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Duncan Okoth Okombo

A Functional Grammar of Dholuo

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Duncan Okoth-Okombo

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PREFACE

The present work is a significantly revised version of my Ph.D. thesis presented to the University of Nairobi in 1986.

The revision however, dealt mainly with matters of detail and accuracy in description and explanation, leaving the theoretical position and the major conclusions undisturbed.

The theoretical tenets of Functional Grammar (FG) employed or assumed in this work are those that were advanced before 1986. The insight that those tenets allowed me to provide in the study of Dholuo constituent-order phenomena that I was able to bring to the surface under the stimulation of FG would easily have gone unnoticed under the glasses of a different theory. It is this richness of data and issues for description and explanation that will give this work its special place in Dholuo studies.

The actual descriptive and explanatory strategies will no doubt vary according to the theoretical tenets of FG that are used. Readers who are interested in this line of investigation will benefit from looking at my data, discussion and conclusions in the context of developments in the FG school since 1986. Particularly important in this regard will be developments in the area of predicate formation (see e.g. Dik 1990) and the handling of the complex and derived constructions (Dik, forthcoming). A comprehensive list of relevant publications in FG both before and after 1986 may be found in Groot (1987) and Groot and Hengeveld (1996).

I will find it extremely exciting to see what insight other scholars can throw into my data using not only new developments in FG but also those from other paradigms of syntactic analysis. After all, constituent-order has become the dominant concern of practically all the leading theories of grammar as we know them today.

D. Okoth Okombo, Nairobi, August, 1997.

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1. INTRODUCTION

1.1. GENERAL BACKGROUND TO THE LANGUAGE

The major speech community with which Dholuo (the object language of this study) is associated are the Luo of Kenya. These people (the Luo) are part of that group of the Nilotes which is collectively referred to as the Lwo. Historians believe that the Lwo formed one grouping in the cradleland of the Nilotes in southern Sudan by the beginning of this millenium. According to Cohen (1974), the Luo began to settle in the Nyanza area of Kenya between 1500 and 1550 A.D.

The Kenya population census of 1979 puts the total number of Luo people in Kenya at 1,995,845. This number, obviously, leaves out the Luo emigrants who now live outside Kenya. The total number of Dholuo speakers includes these people plus the originally Bantu-speaking communities in Kenya who have adopted Dholuo as their main (in some cases only) language, but to some extent registered under their former ethnic groups. Of such people, the largest group are the Abasuba of the South Nyanza District, a diverse group of originally Bantu-speaking peoples who now tend to regard themselves as a homogeneous lot (cf. Ayot 1979, Rottland and Okombo 1986).

According to Greenberg (1966:85), Dholuo (Luo) belongs to the Western Nilotic sub-branch of the Nilotic branch of the Eastern Sudanic family. In the wider (African) context, Eastern Sudanic is itself a sub-branch of the Chari-Nile branch of Nilo-Saharan.

Of the Nilotic languages in Kenya only Dholuo belongs to the Western Nilotic group. Languages closely related to it are found in Uganda and the Sudan. These include such languages as Acholi, Alur, Anuak, Bor, Jur, Lango, Padhola and Shilluk. According to Stafford (1967), Dholuo has two major regional varieties, namely, (i) the Trans-Yala dialect - spoken in Ugenya, Alego, Yimbo, and parts of Gem location; (ii) the South Nyanza dialect - spoken in the various locations of South Nyanza District plus those parts of Siaya and Kisumu which are not included in the Trans-Yala group (Adhiambo 1990). Although these dialects of Dholuo have a high degree of mutual intelligibility, they are distinct enough in their lexical and phonological features to enable one to tell which dialectal zone a speaker comes from merely by the way he speaks. The South Nyanza variety is the

one conventionally regarded as the standard. The Trans-Yala variety, perhaps because it is a minority dialect, is generally avoided in Dholuo publications. It is, therefore, the South Nyanza dialect that is found in the bulk of the literature in Dholuo, including the Bible and readers for schools. For that reason, together with the fact that it is the variety this writer has had the greatest exposure to, it is the dialect chosen for this study, and any mention of Dholuo in this work shall refer to that dialect alone. However, since, as it seems to be suggested by Adhiambo's findings, constituent order does not appear to be one of the main distinguishing features of the two dialects, there is no doubt that most, if not all, of the conclusions of this study will be valid for the whole of Dholuo as spoken in Kenya.

1.2. AIM OF STUDY AND STATEMENT OF THE PROBLEM

The aim of this study is two-fold. First, it sets out to provide a descriptively adequate account, in the sense of Chomsky (1965), of constituent order in Dholuo; secondly, it investigates the possibility of providing such an account without using transformational rules in the sense of structure-changing operations.

Given these fundamental postulates of Transformational Grammar (TG), the aim of this study (as stated above) poses a problem of no small magnitude. The conviction on which this study is based is, however, that such a task can be achieved using the descriptive apparatus and methodological principles which have emerged in the field of linguistics. This is the theory of Functional Grammar (FG), first presented by Simon Dik in 1978, and thereafter developed by Dik himself and other scholars from various corners of the world.

1.3. BACKGROUND TO THE PROBLEM

There are many word-order phenomena in Dholuo, manifested in the form of sentential variations, which a TG model of syntactic description would account for by the use of movement rules (Omondi 1982).

The following examples will illustrate the kind of data we shall be dealing with when investigating the nature of such syntactic phenomena. The orthographic conventions used are explained in 1.8. Each set of examples is given a general name to highlight what the corresponding sentential variations are intended to illustrate. The element whose position is crucial is

paraphrases of one another, only the first one (in each set) is translated into English. Also, unless a new morpheme is introduced in one or more of the other variations, only the first sentence in each set is accompanied with an English morpheme-by-morpheme breakdown. Such a breakdown exists only in the English equivalent and not in the sentence in Dholuo because Dholuo is highly inflectional and does not, as such, always have neat morpheme boundaries.¹ (A question mark at the left of an example shows that its grammaticality is doubtful.)

1.3.1. OK - PLACEMENT

The free morpheme ok belongs to the set of a couple of morphemes which mark negation in Dholuo. One important observation about the syntactic behaviour of ok is that it can be placed in various sentential positions, as can be seen in (1a) and (1b) below.

- (1a) Otieno ok nyal loso kom NM NEG able make-vt chair 'Otieno cannot make a chair.'
- (1b) Ok Otieno nyal loso kom

1.3.2. TIME-ADVERB PLACEMENT

Dholuo time adverbs usually occur in various sentential positions, and by so doing lead to the production of two or more paraphrases. This phenomenon is illustrated in example (2a) - (2d) using the time adverb kawuono 'today'.

- (2a) Otieno nyalo loso kom kawuono NM able make-vt chair today 'Otieno can make a chair today.'
- (2b) Otieno kawuono nyalo loso kom
- (2c) Kawuono Otieno nyalo loso kom
- (2d)? Otieno nyalo kawuono loso kom

1.3.3. NANG'O PLACEMENT

Nang'o is a question word used in Dholuo. It literally means 'for what' and possibly derives phonologically from the sequence ne ang'o (for what). Often it is regarded as the equivalent of the English word 'why'. Like ok and

¹ The situation is a bit more complex because some of the morphemes have only a tonal or even zero realization.

kawongo, it is usually placed in various sentential positions, as can be illustrated by the following examples:

- (3a) Otieno loso kom kawuono nang'o
 NM make-IMP chair today why
 'Why is Otieno making a chair today?'
- (3b) Nang'o Otieno loso kom kawuono?
- (3c)? Otieno nang'o loso kom kawuono?

1.3.4. PASSIVIZATION

Passive constructions in Dholuo are often of the so called agentless type. The process of passive-formation in Dholuo involves the prefixation of either i- or o- plus corresponding tonal modifications, (depending on the aspectual status of the construction, i.e. whether imperfective or perfective, respectively) to the verb root as in the sentences iyang'o diel 'a goat (diel) is being skinned' and oyang' diel 'a goat has been skinned'. However, there are also cases in which passivization involves, among other things, varying the positions of the noun phrases in a sentence, e.g.

- (4a) Jochan kendo mon matin
 People-of-poverty marry women rel-few
 'The poor marry few women.'
- (4b) Mon matiin ikendo gi jochan
 PASS-marry by
 Few women are married by the poor.'
 (It is the poor who marry few women)

1.3.5. Q-ADJECTIVE PLACEMENT

The phrase bedo go 'to be with' is used in Dholuo to mean 'to have'. It is usually realized on the surface as -n gi after pronominal forms, e.g. an gi, in gi, en gi 'I have, you have, he has', respectively. When the third person subject² is given in a nominal form, bedo go is realized as ni gi, e.g. Otieno ni gi pesa 'Otieno has money'. In sentences where a form of bedo go is the main verb, an adjective of quantity in the object noun phrase can be realized in the place of bedo to form a paraphrase of the sentence which has a form of bedo in it, e.g. cf. (5a) and (5b).

² The terms Subj(ect) and Obj(ect) will be used here tentatively in their traditional senses until we replace them with more appropriate terms for Dholuo grammar (see chapter 3).

- (5a) Owino ni gi dhok ma-tin NM be with cows rel-few 'Owino has few cows.'
- (5b) Owino tin gi dhok

Since, as we shall see later, Dholuo attributive adjectives (e.g. matin) are, strictly speaking, relative clauses, this variable placement of quantity adjectives in Dholuo could be accounted for in TG using a raising T-rule.

1.3.6. DATIVE MOVEMENT

Dative Movement is a TG term used to describe the common phenomenon in which the direct and indirect objects of a sentence alternate in their occupation of the immediately postverbal position. Examples (6a) and (6b) illustrate this paraphrase relationship.

- (6a) Ng'ato kelo buk ne japuonj
 Someone bring-IMP book to teacher
 'Someone is bringing a book to the teacher.'
- (6b) Ng'ato kelo ne japuonj buk

1.3.7. TOPICALIZATION

In TG, the process of topicalization involves the placing of a non-subject noun phrase in the preverbal position of a non-cleft sentence. This phenomenon is common in Dholuo and will be exemplified at this initial stage only by the paraphrase relationship between (7a) and (7b).

- (7a) Jodongo dwaro bul elders want-IMP drum 'The elders want a/the drum.'3
- (7b) Bul jodongo dwaro

1.3.8. CLEFT CONSTRUCTIONS

Cleft constructions are constructions in which a unified phrase in one sentence is apparently 'split up' in another sentence which is the former's paraphrase. Sentences (8a) and (8b) below form a pair of constructions.

(8a) Nyathi dwaro rech child want fish 'The child wants fish.'

³ Dholuo does not have articles and we shall henceforth avoid having to write a/the in our translations by using just one article, depending on our understanding of the possible context for any given construction.

(8b) Rech e ma nyathi dwaro

Note that in these two sentences, the VP dwaro rech in (8a) is 'split up' in (8b) in which rech has been placed in sentence-initial position.

The constituent-order phenomena so far mentioned in this section do not exhaust the full list of what can be found in Dholuo concerning constituent ordering. However, they should be enough to show that Dholuo has enough constituent-order problems to warrant a special study. Although some more ordering problems will be introduced in the main body of the study, it must be made clear here that there is no way by which one could be sure to have exhausted all the relevant data on this kind of phenomenon. Sentence production is a creative process and what counts as variable constituent order is to some extent a matter of both the scholar's view and the nature of one's theoretical framework. We shall, therefore, use only enough data here to show that a non-transformational account of Dholuo word order is possible given the descriptive apparatus of FG, including the necessary modifications suggested in chapter 3.

1.4. REVIEW OF THE LITERATURE

1.4.1 THE LITERATURE ON DHOLUO GRAMMAR

Most of the books written on Dholuo grammar have been of a pedagogical nature. They are usually grammar books written for the non-native speaker who wants to acquire a working knowledge of the language. In this group one finds books such as An Elementary Luo Grammar (Stafford 1967), Dholuo Without Tears (Malo 1952), and Elementary Lessons in Dholuo (Huntingford 1959), all of which are straightforward prescriptive grammars based on the English grammars of the traditional school.

However, there are a couple of Dholuo studies based on modern theoretical approaches to language description. One important work of this kind is that of Omondi (1982) which examines the whole spectrum of Dholuo syntax within the framework of standard TG theory, especially as presented in Chomsky (1965). A number of the syntactic configurations that will be discussed here are already analysed in a transformational framework in Omondi's book. Although a comparative study is not intended here, it will be interesting to see the relative abilities of our divergent approaches (TG vs

7

FG) to provide a descriptively adequate account of Dholuo grammar, especially constituent ordering.

Other modern descriptions of Dholuo include Odhiambo (1981), which is arguably the most detailed account of Dholuo phonology existing today; Okoth (1977), which complements Odhiambo's work on Dholuo phonology, especially by adding a tonal dimension to it; and Okoth (1982), which attempts to explain morphophonemic processes in Dholuo from the viewpoints of synchrony and diachrony.

In addition to these major studies on Dholuo, there are a number of journal articles and conference papers by various scholars. And it must be acknowledged that some of the most illuminating observations on Dholuo grammar are to be found in broad-based studies, e.g. Tucker and Bryan (1966), which are devoted to the understanding of the whole of the Nilotic language family (sometimes - as in the case of Tucker and Bryan (1966) - covering a wider ground than even Nilotic).

1.4.2. THE THEORETICAL LITERATURE

The whole body of linguistic theory as it is known today has an enormous amount of literature developing, expounding, and applying (not to mention testing) it. Here we are interested only in the core literature of Functional Grammar - the theoretical framework within which this study is carried out.

It is normally difficult to trace the origins of a theory. In general, no theory ever seems really to begin with the person who first crystallizes it into an organized body of knowledge. It is, however, such first attempts at crystallization that are usually regarded as the origin par excellence of a given theory. And so it is with the theory of Functional Grammar. Although the ideas that were later organized to advance the theory can be traced in such earlier studies as Dik (1968) and various studies by the Hallidayan and Prague schools - all of which 'confluenced' into what may be termed the functional stream of linguistic thought, Dik (1978) must be regarded as the work which launched Functional Grammar as a coherent theory of linguistic description. Strictly speaking, some of the contributaries, such as Prague linguistics, can claim some influence on FG only in that they have kept their mainstreams running parallel to the FG course.

Functional Grammar, we can therefore say, was launched by Dik (1978) in the form of a book by the same title as the theory. The book first outlines the major assumptions behind the functional paradigm for the study of language, constrasting it with the formal paradigm of Chomsky's TG. It goes on to outline the methodological principles of FG and ends with a long detailed explication of its descriptive apparatus and theoretical postulates.

Dik (1978) was followed by a number of other studies on FG. The most notable ones include: (a) Seventeen Sentences (Dik 1979), in which the lexicon is made a subset of a larger component of the grammar, called the Fund. Other issues given greater attention here than they received in Dik (1978) are relativization, conjunction, anaphora, and tense and aspect. (b) Studies in Functional Grammar (Dik 1980); in which some chosen issues are discussed in detail. Such issues include predicate formation, term coordination, cleft constructions, and some specific problems in identified languages; (c) Perspectives on Functional Grammar (Hoekstra, Hulst, Moortgat 1981), which like Dik (1980) discusses some specific selected issues in the theory of FG. In addition, it discusses some language-specific problems which tend to present a challenge to the theory in its initial formulation and which demand more explicitness on some of its postulates. It also contains comparative studies showing the relative merits of FG vis-àvis other theories (especially Montague Grammar and Relational Grammar) and vice versa; (d) Advances in Functional Grammar (Dik 1983); which owes its existence to the 13th International Congress on Linguistics (especially the 'Working Group on FG'), contains some of the latest views on Functional Grammar. While staying basically with FG, a number of articles in this volume attempt in various ways to stretch the theory into directions that will increase its descriptive power and make it better equipped to meet its own set goal of typological adequacy (see 1.6.).

1.5. THEORETICAL FRAMEWORK

As we have stated above, the theoretical model for this study is Functional Grammar.

In order to show how FG differs from a transformational theory of syntax, it is necessary first to summarize the relevant postulates of the theory of Transformational Grammar (TG).

According to the 'Aspects model' of syntactic description (Chomsky 1965), the syntactic component of a grammar consists of a base and a transformational component. The base, in turn, consists of a categorial subcomponent and a lexicon. The base, through phrase-structure and lexicalinsertion rules, generates deep structures. Such a deep structure enters the semantic component and receives a semantic interpretation; it is then mapped by transformational rules on to a surface structure, which is then given a phonetic interpretation by the rules of the phonological component.

In general, it is the transformational rules which give TG its unique place in linguistic theory. The transformational rules of TG are structure-changing mapping relations which, through such operations as deletion, substitution, and permutation (or movement), successively derive one phrasemarker from another until the final phrase-marker (representing the surface structure) is reached.

Functional Grammar, on the other hand, attempts to generate sentences⁴ without the use of transformations in the sense of structure-changing operations.

This study is based on the theory of FG as contained in the major publications between Functional Grammar (Dik 1978) and Advances in Functional Grammar (Dik 1983).

The basic theoretical and methodological tenets of FG are summarized by Hoekstra (1981:3) as follows:

FG is an eclectic model. With Relational Grammar it shares the conviction that generalizations within and across languages can be captured only in terms of primitive relations like subject and object, whereas these are taken as derivative in generative grammar. In another fundamental respect, it is related to Fillmore's case theory, in that it is assumed that semantic functions are needed as independent notions in order to describe the syntactic structure and the ultimate expressions. With FG, then, syntax is not regarded as an autonomous system, but as a system based on semantics. This view of grammar contrasts with the autonomy thesis defended within generative grammar. Other features of FG can be traced back to the Prague School of linguistics and the pragmatic theory of the Oxford School in philosophy (Austin and Searle etc.).

In spite of its already wide acceptance among linguists, FG is a relatively young theory; and it is only proper that a study based on it should have a

⁴ In theory, FG accounts for more than just sentences. For the (generative) scope of FG, see 1.5.3..

detailed outline of its basic principles. Such an outline is attempted below in what will form the rest of this section.

1.5.1. METHODOLOGICAL PRINCIPLES OF FG

FG approaches the description of natural language from a functional point of view. In this view, 'a natural language is first and foremost regarded as an instrument of social interaction by means of which human beings can communicate with each other and thus influence each other's mental and practical activities' (Dik 1980:1). Unlike in the transformational model in which linguistic theory is concerned with linguistic competence - the individual's ability to generate and understand well-formed sentences of his language - in the functional view 'linguistic theory is concerned with the role language plays in communicative competence and in the actual implementation of this competence in social interaction' (ibid.). By 'communicative competence', Dik refers to 'the ability which enables human beings to carry on social interaction with each other' (ibid.).

As far as possible, FG tries not to study the system of language in abstraction from the use of language. In this respect, too, FG differs fundamentally from TG, which emphasizes the study of the system of language (competence). This point is emphasized by Dik (1983:4f) in his statement that 'a functional approach to language is not interested in langue when this langue cannot be used to explain parole; it is not interested in competence when this competence tells us little or nothing about performance'.

The relationship between syntax, semantics, and pragmatics in FG is explained by Dik (1980:2) as follows:

(...) the functional approach to language regards pragmatics as the allencompassing framework within which semantics and syntax must be
studied. It regards semantics as subservient to pragmatics, and syntax as
subservient to semantics. Syntax is there in order to allow for the
construction of formal structures by means of which complex meanings can
be expressed; and complex meanings are there for people to be able to
communicate with each other in subtle and differentiated ways.

A functional grammar is required to conform to standards of adequacy of the type formulated by Chomsky (e.g. 1965), especially descriptive adequacy. With respect to criteria which may be used to evaluate different grammars in the FG framework, i.e. with respect to explanatory adequacy, FG observes the following adequacy requirements: (i) 'pragmatic adequacy - a requirement that a functional grammar ought to reveal those properties of linguistic expressions which are relevant to the manner in which they are used, and to do this in such a way that they can be related to a description of the rules governing verbal interaction' (Dik 1978:6); (ii) 'psychological adequacy - a requirement that a grammar should not be incompatible with strongly validated psychological hypotheses about language processing' (ibid.: 7); (iii) typological adequacy - a requirement which is aimed at a theory of language rather than an individual grammar: it demands that a theory of language 'should be capable of providing grammars for typologically quite different languages, while at the same time accounting for the similarities and differences between these languages' (ibid.: 8). Emphasis is in order here on the fact that only (i) and (ii) above apply to a particular grammar while (iii) applies to theories of Grammar such as FG and TG.

The generative capacity of FG is constrained in the following ways: (i) It uses no transformations in the sense of structure-changing rules. In general, Dik (ibid.: 10) explains, 'FG does not exclude structure-sensitive operations, as long as they are not structure-changing'. The only type of structure change allowed by FG is 'the deletion of variables under specified conditions' (ibid.: 11); (ii) FG makes use of no filtering devices, that is, at no stage does FG (as is common in TG) allow a grammar to generate structures which cannot be considered well-formed at any level of representation only to filter them out later; (iii) FG allows no language-independent concepts in the analysis of lexical items. This constraint is explained by Dik (ibid.: 12) as follows:

(...) even at the deepest level, constructions in FG are built up from predicates which occur as lexical items of the language. There is no analysis of lexical items in terms of purported 'language-independent' concepts, and there are no predicates in the underlying representations defined by FG for linguistic expressions which are not, in some form or other, expressed in the linguistic expressions of the language being described (...).

1.5.2. FUNCTIONS AND CATEGORIES IN FG

FG considers both functional and categorial statements necessary in the description of language. In general, 'categorial statements specify the internal properties of constituents, while functional statements specify the relational properties of constituents with respect to the constructions in

which they occur' (Dik 1978:13). FG makes use of three different functional relations, namely SEMANTIC FUNCTIONS (e.g. Agent, Goal, Recipient, etc.), SYNTACTIC FUNCTIONS (Subject and Object), and PRAGMATIC FUNCTIONS (Theme, Topic Focus, Tail). Dik (ibid.: 13) defines the differences between these three levels of functions as follows:

SEMANTIC FUNCTIONS specify the roles which the referents of the terms involved play within the 'state of affairs' designated by the predication in which they occur.

SYNTACTIC FUNCTIONS specify the perspective from which that state of

affairs is presented in the linguistic expression.

PRAGMATIC FUNCTIONS specify the informational status of the constituents within the wider communicative setting in which they occur. (Words capitalized by us).

Functions from each of the three functional levels determine both the form and the semantic content of every linguistic expression. As Dik (ibid.: 14) puts it, 'both the form and the semantic content of linguistic expressions may vary according to different function-assignments made to their constituents on each of the three levels of function.'

1.5.3. THE SCOPE OF FG

In theory, FG is intended to account for 'any type of linguistic expression, to the extent that the internal structure of that expression is governed by grammatical rules' (ibid.: 15). The set of linguistic structures covered by FG is termed 'the set of 'independent linguistic expressions', where an independent linguistic expression is defined as if one which is in no way dependent on its preceding or following context' (op. cit.).

Although there is a clear sense in which linguistic expressions can be independent, it is probably worth noting that this 'independence' ought to be understood within the reservations expressed by Lyons (1968:172f), especially with regard to anaphoric expressions and possibly some other devices used to provide cohesion in a text, written or verbal.

1.5.4. PREDICATIONS

An FG account of a linguistic expression begins with the construction of a nuclear predication, i.e. with 'the application of a predicate to an appropriate number of terms functioning as arguments of that predicate' (Dik 1978:15).

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The construction of a nuclear predication and the theoretical devices involved are explicated by Dik (ibid.) as follows:

Terms are expressions with referential potential, i.e., expressions which can be used to refer to entities in some world; predicates designate properties of, or relations between such entities. A nuclear predication is arrived at through the insertion of appropriate terms into the argument slots of the predicate.

