand speakers of other dialects living in adjacent areas, but find it difficult to understand people who live further afield and may find those who live on the boundaries of the area completely unintelligible. In other words, the speakers from the two ends of the chain will not understand each other, but are linked by a chain of mutual intelligibility.

Whitely (1974:20) points out the difficulty in classifying Kenyan languages, because the distinction between dialect and language is not clear-cut. He observes that Gikuyu, Meru, Embu and Tharaka are classified as different languages. This was in line with the earlier classification provided by the 1962 census, yet these languages are mutually intelligible. Hence, these languages should be regarded as dialects of Gikuyu and not separate languages. Furthermore, whitely (1974:23) points out the case of Samburu and Maasai, which are largely mutually intelligible and are recognised by speakers to be the same language, but which have been separated on sociological grounds.

Dholuo, like many other languages, has dialects. Stafford (1967:vii) notes the existence of the Trans-Yala/Ugenya Alego dialect, also referred to as Boro Ukwala (spoken in Ugenya, Alego, Imbo and parts of Gem locations) and the South Nyanza dialect. All are mutually

understandable. It is generally agreed that the differences in Dholuo dialects are limited to vocabulary and pronunciations indicated in the examples below:

Table 1: Vocabulary Differences

Lexical items	Kisumu South Nyanza (KSN)	Boro Ukwala
Treatment	Thieth /ϴieϴ/	Chieth /cieϴ/
Today	Kawuono /kawuono/	Gonyo /goŋo/
Garden	Puodho /puoᵟo/	Ndalo /ndalo/
Action	Tim /tɪm/	Tum /tʊm/

Table 1 illustrates instances where the two dialects use different lexical items to refer to the same noun. There is variation between these two dialects' vocabulary. Some lexical items are quite different, as seen in the Dholuo lexical items for 'today' and 'garden'. There is also variation in the Dholuo words for 'treatment' and 'action', because spelling varies at the word initial and medial position respectively, as indicated. There are also phonological differences in terms of phoneme use. This difference in segments could result in an entirely different semantic interpretation of a lexical item. For example, the word *chieth* (Boro Ukwala) would mean faeces (euphemistically referred to as *oko*) and not 'treatment' to a speaker of the KSN dialect. However, this misinterpretation would only occur when the word is written in isolation or out of context, because in a text or sentence the tone would vary since *chieth- /cɪɛϴ/* for faeces has a different vowel quality from that in *chieth- /cieϴ/* 'treatment.' The latter has the same vowel quality as that of the lexical item *thieth* for treatment.

The examples in table 2 below demonstrate instances when the lexical items are similar in form but with a difference in pronunciation. The differences in pronunciation are realised in the tone of different words and in the intonation pattern of utterances.

Table 2: Differences in Pronunciation

Lexical items	KSN	Boro Ukwala
I greet you	Àmô:sí	Àmósi
Recently	Nyó:chá	Nyócha
Food	Chíémó	Chíémó

Some of the vowels as demonstrated above in the words *àmô:sí* and *nyó:chá* are lengthened in the KSN dialect marked by the diacritic (:). In speech, Oduor (2002:65) quotes Okoth (1982:25) who claims that root vowel lengthening in Dholuo takes place when a vowel precedes one or two consonants, followed by either one or no vowel in the utterance-final position. This lengthened vowel is called the root vowel. In a consonant-final word, it is the last vowel, whereas in a vowel final word, it is the second last vowel in a word. The symbol (!/) or (↓) used in the table above represents the down-stepped tone which is a variety of the high tone. The former usually comes after a high tone, but it is low pitched or lower than the high that precedes it, therefore it is down-stepped. The other diacritics used above are (ˋ) for low tone, (^) for falling tone (a combination of high and low tone) and (ˊ) for high tone. These diacritics are also listed in the list of abbreviations.

The examples in tables 1 and 2 illustrate that these two dialects share grammatical structures and similar sets of words with some variation on certain lexical items and phonological (pronunciation/accent) segments, but the dialects are mutually intelligible.

Adhiambo (1990: xviii, 60-61) identifies the Kisumu South Nyanza (KSN) (spoken in Kisumu, Nyando, Rachuonyo, Homa Bay, Migori and some parts of Bondo district) and the Boro-Ukwala (BU) dialects. The Boro-Ukwala dialect is spoken in the Boro and Ukwala divisions, Ugenya and Alego, Imbo and parts of the Yala division, all of Siaya district and

parts of Bondo district. This is captured in figure 2 below. Adhiambo (1990) also identifies a form, which developed because of 'accommodation between Dholuo dialects', a form she calls 'interdialects'.

This study is based on the Kisumu South Nyanza (KSN) variety, because it is spoken in a wider geographical area and is generally used in publications such as the bulk of Dholuo literature, including the Bible and school readers. Therefore, it is regarded as the standard form (Okoth, 1997:2). Dholuo is also my mother tongue and I was born in the area where the BU dialect is spoken. However, I am conversant with both the BU and the KSN dialects.

Figure 2: Dholuo Dialects

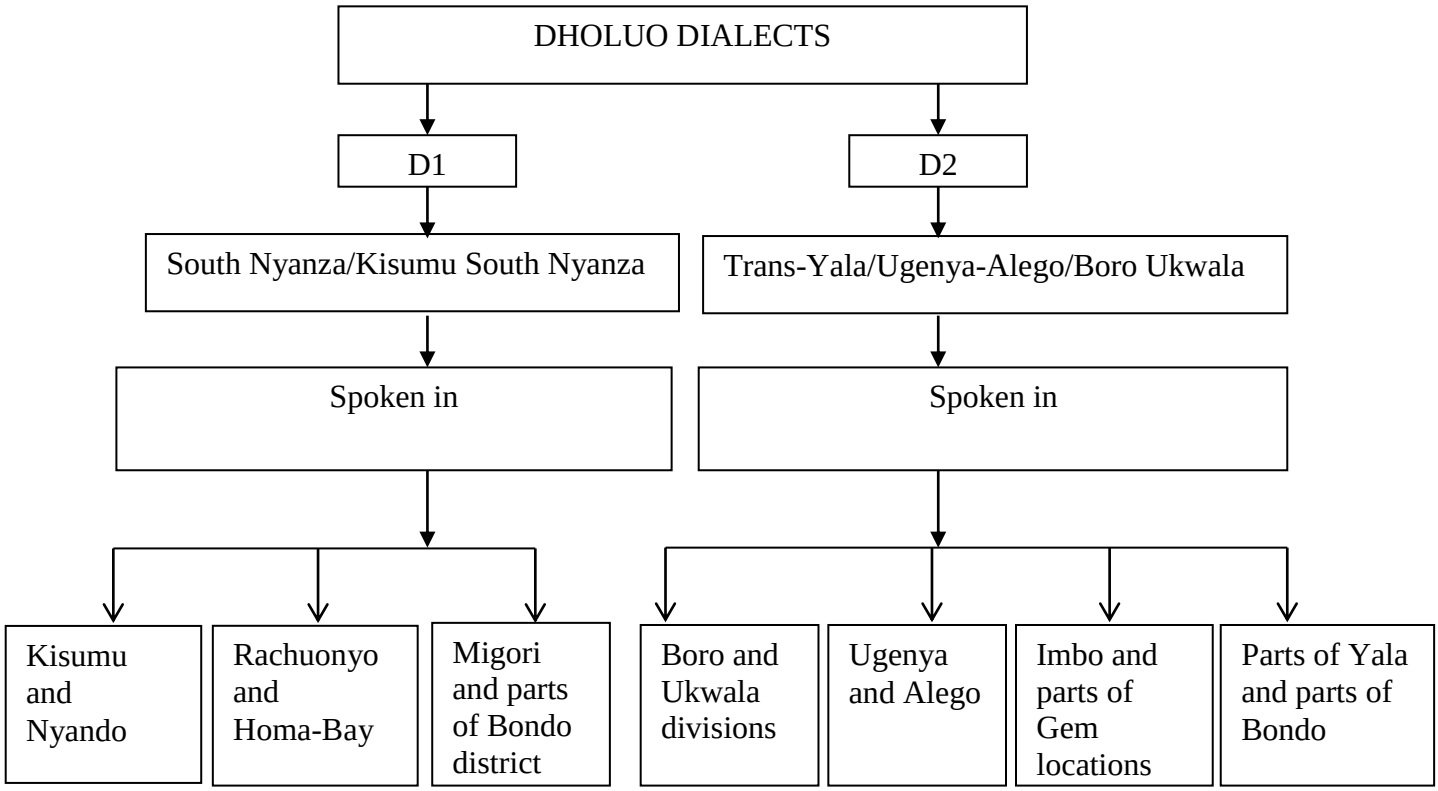


Figure 2 illustrates the two dialects of Dholuo, namely Kisumu South Nyanza (D1) and Boro-Ukwala (D2), as well as the areas in which they are spoken, as identified by Adhiambo (1990) in the discussion above.

1.7.2 Language status

Language status in Kenya has gone through many phases. The phases to be covered in this section include language in education before independence, after independence and at the present time. The Kenyan language policy provisions in the 2010 constitution and the challenges of these provisions will also be discussed. A critical review of the stages is provided below.

1.7.2.1 Language in education before Independence

Muthiani (1987:88-91) observes that language in education in Kenya was first discussed during the United Missionary Conference in 1901 which was dominated by missionaries from the coast. At first, they favoured Kiswahili, because they did not want English to replace the coastal language. In a meeting of the Commission of Education in East Africa in 1919, the policy was changed and recommendation made to have English taught in higher grades only. In 1924, the Phelps-Stokes Foundation suggested that Kiswahili and a few other local languages be used as languages of instruction. In the following year, the East African Commission recommended that local languages, or the vernacular of the child, be used as medium of instruction during the elementary stages with English introduced at a later stage. Only English was to be used as the medium of instruction in secondary schools. In 1927, the Advisory Committee of the colonial office noted that parents regarded English as the principal means for economic advancement and supported its introduction in African schools. The Department of Education recognised the need for using vernaculars as media of instruction in the first four years and for teaching of Kiswahili as a subject during that period. English, like Kiswahili, was to be taught as a subject in the first four years only where there were competent teachers and where it could become the medium of instruction. In my opinion, the idea that English was only to be taught as a subject in the first four years where there were competent teachers was discriminatory because there should have been uniformity across all schools. As far as Kenyan opinions on this are concerned, in 1948, the Beecher Committee under Archdeacon L. J. Beecher recommended that Kiswahili be taught as the language of instruction in towns and settled areas and that some local languages could be taught in country schools outside the towns. In 1953, the Department of Education issued a new syllabus for intermediate schools, class five to eight, in which English would be the main subject in the curriculum and Kiswahili was to be taught as a second language for the first year or so. English was designated the compulsory medium for examination after eight years.

1.7.2.2 Language in education after Independence

Commissions were set up after independence from British colonialism in 1963. These commissions made various recommendations and included the Ominde Commission in 1964, the Gachathi Commission in 1976, the Mackay Commission in 1981 and the Koech Commission in 1999. My focus is on content applicable to language policy and language in education in Kenya in the Ominde Commission of 1964 and the Gachathi Commission of 1976. Most of the current practices in schools are based on the Gachathi report. These commissions bore the names of their chairpersons but the publications are referred to as the 'Republic of Kenya' documents. I will discuss language in education, since it touches on the language situation in Kenya and includes Kiswahili, which has recently been accorded official status in the current Kenyan constitution.

Policy makers of the Republic of Kenya (1964:60-61, 83) made several recommendations concerning a language policy. They recommended the use of English as the medium of instruction from primary one. The Ominde commission believed that the English medium had advantages for the whole educational process and therefore English was assigned the role of educational medium in the critical early years of schooling. The commission relegated local languages to verbal communication in the first three classes in primary schools, and as languages to be used for story-telling sessions constituting one lesson in a week (Kioko, 2013:120). The Ominde commission argued that the foundation laid in the first three years is more scientifically conceived; therefore, it provides a more solid basis for all subsequent studies than was possible in the old vernacular teaching. They were also of the opinion that the difficult transition from a vernacular to English would be avoided and this would save time in primary five. The resulting linguistic equipment would then become more satisfactory and this would expedite and improve the quality of all kinds of post-primary education.

In my opinion, this was acceptable in the sense that if English was to be used as a medium of instruction in subsequent levels, then starting to expose children to it in the preliminary stages of schooling would enhance its mastery. If examinations were also to be set in English, it would be important for students to master the language if they were to interpret the questions correctly and answer them adequately. A good command of the language used as the medium of instruction, in this case English, would also enhance learners' performance in other subjects.

With regard to Kiswahili, the Ominde commission recognised it as a unifying national influence and a means of Pan-African communication over a considerable part of the continent within East Africa, the Eastern parts of the Congo and parts of Central Africa. Considering these important functions, the commission believed that Kiswahili should be a compulsory subject in primary school. They also recommended a general spread of the language to provide an additional African vehicle for national coordination and unification and to encourage international communication.

The commission recommended that Kiswahili be introduced in class one. However, in the schools where both Kiswahili and English were new languages to the students it would be necessary to defer Kiswahili until class three to avoid tackling two new languages at the same time. This was the situation in schools catering for the Asian population or those in non-Bantu African areas. In such instances, Kiswahili was to be given special attention in classes three to five, so that all schools could work towards a common Kiswahili syllabus in classes six and seven. The commission felt that proper and general cultivation of this African language was so important that it warranted attention in primary schools from the lowest practicable level. A major problem in the immediate implementation of the programme was the lack of competent Kiswahili teachers. The commission suggested that this could be rectified by crash training programmes during the school holidays. The training colleges would need to strengthen their staff. They suggested that the Ministry of Education arrange a special course for selected training college tutors. Though not in their terms of reference, the Ominde commission recommended that if there were to be a Department of Kiswahili in the University College, Nairobi, it would assist the promotion of Kiswahili as a national language in Kenya.

The commission referred to the possibility of introducing Arabic in predominantly Muslim schools on the Coast, since Kiswahili was already the local vernacular. They did not believe this could be implemented below class three. The implementation was to be postponed, owing to the low standards at the time in some of the schools in the area and the need for these schools to catch up with the rest of Kenya. They saw no place for any other language in the primary school at the time.

As for Kiswahili as a medium of instruction, in their opinion, for the foreseeable future English would continue to be the language of instruction in secondary and higher education. There was the suggestion that Kiswahili should replace English as the medium of instruction.

The committee did not wish to categorically exclude Kiswahili indefinitely from this role, but saw no possibility of assuming it within the coming decades. This was because the general use of Kiswahili in secondary schools would demand high linguistic competence from the teachers and would call for a vast and immensely expensive translation of school texts and library books. In the committee's view, diverting the scarce resources to translation at that moment would constitute a misuse of funds and the language would require adaptation to unaccustomed scientific uses before it could qualify as a vehicle for education and study at the secondary level.

In relation to Kiswahili as a subject of instruction, the committee desired to see Kiswahili established as a national language in Kenya. This has since been realised. Noting that Kiswahili is the principal common medium of East Africa and beyond, it was recommended that Kiswahili be made a compulsory subject in secondary school. This decision has also been implemented. The committee were of the opinion that the secondary schools were on the right track in using English as the main language, because it is a world language of great practical importance for the economic development and political influence of Kenya and its cultural interaction with other nations.

With regard to other languages, the commission gave preference to French, since it is the common language of many African countries. They reported that Latin had certain relevance as the basis for the academic study of English, the Romance languages, European history and philosophy, and because of this, Latin should be offered in one or two schools as an option, possibly to be taken at the advanced level in the sixth form. They recommended that other languages like Russian and German be offered in particular schools wherever facilities could be provided. The importance of large secondary schools was illustrated by the wider range of linguistic options that their size made possible.

The subsequent Gachathi Commission, whose report is constituted in the Republic of Kenya document (1976:54-55), reported that most children in rural areas could only speak their vernacular language at the time of starting primary education and therefore concluded that the education system should make use of the local languages at the beginning of primary education. The Gachathi Commission proposed that English should be taught as a subject from primary one and then used as a language of instruction in the upper primary classes.

The Gachathi commission thus made the following recommendations (Republic of Kenya, 1976:54-55, 57, 68 & 127) aimed at facilitating the initial progress of children starting school using languages other than English. The predominant language spoken in the schools' catchment area was to be used as the language of instruction for the first three years of primary education and English was to be taught as a subject from primary one to supersede the predominant local language as the medium of instruction in primary four. The commission stressed the development of comprehension skills in the language syllabuses and the ability to convey information and ideas in speech and in written prose.

The commission recommended that Kiswahili should be introduced as a compulsory subject in primary three, or when English became the medium of instruction, to take over from the vernacular medium of instruction. This would avoid a situation where primary school pupils were learning two new languages concurrently. It recommended the teaching of Kiswahili as a compulsory subject and its inclusion in the Certificate of Primary Education (CPE) examination, or making it a compulsory and examinable subject in secondary schools. This would make it necessary to train sufficient teachers. It was suggested that each school built up a library of short books of appropriate difficulty for silent reading during English and Kiswahili periods in each primary class, using a high proportion of books with African backgrounds, with a range of titles so that each pupil had his/her own book to read.

1.7.2.3 Language in education at the present time

Discussions in this section focus on the current official Kenyan language policy. This policy is based on the recommendations of the Gachathi Commission. However, the practice at ground level is different from what the policy stipulates: that local languages are to be used as languages of instruction for the first three years of primary education and English is to be taught as a subject from primary one and then used as a language of instruction from primary four. The use of English from standard four was probably stipulated due to a lack of mastery of English at the lower primary level. In urban areas, most children are able to use English from a very early stage. This is made possible by the foundation laid at good pre-primary schools or at home by their parents. Urban schools use English as the language of instruction from the outset, although missionaries also favoured the use of vernacular languages as the most effective medium of instruction in primary education, since it is the language best known by a child on entry to school life (Kioko & Muthwii, 2001:201). Ogechi (2003;384) also explains that, according to UNESCO (1953:47-48), the vernacular is ideal, because

pupils understand it best when they begin their school life and it makes the transition from home to school as smooth as possible.

Kioko (2013: 120-121) observes that the lack of a clear implementation plan for the articulated language policy has affected the practice on the ground. Although the policy in Kenya is clear on how English, Kiswahili and mother tongues are to interact in the education system, there are no concrete measures of implementation. The policy in Kenya states that in the first three years of school the language of the catchment area shall be the language of instruction. The practice in the majority of schools does not adhere to this policy. In some cases, learners are instructed in English from their first day in school while in other rural cases, learners in upper primary are taught using a mixture of English, Kiswahili and mother tongue yet they are not allowed to employ this language mixing strategy when taking national examinations. As a result of this inconsistency, Uwezo Kenya (2010:15) research findings quoted in Kioko (2013: 121) show that eighty five per cent of pupils in Class Two of primary school cannot read a Class Two level passage in English, twenty five per cent in Class Five cannot read the same Class Two passage, and four per cent in Class Eight cannot read the same passage. This means that four per cent leave primary school without basic literacy in English.

Kioko (2013:121) notes that that the absence of a plan for implementation of the language policy can partly be as a result of lack of resources to support the use of mother tongue as language of instruction in the first three years of primary school. Due to this there are no teachers trained to use mother tongue as language of instruction, all learning and teaching materials are prepared in English even for classes that should be taught using Kiswahili or mother tongue. Funding to train teachers, develop learning materials and supervise the implementation of the multilingual language policy is a big challenge.

Ogechi (2003:284) reports that in rural areas, the mother tongue is used as the medium of instruction, while in the urban multilingual settings Kiswahili or English (or both) are used. It is assumed that teaching materials are provided in the various mother tongues to facilitate their use as media of instruction. Chakava (1995:386) notes that not all Kenyan languages have teaching publications. He adds that the Koech commission (Republic of Kenya, 1999) reports that publications only exist in twenty-two Kenyan languages. He also draws attention to the lack of adequate numbers of well-trained teachers and the fact that many parents, guardians and head teachers insist on the use of English in primary and kindergarten due to

its higher social status. Doubts have also been raised as to whether or not there are teachers who are able to teach or speak the vernaculars. The Mackay report (Republic of Kenya 1981) notes that most graduates who were taught through an English medium of instruction have a poor command of Kiswahili and indigenous languages. They can neither transmit the acquired knowledge and skills to those who cannot speak English, nor can they explain what they have acquired through the medium of English in the indigenous languages (Ogechi 2003:284-285). Chakava 1995:386) also refers to Wolff (2002:136), stating that teachers code-switch between English and the vernacular or Kiswahili to enhance learning.

Gacheche (2010:1,3) explains that Kenya's language in education policy of mother tongue-based learning is intended to make primary education contextually located and locally accessible, particularly to ethnic minorities and marginalised groups, in order to improve access to high quality education. He notes that appropriate language education policies that allow teachers to give instructions in the child's first language as they gradually learn a foreign language improves learners' critical engagement with content, fosters an environment of mutual learning, facilitates understanding by learners who question what they do not understand, creates enjoyment of the challenge of new experiences and improves inclusion and participation. However, Gacheche (2010:1, 5-7) acknowledges the challenges of implementing Kenya's policy of mother tongue based learning in education and concedes that it is not widely practised.

Like Ogechi (2003), Gacheche (2010 :19, 24, 27) identifies factors that prevent effective implementation of a mother tongue-based system, citing reasons such as a dearth of well trained teachers, a lack of adequate instructional materials in local languages, language policy in education and planning and political challenges in implementing a mother tongue-based language policy. He refers to Probyn (2005:160), who observes that this occurs partly because the capacity of education departments to communicate policy requirements is not taken into account. Language planners should consider language practices before writing policies, since planning involves a constant negotiation process between the interests of various social groups and their changing priorities. He recommends greater resource allocation, political will and clear policy objectives if the aims of an effective mother tongue based educational system in Kenya are to be realised. Local languages need to be developed to operate effectively in all domains of society. If the desire and support for literacy in a mother tongue based education system is to be created, there is a need for institutional

support. This can be brought about by hiring people who are proficient in the vernaculars. This would increase the number of places in which local languages can function and people will start to view vernaculars as valuable. A case in point is when organisations hire research officers who can speak the local language to facilitate data collection.

However, the paradox of using disks in schools to penalise students who speak in a language other than English is puzzling. Also, why are examinations set in English if vernaculars need to be promoted? The disk was a tag given to pupils who spoke in their mother tongue or in a language other than English. The pupil would then pass it on to the next victim and by the end of the day or week, all the pupils who had had the disk would be punished. Punishment took the form of caning or doing some sort of extra work. Hence, pupils tried their best to use English. Interestingly, some hardly spoke in order to avoid punishment, particularly if they were poor at English. The use of this disk could have contributed to pupils' mastery of the English language had it been better managed. It was a common practice in the past but some institutions still practise it.

Gacheche refers to Cummins (1979:233-236) who proposes the interdependence theory which explains the positive transfer of literacy skills from the L1 to the L2. He states that the level of a child's literacy competence in the L2 is partially a function of a child's level of competence in the L1 at the time intensive teaching of the L2 begins. Immersion and submersion programmes both involve a home-school language switch, but are dissimilar in some aspects and lead to different results (Cummins, 1979:224-225).

When teaching is conducted in a foreign language, it results in memorisation or rote learning and teaching with no understanding of meaning. The education system should first develop the skills already possessed by learners in their L1. Gacheche (2010:5) refers to Skutnabb-Kangas (2000:105) who equates memorisation with submersion, a term compared to 'submerge', meaning to hold a child forcibly under water. This has a negative impact on the way children learn, as it interferes with their cognitive development and patterns of processing information. In submersion programmes, children are placed in classes with pupils whose L1 is that of the school and the learners' lack of proficiency in the school language is often treated as a sign of limited intellectual and academic ability. Children are made to feel aware of their failure. They may become frustrated due to difficulties in communicating with the teacher. This arises because the teacher is unlikely to understand the child's L1 and because of different culturally determined expectations of appropriate behaviour.

Submersion is contrasted with immersion, an educational model that encourages mutual learning. Gacheche (2010:7) refers to Cummins (1979:225), who views immersion as an asset to the acquisition of a new language and a method, which validates a child's knowledge, culture and home language. Students start the immersion programme with little or no competence in the school language and are praised for any use they make of that language. What is communicated to children is their success. The teacher is familiar with the child's language and cultural background and can appropriately respond to their needs without unfairly criticising the L1.

1.7.2.4 Provisions in the Kenyan constitution (2010) and challenges

Kenya is a multilingual country. English and Kiswahili are the official languages of the Republic of Kenya (the Constitution of Kenya, 2010: Chapter 2 Article 7, (2). These are therefore the languages of education, administration, parliamentary debate, commerce and the judiciary. Kiswahili and the indigenous languages can be used in conjunction with English in court if deemed necessary[1]. Kiswahili is also the national language. It is the language of social interaction for the majority of people in the major cities and it is also the language of political discourse. Kiswahili is used along with English in parliament, on television and in the public service. The use of Kiswahili in parliament has brought about lively debates, as all members of parliament can freely participate during the proceedings. Parliament may also be conducted in Kenyan Sign language according to the Constitution of Kenya (2010: Chapter 8 Article 5, 120 (1)). The state promotes the development and use of indigenous languages and Sign language. It also promotes the development and use of Braille and other appropriate models of communication for people with visual and other impairments.[2]

The bill of rights states that every person has the right to use the language and to participate in the cultural life of their choice. According to Ogechi (2003:279), Kenyan Sign language is used by a small but significant deaf community and cannot be overlooked. He refers to Okoth (2001:141-7), who states that it is not only the official and national languages that are suited for communication in Africa, but also the various indigenous languages, Braille for the blind and Sign language for the deaf. He argues that Kenyan Sign language, a local variety of Sign language, is the most ideal variety to use.

[1] For more details see chapter 2 Article 7 (3): the Constitution of Kenya (2010).

[2] For more details see chapter 4:44(1) the Constitution of Kenya (2010).

Despite the elevation of Kiswahili to the status of an official language, Kenyans need to ensure that Kiswahili is found in all domains of society, including administration and education, ensuring that it is well taught and that teachers are trained in methods of teaching Kiswahili. Provision should be made to publish in Kiswahili and this will include training journalists. In his paper during the conference on language-in-education held in Juba, Matsinhe (2013:23) argues that;

> While... and taking into account the mandate of the African Academy of languages (ACALAN) ..., notwithstanding the global hegemony enjoyed by the former colonial languages like English, efforts and resources should be mobilised for fostering the development of African languages so that they are used in all domains of society, particularly in Education.

There is much room for improvement in the promotion of the development and use of other Kenyan indigenous languages beyond adding them to the constitution. Practical steps are needed to ensure Kiswahili is used in all domains. Gacheche (2010, 19, 24, 27) notes that Kenya's policy makes over-generalizations about how language will be used, without indicating how these statements will be implemented. It is in this context that I refer to the South African situation below.

The constitution of the Republic of South Africa outlines how the languages are to be promoted, respected and developed (Ogechi, 2003:288). The constitution of the Republic of South Africa (1996) stipulates that:

> Recognising the historically diminished use and status of the indigenous languages of our people, the state must take practical and positive measures to elevate the status and advance the use of these languages.
>
> The national government and provincial governments may use any particular official languages for the purposes of government, taking into account usage, practicality, expense, regional circumstances and the balance of the needs and preferences of the population as a whole or in the province concerned; but the national government and each provincial government must use at least two official languages.
>
> Municipalities must take into account the language usage and preferences of their residents.

The South African constitution followed the Organisation of African Unity's (now African Union, AU) language plan of action for Africa, which included aims, objectives and principles, and proposed a programme of action (Ogechi 2003:289. The national government, provincial governments and municipalities must observe and practise a specified language policy. Apart from the constitution, the Pan South African Language Board (PANSALB)

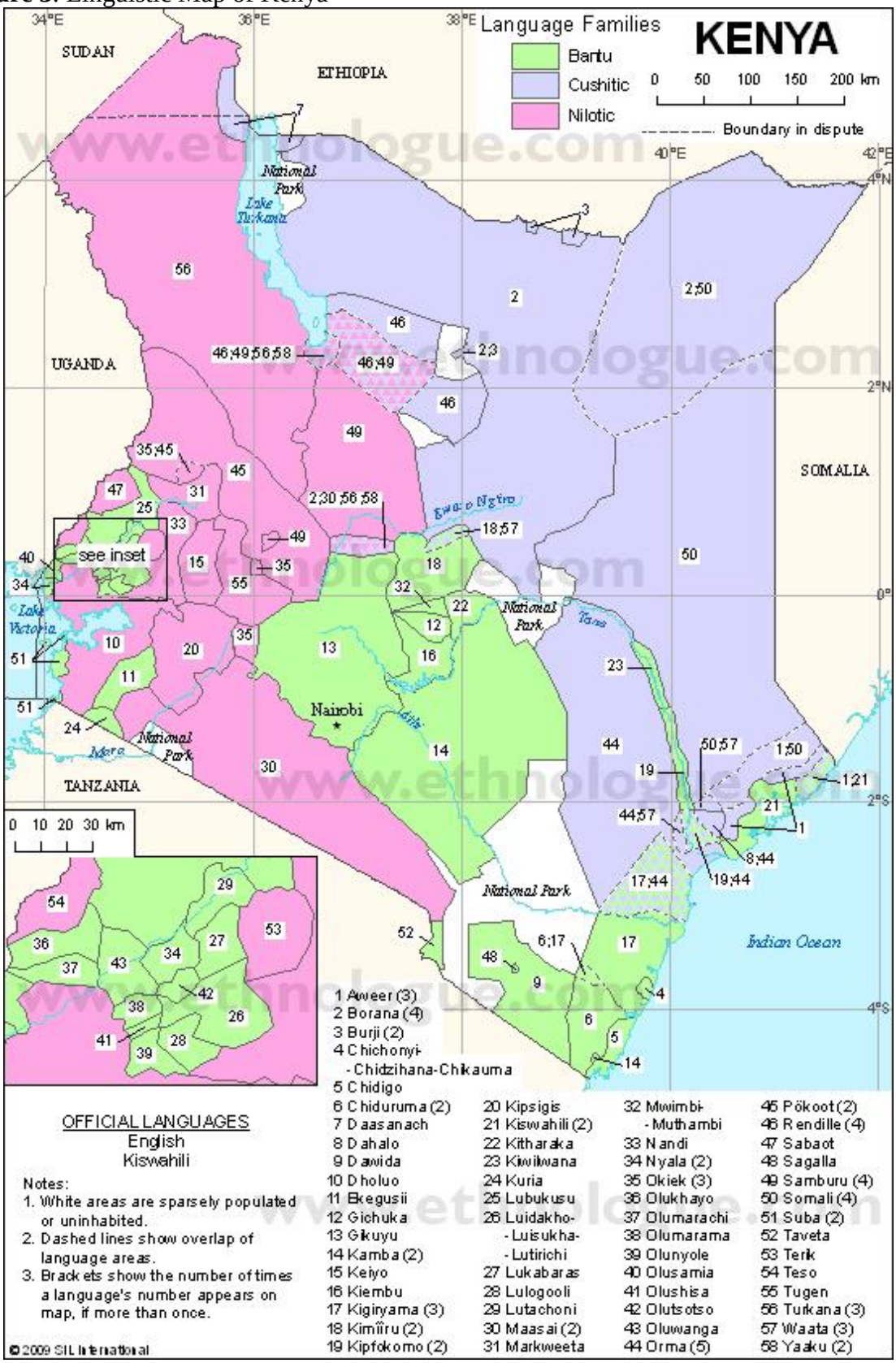
provides for the recognition, implementation and development of previously marginalised languages and the promotion of multilingualism in the Republic of South Africa.

South Africa has eleven official languages: Afrikaans, English, isiNdebele, isiXhosa, isiZulu, Sepedi, Sesotho, Setswana, siSwati, Tshivenda and Xitsonga. Currently, the Academy of African Languages and Science's (AALS) strategic project aims at intellectualising and modernising South African indigenous languages (SAIL) and introducing them into curricula as media of tuition and research. The approach will promote African languages as languages of science, technology, education and research to create conditions for greater social integration and citizenship, renaissance and cultural self-assertiveness for mother tongue speakers of SAIL at the university level and beyond.

1.8 Dholuo: the object of the study

Having looked at the Kenyan language situation in general, the study now focuses on Dholuo. As stated in section 1.5, the study is motivated by the scarcity of studies in Dholuo on the role of tone in providing clear or precise meaning in ambiguous structures involving mood. The role of tone in determining mood in Dholuo is also discussed in the study. As mentioned earlier, the study focuses on Dholuo as spoken in western Kenya, hence it does not cover the variant spoken in Tanzania and Uganda. The area in which Dholuo speakers in western Kenya live is depicted below. Figure 3 is a SIL International online version of the linguistic map of Kenya adapted from http://www.ethnologue.com.

Figure 3: Linguistic Map of Kenya



Source: http://www.ethnologue.com.

Dholuo is spoken in the area marked as 10 on the map. Dholuo speakers live along the eastern shores of Lake Victoria in the Nyanza region of Kenya. The structure of the language will be described in Chapter Four. This linguistic map indicates the major languages spoken in Kenya and where the various ethnic communities that speak these languages are settled. The inset identifies areas in western Kenya where Teso, a Nilotic language, and the different Luhya dialects are spoken, probably because of the limited space in the area marked on the map. Some of the names on the map do not indicate languages but dialects or varieties of Kenyan languages. For example, the language Luhya does not appear on the map, only its dialects feature. Hence, the map differs slightly from items marked in figure 1, which specifies only the main languages and not the dialects. English and Kiswahili are also indicated on the map as the official languages of Kenya.

As noted by Odawa (2004) Dholuo belongs to the Nilo-Saharan family of languages. The Nilo-Saharan family is divided into six branches, one of which is the Chari-Nile. The Eastern Sudanic is one of the divisions of the Chari-Nile and consists of ten groups. The Nilotic group is one of the ten and is in turn divided into Western, Eastern and Southern branches.

Dholuo is a Nilotic language. It belongs to the Western Nilotic branch together with other languages such as Acholi, Lang'o, Alur, Kamanum, Labwor and Padhola in Uganda as well as Dinka, Nuer and Shilluk in Sudan. In the western Nilotic group, only Dholuo speakers settled in Kenya and the northern part of Tanzania. Scholars such as Ochieng (1985) are of the opinion that speakers of these western Nilotic languages that settled in Kenya and Uganda initially migrated from the Sudan.

The language known to many as Luo is actually called Dholuo; Dho- serves as a noun class prefix in Bantu languages, as for example, Ki- in Kiswahili and Gi- in Gikuyu. It is a prefix meaning 'the language of the Luo'.

Cohen (1974:147) explains that the Luo began to settle in the Nyanza region of Kenya between 1500 and 1550 AD. Adhiambo (1981:2) adds that the Luo people live in the Kisumu, Siaya, Nyando, Rachuonyo, Homa-Bay and Migori districts of Kenya. The majority of Dholuo speakers live in Nyanza region, but the Luo are spread across towns in Kenya. The Bantu-speaking community of the Suba, according to Ayot (1973), has adopted the dominant Dholuo as their main language. It is confined to the Mfangano and Rusinga islands of Lake Victoria and parts of Gwasi. Ayot (1973) notes that Suba is becoming an endangered

language on the brink of extinction. However, I would argue that it is facing language death; a situation that could be reversed. To revive this language, a deliberate effort must be made to ensure that children learn the language as they grow up. The language should be introduced in schools and young children should be taught the writing system. Descriptions also need to be completed and codified in dictionaries and grammar reference books. Some effort in this direction has been made, including the recent documentation of a Bible in Suba.

1.9 Organisation of the study

In the following section, the organisation of the dissertation will be discussed.

Chapter One is the introduction and focuses on background information. The chapter considers the context and the research methodology. It outlines the objectives, discusses the research problem, motivation, scope and limitations of the study. It explains the language situation in Kenya, the number of languages and their families, dialectal variations, the status of the languages and their use in education and parliament, including the recent provisions made in the 2010 constitution. Chapter One also presents the challenges concerning the language situation.

Chapter Two provides a brief review of how mood is explained in English, the types of ambiguity and interpretations. In order to determine how mood is expressed in an African language, I will also discuss a study done at Kenyatta University on tense, aspect and mood as expressed in Kihavu, a Bantu language spoken in the Kalehe District of the Democratic Republic of Congo and the Rusizi/Nyamasheke Districts in the Republic of Rwanda. The study partly examines how mood is expressed in Kihavu and is relevant to the present study of mood in Dholuo. Similar to the study on Kihavu, the research presented here also determines how mood can be accounted for in terms of Chomsky's Minimalist Programme. Thereafter, Dholuo descriptive grammars, academic and related works are discussed.

Chapter Three comprises the theoretical framework, focusing on the main aspects of the Minimalist Programme.

Chapter Four provides a discussion of the basic facts of the Dholuo language, including the phonetics, phonology, morphology and syntax.

Chapter Five includes the presentation and discussion of mood and ambiguity in Dholuo. Mood in Dholuo, its categories and the possible word formation processes of inflection and

derivation realised on the auxiliary are presented. Thus, mood morphology will be discussed to determine its morphosyntactic functions in the Minimalist Programme. When written in isolation, the form and tonal marking or pronunciation of most Dholuo modal auxiliaries is similar to those of words belonging to other word categories. This causes ambiguity. It is only in the context of a sentence that either the different meanings connoted by the words used as auxiliaries or other word categories can be determined. However, when form is similar but tonal marking is different, there is no ambiguity. A description of how the data is accounted for by the Minimalist Programme is provided in this chapter, which also explains how the feature checking process distinguishes the tone marking and words belonging to other word categories from the related lexicalised modal auxiliaries. Hence, the structure building process of these sentences and how they fit into Chomsky's (1993:7) basic sentence structure will be discussed.

Chapter Six is the conclusion and includes a summary of the main findings on mood and ambiguity in Dholuo. This chapter also contains suggestions for further research.

1.10 Conclusion

Chapter One provided the background information, setting the scene for this study. Specifically, it considered the context of the study, outlined the objectives and presented the methodology and research problem. I also outlined the motivation and discussed the scope and limitations of the study. The study covers only Dholuo as spoken in western Kenya, focusing on the Kisumu South Nyanza dialect. It does not cover Dholuo as spoken in Tanzania and Uganda. Chapter One included a discussion of the language situation in Kenya, including the number of languages and language families in this country, dialectal variations, language status and use in education, provisions in the new constitution and challenges these pose.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Albeit minimal, some research has been done on mood in general and on Dholuo in particular. This chapter considers studies on mood and ambiguity in general and examinessome works in Dholuo that concern morphology, phonology and syntax. The only theoretical work that addresses the question of mood and ambiguity in Dholuo as spoken in western Kenya will be reviewed. It will also include studies in English, as a way of setting the scene for the study on mood in Dholuo as it gives examples from English to illustrate facts. The chapter will also discuss a study done at Kenyatta University on tense, aspect and mood as expressed in Kihavu, a Bantu language spoken in the Kalehe District of the Democratic Republic of Congo and in the Rusizi/Nyamasheke Districts in the Republic of Rwanda. As mentioned in section 1.8, the study of how mood is expressed in Kihavu is relevant to this research. As in the present study, the work also determines how one can account for mood in terms of Chomsky's Minimalist Programme.

2.2 The state of research in Dholuo studies

2.2.1 Literature on grammar

Earlier works on Dholuo were produced by missionaries and consisted of prescriptive grammars concerned with the correct way of using the language. These works were meant to teach Dholuo to speakers of other languages, mainly missionaries. Such works include *Dholuo Grammar* (a member of St Joseph's Society 1938), *Dholuo without tears* (Malo, 1952), *Elementary lessons in Dholuo* (Huntingford, 1959), *An Elementary Luo Grammar* (Stafford, 1967), and *Luo-English Dictionary* (Blount & Elsie: 1971). These descriptive works are valuable sources of data.

2.2.2 Literature on specific language analysis

Theoretically inspired studies on Dholuo have since been undertaken. The theoretical research on Dholuo does not address the question of mood and ambiguity in this language. The best-known sources are listed here. Okoth (1997) provides a detailed account of the grammatical categories and functions in Dholuo. Such categories and functions form the constituents whose ordering regularities were the aim of the study. The study also explores the nature of Dholuo phrases and the major clause patterns of Dholuo syntactic constituency, which is a property of constructions of a higher order than words. The study aims to analyse

the extent to which one can account for Dholuo structural properties/grammar using Functional Grammar theory. It concludes that this language makes extensive use of pragmatic function assignment using combinations involving pronoun-pronoun or noun-pronoun sequences. This contributes to the interaction between Themes and Topics. Topic and Focus Assignment account for a number of preverbal occurrences of non-alpha constituents. Okoth's (1997) study may be regarded as a major contribution to the study of Dholuo constituent ordering.

Omondi (1982), analyses the major syntactic structures of Dholuo. This study is an analysis of the major units of syntax, using the theoretical framework of the standard theory of Generative Transformational Grammar. It is an attempt to describe the major syntactic structures of Dholuo and provides basic information about Dholuo phonology, discusses the various categories into which the formatives of the language may be divided and their morphological realisations. It also presents a survey of the main syntactic structures and gives the base rules. The study deals with imperatives, negation, questions and emphasis. Other processes discussed include conjunction, relativisation, complementation, pronominalisation and the possessive construction. Some useful transformational rules are also presented.

Okoth (1982) in *Dholuo morphophonemics in a Generative framework* investigates the 'motivation for the morphophonemic alterations which are prevalent in Dholuo grammar'. Okoth (1982) attempts to determine where alternations are relics of an earlier stage of the language and where they have a purely phonetic motivation. The study seeks to determine which alternations are to be presented as natural phonological rules and which are to be regarded as morphophonemic rules (Okoth, 1982:12-13). It notes that the major morphophonemic alterations in Dholuo, especially the ones that involve consonantal changes, are morphologically conditioned. The study demonstrates that morphophonemic alternations in Dholuo are systematic and rule governed. The morphophonemics touch on the morphology of the language; hence, the study may be regarded as a major contribution to the study of Dholuo morphology.

Atoh (2001) in *Semantic analysis of Dholuo nouns: the semantic field approach* analyses nouns in Dholuo and their relationships to one another. The study identifies and describes the types of Dholuo nouns and how they are formed. It notes that Dholuo nouns can be classified into basic or inherent nouns, derived nouns and compound nouns. Dholuo nouns are morphologically complex, but like all other nouns, exhibit the word formation processes of inflection, derivation and compounding. In Atoh's (2001) examination of the headedness

principle, he notes that most Dholuo noun heads appear as the most right-hand constituent of the given compound word. These aspects are significant to Atoh's study, which discusses Dholuo noun morphology.

In *A study of the syllable weight and its effects in Dholuo phonology,* Oduor (2002) attempts to define syllable weight in Dholuo, showing its relation to stress, tone and vowel processes like deletion, compensatory lengthening and glide formation. The study concludes that Dholuo is a quantity sensitive language, as far as vowel processes are concerned, in stress and tone assignment, deletion, compensatory lengthening and glide formation. Syllable weight in Dholuo also has an effect on these aspects. Oduor (2002:281) notes that deletion alone, deletion followed by compensatory doubling and glide-formation all directly affect word final light CV syllables. However, these three processes do not affect word final heavy syllables. This work includes relevant literature on Dholuo phonology, particularly syllables and tone, although it does not analyse tone in relation to mood ambiguity.

Abudho (2004) has also done an analysis of Dholuo coordinate and subordinate complex sentences under the Minimalist Programme. The study provides a worthwhile morphosyntactic analysis of these complex sentences. Abudho (2004) analyses complementiser phrases, namely coordinated and subordinated complex sentences. It concludes that Dholuo marks the complementiser by a C, because in this language complementisers are single lexical items in the unmarked forms. The possibility of grouping the three complimentisers together exists. In this case, a CP introduces the subordinate sentence. It is possible to use the CP in Dholuo subordination in the marked case. There could be more than one complementiser in subordinate complex sentences and in cases where there are two and one introduces each sentence, the complementisers co-occur. Both the coordinate and subordinate complex sentences have the same structure, which is SVO. There is a different structure in the conditional clause because of the differences in aspect, which occur between hypothetical and non-hypothetical conditional sentences.

These differences from the original Minimalist Programme sentence structure have necessitated alterations in creating heads such as C^1/C instead of CP, because in Dholuo the complementiser is represented by a C. ASP^1/ASP is created in the basic structure instead of TNS^1/TNS. In other words, without these changes the Minimalist Programme does not absolutely fit this language. The SVO structure is the same as that of Dholuo and there is no change in the structure to accommodate Dholuo structure.

The only theoretical study so far undertaken on mood in Dholuo and on the Minimalist Programme is Oluoch's (2004) *A morphosyntactic analysis of mood in Dholuo; the Minimalist Programme approach*. The study takes a morphosyntactic approach in a linguistic study of mood in Dholuo. Oluoch (2004) analyses how mood is expressed in this language, the categories of mood and possible word formation processes of inflection and derivation realised on the auxiliary and the mood morphology. The aim of the study is to determine the morphosyntactic functions of mood in Dholuo in the Minimalist Programme.

2.3 Mood and Ambiguity

2.3.1 English works related to Dholuo mood

2.3.1.1 Literature on theory/grammar of modals

Palmer (1986:21) observes that the distinction between mood and modality is similar to that between tense and time, or gender and sex. There are some problems concerning both the terminology and the nature of mood and the way it relates, or is perceived to relate, to modality.

First, the term 'mood' is traditionally restricted to a category expressed in verbal morphology. It is formally a category of the verb like tense and aspect, even though its semantic function relates to the contents of the complete sentence. Traditionally, its verbal nature is not in doubt. Jespersen (1924:373) argues that it is a 'syntactic, not a notional category, which is shown in the form of the verb', and dictionary definitions usually refer to verbal inflection. Yet, modality is not expressed in all languages within the verbal morphology. It may be expressed by modal verbs, which are at least still within the verbal element of the sentence, or by particles, which may well be quite separate from the verb. Due to the restriction of the term 'mood' to verbal morphology, Lyons (1977:848) remarks that 'mood is a grammatical category that is found in some, but not all, languages'. It is probably the case that formal markers of modality are found within the grammars of all languages, though not always within the verb. However, if 'mood' is restricted in this way and not applied to grammatical systems that are not marked on the verb, there will be no general term for all the grammatical systems that are exponents of (semantic) modality and no term accurately parallel to 'tense,' 'number', or 'gender'.

Huddleston (1984:164) talks of 'an analytic mood system' when auxiliaries rather than inflection are the exponents of the grammatical system. This solution will not be adopted

here, because the alternative terminology is well established. If the term ‘mood’ is used solely to refer to inflectional categories, it will be necessary to refer to ‘modal’ systems or ‘modal’ categories that are no less grammatical, while restricting the term ‘modality’ to the typological category of grammar.

The second point that may justify the restricted use of the term ‘mood’, to some extent, is that the moods of familiar languages have a whole variety of semantic functions, and the choice between them is determined grammatically rather than by modal meanings. ‘Mood’ (subjunctive, etc.) and modality (‘can’, ‘may’, ‘must’, etc.) are familiar terms in linguistics, according to Palmer (1986), but he presents a systematic and principled description, across a wide variety of languages, of what can be considered a single grammatical category.

The notion of modality is vague and a number of definitions have been proposed, encompassing the attitude or opinion of the speaker, speech acts, subjectivity, non-factivity, non-assertion, possibility and necessity. Such definitions have often been language-specific. Palmer (1986), by examining data, including data on evidentials, from many different languages (native American and Australian languages, as well as Latin, Greek, English and others) is able to compare and contrast the ways in which modality is grammaticalised, its various functions and its relation to other grammatical categories. Cross-linguistic generalisations and theoretical conclusions arise from this typological approach. Mood and modality form a major contribution to our understanding of a basic topic in language studies.

Jespersen’s (1924:313) discussion of mood is important. He discusses the indicative, subjunctive and imperative moods:

> They express certain attitudes of mind of the speaker towards the contents of the sentence, though in some cases the choice of mood is determined not by the attitude of the actual speaker, but by the character of the clause itself and its relation to the main nexus on which it is dependent. Further, it is very important that we speak of ‘mood’ only if the attitude of mind is shown in the form of the verb: mood thus is a syntactic, not a notional category.

He goes into detail about how mood is expressed in English. In more recent developments in linguistic theory, mood and modality are grouped together.

Lyons (1968:307) defines mood in relation to an unmarked class of sentences that express simple statements of facts, unqualified with respect to the attitude of the speaker. Lyons (1968) says simple declarative sentences of this kind are non-modal (unmarked for mood). Later (Lyons 1977:848), disputes the distinction between ‘mood’ and ‘modality’, where

mood is essentially a grammatical category. He had previously noted Lyons (1968:308) three 'scales' of modality, those of 'wish' and 'intention', of 'necessity' and 'obligation', and of 'certainty' and 'possibility'. He provides no evidence that these are clearly marked grammatically in any known language as distinct 'scales'. He gives a Latin example for the first and an English example for the other two. The second two pairs are what Palmer (1979:4-5) and Von Wright (1951) call 'deontic' and 'epistemic' modality. These types are the main focus of Lyons' later work. 'Wish' and 'intention' are only dealt with in a discussion of 'non-factives'. Although it is clearly implied that factivity is related to modality, there is no indication of the precise way in which the basic notions of possibility and necessity will relate to 'factive,' 'contrafactive' and 'non-factive'. Mood is expressed by the use of modal verbs and as such, it is part of the verb complex.

The basic distinction is nevertheless clear: 'mood' is a grammatical term, while 'modality' is a semantic term relating to the meanings that are usually associated with mood. Thus, the relation between mood and modality is like the relationship between tense and time. It is observed that languages have grammatical categories, which we may call 'moods' that relate to a whole variety of non-factual expressions. Some of these may be different from those we have already noted. In some languages, for instance, there are grammatical ways of expressing what is assumed. German is one such language and the American Indian Menomini is another (Hockett & Altmann, 1968: 237). Menomini's system of mood includes references to unexpected events and to unfulfilled intentions, as well as to statements and questions.

'Modality' is a semantic term used in Palmer (1979:4-5) to refer to the meanings of modal verbs. We have established the set of modal verbs as the grammatical category with which this study is concerned, and do not need the term 'mood,' though there would be no obvious objection to describing each modal as one of the 'moods' of English. Mood is usually reserved for inflectional categories that exhibit modality – the subjunctive, the optative, etc., as opposed to indicatives. Zandvoort (1962:64, 86-9) uses mood to distinguish between the subjunctive and indicative in English (marked by the absence or presence of final -s with the third person present tense form of the verb) and criticises the Oxford English Dictionary's definition of an auxiliary as 'a verb used to form the tenses, moods, voice, etc. of other verbs'. He suggests that 'modality' is the proper term here and not 'mood.' The distinction being made is not between grammatical mood and semantic modality, but as far as we can gather, between the two grammatical-semantic categories of modal verb and mood. If that is

the case, it is not clear why Zandvoort (1962:64, 86-9) did not object to the term ‘tense’ as well and did not distinguish the time characteristics of the auxiliaries from the inflectionally marked tenses of English, namely past and present. It is debatable whether the distinction between subjunctive and indicative is useful here, whether English has, in this narrow sense, any moods at all.

Crystal (2003:45, 212, 224, 374) mentions ‘will’, ‘shall’, ‘may’, ‘might’, ‘can’, etc. as modal verbs. Modals express meanings as a possibility or a necessity. The modal verbs ‘must’, ‘shall’ and ‘may’ distinguish between obligation and discretion. He says modal verbs convey a range of judgements about the likelihood of events. They only function as auxiliary verbs expressing meanings, which are less definable, focused and independent than those of lexical verbs. He identifies nine verbs in this class: ‘can’, ‘could’, ‘may’, ‘might’, ‘will’, ‘would’, ‘shall’, ‘should’ and ‘must’. ‘Dare’, ‘need’, ‘ought to’, ‘have to’ and ‘used to’ have very similar functions. English has no future tense ending and future time is expressed by a variety of other means, for example, by the use of ‘will’ and ‘shall’, loosely referred to as future time. See examples:

(1) (a) I/we shall go.

In traditional grammar, ‘shall’ is used with the first person.

(b) You/he/she/it/they will go.

‘Will’ is used with second and third persons.

(c) I/we will go.

To express an intention to act, the use of ‘will’ is recommended with first persons by Crystal (2003).

(d) You/he/she/it/they shall go.

To express an intention, Crystal (2003) notes that ‘shall’ was recommended with other persons.

(e) *I will be twenty soon.

Crystal (2003) states that this was considered wrong because ‘will’ expresses an intention, but we cannot intend to be a certain age – we just attain it as time elapses.

However, modern usage does not observe this distinction as 'shall' has come to be increasingly replaced by 'will'.

Dholuo similarly marks the future in a variety of ways by using the future marker '*n'* prefixed to the person and the verb. Another possibility is to add a temporal adverb to the future construction to indicate future. The modal auxiliary *biro* (will) is also used, in a similar way to the English examples above. See examples of how Dholuo marks the future below.

(2) Kiny n-o- dhi
Tomorrow FM-3P/SG- GO-IF/INC
He will go tomorrow.

In the above example, the future marker *n* is prefixed to the verb. The temporal adverb *kiny* (tomorrow) specifies the actual future reference.

(3) O- biro dhi (kiny)
3P/SG-will-AUX go-INF-INC (tomorrow)
He will go (tomorrow).

In this example, the modal auxiliary *biro* (will) marks the future. The temporal adverb *kiny* ('tomorrow') can be left without affecting the meaning of the sentence. The adverb is only added to specify the time.

Bhatt (1999:63) notes that mood is about the actuality of an event and identifies three parameters used to establish modal distinctions. These include the speaker's judgement regarding the actuality of an event, evidence used by the speaker to form this judgement and the kind of need or requirement which forces someone to get involved in an event or to carry out an action.

In his work on modal logic, Von Wright (1951:1-2) distinguishes between four modes, which he sets out in a table and we are to assume, presumably, that the horizontal arrangement is significant. His purpose is to investigate their formal structure in terms of truth tables. A linguist's aim is to investigate the kind of modalities that are clearly recognisable in languages and the systems that they exhibit. Below is Von Wright's (1951) table.

Table 3: Categorisation of Types of Modalities

Alethic moods/ Moods of truth	Epistemic moods/ Moods of knowing	Deontic moods/ Moods of obligation	Existential moods/ Moods of existence
Necessary	Verified	Obligatory	Universal
Possible		Permitted	Existing
Contingent	Undecided	Indifferent	
Impossible	Falsified	Forbidden	Empty

As shown in table 3 above, Von Wright distinguishes between the four types of moods; the first three are: alethic, epistemic and deontic. Linguists use these types of moods as part of a theoretical framework for the analysis of modal verbs and related structures in English. The fourth type is existential, used in grammatical descriptions of clause or sentence types.

The following discussion illustrates the typology of moods summarised in the above table. Similar examples demonstrate the application of the alethic, epistemic and deontic moods in Dholuo and English equivalents. A separate sentence is provided for the existential mood.

The alethic mood is of chief concern to logicians. It has little place in ordinary language. The modal ‘must,’ may be used to indicate alethic necessity. It is concerned with the necessary truth of propositions such as the use of modals in sentences (Crystal 1991:14). For example:

(4) (a) Nyaka bed ni chiemo ose yik-o-re.
Must/AUX be that food has/COMP-EP prepare/INF/RFL
It must be that food is ready.

It follows from what is known that when one sees food on the table, it must be ready.

The term ‘epistemic’ is knowledge/judgement based and has been used by linguists to refer to the use of modal auxiliaries, with reference to the use of ‘may’ and ‘must’. Epistemic logic is concerned with the logical structure of sentences, which imply that propositions are known or believed (Crystal 1991:123). See the example below.

(b) Nyaka bed ni chiemo ose yik-o-re
Must/AUX be that food has/COMP-EP prepare/INF/RFL
It must be that food is ready.

The same sentence asserts or implies that it is indeed the case that food is ready.

Von Wright (1951: 1-2) notes that the word 'possible' is used in ordinary language in an epistemic sense, yet it belongs to the alethic mode in his system and the term epistemic mode is undecided. This relates to the fact that epistemic modality in language is usually, perhaps always, what Lyons (1977:792) calls 'subjunctive', in that it relates to an inference by the speaker, and is not simply concerned with 'objective' verifiability in the light of knowledge. Epistemic necessity is indicated by 'must'.

Deontic mood also has a place in ordinary language involving statements (not commands) and is action based, involving judgement of truth. It indicates compulsion, which makes it possible or necessary for an event to take place. It may be internal to the participants of events (notions like ability, willingness, desire, etc.) or external to them (external notions like necessity or requests). The modal verbs are used to express what is obligatory, permitted or forbidden. This modality is concerned with the logic of obligation and permission (Crystal 1991:98). Like epistemic modality, it is usually subjunctive, in that the speaker is the one who obliges, permits, or forbids. Von Wright's (1951:1-2) modality is 'absolute' but he recognises that it can be 'relative' to some moral code or some person. Thus, deontic modals are usually performative in the sense of Austin (1962:4-7), e.g.:

(c) Nyaka bed ni chiemo ose yik-o-re
Must/AUX be that food has/COMP-EP prepare/INF/RFL
It must be that food is ready.

The same sentence in this instance implies that one is obliged to ensure that the food is ready.

Crystal (1991:128) defines the existential mode as a term used in the grammatical description of clause or sentence types. The notion of existence is expressed as a structure beginning with the unstressed word 'there' followed by a form of the verb 'to be'. For example:

(5) Nitie udi ariyo kanyo.
There are houses two there
There are two houses there.

The existential mood, according to Von Wright (1951), is a matter of quantificational logic and is more concerned with 'some', 'any' and 'all' in ordinary language than the expressions of modality. Von Wright (1951:1-2) admits that this mood has essential similarities with other moods of logic. It is of interest for two reasons. Firstly, 'can' is used in an existential sense to mean 'some' (more commonly 'sometimes'). For example:

(6) Jo-ma i- kia nyalo bed-o ma- richo.
People/ that-REL 2P/SG- don't know can/AUX be/INF REL-bad
Strangers can be dangerous.

Secondly, the rules for logical equivalence with negation in existential modality are closely paralleled in the other modalities, especially the epistemic.

Different scholars have dealt with modals and modality in various ways, a clear indication of the complexity of the issues involved and of the difficulty of providing any simple and completely convincing analysis. Palmer (1979:4-5) aims to give a general idea of the nature of the problem and an approach to its solution, as well as to offer some guidelines for the organisation of the analysis. He offers two starting points. By formal criteria, a set of modal verbs can be established; the formal status of six such verbs is hardly in doubt, but others are either marginal or problematic. Semantically, it is assumed that the concepts of possibility and necessity are central to modality. A synthesis of the formal and semantic criteria will lead us beyond possibility and necessity.

The present study views mood as a property of syntax (a grammatical/syntactic approach). From the literature above, this is in line with Jespersen (1924: 313, 373) who notes that mood is a syntactic category and that the choice of mood is determined by the attitude of the speaker shown in the form of the verb and character of the clause. Mood is a category of the verb expressed in verbal morphology, by modal verbs, which are within the verbal element of the sentence or by particles. Mood in Dholuo is also expressed through modal auxiliaries.

The study also views mood as a grammatical category as viewed by Lyons (1977:848), although he disputes the distinction between 'mood' and 'modality.' Lyons (1968:308) had previously noted three 'scales' of modality, those of 'wish' and 'intention', of 'necessity' and 'obligation', and of 'certainty' and 'possibility'. Dholuo modal auxiliaries also express these three 'scales' of modality.

2.3.1.2 Typology of moods in Dholuo

The typology of moods summarised in Von Wright's table also exist in Dholuo. Similar examples in table 3 below demonstrate the application of the alethic, epistemic and deontic moods in Dholuo.

Dholuo modal auxiliaries also express 'wish' and 'intention', 'necessity' and 'obligation' and 'certainty' and 'possibility'. Below are some examples to illustrate their syntactic and semantic functions.

(7) Dine o- mond-i dine o- tiek- o tich
IF 3P/SG early INF COMP would have Aux 3P/SG finish INF/COMP work
If (s) he had come early, (s)he would have completed the work.

The above example expresses a wish or event that did not take place. This is expressed by *dine* in the 'if' and main clause.

(8) Nyaka o- madh yath
Must 3P/SG-drink INC medicine
S/he must take medicine.

In the above example, the modal auxiliary *nyaka,* 'must', connotes the necessity to take medicine if one is to get well and even the obligation if one is to improve. *Oromo* or *owinjore*, meaning 'ought to', connotes obligation and necessity and can take the place of *nyaka*, since the words have the same connotation. One can substitute *onego*-'should' with *nyaka* to express obligation.

Below is another example.

(9) O- nyal-o ted-o.
3P/SG-able-INF/INC cook-INF/INC
S/he can cook.

The modal auxiliary *nyalo* expresses possibility.

Oluoch (2004:23-29) identifies the following ways of marking mood in Dholuo giving the closed set of mood markers.

2.3.1.2.1 Lexical auxiliaries

In this category, there is one lexical word, which expresses mood. This is the auxiliary *nyaka*. This means 'must' or 'ought. It implies a sense of obligation, necessity, duty, rules and compulsion.

2.3.1.2.2 Derived auxiliaries

These are auxiliaries derived from full verbs. For example:

Onego which means should, to be necessary, must, have to, it is convenient, fitting and ought. It also adds the idea of obligation.

Oromo is used in the sense 'it is time to.' This expresses the ideas of; ought to, should and obligation.

Nyalo expresses the ideas of condition, possibility, ability and permission.

Biro which means 'will' is also a derived auxiliary not mentioned here.

2.3.1.2.3 Derived auxiliaries with reflexives

These are two as discussed below.

Nyalore, which means 'to be possible.'

Owinjore, which expresses the ideas 'ought,' 'to be suitable.' It also implies/conveys a sense of obligation or necessity, duty, rules, and to be convenient.' '

2.3.1.2.4 Expression of mood using modal adverbs

These are lexical and act like adverbs. There are two modal adverbs used to express hesitancy or doubt as mood constructions which are *kamoro,* and *chalo*.

2.3.1.2.5 Expression of mood using the hypothetical condition

Other than the above identified by Oluoch (2004), Dholuo mood is also expressed through doubt and the hypothetical condition which expresses an unrealised or hypothetical condition where the speaker assumes that the condition will not actually be met.
All these are discussed in detail in Chapter Five.

2.4 Literature on specific language analysis

2.4.1 How tense, aspect and mood are expressed in Kihavu

Gahutu (2012) analyses the structure of Kihavu verbal expression. Kihavu is a Bantu language spoken in the Kalehe District of the Democratic Republic of Congo and in the Rusizi/Nyamasheke Districts of the Republic of Rwanda. Gahutu observes that the interpretation of tense, aspect and modality systems in Kihavu is a product of the interaction of verbal affixes, lexical categories, and tonal distinctions. The predicate in Kihavu is a complex structure consisting of a verbal root to which temporal and aspectual morphemes can be affixed. These morphemes have either a low or high tone. In addition to the various affixes attached to the root, the verb may also co-occur with one or more auxiliaries. These auxiliaries may be inflected for tense, aspect and modality. Gahutu's (2012) study has provided a foundation for correlating the morphological structure of the verbal system with underlying temporal, aspectual and modal structures in the Minimalist Programme, using an explicit analysis of Kihavu tense, aspect and modality systems. This correlation of verbal morphology with temporal, aspectual and modal concepts represents, essentially, an explicit correlation of form and meaning. The study provides a strong characterisation of the meanings and functions of temporal, aspectual and modal morphemes of Kihavu verbal expressions. It sheds some light on important relations that must be incorporated into a general model analysis of TAM references consistent with the verbal system of Bantu languages.

The modal system being the main concern to this study, reference will be made to Gahutu's (2012: 107-128) analysis of the Kihavu modal system. Just as tone plays a vital role in determining Kihavu time references, the same applies to its modal system. As in the current study, a discussion ensues on ways of marking mood in Kihavu and whether or not one can account for these features by the Minimalist programme. It is noted that different moods can have the same tonal features hence; structure requires a tone checking head (modal head) for the verb to move into to check modal features. Gahutu (2012) concludes that the analysis of tense, aspect and modality systems in Kihavu is carried out with the Minimalist Programme operations of selecting, merging, moving, feature-checking and feature deleting, but he notes that not all morphological phenomena lend themselves to syntactic analysis. He believes that a Minimalist perspective can bear more fruit than any other linguistic approach with regard to descriptions of Kihavu verbal structure. The following moods are identified:

i. The assertive group comprises three types of mood differentiated by their tones. This includes:

a). The indicative mood which indicates facts and is composed of statements, questions and exclamations. It does not have the natural high tone. For example:

Nsoma emvaho - I read Invaho newspaper.

The above example expresses a fact.

b). The conjunctive mood is also discussed and a high tone is put on the verbal prefix.

Kanyange abwene abana **ba´fuluka** oku Nkombo

Kanyange saw the children returning to Nkombo

c). The relative mood is a grammatical category used to describe words or clauses that refer to a word previously used in the same sentence. It is characterized by a high tone.

ii. The autonomous mood is characterized by a high tone on the syllable following the verbal prefix.

Omuntu **okolana** omwerhe

He who works hard

iii. In the infinitive mood, there is the natural tone.

Kugaluka oku Nkombo

To return to Nkombo

iv. The imperative mood is used for giving orders and it describes the mood or a form of a verb that expresses a command or request. It always has a low tone. In Kihavu the imperative mood has no prefix morpheme and it is only used for the second person singular with present time reference. See the following examples from Gahutu.

Derha Ejihavu – Speak Kihavu

Yiga – Study

Ikara – Be seated.

v. The injunctive mood expresses an order that requires somebody involved in a legal action to do something or refrain from doing something. It is characterized by a high tone and final vowel -e. For example:

Wowe oderhe´ Ejihavu – You, you'll speak Kihavu

vi. The optative mood expresses wish and entreaty or even an insult. It always has a low tone.

Mukaburha abana – May you have children

vii. The subjunctive mood is used to express doubts, wishes and possibilities. It is characterized by a high tone and final vowel -e.

rhukole´ - *Let us work (now)* Rhwekole´ - *Let us work (some time later)*

Rhugeende´ - *Let us go (now)* Rhwegeende´ - *Let us go (some time later)*

Rhuderhe´ Ejihavu - *Let's speak Kihavu (now),*

viii. The conditional mood describes a clause, conjunction, verb form or sentence that expresses a condition or limitation. For example:

Abazere bani bakola bansula nanacisima

If my parents visited me, I would rejoice at it.

Morphotonemes, as described by Dessaintes (1971) and Bateranzigo (1984), are the suprasegmentals that trigger movement for checking of modal features from the VP to the ModP in the Minimalist Programme's structure. Ambiguity of mood in Kihavu was not discussed because it was not the focus of the study. However, it is noted that ambiguity can be observed on the Kihavu subjunctive, injunctive and conditional moods where, besides the use of tonal distinctions (the morphotonemes **P**'and **B**'), there is also the insertion of certain structures like **Ni-** (for softening the order or changing it into an entreaty), **-kola** (for conditions), **nka-** (for hypothetical or impossible events) and **hano-** (for soft conditions). Hence, these structures may cause uncertainty or confusion since, in certain cases, their removal does not modify the nature of the system.

2.5 Ambiguity

Crystal (1991:17) defines the term 'ambiguity' as a word or sentence that expresses more than one meaning. He identifies lexical ambiguity as that which is due to the alternative meanings of an individual lexical item. It is a situation where the same word has a set of different meanings, in other words, it is the property of an expression with more than one meaning or multiple meanings. See the following examples containing the words *'*bat*'* and *'*club*.'* (O'Grady et al., 1997).

(10) He saw a bat.

The above sentence could mean either that he saw a flying, mouse-like nocturnal mammal or that he saw a piece of equipment used in cricket or baseball.

(11) The man owns a club.

The above sentence connotes that the man owns either a social organisation or a blunt weapon.

For Malmkjær and Anderson (1991:394), ambiguity is defined as a situation when a word or phrase has more than one interpretation or referent. It can be used to name more than one referent or type of thing, each of which is capable of being picked out by means of different terms. The different referents of an ambiguous word are similar in some respects. To disambiguate a sentence is to do an analysis that demonstrates the ambiguity. Gorfein (1989) observes that a word is ambiguous when there is a mismatch between the first retrieved or most frequent (primary) meaning and the secondary sense context.

Mood is expressed in Dholuo through a lexical auxiliary, derived auxiliaries which are the majority, derived auxiliaries with reflexives and using modal adverbs. Mood can also be expressed through a hypothetical condition, which expresses an unrealised condition where a speaker assumes that the condition will not actually be met in a construction. The head (TM^1/TM) is also used for the aspectual distinction of auxiliaries. Therefore, in the analysis of mood in Dholuo, ambiguity occurs when words of other categories have the same form and tone as Dholuo mood markers (see the discussion in Chapter 5).

Crystal (1991:17) distinguishes between three types of ambiguity, namely, 1) grammatical or structural; 2) transformational; and 3) lexical ambiguity. In what follows, each type is discussed and exemplified.

2.5.1 Types of ambiguity

2.5.1.1 Grammatical/Structural ambiguity

This is ambiguity in terms of how the words in the sentence are related. It refers to the question of what modifies what or how the nodes containing those words are related. In such cases, there is more than one possible interpretation.

Alternative constituent structures can be assigned to a construction in phrase structure ambiguity. The structure looks into how nodes relate to each other or the type of node. In

matters of structure, the arrangement of nodes and the classes of words seem to be important in explaining structural properties that constitute meaning. See example from Crystal (1991:17).

(12) New houses and shops.