1.5.5. EXTENDING A NUCLEAR PREDICATION

Any nuclear predication, constructed by the procedure described above, can be extended by means of 'satellites' 'which specify further properties of the nuclear state of affairs as a whole' (ibid.: 17).

1.5.6. ASSIGNMENT OF SYNTACTIC AND PRAGMATIC FUNCTIONS

Predications, nuclear or extended, can end up as surface linguistic expressions of quite different forms, in terms of word order and/or morphology. These differences are accounted for in FG as the consequence of the assignment of two further functions in addition to the semantic functions already present in the predication itself. The two functions are syntactic and pragmatic functions. According to Dik (ibid.: 18), 'These functional specifications are formalised as assignments, i.e., they are expressed in rules which add functions to the components of predications, subject to certain conditions'.

1.5.7. EXPRESSION RULES

The final shape of linguistic expressions is determined by 'expression rules'. According to Dik (ibid.: 20), 'The expression rules determine the way in which functional structures (...) are mapped onto the syntactic structures of linguistic expressions'. He further identifies the following aspects of syntactic expression as being within the domain of expression rules:

- the form in which terms are realised, in particular by (a) case marking and (b) adpositions, i.e. prepositions and postpositions;
- the form in which the predicate itself is realised, in particular (a) voice difference in the verb, (b) auxiliary elements, and (c) agreement and crossreference;
- (iii) the order of constituents;
- (iv) stress-assignment and intonation. (Dik 1978:20)

1.5.8. THE ORDER OF CONSTITUENTS

Of the aspects of syntactic expression mentioned above, 'the order of constituents' is the most crucial for this study. It is, therefore, appropriate that we say a little more about it, even at this introductory stage.

The underlying predications of linguistic expressions are regarded in FG as 'constructions in which no linear order has been defined over the constituents' (Dik 1980:19). To arrive at the actual linear order of linguistic expressions, we make use of rules and principles 'which give a relative order to previously unordered sets of constituents' (Dik 1980:19f). As has been pointed out above (1.5.7.), these rules and principles belong to the expression component of the grammar in FG. We shall identify the necessary rules and principles in the course of this study according to the requirements of our data and analysis.

All the principles and descriptive apparatus of FG outlined above will become clearer when we see their application to concrete Dholuo data in chapters 3 and 4. I shall, especially in chapter 3, also discuss the necessary modifications required for the theory to account for Dholuo grammar. I will attempt to modify the theory only in such a way that our description does not go out of the broad parameters of the functional paradigm.

1.6. HYPOTHESIS TO BE TESTED

The hypothesis to be tested in this study is that given the methodological principles and descriptive apparatus of FG, it is possible to provide a descriptively adequate account of constituent-order in a language such as Dholuo, which has a multiplicity of constituent-order variations, without having to resort to the use of transformational rules (in the sense of structure-changing mapping relations).

As we have suggested earlier, constituent-order variations and the discontinuous constituents associated with them provide the fundamental justification for the use of transformations in language description. Thus, if it can be demonstrated that one does not need T-rules to account adequately for such phenomena, a significant step will have been made towards proving that T-rules are mere methodological artefacts of TG and not necessary components of any descriptively adequate grammar (in the sense of Chomsky, e.g. 1965:27).

It is hoped that by its strategy of approaching the description of language from three levels of function (semantic, syntactic, and pragmatic), an FG account of Dholuo grammar will reveal properties of the language which may have been hidden to us due to the limitations put on our perception by theoretical models such as TG, which rule out pragmatic considerations in the description of a language.

1.7. METHODOLOGY

The linguistic expressions used as data in this study have been chosen on the basis of their relevance to the issues discussed in the study. The representativeness of the illustrative material in each case depends not on the quantity of data, since the number of sentences that can be produced on the basis of each generalization is indefinite (if not infinite), but on their illustrative appropriateness for the regularity in question. Some expressions were considered appropriate either because they represent a pattern to be captured by a generalization or because they show what does not happen in the grammar of Dholuo.

In obtaining such data the writer relied substantially on his intuitions as a native speaker of Dholuo, and the intuitions of other native speakers were consulted mainly in cases that were not obviously grammatical or acceptable. In such cases at least ten other native speakers were individually asked to say whether they thought the expression or expressions in question were either definitely correct, not so correct but acceptable, or definitely incorrect. In this evaluation, the terms 'correct' and 'incorrect' were used to correspond, respectively, to the more scientific terms 'well-formed' and 'ill-formed'.

Quite often the writer just engaged in a participant observer activity and noted whatever relevant material he identified, coming out unelicited from fellow native speakers. Any expressions collected in this manner that sounded doubtful to the writer were also put through the evaluation test as described above.

The corpus of data acquired in the various ways described above was then analysed as follows. Procedurally, each set problem was tackled by first using only enough data to formulate a hypothesis about the necessary generalization to be made. Then as much data as we deemed necessary was considered to test the hypothesis. This led to either a confirmation or a

refutation of the hypothesis in question. In the latter case, the refuted generalization was reformulated. This procedure was repeated until we came to a hypothesis that looked satisfactory in the light of all the relevant data considered.

In some cases, solutions to specific problems were found inadequate only when related problems were dealt with at a later stage. In such cases, attempts were made to resolve the apparent conflict between solutions (to related problems) either by adopting one hypothesis in favour of another or by postulating a totally new hypothesis which seemed better suited to account for observations without creating any conflicts in the study taken as a whole.

Since there was no existing general account of Dholuo in the functional paradigm, we had to start with a lot of work which did not relate directly to the central problem of this study. First, we devoted the whole of chapter 2 to identifying and defining the grammatical and functional categories of Dholuo in a fairly pre-theoretical way, and we, in the same way, worked out the clause patterns of Dholuo. Then we devoted chapter 3 to the problem of fitting Dholuo grammar into the functional model as defined in our theoretical framework. This helped us to see not only what really counted as relevant data for our study, but, even more important, what modifications were required in the FG Theory in order to accommodate Dholuo grammar. It was only when these issues looked fairly clear that we were able (in chapter 4) to deal more directly and, we hope, satisfactorily with the problem of constituent order in Dholuo.

1.8. ORTHOGRAPHIC CONVENTIONS

The linguistic elements discussed in this work are above the phonemical level. An exhaustive account of Dholuo phonology is not required for the achievement of the objectives of the study. However, since all the examples from Dholuo are written in the conventional Dholuo orthography, it is in order to give the reader some idea of the relationship between the phonological and the writing systems of the language.

This summary of Dholuo phonemes and the related orthographic symbols draws generously on Okoth (1982:2.11 - 2.12).

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1.8.1. CONSONANTS

Dholuo has altogether twenty six consonants, including two semivowels and five nasal-stop compounds. There is a one-to-one correspondence between these consonant sounds and their orthographic symbols. This makes it easy to interpret the consonantal properties of any written word.

However, some attention needs to be paid to the interpretation of digraphs. Dholuo orthography makes use of ten digraphs to represent some fricatives, the palato-alveolar affricate, some nasals, and all the nasal-stop compounds.

The important thing to remember about the digraphs is that each of them represents only one phoneme and not a cluster of phonemes. Thus, for example, the digraph **dh** in the word **Dholuo** represents only one sound - the voiced interdental fricative [o]. Those who want to read the word correctly must resist the temptation to produce an aspirated [d]. They should produce a sound similar to the sound of **th** in the English word **this** or **that**. Similarly, the digraph **ny** - as in the word **nyako** 'girl' - represents only one consonant sound, the palatal nasal [n]. It is the same sound as the one represented by **gn** in the French word **cognac**.

Foreigners usually find Dholuo nasal-stop compounds hard to pronounce in a native-like manner. Take, for instance, the compound mb, as in mbaka 'conversation'. To produce a native-like quality of mb, the lips should be brought together without muscular tension and kept together until the release-stage for b. The nasal quality must characterize the whole of the compound segment, although the final release is mainly through the mouth. In principle the same procedure can be used to produce all the nasal-stop compounds of Dholuo, the only variation being in the point of articulation.

Diacritics are generally avoided in the writing of Dholuo. The one significant exception is the orthographic representation of the velar nasal [ŋ], in which an apostrophe is added to the diagraph used to write the same sound in English. This gives us the symbol ng'. Without the apostrophe the digraph ng represents a velar nasal-stop compound. Thus one distinguishes between kongo /kongo/ 'to hold delicately' and kong'o /kongo/ 'beer'.

The following, then, is a list of Dholuo consonants in IPA and their orthographic representations.

PHONEME	ORTHOGRA- PHIC REP.	EXAMPLE	
p	P,p	Pap /pap/	'field'
- P	B,b	Bat /bat/	'arm'
w	W,w	Wat /wat/	'relative (n)'
m m	M,m	Muma /muma/	'oath'
f	F,f	Fuwo/fuwo/	'foolishness'
θ	Th,th	Tho /θo/	'death'
ð	Dh,dh	Madho /maðo/	'to drink (vt)'
t	T,t	Temo /temo/	'to try'
t	D,d	Sudo /sudo/	'to move'
	R,r	Paro /paro/	'to think'
<u>r</u>	L,1	Lal /lal/	'to be lost'
	S,s	Sero/sero/	'to seduce'
s	N,n	Bano /bano/	'to fold'
n n	Ch,ch	Chik/tʃik/	'law'
tʃ		Jok /d3ok/	'to be bored'
d3	J.j	Yamo /jamo/	'wind'
j	Y,y	Nyinyo /pipo/	'metal'
n	Ny,ny	Kelo /kelo/	'to bring'
k	K,k	Gero /gero/	'to build'
g	G,g	Ng'ato /ŋato/	'someone'
ŋ	Ng',ng'	Hono /hono/	'miracle'
<u>h</u> .	H,h	Mbaka /mbaka/	'conversation'
mb	Mb,mb		'to pinch'
nð	Ndh,ndh	Ndhuno /nðuno/	'tobacco'
nd	Nd,nd	Ndawa /ndawa/	
n3	Nj,nj	Njaga /nʒaga/	'opium'
ŋg	Ng,ng	Nengo /nengo/	'price'

1.8.2. **VOWELS**

The phonemic inventory of Dholuo vowels consists of the single low, front vowel /a/ and four pairs of other vowels. Each of the four pairs has a [+ Advanced Tongue Root] vowel and its [- Advanced Tongue Root] counterpart.

Dholuo orthography underdifferentiates these vowel phonemes. The whole system uses only five symbols, one for /a/ and one for each of the four pairs. This creates many homographs among words distinguished only on the basis

of the tongue-root positions of their vowels. For instance, in isolation one cannot tell whether the orthographic word Pith represents /piθ/ 'hill' or /pɪθ/ 'wealth (having many cattle, goats, etc.)'. However, in normal reading (reading in context) such homographs do not seem to create any problems to Dholuo speakers.

One clear advantage of this system is that it accommodates in reading and writing both personal and regional differences based on vowel tongue-root positions, which are rampant, especially where there are no minimal pairs.

The following is the list of Dholuo vowel phonemes in IPA and the corresponding orthographic representations.

PHONEME	ORTHOGRA- PHIC REP.	EXAMPLE	
а	A,a	An /an/	'I'
e, ε	E, e	Bedo /bedo/, /bɛdɔ/	'to sit/be' 'to open, esp. the mouth (derogatory)'
i, I	Ī, i	Pith /piθ/, /pιθ/	'hill' 'wealth'
0, 0	О, о	Poro/poro/, /poro/	'to imitate' 'to spray all over (esp.sth. solid)'
u, u	U, u	Bur /bur/, /bur/	'hole' 'boil(n.)'

1.8.3. TONES

Although Dholuo is a tone language, tones are not represented in the orthography. This leads to some lexical ambiguity where minimal pairs are involved. For example, in isolation, the orthographic word kich /kitʃ/ is indeterminate between the low-tone word kich 'orphan' and the high-tone word kich 'bee'. Fortunately, tone-based minimal pairs are not very many in Dholuo, and the existing ones rarely if ever belong to the same semantic field. Consequently, native speakers read Dholuo very fluently when the words occur in contexts, much so that non-linguist speakers tend to believe that Dholuo is written exactly the way it is spoken. Moreover, as I mentioned in connection with vowel quality, the absence of tone marks in written Dholuo allows a wide range of readers to give a written text their

idiosyncratic or regional tonal features as they read. For this reason, dialectal differences based on tone do not impede the reading of Dholuo.

Since tone does not seem to have a role in determining Dholuo constituent order, I have not marked tone in my examples, except in the few cases where the point being made concerns tone. Occasionally, I give examples in which the aspectual tone of some key word is important for the point being made. In such cases the significance of the tone is mentioned, usually as part of the gloss. The pertinent tones are identified in section 2.2.2..

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2. AN OUTLINE OF DHOLUO GRAMMAR

2.1. INTRODUCTION

It is difficult, and probably erroneous, to try to provide an analysis of a particular aspect of the grammar of a language without first showing how it fits into the general fabric of that grammar.

FG makes use of both grammatical (or syntactic) categories and functions. Such categories and functions must be identified and defined in a specific way for the language under study. In addition, FG accounts make significant use of the observable surface functional patterns of a given language. Again, these patterns need to be identified and clearly stated before we can start discussing such less obvious phenomena as underlying representations.

The specific objectives of this chapter are, therefore, (i) to provide a fairly theory-independent account of Dholuo grammatical categories, and (ii) to determine, in traditional terms, the major clause patterns of Dholuo and their occurrence in the various sentence types.

This chapter thus contributes to the set goal of our study by outlining the possible grammatical forms and functions that the various constituents of Dholuo sentences take or bear in a given environment.

2.2. GRAMMATICAL CATEGORIES

The grammatical categories of Dholuo have been discussed quite comprehensively in other works on Dholuo grammar (e.g. Omondi 1982:31-83). In this section we shall discuss only those categories whose roles in the grammar have a key place in our analysis.

2.2.1. NOUNS AND NOUN PHRASES

The reason we have chosen to discuss Dholuo nouns and noun phrases together is that, as we shall see below, their distributional properties are more or less similar. But before we go into this, let us first have a clear idea of what we mean by noun phrases.

According to Stockwell (1977:55), noun phrases are 'clusters of words in surface strings of which the nuclei are nouns'. This definition needs to be qualified by stating that the satellites around the noun nucleus may be null elements so as to account for the fact that some nouns, especially proper

nouns, are capable of standing alone in a phrasal position. In fact, as we have pointed out above, in a language such as Dholuo all nouns, common or proper, are capable of filling phrasal positions without modification or determination. Thus, for example, while in English a sentence such as (1) is ill-formed, its Dholuo equivalent (2) is a perfectly well-formed sentence.

- (1) *I saw leader
- (2) Naneno Jatelo
 PST-I- see -PF leader
 'I saw the leader.'

Where satellites occur around the noun nucleus in a noun phrase, they are usually determiners which have various kinds of semantic information. The kinds of semantic information usually borne by such determiners include:

2.2.1.1. DEFINITENESS

When common knowledge per se is the basis of definiteness, there is no grammatical or lexical marker for it in Dholuo. Thus, for example, in a community where there is no teacher, when one says:

(3) Wadwaro japuonj 3PI-want-IMP teacher 'We want a teacher.'

The referent of japuonj is not specific. However, when some parents go to a particular teacher's house and say:

(3) Wadwaro japuonj

it is normally understood to mean the teacher who lives in that house; and the referent of japuonj in this case is understood to be specific.

Definiteness based on previous mention is usually marked by the demonstrative morphemes no and cha (and their plural forms go and ka, respectively). Both no and cha correspond to "that" in English - the former referring to something proximate to the Second Person but not to the First Person, while the latter refers to something not proximate to either the First or Second Person. (Dholuo demonstratives will be discussed in detail later in this section.)

For instance, when referring to an affair which has been mentioned a short while ago, a speaker may say to his interlocutor

(4) Ok adwar winjo wach no kendo Neg Isg-want hear matter that again 'I don't want to hear that matter again.'

Similarly, when referring to something that was discussed some time ago, one may say

(5) Wach cha norumo nango?
matter that Past-end-PF how
'How did that matter end?'

In general, these demonstratives are used to indicate (with respect to definiteness) not just previous mention, but the whole phenomenon of previous experience. The following sentences will further illustrate this point.

- (6) Ngat cha newuoyo nade?

 Person that Past-speak how

 'How was that man talking?'
- (7) Paro no chanda ahinya
 Thought that disturb-imp-me very much
 'That thought disturbs me very much.'
- (8) Mon go ne onge gi chiemo women those Past not-be-with food 'Those women did not have food.'
- (9) Yawuoyi ka ne dwaro kwinyowa
 Boys those Past want provoke- us
 'Those boys wanted to provoke us.'

The choice between no/go or cha/ka is based on when the affair, event, or object referred to was mentioned or experienced prior to the time at which the referring expression is uttered. Generally, no/go is used when the previously mentioned matter or experience has not been followed by any other that can be perceived as the referent of the demonstrative. If, on the other hand, the demonstrative is intended to refer to something already succeeded by one or more utterances or experiences that could qualify as referent or referents of the demonstrative, then cha/ka is used.

Although, as we pointed out above, the contrast between definite and indefinite (or specific and nonspecific) referents is usually not expressed overtly, the partitive moro 'some, a certain' (pl. moko) is often used as an indefinite article, where it is considered appropriate to do so. This point is illustrated by sentences such as

- (10a) Askari biro ka soldier/administrative police officer come-IMP here 'An askari is coming here.'
- (10b) Askari moro biro ka certain

'A certain askari is coming here.'

- (11a) Nyithindo tugo e nam children play-IMP loc. lake '(Some) Children are playing in the lake.'
- (11b) Nyithindo moko tugo e nam some 'Some children are playing in the lake.'

In sentences such as (10) and (11), there is no significant semantic difference between the a-constructions and their b-counterparts if the former are understood only in their indefinite reading. However, since the a-constructions do not necessarily imply the existence of some other member or members in the class of the referent of the noun phrase as is the case in the b-constructions, the former could also have a definite-reference reading, carrying the idea of wholeness or totality. To make this point clearer, consider the following sentences.

(12) Nyithinda odhi sikul children-mine go-PF school 'My children have gone to school.'

(13) Nyithinda moko odhi sikul children-mine some go-PF school 'Some of my children have gone to school.'

While (12) is ambiguous between 'some of my children have gone to school' and 'all my children have gone to school', (13) has only the former interpretation.

Similarly, if a mother says

(14) Nyathina ni Nairobi child-mine be-Pres (in) Nairobi 'My child is in Nairobi.'

we cannot tell whether she has only one child - the one in Nairobi - or she has more than one child but only one is in Nairobi. This problem is not there when the statement is (15).

a nul se I expelli senset a fe i men se a se sessima

(15) Nyathina moro ni Nairobi
child-mine (a) certain be-Pres (in) Nairobi
'A certain child of mine is in Nairobi.' (One of my children is in Nairobi.)

Thus, if we met a child crying and he or she said to us

(16) Minwa moro otho mother-mine some die-PF 'Some mother of mine is dead.'

we would conclude that the dead woman was either his mother's co-wife (i.e. his father was a polygamist) or that she was some woman in his extended family that he ought to call a mother, but we would not infer from (16) that the child's real (biological) mother, who can only be one, was dead. In the latter case, the child would say

(17) Minwa otho
'My mother is dead.'

2.2.1.2. QUANTIFICATION

Like other languages, Dholuo has quantifiers in the form of cardinal numbers, ordinals, or adjectives of relative quantity. In a noun phrase, the head noun comes before the quantifier as in the following examples.

- (18) Adwaro diek ariyo
 lsg.-want goats two (Quant.)
 I want two goats.'
- (19) Koth chwe e dwe mar abich rain rain-IMP Prep. month of five It rains in the fifth month (May).'
- (20) Ruoth nigi rombe mathoth Chief be-with sheep rel-many The chief has many sheep.'

Quantification by a cardinal is straightforward once we have a number such as ariyo 'two' in (18). So is quantification by adjectives of relative quantity, e.g. mathoth 'many' in (20), whose morphological constitution and other relevant properties will be discussed together with the other relative constructions (clauses) in 2.2.1.3.. Dholuo ordinals, however, require further explanation. In general, the number of ordinals a language has corresponds one-to-one to the number of its cardinals. Nevertheless languages differ in how they form their ordinals morphologically. In Dholuo, the ordinal

corresponding to 'first' in English is derived from the verb **kwongo** 'to come first' by prefixing the relativizing morpheme ma- to a stem consisting of **kwongo** and the perfective marker o-. Thus $\mathbf{ma} + \mathbf{o} + \mathbf{kwongo}$ gives us the word **mokwongo** 'first' after a vowel deletion or assimilation process, for which the interested reader is referred to Odhiambo (1981) and/or Okoth (1977, 1982). The word for 'last' is similarly derived from the verb **gik** 'to be last, to end'. Thus $\mathbf{ma} + \mathbf{o} + \mathbf{gik}$ gives us the word **mogik** 'last'. All the other ordinals are phrasal words consisting of the word **mar** 'of' and a cardinal, e.g. **mar ariyo** (of two) 'second', **mar ochiko** (of nine) 'ninth' **mar mia achiel** (of a hundred) 'one hundredth', etc.

2.2.1.3. RELATIVE CLAUSES

Concerning the function and nature of a relative clause, Stockwell (1977:59) makes the following revealing statement:

When the reference of a noun cannot be clarified satisfactorily by any determiner, then languages use a device known as the relative clause, which is a sentence embedded into a noun phrase, and marked in some way as subordinate to the particular noun for which clarity of reference is sought.

Now, linguists generally distinguish between two types of relative clauses, namely restrictive and non-restrictive relative clauses. These two types of relative clause are exemplified in sentences (21) and (22), respectively.

- (21) Ruoth ma onge dhako rach chief/king rel be-without woman bad A chief who does not have a wife is bad.'
- (22) Kata Otieno, ma onge dhako, bende dwaro bedo ruoth

 Even Otieno rel- be-without woman also want to-be chief/king
 'Even Otieno, who does not have a wife, wants to become the chief.'

In each of the above sentences ma onge dhako is the relative clause. However, in (21) it is restrictive, i.e. states the necessary condition for being the referent of a noun, while in (22) it is non-restrictive and simply provides additional information about the noun. In stipulating the reference of a noun, only restrictive relative clauses are relevant.

In Dholuo, a relative clause is introduced by the morpheme ma/ma-. The morpheme is usually free but often occurs as a clitic, especially in one-word predicates (e.g. diel matin 'a small goat', nyako maber 'a good/beautiful girl'), and generally loses its vowel when attached (as a clitic) to a vowel-

initial word (e.g. mofuwo 'foolish' ma + ofuwo; makelo 'which I have brought' ma + akelo, etc.).

More examples of restrictive relative clauses can be seen in the following phrases:

- (23) Ngat marach person rel-bad 'a bad man'
- (24) Ring'o ma jaduong' ohero meat rel elder like-PF 'the meat which the elder likes'
- (25) Nyathi mongèyo jonyuolne child rel-know parents- its 'a child who know its parents'
- (26) Jatelo ma wiye rach leader rel head-his bad 'a bad-headed (acting like a mad man) leader'
- (27) Chuo mochayo mondgi men rel-despise wives-theirs 'men who despise their wives'
- (28) Jodongo madwaro telo elders rel-want leadership 'elders who want leadership'
- (29) Paka ma madho chak cat rel drink-IMP milk 'a cat (which is) drinking milk'
- (30) Rech ma jalupo oyiero kende fish rel fisherman choose-PF alone 'the fish which the fisherman has chosen himself (personally)'

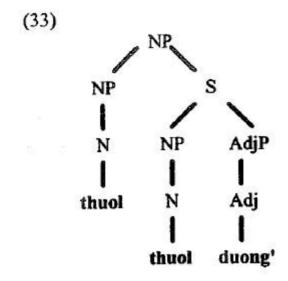
Single-word relative constructions such as **marach** in (23) are technically relative clauses although they are traditionally considered to be adjectives (e.g. Stafford 1967). Notice that, like the ones consisting of many words, single-word relative clauses are derived from embedded sentences, e.g.