The above could be analysed either as:

(13a) Both houses and shops are new.

Or

(13 b) Only the houses are new.

Structure is sensitive to the class of words, as this affects meaning. Structure is not simply the arrangement, but also the classes of arrangement. It is easier to make general statements about structures when they occur in classes as single words/lexical categories/parts of speech. Diagrammatic representations can then be used to illustrate structural ambiguity. This can be represented on two different phrase markers. In Minimalism, lexical features are represented in a single tree at the LF. Below is an example of an ambiguous Dholuo phrase.

(14) Yawuoyi gi nyiri ma timbe gi becho.
Boys and girls REL character their good
Boys and girls with good manners.

The above sentence is ambiguous and the following two meanings can be derived from it. First, both boys and girls have good manners. Second, girls have good manners.

Certain cases of structural ambiguity cannot be resolved if we do not know the category of a word or the categorical status of a particular phrase. See the following example from Radford (1988:66):

(15) Mary looked very hard.

This could be an adverbial or adjectival phrase. The word ‘hard’ here causes ambiguity in the structure as shown in the following possible interpretations.

(16a) She was a hard person/personality (difficult to deal with).
(16b) She made a lot of effort in looking for whatever she was trying to find.

Below is an example from Dholuo:

(17) Gini tek
This thing-REL hard
This thing is hard.

The word *tek* meaning 'hard*'* would lead to the following interpretation of this sentence :

(18a) This thing is stiff.
(18b) This thing/issue is difficult to comprehend.

2.5.1.2 Transformational ambiguity

In this type of ambiguity, alternative semantic representations can be shown by relating the ambiguous sentences to different structures (Crystal, 1991:17). A multiple ambiguous sentence has more than two structural interpretations. For example,

(19) Visiting speakers can be awful.

This is relatable to either

(20a)It is awful to visit speakers

Or

(20b) Speakers who visit are awful
Below is an example from Dholuo.
(21) Puk-o mogo
Pour-INF flour
To pour flour.

This can literally mean:

(22a) To spill flour.

Or idiomatically:

(22b) To lose a source of livelihood.

2.5.1.3 Lexical ambiguity

This type of ambiguity is due to the alternative meanings of an individual lexical item, but not because of the grammatical analysis of a sentence (Crystal, 1991:17). It is based purely on meaning. For example:

(23) I found the table fascinating.

'Table' here could refer to either

(24 a) object of furniture

Or

(24 b) table of figures.

See an example from Dholuo

(25) Miy- a kado
Give- 1P/SG soup
Give me soup/salt.

(26) O- kad- o wiy- e
3P/SG-plait-INF/INC head-3P/SG
She is plaiting her hair.

In Dholuo *kado* means either 'soup', 'salt', or 'to plait'. The implied meaning is drawn from the context.

Gorfein (1989) explains that under semantic/lexical ambiguity there is also a distinction between weak and strong semantic ambiguity. Strong semantic ambiguity for lexical items occurs when a single word refers to multiple categories. The word *kwe* refers to 'peace' (noun), 'hoes' (for digging) (noun) and 'to cool something hot' (verb). Below are two examples illustrating how the lexical item can refer to two word categories:

(27) Wa- onge kwe
1P/Pl-dont' have peace
We do not have peace.

In the above sentence, *kwe* refers to 'peace', which is a noun.

(28) Kwe n- e nyathi chak
Cool for-3P/SG child milk
Cool milk for the child.

The second sentence above is an illustration of the use of the word *kwe* meaning 'to cool', which is a verb.

Weak ambiguity occurs when a word refers to a single category, but the information retrieved for the category may vary. The problem of lexical ambiguity is further complicated when considering that in different contexts even a word that denotes a single object may be interpreted differently. This is because contrasting sets of features may become activated, affecting nearly every word in the lexicon. It appears that all words have more information associated with them than is needed in a single instance. To avoid ambiguity we need to qualify what we are referring to by providing extra information for clarity. For example, although the word *'guok'* has one standard meaning, 'dog', the specific dog being referred to may not be clear. One needs to qualify whether it is a large, brown and mean or small, white and nervous dog (Gorfein, 1989:15, 146). Weak ambiguity also occurs for each sense of a word that exhibits strong ambiguity.

2.6 Models of ambiguity processing

Gorfein (1989:71-72) distinguishes three models of ambiguity processing, namely context-dependent access, exhaustive access and ordered access. The following is a discussion of each model.

In the context-dependent (selective access) model, the meaning of a polysemous/ambiguous word, which is retrieved from memory, is determined by the context in which it occurs. A word will be ambiguous when it has clear, multiple meanings, but one does not know which one to use or apply in a given situation (Gorfein, 1989: 207). According to this model, context-inappropriate meanings of a word are not processed. However, many studies have found evidence against this model and have discovered that context-inappropriate meanings of a word are still activated even when the word occurs in a particular context.

See the example of the word *jalendo* in Dholuo.

(29) En jalendo
3P/SG preacher/convert/announcer
He is a preacher/convert/announcer.

In this context, the word *jalendo* could mean 'a preacher', 'a convert', or 'a radio/TV announcer'. Hence, context-inappropriate meanings of a word are often still activated even when it occurs in a context that requires further qualification.

The exhaustive-access (context-independent model) stipulates that an ambiguous word initially activates all possible meanings in memory and then context is used to select one of the activated meanings for further processing. This model confirms that context-inappropriate meanings are often activated, but context-appropriate meaning is more strongly activated. This model makes both meanings equally available for meaning retrieval. The problem with this position is that the more frequent meaning of the word appears to be more strongly activated than the less frequent meaning. See the example below with the word *tedo* meaning 'to cook' or 'a girl getting married'.

(30) O- se ted-o
3P/SG-COMP-EP cook/INF
She has cooked/got married.

Out of context, most people might be inclined to assume that one means 'to cook food' rather than the less frequent meaning of 'a girl getting married'.

The ordered access model assumes a role for meaning frequency. It is only the primary meaning of an ambiguous word that is initially retrieved (independent of context) and no further meanings are retrieved if the meaning is consistent with the context. If the primary meaning does not fit the context, the memory is searched again for another meaning. The model supports activation of context-inappropriate meanings and the advantage of context-appropriate meanings.

The present research is based on structural/grammatical ambiguity, linked to lexical/semantic ambiguity, with a focus on the exhaustive-access/context-independent model. According to Gorfein (1989), this model stipulates that an ambiguous word initially activates all possible meanings in memory, but thereafter context is used to select one of the activated meanings.

2.7 Interpretation

Ambiguity relates to interpretation and according to Hornstein et al. (2005:9), if some grammatical objects cannot be interpreted by the conceptual and intentional (C-I) characteristics or articulatory and perceptual (A-P) interface, then grammatical structures that contain these might be suitable for these interfaces. These two interfaces impose bare output

conditions that all grammatical objects have to respect. These are conditions that correspond to the filtering effects of the interfaces. They examine how derivations might be 'minimised' and how Full Interpretation (FI) is to be understood in terms of least effort (short derivations) and local movements, or simple operations with no vacuous projections or operations. According to (Chomsky, 1995) there should be no superfluous symbols in a representation. Such structures would be ill-formed unless the wayward objects were dispatched before the structures containing them gained interpretation at these interfaces. According to the Minimalist Programme, the possible linguistic levels of representation are only those required by necessity; these are the ones that interface with performance systems (the A-P and C-I systems). The linguistic levels that interface with these systems are the interface levels PF and LF, which are part of the linguistic system that provides instructions to the performance systems. Within the Minimalist perspective, all principles and parameters of the linguistic system should be stated in terms of legibility at LF or PF as modes of interpretation by either the performance systems or follow as by-products of the operations of the computational system. The Minimalist Programme rejects deep structure (DS) and surface structure (SS) interpretation and concentrates all interpretation at LF, which permits an appropriate account of the noted semantic correlation. According to Jackendoff (2007), in transformational grammar the underlying syntactic structure or deep structure is an abstract representation that identifies the ways a sentence can be analysed and interpreted. It is generated by phrase-structure rules. The surface structure is the outward form of a sentence derived from deep structures by a series of transformations.

Chomsky (1996:313-314) notes that the Minimalist Programme argues that the only absolutely necessary representations are the interfaces of the meaning (LF, semantic component) and sound components (PF, phonetic component) of the linguistic system. This is because language is a mapping between sound and meaning where language connects to the physical world of sound and the mental world of cognition. The LF and PF are external interface levels interpreted by the semantic and phonetic components. In the Minimalist framework, only LF and PF are necessary, hence, it has done away with the DS and SS. There is still a lexicon and a computational system, which forms LF and PF representations from the lexical information. The I-language consists of a computational procedure and a lexicon (Chomsky, 1995:a.p.15). Native speakers internalize I-languages and each speaker has one.

2.8 Conclusion

This chapter provided a critical review of works on mood and ambiguity in general. Works in Dholuo that have been reviewed analyse its morphology, phonology and syntax. Theoretical works that have been conducted on Dholuo do not address the question of mood and ambiguity as the language is spoken in western Kenya, except for Oluoch (2004). Hence, to see how mood is expressed in an African language, I also consulted Gahutu's (2012) study on the expression of tense, aspect and mood in Kihavu. This study relates to the current study as it also determines how one can account for mood in terms of Chomsky's MinimalistProgramme.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

As noted in the previous chapter, no theoretical studies taking a Minimalist Programme have been undertaken on mood in Dholuo, apart from the study by Oluoch (2004). Most studies in Dholuo that are relevant to this study have been conducted within the framework of Functional Grammar, the standard theory of Generative Transformational grammar, Semantic Field Theory, and one study which combines the theories of Autosegmental Phonology (dominant), CV Phonology and Metric Phonology. Although these theoretical frameworks have their merits, in this study the Minimalist Programme as presented in Chomsky (1995) is used. In what follows, I shall focus on aspects of this theoretical framework that are relevant to the study. Every task requires a tool and in this research, the Minimalist Programme is that tool. It is part of the generative tradition of linguistics. I hope the study will contribute to the Minimalist Programme's further development and refinement since most linguistic theories including the Minimalist Programme are informed and inspired by Indo-European languages, mainly English. As far as I know, not much has been done in terms of applying the Minimalist Programme to the study of African languages. This chapter will discuss the theoretical framework, theoretical literature and philosophical background. The Minimalist theory will be discussed with a focus on how and why Minimalism was developed, the shortcomings of Chomsky's phrase structure over Government and Binding (GB), why Minimalism is used as a departure from GB, how it differs from GB, its main tenets, challenges and the role of morphology.

3.2 Philosophical background

From the Generative Grammar point of view, language is innate. Children are born with some internal unconscious knowledge of grammar, known as universal grammar (UG), and being equipped with it and exposed to a language, can construct the grammar of the language they are exposed to (Haegeman, 1994:14). Humans are equipped with a language faculty, which comprises a component called competence, also known as I-language (Crystal, 1991:170), and performance, also known as E-language (Crystal, 1991:118).

Competence is the tacit knowledge that one needs to speak a language. It is the knowledge of an ideal speaker-listener in a completely homogenous speech community who knows the

language perfectly and is unaffected by such grammatically irrelevant conditions such as memory or other limitations. It is the knowledge about a particular language that cannot be measured. This tacit knowledge of language is found in every speaker but it varies from individual to individual. Competence is a property of an individual that provides one with the ability to perceive the relationships of linguistic elements. One can then produce an infinite number of sentences using only a finite number of rules. Competence also allows the native speaker to make assessments about the grammaticality of expressions. One's intuition helps one to judge the well-formedness or ill-formedness of grammatical sentences. It is the perfect, unconscious knowledge of the rules, that is, implicit knowledge.

Performance is the actual use of the language in concrete situations (Chomsky, 1965:4). Performance is the actual use of language. Performance varies from person to person. The performance systems access information stored in the cognitive system and use this information. Performance and cognitive systems are components of the language faculty.

Based on these presuppositions, Generative Grammar meets the conditions for an adequate grammatical model, because it achieves observational adequacy in specifying the difference between grammatical and ungrammatical sentences on phonological, morphological and syntactic grounds. The grammar as a model of competence can generate only the well-formed sentences of a language. It also strives for descriptive adequacy by formulating the rules and regulations of the language structure, which are based on the native speaker's intuition about the well-formedness of the language properties. It accounts for the systematic relationships among the sentences of a language and attempts to define or describe the language in terms of word order, sentence formation and language typology. By providing good reasons for rules of the grammar, explanatory adequacy is achieved. According to Chomsky (1986: 53), every grammar of a specific language has to meet these conditions. Generative Grammar strives for explanatory adequacy by giving us a principal way in which language is learnt by children and human beings.

Chomsky's quest was to develop a universal theory of language, where specific grammatical descriptions of all the different languages contribute to developing the properties of universal grammar (UG). The universality condition states that any adequate linguistic theory should provide a powerful theoretical mechanism for adequately describing the grammar of any natural language. Devices such as phrases and sentences are used when rules are proposed to

describe or account for a language and if these devices are suggested for a given language it should be possible to use them in many languages. Hence universal rules account for other languages as well.

The Minimalist Programme is a development of the generative enterprise. In the Minimalist Programme, structures are represented and generated to account for language phenomena using the smallest set of devices for the linguistic system to be as economical as possible. It is morphosyntactic and can be used to describe the morphosyntax of mood in Dholuo. According to Crystal (1991:226), morphosyntax refers to grammatical categories or properties where the criteria for definition of both morphology and syntax apply. The description of the characteristics of words and number in nouns constitutes a morphosyntactic category, since the contrasts affect syntax. This is because a singular subject requires a singular verb which requires a morphological definition like the plural inflection suffix marker *-s.* Other morphological definitions include traditional properties like singular, perfect, indicative, passive, accusative and third person. This, with reference to the Minimalist Programme, applies to word formation processes like derivation and inflection and how these words lead to the structure building process through feature checking.

3.3 The Minimalist Programme

Chomsky (1993) proposes to make X-bar theory redundant, but x-bar structures follow directly from the structure building process, which combines two elements, words or phrases, selecting one as the label. Maximal projections are the furthest an element projects, hence, some elements can be words and at the same time maximal projections. X-bar categories are projections, which are neither words nor maximal. Chomsky (1993) favours a universal (specifier-) head- complement order.

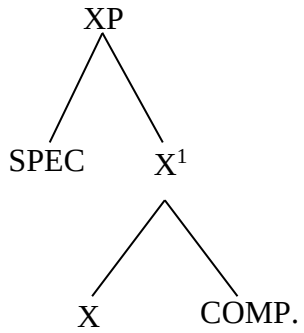
Chomsky (1993) concentrated on X-bar theory to develop more general ways of restricting the power of transformation. The theory was made possible by separation of the lexicon from the Phrase Structure (PS) rules and the introduction of syntactic features in aspects, which generalise the treatment of lexical categories as sets of features to both lexical and phrasal categories. In the underlying X-bar theory, a category-neutral base component classifies expressions as bundles of features and allows lexical categories to be non-transformationally related simply by virtue of important features. With regard to phrase markers in the Minimalist Programme, the development of X-bar theory in the late1960s was an effort to

resolve the tension between explanatory and descriptive adequacy. The lexicon was separated from computations eliminating a redundancy between lexical properties and PS rules and allowing PS rules to be reduced to the simplest context free form. X-bar theory sought to eliminate such rules only leaving the general X-bar theoretic format of UG. It was assumed that the PS rules would be able to be eliminated (Webelhuth, 1995:3, 23, 395).

In X-bar theory, most phrasal constituents have heads on which the other elements of the constituents are dependent. X represents lexical categories that can be heads of phrases. The lexical categories may be subcategorised, depending on whether or not they take a complement and on the kind of complement they take.

The items involved in the sub-categorisation of lexical heads are interpreted as semantic arguments of the predicates denoted by the lexical heads. X-bar theory provides for the projection of phrasal categories from lexical categories and creates a hierarchical organisation of categories. The notion of 'head of a phrase' is made explicit. A lexical head X and its complements form a constituent X-bar and any specifiers of this form with it a higher-level constituent X-bar (Horrocks, 1987:63, 99, 101).

The Minimalist Programme keeps the specifier-head and head-head relationships of X-bar theory (Chomsky, 1993:6). This replaces the notion of government and case assignment and is substituted by case-feature checking which can make a derivation crash at interface level if not checked. The lexical items from the lexicon are transformed into a specifier-head or head-complement relationship leading to the following typical structure known before as maximal projection (Chomsky, 1981:29).



The Minimalist Theory preserves the idea that all information is projected from the lexicon into a main concept for all phrases and presupposes a cross-categorical symmetry from all of

them. In the Minimalist model, the structure building process is driven by necessity. Structures are built only if licensed by morphological or lexical evidence of the language.

A language can produce a partial tree which has no Spec, that is, the subject is dropped. See the example below:

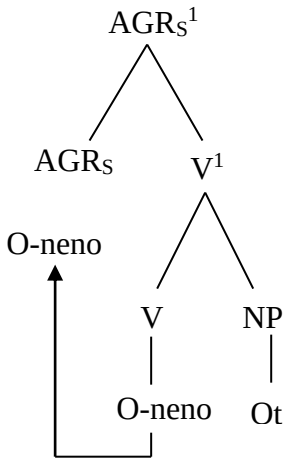
(31) O- nen- o ot

3P/SG SEE-INF/INC ACC-house

He is seeing the house.

There is no overt subject in the above sentence. The nominal features of person, gender and number are attached to the verb and they are rich enough to recover the content of the missing subject. The personal prefix marker *o-* is attached to the verb so that the verb has an inflectional morpheme and the contents of the dropped subject are recovered. See also section 4.8 example 62. The pronominal prefix marks person and number and it is attached to the verb root in the infinitive form.

The following structure represents the construction in the previous example:



The verb *neno-* 'to see' rises to the head Agreement Subject (AGR_S^1/AGR_S) to have its morphological agreement features checked. It inflects for agreement of person and number when used with a covert subject.

In the Minimalist Programme, words are moved around for checking purposes. Inflectional features are checked for their grammaticality by this process. INFL no longer exists according to the split-INFL-Hypothesis (Pollock, 1989:365-424); it is now separated into TNS, agreement subject (AGRs) and agreement object (AGR_o) phrases. TNS and AGR

phrases ascertain that properties of the verb are checked by raising them. Properties of the NP (Determiner Phrase) are the case features. The checking process ensures that NP and VP are properly paired.

This new approach of Generative Grammar reflects the morphology of SVO languages like Dholuo. In Dholuo, verb morphology goes beyond the inflectional features of AGR and TNS. Dholuo has aspect instead of tense. In Minimalism, there are inflectional and derivational nodes that check whether the verb has the appropriate features. They become separate heads during the structure building process. However, the present study concentrates on mood. The Minimalist approach can account for Dholuo modal features through feature checking which is morphologically driven for structure building. Therefore, the structure building process of Dholuo mood morphology fits into the basic sentence structure of Chomsky (1993:7). Some challenges arose and modifications were made as some inflectional heads have been introduced for the lexical feature checking of mood.

The auxiliary *Onego,* which is derived from a full verb, becomes lexicalised after the derivational prefix *o-* and the infinitive suffix marker *-o* has been incorporated into the auxiliary and the derivational process is complete. There are no morphemes to be checked off. Therefore, the original verb *nego* (‘to kill’) is changed into the auxiliary *onego* and the verb and the auxiliary can be used in one construction (Oluoch, 2004). See the example below:

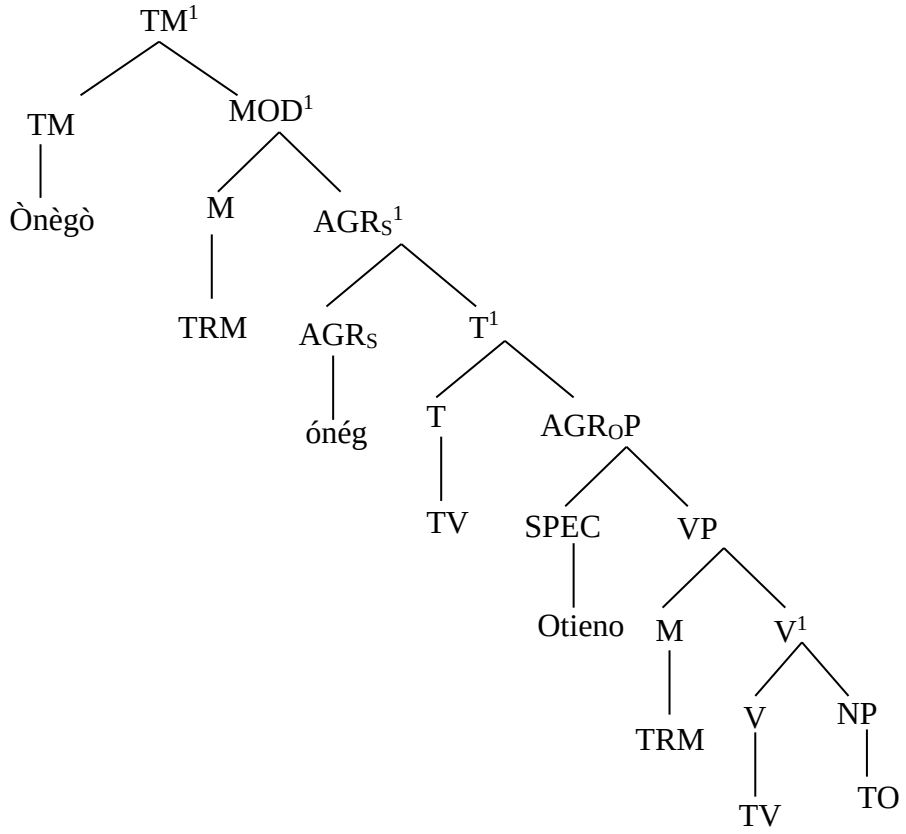
(32) Ò – nèg- ò ó- nég Otieno

DRPR- necessary-INF 3P/SG - Kill ACC-name

He ought to kill Otieno.

The following structure reflects the morphology drive, which involves structure building of the construction (32) above. It is feature driven and the feature checking aids the structure building. The number of heads and specifiers in the tree is also feature driven. These features are lexical or morphological and every new item is assigned a head. The difference between the main verb and the auxiliary in the above sentence is tonal. Hence, the creation of a new tonal head (TM^1/TM) is needed. In constructions where the tone of the auxiliary never

changes, whether in the completive or incompletive, this head is not included since there is no structure building in such cases.



In the above structure, the object is raised from the NP position in the VP to (SPEC/AGR_OP) to check the accusative structural case features. The verb first rises from inside the VP to (T^1/T) to have its incompletive tonal aspect features of the sentence checked. Then it moves again to (AGR_S^1/AGR_S) to check its subject agreement. The lexicalised auxiliary also moves out of the VP to (MOD^1/MOD). It finally moves to the tone head (TM^1/TM) to distinguish its low tone pattern, which differentiates it from the related main verb, which has a high tone.

Tone in Dholuo has a grammatical function and can be used to mark aspect[3]. Modal auxiliaries and principals govern tone assignment in mood in Dholuo. Largely, Dholuo mood is tonal and tone is a structural morpheme; as a suprafix, tone is the last feature to be checked. The modal auxiliary is structural and tonal. This will be discussed in detail in Chapter Five under categories of mood in Dholuo and possible word formation processes on the auxiliary.

[3] Dholuo is a tonal language and it has aspects which are tonally marked.

From the example above, the modifications to the basic sentence structure of Chomsky (1993:7) include the introduction of some inflectional heads in mood constructions for lexical feature checking. These include checking for mood (MOD^1/MOD) and tone (TM^1/TM) after the AGR_SP, where the tone of the auxiliary varies in the completive and incompletive and for tonal distinction in a situation where an auxiliary is used together in a construction with a related verb. The inflectional node for tense (TNS^1/TNS) in Chomsky's basic sentence structure is also replaced by (T^1/T), since Dholuo does not have tense, but has aspect and this is tonal. Dholuo case features are structural (not marked morphologically/no morphological case features), but to keep the structure, the subject and object move out of the VP for nominative case features to be checked under the specifier of the AGR_SP and the accusative case features to be checked under specifier of the AGR_OP. The main verb always moves to (T^1/T) for aspectual feature checking and to (AGR_S^1/AGR_S) for checking agreement features of person.

Cook and Newson (1996:312) drew on Chomsky's work on Universal Grammar, as presented in Chomsky (1993, 1995 and Lansik and Saito (1992), to give an overview of the Minimalist Programme as discussed below.

From the early 1960s, Generative Grammar's objective was to abstract general principles from the complex rule systems devised for particular languages, leaving rules that were simply constrained in their operations by these UG principles (Chomsky, 1995:388).

Verbs in Minimalism are given their inflectional properties and forms in the lexicon. An already inflected verb is inserted into its base position in the VP and does not have to move anywhere to be inflected. The inflectional nodes check that the inserted verb has the appropriate features, instead of adding inflections to a bare verb. Inflections originate in the lexicon and are checked against the positions to which they move. If a verb is already inflected, its movement to check its features can covertly take place at the LF (semantic). If the checking procedure is satisfied, it results in a grammatical sentence. However, if the wrong verb is inserted, checking is not satisfied and the sentence is ungrammatical (for example, the use of 'like' instead of 'likes').

(33a) John likes fruits.

(33b) *John like fruits.

The verb is inserted into the VP as present tense third person singular. In order to check its tense features, it rises first to the TNS position, and then to AGR to check its agreement features. The verb is not raised until the LF accords it with procrastinates.

The Minimalist Programme has developed directly from the GB approach. It reduces the levels of structural representation to the minimum of LF and PF.

Minimalism draws on the principles of full interpretation, economy and procrastination. The principle of economy requires that all representations and processes used to derive them be economical. This leads to Minimalism. The defining characteristic of the Minimalist Programme is that the smallest possible set of devices to account for language phenomena should be used if the linguistic system is to be as economical as possible (in terms of its representation and the generation of structures). The economy of representation requires that representations of syntactic structures contain only the required elements. This condition results in the principle of full interpretation, which states that there are no redundant elements in the structure of a sentence. Each element plays some role, be it semantic, syntactic or phonological, and each element must be interpreted in some way. The procrastination principle explains the different verb movement properties and that movement operations should be delayed for as long as possible.

In Minimalism, grammar is restricted to the bare minimum. Adopting a checking theory of verb movement enables simpler views on issues like word order and case assignment.

In Minimalism, structures are constructed in a piecemeal fashion. In GB on the other hand, D-structure was presented as a complete structure and little was said about the internal process of its formation. It was an all-at-once operation (Chomsky, 1993:21).

3.4 The main tenets of the Minimalist Programme

The Minimalist Programme is based on the principle of economy in the study of language and it attempts to formulate broad guidelines for the Generative Theory of universal grammar (Chomsky 1995). The model of the Minimalist approach to syntax strives for economy of representation in linguistic analysis and description to ensure that syntactic specification and

derivational procedures contain only the essential elements. Minimalism equates a simple sentence with a maximal IP. The Minimalist Programme also seeks to enhance an interdisciplinary approach to linguistics as the theory can be used to analyse other languages as well. Economy is a basic principle of universal grammar, which postulates that the smallest possible set of theoretical and descriptive apparatus be used for the interpretation and representation of linguistic phenomena (Mwihaki, 2007). As a model of UG, the Minimalist Programme does not allow superfluous elements and captures the essential properties of language by making general statements. The Minimalist Programme therefore follows the tradition and philosophy of generative linguistics.

Generative grammar attempts to formalise the implicit rules that a person uses while speaking his native language. Innate language rules enable humans to learn their native language with minimum effort and time. Generative grammar sets rules to recognise grammatical sentences in a language and differentiate them from improper sequences of words or ungrammatical sentences in the same language. The grammar is a set of principles and parameters for the formation and interpretation of sentences, including phonological and semantic systems.

The Minimalist Programme also follows the generative assumption that the human brain contains a computation system for sentence structure that comprises sounds and meaning. Generative grammar gives a format for phrase structure. It assumes that grammatical function depends on the hierarchical organisation of constituent phrases, rather than the linear order of words. This organisation is captured by tree diagrams and includes ways in which syntactic relationships are maintained or altered in a structural change. The Minimalist Programme also follows the claim of the generative theory of UG that sentence structure edits the phonological and semantic structures and because of this, every sentence of a language should have a computational structure/syntax associated with the phonological structure/phonetic form and semantic structure/logical form. Syntax is the core of generative grammar with the PF and LF being the interface between grammar and other cognitive systems. In generative syntax, traditional concepts of subject, verb and object are referred to as specifier, predicate and complement. Traditional functional concepts of subject and object are now referred to as nominative or objective/accusative case. There are now also semantic roles as agent or theme in semantic terms.

Transformational Grammar is an approach to generative grammar, which describes a language through transformational rules. It goes a step further than structural grammar which focuses more on the sentence structures used for communication. Transformational Grammar analyses the words with reference to the underlying thoughts, including the use of the correct sentence structure. Transformational Grammar employs most of the linguistic tools such as syntax and context to explore the possible meanings of words.

The Minimalist Programme is different from generative syntax as it represents a modification of the latter.

The Minimalist Programme (1995) differs from complex grammars of the 1980s and Government and Binding (1981), which developed a modular view of syntax identified in terms of the concepts and principles and parameters. The Minimalist Programme differs from GB for the reasons discussed below.

As stated by Mwihaki (2007), this theory collapses the constituent modules into one and eliminates the d-structure. GB was abstract, because it specified two levels of syntactic structure, namely d-structure and s-structure, which were said to perform functions similar to the Generative Grammar deep structure and surface structure. GB syntax had six modular theories; x-bar, government, case, thematic/theta, binding and bounding theories. The Minimalist Programme reduces the complexity of GB by collapsing these theories into one, while upholding the principles and parameters that govern them. A parameter indicates a condition of language specific rule variation, which captures ways in which individual languages differ. Parameters include the null subject and headfirst hypothesis. Principles refer to universal laws of language that account for similarity among all languages. These include the structure dependency principle, lexical projection, full interpretation and theta criterion principles.

The Minimalist Programme keeps the specifier-head and head-head relationships of x-bar theory (Chomsky 1993:6). Head government is no longer a viable well-formedness condition. This replaces the notion of government and case-assignment is substituted by case-feature checking. It abandons government as a fundamental notion in the theory on which the GB theory is based. The lexical items from the lexicon are transformed into a specifier-head or head-complement relationship, leading to the structure known before as maximal projection.

Chomsky (1993) proposes recasting case theory in terms of a Spec-head agreement relation. The Minimalist Programme treats all case assignments as an instance of Spec-head relation. Government as a fundamental grammatical relation is eliminated and is thus replaced by the specifier-head relation. NP objects of verbs and prepositions move to Spec positions of higher AGR nodes to fulfil case requirements. The accusative case is discharged in Spec Agro. The case of the NP in Spec Agro position after the verb is raised to Agro and is checked by the V+Agro complex. The structural prepositional case is assigned in a similar way.

The role morphology plays in GB and in the Minimalist Programme differs. The morphosyntactic features were placed onto the d-structure level under GB. A verb was selected in its root form from the lexicon and base-generated in the VP under INFL. Person, number and tense inflectional morphemes were then base-generated under their respective inflectional heads (INFL). Verb movement took place in order to pick up these morphological features for the verb to appear grammatically correct on the s-structure level. Thus, morphology and syntax were split in GB. On the other hand, the Minimalist Programme's morphosyntactic nature assumes that the verbs and nouns are assigned their inflectional properties in the lexicon. The already inflected verbs and nouns are placed in the VP. The division between deep and s-structure is eliminated, because there is no more need for verbs and nouns to be projected at d-structure level to pick up their features and appear grammatically correct on s-structure level (as was the case in GB). The lexicon is no more simply a collection of roots and stems for verbs and nouns; it also contains all the relevant inflectional and derivational morphology of the categories.

Verbs in the Minimalist Programme are given their inflectional properties and forms in the lexicon. An already inflected verb is inserted into its base position in the VP and does not have to move anywhere to be inflected. The inflectional nodes check that the inserted verb has the appropriate features, instead of adding inflections to a bare verb. Inflections originate in the lexicon and are checked against the positions to which they move. If a verb is already inflected, its movement to check its features can covertly take place at the LF (semantic). If the checking procedure is satisfied, it results in a grammatical sentence. On the other hand, if the wrong verb is inserted, checking is not satisfied and the sentence is ungrammatical. The verb is not raised until LF, accords it with procrastination. The Minimalist Programme reduces the levels of structural representation to the minimum of LF and PF. The

procrastination principle explains the different verb movement properties, namely that the movement operations should be delayed for as long as possible.

The Minimalist Programme aims to show that the grammatical levels of the DS and SS do not exist. Chomsky (1993) assumes that only LF has the structure of a phrase marker concern.

LF (grammatical structure relevant to meaning) is the only level at which principles of grammar can be stated before they can be read off the SS phrase marker from UG. It was assumed in GB-style theories that case theory does not apply at SS. In Minimalism, case is an LF phenomenon implying that it is not assigned, but checked: lexical elements are inserted with case features and the grammar 'checks' at LF. The case filter applies to LF phrase markers. The Minimalist Programme does not permit the S-structure, therefore locality conditions on movement like subjacency and parasitic gap licensing conditions cannot be stated as conditions on SS representations. The binding theory must apply exclusively at LF and not at DS, SS or LF. Chomsky (1993) observes that a theory in which only LF application of the BT is permitted is preferable to one in which it can apply at several levels. Minimal assumptions are that a theory with only two significant grammatical levels, LF and PF, is better than one with two additional levels of SS and DS.

Chomsky (1993) proposed that Universal Grammar has only two grammatical levels: the LF and PF. These are the minimum required by any theory of grammar reflecting the fact that natural language sentences are pairings of sound and meaning.

The Minimalist Programme is a development of Generative Grammar, which aims to make simple and general statements about language. It postulates that a linguistic expression is well represented only at the interface (equivalent to surface level in GB) (Chomsky, 1993:5), which contains the phonological form (PF) and the logical form (LF).

Adopting a checking theory of verb movement enables simpler views on issues like word order and case assignment.

The challenge to the theory is that not all facts concerning mood and ambiguity in Dholuo can be accounted for in terms of Chomsky's Minimalist Programme and modifications have to be made by creating new heads. We will come back to this in Chapter Five when we deal with the Dholuo data.

The Minimalist Programme accounts for the data on mood and ambiguity in Dholuo, as will be seen in Chapter Five, where structure building fits into the basic sentence structure which reflects the morphology of SVO languages like Dholuo with inflectional heads introduced for lexical feature checking. The analysis, description and explanation is based on the principles of the Minimalist Programme in relation to three components of the syntax of language: grammatical categorisation of words in terms of morphological and syntactic criteria, the structural description of phrases and sentences through the combinatorial operation of merge, and the description of structural change through the operation of move.

Sentence examples and corresponding structural configurations derived for them are provided. Successive constituents vary according to the structure of the sentence. Subject NPs move from a position in the VP into the specifier subject position to have the nominative case checked. The object is raised from the NP position to the specifier object position to have the accusative case checked. The lexical verb is raised from the VP position (T^1/T) to check aspectual tonal features; it may also check agreement features in $AGRs^1$/AGRs. The auxiliary moves from the VP to its structural position (MOD^1/MOD) to get its agreement features checked in ($AGRs^1$/AGRs) and finally moves to (TM^1/TM) to check its tonal modal features to distinguish its tone from that of the related lexical verb from which it is derived (if they both appear in the construction). (TM^1/TM) is also used for aspectual distinction of auxiliaries where other word categories have the same form and tone as an auxiliary, causing ambiguity. In such a case, the head of the word category and tone head are introduced for the related lexical verb.

Hornstein (1995:59-71), referring to Chomsky (1993), explains the principles of the Minimalist Programme. The aim was to develop a theory of grammar based on natural concepts required by necessity and to develop an economical theory. Below are some of these concepts. He argues that any theory of grammar must have two grammatical levels, LF and PF, which interface with the modules responsible for sound and meaning features of language. Chomsky presupposes that PF interfaces with the Perceptual Articulatory (PA) system and LF with the Conceptual-Intentional (CI) system. This two-level Minimalist proposal is in contrast to the GB-style theories, which identify four grammatical levels (PF, LF, DS and SS). The Minimalist Programme aims to show that the grammatical levels of the DS and SS do not exist, meaning that the theory of grammar need not distinguish DS and SS phrase markers from other levels of derivation.

Chomsky (1993) assumes that only LF has the structure of a phrase marker. Therefore, the reallocation of principles from DS and SS to LF is our focus.

According to Chomsky, movement is copying and deletion. A full copy of a moved constituent is left at the launching site (in Government and Binding theory, Chomsky refers to the site where an object moves from as extraction site); at the LF all copies but one must be deleted and the preference principle requires that as much of the redundant material as possible be deleted from the head of the A'-chain in cases of A'-movement. In a two-membered A'-chain of lexically identical material, as much material is deleted from the first member of the chain as possible. Without movement, deletion and the A'-preference principle, the aim of applying the binding principles exclusively at LF is unrealisable.

Chomsky (1993) proposes recasting case theory in terms of a Spec-head agreement relation. The Minimalist Programme treats all case assignment as an instance of Spec-head relation. Government as a fundamental grammatical relation is eliminated and is thus replaced by the specifier-head relation. NP objects of verbs and prepositions move to Spec positions of higher AGR nodes to fulfil case requirements. Accusative case is discharged in Spec Agro. The case of the NP in Spec Agro position after the verb is raised to Agro and is checked by the V+Agro complex. The structural prepositional case is assigned in a similar way.

The basic grammatical relations are X^1-theoretic. The Minimalist Programme eliminates the ECP as a consequence of doing away with the non-X^1-notions. Head government is no longer a viable well-formedness condition, as it is defined in terms of the notion of government.

The Minimalist Programme is a development in Generative Grammar, which aims to make simple and general statements about language. It postulates that a linguistic expression is well represented only at the interface (equivalent to surface level in GB) (Chomsky, 1993:5), which contains the phonological form (PF) and the logical form (LF). In transporting lexical or morphological information from lexicon to interface, several processes and guiding principles are involved. These include the computational process, spell-out and the numeration process as discussed below.

3.5 Transporting lexical/morphological information from lexicon to interface

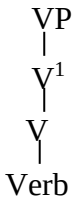
The earlier principles and parameters theory form is referred to as Government and Binding and Minimalism developed from the latter. Minimalist strives for simplification. Minimalism abandons government as a fundamental notion in the theory on which the GB theory is based. The effects of government can be reduced to relations that are more fundamental. Concerning the tenets of Minimalism theory, let us see what each component stands for, as Chomsky puts it. Several processes and guiding principles are involved in moving lexical or morphological information from lexicon to interface. In Minimalism, a sentence is formed in a piecemeal computation process with three progressive operations of numeration, merge and move (Mwihaki, 2007). The computational process is the first component of the Minimalist Programme. Computation begins with input (lexical information) yielding an output (sound-meaning) through merge, move and deletion. Functional elements, like agreement in tense with their inflectional morphemes, are base generated. Contextual elements like the stem of a verb or noun phrase are raised to the functional nodes to pick up their inflections in adjunction, a transformational process. Their features of person, gender, number, case and agreement accompany the inflectional morphology of verbs and XPs, maximal projections. Phonological information undergoes a process of operations under phonological rules and further movements occur in the non-phonological elements after spell-out.

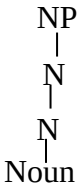
Computation (derivation) begins with the numeration of lexical items from which the SD is to be formed. The system is a mechanism that forms the structures that appear at interface levels. It builds structures by selecting elements from the numeration and combining them in the relevant ways. Cook and Newson (1996: 322) define numeration as a set of elements selected from the lexicon, which is the starting point of the structure building process. Mwihaki (2007) defines numeration as the first stage of the sentence computation process where words that are used to express ideas are selected. These words belong to different word categories of lexical numeration that form syntactic structures through the merge process. Computation can form many separate trees but at some point in the derivation, the trees are combined appropriately to form a single tree. See the Dholuo example below:

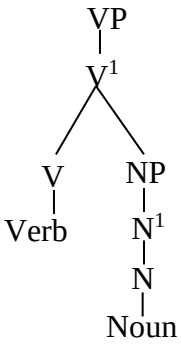
(34) Chiw-o kony

Give-INF help

Giving help.







From the above example, if the process forms structures that conform to the X-bar principles, it may first take the verb and form a VP structure, next take the noun and form an NP structure and then combine these two with the NP as the object of the VP. This may continue until the numeration uses up all the lexical choices it made. This system can form many separate/individual trees for lexical items conforming to the x-bar requirements, combining these trees at some point in the derivation in appropriate ways to form a single/larger tree. The result will be ungrammatical if a single SD has not been formed.

The result of the computations is that there must be two fully formed structural representations, one at LF and the other at PF, meaning that the computation must split at spell-out point. After this, the computational system forms two independent representations with different perspectives.

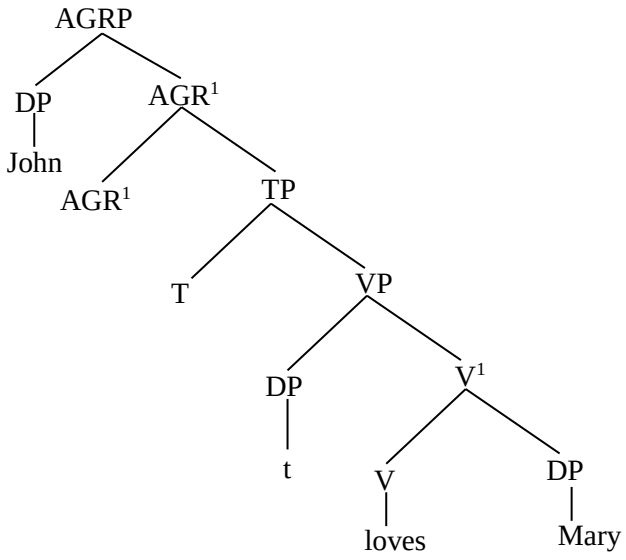
The computational system builds structures as follows. It starts with the numeration of lexical items which form the SD. The SD formation process is constrained by the convergence requirement at the interface levels through the merging process which combines lexical items and partial trees to form larger units from the ones already constructed (Chomsky, 1995b:396).

In Minimalism, elements move to satisfy morphological requirements (Hornstein, 1995). Lexical elements are extracted from the lexicon and packaged into phrase markers already loaded with their morphological features. Movement in operation is part of the computational system of the transformational Minimalist Programme. The computational system builds trees in the tree formation process and moves elements into structural positions created by the process. 'Move' according to Cook and Newson (1996:325) is the movement process which moves elements about and plays a role in structure building where a position is created into which to move an element, for example, a specifier position. Movement is to be kept local and constrained by relativised minimality, a 'minimal link condition' that only allows movement into the nearest relevant position. It only raises an element to a position if its morphological properties are not satisfied in the derivation (Chomsky, 1995:400).

Mwihaki (2007) notes that elements in movement or transformation are involved in a syntactic change expressing the relationship between the derived and underlying structure. The derivation process may take a fully formed structure and change some aspects by moving

certain constituents. This operation requires movement to take place from a lower to higher position and the moved constituent leaves a trace, bound by an antecedent in the same governing category. These two requirements are elements of the empty trace principle interacting with the constituent command condition on binding and the principle of proper government. This movement occurs in successive cyclic steps.

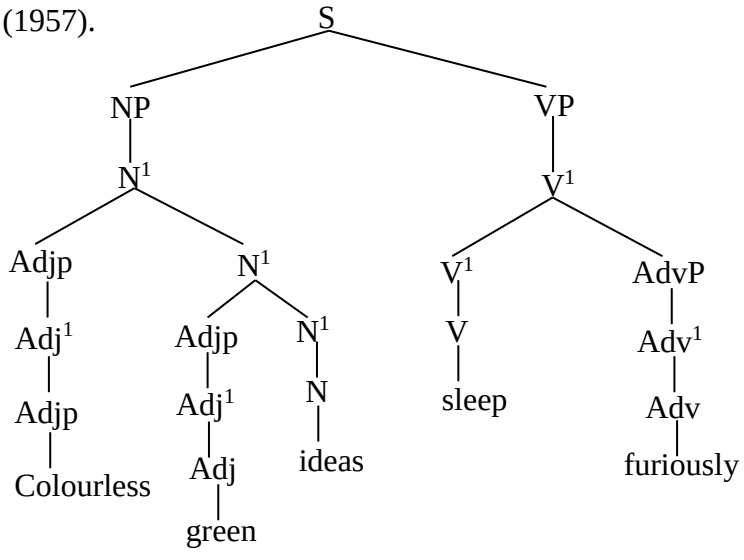
Before giving an example in Dholuo see the following example from Cook and Newson (1996: 324) to illustrate the Minimalist Programme's tree formation process where elements are moved into structural positions created by the process itself. The structure is simplified into a bare minimum.



The subject John moves from inside the VP into the specifier position where the AGR system has been added to form the tree.

Another example to illustrate the details of this theory is Chomsky's X-Bar representation of the following sentence in Chomsky, N. (1957).

Colourless green ideas sleep furiously



The above sentence is a grammatical sentence in English though semantically nonsensical since no understandable meaning can be derived from it. The structure demonstrates how the Minimalist Programme keeps the specifier-head and head-head relationships of the X-bar theory (Chomsky, 1993:6). The lexical items from the lexicon are transformed into a specifier-head or head-complement order.

In Minimalism, movement is driven only by morphological requirements. An element only moves to satisfy its own morphological requirements, hence movement is selfish. According to the theory, movement is no longer determined by the nature of the INFL, but by a feature checking process in which abstract inflectional features are checked for their correctness in the syntactic positions in sentence structure. See the example below.

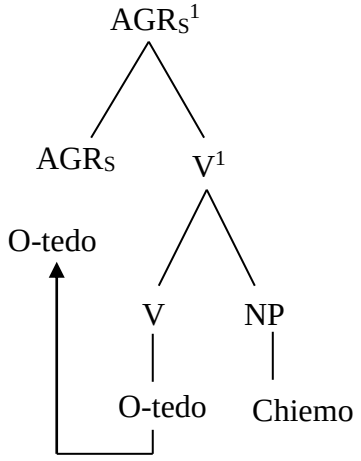
(35) Ó - tédó chíémó

3P SG COOK-INF-INC ACC-FOOD

He is cooking food.

There is no overt subject/SPEC in the above sentence, because the subject has been dropped. The nominal features of person, gender and number are attached to the verb and they are sufficiently rich to recover the content of the dropped subject. The personal prefix marker *O-* is attached to the verb as an inflectional morpheme. The pronominal prefix marks person and number and it is attached to the verb root in the infinitive form.

The following structure represents the above construction.



The verb *tedo-* 'to cook' is attached to the personal prefix marker *o-* for morphological subject/nominal agreement features of person and number when used with a covert subject. The verb will move from the VP to (T^1/T) to check its incompletive aspect features. Then it rises to Agreement subject (AGRs) to check its morphological agreement features, since it inflects for agreement of person and number when used with a covert subject.

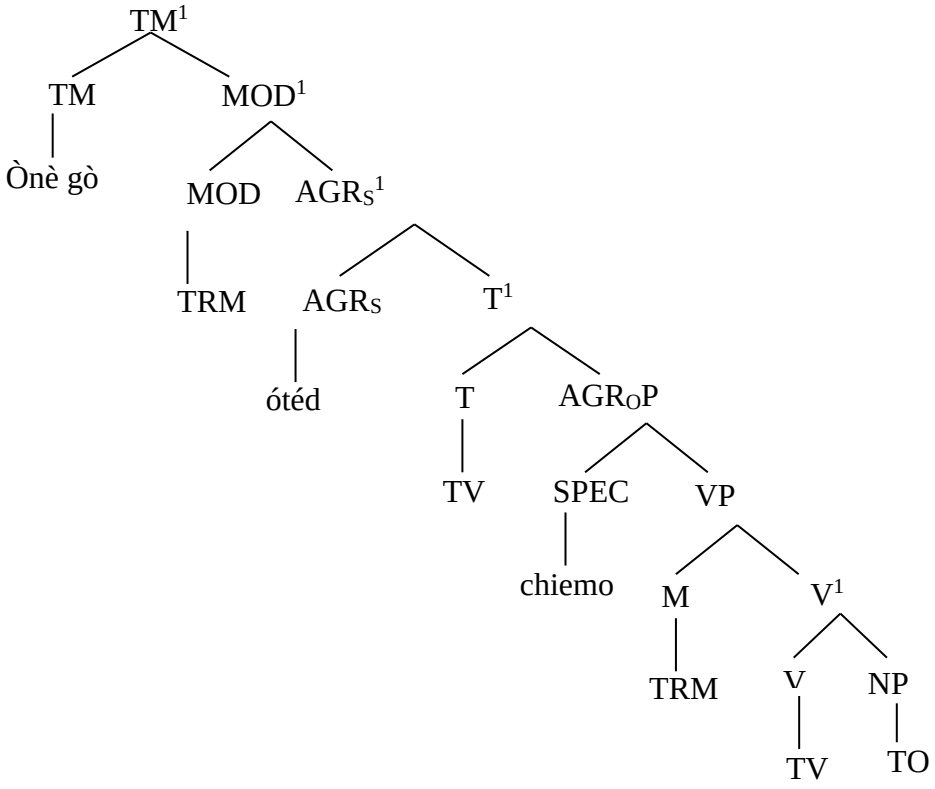
Derived auxiliaries have related verbs from which they are derived. From the original verb *nego-* to kill, the auxiliary *onego* is derived. See the example below:

(36) Ò- Nèg-ò ó- téd chiemo

DRPR-necessary-INF 3P/SG cook ACC FOOD

He ought to cook/prepare food.

This construction is represented in the following structure.



The object in the above structure is raised from the NP position in the VP to SPEC position (SPEC/AGR_OP) to check its accusative structural case features. The verb first moves from inside the VP to (T^1/T) to check the incompletive tonal aspect features of the sentence. Then it moves again to (AGR_S^1/AGR_S) to check its agreement features.
The lexicalised auxiliary also moves out of the VP to the created head (MOD^1/MOD). It then moves to the tone head (TM^1/TM) which has also been created to distinguish its characteristic tone pattern, which differentiates it from the main verb.

The tree building process is made up of two basic operations: 'merge' which according to Cook and Newson (1996:325) is the combinatorial process, which forms structures/trees from elements in the numeration and other partially built structures, and 'move.' These processes build SDs piecemeal. Before describing the merge, it is necessary to describe the general principles that govern syntactic movement, namely, greed, procrastination and the minimal link condition. They are the major constraints on the 'move' operation/computation.

Greed observes that it is the verb that moves to get its features checked off and not the inflections. This supports Mwhaki's (2007) observation that an element is moved to satisfy a morphological need in the moved element and not another constituent close to which it moves. Cook and Newson (1996: 325) note that greed only allows movement of an element if it satisfies some property or the requirements of the moved element, for example, in order to check the features of a verb it must move to AGR and TNS, which cannot move to the verb.

Cook and Newson (1996: 325) state that procrastination delays movement for as long as possible, until it needs to be done. It ensures that movement only takes place if there is a need and if it is licensed by any morphosyntactic or lexical evidence from a language. It does not allow verbs to move before spell-out (weak verbal features that can survive at PF as invisible). If these constraints are not adhered to, a derivation crashes. Mwihaki (2007) reiterates that the NP is only moved after the construction has managed to express analysable propositional content and only after satisfying a prerequisite complement function.

Reformulating the principle of relativised minimality, the minimal link condition states that movement is only possible into the nearest relevant position (Rizzi, 1990, Chomsky, 1993, 1995). According to Mwihaki (2007), it constrains the distance that one move can cover: a move should not cross more than two intervening nodes. For example, an NP originates in the outer complement position of the expanded VP, crosses one node to the inner complement

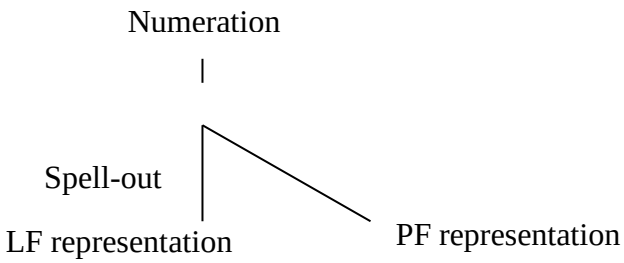
position and then traverses two other nodes to end up in the subject specifier position of the maximal IP.

The minimal link conditions, the interacting principle of economy and the principles of procrastination and greed direct movement. The Last Resort advocates the shortest move to the nearest relevant position. Related to this is the Last Resort Greed Principle, which states that an item moves only to satisfy the features of the element being moved and not the element it is being moved to. Feature checking allows a simple theory of word order and verb movement.

Merge is a basic constituent building operation in the Minimalist Programme. Two adjacent syntactic elements make up a new syntactic unit. It is a recursive system, which joins two syntactic objects and forms a new one. It builds structures from lexical items and larger units from smaller ones. It is a constituent building operation through which words in sentences group into constituents. The merge and move, a computational process, combines the elements into projections and partial trees. Mwihaki (2007) notes that merge is a category-based progressive combination of words into initial and partial structures formed from the numeration elements deriving a complete sentence structure. It begins with the formation of minimal structures, usually the more natural two-word phrase structures. Clauses also merge like phrases. The tree diagram then depicts the maximal projection as an inflectional phrase. The tree diagrams represent constituent structures and depict structural relationships of constituents. Merge progresses until all the lexical choices made have been exhausted in the computation process. The elements are combined appropriately to form a single structure that conforms to the assumptions of spell-out. Merge selects elements from the numeration and combines them to build structures.

Merge transports the information from the lexicon to the interface level, which consists of the phonetic component (PF) and semantic component (LF). This is what used to be the surface level in GB. The structure building process in the Minimalist Programme pursues a different goal to that of the projection principle in GB. The d-structure in GB functioned as an internal interface between the lexicon and the syntactic representation. The information of the lexicon was then projected onto d-structure level. The Minimalist Programme deviates from GB by eliminating the projection principle and the d-structure level.

Minimalism as a model of UG incorporates the phonetic, semantic and syntactic components of grammatical representation as the bridge between interface components. The computation process from lexicon to interface is represented below.



The lines in the structure represent the workings of the computational system. Full interpretation applies differently to the two interface representations, depending on whether the information being interpreted is semantic or phonetic.

In the new interface, the principle of full interpretation has been integrated into the spell-out process and is now linked to the principle of economy. Articulation and perception involve interface representation. The F1 restricts the structure building process. Only lexically or morphologically licensed elements appear in the structure of a sentence. The θ-criterion has turned out to be inadequate and arbitrary (Chomsky, 1993:21). Languages also work on the principle of Economy (Chomsky 1993, 1995) that interacts with other principles in the computational process before being spelled out into PF and LF. Derivations, through the Least Effort Condition, should be as economic as possible without any redundant step in the derivation, so that no superfluous symbol appears in the representation.

Spell-out, the second component of the Minimalist Programme, should take place after the numeration and structure building process and entails the separation of semantic (LF) and phonological information (PF) according to the full interpretation (F1) principle. Two correlated structures are formed from a single formation. If it takes place too late, after PF and LF, for example, the representations on these levels are mixed up. If lexical items are inserted after spell-out, the process cannot split the relevant information into the correct levels of interpretation.

The spell-out process sorts out the phonological and semantic information for the structural descriptions. It checks grammaticality, which is manifested in PF and LF. Logical (semantic)

information cannot appear at PF, nor can any phonological information appear at LF, otherwise the derivation crashes and the final structure becomes ungrammatical. According to the Minimalist Programme, a linguistic expression is well represented only at the interface level containing the phonological and the logical form.

Computation proceeds to a point at which the derivation splits into phonetically relevant and semantically relevant information, which is spell-out. This is the point in the derivation of a structure at which phonetically relevant information is separated from all other information. Two structures/separate representations, LF and PF, are formed from a single numeration. This operation takes a partially formed SD containing all the phonetic and semantic information from the lexicon and splits it so that there is representation that consists of phonetic information and a representation of everything that is left. Semantic information does not appear at PF and phonetic information does not appear at LF and a derivation converges at each of the interface levels, otherwise it will crash. An SD must converge both at LF and at PF to be grammatical. A PF representation containing semantic information crashes, causing the SD to be ungrammatical. The same applies to an LF representation containing phonetic information. The only legitimate objects allowed at LF are those that can be given a semantic interpretation that does not cause the derivation to crash. Spell-out splits the derivation.

The logical form and phonetic form (sometimes called phonological form) are conceptually necessary parts of any adequate model of grammar. PF and LF are interface levels within GB. They provide the grammatical information required to assign a phonetic and semantic interpretation to a sentence. PF and LF are responsible for filtering out crashing derivations. Some of the proposals made about the operations that apply to these levels include the notion that the ECP-filter weeds out derivations with unlicensed traces at LF and that, by contrast, it is unlikely that any syntactic condition can apply at the PF level. The latter applies, since it is not a phrase marker, but this does not rule out the possibility that syntactic conditions may apply during the mapping from SS to PF, while syntactic structures are still available. LF and PF are not directly connected.

The features are checked in the course of the derivation. Checking is done by moving to the appropriate functional projections. Morphological features are then checked within these functional categories. An NP is moved from the lexicon carrying accusative case

morphology, which must be checked in all languages. In some languages, these features must be checked before spell-out, where the LF and PF paths split. Checking in English is done at the LF. The object is raised to Spec AGRo, where the accusative case feature is checked under Spec-head agreement with the V+AGRo. A feature on the verb is also checked using this same operation. Verbs agree with their objects in many languages. The agreement features are checked in the Spec-head configuration that monitors the accusative case. Other features are checked in the same way. The derivation becomes illicit and crashes if not all features are checked by LF. Hornstein (1995) highlights the fact that movement in the grammar, whether V-raising to some INFL projections, NP movement to a case position, or WH-movement to Spec CP, is driven by the requirement of checking morphological features.

The morphology drive involves structure building which is feature driven and necessitated by feature checking. The number of heads and specifiers in the tree is also feature driven. The features are lexical or morphological, with each new item receiving a head. To check accusative structural case features of the above sentence, the object moves from the NP position in the VP to the specifier of the agreement object phrase. The verb will first move from inside the VP to the tone head to check its incompletive tonal aspect features and then to the agreement subject head to check its agreement features. The lexicalised auxiliary also moves out of the VP to the mood head, then to tone head, to distinguish its tone pattern. See the two trees above for the morphology drive involving structure building of structures similar to the given sentences.

The feature checking procedure, a technical device from the Minimalist point of view, makes it possible to account for the relevant facts by means of filter conditions at LF or at PF. If movement does not occur, an illegitimate object will reach PF. Spell-out is a level of representation that filters out structures that would be allowed by LF and PF. LF is formed after the numeration has been exhausted, all possible features have been checked, and a single tree/root/syntactic object has been assembled (numeration to LF through checking). Spell-out applies to the LF object and ships the relevant information to the phonological component, deriving PF after further computations. The Minimalist Programme pays closer attention to the role lexical features play in the computation (Hornstein et al., 2005).

In the same way, the checking procedure eliminates grammatical features, which are irrelevant to the semantic and phonetic interpretations of a structure before they arrive at the

interface representations of LF or PF. This happens when a verb moves to the inflectional nodes. Interface conditions instantiate the full interpretation principle where each representation at LF and PF only contain elements interpreted at these levels without superfluous elements. If phonetic or semantic information strays into the wrong representation, full interpretation is violated and it causes the derivation to crash. Chomsky (1995:30) notes that a whole computation/derivation converges at one of the interface levels if it forms an interpretable representation and if it converges at both interface levels of PF and LF; otherwise it crashes and the structure is ungrammatical. Convergence means that LF and PF representations must contain relevant semantic and phonetic information to satisfy the full interpretation principle. If a representation/derivation at LF or PF conforms to full interpretation, it converges at that level. The computational system continues to form structures but the derivation crashes if the end points do not conform to full interpretation condition.

If spell-out happens too early (before all lexical elements of the numeration have been included and introduced at some post-spell-out point either in the branch that leads to LF or PF), there will be an element of LF still with its phonetic information, or an element of PF still with its semantic information. Spell-out cannot split the relevant information into its correct levels of representation if lexical items are inserted after the process and consequently, the derivation will crash. Again, if spell-out occurs before all the sub-trees that the computational system is creating are completed, there will be an uninterpretable representation at PF. This presumes that after spell-out the computation to PF involves only operations relevant to the phonetic component. No major syntactic processes occur between spell-out and the fully formed PF. If spell-out happens too late, there will be a conflict with the procrastinate principle which states that all movements must be delayed for as long as possible until after spell-out, unless otherwise forced. Spell-out must apply at a point which will enable movement to happen after the process.

The third component of the Minimalist Programme is the numeration process. Numeration refers to a set of selected lexical elements from the lexicon, which is the starting point of the structure building process. The structures that constitute LF and PF are formed by a process starting in the lexicon, as lexical elements determine the content of a legitimate expression in a language (Chomsky, 1995). In the numeration process, we start with a set of lexical items from which the structural description (SD) is built. The SD formed is only grammatical if

each element from the numeration used the required number of times - items cannot be left in the numeration unused if a grammatical sentence is to be formed. Verbs are formed in the lexicon, together with all their features that are checked at some point in the derivation.

The numeration process explains the 'computational processes' from the lexicon to the syntactic representation. All the lexical and morphosyntactic information about nouns and verbs is found in the lexicon. In the process of numeration, a set of morphosyntactic and lexical items is taken from the lexicon. The morphemes then slot into the structure.

3.6 The role of morphology

Morphology focuses on the structure of words and deals with inflectional endings and the way words can be built up out of smaller units. It is the study of the structure of words and the field is divided into two domains, the first being lexical/derivational morphology. This studies the way in which new items of vocabulary can be built out of combinations of elements, as in the word 'in-describ-able'. First, derivation is the process of word formation through derivational affixes, which combine with roots to create new words. Second, inflectional morphology studies the way words vary in their form in order to express a grammatical contrast, for example, the -s suffix ending of the noun 'horse-s' marks plurality. Inflections are a distinct group, always occurring at the very end of a word as in 'graces' or 'disgraced', following derivational suffixes. Inflection is the process of adding very general meanings to existing words. Affixes combine with roots to indicate the basic grammatical categories like tense, aspect, number/plurality, possession or degree/comparison. It does not involve a change of word category. English inflectional affixes are always suffixes. Syntax, on the other hand, focuses on the structure of sentences, how the morphologically built up words combine into phrases and clauses to form sentences.

Crystal (1991:225) defines morphology as the branch of grammar that studies the structure or word formation using the morpheme constructs (analysing words into morphemes). It involves inflectional morphology (the study of inflections) and lexical or derivational morphology (word formation). In Generative Linguistics, morphology and syntax are not seen as two separate levels.

As Chomsky (1993:32) states, morphology plays an important role in the new theory. The operations in the computational system are driven by morphological necessity. In the

structure building, the amount of movement that takes place depends on how rich or how weak the morphology of a language is (Chomsky, 1993:8).

The role morphology plays in GB and the Minimalist Programme differs. The morphosyntactic features were placed onto the d-structure level under GB. A verb was selected in its root form from the lexicon and base-generated in the VP under INFL. Person, number, and tense inflectional morphemes were then base-generated under their respective inflectional heads (INFL). Verb movement took place in order to pick up these morphological features for the verb to appear grammatically correct on the s-structure level. Thus, morphology and syntax were split in GB. In contrast, the Minimalist Programme's morphosyntactic nature assumes that the verbs and nouns receive their inflectional properties in the lexicon. The already inflected verbs and nouns with their morphology are placed in the VP. The division between deep and s-structure is eliminated, because there is no more need for verbs and nouns to be projected at d-structure level to pick up their features and appear grammatically correct on s-structure level (as was the case in GB). The lexicon is no more simply a collection of roots and stems for verbs and nouns; it also contains all the relevant inflectional and derivational morphology of the categories.

As Ochola (2003:13) observes, the nature of INFL no longer determines the verb movement process. The checking process tests abstract inflectional features for correctness against syntactic positions in the sentence structure. The case features for nouns are checked under appropriate positions. Tense and agreement features are incorporated into the verb in the lexicon and are called V-features with bare properties of the verb after they are selected from the lexicon, but before appearing at LF and PF.

In the Minimalist Programme, AGR is either weak or strong. Strong as opposed to weak agreement is visible at PF. Languages with strong AGR force verb movement to eliminate the abstract features before spell-out into PF. Those with weak agreement do not force verb movement since no features have to be checked and the verb appears right away at PF and LF.

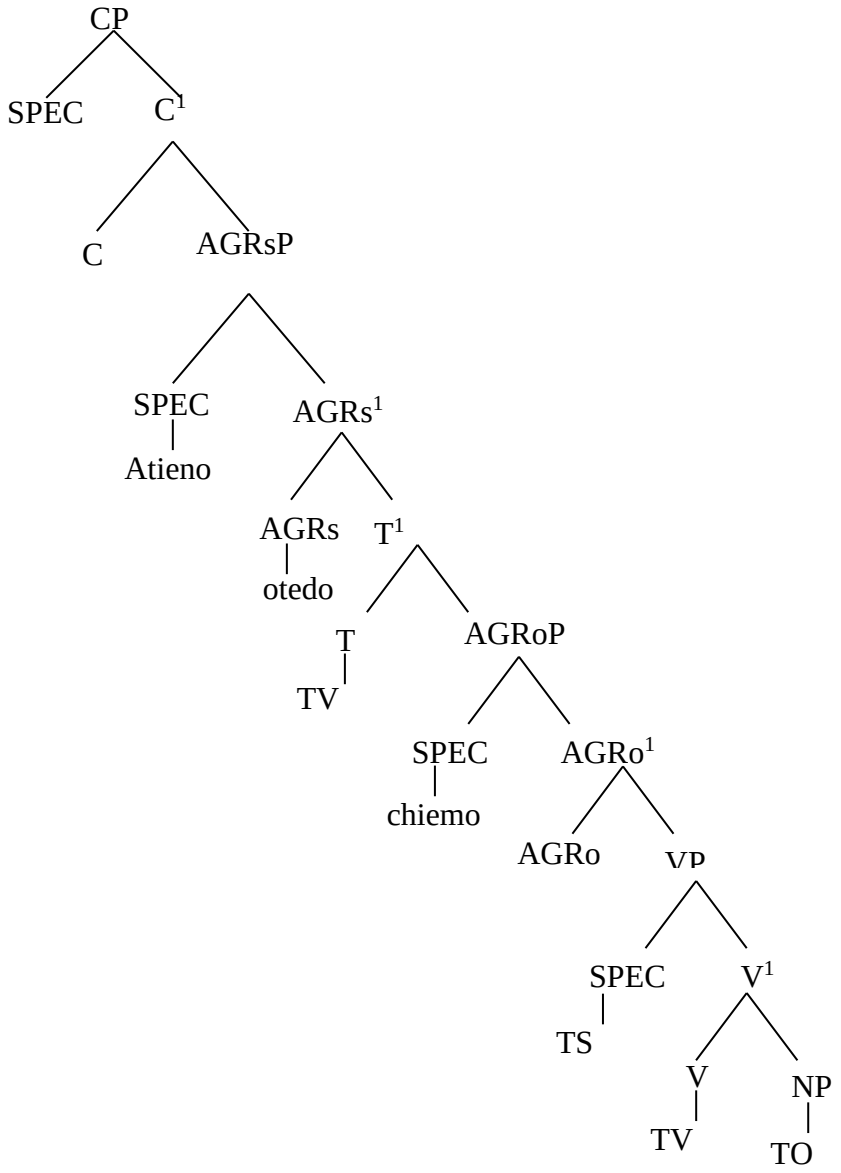
The following new basic sentence structure (Chomsky, 1993:7) reflects the morphology and its direct bearing on verbal inflection and case marking. The following example will be used to illustrate that the sentence is a projection of the VP:

(37) Atieno o- ted-o chiemo.

Name-NOM PRO-COOK-INF food-ACC

Atieno has cooked food.

Below is the derived structural configuration corresponding to the sentence above.



The object in the above structure is raised from the NP position into the SPEC position (SPEC/AGRoP) to have the accusative case checked. The verb moves from the V position in the VP to (T^1/T) to check its completive aspectual features. Then it moves to ($AGRs^1$/AGRs) head to have its agreement features checked. The subject in the above structure moves from the Spec position in the VP into the specifier position of the AGRsP to have the nominative case checked.

Minimalism gets rid of D- and S-structure and emphasises the internal structure formation process. The Minimalism clause structure assumes that there are two agreement elements for the subject (AGRsP) and the object (AGRoP). The Ɵ-criterion is claimed to apply at D-structure. In later versions of GB theory, this was replaced by the principle of full interpretation. The Minimalist Programme intends to capture the effects of Ɵ-criterion, particularly how it is ensured that arguments that accompany the verb correspond to those determined by the S-selection properties of the verb stated in the lexical entry. The structure of sentences plays an important role in many arguments in the Minimalist perspective.

AGRs and AGRo are bundles of abstract features like gender, number and person, which distinguish the agreement-marking of the two functional roles of AGR-subject and AGR-object. This new programme also takes into consideration languages, which have morphological object case-marking. AGRs and AGRo are instances of nominal features that agree with certain nominal elements, which move into their specifiers resulting in specifier-head agreement/relationships. DPs move to specifier of AGRP to check their case features by the principle of greed. The subject of the lower clause moves to the specifier of the top/higher clause AGRP (AGRsP) before spell-out. The movement is overt and the object moves to the lower AGRP (AGRoP) after spell-out in a covert manner. Chomsky (1993) notes that object movement follows the procrastinate principle that movement should be as late as possible (after spell-out), while subject movement does not. SVO languages move the subject before spell-out. If the subject moves to AGRoP, the movement of the object into the AGRsP would be a violation of the minimal link condition, causing the derivation to crash. AGRs applies to the subject while AGRo applies to the object. Chomsky's relativised minimality requires movement to be over the shortest distance, like the principle of economy where short moves are more economical than longer ones, hence the minimal link condition is appropriate.