(31) Thuol maduong' snake rel-big 'a big snake (a snake which is big)'

derives from the complex NP (noun phrase)

(32) NP[Thuol S[NP[thuol] AdjP[duong]]]

in which the sentence thuol duong 'snake (is) big' is embedded into an NP which can be represented in a tree diagram as in (33) below.



The apparent oddity observed in the branching of a sentence into a noun phrase and an adjective phrase is explained by the fact that Dholuo, as we shall see later on in this section, allows verbless predicates.

2.2.1.4. ORDER OF DETERMINERS

Normally, in one Dholuo NP, we can have the head noun, a partitive article, a quantifier, a demonstrative and one or more relative clauses. Below is a possible NP consisting of a head noun and all these determiners.

(34) Nyithindo moko ariyo matindo mohero tugo ka

1 2 3 4 5 6

children some two rel-little playing those
'Those two little children who like playing' (The idea carried by the partitive here cannot be rendered into English.)

By permuting the constituents of (34), we can have seven hundred and twenty $(6 \times 5 \times 4 \times 3 \times 2 \times 1)$ potential phrases. If we fix the position of the head noun and do not allow any determiner to come before it, as Dholuo grammar requires, we reduce the number of potential phrases to one hundred and twenty $(5 \times 4 \times 3 \times 2 \times 1)$ - which include the following:

- (35a) Nyithindo moko ariyo matindo mohero tugo ka
- (35b) Nyithindo ariyo moko matindo mohero tugo ka
- (35c) Nyithindo matindo ariyo moko mohero tugo ka
- ?(35d) Nyithindo mohero tugo moko ariyo matindo ka
- *(35e) Nyithindo ka moko ariyo matindo mohero tugo
- ?(35f) Nyithindo moko matindo ariyo mohero tugo ka
- (35g) Nyithindo ariyo matindo moko mohero tugo ka
- *(35h) Nyithindo ariyo matindo moko ka mohero tugo

- (35i) Nyithindo matindo moko ariyo mohero tugo ka
- ?(35j) Nyithindo matindo mohero tugo moko ariyo ka
- ?(35k) Nyithindo mohero tugo matindo moko ariyo ka

It is noted that the preferred position for the demonstrative is the phrase-final position. In this position, everything occurring before it is supposed to be within the scope of the demonstrative. It is this question of scope which seems to be at the root of intuitions concerning the acceptability of the various permutations. One observes that all the obviously acceptable arrangements have the demonstrative at the end and all the obviously unacceptable ones have it somewhere in the middle of the phrase - not at the end. (The problem with (35k) seems to be based on the scope of matindo, which is apparently shifted to tugo, away from nyithindo.)

In general, the most preferred order seems to be:

(36) HN PA Quan. RW RC Dem. 1 2 3 4 5 6

(where: HN = Head Noun; PA = Partitive Article; Quan.= Quantifier; RW = Relativized word; RC = Relative Clause; Dem. = Demonstrative)

and the most acceptable variations are in positions 2, 3 and 4. The term 'relativized word' has been used here to capture the differences between the single-word relative clause and the type that contains more than one word. Since both of them are technically relative clauses, their positional differences may be explained in terms of the FG principle of LIPOC (language independent preferred order of constituents) which we shall discuss in later chapters.

There is one notable case in which the demonstrative tends to occur immediately after the head noun. This is when the head noun shows time, e.g.

- (37a) Chieng'de ma Yesu oduogo wanamor gilala day-that rel. Jesus return-PF I-P1-Fut-be happy much 'On the day Jesus comes back we shall be exceedingly happy.'
- (37b) Seche ka ma ne wawuoye kodi to niparo time-PL those rel Past 1pl-talk-loc with-you but Past-2sg-think angò?
 what

'But what were you thinking of at the time we were talking?'

In all such cases the demonstrative can be placed at the end of the noun phrase, so that our examples in (37) can be expressed as: (Numbering repeated for ease of reference.)

(37) a') Chieng' ma Yesu oduogo no wanamor gilala.
 b') Seche ma ne wawuoye kodi ka to niparo ang'o?
 (where a = a' and b = b')

2.2.2. **VERBS**

Although it is possible to identify words in Dholuo which can defensibly be called verbs, this class of words (in Dholuo) does not lend itself to general recognition principles of the kind found in statements such as:

In their tactical function, verbs presuppose the presence of participants (noun phrases) which function as subjects and objects of the verb. (Stockwell 1977:38)

This criterion works well for languages such as English, in which there can occur no sentence without a verb. For example, while (38) is a well-formed English sentence (39) and (40) are not because they are verbless.

- (38) Peter works
- (39) *Peter a teacher
- (40) *Peter good

In Dholuo, however, the presence of a verb is not a prerequisite for the well-formedness of a sentence. Thus parallel constructions to (38), (39) and (40) are well-formed in Dholuo, as the following sentences confirm:

- (41) Peter tiyo
 'Peter works.'
- (42) Peter japuonj
 'Peter is a teacher.'
- (43) Peter ber 'Peter is good.'

In this study, two criteria have been applied in a complementary manner to tell whether or not a given word is a verb in Dholuo. The first of these criteria is a general notional one which, in the words of Stockwell (1977:38), can be expressed as follows:

In their cognitive function, verbs are symbols for events (creations, changes of state, processes, actions) for states of affairs, and for speaker intention and attitude (promises, commands, hopes, expectations).

The second criterion, which is based specifically on observations concerning Dholuo morphology, is that verbs are characterized by their ability formally to show aspectual distinctions tonally and/or segmentally.

For example, by the cognitive criterion above one cannot tell in a conclusive manner whether or not the words **fuwo** and **ber** are verbs in sentences (44) and (45), respectively.

- (44) Juma ofuwo Juma is-foolish
- (45) Juma ber Juma is-good

In both cases some kind of state of affairs is expressed, and from the English equivalents one even senses some degree of adjectiveness in the predicative expressions.

But we notice that in (44) the predicate fuwo takes a perfective morpheme, marked by o-, while ber in (45) does not. We note further that fuwo can be tonally marked for imperfective aspect whereas ber remains aspectually neutral, as the following sentences illustrate:

- (46) Juma tinde fúwo

 Juma nowadays becoming-foolish
- (47) *Juma tinde bér

This kind of evidence shows that the two words belong to different classes, one (fuwo) being a verb and the other (ber) an adjective.

The grammatical operators which normally satellite around the verb, although their real scope may be a larger construction (e.g. a clause) include tense, aspect, modality, and negation. We shall briefly look at how some of these operators are realized in Dholuo.

2.2.2.1. TENSE

Basically, tense is a deictic category. As Heine (1980:23) explains:

Deixis relates linguistic messages to the relevant speech contexts. Since speech contexts are defined in terms of place, time and participants, there are three deictic dimensions: space, time and person.

Ignoring the controversies which exist in the definition of tense (which would be material enough for another study), we shall take, as our guiding principle in this discussion, the position of Lyons (1968:305) that:

The essential characteristic of the category of tense is that it relates the time of the action, event or state of affairs referred to in the sentence to the time of utterance (the time of utterance being 'now').

Like other deictic categories, tense is encoded in language both lexically and grammatically. This point is worth noting because there is a tendency among linguists to regard as tense-markers only those linguistic elements which occur as affixes (bound morphemes).

The lexical items which relate linguistic messages in Dholuo to the relevant speech context in terms of time are as follows:

- (a) Nene Remote past
- (b) Nende Near past (within the same day)
- (c) Nyoro Yesterday
- (d) Nyocha The day before yesterday
- (e) Kiny Tomorrow
- (f) Orucha The day after tomorrow
- (g) Kawuono Today (h) Sani - Now
- (i) Ang'/wang'- Near future (within the same day)
- (j) Chieng'- Remote Future

In addition to these, there are idiomatic expressions involving the words a 'to come from' and biro 'to come (to)', for immediate past and immediate future, respectively. Thus, for example, the English sentence 'I've just seen him a while ago' can be rendered in Dholuo as:

(48) A-a nene machiegni
I-come from to-see-him rel-near

and 'I'll see him soon' as:

(49) A - biro nene machiegni I-come to to-see-him rel-near

Moreover, a number of the words in (a) - (j) above have synonymous expressions. For instance, nende is often replaced by a long /a/, as in:

¹ This seems to argue in favour of the localist hypothesis (Lyons 1977:718).

(50) aanene kawuono gokinyi
recent past-I-see-him today in-the-morning
'I saw him today in the morning.'

and sani is, in many contexts, mutually interchangeable with koro, e.g. 'Now John may come' can be expressed in Dholuo either as (51a) or (51b).²

(51a)	John	koro	nyalo	biro
			can/may	come
(51b)	John	sani	nyalo	biro

Sometimes, sani and koro reinforce each other as in (52), which has the same sense as (51a) or (51b).

(52) John koro nyalo biro sani

The question one is faced with here is whether or not the time-markers we have mentioned above can technically be regarded as tense-morphemes.

Even after conceding that tense markers need not be grammaticalized, one still finds it difficult to argue for tense-marking in Dholuo. The multiplicity of lexical items involved is itself suspicious. But even more important is the fact that there are no systematic grammatical contrasts expressed by the time relations lexicalized in this semantic field (cf. Lyons 1968:304). We really have to admit that words such as those listed in (a) - (j) above are only temporal adverbs, more specifically, 'point time' adverbs (cf. Stockwell 1977: 42).

The closely related concept of aspect has a clearer place in Dholuo. However, since Dholuo aspect has been discussed fairly exhaustively in Okoth (1977), we shall not spend much time on it here. Suffice it to say that Dholuo distinguishes (by the use of different tones) between perfective and imperfective aspect as defined by Comrie (1976:16). Thus, for instance, we distinguish between:

(53) 6 - dh!í nàm
3sg - go-Imp lake
'He is going to the lake.'

and

² Sometimes koro has the sense of 'in present circumstances', roughly equivalent to 'how' in the sentence 'Having been told of the company's generous terms of service, he is now willing to accept the job offer.'.

(54) 6 - dhí nàm
- go-PF
'He has gone to the lake'
('= HIGH; !'= DOWN-STEPPED HIGH; '= LOW)

2.2.2.2. NEGATION

There are many lexical items that have a negative sense in Dholuo. A number of these are mentioned at various places in this study. The only one we feel obliged to discuss here is the word ok, roughly equivalent to the English expression 'it is not the case that'- though usually equated (for brevity) to the word 'not'.

The choice to give ok a special treatment here is based on two grounds. First, it can justifiably be regarded as *the* marker of negation in Dholuo. Secondly, and more significantly, is the fact that it is one of the constituents whose ordering problems are dealt with in this study (chapter 4).

Although ok is usually associated with the verbal element in a given construction, its real scope is often the whole predication, as in the sentence:

(55) Ok adwar chiemo
Neg I-want food.'

Here what is negated can be understood as the whole propositional content of the parallel sentence

a was a file. Bare y anas a figure 1964 y sa i a 1965, a

8 0 6

(56) Adwaro chiemo I-want food

and, in this way, it differs from a sentence such as

food Foc rel. Neg I-want
'It is food that I don't want.'

in which the scope of ok is only chiemo, or one like:

(58) Opiyo e ma ok dwar chiemo
Name Foc rel Neg want food
'It is Opiyo who doesn't want food.'

where only Opiyo falls within the scope of ok.

Problems of this nature will be discussed at length when we come to deal with pragmatic functions in Dholuo.

As is the case in many other languages (perhaps in all languages), the surface satellites around the verb include not only markers of tense, aspect, and negation (all of which are scope-bearing elements), but also noun phrases or nominal terms that refer to participants in the event specified by the verb (agents, goals, objects, instruments, and the like). These and other possible constituents of a VP in Dholuo will become clear from the treatment of clause patterns in section 2.3..

2.2.3. ADJECTIVES

The distinction between verbs and adjectives is not clearly defined in linguistics. Outside language-specific considerations of morphological possibilities for word-classification and differentiation, there is only the semantic idea that verbs generally predicate events whereas adjectives generally predicate states (cf. Stockwell 1977:36). But even here there are problems of overlap, for while adjectives have the function, by definition, of predicating states, a number of verbs or words which otherwise behave like verbs are often capable of predicating states. For example, in the sentences

(59a) Dienda olal goat-mine PF- be/get lost 'My goat is lost.'

and

(59b) Dienda echo lal there-is 'There is my goat getting lost.'

the word lal may be regarded either as a verb or an adjective depending on whether we understand it (in a given context) to mean 'to get lost' or 'to be lost'. It does not help to regard the second interpretation as that of a stative verb because, by so doing, we exclude the possibility of having a sentence such as (59b) which expresses a non-stative situation. Of course, this is a case of something that belongs to the grey area between two grammatical categories and is likely to remain controversial for a long time. In this study we take the stand that if a word can predicate a non-stative situation (state of affairs) then it is a verb and not an adjective, even if it also predicates states

in some of its uses.³ Accordingly we shall regard as adjectives those words which predicate only states. Unmodified, Dholuo adjectives can have only a predicative function, e.g.

(60a) Dhiang' ber cow good 'A cow is good'

(60b) Punda rach donkey bad 'A donkey is bad'

(60c) Kwach ger leopard fierce 'A leopard is fierce'

(60d) Dala bor home far 'Home is far away'

The predicative idea is only semantic (and not syntactic) in Dholuo because adjectives, whether predicative or attributive, occur postpositionally. In fact, it can be argued that adjectives qua adjectives exist only in a predicative role. The attributive function is performed by adjectives in the form of minimal or one-word relative clauses in which, as usual, the clitic ma functions as a relativizer, e.g.

(61a) Dhiang' ma - ber cow rel-good 'a cow which (is) good' (a good cow)

(61b) Punda ma-rach
donkey rel-bad
'a donkey which (is) bad' (a bad donkey)

(61c) Kwach ma-ger
leopard rel-fierce
'a leopard which (is) fierce' (a fierce leopard)

(61d) Piny ma-bor⁴
country rel-far
'a country which (is) far (away)' (a far (away) country)

Although elementary grammars (e.g. Stafford 1967) refer to forms like maber as adjectives, I find it more accurate to regard them as relative

³ An argument that seeks to place such a word in two categories (i. e. as both verb and adjective) is also defensible. The two occurrences of the (phonological) word would then be regarded as representing a case of homonymy.

⁴ We have substituted piny for dala in (d) because mabor (as in dala mabor) tends to suggest length rather than distance (between two different places).

clauses, albeit (structurally) minimal ones. By so doing we capture the generalization contained in the observation that the clitic ma is used in all relative clauses in the language. The following sentences exemplify this idea:

- (62a) Yien ma wiye owang' tree rel head-Poss PF-burn 'a tree whose top is burnt'
- (62b) Jaduong' ma ohero pesa
 elder rel PF-like money
 'an elder who likes money'
 (Phonologically, ma + ohero is often realized as mohero.5)

Typologically, this is not an unusual phenomenon, given that even in cases like that of English in which no relativizer appears in attributive constructions (e.g. 'a good man'), such phrases are derived from underlying relative clauses (in this case, 'a man who is good').6

A characteristic feature of predication in Dholuo is that it is direct, making use of no copula. For example, in a sentence such as

(63) Opiyo riek

NM clever

'Opiyo is clever.'

only word-order establishes the relationship between the two words used. Where a nominal and an adjective are involved, the reverse word-order to that of (63) would produce a non-sentence. Thus

(64) * riek Opiyo

is syntactically ill-formed and semantically anomalous. For this reason, nominal predicates - being capable of serving (in the same form) as terms (or arguments) - are identified only by word-order, the inviolable functional pattern being XP, where X is a term (or argument) and P is an adjectival or a nominal predicate. The ability of nouns, especially common ones, to function both as terms and as predicates allows us to have word-order-based minimal pairs such as

⁵ For such phonological processes see Odhiambo (1981) or Okoth (1982).

⁶ This kind of analysis is found in such standard TG texts as Huddleston (1976:101-109).

- (65a) Japuonj jajuok

 Teacher wizard

 'The teacher is a wizard.'
- (65b) Jajuok japuonj wizard teacher 'The wizard is a teacher'

It is the order of constituents, fixed as Participant - Predicate, which determines the semantic reading of such sentences at the level where the constituents are directly dominated by the same node (cf. Katz and Fodor 1964).

A slight complication arises from the fact that personal pronouns seem to be capable of functioning as a copula, giving us sentences like

- (66a) Japuonj en jajuok 3sg 'The teacher is a wizard.'
- (66b) Dhok gin mwandu cattle 3pl wealth 'Cattle are wealth.'
- (66c) Kuo en richo theft sin 'Theft is sin.'
- (66d) Nyithindo gin gweth children blessing 'Children are a blessing.'

The description of such sentences in Dholuo grammar is at the moment rather controversial. As will be argued later in this study, these sentences represent two features of Dholuo grammar, namely (i) the use of nouns and their cognate pronouns in the same sentences to carry pragmatic functions such as Topic, Theme, etc., and (ii) the use of personal pronouns as copulas in the same way as has been observed in related Nilotic languages, e.g. Shilluk (cf. Kohnen 1933) and languages in other families, e.g. Hebrew (cf. Junger 1980). A significantly different view from the one expressed here is that of Omondi (1981) who derives the linking elements (en, gin, etc.) in (66) from underlying structures in which the verb bedo 'to be' is the copula. As we shall argue later, this hypothesis is made suspect by the apparent extraordinarily fortuitous nature of the morphophonemic rule or rules that are supposed to be capable of mapping the verb bedo onto surface realizations which are always phonologically identical to the pronominal form of whatever nominal happens to be in what may still be loosely

referred to here as subject position, agreeing with it in Person, Number and Syntactic function. Thus, for instance, in (66a), japuonj is linked to jajuok by en, which also happens to be its corresponding pronominal form, as in

(67) A: Mano ng'a?
That who
'Who is that?'

B: Japuonj

'The teacher'

A: Erego? Adwaronene
Where-is-he I-want to-see-him

B: En buta ka
3sg subj near-me here
'He is here, near me.'

where, as the conversation demands, B refers to **japuonj** in his second mention of him as **en**. The same can be shown for each of the remaining cases. But this debate must be left until later (chapter 3), when its resolution becomes crucial for our data analysis.

Suffice it to conclude this discussion by pointing out that whatever view one adopts, it is important to take cognizance of the fact that adjectives are never directly linked to nominals (participants) by forms such as en, gin, etc. Thus the construction:

(68) *Japuonj en ber Teacher cop good

is not well-formed, because the adjective requires a clitic o-, the nonemphatic subject pronoun, to precede it, as in the following construction:

(69) Japuonj en ober 'The teacher, he is good.'

whose meaning carries an element of comparison not found in the meaning of the parallel construction:

(70) Japuonj ber
'The teacher is good'

For the purposes of this study, what we have said above about adjectives is sufficient. Later on (chapter 3) we shall see how adjectives, as term restrictors, are accommodated in the FG model.

어머니에 들어 있다는 말을 할 것 같습니다. 이번 사람들에 보는 이렇게 하는 사람들이 되었다면 다른 사람들이다.

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2.2.4. REFLEXIVE VERBS

Dholuo reflexives are formally marked by -rV (where -r- is the reflexive morpheme per excellence and -V is some word-final vowel). The word-final vowel is chosen from the following:

- -a for 1st Person Sg.
- -i " 2nd Person Sg.
- -e " 3rd Person Sg. and Pl. and 1st Person Pl.
- -u " 2nd Person Pl.

Of these Person-markers, -e is the unmarked form and thus may replace the other three in their specified environments. This gives us the possibilities illustrated below:

- (71) Ahinyor-a/e
 'I have hurt myself.'
- (72) Ihinyor-i/e
 'You have hurt yourself.'
- (73) Ohinyor-e
 'He has hurt himself.'
 - (74) Wahinyor-e
 'We have hurt ourselves.'
 - (75) Uhinyor-u/e
 'Your have hurt yourselves.'
 - (76) Gihinyor-e
 'They have hurt themselves.'

The unmarked nature of -e, as exemplified above, accounts for the tradition popularized (if not started) by Stafford (1967), in which the form ending in -e is given as the citation form of a reflexive verb. In this tradition, the Dholuo equivalent of English 'to hurt oneself' is given as hinyore. However, Dholuo speakers who rely entirely on their intuitions tend to translate this English (infinitival) phrase as hinyruok, hence the following Dholuo-English equivalents:

- (77) a. Hinyruok rach
 - b. To hurt oneself is bad
- (78) a. Tuonruok tek
 - b. To deny oneself is hard

These morphological matters, interesting as they are, are nevertheless not our main concern here. It will suffice to observe that in showing reflexive

relationships, Dholuo follows what Simon Dik (in an unpublished paper) has called 'the verbal strategy' as opposed to 'the nominal strategy'.

In the latter (which is the strategy followed by English) 'one of the term positions of a predicate-frame is filled, with a nominal or pronominal contituent which explicitly indicates identity with some other term in the predication'. In the verbal strategy, on the other hand, 'there is no specific reflexive (pro)nominal, but... the verb is marked in such a way as to make it clear that the subject relates to itself rather than to some other entity'. This is what we observe in the examples of Dholuo reflexive constructions given above.

What we wish to highlight here, without going into too much detail, is the fact that the semantics of the Dholuo reflexive constructions is more complex than can be captured by the simple canonical explanation that the actor and the recipient of the action are identical in such a construction.

In their study of syntactic functions in Serbo-Croatian, Dik and Gvozdanovic (1981) have offered a typology of reflexive constructions which is farly close to what is observed in Dholuo. We borrow substantially from their terminology in the following taxonomy of Dholuo reflexive constructions.

2.2.4.1. TRUE REFLEXIVES

These are the kind of reflexives which Lyons (1968:361) has in mind when he defines a reflexive construction as 'one in which the subject and object refer to the same person (thing)'. In Dholuo, we see them in such constructions as:

- (79) **Dhiang' nangòre**cow lick-self
 'The cow is licking itself.'
- (80) Jaduong' ohinyore elder PF-hurt-self 'The elder has hurt himself.'

2.2.4.2. RECIPROCAL CONSTRUCTIONS

In this kind of reflexive construction, the participants in the given state of affairs do the same thing to one another, as in:

and the confidence of a state

- (81) Jokong'o yanyore
 drunkards insult-reflex.
 'Drunkards are insulting one another.'
- (82) Otieno gi Apiyo oherore
 'Otieno and Apiyo love each other.'

A word-level structural ambiguity often arises in the interpretation of constructions such as:

(83) Dhok nang'ore cows lick-reflex. 'Cows are licking themselves/one another.'

which admit of either a true reflexive or a reciprocal interpretation as shown in our translation. In such cases, only the context determines what is actually meant.

2.2.4.3. IMPERSONAL CONSTRUCTIONS

Reflexive verb forms are used in Dholuo to make impersonal constructions, in which the emphasis is more on what is done than on who or what does it. Using the words 'actor' and 'event' in their non-technical senses, we may account for such constructions by distinguishing between 'actor-oriented' and 'event-oriented' constructions - avoiding the anologous terms, 'agent- vs. process-oriented', employed by Lyons (1968:366) because the words 'agent' and 'process' have strict technical applications in the FG theory.

The opposition between 'event-oriented' and 'actor-oriented' constructions affords us two construction-types, each of which is, at least theoretically, capable of internal differentiation. For example, let us take the following constructions:

- (84) Odi mukore
 Your-house knock-itself-down
 'Your house is crumbling.'
- (85) Imuko odi
 Being-knocked-down your-house
 'Your house is being knocked down.'
- (86) Otieno muko odi

 NM knocking-down your-house
 'Otieno is knocking down your house.'