The extended projection principle stipulates that there must be a subject, hence AGRs is obligatory and since there is no compulsory requirement for objects, AGRo may be optional. Verbs are inserted from the lexicon with all their features checked off; the verb moves to the relevant elements at some stage in the derivation to prevent these grammatical features from appearing in the interface levels. A verb with tense features moves to the T-position to check off the feature. A transitive verb has object agreement features and subject agreement features. This works without the D-structure level of representation.

As for the S-structure, more elements such as case and binding theories should have applied here and therefore have to be accommodated in the interface levels in the Minimalist Programme. Chomsky (1993) argues that Minimalism is conceptually superior and empirically more adequate, as many problems that arose in the GB framework are given satisfactory solutions. The Minimalist framework has a uniform case theory accounting for certain word order differences.

The case theory was assumed to apply at S-structure, since it has implications for both LF and PF representations. If a DP is not case marked, it will not be visible for Θ-marking. For this reason case theory must apply at or before LF. Abstract case is linked to morphological case, which is a PF phenomenon, so case theory must apply at or before PF; case theory cannot apply at either LF or PF, as it has implications for both and it must apply before LF or PF at S-structure. It does not apply at D-structure, since DPs are allowed to appear in case-less positions at this level, if they move to be case marked by the S-structure. Hence, some other level of representation other than LF and PF is necessary via the notion of checking. Features of an element are checked by the relevant head. Just as verbs are inserted in the VP with their verbal features such as tense and agreement, the same can apply to DPs in assigning structural case. They have case features in their original positions, but have to move to the specifier position of an AGRP to check these case features. Movement to the specifier position can take place overtly before or covertly after spell-out with no implications for the phonetic form of the DP. Strong features cannot survive at PF without causing the derivation to crash, while weak ones do not cause a crash even if they appear, since they are invisible at PF. DP features are strong in SVO languages, hence a DP rises to the AGRs before spell-out. However, DP features are weak in VSO languages, so the subject does not rise until LF by the principle of procrastination, similar to the object in SVO languages which does not rise before spell-out. Case marking is then reduced to the checking of case features of DPs inserted from the lexicon and does not need S-structure to occur. Elements enter the computational system with case features and are only checked at LF level (Chomsky 1993:539). In Minimalism, binding theory applies at LF where only wh-material is in wh-positions. Non-wh-material is overtly moved with a wh-element and is reconstructed back in the original position. Only wh-elements undergo covert movement to wh-positions at LF.

In the Minimalist Programme, no question is raised about the proper government of traces as government theory has been eliminated. Government played a crucial role in the GB

approach and has been replaced by the specifier-head relationship in case theory, as discussed above. Case theory and not government also determine the distribution of PRO, the personal pronominal affix prefixed to the verb root acting as the covert subject. It has a null case feature checked only in the specifier of a non-finite TP.

Feature checking enables a simple theory of word order and verb movement. Verbs in all languages are moved to inflectional nodes and DPs to the specifier of AGRP. Differences in languages occur when the movements take place, either before or after spell-out. Procrastinate principles require movements to occur after spell-out, but movement is made to occur before spell-out to check grammatical features before PF. This difference depends on whether the grammatical features are strong or weak. Weak features can appear at PF, so procrastinate can occur, but strong features have to be checked before spell-out. Overt movement of verbs and DPs depends on weakness or strength of their features.

3.7 Conclusion

In this chapter, the tenets of the Minimalist Programme, how it differs from other theories, as well as how it accounts for Dholuo sentences, were discussed. In the Minimalist Programme, a sentence is formed in a piecemeal computation process with three progressive operations: numeration, merge and move. The Minimalist Programme developed directly out of the GB approach. Chomsky (1993) argues that Minimalism is conceptually superior and empirically more adequate than GB.

CHAPTER 4: DHOLUO – BASIC FACTS

4.1 Introduction

Dholuo, as mentioned in Chapter One, belongs to the larger Nilotic family of languages. A population of 4.04 million as indicated in the 2009 census report speaks Dholuo in western Kenya (Daily Nation Newspaper, September 1, 2010). Before I proceed to deal with mood and ambiguity in Dholuo, I deem it necessary to provide the basic structure of the language. This chapter will discuss Dholuo phonetics (how speech sounds are articulated), focusing on consonants and vowels, which will provide an insight into Dholuo phonology (sound system: how the sounds of a language combine to form words). Dholuo syllable structure, nouns and pronouns will also be discussed. Dholuo is a tonal language, therefore this chapter will discuss tone and aspect, as they have a bearing on mood. This section discusses only tone marking on the verb in order to illustrate how aspect is marked in Dholuo. An introduction to Dholuo syntax/sentence structure is also necessary.

Many know the language as Luo, but its full name is Dholuo. As Sure (1993:329) notes, Dho- is a contraction of the word *dhok*, which ordinarily means the 'mouth': in this sense it means 'the language of ...' Dholuo is therefore the language of the Luo people. It belongs to the Western Nilotic sub-branch of the Nilotic branch of the Eastern Sudanic division of the Chari-Nile sub-family of the Nilo-Saharan language family. It is spoken mainly in western Kenya in the three predominantly Luo districts of South Nyanza, Siaya and Kisumu. These districts, together with Kisii and Nyamira, comprise Nyanza Province, which lies to the west of the Rift Valley and covers most of the area around Lake Victoria, as is illustrated in the map depicting the areas in which the many languages of Kenya are spoken (see Section 1.8). However, the Luo are a fairly mobile people and the language is today spoken in most of the major towns and in some settlement areas in the Rift Valley and coastal regions of Kenya. It is estimated that there are no fewer than four million speakers of the language. This study is based on the Kisumu-South Nyanza (KSN) variety (see Section 1.7.1).

4.2 Dholuo phonetics, morphology and syntax

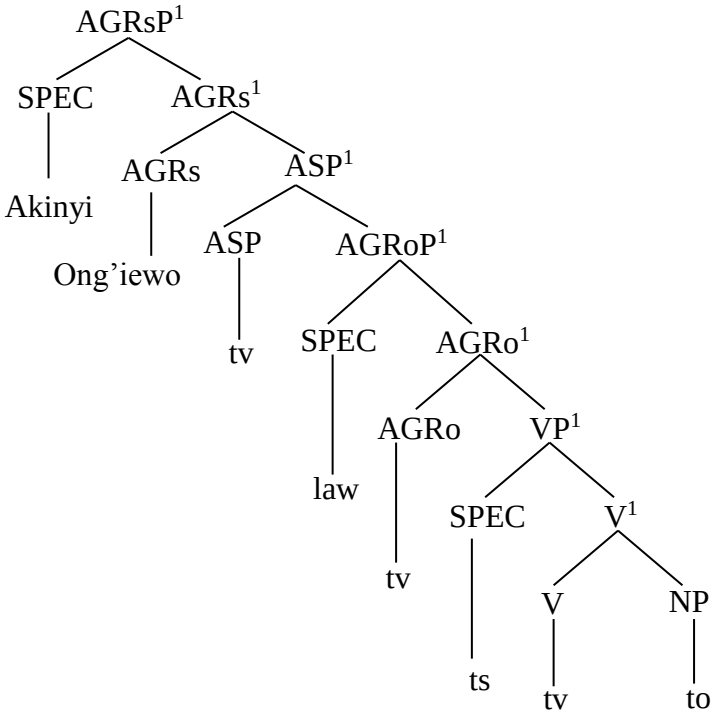
As is the case with all Nilotic languages, Dholuo is an SVO language. While keeping in mind the main objective of this study, the focus in this section will be Dholuo phonetics, morphology and syntax. Word properties are distributed or combined to build up the structure of the sentence. Crystal (2003:197-198) notes that the field of grammar is often divided into two domains; morphology and syntax. In morphosyntax, both syntactic and morphological criteria are applied. Morphosyntax is the study of grammatical categories or linguistic units that combine morphological (word formation through derivation and inflection) and syntactic (how words combine into larger units like phrases or sentences) structure.

As observed by Mwihaki (2007), a sentence construction is hierarchical with each constituent structure consisting of other constituents. The concept of constituency captures structural relationships, thus these progress from the immediate down to the ultimate constituents. The sentence contains functional or lexical phrases that constitute a sentence, each with a specific grammatical function depending on the grammatical category of the head-word. The following sentence demonstrates the morphosyntactic structure in Dholuo:

(38) Akinyi o- ng'iewo -o law

Name-NOM 3P/SG buy INF-COMP dress-ACC

Akinyi has bought a dress.



The verb in the above sentence moves to ASP[1]/ASP (Dholuo does not have morphological tense marking but expresses time relations through aspect marking) and to AGRs[1]/AGRs to check its aspectual and agreement features respectively. The object moves from its VP to AGRoP[1]/SPEC to check its proper accusative case. This is because in the Minimalist Programme, case theory has been reduced to case checking through specifier head relationship of their respective heads.

4.3 Dholuo phonetics

In the following sections, I discuss Dholuo consonants and vowels to provide an insight into Dholuo phonology (the sound system).

4.3.1 Dholuo consonants

As indicated in the following table, Dholuo has twenty-six consonants.

Table 4: Dholuo Consonants
(adapted from Okoth (1982:19) and Ngala (1994:49))

Place of articulation / Manner of articulation	Bilabials	Labio-dentals	Dentals	Alveolars	Palatals	Labio-velars	Velars	Glottals
Stops	p b			t d	c ɟ		k g	
Fricatives		f	Ɵ ð	s				h
Laterals				l				
Glides					j	w		
Rolls (trills)				r				
Nasals	m			n	ɲ		ŋ	
Prenasalised stops	mb		nð	nd	ɲɟ		ŋg	

In the above inventory, the manner of articulation, state of the glottis and the place of articulation are shown, with the voiceless segments placed above their voiced counterparts, except in the case of nasals, which are voiced (plus nasal compounds). The palatal stops /c/

and /ɟ/ are neither pure affricates nor stops. They are somewhere in between and could as well be presented as affricates. Here they are presented as stops to avoid the use of diagraphs.

In Table 5 below the International Phonetic Alphabet (IPA) symbols that represent Dholuo consonants are matched with the corresponding orthographic representation.

Table 5: The IPA Symbols and Orthographic Representation of Dholuo Consonants

IPA Symbols	Orthographic Representation	Examples
P	p	pala ‘knife’
b	b	ber ‘good’
w	w	wich ‘head’
m	m	miel ‘dance’
f	f	fulo ‘to report’
ɵ	th	tho ‘death’
ð	dh	dhok ‘cows’
t	t	tedo ‘to cook’
d	d	duol ‘cow shed’
r	r	rabolo ‘banana(s)’
l	l	loch ‘independence’
s	s	singo ‘promise’
n	n	nindo ‘sleep’
c	ch	chiel ‘fence’
ɟ	j	juok ‘witchcraft’
J	y	yuak ‘cry’
ɲ	ny	nyako ‘girl’
k	k	kelo ‘to bring’
g	g	gero ‘to build’
ŋ	ng’	ng’ato ‘someone’
h	h	hera ‘love’
mb	mb	mbero ‘bench’
nᵭ	ndh	ndhuno ‘to pinch’
nd	nd	ndoo ‘bucket’
ɲ ɟ	nj	njugu ‘groundnuts’
ŋg	ng	ngero ‘proverb’

This table illustrates the correspondence between the IPA representations of Dholuo consonants and standard orthography. Examples of Dholuo words that start with these consonants are provided.

4.3.1.1 Consonant deletion

According to Odhiambo (1981), deletion is a process that involves loss of segments. Oduor (2002: 223) notes that deletion may involve consonants, vowels and syllables. It is therefore the eliding of sounds in certain environments. Nimura (1996: 59-61) quotes Odhiambo

(1981) who observes that consonant deletion takes place in the construction of genitive forms and it triggers compensatory lengthening. The final consonants of nominative forms are alternated in the construction of genitive forms based on morphophonemic rules. Nimura (1996) identifies the following alternations of consonant patterns from Okoth (1982).

a) Alternations between voiceless obstruents and their voiced counterparts.
b) Alternations between /w/ or zero and /p/
c) Alternations between nasals and their corresponding compounds
d) Alternations between /l/ and /nd/
e) Alternations between /r/ and /g, k/
f) Alternations between /j/ and /c/
g) Alternations between liquids and /c/

By the application of (a) and (d) the genitive form of *ot* 'house' is *od* and that of *pel* 'navel' is *pend.* The genitive forms are used with personal prefixes and nouns as in *od+a* 'my house', *od+i* 'your house' or *od Otieno* 'Otieno's house.'

The final consonant is optionally deleted along with alternation and compensatory lengthening takes place. Goldsmith (1990:73) quoted in Oduor (2002:245), defines compensatory lengthening as a process of lengthening a segment, most commonly a vowel, but not always, seen as a response to a prior process, which removed or in some way shortened the segments previously present.

	Nominative	Genitive
		(A) (B)
a) 'head'	wic	wij - → wi:
b) 'leopard'	kwac	kwaj-→kwa:
c) 'fire'	mac	maj- →ma:
d) 'hunger'	kec	kej- → ke:
e) 'stomach'	ıc	ıj-→ ı:
f) 'water'	pi	pig- → pi;
g) 'axe'	le	len-→ le:
h) 'boat'	jie	jien- →jie:

There are two genitive forms for each of the above nominative forms. The forms under (A) are used with personal prefixes, for example, *wij+a* 'my head.' The second (B) forms are used with nouns, for example, *wi: ruoθ* 'chief's head.'

The above examples can be classified into three categories in terms of conditions for the deletion. The first category consists of examples like (a-e), where the final consonant /c/ in the nominative form is alternated with /j/ in the genitive (A) form. When /c/ in the nominative

form is alternated with /j/ as in *tic*, whose genitive form is *tij*, the deletion does not occur. The second category is illustrated by (f and g) where the nominative forms are mono-syllabic. They do not end in a consonant therefore the morphophonemic rules on alternations of consonant patterns are not applied here. Certain types of consonants like 'n' as in (g) are inserted first for the genitive (A) forms. The consonant deletion occurs, which leads to compensatory lengthening. The third category consists of an exceptional case (h) which is an exceptional case. Although it is not mono-syllabic, it follows the same procedure as (g) to derive the genitive form.

4.3.2 Dholuo vowels

Dholuo has nine pure vowels, which can be divided based on the process of vowel harmony into two matching categories of four vowels each, with the one single low front vowel /a/ considered neutral in terms of vowel harmony categorisation. Each of the four pairs has a + form [advanced tongue root vowel/root of the tongue is projected forward to create a greater pharyngeal opening] and a - form counterpart [advanced tongue root/retracted tongue root where the tongue root is retracted]. The system of vowel harmony dictates that the vowels in a word are all open, or all closed. Below is a Dholuo vowel table according to tongue root position.

Table 6: IPA Symbols Representing the Nine Pure Vowels in Dholuo

	+ATR	-ATR
Mid/Front	E	ɛ
High/Front	I	I
Mid/Back	O	ɔ
High/Back	U	ʊ
Low	a	

The table above illustrates how the IPA symbols represent the nine pure vowels. In each of the four pairs, the IPA symbols on the left are [+ATR] while those on the right are [-ATR].

Okoth (1997:19) illustrates the nine vowels as follows:

[+ATR]	[-ATR]
/e/ t**e**ro ‘to take to’	/ɛ/ t**e**ro ‘wife inheritance’
/i/ p**i**th ‘hill’	/ɪ/ p**i**th ‘wealth’
/o/ p**o**r**o** ‘to imitate’	/ɔ/ por**o** ‘to spray all over especially something solid’
/u/ b**u**r ‘hole’	/ʊ/ b**u**r ‘boil’ (n)
/a/ /e/ d**a**n**e** ‘his/her grandmother’	/a/ / ɛ/ w**a**chn**e** ‘tell him/her’
/a/ /i/ d**a**n**i** ‘your grandmother’	/a/ /ɪ/ w**a**chn**i** ‘your problem’

Vowel harmony is characteristic of all the nine vowel systems. In vowel harmonic languages, the vowels are divided into two distinct sets based on the advanced tongue root feature. It is a principle, which dictates that all vowels in a language belong to one harmonic set; they do not cross lines, as reflected in the above examples. In the word ‘poro’ which has the same vowel appearing twice, the two phonemes are either [+ATR] or [-ATR], depending on which of the two meanings the word is conveying. Note that /a/ does not participate in vowel harmony and can occur with either set, as illustrated above.

However, the orthography of the Dholuo vowel system does not acknowledge the vowel harmony category difference as seen in the above examples. It uses only five symbols to represent the nine phonological vowels, which are orthographically represented as ‘a, e, i, o, u’.

4.3.2.1 Dholuo diphthongs

Ngala (1994:54-55*)* explains that diphthongs can be a sequence of vowels or a semi-vowel and a vowel, making up only one syllable. This applies to Dholuo diphthongs. A speaker may sometimes use a glide-vowel sequence and at other times a vowel-vowel sequence for the same word therefore, Ngala concludes that a glide-vowel sequence and a vowel-vowel sequence are in free variation, so long as the vowel-vowel sequence begins with a high vowel. The examples below illustrate the inconsistency in the articulation of Dholuo diphthongs. Dholuo speakers cannot make a distinction in pronunciation between a sequence of two vowels and a sequence of a semi-vowel and a vowel where the first vowel in the vowel-vowel sequence is a high vowel. Dholuo diphthongs are represented as underlying a vowel sequence and they start with a high vowel that changes into a glide when followed

immediately by either a non-high vowel or a high vowel with the opposite feature. See the following examples:

Ywayo	[juajo]	[jwajo]	'to pull'
Twono	[tuɔnɔ]	[twɔnɔ]	'to salt'
Tuo	[tuo]	[two]	'to dry'
Kwalo	[kualɔ]	[kwalɔ]	'to steal'
Liel	[lɪɛl]	[ljɛl]	'funeral'
Piago	[pɪagɔ]	[pjagɔ]	'to sharpen'

There may also be vowel sequences, which begin with a vowel that is not high (Ngala, 1994:135). The articulation of these vowel sequences does not form a glide within the same syllable, but constitutes two syllables and is not a diphthong. The articulation of the first non-high vowel is completed before the articulation of the next vowel begins. For example:

Auchiel [a$ʊ$cɪɛl] 'six'

All Dholuo vowels occur in the word initial, medial and final positions. Lengthened vowels do not occur in word final position, but can appear syllable finally in the word medial position. Dholuo vowels are phonemically short; hence, long vowels are allophones of the short ones and vowel length in Dholuo does not affect a word's meaning (Ngala, 1994:147).

4.3.2.2 Vowel deletion

As already stated in section 4.3.1.1 deletion is a process that involves loss of segments that may involve consonants, vowels and syllables. It is the eliding of sounds in certain environments. According to Okoth (1977), quoted in Nimura (1996:57), vowel deletion, consonant deletion and open-syllable deletion may trigger the lengthening of underlying short vowels by the process of compensatory lengthening which occurs when part of a word is deleted (Okoth 1982). The following examples are provided to illustrate the process of compensatory lengthening triggered by a vowel deletion.

(39)

(a) kᵊ + acɪɛl →ka:cɪɛl

gourd one

one gourd

(b) kᵊ + ɛ co →kɛ:co

gourd there is

There is the gourd

(c) lɛ + ɪnɛnᵊ →lɪ:nɛnᵊ

axe you have seen

Have you seen the axe?

(d) lɛ + ᵊtᵘr → lᵊ:tᵘ:r

axe be broken

The axe is broken

The final vowel of a monosyllabic word deletes when it precedes an initial short vowel of the following word (Oduor 2002:223). Okoth (1977) notes that non-high vowels of Dholuo /e, ɛ, a, o, ᵊ/ are deleted when followed by a vowel which is in a light syllable.

4.4 Tone

Tone is a term used in phonology to refer to the distinctive pitch level of a syllable (Crystal, 1991:353). Oduor (2002:57) asserts that tone refers to the different pitches of voice that combine to form certain patterns in pitch variation. Pitch is the rate of vibration of the vocal folds. The resulting pitch becomes higher when the rate of vibration is higher. In tonal languages, pitch differences are used phonemically either to differentiate word meanings or to convey grammatical distinctions (Katamba, 1989, in Oduor, 2002).

Okoth (1982:26-27) suggests three basic tone patterns, low (L), high (H) and downstepped high (DH) or (!H), and three derived tone patterns which are low-rising (LH), high-falling (HF),the latter are represented by Oduor (2002) as (HL) and high-hanging (H!H).

Downstepped is a variety of high; it has a high before it, which is higher. It is low-pitched, hence downstepped.

Lexical tone applies in a situation where the tone carried by a word is an essential feature of its meaning. In this case, all segments are identical and the difference is only brought about by tone. It distinguishes the meaning of two or more otherwise identical lexical terms (words), for example:

(a) kèndò – fireplace

(b) kèndó – again

(c) kéndo!/ – to marry

Grammatical tone distinguishes grammatical functions and therefore contributes to differences in meaning. Tone has a grammatical function as it can be used to mark mood and aspect in Dholuo.

Dholuo is a tonal language that exhibits grammatical and lexical tone, although tones are not represented in the orthography. This is because spelling does not represent exact pronunciation. It is in transcription that we would mark tone if need be to represent pronunciation. This leads to some lexical ambiguity where minimal pairs are involved, but Dholuo speakers differentiate between the meanings of such words depending on the context in which they are used. In Dholuo, tones based on minimal pairs are not very frequent and those that exist, as Okoth (1997:19-20) puts it, rarely, if ever, belong to the same semantic field. He says the lack of tone marks in written Dholuo enables readers to give a text individual or dialectal tonal features, thus regional tonal differences do not impede the reading of the language. Tone does not determine Dholuo constituent order. However, Oluoch (2004:46) notes that some Dholuo modal auxiliaries, in form and tone and when taken out of context, fall under more than one word class leading to ambiguity in meaning determination. Hence, there is a need for research into this under the Minimalist Programme. Where there is more than one tonal marking, there is no ambiguity.

Tone in relation to ambiguity in Dholuo modal auxiliaries will be the focus of Chapter Five, but for ambiguity to occur the form and tone of the lexical items must be the same, only to be disambiguated in context.

4.5 Dholuo syllable structure

The study so far has explained the production and classification of speech sounds in Dholuo. This section discusses the syllable structure of the language. As is well known in linguistic studies, the term 'syllable' refers to a unit greater than the phoneme (sound segment) that is distinct from the word or morpheme. Oduor (2002:47-50) quotes various linguists' definitions of the term syllable. Among these are Gimson (1989), who provides the definition above. Some sounds are more sonorous than others are and the number of peaks in sonority shows the number of syllables and syllable boundaries that occur between sounds of relatively weak prominence. This is a phonetic approach to the syllable and is an attempt at a universal definition based on the prominence theory.

Oduor (2002) also refers to Goldsmith (1990), who offers two traditional views on the nature of the syllable, which recognise that a spoken utterance is divided into chunks of segments or units. One view focuses on the rise and fall of energy and is referred to as the sonority view of the syllable. Oduor mentions Katamba (1989), who explains that the syllabic potential of a sound depends on its propensity to vocalise: the more open a vowel is, the more likely it is to be the peak of sonority in its syllable. This definition suggests that syllable peaks are associated with vowels. The second traditional view is based on a syntactic approach, which considers the syllable as a constituent definable in phrase structure terms like a sentence. These are subsets of phonological segments of the language occurring in well-formed utterances. In this definition, the syllable is composed of constituents, the onset, nucleus (peak) and coda and the individual vowels (Vs) and consonants (Cs). Oduor (2002:49) notes that earlier researchers such as Harris (1951), Haugen (1956) and Fudge (1969) held the same view. The nucleus and coda are referred to as the core or rhyme. The syllable is divided into the onset and the core, e.g. in a CVC sequence, C is the onset and VC is the core. Oduor (2002) believes, like Newman (1972) that syllable weight refers only to the core of a syllable.

For other definitions of the term syllable, according to Derek (1982), quoted in Oduor (2002), a syllable is the smallest rhythmic unit in a language. According to Hooper (1973), quoted in Odhiambo (1981: 13) a syllable is the smallest pronounceable phonological unit.

Ngala (1994) and Oduor (2002:51-52, 60-62) note that the Dholuo syllable has a maximum of one consonant in the onset, followed by the peak and then a maximum of one consonant in the coda, that is, (C)V(C). The vowel is the only obligatory element in the Dholuo syllable. The peak consists of a short vowel, a long vowel or a vowel-vowel sequence.

Most languages fall into categories. Some languages have closed syllables that end in consonants, while others have open syllables, which end in vowels. As Oduor (2002:81-3) explains, Dholuo allows both open and closed syllables. An open syllable ends in a vowel, whereas a closed syllable ends in a consonant, or has a consonant after the peak and may be composed of an onset, peak and coda (the three phonetic parts of a syllable) or a peak and coda. The types of syllables found in Dholuo are discussed in the next section.

4.5.1 Dholuo open syllables

The following are examples of Dholuo open syllables, in bold, that end in vowels. Each is used in a sentence by way of explanation (Oduor 2002:82, 3).

(40) (a) ŋa:$ka - ‘must’

Nyaka u-ted

Must 2PP-cook

You must cook.

(b) o$**ji**$**mo**$**re**$u:$**ru** – ‘good evening (to many people)’

Oyimore uru

Evening you

Good evening to you.

4.5.2 Dholuo closed syllables

The following are examples of closed syllables in Dholuo as illustrated by Oduor (2002:90-91). The closed syllables end in consonants. Below, the closed syllable is in bold and below each example is a sentence in which the word is used.

41 (a) **lɪŋ** - 'to keep quiet'

Ling' thi

Keep quiet completely

Keep quiet.

(b) **An**tie - ' I am present'

An- tie kawuono

1PSG- am there- today

I am present today.

4.6 Nouns in Dholuo

Dholuo nouns vary in form to express grammatical contrast in number (singular plural), as can be seen in the following examples. This distinction indicates how nouns are structured in Dholuo.

Plural formation in Dholuo involves the following processes, as explained by Okoth (1982:29-32) and Sure (1993:334,336).

A plural suffix, which may be a vowel '-i', '–e', or suffix '-ni', is added to the stem.

Singular	Plural	
nyako	nyiri	'girl'
rawera	rawere	'child'
miyo	mine	'woman'
law	lewni	'dress'
ndiga	ndigni	'bicycle'

There is a change in the final consonant in the stem if the suffix added is not '-ni'. The following are the sub-classifications:

Voiceless obstruents become voiced and take an '-e'. If /t/ occurs as the last obstruent in a word, it becomes /d/. Whenever /k/ occurs word finally it becomes /g/ in the plural.

Singular	Plural	
Alot	alode	'vegetable'
puϴ	puᵟe	'cripple'
yaϴ	yeᵟe	'medicine'
cak	cege	'milk'

Voiced obstruents become voiceless and an '-e' is added. If /d/ occurs as the last obstruent in a word, it becomes /t/ and whenever /g/ occurs word finally, it becomes /k/ in the plural before the vowel '-e' is added.

Singular	Plural	
kedi	kete	'stick'
ogudu	ogute	'hat'
mogo	moke	'flour'

When /w/ or zero occurs word finally, it becomes /p/ in the plural and an '-e' is added.

Singular	Plural	
lowo/Loo	lope	'soil'
bao	bepe	'wood'

When /p/ occurs word finally, it becomes /w/ in the plural and takes an '-e'.

Singular	Plural	
pap	pewe	'field'

If the alveolar liquid /l/ occurs word finally, it changes to the nasal compound /nd/ in the plural and an '-e' is added.

Singular	Plural	
bul	bunde	'drum'
kul	kunde	'cowshed'

When /c/ occurs word finally, it becomes /y/ in the plural and takes an '-e'.

Singular	Plural	
wic	wiye	'head'
kic	kiye	'orphan'

Atoh (2001:49-50) argues that some Dholuo compound nouns have right-handed heads which are inflected for number. Some instances deviate from this general pattern and we find cases where the left-handed element, which is not the head of the compound word, is inflected. In other instances, both bases are inflected for number and I have identified instances where none of the bases is inflected for number. I have provided some examples below.

Right-hand heads inflected:

Singular	Plural
chiemb guok	chiemb guogi
'dog food'	'dogs' food'
tong gweno	tong gwen
'chicken egg'	'chicken eggs'
remb dhiang'	remb dhok
'cow blood'	'cows' blood'

The first noun in the compound (not the head) is inflected for number:

Singular	Plural
nyathi otenga	nyithi otenga
'child of the kite'	'children of the kite'
ja wuoth	jo wuoth
'a traveller'	'travellers'

Both bases inflected for number:

Singular	Plural
nyathi guok	nyithind guogi
'child of a dog'	'children of dogs'
min nyathi	mine nyithindo
'mother of child'	'mothers of children'

None of the bases are inflected:

Singular	Plural
rabound nyaluo	rabuond nyaluo
'sweet potato'	'sweet potatoes'

Atoh (2001:56-57) observes that speakers often stick to compounds comprising two bases as the standard; if they do not, it becomes difficult to account for this stretch of morphemes semantically. Speakers can recursively attach certain base morphemes to form three compounds in some instances, for example, *chi ong'ongo ong'ongo* ('wife of an ogre'). This recursion has a derogatory sense and acts as a pun in children's word plays and narrative sessions.

The above examples show the system through which different types of singular nouns form their plurals. From the different categories explained and exemplified, generalisations have been made in the discussion of how the different categories of identified nouns form their plurals.

4.7 Dholuo personal pronouns

As in any language, in a given speech situation, we use pronouns in Dholuo. Below is a table illustrating Dholuo personal pronoun use in terms of person, number and function (whether

specific pronouns are used as subjects or objects). The emphatic and non-emphatic (short) forms are also distinguished.

Table 7: Dholuo pronominal forms

Person	Singular Emphatic forms	Short forms Non-emphatic	Plural Emphatic forms	Short forms Non-emphatic
1st person	an	(S)**a-**, (o)**-a**	wan	(S)**wa-**,(O)**-wa**
	S- I		S- We	
	O- Me		O- Us	
2nd person	in	(S)**i-,** (O)**-i**	un	(S)**u-**, (O)**-u**
	S- You		S- You	
	O- You		O- You	
3rd person	en	(S)**o-**, (O)**-e,-go**	gin	(S)**gi-**,(O)**-gi**
	S- He/she/it		S- They	
	O- Him/her/it		O- Them	

S- Subject

O- Object

Okoth (1982:42) indicates that the emphatic forms can occur in isolation or as free morphemes and are never the subject of a verb. The short non-emphatic/bound forms of the emphatic forms are prefixed to the verb if a personal pronoun acts as the subject of a verb. Okoth (1997:57-58) agrees that these are bound forms that occur as prefixes or suffixes. The short forms are subject/object prefixes. Prefix forms are marked with a dash after the form, while suffix forms have a dash before the form. The third person singular has '-e' and '-go' suffixes used as objects and the 'o-' prefix when acting as the subject. The two allomorphs are free variants. Some speakers feel that '-go' is more emphatic. All the other non-emphatic

forms have the same morph for the prefix and suffix elements, whether used as a subject or object. There are no gender distinctions. In pronominal argument sentences, a lexical noun phrase is replaced with a pronoun (Crystal 1991:21). Below are examples to simply to illustrate the use of the various pronominal forms listed in the table above.

(42)

a) **An** jalupo

I fisherman

'I am a fisherman.'

b) **A**somo buk

I-read book

'I am reading a book.'

c) Wach oro chand-**a**

Matter drought disturb-me

'The issue of drought is bothering me.'

d). **Wan** kare

We alright

'We are alright.'

e) **Wa**- tiyo

We- work-IMP

'We are working.'

f) Kech ka- **wa**

Hunger bite-IMP- us

'We are starving.'

g) **I**n kanye?

You where

'Where are you?'

h) **I-** tiyo matek.

You-work hard.

'You work very hard.'

i) Gino ok bi hiny-**i**

Thing- that not come hurt-you

'That thing is not going to hurt you.'

j) **Un** jo ma nade?

You people rel-how

'What kind of people are you?'

k) **U-** dwaro ling?

You- want quiet

'Do you want to keep quiet?'

l) Ji penjo- **u**

People ask-IMP-you

'People are asking you.'

m) **En** ja-wer.

He a-singer

'He is a singer.'

n) Loso orom- **e**

Talking enough-3PSG Obj.

'He has had enough of talking.'

o) **O**- hero wer.

3SG-like singing.

'He likes singing.'

p) Loso oromo- **go**

Talking enough-3PSG

'He has had enough of talking.' (See n.)

q) **Gin** gi kinda

3PP with determination

They have determination.

r) Ok **gi**- bi bir-o

Not 3PP-come come-INF

They will not come.

s) Kony **gi**

Help 3PP

Give them help.

4.8 Dholuo verbs

This study deals with mood and ambiguity. One of the ways in which Dholuo expresses mood is by the use of modal auxiliaries, which are within the verbal element of the sentence. Other ways of marking mood in Dholuo include; modal adverbs which express hesitancy and doubt and by using the hypothetical condition which expresses an unrealised or hypothetical condition where the speaker assumes that the condition will not actually be met. Tone marks

mood and aspect which are marked on verbs; hence tone and aspect will be discussed. This discussion includes verb forms identified in the following categories: the infinitive, transitive verbs, intransitive verbs, verb reduplication and voice.

4.8.1 Aspect

Aspect refers to how the time of the action of the verb is regarded, such as whether or not it is complete, in progress, or showing duration (Crystal, 2003:225). Tense indicates the time of an action, event or state of affairs referred to in the sentence at the time of utterance. English has regular and irregular verbs. The regular verbs add the suffix '-ed' to mark past tense. Omondi (1982:108) observes that the Dholuo verb does not inflect for tense. Dholuo does not have morphological tense markers, but has lexical items, which relate linguistic messages to the relevant speech context in terms of time (Okoth, 1997:32). Okoth notes that linguists tend to regard only those linguistic elements that occur as affixes or bound morphemes as tense markers. Hence, Dholuo marks aspect and not tense. Aspect indicates the time of the action of the verb considering whether it is still taking place or is completed at the time of reference.

In sentence structure in the Minimalist Programme, the verb rises to have its tense features checked. Hence, the Dholuo verb moves to have the completive or incompletive tonal aspect features of the sentence checked. As defined above, aspect refers to how the time of the action of the verb is regarded, such as if it is complete, in progress, or showing duration (Crystal, 2003:225). English uses two types of aspectual contrast, which it expresses with auxiliary verbs; the perfective and the progressive. In traditional grammar, such contrasts were called 'the perfect tense', but far more is involved than simply the expression of time. The discussion of aspect in this study will be based on Comrie (1976:16), who distinguishes between perfective and imperfective aspect. Ochola (2003:28) believes there are two aspects in Dholuo, the imperfective and perfective. The imperfective/incomplete aspect is used for actions still taking place or which are habitual, while the perfective/complete aspect is used for actions completed at the time of reference.