As opposed to (86), both (84) and (85) are impersonal constructions. However, (84) is event-oriented and is, in this way, different from (85),

which shares with (86) the property of being actor-oriented. But (85) is not actor-oriented to the same degree that (86) is. In fact, one can even argue that between the two actor-oriented constructions above there is still one scale of actor-orientation represented by either (87a) or (87b) below.

- (87a) Ng'ato muko odi
 'Someone is knocking down your house.'
- (87b) Jo moko muko odi
 'Some people are knocking down your house.'

While (85) can be said to paraphrase (87a,b), both of the sentences of (87) are more actor-oriented than (85) because of their explicitness on the class of the actor, which they make definitely [+ human]. On the other hand, (87) is less actor-oriented than (86), the latter being so specific in its identification of the actor that it could be used for either accusation or commendation, depending on whether or not the owner of the house wants it knocked down.

It is clear from the above discussion that the event-oriented reflexive construction is just one of the impersonal constructions one can identify in Dholuo. The meaning-range of such reflexive constructions is much wider than we can fully discuss here without straying far from our course. At the extreme end of this range, one finds more-or-less figurative sentences, such as:

- (88) Kong'o madhore ka beer drinking-itself here 'People are drinking beer here.'
- (89) Tugo tugore ka
 Play playing-itself here
 'People are playing here.'

whose typical communicative roles are (i) to emphasize the event by suggesting that it is taking place in a large measure (sometimes with a tinge of disapproval), and (ii) to be non-committal as to the identity of the actor. Most such sentences (or their propositional contents, to be more exact) can be expressed in an actor-oriented version. Thus, for example, (88) could also be expressed such as:

(90) Ji madho kong'o ka
'People are drinking beer here.'

Finally, we may point out, for the sake of completeness, that the reflexive form of what is normally a transitive verb is usually used to indicate a state of existence in which a particular object may or may not be affected by the action designated by the transitive verb in question. For instance, from the verb ng'ado 'to cut' we have the reflexive form ng'adruok, which is used in the following sentences to illustrate this point.

- (91) Chuma ni ng'adore metal this cut-reflex 'This metal can be cut.'
- (92) Gini ok ng'adre
 Thing-this Neg cut-reflex
 'This thing cannot be cut.'

Such reflexive constructions are often ambiguous between what is possible and what is actually taking place but expressed in the form of an event-oriented (reflexive) construction (cf. (84) and (91)).

A number of reflexive verb forms in Dholuo do not lend themselves to the kind of analysis presented above, especially because the constructions in which they occur do not have syntactic paraphrases of the actor-oriented type. Such reflexive forms should be accorded the status of basic or non-derived lexical items. The strongest candidates for such treatment in Dholuo are words such as:

(93a) Puonjruok (to teach oneself) 'to learn'

(93b) Timruok (to do oneself) 'to happen'

(93c) Chandruok (to bother oneself) 'to suffer'

(93d) Larruok (to scramble for each other) 'to compete'

(93e) Ladhruok
(Not synchronically analysable)
'to live from hand to mouth'

2.2.5. ADVERBIALS

The discussion of adverbs in this section is done within the framework outlined by Stockwell (1977: 42-48). In this approach, adverbs are subclassified in terms of what they predicate or are predications over. The subclasses are:

2.2.5.1. PREDICATIONS OVER EVENTS OR ACTIONS

This includes such adverbial functions as:

LOCATIVE - which indicates where something is located, e.g.

(94) Ng'ato nindo e tiend yath
Someone sleep-IMP loc. foot-of tree
'Someone is sleeping under the tree.'

DIRECTIONAL - which indicates the physical orientation or direction of a static or moving body as the case may be, e.g.

- (95) Od sikul ochung ka ochomo nam house-of school stand-PF while facing lake 'The school building stands facing the lake.'
- (96) Nyithindo dhi (e) sikul children go-IMP (Loc) school 'Children are going to school.'

DURATIVE - which shows the duration of a given event, e.g.

(97) Ne gitiyo (kuom) higni apar
Pst 3P1-work for years ten
'They worked for ten years.'

EXTENT - which shows the spatial equivalent of duration, e.g.

(98) Asewuotho mael abich
Isg-PRT-walk mile(s) five
'I have walked five miles.'

POINT TIME - which marks the time at which an event takes place, e.g.

(99) Kenyatta notho higa mokalo
Name Pst-die year rel-Pass
'Kenyatta died last year.'

e Tall you calle joins on a

MANNER - which indicates the way in which an event takes place, e.g.

(100) Gari ringo matek

Train run rel-hard
'The train goes fast.'

INSTRUMENT - which indicates what is employed (usually as a tool) in carrying out something, e.g.

(101) andiko gi -kalam
Isg-write-IMP with pen
'I am writing with a pen.'

ACCOMPANIMENT - which indicates that one nominal acts as an accompanying participant to another nominal, e.g.

(102) Aloo dhi nam gi wuon

Nm go-IMP lake with father-Poss
'Aloo is going to the lake with her father.'

The word gi 'with' in (102) is homophonous to the gi 'and' which occurs in the following sentence.⁷

(103) Aloo gi wuon dhi nam
'Aloo and her father are going to the lake.'

where Aloo gi wuon is a compound subject.

EQUIPMENT - which, although introduced by the same form gi, indicates what one equips himself with for some intended purpose, e.g.

(104) Aloo dhi nam gi ndoo
with pail
'Aloo is going to the lake with a pail' (e.g. to draw water)

MEANS - which shows how one achieves a certain purpose (in expressions which adopt an adverbial strategy for showing it), e.g.

(105) Adhi sikul gi tienda
I-go-IMP school by foot 1sg Poss
'I go to school on foot'

Whether gi, as we have in accompaniment, conjunction, and equipment, is regarded as one word with different meanings (i.e. as a case of polysemy) or as different words with the same physical form (i.e. as a case of homonymy) is of no real consequence in this work.

2.2.5.2. PREDICATIONS OVER PROPOSITIONS

Unlike in the above cases, where the scope of the adverbial element is limited only to some part of the proposition, usually the action or state designated by the verb, in the case we are dealing with now the sentence in question has a whole proposition which can be shown to fall within the scope of a given adverbial expression. The adverbial functions under this category include:

FACTIVE - which indicates that a given proposition is believed by the speaker to be a fact, e.g.

- (106) Kiwacho adieri (to) Jo-Kenya ohero pesa
 If-speak-PASS truth(then) People-of-Kenya like money
 'Truly speaking, Kenyans love money.'
- (107) Ka ok ariambo (to) koth biro chwe kawuono
 If not 1sg-lie (then) rain come rain-v today
 'If I don't lie, it will rain today.'

MODALITY - which indicates the speaker's attitude towards what he says, e.g.

- (108) Ka nyalore (to) Onyango biro duogo
 If possible (then) Name come return(vi)
 'If (it is) possible, Onyango will come back.'
- (109) Ka de ber to ngàto de okonyo ng'atni
 If cond. good then someone cond. help man-this
 'It would be good if someone could help this man.'

CONCESSION - which introduces a proposition contrary to what should be expected from known facts, e.g.

- (110) Kata aonge pesa to nyaka abed gi ot

 Even-if 1sg-lack money but must 1sg-be with house
 'Even if I don't have money I must have a house.'
- (111) Wayie ni okwelo to ok unyal nege
 3 pl-agree that 3sg-steal-PF but not 2pl-can kill-3sg obj.
 'We agree that he has stolen, but you can't kill him.'

2.2.5.3. PREDICATIONS OF MOTIVATIONS, CONDITIONS, AND TRANSITIONS

The adverbial functions which fall under this category include:

PURPOSE - which indicates the motive or reason for doing something, e.g.

(112) Ng'atno odere mondo oa e chandruok man-that commit-suicide-PF so-that 3sg-leave loc problems 'That man has committed suicide so as to get away from problems.'

CAUSE which shows what makes something else happen, e.g.

(113) Kech nitie nikech piny notho famine present because earth Pst-die 'There is famine because the crops failed.'

CONDITIONAL - which shows the circumstances which must be fulfilled for something else to take place, e.g.

(114) Ka oyanya to abiro goye

If 3sg-insult-me then I-come beat-3sg Obj

'If he insults me, I'll beat him.'

TRANSITIONAL - which marks the change from one state or position to another, e.g.

(115) Kata kamano to adwaro neno jatelo Even though but I-want see leader 'However, I'd like to see the boss.'

Note that transitional adverbs such as the one in (115) often have a concessional function as well.

2.2.5.4. QUANTIFIERS AND COMPARATIVES

The adverbial functions under this category include:

FREQUENCY - which shows how often something takes place, e.g.

(116) Okadho ka pile (pile)
3sg-pass here everyday
'He passes here everyday.'

INTENSIFIER - which augments the magnitude or extent of a particular state of affairs, e.g.

(117) Japuonj no ofuwo ahinya
Teacher that foolish-PF very-much
'That teacher is very foolish.'

COMPARATIVE - which shows the extent or magnitude of something relative to that of something else, e.g.

(118) Otieno riek moloyo owadgi
Name clever rel-surpass brother-3 Poss
'Otieno is cleverer than his brother.'

Finally, let us make special mention of interrogative adverbs, noting that according to the above categories most, if not all, of them can be classified as predications over propositions. This special mention is accorded to them because many grammarians tend to leave them out of their lists. In Dholuo they can be:

LOCATIVE OR DIRECTIONAL, e.g.

- (119) John nindo kanye? (LOCATIVE)

 Name sleep-IMP where

 'Where is John sleeping?'
- (120) Ng'at cha dhi kanye? (DIRECTIONAL)

 Person that go-IMP where

 'Where is that person going?'

TEMPORAL, e.g.

- (121) Ibiro nena karang'o? (POINT-TIME)

 2sg-come see-me when

 'When are you coming to see me?'
- (122) Osebiro ka didi? (FREQUENCY)
 3sg-PRT-come here how-many-times
 'How many times has he been here?'

PURPOSE, e.g.

(123) Ukelo bunde ka nang'o?

2pl-bring-IMP gun here why

'Why are you bringing a gun here?'

CAUSE, e.g.

(124) Ang'o momiyo pien rawo tek?

What rel-cause skin-of hippo tough
'Why is a hippo's skin tough?'

MEANS, e.g.

(125) Ere kaka anyalo yudo pesa kawuono?
Where-is how I-can find money today
'How can I get money today?'

2.2.6. ADPOSITIONS

Linguistic elements have a certain relationship with the non-linguistic world in which a given language exists. This relationship is generally known as reference, in spite of the definitional problems surrounding the concept. But linguistic elements also have certain relationships with one another in a given utterrance. The linguistic forms which serve to indicate such intralinguistic relationships, especially those between predicators (verbal, adjectival, etc.) and referring expressions are called adpositions. They are known as prepositions if they occur before the referring expression in question, and postpositions if they occur after them. Dholuo has only prepositions. The specific relationships usually designated by prepositions in Dholuo include:

LOCATIVE - which is marked by a number of lexical elements, the most typical of which is the locative copula **ni** with or without one or more of the elements shown in (126) below. The canonical form of locative phrases with the copula **ni** is as follows:

where X is a variable (optional) locative element of greater specificity than $\mathbf{n}\mathbf{i} + \mathbf{e}$ alone, and Y is a referring expression (nominal or adverbial). Examples of constructions which fall into this schema are:

- (127a) Pala ni ka (ni + Y) knife cop. here 'The knife is here.'
- (127b) rombe ni e pap (ni + e + Y) sheep-Pl cop. loc. field 'The sheep are in the field.'
- (127c) Chiemo ni e i dak (ni + e + X + Y)
 food cop. loc. in pot
 'Food is in the pot.'

Strictly speaking, only e (the general locative marker) and the X-element can be called prepositions. The first element in the schema, ni, is a locative

copula, so called because its occurrence is mainly restricted to locative constructions - its other occurrence being only in the phrase mi gi, as in:

(128) Nyathi ni gi buk child be with book 'The child has a book.'

We regard this element (ni) in the usage illustrated by (128) as a suppletive form of bedo in the infinitival phrase bedo gi (to be with) 'to have'. As we have pointed out in the discussion of verbs, the copulative role of the verb 'to be' (bedo) is normally performed by pronominal forms, a phenomenon known as pronoun support. In some cases the copula ni occurs in the longer element nitiere/nitie 'is present'. The distributional relationship of the former to the latter seems to be that of free variation, and only personal taste controls the choice of one as opposed to the other.8

Although **ni** is the only non-prepositional element in Dholuo whose occurrence is to a large extent attributable to the locative function (hence the prominence given to it here), we still have to note that the locative prepositions identified in the schema (126) as e and X can occur with any other verb, depending only on the semantic possibilities of the state of affairs in question. Thus, for example, we can have prepositional phrases such as:

- (129) Ng'ato nindo e kom

 Someone sleep-IMP loc. chair
 'Someone is sleeping on the chair.'
- (130) Opira olal e i bungu ball get-lost-PF loc. in bush 'The ball is lost in the bush.'

Moreover, the element e is replaced by kuom 'on' when Y is a living being (especially an animal or human being) and there is no reference to a specific part of its body. Thus, one says:

(131) **Ibedo** kuom guok
2 sg-sit on dog
'You are sitting on the dog.'

but,

⁸ The possibility that ni could be a contraction of nitiere is worth investigating, though Omondi (1981) expresses doubt that this suspicion could be true.

(132) Ibedo e iw guok tail-Poss 'You are sitting on the dog's tail.'

when it matters what particular part of the dog is sat on. On the basis of the above observations, it needs to be emphasized that the schema for locative phrases given in (126) is relevant only to the cases in which the locative ni is used.⁹

INSTRUMENTAL - in which the participant with the semantic function of instrument is introduced by the preposition gi 'with', as in:

(133) Oloo kunyo bur gi beti
NM dig-IMP hole with panga
'Oloo is digging a hole with a matchet.'

As we pointed out in the discussion of adverbials, the preposition gi also introduces nominal elements with the semantic functions of:

MEANS, e.g.

(134) Wadhi Mombasa gi gari 3pl-go-IMP NM by train.' 'We are going to Mombasa by train.'

ACCOMPANIMENT, e.g.

(135) Nyathi nindo gi min child sleep with mother-Poss 'The child is sleeping with its mother.'

EQUIPMENT, e.g.

(136) Odhi e pwodho gi kweru 3sg-go-IMP to farm with jembe 'He is going to the farm with a hoe.'

Other uses of gi will be discussed at various points later when the relevant issues arise.

DIRECTIONAL - There is usually no overt marking for direction if the reference is made in not-so-specific terms. Thus, one says:

⁹ Also look at Direction (this section) for another use of e.

(137) Dhi nam go lake 'Go to the lake.'

but,

go to mouth-Poss lake 'Go to the lake-shore.'

where e is employed as a preposition.

Similarly, we say:

(139) Wadhi taon
3sg-go-IMP town
'We are going to town.'

but,

(140) Wadhi e office

office

'We are going to the office.'

It is not possible to state explicitly where the boundary between specific and non-specific lies. The distinction is highly psychological and subject to a lot of individual idiosyncrasies.

When there is a non-place participant filling the direction slot, the element ir is used as a preposition, e.g.

- (141) Nyithindo dhi ir japuonj children go-IMP to teacher 'The children are going to the teacher.'
- (142) Sud ir dhok
 move to cows
 'Move closer to the cows.' (said to a herdsman, for example)

But not when the participant in question is inanimate - thus we cannot have constructions such as:

(143) *Dhi ir duka go to shop (144) *Sud ir pwodho

(144) *Sud ir pwodho move to farm It should be noted that the concept of Direction used here (as is conventional in linguistics) refers to the (intended) destination of an action of movement. The non-destinational idea of direction as expressed by 'towards' or 'in the direction of is just one of the concepts captured by the term Direction here. When Dholuo intends to show direction without suggesting destination, it often uses the element yo/yor (lit. '(in) the path of'), e.g.

(145) Japuonj odhi yo Kisumu teacher go-PF NM 'The teacher has gone towards Kisumu.'

The term Direction, however, seems to be worth retaining for both cases since it seems to include destination without being as semantically marked as the latter. Thus, for instance, if a man tells us:

(146) Adhi e chiro (DESTINATION)

I-go-IMP to market
'I am going to the market.'

we may, in the absence of a better explanation, consider him to be a liar if we have evidence that he does not actually get to the market. However, if he says:

(147) Adhi yo chiro (DIRECTION)
'I am going towards the market.'

we do not necessarily expect him to reach the market but we do not consider him to be a liar if we find him there.

BENEFICIARY, LOSER, SUFFERER, etc.

The preposition ni/ne is used in Dholuo to mark a set of roles including such ideas as beneficiary, loser, sufferer, etc. The understanding of the specific role in each case depends on the state of affairs designated by, above all, the verbal predicator in question. For example,

- (148) Ng'ato ong'iewo ne nyathi pala (BENEFICIARY) someone buy-PF child knife 'Someone has bought a knife for the child.'
- (149) Ng'ato olalo ne nyathi pala (LOSER) lose-PF
 - 'Someone has lost the child's knife.'
- (150) Ng'ato ogolo ne nyathi pala ((Intended) SUFFERER)
 draw-PF
 'Someone has drawn a knife to attack the child.'

The situation is further complicated by the fact that some verbal predicators lend themselves to various interpretations (readings) and usually only the extra-linguistic context determines what semantic function is marked by the preposition ne. Thus, for example, if we imagine a situation in which the child in question wanted to draw a knife (say from a sheath) but was unable to do so until someone did it for him, then ne nyathi in (150) would have the semantic role of Beneficiary and not Sufferer. In practice, as we shall explain later, the term Beneficiary is used to mark all the different nuances of meaning associated with ne as in (148), (149), and (150). We, however, distinguish it from the function of Receiver as illustrated by the use of ne in the following sentences.

- (151) Watero chiemo ne welo
 we-take-IMP food to visitors
 'We are taking food to the guests.'
- (152) Jatugo ogweyo opira ne nyawadgi
 Player kick-PF ball to mate-3sg.Poss.
 'The player has kicked the ball to his mate.'

where ne indicates that the (immediately) following participant has the role of Receiver (Recipient).

Since ne is formally indistinguishable in its various contexts, we tell a Beneficiary from a Receiver only by the state of affairs designated by the verbal predicator in question (taking into account the meaning of the verb in a particular context).

The prepositions discussed above are mostly function words. In addition to them there are a number of content words which serve as prepositions of greater specificity. They include such words and expressions as **bwo** 'under' (Location), **nyim** 'in front of' (Orientation), **tiend** 'at the foot of (under)' (Location), **bath** 'beside' (Orientation), **motelo** ne 'ahead of' (Sequence), **dier** ng'e 'behind' (Orientation), etc. All these, except **motelo** ne, are preceded by the general preposition e (e.g. e bwo 'under').

Normally, prepositions can occur at the end of a sentence only when their nouns (or NPs) are for pragmatic purposes (see 3.1.5.) placed before the verb. For example, note the position of go in ruoth tek wuoyo go 'The chief is hard to talk to' - this go is a variant of gi 'with' which occurs only in the circumstances described above. It should not be confused with the go-like

element which results from the deletion of the -i in gi when the immediately following word starts with a vowel (usually a- or o-) e.g.:

gi + Atieno = g'Atieno, and gi + Omolo = g'Omolo

The ability of a prepositional element to occur sentence-finally can also be illustrated by the positioning of ne (not its variant ni). We see it in such sentences as Ng'at ni ber tiyo ne 'This man is good to work for' and Wach no ok anyal tho ne 'That matter I cannot die for'.

Further evidence of this structural feature of Dholuo may be seen in the positioning of e in a sentence such as Mesa ni ok ber som-e 'This table is not good to read at'.

It should, however, be noted that content-word prepositions cannot occur sentence-finally unless there is a pronominal suffix on them, e.g. Yadh ni ber yueyo e tiend-e 'This tree is good to rest at the foot of (it)' (See 2.2.7. for the -e on tiend-e.).

2.2.7. PRONOUNS

The inadequacies of the traditional term 'pronoun' as a scientific concept have been discussed quite competently by such scholars as Quirk and Greenbaum (1973:22), who replace it with the term 'proform', and Radford (1981:63-64), who uses the term 'proconstituent'.

The basic argument against the use of this term is that the linguistic elements it refers to are not always noun-substitutes. Thus, to give an English example, while the word 'it' replaces a noun in (153), the constituent it replaces in (154) is a whole clause.

- (153) I can read French but I can't speak it.
- (154) He told me that he was ill but I didn't believe it.

However, for the sake of familiarity, we shall use the term 'pronoun' here, with the awareness that, as referring expressions, pronouns (in a semantic sense) stand for more than just what may be called nouns.

Keeping to traditional terminology, we can classify Dholuo pronouns as follows.

2.2.7.1. PERSONAL PRONOUNS

These occur in two sets, which we may (for lack of better terms) refer to as emphatic and non-emphatic forms. The following is a paradigmatic account of the personal pronouns in Dholuo.

	Emphatic	Non-Emphatic
First Person Singular	an	a-, -a
First Person Plural	wan	wa-, -wa
Second Person Singular	in	i-, -i
Second Person Plural	un	u-, -u
Third Person Singular	en	o-, -e, -go
Third Person Plural	gin	gi-, -gi

The most objective difference between the emphatic and the non-emphatic forms is that while the former are free morphemes, the latter are all bound forms, occurring as either prefixes or suffixes. Thus, in principle, for each Person-Number combination (e.g. 1st Person Singular) there exist two nonemphatic forms x and y such that x occurs as a prefix (corresponding to subject) and y occurs as a suffix (corresponding to object). On our chart the prefix-forms are marked with a dash after them (e.g. a-) while the suffixforms have a dash before them (e.g. -i). In one case, the Third Person Singular, the y-element has two allomorphs (-e and -go) which are free variants. (Some speakers feel that -go is more emphatic than -e). It also needs to be noted that except for the Third Person Singular, all the nonemphatic forms have the same morph for the x- and y-elements.

It is not easy to discuss meaningfully the functional loads of personal pronouns in Dholuo outside a theory of grammar which recognizes various levels of function in linguistic elements. Such is the kind of theory we have in Functional Grammar. Since we still are not in a position to delve into the complexities of FG, we shall postpone the discussion of the functions of Dholuo personal pronouns for a while. It will suffice merely here to give examples illustrating the use of the different pronominal forms shown on our chart.

to the property will be a second

- (155a) An japuenj teacher 'I am a teacher.'
- (155b) Abiro neni I-come see-you(sg) 'I am coming to see you.'

- (155c) Wach more chand-a matter some disturb-me 'Something is bothering me.'
- (156a) Wan ka We here 'We are here.'
- (156b) Wa-biro we-come-IMP 'We are coming.'
- (156c) Koth go-wa
 rain beat-IMP-us
 'It is raining on us.'
- (157a) In mari onge
 You yours be-absent
 'You, your share is not there.'
- (157b) I-hero kwano ahinya You-like maths much 'You like Maths too much.'
 - (157c) Ok gino bi neg-i
 not thing-that come kill-you
 'That thing is not going to kill you.'
 - (158a) Un jokwo madongo You thieves rel-big 'You are big thieves.'
 - (158b) Bende u-dwaro chiemo?

 Q you-want food
 'Do you want food?'
 - (158c) Ng'ato ng'iyo-u someone look-Imp-you 'Someone is looking at you.'
 - (159a) En wuod nera
 he son-of uncle-mine
 'He is my (maternal) uncle's son.' (i.e. my cousin)
 - (159b) Tinde somo ool-e

 Nowadays studying tire-3sg Obj.