Tucker (1994: 451) identifies the indicative mood as a marker of the imperfect aspect. Three types of action are described here.

(43) Action in progress at the time of speaking:

(a) merú tim(ô) aŋô What is your mother doing?

(b) Ótėdó rėc She is cooking fish

(c) Reti gári wúôk Hurry, the train is starting!

(44) Immediate future

(a) Kel-ná lú`th Bring me a stick

(b) Luth ítimó na-de What do you (want to) do with a stick?

(45) Action of a customary or habitual nature.

(a) Dhok cám(ô) aŋô What do cows eat?

(b) Gí-camó lum They eat grass

(c) Oŋer ídhó yath piyo A monkey climbs a tree quickly, monkeys climb trees quickly

On indicative as a marker of perfect aspect, Tucker (1994: 452) states that here the action is finished and the resultant state is described.

(46)

(a) Koth ocok The rain has stopped

(b) i-níndo nadi? How have you slept?

(c) a-níndo mábé`r I've slept well

In Dholuo, the difference between the perfective and imperfective aspects is marked by tone. Both verbs have a high tone but the distinction occurs in the infinitive marker where there is a high, downstepped (variety of high tone), high tone in the imperfective (47a) and a contrastive high, falling, low tone in the perfective verb (47b):

47 (a) Ó- téd- ó chiémo

3P/SG-cook-INF/INC food

He is cooking food.

(b) Ó- têd- ò chiemo

3P/SG-cook-INF/COMP food

He cooked food.

When expressing the future, the future marker ‘n-’ is prefixed to the person and verb:

(48) Otieno n- ó- dhí

name-NOM FM- 3P/SG- go-INF/INC

Otieno will go.

This does not apply to the incompletive construction, as illustrated below:

(49) Otieno dhi

name-NOM go-INF/INC

Otieno is going.

This example in the incompletive takes neither a future marker ‘n-’ used with the future, as in (49), nor does it take the completive marker [4]‘ne’ for the completive. See the sentence in the completive:

(50) Otieno ne o- dhi

Name -NOM CM 3P/SG- go-INF

Otieno went.

However, this past marker ‘ne’ in the completive can be contracted and incorporated into the verb to become ‘no-’, through the phonological process of fusion, where the ending ‘e’ is lost, as in the following example:

[4] ‘Ne’ is a completive marker/morpheme for the usual completive verb forms. It is a contracted form of the aspect particles of the perfective ‘nene’ for remote past and ‘nende’ for the immediate/near past (within the same day).

(51) Otieno n- ò - dhì.

name-NOM CM -3P/SG- go-INF

Otieno went.

Example (51) looks like a future construction where the completive marker 'n-' is attached to the person, 'no-'. In a construction with an overt subject, the difference between example (48) and (51) is tonal, where the future verb (48) has a high tone on the pronoun prefix and root, while the completive (51) has a low tone on the pronominal prefix and root.

Tucker (1994:459) notes that there are six Tenses in the Indicative Mood, all referring to Past Time, and one in the Subjunctive Mood, referring to Future Time. It is noted that all are formed by means of Adverbial Particles prefixed to (and often merged in Past Time with) the Pronoun Subject. The six Tense Particles attached to the Indicative mood are all contractions of Adverbs of Time and all refer to Past Time. They are as follows:

á- General past, contraction of á`ye meaning; then, after that; very often used to indicate the Past of today.

nê- Recent Past, contracted from néndé (or né`nde). This refers to recently; also used to indicate Past of today. Near past (within the same day).

né- Remote Past, which is a contracted form of néné meaning long ago. It is mostly used for non-definable past time and is much used in narrative.

nyô refers to Past of yesterday, it is a contracted from nyóró – yesterday (past).

nyócá is Past of the day before yesterday (past)

yá`nde, yandê Recent Past, indicates the Past of a few days ago (before nyócá).

Tucker (1994:464) notes that there is a Future tense formed by the addition of a prefix n(í) to the subjunctive. It refers to some indefinite time in the future.

(52)

(a) Jatic nóní`ndí The workman will sleep

(b) Jotic nógé`r?ó`t The workmen will build the house

Dholuo also uses temporal/point time adverbs (lexical items) to indicate specific points of time. The following are more time adverbials, which function as tense markers.

Kiny - tomorrow (future)

Orucha - the day after tomorrow (future)

Kawuono - today (present)

Sani/koro - now/present (Koro also means 'how')

Ang'/wang' - near future (within the same day)

Chieng' - remote/distant future

Temporal adverbs, *ang/wang* and *chieng* can also be used with the future to indicate how far in the future the action will take place. These adverbs are placed before the future marker and the verb with the pronominal. The temporal adverb *ang* or *wang* distinguishes time span in the near future (within/later the same day) and *chieng* distinguishes remote future. See the following examples:

(53) (a)Ang'/wang' n- o- dhi (kawuono)

NF FM-3P/SG-go-INF INC (today)

He will go (in the near future/today).

(b) Chieng' n- o- dhi

RF FM-3P/SG- go-INF/INC

He will go (in the remote future).

4.8.2 The infinitive

The infinitive is the base form in which verbs are given in vocabulary lists in Dholuo. It usually consists of the root of the verb plus the suffix marker '-o'. See the example:

(a) Cham-o

Eat- INF

To eat.

(b) Tur-o

Break-INF

To break.

There are a few exceptions that have '-i' as the suffix marker. These can be regarded as irregular patterns of the infinitive form. See the example below:

(a) Dh-i

Go-INF

To go.

In verbs ending in consonants the root is also the infinitive, as in the example below:

Wuok

To -get- out

To get out.

The imperative forms of the verb do not take the infinitive '-o' suffix marker:

(a) Chuŋ

'stand up'

(b) Cham

'eat'

(c) Tur

'break'

4.8.3 Transitive and intransitive verbs

In Dholuo, there are two types of verbs, as discussed below.

4.8.3.1 Transitive verbs

The transitive verb ends in an '-o' suffix in the infinitive form. Dholuo transitive verbs are the largest sub-class and take the '-o' suffix in the infinitive form as in the examples below. They take direct objects, as seen in example 54 (a), but there may also be double object constructions, as shown in example 54 (b), one being an indirect object and the other a direct object. The human, indirect object, comes first, then the animate, direct object, comes second. The direct object is what is given and the indirect object is the person to whom it is given.

(54)

(a) Loso - to prepare

Atieno loso chiemo

S V DO

Atieno is preparing food.

(b) Miyo - to give

Odhiambo omiyo nyathi chiemo

S V IO DO

Odhimbo has given the child food.

4.8.3.2 Intransitive verbs

This refers to an action or a verb, which does not take a direct object. The intransitive verbs in Dholuo end in the '-ni' suffix and, according to Omondi (1982:43), verbs that end in the infinitive '-o' but do not take direct objects are also intransitive. There are fewer intransitive verbs than transitive verbs.

(a) Mbwakni - to be crude/to heckle

(b) Kithni - to be restless

(c) Nindo - to sleep

(d) Woutho - to walk

(e) Budho - to stay

4.8.4 Verb reduplication

The affix ‘a’ is suffixed and prefixed to the stem of the verb following the full form of the verb. It connotes ‘just/simply/merely’.

(55) (a) Iwacho awacha

It is merely said.

The final ‘o’ of the verb is elided in speech and fused to become one word.

(b) Iwachawacha.

It is merely said.

4.8.5 The passive voice

As in any language, there are two voices, active and passive voice in Dholuo. The personal pronominal affix ‘o-’ or ‘i-’ is prefixed to the verb root with tonal modification, depending on whether it is perfective or imperfective, as seen below. Constructions 56(a) and 57(a) are in the active voice whereas the others demonstrate the possible variations of the passive voice construction in Dholuo.

(56) (a) Jatedo o- tedo chiemo

Cook-NOM SM-cook food-ACC

The cook has cooked food.

(b) O- ted chiemo

PASS-cook-PERF food-ACC

(has been cooked food)

Food has been cooked.

(c) I -ted-o chiemo

PASS-cook-INF food-ACC

Food is being cooked.

Passivisation may also involve changing positions of the noun phrases in a sentence (Okoth 1997:4).

(57) (a) Jatedo o-tedo chiemo

Cook-NOM SM-COOK-PERF food-ACC

The cook has cooked food.

(b) Chiemo oted gi jatedo

PASS- food cook-PERF by cook

Food has been cooked by the cook.

The passive equivalent is discussed in Tucker (1994:433). It is noted that there are Impersonal Prefixes attached to special forms of the Verbs as seen in the following examples.

(58) Imperfect

(a) Í-wa-co It is said

(b) Íwaco ní ruoth otho it is said that the chief is dead

(c) Íluoŋgo ŋa Who is being called? (lit. it calls whom?)

(59) Perfect

(a) o-wácî It has been said

(b) o-wác ni wá-só`m ká-wá-lí`ŋ it has been ordered that we read silently

(c) olúóŋg ŋâ Who should be called?

Subjunctive is in many contexts identical with the perfect form.

(d) o-wácî Let it be said

(e) ó-dwáró mond(o) owác ní én rúoth He wants it to be said that he is chief

This process may be applied to all verbs, while the introduction of a 'sufferer' results in a quasi-passive construction that Tucker (1994) calls the 'Passive Equivalent.' If the sufferer is denoted by a Personal Pronoun, it is attached to the Verb as an Object Suffix; if it is a Noun, it may either precede or follow the verb. Pronominal 'sufferers' like *ŋa* 'who?' *aŋo 'what?'* always follow. There is no infinitive form.

4.9 Conclusion

This chapter discussed the basic facts of Dholuo phonetics, focusing on consonants, vowels, tone and syllable structure. Under Dholuo, discussions included noun morphology, nouns and personal pronouns; syntax and verbs. Some of the features in these domains have bearing on mood, which will be discussed in the next chapter.

As far as sentence structure is concerned, in some sentences there can be no overt subjects. The explanation of Dholuo sentence structure is necessary to determine whether the morphology of SVO languages like Dholuo or the structure building process can be accounted for in terms of Chomsky's basic sentence structure (Chomsky, 1993:7).

Dholuo sentence structure is basically SVO. See the example below with an overt noun phrase:

(60) Otieno dhi dala

Name-NOM go-INF-INC home

Otieno is going home.

(61) Atieno dhi dala

Name-NOM go-INF- INC home

Atieno is going home.

The subject in the above two sentences are proper nouns which could be either male or female (Otieno is male, while Atieno is female). The verb is *dhi* (is going), while *dala* (home) is the object.

As Dholuo is a pro-drop language, the VS structure is possible when the declarative sentence occurs without an overt subject. According to Schroeder (2002), the pronoun is dropped and its contents, such as the nominal features of person, gender and number, are attached to the verb. The latter are rich enough to recover the content of the missing subject. The subject marker 'o-' is attached to the verb, so that it has an inflectional morpheme and the contents of the dropped pronoun are recovered (see also Section 3.3, Example 31). Below is an example of a covert noun phrase;

(62) O- dhi dala

3P/SG- go-INF/INC home

He is going home.

See the following example where the noun is inserted in the syntactic structural position to be assigned case:

(63) O- tiyo

3P SG work-INF-INC

He is working.

The verb 'to work' is attached to the personal prefix marker '*o'* for morphological subject agreement features of person and number when used with a covert subject. The verb rises to (AGR_S) position to have its morphological agreement features checked as it inflects for agreement of person and number. Subjects are raised to Spec of AGRs where the nominative case features are checked, whereas objects are raised to Spec of AGRo where the accusative case features are checked. Morphologically, in the formation of the derived lexical auxiliaries such as *onego* 'should/necessity' derivation occurs, as will be seen in Chapter Five. It derives from a full verb *nego* 'to kill' and is changed into *onego,* the auxiliary. The derivational prefix '*o*-' develops from the prefix '*o*-' which changes into a derivational prefix, no longer functioning as a third person pronoun but as a derivational prefix. The fused final '*-o*' in the verb and auxiliary is an infinitive marker. The fusion of the prefix and the infinitive suffix marker make a full auxiliary. Derived auxiliaries are morphologically similar to full verbs and other word categories, but the differences lie in tone marking, as will also be seen in Chapter Five.

The next chapter will discuss Dholuo mood and ambiguity.

CHAPTER 5: MOOD AND AMBIGUITY

5.1 Introduction

In Chapter Two, the literature review, it was noted that there have not been much research conducted on mood in Dholuo. The only theoretical work undertaken so far on mood in the Minimalist Programme is by Oluoch (2004). It analyses how mood is expressed in this language, the categories of mood and possible word formation processes of inflection and derivation realised on the auxiliary and the mood morphology. The aim of the study was to determine the morphosyntactic functions of mood in Dholuo in the Minimalist Programme.

This chapter will spell out the facts of Dholuo mood and ambiguity. It will first explain mood as expressed using various modal auxiliaries in Dholuo: lexical auxiliaries, derived auxiliaries and derived auxiliaries with reflexives. Other ways in which Dholuo expresses mood will also be discussed and these include the expression of mood using modal adverbs and the hypothetical condition. These expressions of mood will be represented diagrammatically to illustrate how they can be accounted for in terms of Chomsky's Minimalist Programme. This theory has been used as a tool to explain how Dholuo mood behaves structurally. Generalisations have been made through its application. The morphosyntactic functions of the modal verb have been discussed in the light of this theory. Nominative-accusative case marking, modal and main verb movement, agreement and aspectual features will also be discussed, together with instances of ambiguity where these modal auxiliaries have the same form and pronunciation as words belonging to different grammatical categories. The morphosyntactic functions of ambiguous words falling under other word categories which have the same form and tone as modal auxiliaries will also be represented using the basic sentence structure of the Minimalist Programme.

Any problems encountered where the theory does not satisfactorily account for Dholuo mood will be discussed, including adaptations of the theory as a system to accommodate problems.

5.2 Mood as a syntactic/grammatical category

As mentioned in Chapter 2, Section 2.3, whether one uses the term ‘mood’ or ‘modality’ is a question of terminology. In this study, the term ‘mood’ expresses the speaker’s attitude of mind towards the contents of the sentence as shown in the form of a verb (Jespersen, 1924:313). However, in some instances the choice of mood is not determined by the attitude of the actual speaker, but by the clause and its relation to the main nexus on which it is dependent. It may be expressed by modal verbs, which are at least still within the verbal element of the sentence, or by particles, which may well be quite separate from the verb. The term ‘mood’ is restricted to verbal morphology. In the case of Dholuo, the form of a verb will be a form of the modal auxiliary. According to Jespersen (1924), mood is therefore a syntactic category and it will be subjected to a morphosyntactic analysis. Jespersen (1924) groups mood and modality together (see the discussion of mood in Section 2.3).

This research investigates mood by following a grammatical/syntactic approach. Mood is a property of syntax, in line with Lyons (1977), who believes that sentence meaning is directly related to the grammatical and lexical features of a sentence.

Lyons (1977:848) also asserts that ‘mood is a grammatical category that is found in some languages though not always within the verb’. In Dholuo, apart from the use of modal auxiliaries, mood can also be expressed using modal adverbs and the hypothetical condition. Lyons (1968:308) lists three ‘scales’ of modality: ‘wish’ and ‘intention’, ‘necessity’ and ‘obligation’, and ‘certainty’ and ‘possibility’.

Crystal (2003:45, 212, 224, 374) mentions ‘will’, ‘shall’, ‘may’, ‘might’, ‘can’, etc. as modal verbs that express possibility and necessity. The modal verbs ‘must’, ‘shall’ and ‘may’ distinguish between obligation and discretion. He identifies nine verbs in this class: ‘can’, ‘could’, ‘may’, ‘might’, ‘will’, ‘would’, ‘shall’, ‘should’ and ‘must’. ‘Dare’, ‘need’, ‘ought to’, ‘have to’ and ‘used to’ share very similar functions.

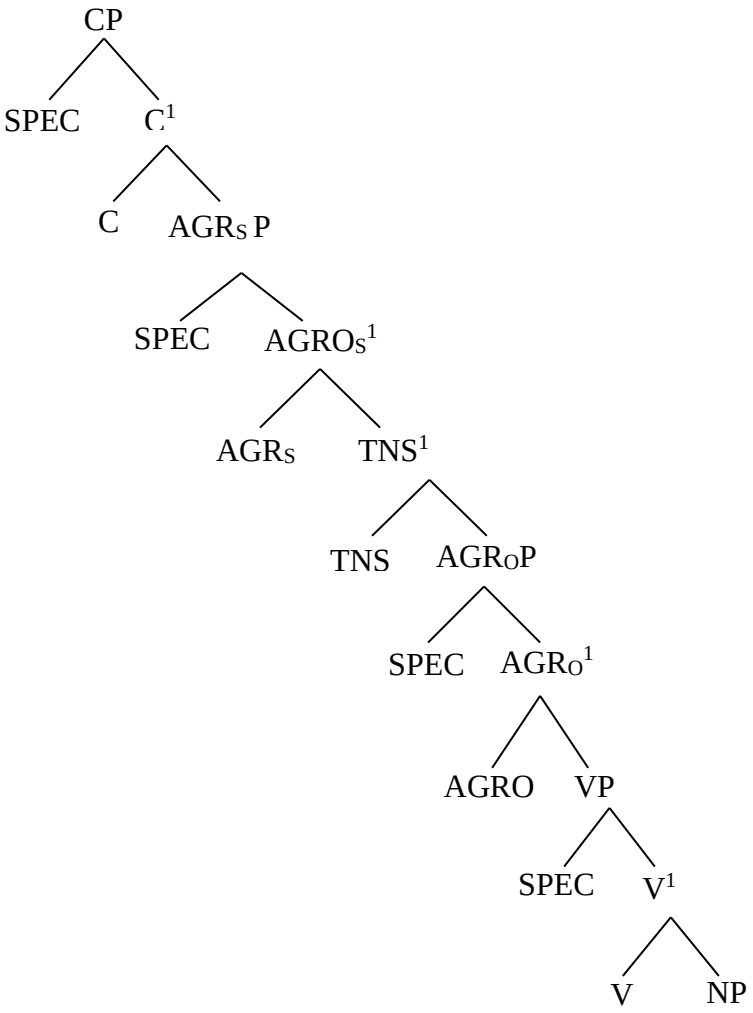
5.3 Auxiliaries

In Dholuo, Modal auxiliary verbs are used with main verbs to add a kind of mood to the sentence in order to suggest the perspective of the speaker and to show the reality, intentionality or unreality of an action. For example, Radford (1988:58, 149, 153) observes that in English modal auxiliaries differ from other verbs, because modals take a bare infinitive VP complement and have no infinitive form. Hence modal auxiliaries cannot be used after the infinitive particle 'to' or after another modal, they have no '-n' participle form and therefore cannot be used after perfective 'have'. They also do not have a gerund '-ing' form. Modal auxiliaries are always finite (i.e., they appear in present or past tense forms), do not inflect for subject-verb agreement morpheme '-s', always take infinitive verb forms as their complements, never occur in non-finite clauses, because they do not have non-finite verb forms, can be directly negated by the negative particle ('not'), can undergo inversion in interrogative clauses, do not permit arguments of their own, do not occur as infinitive complements as verbs do, and do not have the base form of the non-modal verbs. This might not always be the same in other languages, but modal elements have common properties. Firstly, they encode modal notions such as possibility, probability, ability, intention and obligation. Secondly, they take verbal expressions as complements. The Dholuo verb marks aspect (tonally), person and agreement while the English verb inflects for tense, aspect, mood, agreement and person.

The difference between the Dholuo full verb and the auxiliary is that the auxiliary occurs before the main verb, and most auxiliaries do not inflect for aspect, person and agreement like the verb. There are only two auxiliaries, one of which is *nyalo* (see Section 5.5.2), which derives from a noun that behaves like a full verb. It also marks aspect (tonally), person and agreement. The second is *biro*, which derives from a verb and inflects for person and agreement.

5.4 The basic sentence structure in the Minimalist Programme

Before launching into an in-depth description of mood and ambiguity in Dholuo and their presentation in diagrams, it is necessary to show the following basic sentence structure proposed by Chomsky (1993:7) to which modifications will be made to accommodate the facts and demonstrate how they can be accounted for in terms of Chomsky's Minimalist Programme.



In this structure, a verb moves to tense (TNS) to check that it has the right tense and to agreement (AGR) position to check that it has the right agreement features. If the checking procedure is satisfied, then a grammatical sentence results. Movement is only for checking purpose and the inflections, which originate in the lexicon and are checked against their syntactic positions to which they move in the structure. Case features of nouns are checked in the appropriate specifier position. They also check the properties of the NP or Determiner phrase (DP), by raising them to the specifier positions of AGRs and AGRo. Hence, the checking process ensures that the NP and VP are properly paired (Schroeder 2002:14-15).

The above structure represents the structure of a typical SVO Dholuo sentence. It is the basic sentence structure proposed by Chomsky to which the present study will apply data from Dholuo mood and ambiguity. Sentence (38) in section 4.2 is a typical sentence to illustrate the realisation of the structure presented in an SVO language.

Subjects and objects in Dholuo behave in the following way: Dholuo case features are not morphological and the nouns move out of the VP to keep the SVO structure, because there is no overt morphological feature case marking. The bundles of features AGR_S and AGR_O are checked for agreement features. Therefore, the subject and object in Dholuo move out of the VP for nominative and accusative structural case features to be checked under the specifier of AGR_SP and the specifier of AGR_OP.

The modal verb in Dholuo and the main verb are all in the VP. The modal verb precedes the main verb. When applying feature checking, there is no place for the modal verb in the proposed sentence structure, so a head is created for its lexical feature checking (MOD^1/MOD) preceding the AGR_SP, because the modal verb always precedes the main verb. The main verb moves to (AGR_S^1/AGR_S) for agreement checking. This theory does not account for mood, but allows for the creation of relevant heads in the process of structure building, as will be demonstrated in the following discussion and examples.

5.5 The basic facts about mood in Dholuo

As discussed in chapter two, the basic facts about mood in Dholuo as discussed in Oluoch (2004:23-29) are presented below. These include the following ways of marking mood in Dholuo giving the closed set of markers of mood.

5.5.1 Lexical auxiliaries

These are lexical words, which express mood without any derivation or inflection. In this category, there is only one, auxiliary, namely *nyaka*[5]. This auxiliary, which means 'must' or 'ought to' implies a sense of obligation, necessity, duty, rules, compulsion, suggestion, probability or invitation.

[5] *'Nyaka'* also has other meanings such as 'up to', 'including,' and 'since' which are used as prepositions for adverbs.

Nyaka can be used with all aspects. See how *nyaka* is used with the completive aspect in the past:

(64) Nyaka ne ó- dhí

Must CM 3P/SG- go-INF/COMP

He had to go.

The completive marker/morpheme ‘ne’ is placed before the main verb. This can be incorporated into the verb through the phonological process of fusion where the vowel ending ‘e’ is lost. There is no difference between (64) and 65(a), because both denote ways of marking the completive. However, the effect of dropping the ‘e’ is that there will be ambiguity (no tonal distinction) between (65a) for the completive and (65b) for the future, because the tone will be the same. The completive marker of the completive ‘ne’ is contracted and incorporated into the verb to become ‘no’ like the future where the future marker ‘n-’ is prefixed to the person and the verb ‘no-’:

(65) (a) Nyaka n- ó- dhí

Must CM-3P/SG-go-INF

He had to go.

Generally, the future is denoted by prefixing a future marker/morpheme ‘n-’ to the verb:

(b) Nyaka n- ó- dhí

Must FM -3P/SG- go-INF/INC

He will have to go.

In written Dholuo, one should use the form in (64) without fusion for completive constructions, and to 65(b) for future in order to avoid ambiguity caused by similarity in tone. In speech, where the completive and future markers have a similar tone, see 65(a) and 65(b), there will be no ambiguity, as the speakers can place them in the right context for completive and future.

When the constructions start with an auxiliary, there will be ambiguity (no tonal distinction) between completive and future unless a temporal adverb is added to the future construction, as in (66), to indicate future. See the examples:

(66) (a) Nyaka ang'/wang' n- ó- dhí (kawuono)

Must NF FM-3P/SG- go-INF INC (today)

He will have to go (in the near future/today).

(b) Nyaka chieng' n- ó- dhí

Must RF FM -3P/SG- go-INF/INC

He will have to go (in the remote future).

In exploring the word order of modals when they co-occur and word order of the modals and other constituents, the auxiliary *nyaka* can either occur before or after when temporal adverbs are used to indicate the future. See the following illustrations.

(67)

(a)Ang' nyaka n - ó- dhí

NF must FM-3P/SG- go-INF INC

He will have to go

(b)Nene nyaka ó- dhí

RP must 3P/SG- go-INF INC

He had to go

(c)Nene nyaka ó- dhí

RP must 3P/SG- go-INF/COMP

He had to go.

(d)Nyaka ang' ó- dhí

Must NF 3P/SG- go-INF INC

He will have to go

(e)Nyaka ang' n - ó- dhí

Must NF FM-3P/SG- go-INF INC

He will have to go

(f) Nyaka ang' ne ó- dhí

Must NF FM 3P/SG- go-INF INC

He will have to go

The tone of *nyaka* does not change whether in the completive or incompletive. The tone of *nyaka* is discussed here because the lexical auxiliary *nyaka* may be ambiguous. It may have more than one interpretation, since it has the same form and tone/pronunciation with the word *nyaka* when used as a preposition. It is also necessary to make a tonal distinction between the remote and near past, which occur only with the completive. The temporal particle *ne* is placed before the main verb and it bears the tonal features which indicate whether it is near past (high tone *né*) or remote past (low tone *nè*). See examples of the completive:

(68) (a) Nyàkà né o- dhi

Must NRP 3P/SG-go-INF/COMP

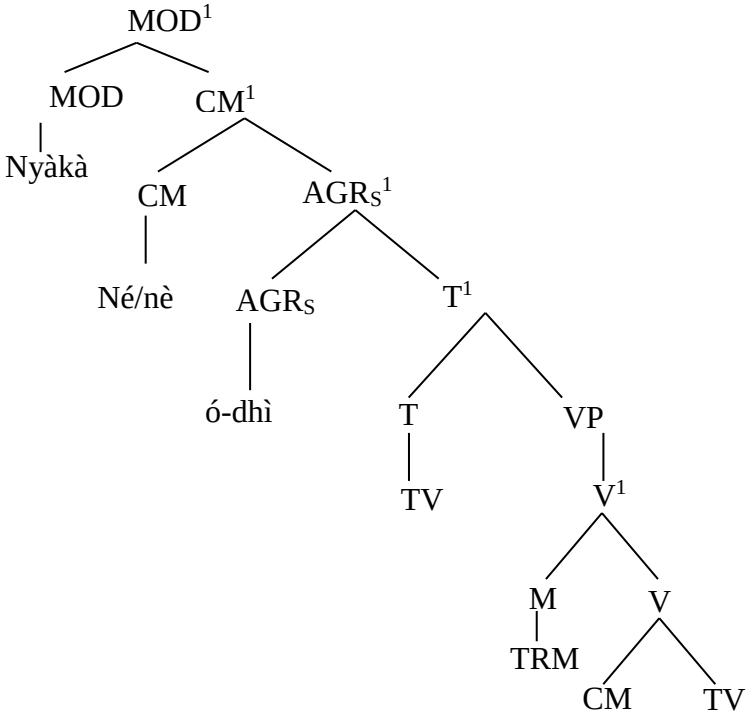
He had to go.

(b) Nyàkà nè o- dhi

Must RP 3P/SG-go-INF/COMP

He had to go.

The sentence structure that corresponds to 68(a) and 68(b) would be as follows: a new head for the completive marker (CM^1/CM) is also created for the checking of its near or remote past features.



In the above structure, the tone head (T^1/T) distinguishes the complete aspect marked on the verb. The verb rises from its base position in the VP to (T/T^1) to check its aspect features and moves again to (AGR_S^1/AGR_S) for the checking of agreement features of person. The completive marker is raised to (CM^1/CM) to check the near or remote past features. The modal verb, a lexical morpheme, moves from the VP to (MOD^1/MOD).

The incompletive aspect is used for actions still in progress; therefore, the completive marker 'ne' is not used. If *nya:ka* is followed by 'to,' it expresses strong final prohibition. According to Okoth (1982:25), quoted in Oduor (2002:65), root vowel lengthening in Dholuo takes place when a vowel precedes one or two consonants followed either by one or by no vowel in the utterance-final position. This lengthened vowel is the root vowel. In a consonant-final word, this vowel is the last vowel, whereas in a vowel-final word, it is the second last one in the word. See the following example:

(69) Nya:ka (to) ó- dhí

Must EP 3P/SG- go-IMP/INC

He must go.

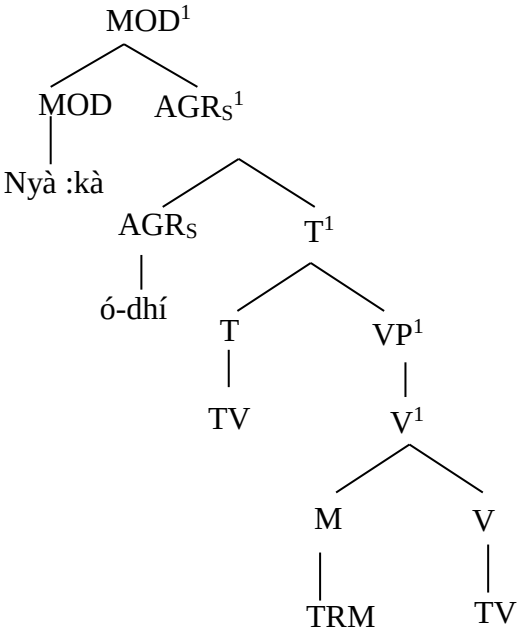
As mentioned above, Dholuo has one lexical auxiliary which is *nya:ka* (‘must’ or ‘ought to’). This lexical auxiliary has no inflectional features for aspect and agreement. The tone of *nya:ka* does not change whether it is completive or incompletive, as discussed in Section 5.5.1 See the example of *nya:ka* in the incompletive below:

(70) Nyà:kà ó- dhí

Must 3P/SG- go-IMP/INC

He must go.

The sentence structure that corresponds to sentence (70) above is as follows:



In this structure, there is no specifier position in the VP because there is no overt subject. The verb is raised from the base position in the VP, to (T^1/T) to check its aspectual features and then it moves to (AGR_S^1/AGR_S) to check its agreement features of person. The modal verb, which has lexical features moves from VP to (MOD^1/MOD).

The lexical auxiliary *nya:ka* may be ambiguous. It may have more than one interpretation, because it has the same form and tone/pronunciation when used in different word categories.

Neither tone nor word category leads to a distinction in meaning. They do not mark a difference in the meaning assigned to the word. Only context disambiguates the meaning, that is, when it is used in a sentence. The tone is low. In the following sentences *nya:ka* is not used as an auxiliary, but as a preposition.

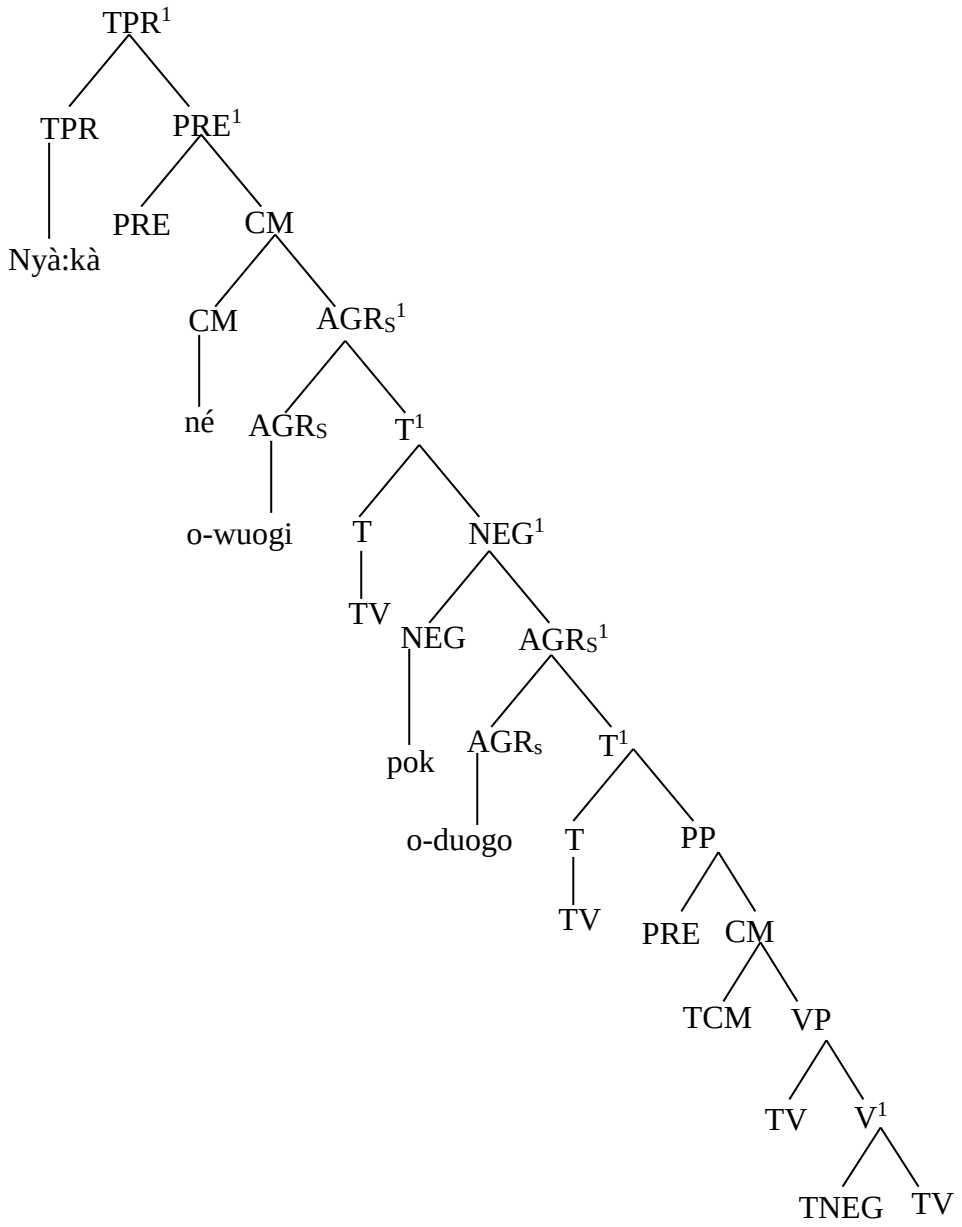
Nya:ka ('since') as a preposition is used when talking about an event from a specified time in the past, lasting until now. It takes an infinitival complement. The infinitive in Dholuo has agreement yet the infinitive is usually considered as -AGR, -TNS. (Haegeman, 1994). See the example:

(71) (a) Nyà:kà ne o- wuog-i pok o- duog- o

Since CM 3P/SG- leave-INF/COMP not- INF 3P/SG-come back-INF

(S)he has not come back since she left.

The structure below illustrates *nya:ka* as a preposition bearing the same tone as the auxiliary.



As seen in the structure above, the verb *oduogo* rises out of the VP to (T^1/T) to check its aspectual tone features and moves again to (AGR_S^1/AGR_S) to check its agreement features of person. The negation particle *pok*, a contracted form of *podi ok*, has a new head created for it and the particles raised to the (NEG'/NEG) head. The verb *owuogi* also rises from the VP to (T^1/T) to check its aspectual tone features and moves again to AGRs(AGR_S^1/AGR_S) to have its agreement features checked. The completive marker/morpheme *ne* is raised to the head (CM^1/CM) that has already been created to check its near remote past features. The

preposition moves from the PP to (PRE[1]/PRE) and then to (TPR[1]/TPR), also created to accommodate these features, to check its tonal features. This does not conform to Chomsky's basic sentence structure where everything fits into the VP, but necessary heads are accommodated for structure building.

5.5.2 Derived auxiliaries

The term 'derivation' is used in morphology to refer to one of the two main categories and processes of word formation. A derivational process results in a new word. Derivational affixes change the grammatical class of the morphemes to which they are attached (Crystal 1991:99). Derivation is the process that enables us to create new words belonging to the same or different word categories from the ones they are derived from. Thus, within derivation a distinction is made between the class-changing process, which produces a new word in a different word-category and the class-maintaining process, which produces a new word, but does not change the category. There are, however, arguments against this distinction but this is beyond the scope of this study. There is also the phenomenon of conversion/internal derivation, which occurs when a word changes word category without affixation (Malmkjær and Anderson, 1991: 317, 319).

Below are examples of derivations from English (O'Grady et al., 1997:147):

Act - verb

Act*ive* - adjective

Activ*ate* - verb

Activat*ion* - noun

The internal structures of the above words are built up in several layers through the attachment of affixes to a base. The affix '-ive' is attached to the base 'act', a verb, to produce the participle form adjective 'active'. The affix '-ate', when added to the adjective 'active', results in the verb 'activate.' The addition of the affix '-ion' to the verb converts it to the noun 'activation'. In the verb and adjective formation the 'e' is deleted in the spelling.

The following discussion will be based on how derivation works in Dholuo as far as derived auxiliaries are concerned. The discussion will also consider the role these derivations play in conveying mood and ambiguity in the language. These auxiliaries are derived from full verbs,

adjectives and a noun. The auxiliary *onego* is derived from the verb *nego* (‘to kill’). See the following examples of the full verb in the incompletive and completive aspect. The difference between them is the tone pattern:

(72) (a) Ó- nég- ó

3P/SG- kill- INF/INC

He is killing.

(b) Ne ó- nég- ò

CM 3P/SG-kill- INF/COMP

He killed.

The verb in 72(a) has an HHH tone pattern while that in 72(b) has an HHL tone pattern. The tonal difference between these verbs lies in the infinitive marker *-o* which is attached to the end of the verb. The infinitive marker of the incompletive verb has a high tone pattern as opposed to that of the completive simple past tense verb with a low tone pattern. The initial *o-* placed before the verb ‘kill’ is a pronominal referring the covert subject. *Ne* is a completive marker placed before the main verb in the completive sentence.

The following shows the derived auxiliary:

(73) Ò- nèg- ò ó- dhí

DRPR -necessary-INF 3P/SG-go-INF/INC

He should go.

In the above modal verb, the prefix *o-* no longer functions as a third person pronoun but as a derivational prefix DRPR. The infinitive marker *-o* is also fused. Hence, the fusion of the prefix and the infinitive suffix marker makes a full auxiliary. The auxiliary also has a different tone pattern, LLL. The tone of the verbs in examples 72(a) and 72(b) changes to L tone in the auxiliary (73)[6].

[6] The low tone pattern marks the auxiliary.

The modal verb has the meaning ‘to be necessary’, ‘must’, ‘have to’, ‘it is convenient’, ‘it is fitting’ or ‘ought to’. It also adds the idea of obligation. The auxiliary *nyaka* expresses a stronger prohibition than *onego* (see Section 5.5.1).

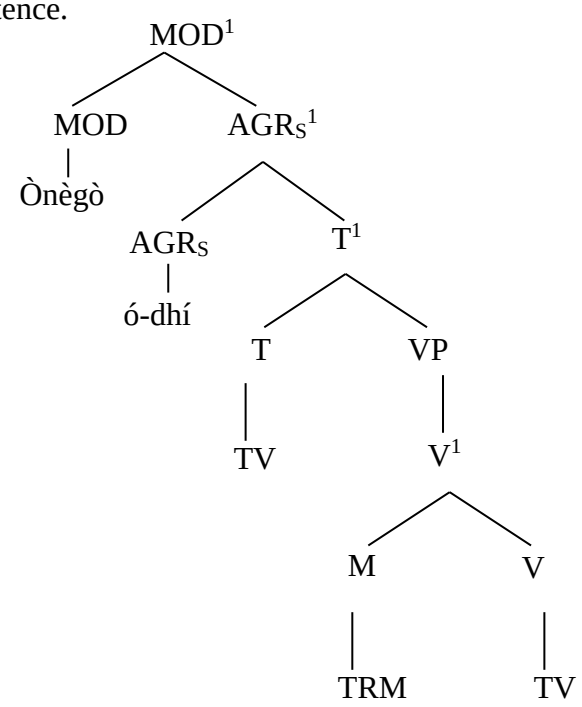
The auxiliaries *onego* and *oromo* are derived from full verbs and become lexicalised after the derivational prefix *o-* and the infinitive suffix marker *-o* have been incorporated into the auxiliary and the derivational process is complete. There are no morphemes to be checked off. See the example below:

(74) Ò- nèg- ò ó- dhí

DRPR-necessary-INF 3P/SG- go/INF

He should go.

The structure below represents this sentence.



In the above structure, the main verb rises from inside the VP first to (T^1/T) which has been created for aspect distinction to check the incompletive tonal aspect features for the construction which is marked on the verb. Then it moves again to (AGR_S^1/AGR_S) to check its agreement features. The verb has merged with the person marker, which is incorporated into it. The auxiliary *onego* moves from inside the VP to (MOD^1/MOD), a head created for the modal verb. The derivational prefix and infinitive markers have been lexicalised and the

auxiliary becomes a lexeme. No morphological feature checking is needed for the modal auxiliary.

As noted in Oluoch (2004: 36-37), the derived auxiliaries have related verbs from which they are derived. For example, the original verb *nego*- to kill, is changed into the auxiliary *onego*. The verb and the auxiliary could be used in one construction. See example.

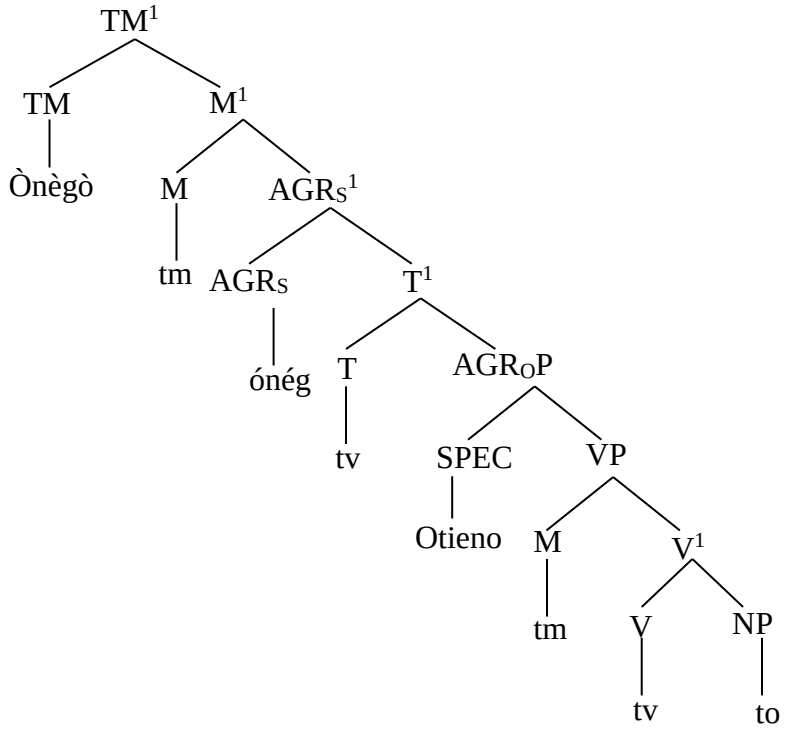
(75) Ò -nèg- ò ó- ség Otieno

DRPR- necessary-IF 3P/SG-kill ACC- name

He ought to kill Otieno

Tone is the difference between the main verb and the auxiliary in the above sentence. Hence, the creation of a new tone modal head (TM^1/TM) is needed. In constructions where the tone of the auxiliary never changes whether in the completive or incompletive, this head is not included since there is no structure building in such cases.

The following tree structure represents the construction of sentence (75) above.



The object moves from the NP position in the VP to (SPEC/AGR_OP) to check its accusative structural case features. The verb first moves from inside the VP to (T^1/T) to check the incompletive tonal aspect features of the sentence. Then it moves to (AGR_S^1/AGR_S) to check its agreement features. The lexicalized auxiliary also moves out of the VP to (M^1/M). It then moves to the tone head (TM^1/TM) to distinguish its characteristic tone pattern, which distinguishes it from the related main verb.

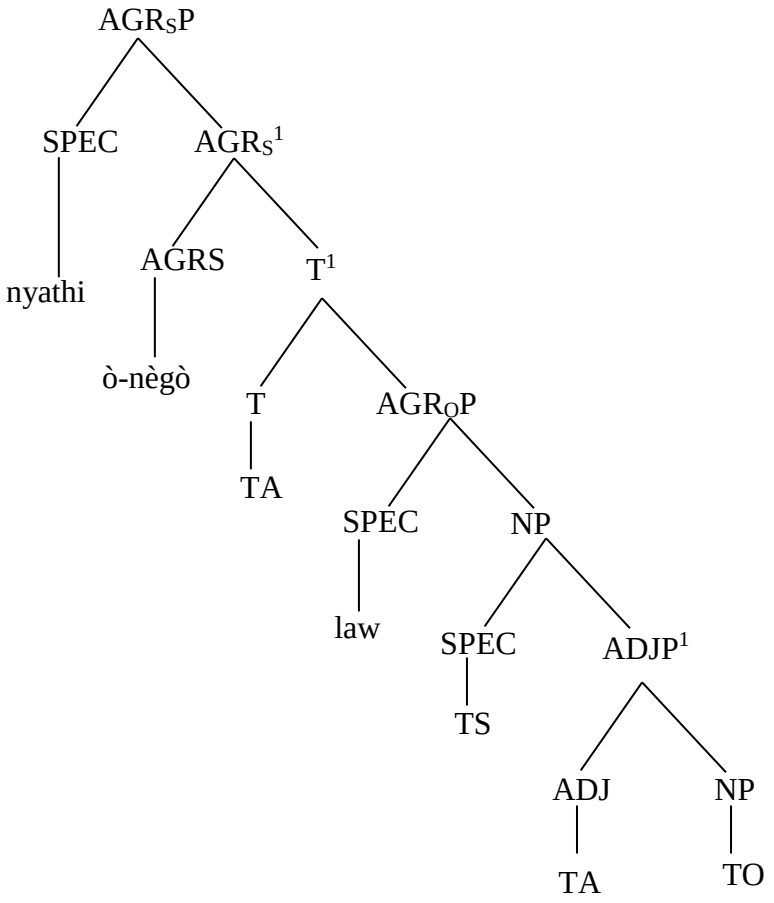
Onego with the L tone pattern is used as an adjective rather than as an auxiliary in the following example, meaning 'smart'. It could also be considered as an idiom.

(76) Nyathi ò- nèg- ò law

Child 3P/SG- kill -INF dress

The dress fits the child well.

Onego is used here as an adjective with the same tone as the auxiliary represented in structure below.



In the structure above, the object is raised from the NP position to the SPEC (AGR_OP/SPEC) to check its accusative case features as a lexical morpheme. The adjective position is created and it moves from the ADJP to (T^1/T) to check its tonal features and then moves again to (AGR_S^1/AGR_S) to check its agreement features. The subject is raised to (AGR_SP/SPEC), the SPEC position, to check the nominative case features. This is a sentence that illustrates my earlier explanation of one of the constituent structures of a Dholuo NP, where the presence of a verb is not mandatory for a well formed sentence, unlike in English. The noun is the head and is post modified by an adjective as explained in Okoth (1997:30-31). It is a verb-less sentence, which does not conform to the basic sentence structure, where structures are generated from the base position in the VP. Since Minimalism is driven by necessity, the structure can be modified by creating relevant heads to facilitate structure building.

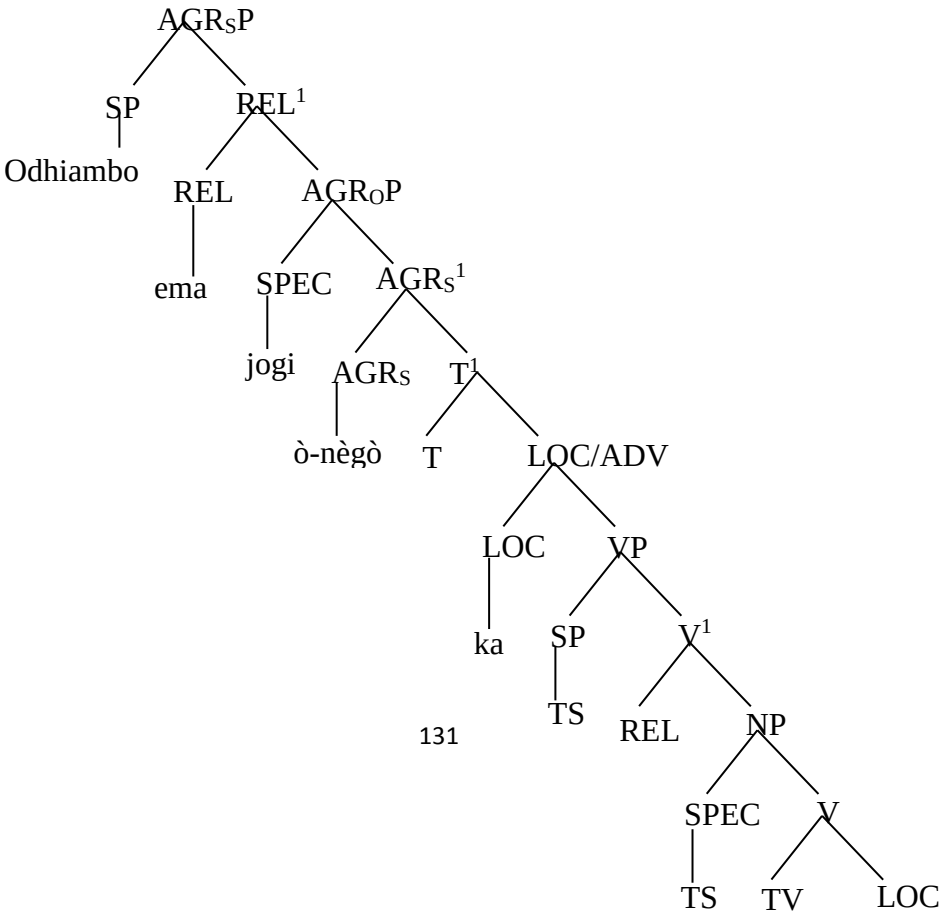
Onego can also be used as a verb with the L tone pattern in a reporting verb. If used in isolation, there will be ambiguity. See the example below:

(77) Odhiambo ema jogi ò- nèg-ò ka

Name is the one that-REL these people 3P/SG- kill-INF/COMP here

These people have killed Odhiambo.

Sentence (77) illustrates *onego* as a verb with the same tone as the auxiliary. See its representation in the structure below.



In the above structure, the locative adverb position is created (ADV) and the adverb moves out of the VP to get its features checked. The verb then rises from the VP to (T^1/T) to check its present perfect tonal features and finally to (AGR_S^1/AGR_S) to check its agreement features. The object, too, is raised from the NP position in the VP to the SPEC position (AGR_OP/SPEC) to check the accusative case features. The relative pronoun also moves from the VP to check its features in the relevant head created in the structure building process. The subject is raised from its VP position to the SPEC position (AGR_SP/SPEC) to check its nominative case features.

Similarly, the auxiliary *oro:mo* derives from the full verb *romo* (‘to meet’). As a verb, *oromo* has high tone in the following incompletive example:

(78) Sa - ó- róm- ó

Time SM reached-IF/INC

It is time.

As illustrated below in 79(a) and 79(b), *oro:mo* is an adjective meaning ‘to suffice’ in the incompletive and completive:

(79) (a) Chiem-o ò- rò:m- ò

Food -INF SM-suffice-INF/INC

The food is enough/sufficient/adequate.

(b) Chiem-o ó- rò:m- ò

Food- INF SM-suffice-INF/COMP

The food was enough/sufficient/adequate.

The incompletive adjective in 79(a) has an LLL tone pattern while the completive in 79(b) has an HLL tone pattern.

The following example illustrates the derived auxiliary:

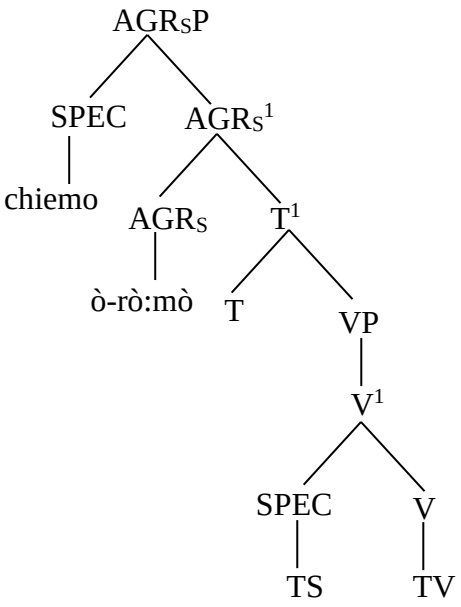
(80) Ò- rò:m- ò ó- chíém

DRPR- fit- INF 3P/SG- eat-INF/INC

He ought to eat.

The difference between 79(a), 79(b) and (80) is tonal. The tone marking on the auxiliary in Example (80) and the incompletive adjective in 79(a) is LLL. *Oro:mo* as an adjective in the incompletive 79(a) has the same tone as the auxiliary (80) and can be disambiguated within context. The difference in the tone pattern of the completive adjective is the change of tone in the pronominal prefix marker, which is high. *Oro:mo* is a modal auxiliary used in the sense 'it is time to'. It expresses the ideas of 'ought to', 'should' or obligation.

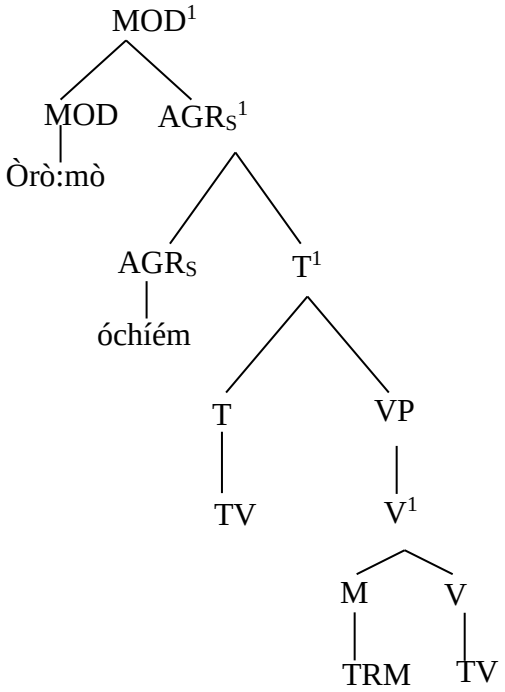
Oro:mo as an incompletive adjective, as in sentence (79a), has the same tone as the auxiliary *oro:mo* (80) represented in the structure below.



In this structure, the verb rises from the V position in the VP to (T^1/T) to check its incompletive aspectual features. It then moves to (AGR_S^1/AGR_S) to have its agreement features checked. The subject is raised from its VP position to the Spec position (AGR_SP/SPEC) to check its nominative case features.

Oromo as an auxiliary in sentence (80) has the same tone as *oromo*, an incompletive adjective in Example (79a), as is represented in the structure below.

Note the position of the derived modal verb in this structure. A tone head (T^1/T) is also created for the tone of the lexical verb. It distinguishes aspect marking on the verb.



The main verb in the structure above rises from its base position in the VP to (T^1/T) to check its incompletive aspectual features. Dholuo has a tonal aspect system. Aspect and tone in Dholuo are at the same morphological level; The (T/T^1) or (ASP/ASP^1) projection which is not found in the proposed sentence structure of SVO languages, has been used as a substitute for (TNS/TNS^1) projection. This has been used for aspectual distinctions of the lexical verb. The verb then moves to (AGR_S^1/AGR_S) to check its agreement features. The modal verb moves to (MOD^1/MOD) for lexical feature checking. The Minimalist Programme does not allow redundant features as the checking process is morphologically driven. AGR_S has no specifier since there is no overt subject. Only inflectional and lexical features present are included in structure building.

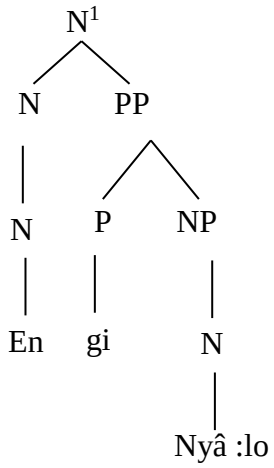
The auxiliary *Nya:lo* is also a derived auxiliary. Stafford (1967:121) speculates that it derives from the full verb *nya:lo* (‘to be able to’), but in my opinion it derives rather from the noun *nya:lo* (the ability to do something). When used in a construction, the noun can form a verb-less sentence, which does not conform to basic sentence structure in the Minimalist Programme. See the example below:

(81) En gi nyâ:l- ò

3P/SG with ability-INF

He has the ability (He is able).

In structure building, the sentence above is a noun phrase. Below its phrase structure is illustrated:



It also derives from the verb *nya:lo* (‘to manage’), as in the following example:

(82) Ok wa-bi nyâ:l- ò

NEG 1P/PL-will manage-INF/INC

We will not manage.

The following example shows *nya:lo*, the derived auxiliary, inflected for person unlike the other auxiliaries (except *biro*) which do not have the person marking which is usual on the full verb. It changes from a noun/verb to an auxiliary.

(83) Ó- nyá:l- ó nén- ó ot

P/SG- able- INF/INC see- INF/INC ACC house

He can see the house.

This auxiliary above is in the incompletive construction and has a high tone marking on the person marker and the auxiliary with the infinitive suffix marker taking the high incompletive tone pattern. The second syllable has a downstepped tone, which is a variety of the high tone that always follows a high tone. It is pitched lower than the normal high tone, but is not mid or low. The arrow is an alternative way of marking downstepped tone. See tone marking of an incompletive verb below:

(84) Ó- ted- ó

3P/SG- cook-INF/INC

He is cooking.

The tone marking of the incompletive lexical verb above (84) is the same as the tone of the incompletive auxiliary *nya:lo* in (83) although there is no ambiguity because the form is different. *Nya:lo* inflects for person and marks tone for aspect when used with a covert subject. See Example (83) for incompletive and (85) for completive aspectual tone marking with covert subjects. The auxiliary *nya:lo* used in the completive also has a different tone pattern. See the following example of the auxiliary *nya:lo*, which can also be used in the completive, together with a completive infinitive verb.

(85) Ô- nyá:l-ó nén-ò ot

3P/SG-able-INF/COMP see-INF/COMP ACC-house

He could see the house.

This example of the auxiliary *nya:lo* in the completive has the tone characteristics of the completive full verb, which is downstepped, high, high. The person marker has a downstepped tone marking with the auxiliary and the infinitive suffix marker takes the high tone completive marking. *Nya:lo* is a morphologically derived auxiliary that expresses the ideas of condition, possibility, ability or permission. The tone marking of the completive full verb and completive auxiliary is the same, but there is no ambiguity. This is because the form is different. See the following example of a completive full verb:

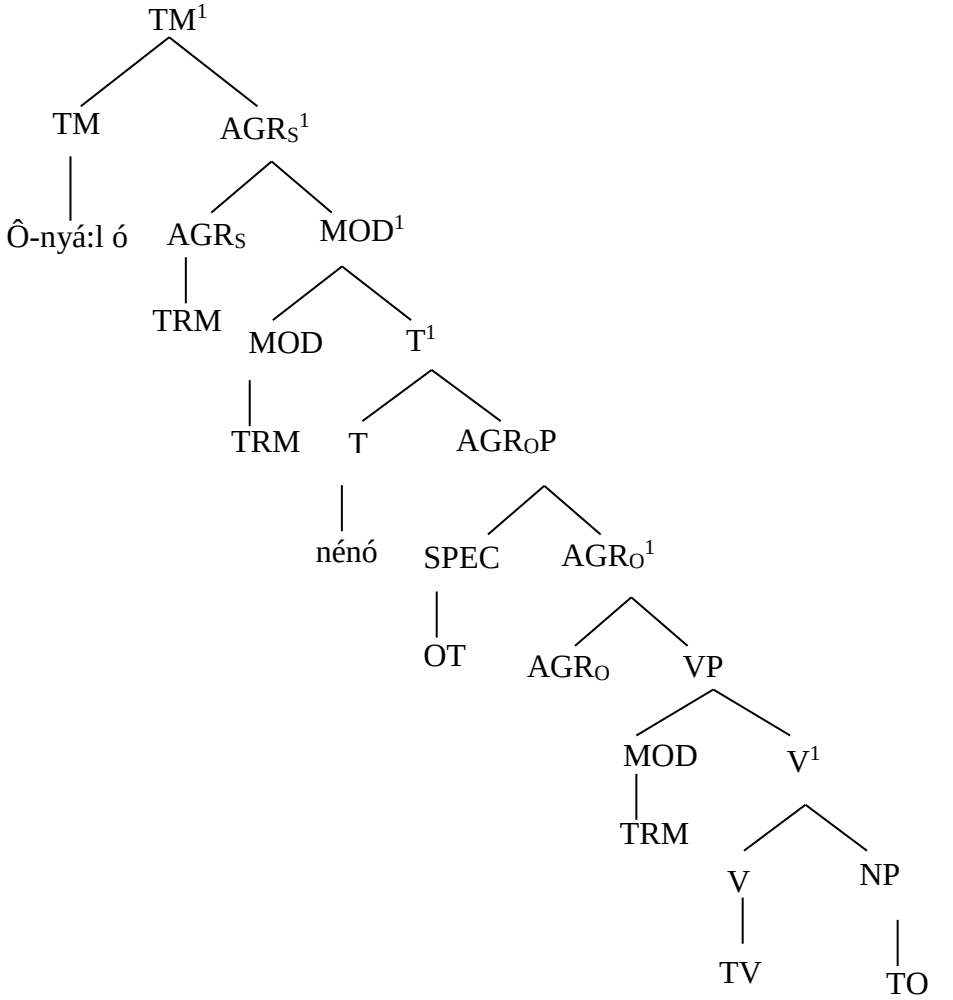
(86) Ô-té:d-ó

3P/SG-cook-INF/COMP

He was cooking.

The person marker has a downstepped tone marking with the verb and the infinitive suffix marker takes the high tone completive marking, as can be seen in the completive auxiliary.

In the structure below, the feature-checking structure for sentence (85) is illustrated. Tone as a suprafix is the last to check, so it heads the agreement head. Tone features of the auxiliary are also acquired by the incorporated agreement prefix. The head (AGR_S^1/AGR_S) is used for the modal verb as agreement features of the auxiliary are checked, but the main verb does not move to AGR_S, as it has no morphological agreement features.



In the structure above, the object is raised from the NP position to the (SPEC/AGR_OP) to check its accusative case features. The verb rises out of its V-position to (T^1/T) to check its completive aspectual tonal features. The auxiliary moves out of the VP to (MOD^1/MOD) and then moves again to (AGR_S^1/AGR_s) head to check its agreement features. Finally, it rises to (TM^1/ TM) to have its high tonal modal features checked.

The auxiliary *biro* means ‘will’ and, like *nyalo*, it is a derived auxiliary. It derives from the full verb *biro* meaning ‘to come (to)’. Like *nyalo*, it inflects for person and agreement. Its tone marking is high on the subject marker and downstepped on the auxiliary. Downstepped is a variety of high tone, therefore the tone of the auxiliary resembles that of the full verb with a high and downstepped tone marking. Hence, there is ambiguity between biro as an

auxiliary and as a full verb unless placed in context. Below is a sentence example with the auxiliary inflected for person used together with the full verb.

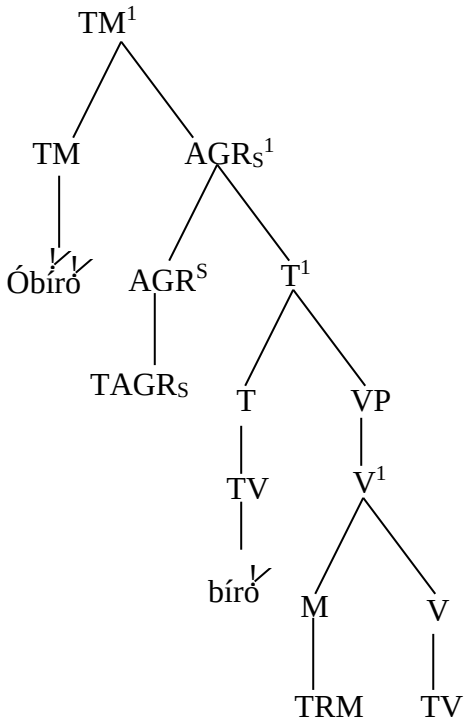
(87) Ó- bíro bíro.

3P/SG-will-AUX come (to)-INF-INC

He will come.

In sentence (87) shown below, the morphological person marker is prefixed to the modal auxiliary; hence the head (MOD^1/MOD) is created. The use of the auxiliary *biro* is an alternative way of representing or expressing the future, like the *ang/wang* representation.

The following structure corresponds to the above sentence.



In terms of the Minimalist Programme, the main lexical verb in the diagram above moves to the tone head (T^1/T) to check the incompletive tone, which is similar to the tone of the modal verb. In order to apply feature checking for agreement features of the modal verb, it then moves to ($AGRS^1$/AGRS). The modal verb moves to the (TM^1/TM) head, which is created for the lexical feature checking for it and its tone.

5.5.3 Derived auxiliaries with reflexives

Okoth (1997) quotes Lyons (1968:361) who states that in a reflexive construction the subject and object refer to the same person or thing. Okoth (1997:40) adds that Dholuo reflexive verbs are marked by –RV, where '-r'- is the reflexive morpheme and '-v' a word final vowel, normally a person marker. The unmarked forms, according to Stafford (1967), are the forms ending in 'e-' given as the citation form of the reflexive suffix '-re'.

A normal verb needs a reflexive head, unlike in the above structure where there is no head for the reflexive features of the auxiliary. Below is an example of a reflexive verb.

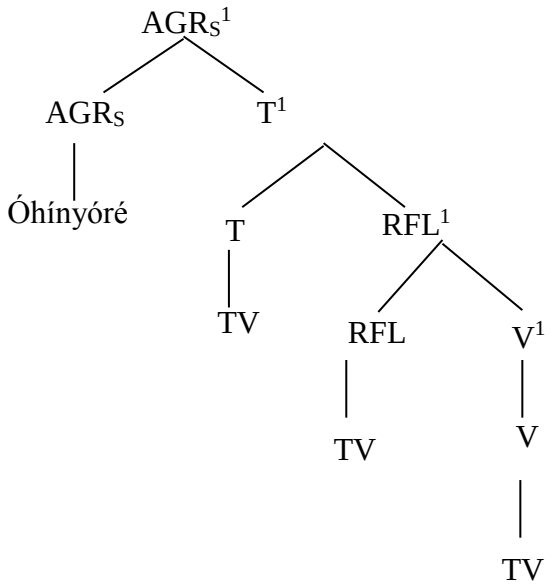
(88) O- hiny-o- re

3P/SG-hurt-INF/COMP-RFL

He has hurt himself.

The structure for (88) above would be as represented as in the structure below.

In a reflexive construction the subject and object refer to the same person or thing, hence, there is only the subject head (AGR_S^1/AGR_S) to check the subject and agreement features, but a reflexive feature head (RFL^1/RFL) is created.



The verb in the above structure moves out of the VP to check its reflexive features. It then moves to (T^1/T) to check its aspectual tonal features and finally to (AGR_S^1/AGR_S) to check its subject agreement features.

Besides the auxiliaries discussed above, two derived auxiliaries have the morphological reflexive. The reflexive morpheme *-re* is suffixed to the derived auxiliaries *nyalo(re)* and *owinjo(re)*. The auxiliary *nyalo* can also occur with the reflexive marker *-re* to become *nyalore* the tone of which is high, downstepped, high. It belongs to the group of derived auxiliaries that have the morphological reflexive. This is marked by adding the reflexive marker/morpheme *-re* as suffix, as illustrated below:

(89) Ka nyál- ó- ré to ó- bí

If possible- INF-RFL then 3P/SG-come-INF/INC

He should come, if it is possible.

The derivation of the auxiliary *nyalo* from the noun/verb has been discussed under derived auxiliaries in section 5.5.2. This auxiliary additionally takes the reflexive suffix/marker. The auxiliary is one of the two that have the high tone pattern of the verb.

Nyalore has the sense of 'to be possible'. No ambiguity occurs in the use of this auxiliary.

The auxiliary *owinjore* derives from the verb *winjo* 'to hear'. The following full verbs in 90(a) and 90(b) illustrate the incompletive and completive aspects:

(90) (a) Ó- wínj- ó

3P/SG-hear-INF/INC

He is hearing.

(b) ó- wínj- ò

3P/SG- hear- INF/COMP

He has heard.

There is also a reflexive verb *winjore* 'to be reconciled with' which, with the inflection of person, becomes *owinjore*. In the incompletive, it has a high tone. See the following example:

(91) Sani ó- wínj- ó- ré kod Otieno.

Now 3P/SG-reconciled-INF- RFL/INC with ACC-name

He is now reconciled with Otieno.

Below is an example of the derived auxiliary *owinjore* ‘ought to’, which occurs with the reflexive marker *-re*. It derives from the verb *winjo* ‘to hear’.