 'He is nowadays tired of studying.'
 - (159c) O-dwaro medo somo

 3sg-want add education

 'He was to study further.'
 - (159d) Tinde somo oolo-go
 'He is nowadays tired of studying.' (= (b))

2.2.7.2. POSSESSIVE PRONOUNS

The concept of 'belonging to' is expressed in Dholuo using the word mar, which has an irregular plural form mag/mek. To form a possessive pronoun,

i.e., a word which can functionally replace a possession-showing nominal constituent, a non-emphatic form of an appropriate personal pronoun is suffixed to either mar or mag/mek, depending on the (grammatical) number required.

Since Dholuo has six Person-Number combinations, there are six pairs of possessive pronouns, namely:

SINGULAR	PLURAL
mar-a	mag-a/mek-a
'mine'	III.
mar-i	mag-i/mek-i
'yours' (sg.)	10 00
mar-e	mag-e/mek-e
'his/hers/its'	
mar-wa	mag-wa/mek-wa
'ours'	
mar-u	mag-u/mek-u
'yours' (pl.)	is No set at the energy
mar-gi	mag-gi/mek-gi
'theirs'	

A possession-showing constituent occurs in the form of a construction consisting of the element representing the possessed entity and the element indicating the possessor. For each such possessed-possessor sequence, QR, the possible values of R include:

```
(i) a nominal designation of the possessor, e.g.

bug japuonj

'the teacher's book'

(Q = bug, R = japuonj)

(ii) a pronominal representation of the possessor (always suffixed), e.g.

bug-e

'his book'

(Q= bug, R = -e)

(iii) an element of type (ii) preceded by -n- (normally found in cases where the Q-element in the construction QR ends in a vowel), 10 e.g.

nyathi-n-a

'my child'

(Q = nyathi, R = -n-a)
```

¹⁰ There are exceptions to this as we can see in forms like osiep 'friend', osiepna 'my friend'; tim 'behaviour', timne 'his behaviour'; loch 'rule', lochni 'your rule (power)'. Thus, strictly speaking, we need to mark words in a dictionary with respect to whether they fall under type (ii) or type (iii) QR-combinations.

Each type of QR-construction in (i)-(iii) above can be replaced by an appropriate possessive pronoun as the following pairs of 'contextual' paraphrases testify:

- (160a) Mano kalamb Atieno (type (i))
 That Pen-Poss. NM
 'That is Atieno's pen.'
- (160b) Mano mar-e 'That (is) hers.'
- (161a) Mano kalamb-e (type (ii))
 'That (is) her pen.'
- (161b) Mano mar-e 'That (is) hers'
- (162a) Mano dala ruoth (type (iii))

 That home chief
 'That is the chief's home.'
- (162b) Mano dala-n-e
 'That (is) his home.'

It may be noted in passing that while some Dholuo nouns have a genitive form (e.g. kalam kalamb), many others (e.g. dala) do not have such a form (see (162)). (A full account of this matter has been published in Okoth (1982).)

The pronominal representation of the possessor by -nV also helps in distinguishing between alienable and inalienable possession, especially where the possessed object is a part of the body (of a person or an animal). Thus we distinguish between Ma lewa 'This is my tongue.' (i.e. part of my body), and Ma lepna which means the same as the former except that in the latter the tongue is from an animal's body (certainly not the speaker's).

When a nominal element represents the possessor, the distinction is made in more or less the same manner, i.e., using the normal genitive form for inalienable possession and the unmodified citation form for alienable possession, hence: Lew Nyakeno 'Nyakeno's tongue (his body)' as opposed to Lep Nyakeno, which refers to a tongue of something else claimed as a property by Nyakeno (-nv = -n + a required pronominal vowel).

2.2.7.3. DEMONSTRATIVE PRONOUNS

The communicative function of a demonstrative element is to specify or single out a person or object that is talked about. When such an element singles out a given object (or person) by simply modifying the word (or phrase) that designates the object in question, it is referred to as a demonstrative adjective. When, on the other hand, it completely replaces what it singles out in a given construction it is called a demonstrative pronoun. Thus, for instance, in the two English sentences

- (a) 'That book is mine.' and
- (b) 'That is mine.'

we have two occurrences of the demonstrative 'that' used as an adjective and as a pronoun in (a) and (b), respectively.

In their adjectival role, Dholuo demonstratives occur in the following forms:

SINGULAR PLURAL

ni gi
'This' 'These'

(The qualified object is proximate to the

(The qualified object is proximate to the addressor and may also be proximate to the addressee).

no go 'That' 'Those'

(The qualified object is closer to the addressee than to the addressor.)

cha ka 'That' 'Those'

(The qualified object is away from both the addressor and the addressee.)

Examples of the use of these demonstrative adjectives are provided by the following constructions:

(163a) Wuoyi ni dwari boy this want-2sg 'This boy wants you.'

(SG., Near Addressor)

(163b) Yawuoyi gi dwari boys these want-2sg 'These boys want you.'

(Pl., Near Addressor)

(163c) Nyako no osiepna girl that friend-1sg Poss. 'That girl is my friend.' (SG., closer to Addressee)

(163d) Nyiri go osiepena/osiepega girls those friends/1sg.Poss. 'Those girls are my friends.'

(Pl., Closer to Addressee)

(163e) Dhako cha hinyore woman that hurt-R 'That woman is getting hurt.'

(SG., Away from Addressor and Addressee)

(163f) Mon ka hinyore

women those

'Those women are getting hurt/hurting each other.'

(Pl., Away from Addressor and Addressee)

Every demonstrative pronoun in Dholuo is a compound (linguistic) element consisting of the usually bound form ma and one of the adjectives given above. This gives us three pairs of demonstrative pronouns, namely:

SINGULA	AR.	PLURAL
mani		magi
'This'		'These'
mano	BL 0	mago
'That'		'Those'
macha		maka
'That'		'Those'

(The difference between mano/mago and macha/maka corresponds to the difference between their adjectival constituents as explained above.)

In everyday language use **ma** is often used alone instead of **mani**, but this leads to no ambiguity since all the other compounds always occur in full. The use of these demonstrative pronouns leads to the construction of sentences such as:

(164a) Mani/Mae wach mokela iri
This Foc. affair rel-bring-me to-you
'This is the matter that has brought me to you.'

(164b) Mago chike Nyasaye Those rules God

'Those are God's commandments.'

(164c) Macha nyar jatelo
That daughter-of leader
'That is the big man's (leader's) daughter.'

2.2.7.4. INTERROGATIVE PRONOUNS

Dholuo has three interrogative pronouns corresponding to the English words 'who', 'what', and 'which'. The following table shows the pronouns (with variant forms where available).

```
SINGULAR

ng'a/ng'awa/ng'ano

ang'o/ang'owa/ang'ono

--(gini)

what'

mane

mage

which'

(--= Position occupied by a form similar to the Singular form.)
```

The alternative forms for 'who' and 'what' usually occur in free variation, though many speakers (including the writer) find the longer forms strong and rude. These interrogative pronouns occur in sentences such as:

- (165a) Ng'a ma dwaro rech? who rel. want fish 'Who wants fish?'
- (165b) Ng'a gini ma ni e ot kanyo? who (Pl.) rel. cop. loc. house there 'Who are there in the house?'
- (165c) Ukelo ang'o? 2Pl-bring-PF what 'What have you brought?'
- (165d) Odwaro diek mage?

 3sg-want goats which
 'Which goats does he want?'
- (165e) Diek mage modwaro? (= (d)) rel-3sg-want

In all cases, if the interrogative pronoun precedes the verb then the Verb Phrase is relativized (see (165a,b,e)).

2.2.7.5. THE RELATIVE PRONOUN

Generally, a relative pronoun is a pronominal form which replaces a nominal construction (or term) occurring in a higher clause where it is repeated in an embedded clause. For example, in the sentence:

(166) Mano dhiang' ma onge tunge
That cow rel. lack horn-3sg Poss
'That is a cow which does not have (its) horns.'

the word ma is supposed to be a pronominal representation of the preceding nominal term dhiang'. By bracketing conventions, dhiang' belongs to a higher clause than ma. This information is diagrammatically representable as follows:

[Mano dhiang' [ma onge tunge]]

where each pair of brackets encloses one hierarchy of clause structure. The innermost brackets enclose the most deeply embedded clause for any given complex sentence, Sⁿ (where n is a positive integer representing the number of simple clauses in the complex sentence).

The element **ma**, which appears in (166), is the only relative pronoun in Dholuo. Often it stands as a separate word, but when the following word begins with a vowel, **ma** tends to lose its vowel - ending up as a mere prefix of the next word, e.g. (cf. (a) and (b))

- (167a) Ng'at ma neno person rel. see (be awake) 'a person who is awake'
- (167b) Ng'at moneno jakuo rel-see-PF thief 'the person who has seen the thief'

This reduction of ma, as (166) shows, does not take place in some cases (e.g. ma onge, but not *monge 'which is absent/who does not have'). No general rule exists for these exceptions and the speaker of the language has to learn them as such.

2.2.8. CONNECTIVES

Dholuo has a small set of words used to combine words, phrases, or clauses as the case may be. The commonest coordinators in Dholuo are gi and to, meaning (roughly) 'and' and 'but', respectively. Their use is illustrated by the following constructions:

- (168a) Otieno gi wuon gero ot Otieno and father-Poss build house 'Otieno and his father are building a house.'
- (168b) Japuonj olalo bugena ariyo gi kalembena adek teacher lose-PF books-1sg-Poss two and Pens-sg-Poss three 'The teacher has lost two of my books and three of my pens.'
- (169a) Akelo ndiko to nyamin somo NM write but sister-Poss read 'Akelo is writing, but (while) her sister is reading.'
- (169b) Awachone ni ochungi to ok owinji
 I-tell-3sg that 3sg-stand but Neg 3sg-hear
 'I am telling him to get up, but he doesn't listen.'

In the coordination of clauses, the word kendo is used instead of gi if the conjoined clauses have the same subject. For instance, the English sentence 'John goes and comes back every day' may be rendered in Dholuo as:

(170) John dhi kendo duogo pile ka pile NM go-IMP and return every-day

In this type of construction **kendo** may be replaced by **to**. Thus (170) could also be expressed as:

(171) John dhi to duogo pile ka pile

Moreover, when the conjoined activities are taking place at the same time, to is the preferred coordinator. For example, when someone sleeps as he eats, the tendency (among speakers) is to say something like:

(172) Opiyo chiemo to nindo Opiyo eat sleep

rather than

(173) ? Opiyo chiemo kendo nindo.

Generally speaking, the major function of gi which to is completely unable to perform is conjoining terms designating participants in a given state of affairs. This means, for example, that to cannot replace gi in (168), especially (168a). In cases like (168), while to cannot replace gi completely, it can support it - leading to the formation of a sentence such as the following:

(174) Japuonj olalo bugena ariyo to gi kalembena adek (= 168b)

We can therefore say that of the three Dholuo coordinators (gi, to, and kendo) to is the least marked in terms of collocational possibilities.

Since subordination gives the construction in question an adverbial status, the conjoiners that function as subordinators in Dholuo have also appeared in our discussion of adverbials. Such conjoiners are associated with functions such as:

REASON, e.g.

(175) Ok adhi sikul nikech wiya bara
Neg. I-go school because head-1sg.Poss. split-me
'I am not going to school because I have a headache.'

(176) Notuo emomiyo ne ok obiro
Pst-3sg-sick that-is-why Pst Neg 3sg-come
'He was sick (and) that is why he did not come.'

CONCESSION, e.g.

(177) Kata ahere (kamano) to ok anyal kende
Though I-love-3sg Obj so but Neg I-can marry-3sg Obj
'Much as I love her, I cannot marry her.'

CONDITION, e.g.

- (178) Ka koth ochwe to kik ibi

 If rain rain-PF then do-not come

 'If it rains, (then) do not come.'
- (179) Kik ibi ka koth ochwe (= 178)

TIME, e.g.

(180) Ne gidonjo ka ching' podho
Pst 3pl-enter when sun set
'They arrived at sunset.'

COMPARISON, e.g.

(181) Ode rieny ka/kaka sulwe
House-Poss-esg shine like star
'His house shines like a star.'

CAPACITY (POSITION), e.g.

(182) Obiro kaka jatendwa
3sg-come as leader-Poss-3pl
'He is coming (in his capacity) as our leader.'

The above-mentioned are the commonest semantic functions borne by subordinating conjunctions in Dholuo. Needless to mention, some of these functions can be taken care of by using expressions which are not conjunctions. For example (180) may be expressed as:

a severe of a barren rife."

(183) Ne gidonjo saa ma chieng' podho time rel.

where the word saa 'time' is overtly employed, necessitating the relativization of the second clause ('They arrived at the time when the sun was setting').

2.3. SENTENCE TYPES

Language, as an instrument of social interaction, has a number of communicative functions. In a discourse, i.e., a verbal interaction involving at least two participants (interlocutors) - an addressor and an addressee - the sentence can be used to perform various communicative functions of language. Such functions include making assertions, giving commands, making promises, seeking information, persuading or dissuading (the addressee), giving information, etc.

The sentence types in a language depend on which of these communicative functions are regularly coded in the language by special syntactic patterns. In general, where they occur, declarative sentences are used to make assertions, presentative sentences are used to introduce new information, interrogative sentences are used to ask questions and make requests, and imperative sentences are used to give commands (and also make requests).

Three of these, namely declarative, interrogative, and imperative sentence types are overtly marked in Dholuo, where they are characterized as follows:

2.3.1. DECLARATIVES

Taking only obligatory constituents into consideration, Dholuo declaratives occur in the following clause patterns (the English equivalent given does not necessarily fall under the same pattern as its Dholuo counterpart):

Subject + Verb (SV), e.g.

- (184a) Omolo biro

 NM come-IMP
 'Omolo is coming.'
- (184b) Nyako cha tedo girl that cook-IMP 'That girl is cooking.'

In general, this clause pattern consists of a Subject NP (of any complexity) followed by an intransitive verb.

Subject + Subject Complement (S Cs), e.g.

(185a) Omolo ber NM good 'Omolo is good.' (185b) Jatichna jakuo Workman-1sg Poss. thief 'My servant is a thief.'

Here the predicate consists of a nominal or adjectival complement of the subject in question.

Subject + Verb + Object (S V O), e.g.

- (186a) Ng'ato onego jajwok Someone kill-PF wizard 'Someone has killed a wizard.'
- (186b) Juma ochamo ring'o manumu NM eat-PF meat raw 'Juma has eaten raw meat.'

Subject + Locative Adverbial Complement (SCLA), e.g.

- (187a) Thuol ni e ot
 Snake cop. prep. house
 'A snake is in the house.'
- (187b) Nyasaye ni e polo God cop. prep. heaven 'God is in heaven.'

Note that since ni functions as a locative copula, we regard it here as part of the complement phrase.

Subject + Verb + Object + Locative Adverb (S VOA), e.g.

- (188a) Apiyo keto pala e tiende

 NM put knife prep. foot-3sg. Poss.

 'Apiyo is putting the knife on her foot.'
- (188b) Ng'ato oolo pi e(i) puga Someone pour-PF water prep.in gourd 'Someone has poured water in a gourd.'

Subj + Verb + Indirect Object + Direct Object (S V ID DO), e.g.

- (189a) Mama miyo nyathi chiemo Mother give-IMP child food 'Mother is giving the baby food.'
- (189b) Baba okelo ne nyathi nanga
 Father bring-PF for child garment
 'Father has brought the baby a dress.'

```
Subj + Verb + Object + Obj Complement (SV O Co) e.g.
```

(190a) Ji oketo Opiyo ruoth
People make-PF NM chief
'(The) people have made Opiyo (their) chief.'
(190b) Uloko Otieno raura
2pl-turn NM fool

'You have turned Otieno into a fool.'

Since the clause patterns given above have only obligatory constituents, it needs to be noted that any one of them can be extended by adding some appropriate (usually adverbial) constituent to give some more information.

2.3.2. INTERROGATIVES

The most typical function of the interrogative sentence is to ask questions.¹¹ It is this function that shall be our concern here. The main question-types in Dholuo are (i) those that seek information and (ii) those that seek confirmation.

Information-seeking questions are normally formed by inserting a suitable question word where the questioned element would occur in a corresponding declarative sentence. The question words usually found in this question-type are:

ng'a	(Pl. ng'a gini)	'who'
ang'o		'what'
nade/nang'o	(H H-M)	'how'
nang'o	(H H) / (H L-M)	'why'
dak		'why (negative)'
kanye		'where'
kure		'where'
mane		'which one'
ere		'where is'
adi		'how many'

In addition to these, speakers (depending on personal taste) can form such compound forms as mar ang'o 'why (for what)', nikech ang'o 'why (because of what)', mondo ang'o 'so that what (may happen)', etc.

Generally, the clause patterns for information-seeking questions are the same as the patterns for their corresponding declaratives, the significant

¹¹ There are other communicative functions associated with interrogative sentences, the actual number depending on the language under consideration.

difference being that in the former there is a question word filling some structural position. Placing a question word in preverbal position necessitates the relativization of what comes after it if the information sought by the question word can be given in the form of a nominal (phrase). For example, in the following pairs of semantically equivalent sentences

- (191a) Ng'at no dwaro ang'o?

 Person that want what

 'What does that person want?'
- (191b) Ang'o ma ng'at no dwaro? (= 191a) rel.
- (192a) Ere pala?
 Where knife
 'Where is the knife?'
- (192b) Pala ere (= 192a)

the information required by (191) would normally be given in the form of a nominal, e.g. (odwaro) pesa '(He wants) money.', while the information required by (192) would normally take the form of a prepositional phrase, e.g. (Pala) ni e wi mesa '(The knife is) on the table.'. This explains why we have a relative clause after ang'o in (191b) but not after ere in (192b).

Representing the Question word with a Q, we can, following our observations above, identify some of the relevant clause patterns as follows:

- Q V DO, e.g.

 (193a) Ng'a ma kelo koko
 Q (+Human) rel. bring-IMP noise?

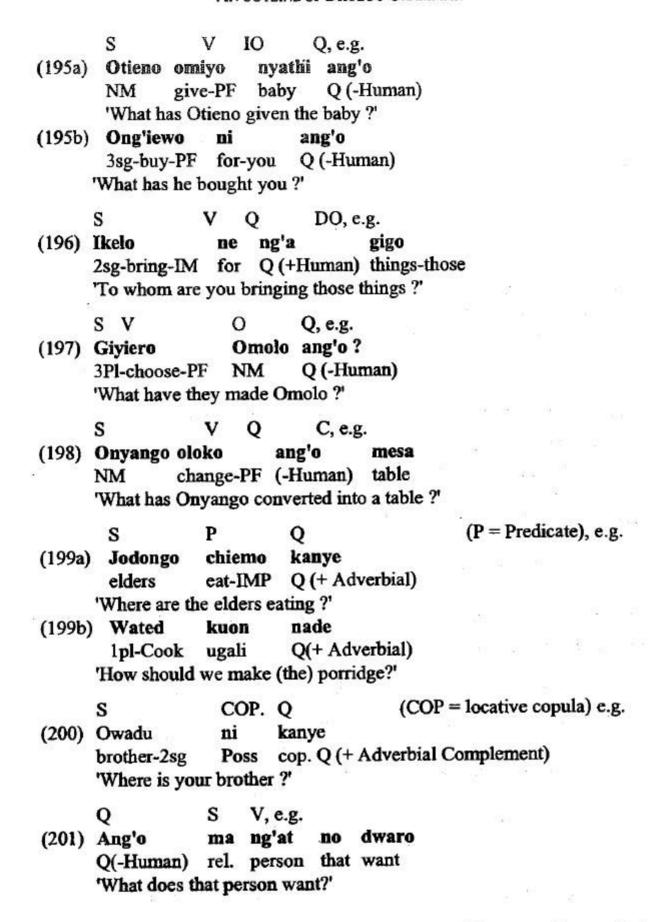
 'Who is causing trouble?'
- (193b) Ang'o ma yiengo ot
 Q(-Human) rel. shake-IMP house
 'What is shaking the house?'
- S V Q, e.g.

 (194a) Juma otimo ang'o

 NM do-PF Q (-Human)

 'What has Juma done?'
- (194b) Kwach onego ng'a leopard kill-PF Q (+ Human) 'Whom has the leopard killed?'

¹² Note that, as we have explained earlier on, the locative copula ni introduces a prepositional (locative) phrase and should not be equated to English 'is' without qualification.



There are many clause patterns for information-seeking questions which we can identify in Dholuo. The important principle is that in every such construction there is an informational gap which is indicated by the presence of a question word in some structural position.

Confirmation-seeking questions are formed either (i) by merely expanding the tonal register of a declarative construction, or (ii) by using an appropriate question word. The first strategy was discussed in detail in Okoth (1977) and, since it has no structural consequences at the segmental level, we shall not go into it here. The key words used in the second strategy are **bende**, **donge**, and **koso**, all of which ask for the confirmation of an accompanying statement. Their closest equivalent is the French interrogative expression 'est-ce que' (lit: 'is it that...?').

The defining characteristic of a confirmation-seeking question is that it can be adequately responded to by merely saying either ee 'yes' or ooyo 'no'. Bende usually occurs either sentence-initially or after the subject, e.g.

(202a) Bende ng'ato pidho nyathi
Q someone feed-IMP baby
'Is anyone feeding the baby?'

(202b) Ng'ato bende pidho nyathi (= 202a)

With subjects of more specific reference than ng'ato, the occurrence of bende after the subject (or any other referring expression) may suggest a restriction of the scope of bende to the expression in question with the sense of 'as well' added to its general role as confirmation-seeking question word. Thus, for instance, the sentence

(203) Atieno bende biro Atieno come-IMP

may mean either 'Is Atieno coming?' or 'Is Atieno also coming?' (that is, we know someone else who is).

The important semantic point about bende is that it shows only the speaker's desire to know whether the propositional content of the X-element in any sentence of the form bende X (where X is a declarative construction) is or is not the case. For example, the interest of the person who asks the question (as far as we can tell from the wording alone)

(204) Bende jo Ulaya puro
Q people-of Europe cultivate
'Do Europeans cultivate (their land)?'

is only to know whether it is or is not the case that

(205) Jo Ulaya puro 'Europeans cultivate (their land).'

¹³ In conversation, bende is often reduced to be, which gets further reduced to b- before a vowel-initial word, e.g. be inene 'Have you seen him?' is often realized as bi:nene. For a detailed account of such phonological processes see Okoth (1977) and (for a different view) Odhiambo (1981).

On the other hand, using donge, as in

(206) Donge ubiro
Q 2pl-come-IMP
'Aren't you coming?'

suggests not only that the speaker expects the X-element of the sentence donge X to be true, but also that he has an interest in its confirmation.

If the speaker does not expect the X-element in any sentence QX? (where Q is a confirmation-sceking question word) to be true, then he uses the word koso, as in

- (207) Koso ubiro
 'Might you be coming?'
- (208) Koso ichamo rech
 Q 2sg-eat-IMP fish
 'Do you eat fish? (I assume that you do not)'

Thus koso has an inherent negative meaning, rather like (though perhaps not to the same degree as) the information-seeking question word dak 'why not', as in the sentence

(209) Dak iwuo Q 2sg-talk 'Why don't you talk?'

Some of the question words, e.g. donge, are fairly free in their occurrence relative to the other constituents in a sentence. Thus, we can say

(210a) Donge yamo kudho
Isn't (the) wind blowing?
(210b) Yamo donge kudho (= 210a)
(210c) Yamo kudho, donge (= 210b)

Such phenomena are of central importance to the subject of this study, but we shall postpone their discussion until we have put everything in its place within our theoretical framework.

2.3.3. IMPERATIVES

Imperative constructions in Dholuo are, as in many other languages, characterized by two structural features, namely (i) the absence of an overt subject, and (ii) the presence of a main verb in the active voice.