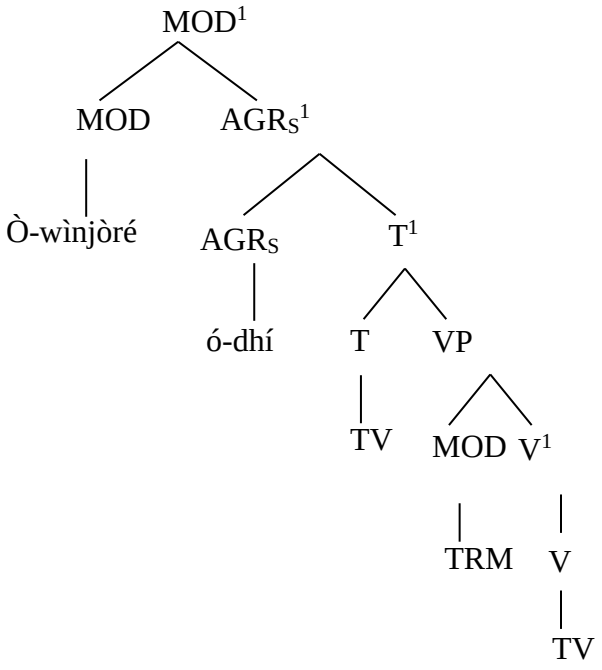
(92) Ò- wìnj- ò- ré ó- dhí

DRPR- suitable - INF- RFL 3P/SG- go-INF/INC

He ought to go.

The differences in 90(a), 90(b), (91) and (92) are tonal. The tone marking on the constructions with the full verb has a high tone pattern. However, the difference between the incompletive and completive is the change of tone on the infinitive suffix marker which is high for the incompletive 90(a) and (91), but low for the completive 90(b). However, the tone marking is LLLH in (92) for the auxiliary; the high tone is on the word final vowel in the reflexive.

The sentence structure for the derived auxiliary *owinjore* has a reflexive marker (92) and is represented in the structure below. There is no head for (RFL[1]/ RFL) to check the reflexive features of the auxiliary, because it is incorporated in the word once the DRPR and the reflexive marker have been added to the auxiliary during the derivation process, the process is complete and the auxiliary becomes lexicalised.



The verb in the above structure moves first from the VP to (T^1/T) to check its incompletive aspectual tonal features and then again, to (AGR_S^1/AGR_S) finally to check its agreement features. The auxiliary is raised from its position in the VP to the (MOD^1/MOD).

The auxiliary *owinjore* is similar in meaning to *oromo* and it expresses the ideas 'ought to' or 'to be suitable', as well as conveying a sense of obligation or necessity, duty, rules or convenience. *Owinjore* and *oromo* can be used interchangeably. *Owinjore* without the reflexive marker *-re (owinjo)* is a verb only as illustrated in 90(a) and 90(b), where *o-* is a subject prefix marker attached to the verb *winjo.*

It is considered ungrammatical to use *owinjo* without the reflexive marker *-re* (which is a verb) for an auxiliary. See the example below:

*(93) Ò- wìnj- ò ó- dhí

DRPR-suitable that-IF 3P/SG-go-INF/INC

He ought to go.

Therefore, the auxiliary *owinjore* is not like its counterpart *nyalore*, which has a related auxiliary without the reflexive marker *-re*, namely *nyalo*.

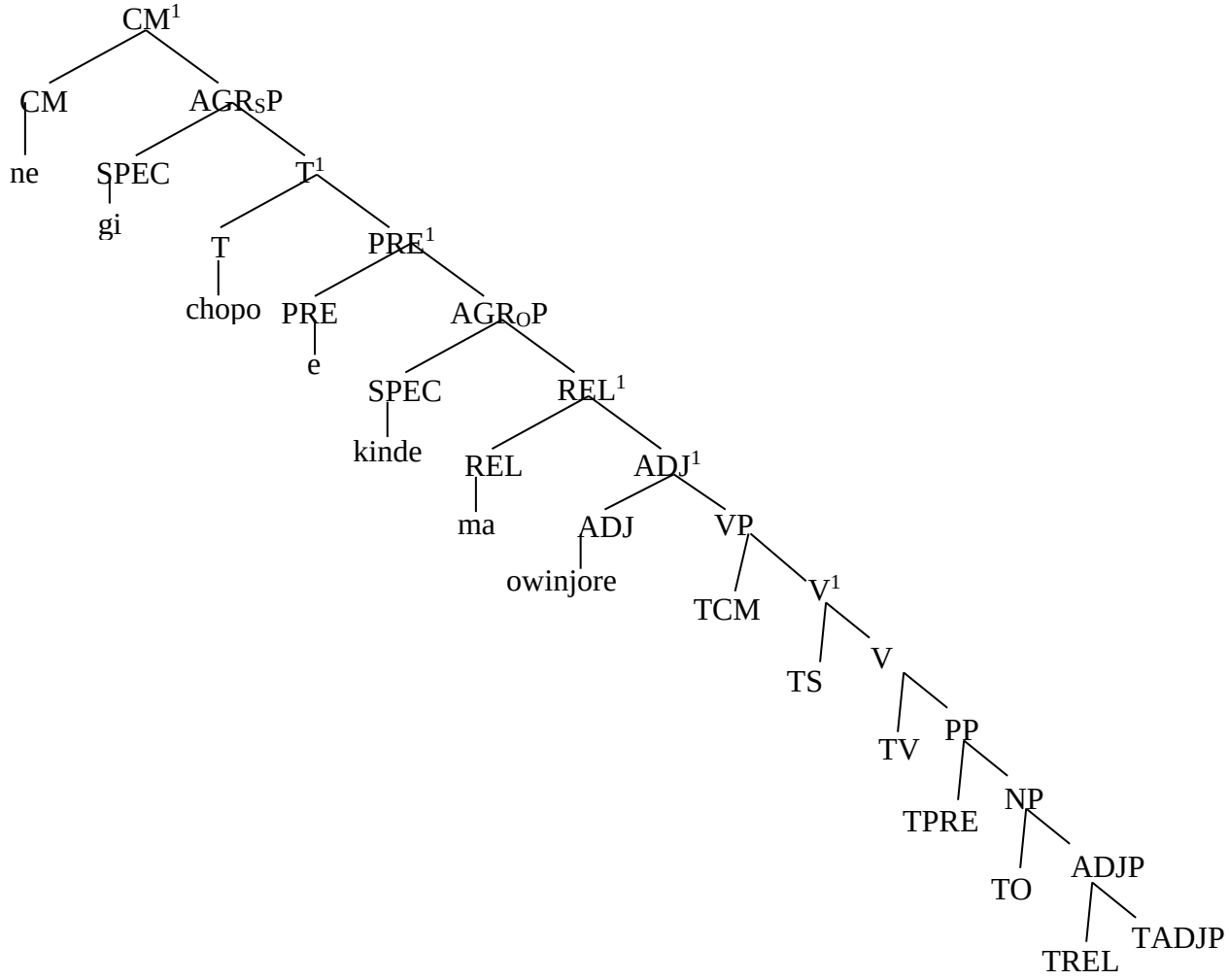
When *owinjore* is used as an adjective with the completive marker/morpheme in 94(a) or the reflexive verb, there is ambiguity. This is because the tone is LLLH, which is similar to that of the reflexive auxiliary. See the following examples:

(94) (a) Ne gi- chop- o e- kinde ma òwìnjòré

CM 3P/PL reach-INF/COMP in time that/REL PR right/RFL

They arrived at the right time.

Owinjore in sentence 94(a) is used in the completive forms an adjective. The sentence begins with the completive marker/morpheme *ne.* The adjective *owinjore* has the same tone, LLLH, as the reflexive auxiliary *owinjore*. See the corresponding diagram below.



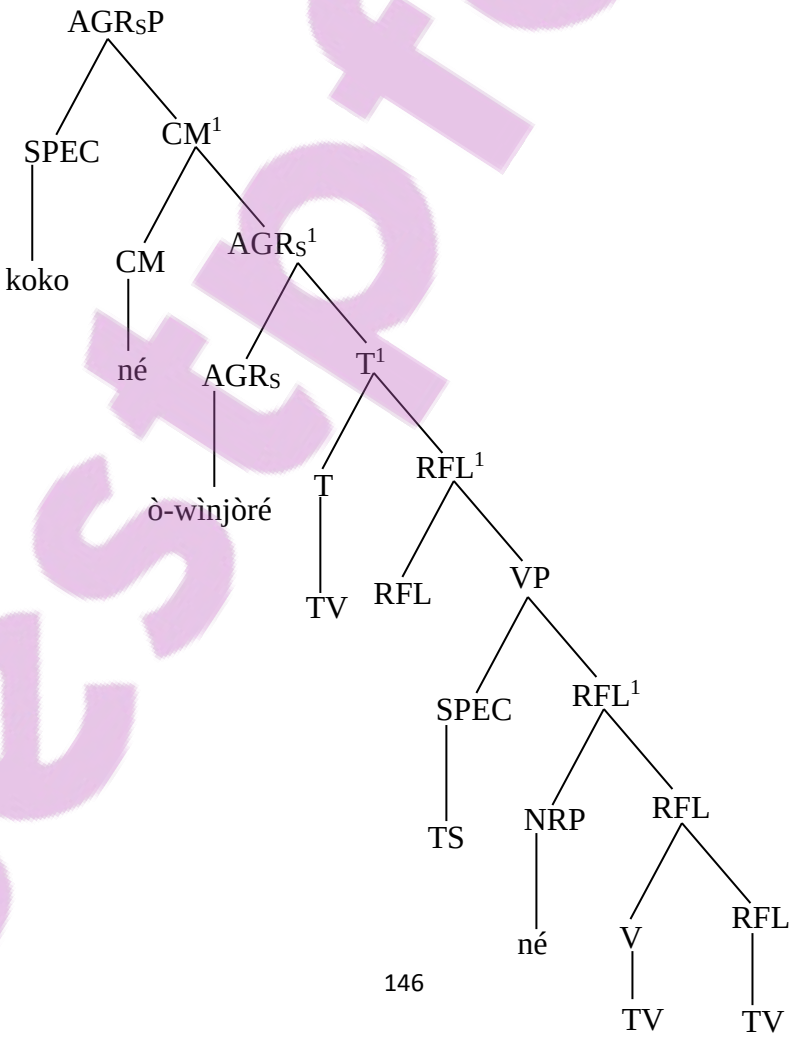
The completive marker/morpheme *ne* in the above structure rises to the (CM^1/CM) to check the near remote past tonal features. The subject is raised from the VP position to (AGRsP/SPEC) to check its nominative case features. The verb is raised from the VP to (T^1/T) to check its aspectual tonal features. The preposition also moves to check its features. The object *kinde* moves from its NP position to the SPEC position to (AGR_OP/SPEC) to check its accusative features. The relativiser also moves to check its features. The adjective rises from of its position in the VP to (ADJ^1/ADJ) to check its reflexive adjective features.

(b) Koko ne òwìnjò-ré

Noise CM heard/RFL-COMP

The noise was heard.

Owinjore has an LLLH tone like the modal auxiliary when it is used as a reflexive verb in the completive and is preceded by the completive morpheme/marker *ne*. Below is the sentence represented in 94(b).



The subject here is raised from the VP position to the SPEC position (AGR_SP/SPEC) to check its nominative case features. The completive marker/morpheme rises to (CM'/CM) to have its near remote past tonal features checked. The verb moves out of the VP to (AGRS'/AGRS) to check its subject agreement features and then moves again to (T^1/T) to check its tone features. Finally, it rises to (RFL'/RFL) to check its reflexive verb features.

5.5.4 Expression of mood using modal adverbs

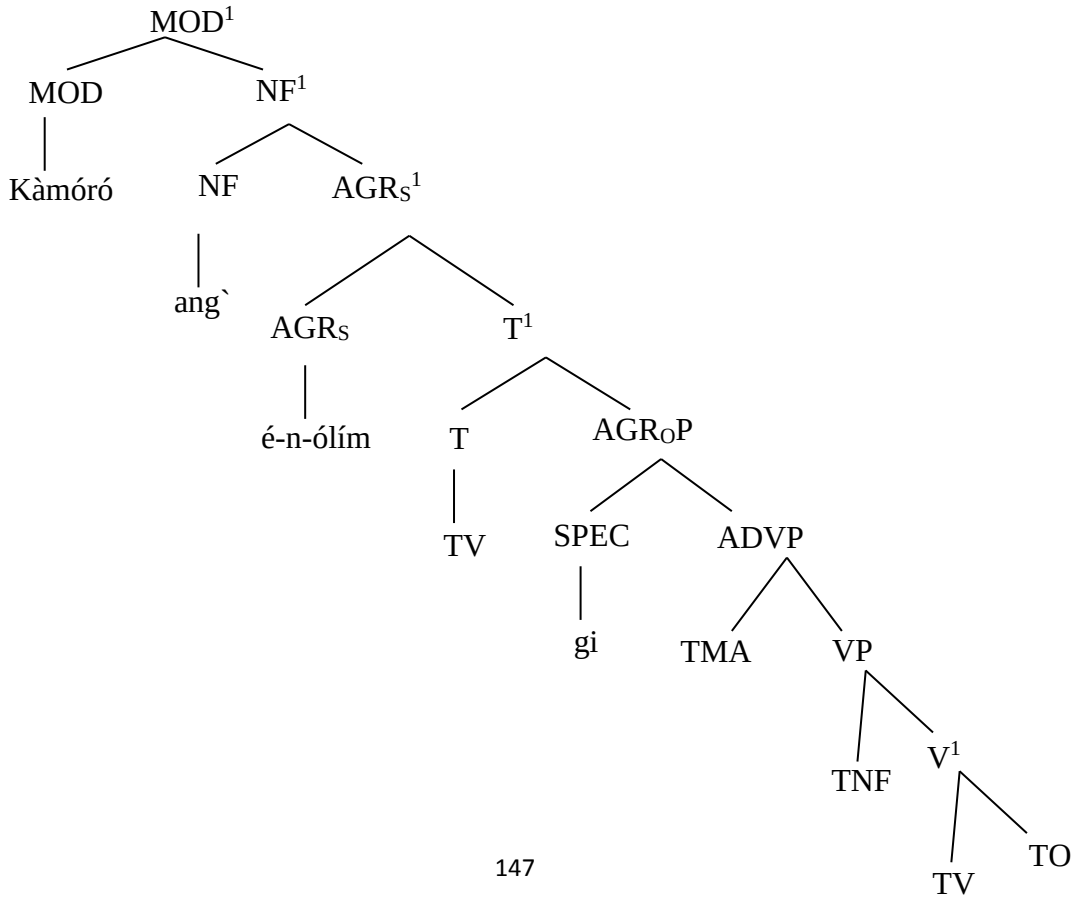
This category consists of auxiliaries that are lexical and act like adverbs. There are two modal adverbs used to express doubt as mood constructions. They are *kamoro*, which means the same as *dipo* or *kiawa*, and *chalo*, used in sentences 95(a-c) and (97). These words are placed at the beginning of the sentence. See the example with *kamoro*:

(95) (a) Kàmóró ang' e- n- o- lim gi

ADVsometimes/perhaps NF 3P /SG-FM-3P/SG/AGRvisit-INF/INC 3P/PL

Perhaps/probably he will visit them (today).

The structure of this sentence is represented in the structure below. According to feature checking, the new heads for the temporal adverb NF and modal adverb TMA are created.



In the above structure, the verb moves from its position inside the VP to (T^1/T) to get its tonal aspectual features checked, then it moves again to (AGR_S^1/AGR_S) to check its agreement features. The near future marker rises to (NF^1/NF) to check its features. The modal adverb moves from the ADVP to (MOD^1/MOD) for feature checking. The object is raised from its position in the VP to SPEC position (SPEC/AGR_OP) to check the accusative case features. This does not conform to Chomsky's basic sentence structure where everything fits into the VP although necessary heads are accommodated for structure building.

Dipo and *kiawa* are modal adverbs, which may be used instead of *kamoro*, but they have no instances of ambiguity like *kamoro.* Below are examples:

(b) Dípô ka wa nen-e

ADV might/perhaps if 1PP see-3P/SG

We might/may see him. We will perhaps/probably see him.

(c) Kíàwá ka wa- biro nen-e.

ADV/doubt if 1PP will see-3P/SG

I doubt if we will see him. We will perhaps/probably see him.

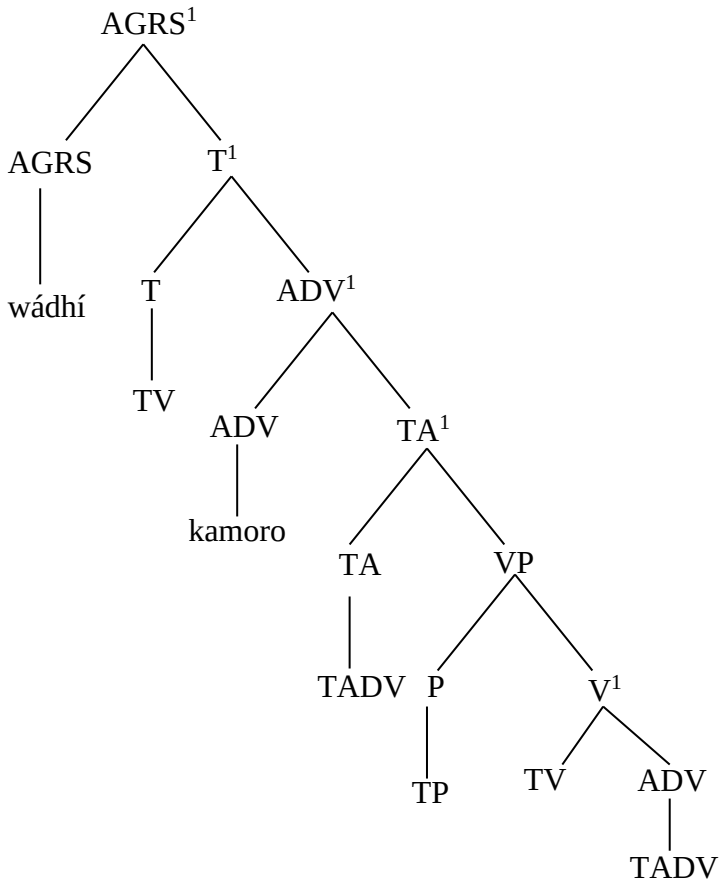
When used as an adverb, *kamoro* has the same tone as when used as a lexical auxiliary/modal adverb. Below is an example of its use as an indefinite adverb after the verb.

(96) wa- dhi kàmóró

1PP go-INF/INC ADV/somewhere

We are going somewhere.

The structure of sentence (96) is illustrated in the following structure:



In this structure the main verb moves out of the VP, first to (AGR_S'/AGR_S) to check its agreement features and then to (T'/T) to check its incompletive tonal aspect features. The adverb rises from the VP to (ADV^1/ADV) for feature checking and finally moves to (T'/T) to have its tone features checked.

(97) Chál- ó k- o- biro tim- o ma- ber

ADV- perhaps/seems-INF COND-3P/SG-going to do- INF/INC REL-good

Perhaps he will do well / It seems as if he will do well.

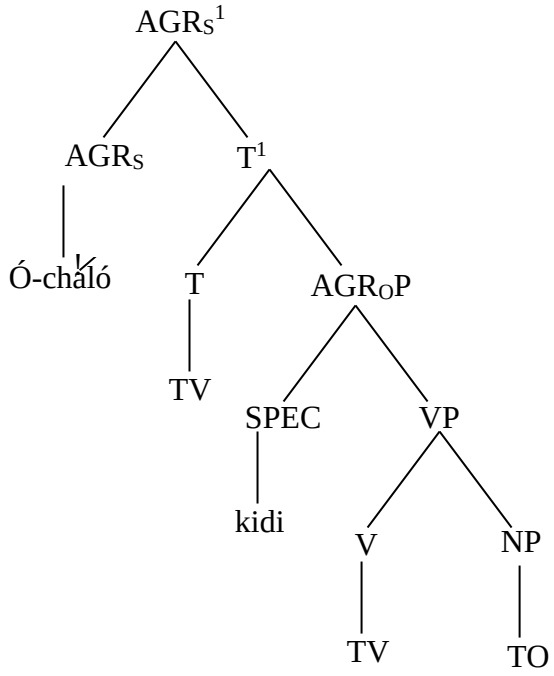
When used as a modal adverb in (97) above *chalo* has the same tone as that of a verb, which has high, downstepped (a variety of high tone that comes after a high tone but is pitched lower than a normal high tone), high tone. This results in ambiguity. See the structure below.

(98) Ó- chál- ó kidi

3PSG V-like-INF stone

It looks like a stone.

The structure of this sentence appears below.



The verb rises from its position inside the VP to (AGR_S^1/AGRS) to check its agreement features, and then to (T^1/T) to check its tone features. The object is raised from the NP position in the VP to the SPEC position (AGR_OP/SPEC) to check its accusative case features.

5.5.5 Expression of mood using the hypothetical condition

Other than the above identified by Oluoch (2004), Dholuo mood is also expressed through doubt and the hypothetical condition which expresses an unrealised or hypothetical condition where the speaker assumes that the condition will not actually be met. Abudho (2004:71, 91) explains the hypothetical condition as representing an unreal condition of some hypothetical consequence and this is the case in Dholuo conditional sentences. The hypothetical condition expresses a wish or what one would want to happen, but not a real situation that is not possible to fulfil. The 'if' and the main clause are introduced by *dine/da* (expressing possibility or capability) in the impossible condition. It is also used for very unlikely suppositions that are impossible to fulfil. *Dine* 'if' is a contraction of *di nende* or *di nene*. *Dao/-do* 'would have' is a contraction of *da aye*. *Dine/da* is the impossible condition that performs the function of

modality. The aspect of the verb is completive in hypothetical conditional sentences. Such sentences do not have instances of ambiguity.

The difference between *dine* 'if' and *da* is aspectual, as *dine* is used in reference to the distant past and *da* refers to recent past events, i.e. events that happened on the same day.

See example below:

(99) Dínê o- luw- o Kisumo

If INF 3P/SG follow INF/COMP PLACE-ACC

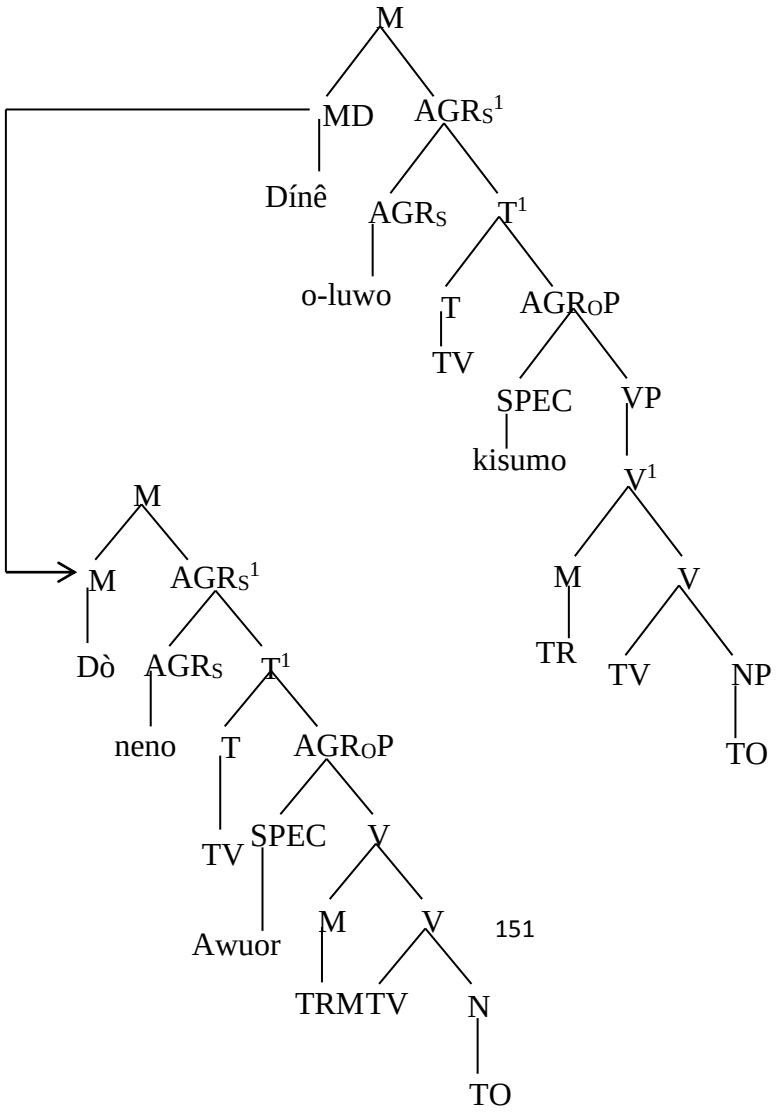
If (s)he had followed Kisumu,

dò nen-o Awuor.

would have Aux see-INF/COMP NAME/ACC

(s)he would have seen Awuor.

The above sentences are represented in the following structures.



The auxiliary in the above structure rises to (MOD^1/MOD) for checking. The verb moves to (AGR_S^1/AGR_S) to check its agreement features, then to (T^1/T) to check its completive aspectual features. The object is raised to the SPEC position (AGR_OP^1/SPEC) to check its accusative case. The two auxiliaries introduce each sentence.

5.5.6 Conclusion

This chapter discussed mood and ambiguities in Dholuo. It described the types of modal auxiliaries in Dholuo and instances of ambiguity arising from their similarity in form and tone to words from other word categories. The chapter also explained how mood and ambiguity in Dholuo could be accounted for in terms of the Minimalist Programme with reference to the basic sentence structure proposed by Chomsky. Instances when the theory does not account for mood in Dholuo were also discussed. The following five mood categories were identified:

First, there is one lexical auxiliary, *nyaka*.

Second, there are also derived lexical auxiliaries that involve two word formation processes, derivation and inflection. Under derivation, the word category is changed from full verb and a noun to auxiliaries. Derivational affixes are added to some of these words that are derived from verbs. The auxiliaries take the infinitive form: *onego, oromo, nyalo* and *biro.* Only the derived auxiliaries *nyalo* and *biro* inflect for person. Some auxiliaries have morphological similarities with full verbs/reflexive verbs, adjectives and prepositions, but the difference in unambiguous cases lies in the tone marking. The auxiliaries *nyalo* and *biro* have tone marking distinctions in the person/subject prefix marker and the auxiliary, like the full verb. This is different from the other auxiliaries derived from the verb, where tone marking is on the derivational prefix and the auxiliary.

Third, some derived auxiliaries also take the morphological reflexive.

Fourth, mood can also be expressed through modal adverbs, which are used to express hesitancy or doubt.

Fifth, mood is also expressed using the hypothetical condition. The auxiliary precedes the main verb, as seen in constructions with lexical and derived auxiliaries. The same applies to modal adverbs used to express mood and the expression of mood using the hypothetical condition. This chapter discussed mood morphology to determine its morphosyntactic

functions. It examined the nominative-accusative case marking system, the movement of the main verb and the modal verb from their base position in the VP, as well as tonal agreement and aspect feature checking. The structure building fits into the basic sentence structure of Chomsky (1993:7) which reflects the morphology of SVO languages like Dholuo. However, there were some difficulties in mood constructions and some inflectional heads were introduced for lexical feature checking. Among the created heads, Mood (MOD^1/MOD) and Tone (TM^1/TM) heads are placed after the AGR_SP where the tone of the auxiliary varies in the completive and the incompletive. This also occurs to make a tonal distinction in a situation where an auxiliary is used in a construction with a related verb. The inflectional node for tense (TNS^1/TNS) in Chomsky's basic sentence structure is also replaced by (T^1/T). This replacement was made as Dholuo does not mark tense, but aspect, and the latter is tonal. Dholuo case features are structural and to keep the structure, the subject and object move out of the VP for nominative case features, to be checked under the specifier of the AGR_SP, and the accusative case features are checked under specifier of the AGR_OP. The main verb always moves to (T^1/T) for aspectual feature checking and then to (AGR_S^1/AGR_S) for checking agreement features of person. Where there is ambiguity, the tone heads check the similar tone and the word category head is created, but context disambiguates the meaning. The created heads are driven by necessity; hence, the structure can be modified by creating relevant heads to necessitate structure building.

CHAPTER 6: CONCLUSION

6.1 Introduction

This chapter summarises the expression of mood in Dholuo, how it is affected by ambiguity in terms of accessing meaning, the role tone plays in resolving ambiguity to make meaning accessible, as well as making suggestions for further research.

6.2 Summary of the main findings

This study aimed to analyse how ambiguity in mood is expressed in Dholuo and to determine how the morphosyntactic functions can be accounted for by feature checking under Chomsky's Minimalist Programme. It also intended to establish the role of aspect (tonal) in Dholuo mood and to examine the contents of the VP. The study investigated structural/grammatical ambiguity and lexical ambiguity. The focus was on the exhaustive-access/context-independent model, one of the three models of ambiguity processing which postulates that an ambiguous word initially activates all possible meanings in memory and that context is used to select one of the activated meanings.

Mood expresses the speaker's attitude towards the contents of the sentence. It is conveyed by the form of a verb, though in some instances the choice of mood is not determined by the attitude of the actual speaker, but rather by the clause and its relation to the main nexus on which it is dependent. Mood can be expressed by modal verbs, which are at least still within the verbal element of the sentence, or by particles, which may well be quite separate from the verb. Mood is restricted to verbal morphology. In English, modal verbs like 'must', 'will', 'shall', 'may', 'might', 'should', 'can', 'could' and 'would' express meanings such as a wish, intention, possibility, obligation, certainty, discretion or necessity. 'Dare', 'need', 'ought to', 'have to' and 'used to' have very similar functions.

In the case of Dholuo, the form of the verb used is the modal auxiliary. Mood is not always contained within the verb - in Dholuo mood can also be expressed using modal adverbs and the hypothetical condition. This study is a development of linguistic theory, since mood and modality are grouped together. Mood is a grammatical/syntactic category, a property of syntax where sentence meaning is directly related to the grammatical and lexical features of a sentence.

The following conclusions were reached in the study. Mood is expressed in Dholuo through modal auxiliaries, which can be classified into five categories. There is one lexical auxiliary, namely *nyaka*. The majority of these modal auxiliaries are derived lexical auxiliaries including *onego, oromo*, *nyalo*, and *biro*. Mood is also expressed in Dholuo through derived auxiliaries with reflexives, e.g. *nyalore* and *owinjore*. In addition, modal adverbs express hesitancy and doubt; examples include *kamoro/dipo/kiawa*, which are used interchangeably, and *chalo*. Finally, Dholuo also conveys mood by using the hypothetical condition, which expresses an unrealised or hypothetical condition where the speaker assumes that the condition will not actually be met. Examples are *dine* and *do***,** discussed in Chapter Five.

It was also made clear in this study that Dholuo derived modal auxiliaries undergo derivation. One of these forms is derived from the noun *nyalo* and it undergoes the process of morphological inflection for person, agreement and aspect (tonal marking). The second derived form, *biro*, inflects for person and agreement. These two auxiliaries have tone marking distinctions in the person/subject prefix marker and the auxiliary, much like the lexical verb. In structure building, they move to check their agreement and tonal features.

The other modal auxiliaries derived from the verb have tone marking on the derivational prefix and the auxiliary. These auxiliaries are structural as well as tonal in the sense that they have tone marking. Largely, then, Dholuo mood is tonal and tone is a structural morpheme. Completive aspectual tone is marked on the main verb or with a completive marker/morpheme, while incompletive tone is always marked only on the main verb. Dholuo modal auxiliaries occur in the VP with the main verb, always preceding it.

Mood is affected by ambiguity when it comes to accessing meaning. Where words of other categories have the same form and tone as an auxiliary this causes ambiguity (as discussed in Chapter Five). Tone plays a role in resolving this ambiguity making meaning accessible. In instances where the form of a word is the same, but the tone varies, the meaning becomes accessible without the words having to be placed in context. However, when the form and tone is the same, the words have to be placed in context to be disambiguated. *Nyaka, onego, oromo, nyalo, biro, owinjore, kamoro* and *chalo* were found to have instances of ambiguity with prepositions, adjectives, verbs and a reflexive verb (see Chapter Five). A few auxiliaries did not cause ambiguity, e.g. *nyalore, dipo/kiawa* (which means the same as *kamoro,* but did not bring about any ambiguity) and *dine/da,* used to express mood in hypothetical conditions.

The Minimalist Programme can account for Dholuo modal features and ambiguity through modifications in terms of creating relevant heads; for example, mood and aspectual tone heads for feature checking and structure building are morphologically or lexically driven. Morphemes are moved out of the lexicon to build structures.

Instead of the (TNS/TNS^1) projection, Dholuo has a projection, which is not found in the proposed sentence structure of SVO languages. This is the (T/T^1) or (ASP/ASP^1) projection. In this study (T/T^1) has been used, since Dholuo has a tonal aspect system and they are on the same level. This has been used for aspectual distinctions of the lexical verb. Dholuo has a head for the modal auxiliary (MOD^1/MOD), since mood becomes an independent head in the theory. A head (TM^1/TM) distinguishes the tone of the auxiliary from the tone of the verb from which the auxiliary is derived if the auxiliary and the related verb are used together in a construction. The head (TM^1/TM) is also used for the aspectual distinction of auxiliaries where words of other categories have the same form and tone as an auxiliary, resulting in ambiguity. This head is introduced to bear the tone for mood. In the case of the verb or words belonging to different word categories, the head for the word category and the tone head are introduced. Different trees are drawn for the different contexts.

The word formation process of conversion/zero derivation/functional shift is noted in instances of ambiguity. This is derivation where the form of a word does not change. In other words, there is no morphological marking, but there are functional shifts or word category changes. There are no additional affixes. It is a highly productive word formation process where there is a word category change. A lexical item is simply converted or adapted from one grammatical category to another. A new word is formed from an existing, identical one. This was seen in cases of ambiguity where words belonging to other word categories had the same form and tone as Dholuo modal auxiliaries.

The VP does not contain all the information of the sentence, as seen in the verb-less sentence of the NP. Likewise, it might contain more than the verb. In cases where the constructions do not fit in the Minimalist basic sentence structure (where a structure is base generated from the VP), Minimalism still generates structure building driven by morphological necessity and the creation of relevant heads.

6.3 Suggestions for further research

As mentioned in Chapter One, some issues relating to Dholuo are beyond the scope of the study, since the focus was on mood and ambiguity and this imposed certain limitations. Another major limitation of the study is that it focused on Dholuo only as spoken in western Kenya and did not deal with the language as it is spoken in Tanzania and Uganda.

Further research could be carried out to establish the role of tone in determining mood in Dholuo as it is spoken in Uganda and Tanzania. Apart from ambiguity in mood in Dholuo, there are also other forms of ambiguity in Dholuo, other than mood, in meaning determination of words belonging to different word categories, which have not been covered in this study. Tone could be applied to determine the semantic categories and meanings of such words in relation to ambiguity.

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