The two main communicative functions of imperatives in Dholuo are to give commands and to make requests (or challenge someone to do something). Each of these functions is indicated in Dholuo by a characteristic modification of the verb form. Since the tonal aspects of this modification have been dealt with in Okoth (1977), we shall discuss here only its segmental aspects.

COMMANDS are formed by using only the verb root if the final segment of the root is a liquid, a nasal, a glide, or a vowel. Thus, we have constructions such as the following:

```
(211a) kel
         'Bring.' (kelo 'to bring')
(211b) kel pesa
        Bring money.'
(212a)
        'Try.' (temo 'to try')
(212b) tem ngàto
        'Try somebody (else).'
(213a) kaw
        'Take.' (kawo 'to take')
(213b)
        kaw gini
        'Take this thing.'
(214a)
        'Die.' (tho 'to die')
(214b) a
        'Leave.' (a 'to leave (vi)')
```

It should be noted that where the root is segmentally identical to the infinitive as in (214), only tone and the absence of a subject mark the imperative construction. In this particular example, the tone pattern of tho changes from Low in the infinitive form to LOW-RISING, in the imperative form. The same happens in the case of a. We should also note two types of exceptions to the behaviour illustrated by (211)-(214) above, one systematic and the other accidental. The systematic one involves the class of verbs whose roots end in glides. Since Dholuo morpheme-structure conditions do not allow the palatal glide (shown by y in Dholuo orthography) in word-final position, y-final roots (or what would be such roots) become vowel-final in their command forms, e.g.

```
(215a) go
'Beat (sth.).' (goyo 'to beat')
```

```
(215b) go bul

'Beat the drum.'

(216a) we

'Leave (sth.).' (weyo 'to leave (sth.)')

(216b) we wach no

'Leave that matter.'

(217a) ka

'Bite (sth.).' (kayo 'to bite')

(217b) ka lweta

'Bite my hand.'
```

The accidental type involves words whose command forms become vowel-final as a result of phonological behaviour which cannot be explained in terms of any general phonological rule of the language. A notable example of this is found in the behaviour of the transitive verb neno 'to see (sth.)'. In some morphosyntactic environments the verbfinal -o is the only part of it that is dropped, leaving nen- as the root in such forms as nen-a 'See me.', nen-e 'See him.', etc.; but in some other environments the whole of the second syllable -no is dropped, so that ne- is the root to which the necessary modifications are suffixed. This is what we have in forms such as ne-gi 'See them.', ne-wa 'See us.', and the command forms as we see in the following sentences:

```
(218a) ne
'See (sth.).' (neno 'to see (sth.)')
(218b) ne lweta
'See (look at) my hand.'
```

What needs to be emphasized is that both of the two kinds of exception identified above are not exceptions to the general way in which commands are constructed, but only to the manner in which roots are separated from the infinitival suffix -o. Since vowel-final roots are in the same class as glide- and nasal-final ones, there are no adverse structural consequences arising from the exceptional behaviour of the words discussed above.

The second way in which commands are formed involves those verbs with roots which end in obstruents (or true consonants). The significant difference between this kind of root and the first type (as far as forming commands is concerned) is that, whereas in the case of the latter (as we saw above) the verb root is unmodified both sentence-finally and when followed by another word (compare the a- and b-sentences of the relevant examples), in the commands formed from obstruent-final roots the root is extended by

the suffix -i if no word follows it. The following examples will make this point clearer. (Compare the a- and b-sentences.)

(219a) losi 'Talk!' (loso 'to talk') (219b)los koda 'Talk to me!' (220a) keti 'Put (sth.)!' (keto 'to put.') (220b) ket gino ka 'Put that thing here!' (221a) duoki 'Return (sth.)!' (duoko 'to return (sth.)') (221b) duok mano 'Return that one!' (222a) hobi 'Pierce (sth.)!' (hobo 'to make a hole in') (222b) hob piere 'Make a hole in its bottom (part)!' (223a) lupi 'Fish!' (lupo 'to fish') (223b) lup gokinyi 'Fish in the morning!' (224a) wuogi 'Depart!' (wuok 'to depart') (224b) wuog sani 'depart now' (225a) jogi 'Get disgusted!' (jok 'to be disgusted') (225b) jog piyo

The last two examples, in which the infinitive ends in a voiceless consonant, illustrate (in their command forms) a general morphophonemic process in Dholuo - which is the subject of Okoth (1982) - but what is significant here is the presence of the suffix -i in the a-sentences as opposed to its absence in the b-sentences.

This second method of command-formation also applies in the case of roots which end in nasal compounds, e.g.

(226a) nindi
'Sleep!' (nindo 'to sleep')
(226b) nind ka
'Sleep here!'

'Get disgusted quickly!'

```
(227a)
          penji
          'Ask!' (penjo 'to ask')
          penj wuoru
(227b)
          'Ask your father!'
(228a)
          gangi
          'Pile (sth.) up! (gango 'to pile (sth.) up')
(228b)
          gang gigo
          'Pile those things up!'
(229a)
          riambi
          'Tell a lie!' (riambo 'to tell a lie')
(229b)
          riamb piyo
          'Tell a lie quickly.'
          bandhi
(230a)
          'Demand.' (bandho 'to demand (sth. owed) back'
          band matek'
(230b)
          'Demand hard.'
```

A further point to be noted is that if there is need to suffix a personal pronoun to the command form of a verb, then the command-form suffix -i is replaced by the given pronominal element, e.g.

```
(231a) penji
       'Ask.'
(231b) penj-a
       'Ask me.'
(231c) penj-e
       'Ask him.'
(231d) penj-gi
       'Ask them.'
(232a) wachi
       'Say.'
(232b) wach-na
       'Tell me!'
(232c) wach-ne
       'Tell him!'
(232d) wach-nwa
       'Tell us!'
```

(The n which precedes the pronominal forms in (232) is a reduced form of the preposition ne/ni 'for, to, etc').

The third way in which commands are constructed involves verb forms ending in the reflexive element -ruok. The command forms of such verbs always consist of a stem ending in -r followed by the suffix -i.14 With

¹⁴ This is so except in plural forms, as explained in the next paragraph.

respect to the suffixation of the command-form -i, the difference between the command-type and others is that it always has the -i irrespective of the environment in which it occurs. This behaviour is illustrated by the following examples in which the -i appears in both the a- and the b-sentences.

```
(233a) tamri
          'Refuse!' (tamruok 'to refuse')
         tamri sudo
 (233b)
          'Refuse to move!'
         sungri
 (234a)
          'Boast!' (sungruok 'to boast')
         sungri-na
 (234b)
         'Boast to me!'
 (235a)
         gori
         'Fight!' (goruck 'to fight')
         gori kode
(235b)
          'Fight him!'
 (236a) pakri
         'Praise yourself!' (pakruok 'to praise oneself')
 (236b)
         pakri sani
         'Praise yourself now!'
```

So far we have talked only about singular command forms (i.e. those addressed at one individual) and some of what we have said does not hold in plural forms. There is much more regularity in the plural command forms than in the singular ones, giving us only two command-types. The more general type includes commands formed from all non-reflexive verbs. In this type, whatever the verb, we merely add the suffix -uru to the verb-root in order to form the command-form. Thus we have commands such as the following:

```
(237a) lup-uru
'Fish!' (you-Pl.)
(237b) kech-uru
'Be angry!' (you-Pl.)
(237c) los-uru
'Speak!' (you-Pl.)
(237d) kel-uru
'Bring (sth.)!' (you-Pl.)
(237e) chiem-uru
'Eat!' (you-Pl.)
(237f) kaw-uru
'Take (sth.)!' (you-Pl.)
```

```
(237g) a - uru
'Depart!' (you-Pl.)
(237h) tho-uru
'Die!' (you-Pl.)
```

The second type includes all commands formed from reflexive verbs. In this type we add a stem-formative -e to the reflexive stem before suffixing the plural marker -uru. This gives us command forms such as the following:

```
(238a) tamre-uru

'Refuse!' (You-Pl.)

(238b) dembre-uru

'Be calm!' (You-Pl.)

(238c) gore-uru

'Fight!' (You-Pl.)

(238d) thagre-uru

'Suffer!' (You-Pl.)

(238e) herre-uru

'Love one another!' (You-Pl.)

(238f) orre-uru

'Send one another!' (You-Pl.)
```

Notice that in cases like (238e) and (238f) the verb root has a root-final -r-before the reflexive -r- is added (thus hero 'to love' becomes herruok 'to love one another' and oro 'to send' becomes orruok 'to send one another').

Like commands, requests (and challenges) are constructed by affixing appropriate elements to verb roots. 15 The following are the main ways in which requests are formed.

In cases where there is a pronominal suffix as object of the verb, the request-form has the structure (as far as the verb is concerned) Root - Pronominal Affix -e, e.g. (Compare the a- and b-sentences):

(239a) mak-e
'Catch him!'
(239b) mak-e-e'Please, catch him!'
(240a) kel-gi
'Bring them!'
(240b) kel-gi-e
'Please, bring them!'

¹⁵ Unless there is an indication to the contrary, statements made about request-forms here also hold true for challenge-forms.

```
(241a) miy-a
'Give me!'
(241b) miy-a-e
'Please, give me!'
```

(242a) luong-wa 'Invite us!'

(242b) luong-wa-e 'Please, invite us!'

Here all the b-sentences could also have the sense of a challenge, e.g. (239b) may also mean 'Catch him, if you dare.' In conversation, the request-marking -e is usually assimilated to the preceding (pronominal) -a-, so that (241b), for instance, is often pronounced as miy-a-a and (242b) as luong-wa-a.

In the case of consonant-final roots, if there is no pronominal suffix on the verb in question, then the request-form consists simply of the verb root (or reflexive verb-stem) plus the suffix -ie, as can be seen in the following sentences:

```
(243) lup-ie (kawuono)
fish- today
'Please, fish (today)!'<sup>16</sup>
```

(244) cham-ie (rech) eat- fish 'Please, eat (fish)!'

(245) kaw-ie (mano) take- that 'Please, take (that one)!'

(246) tamr-ie (sani)
refuse- now
'Please, refuse (now)!'(normally used as a challenge)

The optional words (in brackets) in these examples show that it does not matter whether or not something else follows the request-form of the verb - it remains the same.

In the case of vowel-final roots, only -e is suffixed to the root to form a request-form, e.g.

¹⁶ In Dholuo this is a genuine request, and is not the polite welcoming statement contained in the English equivalent.

```
(247) ko - e kamano
say- so (like that)
'Please, say so!'
(248) a - e
leave-
'Please, leave!'
(249) ne - e
see -
'Please, look (at this)!'
```

One other way of making requests is by adding the word ane/anena after either a command- or request-form of a given verb. This type of request construction is illustrated by the following pairs of paraphrases:

```
(250a) mak-ie bada
'Please, catch my arm!'
(250b) mak(ie) ane bada
(251a) bed-ie piny
'Please, sit down!'
(251b) bed ane piny
```

(252) kelie-uru pala

Plural forms of all requests are made by adding the morpheme -uru to the relevant request-form of a verb as in the following examples: (Request elements not glossed)

```
bring-Pl knife
     'Please, bring a knife!'(2 Pl.)
(253) koe-uru kamano
      say-Pl so
     'Please, say so!' (2 pl.)
(254) mak-naa-uru gini
     hold-for me-Pl this thing
     'Please, hold this thing for me!'(2 Pl)
(255) tamr -ee-
                  uru
     refuse-
                  -pl
     'Refuse, if you (Pl.) dare!'
(256) tang' ane uru lwetu
     show
               Pl hands-2Pl-Poss.
```

'Please, show me your hands!'

Except (255), the examples of plural request-forms above (which represent all the request-types we have discussed) retain their singular shapes as shown above, merely adding the plural element, -uru. In (255) - which we

repeat in (257b) for ease of reference - the request element ie (see (257a)) changes to ee before the plural element is added.

- (257a) tamr -ie
 'Refuse, if you (sg.) dare!'
- (257b) tamr -ee-uru 'Refuse, if you (Pl..) dare!'

This is a peculiarity of the reflexive verb-stem, as these verbs of the same class testify:

- (258a) Pakr-ie
 'Please, praise yourself!'
- (258b) Pakr-ee-uru
 'Please, praise yourselves!'
- (259a) kwakr- ie 'Please, embrace yourself!'
- (259b) kwakr-ee-uru 'please, embrace yourselves!'
- (260a) der-ie
 'Commit suicide, if you (sg.) dare!'
- (260b) der-ee-uru
 'Commit suicide, if you (pl.) dare!'

To conclude, let us point out that apart from the absence of a subject element and the modifications on the verb form discussed above, the imperative construction in Dholuo does not have any differences of structural significance from the declarative construction.

What we have discussed so far are the structurally significant sentence types in Dholuo. Others, like exclamations and presentatives, do not have any special clause structure or modifications of the verbal predicator. For example, the sentence:

(261) Mano dhiang' manade That cow rel-how

could be either interrogative, asking 'What cow?' is talked about or an exclamation, wondering 'What a cow!' one is faced with. Only the voice level, by indicating anxiety or normality, helps in telling whether we have an exclamation or something else in a case such as this. Sometimes we have a special word, e.g. the verb doko 'to be', which is used only in exclamations, such as:

(262) Ma doko tim

This be action

'What behaviour/deed/action/conduct, etc.!'

Perhaps what needs stressing as we conclude this topic is that there is no inviolable correlation between sentence types and communicative functions. That is to say, a sentence type often associated with one communicative function may be used for another. For instance, a declarative construction may, in an appropriate context, be used to ask a question (cf. Saddock 1974).

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3. CONSTITUENT FUNCTIONS AND THEIR RELATIONSHIP TO SURFACE PATTERNS

In the previous chapter we discussed the various grammatical categories and functions found in Dholuo. We concluded the chapter by outlining the major clause patterns of the language. Linguistic constructions which fall under such categories acquire constituent status when they occur in larger (or higher) constructions, thinking in terms of dominance relations. Thus, a word is a constituent of a phrase, which is a constituent of a clause or sentence. Needless to say, by virtue of the dominance relations we have mentioned above, the sentence is the only linguistic construction which is not a constituent of any other construction.

It follows, then, that the clause patterns that we talked about in traditional terms (chapter 2) are actually (sentential) constructions within which various lower constructions relate one to another as constituents with such functions as subject, object, complement, adverbial, etc. In chapter 2, our main concern with clause patterns was to determine the combinations of constituent functions that are found in various sentence-types. What we did not talk about are the variations in constituent ordering that such clause patterns are capable of in Dholuo.

We postponed discussion of that part of our task because an insightful account of such variations in constituent order requires (i) an awareness of the underlying functions of the constituents in question, and (ii) the role of these underlying functions in determining the various surface patterns that we observe in the empirical data. All this can be done systematically only if we work within a coherent theoretical framework with explicit definitions of constituent functions and relations. We shall, therefore, devote this chapter to the investigation of the underlying constituent functions in Dholuo (and their relations) within the framework of FG as we defined it in chapter 1. We shall also discuss how such underlying representations are related to the surface structure patterns of the kind outlined in chapter 2.

This investigation will contribute to our study in two major ways. First, it will give us some idea of what descriptive tools of FG are really relevant to the description of Dholuo constituent order and what modifications, if any, are required for us to meet our objectives without going outside the functional paradigm. Second, and equally important, it will enable us to

have a clearer idea of what actually constitute the data for our ordering problems in Dholuo.

Once established, such problems will then be discussed more exhaustively in chapter 4. If, therefore, we do not expose so much data in this chapter, it is not because we deviate from the empirical basis of our study, but just because we regard this chapter as our (theoretical) stage-setting for the main activity, which is to come in chapter 4 - where we shall work with much more data.

In FG theory the underlying predications of the type we want to investigate here are built upon general predicate-frames found in the lexicon of the language in question. It is, therefore, appropriate to open this chapter by considering the nature of the lexicon that Dholuo would have in an FG model.

3.1. PREDICATE-FRAMES AND THE LEXICON

The complete inventory of lexical items and their structural possibilities is called the Fund of a language (Dik 1979:6). Briefly, the Fund is a set of predicate-frames plus a set of terms. Formally, if we call the first set S_1 and the second one S_2 , then the Fund may be defined as a set F such that:

$$F = S_1 \cup S_2 \cup U = Union$$
.

The lexicon is that subset of the Fund which contains basic terms and basic predicates. That is, it is a set of those expressions of the language which cannot be formed by synchronically productive rules. The set of basic terms and predicates can be extended by the formation of derived terms and predicates. This task is done by term- and predicate-formation rules, which are synchronically productive rules.

As we shall see below, the syntagmatic possibilities specified for each predicate by the corresponding predicate-frame make it unnecessary for a grammar which uses such frames, e.g. FG, to use phrase-structure rules (such as are found in the base component of a transformational generative grammar).

¹ From now on, unless indicated otherwise, the term 'predicate' is used to mean what we have up to now been referring to as 'predicator'.

3.1.1. PREDICATE-FRAMES

The standard predicate-frame in FG (cf. Dik 1979:6) specifies for each predicate, basic or derived, the following properties: (i) its lexical form, (ii) the (sub)category to which it belongs, (iii) the number of arguments that it takes, (iv) the semantic functions of these arguments, and (v) the selectional restrictions which it imposes on these arguments.

I will attempt here to give representative predicate-frames for Dholuo. The frames discussed here should have a very close relationship to the clause patterns discussed in chapter 2. Both contain mainly structurally obligatory constituents and thus can serve only as a basis for the construction of nuclear predicatons (cf. 3.3.2. for more complex predications). However, since predicate-frames provide more information, as we can see in the list given above, the representative frames of a language cannot be equated with its clause patterns.

In formulating these representative predicate-frames, use is made of the following symbols:

P stands for any unspecified predicate

Pc stands for any unspecified predicate belonging to the grammatical category c (where c may be V(erb), N(oun), Adj(ective), etc.)

R stands for any predicate showing a selectional restriction on the kind of argument that can be used to fill a variable term position.

The interpretation of these symbols should become clearer as we see their application in relevant formulations below.

The following are the representative frames for the major predicate-types in Dholuo.

(1)
$$P_V(X_1 : R(X_1))_{AG}$$

This represents the predicate-frame for any verbal predicate which goes into a predication in which the participant with the semantic role of Agent has to have the bundle of selectional features represented by R. Verbal predicates which have this type of predicate frame in Dholuo are many. To belong to this class a verb must be a one-place predicate, and the semantic function (SF) of the one argument in the frame must be that of Agent. The following are typical type-1 predicate-frames:

 $wuoyo_V$

 $(X_1 : [+Human](X_1))_{AG}$

```
gedo_V
(X_1 : [+Animate] (X_1))_{AG}
ywecho_V
(X_1 : [+Human] (X_1))_{AG}
ringo_V
(X_1 : [+Animate] (X_1))_{AG}
```

All these verbal predicates, wuoyo 'to talk', gedo 'to build (vi)', ywecho 'to sweep (vi), and ringo 'to run' are one-place predicates which take terms with the SF of Agent.

```
(2) Pv(X_1 : R(X_1))_{PROC}
```

This formula represents the basic predicate-frame for one-place predicates which occur in predications in which the participant involved has the SF of Processed. Such a formula represents predicate-frames of such verbal predicates as dongo 'to grow', lwar 'to drop (vi)', pukruok 'to spill (vi)', yienyo 'to boil (vi)':

```
\begin{aligned} &\textbf{dongo}_{V} \\ &(X_{1}: [+Animate] \ X_{1}))_{PROC} \\ &\textbf{lwar}_{V} \\ &(X_{1}): [-Gaseous] \ (X_{1}))_{PROC} \\ &\textbf{pukruok}_{V} \\ &(X_{1}: [+Mass-Noun] \ (X_{1}))_{PROC} \\ &\textbf{yienyo}_{V} \\ &(X_{1}: [Liquid] \ (X_{1}))_{PROC} \\ &(3) \ P_{V} \ (X_{1}: R \ (X_{1}))_{PO} \end{aligned}
```

This formula represents the basic predicate-frame for any one-place verbal predicate which occurs in predications in which the participant has the SF of Positioner. The formula represents the predicate-frames of such verbal predicates as dagi 'to refuse', budho 'to rest', dembruok 'to remain calm', kuno 'to sulk':

```
\begin{aligned} &\textbf{dagi}_{V} \\ &(X_{1}: [+Animate] (X_{1}))_{PO} \\ &\textbf{budho}_{V} \\ &(X_{1}: [+Animate] (X_{1}))_{PO} \\ &\textbf{dembruok}_{V} \\ &(X_{1}: [+Animate] (X_{1}))_{PO} \\ &(4) P_{V} (X_{1}: R(X_{1}))_{\emptyset} \end{aligned}
```

This is the formula for the basic predicate-frame of any verbal predicate whose domain consists of only one participant, which has the Zero SF. Such

is the predicate-frame for verbs of the category often referred to as 'stative', e.g. ool 'to be tired', jok 'to be disgusted', chiek 'to be cooked', romo 'to be enough',

```
\mathbf{ool}_{V}
(X_{1} : [+Animate] (X_{1}))_{\emptyset}
\mathbf{jok}_{V}
(X_{1} : [+Emotion-Possessing] (X_{1}))_{\emptyset}
\mathbf{chiek}_{V}
(X_{1} : [+Cookable] (X_{1}))_{\emptyset}
\mathbf{romo}_{V}
(X_{1} : [+Target-Oriented] (X_{1}))_{\emptyset}
```

The four representative frames identified above will accommodate all the one-place verbal predicates in Dholuo. Further investigation is required to resolve the complications which arise from the fact that aspect seems to determine the state-of-affairs designated by a particular predication. This is relevant especially in handling the ingressive forms of verbal predicates relating to states and positions. For example, the word dhero 'to be thin' is more clearly stative in the sentence Ogot odhero 'Ogot is thin' than in Ogot dhéró 'Ogot is getting thin'. The latter suggests the process of getting into the state designated by the former. Similarly, the ingressive form tends to give states of affairs that would normally be regarded as positions, the properties of an action. Thus, for example, bedo 'to be seated' is more clearly a position in wendo obedo (piny) 'the guest is sitting down' than in wendo bedo (piny) 'the guest is getting seated'. The question, for both dhero and bedo is whether the SFs of the participants in them should be inferred from their perfective or imperfective senses. A simple solution, which seems to be acceptable to the founder of FG, Simon Dik (personal communication), is to regard all predicates of what seem to be states or positions but which have ingressive forms as either processes (in the case of states) or actions (in the case of positions). If, for some reason, this solution is not found satisfactory, it may be worth investigating the descriptive (and theoretical) consequences of having either an unspecified SF or a general one such as Controller which is made specific only (as Ø or Positioner) after the aspectual value of a predication has been determined.

The option involving a general SF is fairly straight-forward in terms of what its application would require. The person who adopts it needs only to outline a procedure for converting one SF into another. Such a procedure may, for

example, stipulate that the Controller function is converted into Positioner when we have imperfective aspect and into Zero when the aspect is perfective. However, the option involving an unspecified SF is theoretically more complicated and we shall provide a brief sketch of the direction its development might take, if it should be found profitable.

Let us suppose that some predicate-frames in the Fund of a language are allowed to have variables β and γ for semantic functions and states of affairs respectively. We would thus give a predicate such as Dholuo **dhero** 'to be thin' a predicate-frame of roughly the following specifications (ignoring irrelevant details):

(5) [dhero_V (X1: (X1)) β]_{γ}

We may call the specific state of affairs corresponding to any γ at any given time the gamma-value of a predicate-frame and the sum of the elements of the set W of all the possible gamma-values of a given predicate-frame its gamma-range. Similarly, the specific semantic functon corresponding to β at any given time may be called the beta-value of the relevant term X_1 and the sum of the elements of the set Z of all the possible beta-values of X_1 shall accordingly be called its beta-range.

Applying this to frame (5), we can specify its gamma-range as 2, being the sum of the elements of the unordered set $W = \{State, Process\}$. The betarange of the term X_1 is also 2, being the sum of the elements of the unordered set $Z = \{\emptyset, Processed\}$. When the gamma-value of (5) is 'State', the beta-value of X_1 is \emptyset and when the gamma-value of (5) is 'Process', the beta-value of X_1 is 'Processed'. In general, for any given gamma-value of a predicate-frame, there is a corresponding beta-value of some term X_1 within the same predicate-frame and a set Q of all aspects (aspectual distinctions) which are compatible with the particular gamma-value. Thus, for (5), when the gamma-value is 'State', the unmarked aspect to go with it is perfective, and when it is 'Process', imperfective is its unmarked aspectual correlate.

Given the assumptions made above, a change in the elements of Q would result from a corresponding change in the gamma-value of the predicate-frame in question. Thus, for instance, a change from imperfective to perfective aspect would follow a change from 'Process' to 'State'. However, this is where the problem of this solution seems to lie. In real-life situations speakers can choose to present as perfective an event that is still in progress.

For example, saying Baba odhi mam 'Father has gone to the lake' does not necessarily imply that the journey is complete - it merely means that the speaker is not interested in "the various separate phases that make up that situation" (Comrie 1976:16). This use of aspect in a way that ignores the real state of affairs seems (in Dholuo, at least) to be possible only with the perfective aspect. No one, unless with the intention of telling a lie, would say tol chot 'The rope is getting cut' if he sees that the rope is alreday in two pieces as a result of the process he is describing. So, some refinements would need to be made to handle this problem. However, whatever solution is used to take care of the problems relating to the ingressive aspect as stated above, the resulting predicate-frames will still be among our types (1)-(4) above, since any treatment given to them cannot alter the fact that the predicates involved are one-place predicates.

We shall now proceed to look at the representative frames needed for twoplace predicates in Dholuo (continuing with our system of numbering).

(6)
$$P_V(X_1 : R_1(X_1)_{AG}(X_2 : R_2(X_2))_{GO}$$

Here we have a frame that shows that P is a verbal predicate with one argument having the SF of Agent and a second one functioning as Goal. Each of the arguments has its own set of selectional features. The kind of state of affairs associated with a predication that would be built on this type of frame is that of Action. Predicates which have frames of this type include nego 'to kill', chamo 'to eat (vt)', ng'iyo 'to look at', kwalo 'to steal (vt)' etc.:

```
\begin{array}{l} \textbf{nego}_V\\ (X_1)_{AG}\ (X_2:[+Animate]\ (X_2))_{GO}\ (\text{where }R_1\ \text{in the general formula is null set})\\ \textbf{chamo}_V\\ (X_1:[+Animate]\ (X_1))_{AG}\ (X_2:[+Food]\ (X_2))_{GO}\\ \textbf{ngiyo}_V\\ (X_1:[+Eye-Possessing]\ (X_1))_{AG}\ (X_2:[+Visible]\ (X_2))_{GO}\\ \textbf{kwalo}_V\\ (X_1:[+Moral-Being]\ (X_1))_{AG}\ (X_2:[+Property]\ (X_2))_{GO} \end{array}
```

A minor modification of (6) gives us the representative frame (7), in which X_1 has the SF of Force.

```
(7) P_V (X_1 : R_1 (X_1))_{FO} (X_2 : R_2 (X_2))_{GO}
```

Force arguments are, however, not in a controlling role, and thus a predication built upon this kind of frame can designate only a Process (Dik

1978:37). However, the set of predicates which have the type of frame represented by (7) seems to be a subset of the set of those that have type (6). For example, under type (7), nego (cf. (6a)) would have the following predicate-frame:

```
nego_V
(X<sub>1</sub>)<sub>FO</sub> (X<sub>2</sub> : [+Animate] (X<sub>2</sub>))<sub>GO</sub>
```

A possible X_1 element would be **koth** 'rain', and the X_2 position could be taken by **liech** 'elephant'. Thus we get the predication:

```
negov (koth)FO (liech)GO
```

This, ignoring other issues yet to be discussed, would lead to the surface construction:

```
koth onego liech
rain kill-PF elephant
'The rain has killed an elephant.'
```

It, therefore, appears that predicate-frames of verbs such as **nego** may need to combine features of type (6) with those of type (7). This would result in a frame of the following kind:

```
nego_V
(X<sub>1</sub>)<sub>AGFO</sub> (X<sub>2</sub>: [+Animate] (X<sub>2</sub>))<sub>GO</sub>
```

with the proviso that X_1 is an Agent argument if a predication designates an Action and a Force argument if it designates a Process.

(8)
$$P_V(X_1 : R_1(X_1))_{PO}(X_2 : R_2(X_2))_{GO}$$

Frame (8) represents predicate-frames for verbal predicates which take two arguments, X_1 and X_2 , with the SFs of Positioner and Goal, respectively. Verbs with this kind of predicate-frame include **rito** 'to wait for', **diedo** 'to balance on the head', **dagi** 'to refuse (vt)', **kano** 'to keep', etc.:

```
rito<sub>V</sub>
(X_1 : [+Animate] (X_1))_{PO} (X_2)_{GO}
diedo<sub>V</sub>
(X_1 : [+Human] (X_1))_{PO} (X_2)_{GO}
dagi<sub>V</sub>
(X_1 : [+Animate] (X_1))_{PO} (X_2)_{GO}
kano<sub>V</sub>
(X_1 : [+Animate] (X_1))_{PO} (X_2)_{GO}
(9) P_V (X_1 : R_1 (X_1)) \emptyset (X_2 : R_2 (X_2)) \emptyset
```

This general frame represents the predicate-frames of two-place predicates which designate states. To avoid the controversies surrounding the zero function we have kept to the standard theory as expressed in Dik (1978:38). Verbs with this type of frame include **neno** 'to see', **kia** 'to be ignorant of', **ng'eyo** 'to know', **hero** 'to love':

```
neno<sub>V</sub>
(X_1 : [+Eye-Possessing] (X_1))_{\emptyset} (X_2 : Visible (X_2))_{\emptyset}
kia_V
(X_1 : [+Cognitive-Capacity] (X_1))_{\emptyset} (X_2)_{\emptyset}
ng'eyo_V
(X_1 : [+Cognitive-Capacity] (X_1))_{\emptyset} (X_2)_{\emptyset}
hero_V
(X_1 : [+Animate] (X_1)) (X_2)_{\emptyset}
```

The maximum number of arguments that we can have in a nuclear predicate-frame (in Dholuo) is three. The representative frames for such predicates are given in (10-13) below.

```
(10) P_V(X_1 : R_1(X_1))_{AG}(X_2 : R_2(X_2)_{GOREC}(X_3 : R(X_3)) (where So and Dir are mutually exclusive)
```

This general frame represents the predicate-frames of three-place verbal predicates which designate Actions. The SF of the X_1 term is Agent, that of the X_2 term is either Goal or Recipient, depending on the kind of verb in the P_v position, and that of the X_3 term depends on the SF of X_2 . It is either Source or Direction if X_2 is a Goal argument, and Goal if X_2 is a Recipient argument. Verbs which have this kind of frame include **miyo** 'to give', tero 'to take from' etc.:

```
\begin{array}{l} \textbf{miyo}_{V} \\ (X_{1}: [+Animate] \ (X_{1}))_{AG} \ (X_{2}: [+Animate] \ (X_{2}))_{REC} \ (X_{3})_{GO} \\ \textbf{tero}_{V} \\ (X_{1})_{AG} \ (X_{2})_{GO} \ (X_{3}: [+Advl.] \ (X_{3}))_{DIR} \\ \textbf{golo}_{V} \\ (X_{1})_{AG} \ (X_{2})_{GO} \ (X_{3}: [+Advl.] \ (X_{3}))_{SO} \end{array}
```

It is possible to have a variation of the last two frames in which the X_1 term has the SF of Force, giving us a frame such as:

```
golo_V
(X<sub>1</sub>)<sub>Fo</sub> (X<sub>2</sub>)<sub>Go</sub> (X<sub>3</sub> : [+Advl.] (X<sub>3</sub>))<sub>So</sub>
```

In principle, frames like the ones for golo can be combined into one frame, using the formal abbreviatory conventions of the type used, for example, in the general frame (10) above.

(11)
$$P_V(X_1 : R_1(X_1))_{PO}(X_2 : R_2(X_2))_{GO}(X_3 : R_3(X_3))_{LOC}$$

This is the general frame for three-place predicates designating Positions. The X_1 , X_2 and X_3 terms have the SFs of Positioner, Goal, and Location, respectively. Predicates for which the X_3 term is essential in a nuclear predication are rare, since most Position predicates require only two arguments in a nuclear predication, taking location arguments only as satellites (see 3.3.2.). However, there are verbal predicates which require location arguments in their nuclear predications. Perhaps the best examples of such verbs are **keto** 'to put' and **yiengo** 'to place against sth. else (vt)'. The predicate-frame of **keto**, for instance, may be formulated as follows:

```
keto<sub>V</sub>
```

```
(X_1 : [+Animate] (X_1)_{PO} (X_2 : [+Concrete] (X_2)_{GO} (X_3 : [+Advl] (X_3))_{LOC} 

(12) P_V (X_1 : R_1 (X_1))_{AG} (X_2 : R_2 (X_2))_{GO} (X_3 : R_3 (X_3))_{DIR}
```

This general frame represents the predicate-frames of Action predicates. As in (11), a large number of verbs that would have this kind of frame do not need the X₃ term in a nuclear predication. However, there are verbs such as **ling'o** 'to plunge, throw into' which seem to require this kind of frame. This would give it the following specific predicate-frame:

```
\begin{array}{l} \textbf{ling'o}_V \\ (X_1)_{AG} (X_2 : [+Concrete] (X_2))_{GO} (X_3 : [+Advl] (X_3))_{DIR} \end{array}
```

Process predications provide a minor modification of (12) in which the X_1 term has the SF of Force. Thus, **ling'o** would have another lexical entry in which it has the following predicate-frame (PF):

```
ling'o_V
(X<sub>1</sub>)<sub>FO</sub> (X<sub>2</sub>: [+Concrete] (X<sub>2</sub>))<sub>GO</sub> (X<sub>3</sub>: [+Advl] (X<sub>3</sub>))<sub>DIR</sub>
```

If, for example, $X_1 = yamo$ 'wind', $X_2 = jaduong'$ 'old man', and $X_3 = aora$ 'river', an underlying predication based on this frame would have as one of its possible surface realizations:

```
Yamo oling'o jaduong' e i aora
wind throw into-PF old-man loc in river
'The wind has thrown the old man into the river.'
(13) P_V(X_1 : R_1(X_1))_{POAG}(X_2 : R_2(X_2))_{BEN}(X_3 : R_3(X_3))_{GO}
```

Frames of this type are for Action or Position predicates which, in addition to an Agent or Positioner argument, also require Beneficiary and Goal arguments in the corresponding nuclear predications. Verbal predicates of this type include mayo 'to rob', miyo 'to give', tuono 'to refuse to give sth. (vt.), hanyo 'to remind sb. of an advantage you have over him', etc., whose specific frames can be formulated essentially like the following for mayo:

 $mayo_{V}$ $(X_1 : [+Animate] (X_1))_{AG} (X_2 : [+Owner] (X_2))_{BEN} (X_3)_{GO}$

The representative frames discussed above will accommmodate most, if not all, the verbal predicates of Dholuo. Needless to say, greater accuracy could be achieved in matters involving the specification of SFs and selectional restrictions. In particular, all the selectional restrictions, with the exception (perhaps) of some with the feature [+Advl], could be made more rigid by adding the feature [+Nominal]. The specification of selectional restrictions is always a controversial issue in linguistics, and we can only concede that our specifications here are open to improvement. For example, since the verbal predicate **tuono** 'to refuse to give' usually has moral implications, one feels inclined to associate it with a [+Human] argument as the X₁ term. However, it is quite normal also to say:

(14) Paka otuono nyathine chiemo cat refuse-to-give-PF child-3sg Poss food 'The cat has denied its child food.'

And, observing birds eating in their nests, we could easily say the same of a bird. So one might feel that it would be more correct to make the X_1 term [+Animate]. Yet to say:

(15) guok otuona ring'o dog deny-me-PF meat 'The dog has denied me meat.'

seems a rather odd statement to make, and it is perhaps even more odd to say:

(16) kudni otuona chiemo
worm
'The worm has denied me food.'

The boundary between grammar and sense is one which linguistics has not yet clearly defined and, since it is not our direct concern here, we shall not spend much time on it.²

Having dealt at length with verbal predicates (because of their centrality in the formation of predications), let us now turn our attention to other types of predicates. We shall start with adjectival predicates, which normally designate states. They are characteristically one-place predicates, all of which can be easily accommodated in a representative frame of essentially the same nature as (4), with the change from P_V to P_{ADI} as the only significant modification. This gives us (17) as the representative frame for adjectival predicate-frames.

$$(17) P_{ADJ} (X_1 : R(X_1))_{\emptyset}$$

Adjectives such as kwar 'red', ber 'good', tuo 'ill', chiegni 'near', etc. have predicate-frames of type (17), the only differences being in the features represented by R in each case. This can be seen in the following corresponding PFs:

```
kwar<sub>ADJ</sub>
(X_1 : [+Nom., +Concrete] (X_1))\emptyset
ber<sub>ADJ</sub>
(X_1)\emptyset
tuo<sub>ADJ</sub>
(X_1 : [+Nom., +Animate] (X_1))\emptyset
chiengni<sub>ADJ</sub>
(X_1 : [+Place] (X_1))\emptyset
```

Nominal predicates also have predicate-frames which are essentially of type (4), except that in such predicates P is nominal rather than verbal. A representative frame for such predicates can be formulated as follows:

$$(18) P_N < F > (X_1)_{\emptyset}$$

where F is a set of inherent features of the given nominal predicate. It should, however, be noted that as in (4) the predicate has only one argument (X_1) and this argument has the SF \emptyset . It is such a frame that we find in the

² It appears that the study of selectional restrictions needs to consider the relationship between the terms themselves because we cannot otherwise explain why (16) appears more odd than kudni otuono nyathine chiemo 'The worm has denied its child food.'. The level of acceptability in cases such as these seems to be a function of our social expectations, no matter how covert.

lexical entries of Dholuo nouns, e.g. dhako 'woman', dichuo 'man', japuonj 'teacher', mach 'fire', etc.:

```
dhako<sub>N</sub>
(< Animate, Human, Feminine > (X_1))<sub>Ø</sub>
dichuo<sub>N</sub>
(< Animate, Human, Masculine > (X_1))<sub>Ø</sub>
japuonj<sub>N</sub>
(< Animate, Human > (X_1))<sub>Ø</sub>
mach<sub>N</sub>
(< Exothermic, etc. > (X_1))<sub>Ø</sub>
```

For the sake of completeness, let us point out that existential and locative predications, e.g. (19) and (20) respectively, may be built on PFs for locative predicates.

- (19) Nyasaye nitie

 God be-present
 'God is there.'
 - (20) Ng' ato ni ka Someone be here 'Someone is here.'

The locative nature of existential statements has been argued fairly well by other scholars and we do not need to defend it here. As Dik (1980:110), quoting Lyons (1968), puts it, "to say that something exists is to say that it is located somewhere". Perhaps Dholuo has interesting evidence to contribute to this idea since in Dholuo the characteristically locative copula ni appears, outside recognized locative constructions such as (20), only in existential constructions, e.g. (19). Thus, if we treat ni as a surface element, to be introduced by the already well-defended rule of Copula-support (cf. Lyons 1968: 322) which introduces copulative elements such as ni to strings which underlyingly have no such forms, we account for predications of the type exemplified by (19) and (20) by having predicate-frames of the following general type.

```
(21) P_{Loc}(X_1 : R(X_1))_{\emptyset}
```

Words such as ka 'here' and tie 'showing general existence or presence' would have the following PFs:

```
\mathbf{ka_{LOC}}
(\mathbf{X}_1 : [+\mathbf{Nom}] (\mathbf{X}_1))_{\emptyset}
```

 tie_{LOC} (X₁: [+Nom] (X₁)) $_{\emptyset}$

The four predicate-types discussed above, namely verbal, adjectival, nominal, and locative, are what one requires to construct predications in Dholuo. If our conclusions are accurate, then no nuclear predication can occur in Dholuo without fitting into the design of the frame of some predicate which belongs to one of the types we have discussed here.

3.1.2. TERMS

In FG, a term is "any expression which can be used to refer to an entity or set of entities in some world" (Dik 1978:55).

As we have mentioned earlier, terms are divided into basic and derived terms, the former are contained in the lexicon while the latter are provided by term-formation rules.

The set of basic terms is an actual inventory of learnt lexical items, usually small (and definitely finite) compared to that of derived terms which, given the recursive nature of term-formation, is open (potentially infinite). It contains those linguistic expressions whose (intended) referents are assumed by speakers to be always clear or, in a given context (linguistic or otherwise) unambiguous.

In Dholuo, as in most (if not all) other languages, the class of basic terms has as its members what are traditionally called proper nouns and pronouns.

The following schema has been suggested by Dik (1978:57) for representing terms in the lexicon:

(22)
$$(WX_i : \Phi_1(X_i) : \Phi_2(X_i) : ... : \Phi_n(X_i))$$

where the domain of potential referents X_i is first restricted to the set of entities of which Φ_1 (X_i) is true: then this latter set is restricted to the subset of which Φ_2 (X_i) is also true, and so on until finally the open predication Φ_n (X_i) gives the last restriction on the set of potential referents of the term as a whole.

The use of symbols in schema (22) is explained by Dik (ibid:51) as follows:

 X_1 is a variable ranging over the set of potential referents, $\Phi(X_i)$ is an open predication in X_i , and 'w' is a term operator or a combination of term operators. The colon ':' indicates that the information to the right gives a

specification of or restrictions on the possible values of X_i to the left. It can be read as: 'such that'.

Following this schema, a proper noun such as Otieno (a person's name) would be entered in the lexicon as follows:

where 'd' stands for the term operator 'definite' and '1' for the term operator 'singular'. Entry (23) is thus interpreted as saying that the term Otieno can be used to refer to any definite singular entity which has the property of being (having the name) Otieno.

Although a proper noun (e.g. Otieno) would not normally take a definite article even in a language like English, which makes use of the definite article to indicate definiteness of a referring expression (or term), we still have the operator 'd' in its entry to capture the obvious idea that the reference of such a term in a given predication is normally definite. Dik (ibid:62) defends this idea as follows:

In order to be able to generalise over all definite terms ... we assume that even in such cases [the case of "terms which in all respects behave like definite terms" but "have no overt definite marker"] the definiteness of operators is present in the underlying structure of the term.

Incorporating some minor adjustments defended in Dik (1979), we shall modify (23) as follows:

```
(24) (d_1X_i : Otieno_{NPROP} < Animate, Human, Male> <math>(X_i)_0)
```

In this revised lexical entry it is indicated that Otieno belongs to the syntactic category of Proper Noun and has the inherent features Animate, Human, and Male. The information about inherent features is useful when it comes to inserting terms in the argument positions of predicate-frames which, as a matter of principle, show selection restrictions which make use of similar features. Entry (24) also shows that the SF of X_i is Zero. The following would thus be typical entries of basic terms in Dholuo:

```
(25) (d_1X_i : Aloo_{NPROP} < Animate, Human, Male > (X_i)_0)
```

(30) (QX_i : ang'o <Non-human> (X_i) $_{\emptyset}$)

⁽²⁶⁾ $(d_1X_i : Nyasaye_{NPROP} < Deity > (X_i)_\emptyset)$

⁽²⁷⁾ $(d_1X_i : en_{PRO}(X_i)_{\emptyset})$ (28) $(d_1X_i : macha_{DEM}(X_i)_{\emptyset})$ (29) $(d_mX_i : wan_{PRO}(X_i)_{\emptyset})$

(31) $(RX_i : ma(X_i)\emptyset)$ (where m = the term operator 'plural'; Q = the term operator 'Question'; R = the term operator 'Relativizer')

One fundamental difference between Dholuo and, say, English is that Dholuo does not have overt markers of definiteness, at least not in the form of definite and indefinite articles. As we stated in chapter 2, only demonstrative adjectives perform a role close to that of definite articles, while the word moro (in the sense of 'some' as in 'some stranger was here') has an 'indefinite' sense. Thus, if these demonstratives and moro (or its plural moko) always performed the roles of the definite and indefinite articles, respectively, we would keep the definiteness operator 'd' and have only expression rules which relate it to demonstratives or moro/moko in Dholuo. The fact, however, is that definiteness is normally based on context in Dholuo and is (semantically) understood without the aid of any overt marker whatsoever.³

This is contrasted, in support of her claim, by the non-occurrence of more with nego, which leads to the ill-formedness of (her example):

(iii) *Nyathi moro nogo

These distributional arguments, sound as they may be, do not, however, prove her claim. As Radford (1981:64) has observed, there are cases in which an adequate description of a grammatical element needs to refer to both its syntax and semantics. We believe that the position of nogo in Dholuo grammar is such a case.

First, most co-occurrences of more with demonstrative adjectives, e.g. no, are based not on the function of more as a marker of indefiniteness, but on its other lexical meaning in which its closest equivalent in English is 'other'. Thus an accurate rendering of (i) in English would be 'that other child'. We have discussed co-occurrences in which more has its indefinite sense in the main text. (See the discussion following our examples (41) and (42)).

Second, it should be noted that whatever distributional observations we make about more and nogo, our conclusions must provide satisfactory insight into the syntactic and semantic properties of nogo, as revealed by its own contexts of occurrence within the language system. In this regard, it appears more reasonable to think of nogo not as a determiner marking definiteness, but as a nominal intensifier used with previously mentioned nouns (hence the sense of definiteness) in order to give emphasis to the

The controversy over this matter has to do with the grammatical position of the word nogo in Dholuo. Omondi (1982:67-68) claims that this word is a marker of definiteness, equivalent to the English definite article 'the'. Her defence for this position (personal communication) is based on the distribution of moro, equivalent to the English word 'some' in a construction such as 'Some men came here.', relative to nogo and the demonstrative adjective no, as shown in (her examples):

⁽i) Nyathi more no child some that

⁽ii) Nyathi nogo no child the that

If we distinguish between the definiteness of proper nouns, which we may call 'inherent', as opposed to the contextually determined definiteness of common nouns, which we may call 'acquired' definiteness, we can say that normally it is the acquired type that needs overt marking (e.g. in English). Thus, for instance, while both 'John' and 'mouse' in 'John fed the mouse.' are definite, 'John' is not overtly marked for definiteness. We can, therefore, argue that proper nouns in Dholuo, being inherently definite, need the operator 'd' in their lexical entries. It is, however, difficult to justify it for common nouns. This matter will not be resolved here since it poses a considerable problem in the relationship between semantics and pragmatics.

We shall, nevertheless, sketch out how the demonstrative adjectives may be accommodated in the term entries. Adopting from Dik (1978:62) the symbol 'P' as an operator for proximity, we can classify Dholuo demonstrative adjectives as follows:

P1	'Proximate to Speaker'	= ni / gi (P1.)
P2	'Proximate to Addressee'	= no / go (Pl.)
P3	'Proximate to neither Speaker nor Addressee'	= cha / ka (Pl.)

Taking any demonstrative adjective P_n such that P_n is a member of the set P_1 , P_2 , P_3 , we can form a derived singular term, formally representable as:

(32)
$$(d P_{n1}X_i : \Phi(X_i)_{\emptyset})$$

where we include the operator 'd' to show that any term which consists of, among other things, a demonstrative adjective is definite. The following are examples of such derived terms:

(33) wach ni 'this affair' (d P₁₁X_i: wach (X_i)_Ø)

significance, appropriateness, or relevance of a (previously mentioned) noun in a given context or to give exaggerated concurrence in the identity of the noun (as given by a previous speaker). Thus, a more appropriate English rendering of Omondi's example (ii) above would be 'that very child'.

Our opinion, therefore, is that **nogo** is an intensifier, equivalent to English 'very' (as in 'the very man') and not just a marker of definiteness, equivalent to English 'the' (as Omondi believes).

It seems that intensifiers of this kind (at least in Dholuo and English) cannot collocate with an element marking indefiniteness, hence the ill-formedness of (iii) above. This, in the case of Dholuo, may be due to the fact that the use of nogo, as explained above, presupposes a level of certainty that cannot accommodate the indefiniteness associated with moro.

```
(34) wach no
'that affair'
(d P<sub>21</sub>X : wach (X<sub>i</sub>)<sub>Ø</sub>)
(35) wach cha
'that affair'
(d P<sub>31</sub>X<sub>i</sub> : wach (X<sub>i</sub>)<sub>Ø</sub>)
(36) weche gi
'these affairs'
(d P<sub>1m</sub>X<sub>i</sub> : wach (X<sub>i</sub>)<sub>Ø</sub>)
(37) weche go
'those affairs'
(d P<sub>2m</sub>X<sub>i</sub> : wach (X<sub>i</sub>)<sub>Ø</sub>)
(38) weche ka
'those affairs'
(d P<sub>3m</sub>X<sub>i</sub> : wach (X<sub>i</sub>)<sub>Ø</sub>)
```

Overtly indefinite derived terms would have the operator 'i' (for indefinite) and moro (also functioning as a term operator). This would give us, for example, (39) and (40) as the indefinite equivalents of (33) and (36), respectively.

```
(39) wach moro 'some affair' (i_i moro_1 X_i : wach (X_i)_\emptyset) (40) weche moko 'some affairs' (i_i moro_m X_i : wach (X_i)_\emptyset) (The same expression rules that replace wach in (40) with its plural weche will give us moko - the plural form of moro.)
```

A problem arises in cases where **moro** and a demonstrative adjective are found in the same determiner phrase, e.g.:

- (41) Miya kalam moro no give-me pen P2
 'Give me that other pen.'
- (42) Miya kalambi moro (maber) cha pen-2sg-Poss rel-good P3 'Give me that your (good) pen.'

In (41), more has the meaning of 'other' and is not the same as the one that appears in (39) and (40). Thus, the problem presented by (41) can be handled by invoking the concept of homonymy, and thus claiming that we are dealing with different words which sound the same. But (42) cannot be dealt with in the same manner. Here we certainly have the concept of

indefiniteness combined with the definiteness that is associated with a demonstrative adjective. To accommodate this kind of construction, we perhaps need to treat definiteness as a scalar feature so that we can talk of degrees of definiteness. This is not a far-fetched idea. After all, the possibility of saying 'more definite' shows that definiteness occurs in varying degrees. Armed with such an idea, we can explain the apparent paradox in (42). The demonstrative adjective cha in that sentence shows previous mention or experience, e.g., one might have seen, used, or talked about the pen in question before. This makes it more definite in the speaker's mind than any other pen that he might not have so experienced. Yet there is a certain amount of uncertainty in the speaker's mind over the exact identity of the pen in question. In a case such as (42), the only other characteristic of the pen the speaker remembers is that it was good (itself a rather vague characteristic). It appears, therefore, that the theory of FG needs to have in its descriptive apparatus a schema for accommodating relative degrees of definiteness. Although this matter requires further investigation, and should not occupy much of our time now, we may point out that such a schema would not be difficult to formulate. Working with an operator such as 'd' (for 'definiteness'), we would only need to give it values ranging between two variables x and y, whose specific values would be uniquely defined for each language, depending on the number of degrees of definiteness that it shows. Alternatively, one could make the values of 'd' range between Zero and y so that the zero value of 'd' may represent 'indefiniteness', thereby eliminating the need to have a second operator, e.g. 'i' (for 'indefiniteness') in the current formulation of the theory.

So far we have dealt only with term operators, elements which, according to Dik (1978:60), 'quantify or qualify the set of potential referents of the term as a whole' - generally including such grammatical elements as numerators, quantifiers, articles, demonstratives etc. Another set of elements found in derived terms is that of 'restrictors', which are used to 'specify the domain of potential referents of Xi [and] must all be open predications in Xi' (Dik ibid:57).

To show clearly the difference between term operators and term restrictors, let us take our example (33) - which we shall repeat here as (43) for ease of reference.

(43) wach ni 'this affair' (d P₁₁X_i: wach (X_i)_Ø)

The term in question is X_i . Before it we have the symbols 'd' (for 'definiteness'), P_1 (for the demonstrative adj showing proximity to the speaker), and 1 (for grammatical number, in this case 'singular'). All these will be the properties of any constant term put in the argument slot of X_i in a given predication. They are the term operators (for X_i). Ignoring the zero SF marker \emptyset , we have after the colon the open predication 'wach (X_i) ', with the nominal predicate wach specifying the 'property which some entity must have in order to qualify as a potential referent of the term' (Dik 1980:10). It is thus the only restrictor of the term X_i .

In principle, since term restriction is recursive, there is no limit to the number of restrictors we can have for any given derived term. In Dholuo, derived terms usually consist of one nominal restrictor, realized as the head of the term (cf. head of a noun phrase), and any number of adjectival restrictors - realized in the form of relative constructions. Thus, (43) may be expressed in the form of a longer construction in which, in addition to the nominal restrictor wach, there is also an adjectival one, marach '(which is) bad', giving us the new derived term:

(44) wach marach ni (d $P_{11}Xi : wach_N (X_i)_{\emptyset} : rach_{ADJ} (X_i)_{\emptyset}$)

For the correct surface realization of the adjectival restrictor, the basic term (ma) marked by the operator R (relativizer) (see example (31)) is selected from the lexicon and inserted into the argument slot of rach in (44). This, in general, is how restrictors in Dholuo may be handled.

To end this section, let us note the fact that the distinction between operators and restrictors captures one (linguistically) significant generalization observed among the adjectives of Dholuo. This is the fact that such adjectives as demonstratives, cardinals, the quantifiers duto 'all' and nus 'half', and the word moro 'some, a certain' perform their attributive function unmodified by the relativizer ma. This set of adjectives is the class of term operators in Dholuo. Those which are relativized, e.g. marach 'bad', maler

'clean', maduong 'big', etc. are term restrictors.⁴ This is a significant contribution from Dholuo as a language to linguistic theory because many languages do not provide a grammatical justification for the distinction between operators and restrictors as used in FG.

3.1.3. SATELLITES

The predicate-frames we have so far discussed are only those which 'capture the basic structure of nuclear predications' (Dik 1978:16). Such a predication contains no more than the number of arguments structurally required by a given predicate to form a simple sentence with no modification, adverbial or of any other kind (as we shall see below). Since this concept is not easy to define, a few examples might help clarify the idea. Take the verbal predicate wuoyo 'to talk'. Being a one-place predicate, it requires only one (Agent) term to form a nuclear predication such as

(45) Ng'ato wuoyo
'Someone (is) talking.'

Any additional term as in (46-47):

- (46) Ng'ato wuoyo ka
 'Someone (is) talking here.'
- (47) Ng'ato wuoyo e i ot loc.prep house 'Someone is talking in the house.'

converts (45) into a non-nuclear or, to use the conventional term, extended predication. Constituents, such as those italicized in (46) and (47), which 'provide optional additions to the information contained in the nuclear predication' (Dik ibid:25) are called satellites. As Dik (op. cit.) explains:

Satellites are constituents which do not function in the definition of the state of affairs as such, but give further information pertaining to the state of affairs as a whole, by specifiying the time or the location of the state of affairs, giving the reason or cause of its obtaining, and providing other additional information.

⁴ Note that this statement refers only to adjectives. Nominal restrictors are not relativized (cf. (44)).

In terms of internal structure, satellites are just like nuclear arguments, and they perform the same kind of semantic functions. Let us take the predication (48) and its underlying representation.

(48) Achola kelo pi

NM bring-IMP water

'Achola is bringing (some) water.'

[kelo_V (X₁: Achola (X₁))_{AG} (X₂: pi (X₂))_{GO}]_{ACTION}

This is an action predication in which **Achola** is the X_1 term with the SF of Agent, and **pi** is the X_2 term with the SF of Goal. The underlying predication is a nuclear predication because it contains only enough arguments to fill the argument positions of the nuclear predicate frame for the verbal predicate **kelo**. We can, if we find it necessary, extend the nuclear predication by adding a satellite with SF of Temp (Time):

 $[kelo_V(X_1:Achola(X_1))_{AG}(X_2:pi(X_2)_{GO}]_{ACTION}(Y_1)_{TEMP}]$

Now, if we insert a term in the satellite position (Y_1) , we form the extended predication:

 $[kelo_V(X_1 : Achola(X_1))_{AG}(X_2 : pi(X_2))_{GO}]_{ACTION}(Y_1 : sani(Y_1))_{TEMP}]$

which is the underlying representation of

Achola kelo pi sani 'Achola (is)bringing water now.'

The following extended predications (and their corresponding underlying representations) illustrate other types of satellite terms (italicized) in Dholuo.

(49) Jathum miel mamit
musician dance-IMP beautifully
'The musician is dancing beautifully.'

 $[miel_{V}(X_1:jathum(X_1))_{AG}]_{ACTION}(Y_1:mamit(Y_1))_{MANNER}^5$

(50) Otieno dhi nam

NM go-IMP lake
'Otieno is going to the lake.'

 $[dhi_{V}(X_{1}: Otieno(X_{1}))_{AG}]_{ACTION}(Y_{1}: nam(Y_{1}))_{DIRECTION}$

⁵ The Y₁ term could also have the form (Y₁: mit (Y₁)) Manner, with the proviso that there will be expression rules which say that mit is realized as mamit in a Manner satellite.

(51) Wendo obedo e kom visitor sit-PF loc. chair 'The visitor is sitting on a chair.'

 $[\mathbf{bedo}_{V}(X_1 : \mathbf{wendo}(X_1))_{PO}]_{POSITION}(Y_1 : \mathbf{kom}(Y_1))_{LOCATION}$

(52) Nyathi ywak sani nikech odenyo
child cry-IMP now because 3sgPF-hungry
'The child is crying now because he/she is hungry.'

[ywak_V(X₁:nyathi(X₁))_{AG}]_{ACTION}(Y₁:sani(Y₁))_{TEMP}(Y₂:denyo_V(X₁)_Ø
(Y₂))_{REASON}

In the above examples, we have simplified the underlying representations to show only the relevant properties of the predications. These examples hardly exhaust the full range of possibilities, though they adequately illustrate the idea of an extended predication and, thus, the role of satellite terms. In principle, all the various types of adverbial expressions discussed in chapter 2 can be used as satellites to extend nuclear predications, so long as we pay due attention to the restrictions imposed on our range of possibilities by the various states of affairs.

3.1.4. SYNTACTIC FUNCTIONS

The standard FG theory (Dik 1978) works with only two syntactic functions, namely Subj(ect) and Obj(ect). Dik (ibid: 92) explains the Subj function in these words:

a constituent with Subj function refers to the entity which is taken as a point of departure for determining the perspective from which the state of affairs designated by the predication is presented.

Accordingly, we assign Obj function to the entity which is taken as the second point of departure (or vantage point).

The real motivation for the inclusion of Subj and Obj functions in FG is the need to account for active-passive paraphrase relations, especially in the case of languages such as English in which a constituent with Obj function in an active sentence assumes Subj function in the corresponding passive construction. For example, in the sentences:

Bod March 1997 and all all all and the second of the secon

- (53) Men rule the world. Subj Obj
- (54) The world is ruled by men. Subj

I have demonstrated elsewhere (cf. Okoth 1983) that the concept of Subjassignment, as used in FG, has no descriptive value in Dholuo. As we shall see in this work, an adequate account of constituent order in Dholuo can be arrived at by using only semantic and pragmatic functions. To do this we need to:

... classify semantic functions into at least two major subclasses according to how they relate to Agent on the SFH. Semantic functions which, like Agent, typically belong to the X_1 term in a given predication have a paradigmatic relationship to Agent and must, therefore, occupy the same hierarchical position (H_1) as Agent. Semantic functions such as Goal, which do not belong to the X_1 are necessarily in a syntagmatic relationship to Agent; and must find their positions on the SFH in some place (H_i) , such that 1 precedes i. (Okoth ibid: 150)

Those semantic functions which occupy the H₁ position are referred to, after the work quoted above, as 'alpha' functions while the others are said to be 'non-alpha'. Similarly, terms are called alpha or non-alpha, depending on the SFs they have in a given predication. The unmarked constituent order for complete predications in Dholuo is as follows:⁶

(55) 1 V 2 ... n

where V is the verbal predicate which forms the structural nucleus of the predication; and 1, 2 ... n are term positions. Among the term positions, only 1 must in all cases be occupied since the filling of the rest (of the positions) (2 ... n) will, in each case, depend on the valency of the verbal predicate in question. This is the kind of constituent order reflected in the following sentences:

- (56) Otieno nindo

 1 V

 NM sleep-IMP
 'Otieno is sleeping.'
- (57) Otieno ochamo rech

 1 V 2

 eat-PF fish
 'Otieno has eaten fish.'
- (58) Otieno miyo paka chak

 1 V 2 3
 give-IMP cat milk
 'Otieno is giving the cat some milk.'

⁶ This is based on predications built upon verbal predicates only.

- (59) Otieno ong'iewo nanga ne nyathine

 1 V 2 3

 buy-PF dress for child-3sgPoss
 'Otieno has bought a dress for his child.'
- (60) Otieno ong'iewo ne nyathine nanga 1 V 2 3

'Otieno has bought his child a dress.'

- (61) Jatedo miyo nyathi nyuka ne japidi e jikon

 1 V 2 3 4 5

 cook(N) give-IMP child gruel for maid loc kitchen

 'The cook is giving the child some gruel for the maid in the kitchen.'
- (62) Jatedo miyo ne japidi nyathi nyuka e jikon 1 V 2 3 4 5

The following general tendencies are observed in sentences of this kind:

- In every complete predication, the alpha term (e.g. Otieno and Jatedo) occupies the preverbal position 1.
- (II) The immediately postverbal position 2 is occupied by the next term on the SFH which occurs in the given predication, subject to observation (III).
- (III) Except in the case of some few verbal predicates, e.g. miyo 'to give', which have their peculiar restrictions on the positioning of non-alpha terms, position 2 can be occupied by a term bearing any of the first three non-alpha functions, namely, Go, Rec, and Ben.
- (IV) No term bearing a semantic function lower than Ben on the SFH can occupy position 2 if a term bearing any of the first three non-alpha functions Go, Rec, or Ben occurs in the same predication.
- (V) Unless they are assigned some special (pragmatic) functions, terms bearing semantic functions lower than Ben on the SFH are normally positioned according to their hierarchical order.

Since we have taken the position that there is no need for Subj assignment in the description of Dholuo, we must accordingly also dispense with the notion of Obj assignment because in FG the latter presupposes the former (v. Dik 1978:73). In general, then, the notion of 'syntactic function' (as applied in FG) is irrelevant to the description of Dholuo. In both preverbal and postverbal positions, constituent order in Dholuo will be accounted for in statements which make reference to semantic functions. Thus, before considering the contributions of pragmatic functions, complete predications in Dholuo may be said to have the following basic order:

(63) Alpha Verb Non-alpha

with the proviso that on the non-alpha side there exists a free-order zone that comprises the first three non-alpha functions, namely, Go, Rec, and Ben. Any other term positions in a predication can be accounted for only in terms of the assignment of pragmatic functions - which we shall now proceed to investigate. (It should be borne in mind that a more detailed account of Dholuo constituent order, using these guidelines, plus necessary revisions, will be provided in the next chapter.)

3.1.5. PRAGMATIC FUNCTIONS

In FG pragmatic functions (PFs) are assigned after syntactic functions to 'mark the informational status of constituents in question, within the particular setting in which they are used' (Dik 1978:19).

Of the four pragmatic functions distinguished in FG, two are external to the predication proper while the other two are internal. The external PFs are Theme and Tail, and the internal ones are Topic and Focus. Dik (ibid.) defines these PFs as follows:

- (I) The Theme specifies the universe of discourse with respect to which the subsequent predication is presented as relevant.
- (II) The Tail presents, as an 'afterthought' to the preceding predication, information meant to specify, clarify, or modify it in various ways.
- (III) The Topic presents the entity about which the predication predicates something in the given setting.
- (IV) The Focus presents what is relatively the most important or salient information in the given setting.

The external status of the Theme in Predications has of course been questioned. It seems to depend on specific languages and even predications. As de Groot (1981:87) has observed, in some cases "there are no reasons to assume that the Theme constituents are outside the predication". However, this issue has no direct relevance to our immediate purposes, and we shall not investigate it here. We shall proceed to look at each PF in turn with a view to finding out how it is marked in Dholuo.

3.1.5.1. THEME

The schema used in FG for 'introducing predications preceded by Themes and/or followed by Tails' is as follows (Dik 1978:130):

(64) (X_i)_{THEME}, Predication, (X_j)_{TAIL}

where the constituents bearing Theme and Tail functions are 'optional additions to the predication' (Dik ibid.:130).

The following are examples of Dholuo utterances which have constituents with Theme function (italicized).

- (65) Nyako ma biro no en osiepni?
 girl rel come-IMP that 3sg friend-2sg Poss
 'That coming girl, is she your friend?'
- (66) Nanga ma ng'ich no duoke oko dress rel wet that return-3sgNA outside 'That wet dress, return it outside.'
- (NA = non-alpha element)
- (67) In, in jakuo
 2sg 2sg thief
 'You, you are a thief.'
- (68) Wan, wan jo mohero somo

 We we people rel-like education

 'We, we are people who like education.'
- (69) Joluo, gin gikia weche ohala
 The-Luo, they 3P1A-not-know affairs trade
 'The Luo, they do not know business matters.'
- (70) Oloo, en oonge gi weche mathoth
 NM 3sg 3sgA-not have words rel-many
 'Oloo, he does not have many words (is peaceful).'

In each of the examples (65)-(70) the italicized constituent specifies a universe of discourse which defines the set of objects with regard to which what is said in the immediately following predication is relevant. Thus, for example, the assertion made in the predication gin gikia weche ohala is shown to apply only to Joluo in (69). We, therefore, say that Joluo has the PF of Theme in that sentence. So, according to the schema given in (64) above, Joluo is the constituent represented by X_i. The same is true of all the other italicized constituents in the examples given above.

3.1.5.2. TAIL

The Tail, as we have indicated above, occurs to the right of a predication which is already complete in itself and, as an afterthought, gives further information about it (or part of it). Examples (71)-(74) show cases in which a pause may precede the Tail but is not always necessary and is usually avoided:

- (71) Ok adware, wive duong no
 Not I-want-3sgNA head-3sg-Poss big that
 'I don't want him, that big-headed one.'
- (72) Oonge paro, jakong'o no 3sgA-not have sense drunkard that 'He is senseless, that drunkard'
- (73) Ohero koko, en 3sgA-like noise 3sg 'He likes noise, him.'
- (74) Kik isud buta, in

 Do-not 2sg-move near-me you

 'Don't move near me, you.'

In the following cases, a pause is necessary:

- (75) Macha e japuonj, ma wiye oyugno cha
 That Foc teacher rel.head-3sgPoss bushy that
 'That is the teacher, that bushy-haired one'
- (76) Mano e maber, ma ok miya tich matek
 That Foc rel-good rel not give-me work rel-hard
 'That is the good (one), which does not give me hard work'

Constituents with Tail function can be placed within the predication. For example, (75) may be constructed with the Tail element occurring parenthetically as in:

(77) Macha, ma wiye oyugno cha, e japuonj

In both (75) and (77) the constituent with Tail function is added to give further information on what is referred to by the demonstrative pronoun of macha.

3.1.5.3. TOPIC

According to the standard FG theory, as expounded in Dik (1978), the Topic function has the following three characteristics:

- it is assigned to the constituent designating 'the entity about which the predication predicates something in the given setting' (ibid:19),
- (ii) such an entity is usually 'coreferential to a constituent in a preceding question (or in a question that could have preceded)' (ibid:144), and
- (iii) 'any term of a predication, regardless of its semantic and syntactic function, may qualify for Topic function, given the appropriate pragmatic conditions' (ibid:143).

The special position for Topic constituents in Dholuo is the preverbal position. Since alpha terms must stand before the verb if they occur in a predication, they do not gain any prominence by having the Topic function. Let us take the following predication:

(78) Inego kwach kill-Pass-IMP leopard 'A leopard is being killed.'

In such a predication, the non-alpha term **kwach** can, if assigned the Topic function, stand before the verb as in:

(79) Kwach inego

Although (78) and (79) have the same meaning to the extent that they bear the same truth conditions, they perform different communicative functions. The former provides information as to what is taking place (in general, at a given time and place), but the latter gives information on what is happening to kwach in particular. Thus, for instance, to the question:

(80) Ango ma timore ka? what rel happen-IMP here 'What is happening here?'

The predication expressed by (78) constitutes an appropriate answer, while its counterpart (79) does not. The latter would be an appropriate response to the question:

(81) Itimo kwach nade?
do-Pass-IMP leopard how
'What is being done to the leopard?'

where it may, if communicatively found appropriate, be replaced by the non-alpha pronoun -e, as in:

(82) Ineg-e
'It is being killed.'

Again, it should be noted that (82) cannot replace (78) as a response to (80). Now take the predication:

(83) Nyithindo nego kwach children kill-IMP leopard 'Children are killing a leopard.' Given a situation in which kwach is the Topic element, we would have the predication:

(84) Kwach nyithindo nego

in which kwach precedes the alpha term nyithindo, which has to stand in preverbal position so long as it occurs in a given predication. This gives us the general pattern:

(85) Topic Alpha Verb X (where X represents any constituent whose positioning is not accounted for by the procedures under discussion in this section).

In general, given any underlying predication, we can assign the pragmatic function of Topic to one of its terms, nuclear or satellite. Thus from the following underlying predication

(86) $rudo_V(X_1 : jatedo(X_1))_{AG}(X_2 : nyuka(X_2))_{GO}(X_3 : kede(X_3))_{INSTR}(X_4 : jikon(X_4))_{LOC}$

we can realize various surface constructions depending on which of the four terms is assigned Topic function. If we do not assign pragmatic functions to any terms in (86), we end up with a predication in which the order of constituents is determined by the Semantic Function Hierarchy, especially as formulated for Dholuo in (63) (section 3.1.4.). In this formulation the alpha term, if there happens to be one, precedes the verb and then the non-alpha terms follow, usually in their order on the SFH. In such a situation, the underlying predication (86) would be realized as:

(87) Jatedo rudo nyuka gi kede e jikon cook stir (IMP) porridge with stick Loc kitchen

Assigning the Topic function to X_1 gives us the same surface structure as in (87) since the SF of X_1 is an alpha function, but assigning it to any other term produces a different surface structure, as we can see in (88), (89), and (90) (Topic term italicized).

- (88) Nyuka jatedo rudo gi kede e jikon X₂ X₁ X₃ X₄
- (89) Kede jatedo rudo-go nyuka e jikon X₃ X₁ X₂ X₄
- (90) Jikon jatedo rudo-e nyuka gi kede X₄ X₁ X₂ X₃

It should be observed that, when a term which is normally introduced by a preposition is put in Topic position, its preposition is suffixed on the verb, sometimes in a slightly different form, as in example (89). This can also be seen where we have a Beneficiary introduced by ne in a predication. Thus, if nyathi 'child' as in:

(91) Jatedo rudo nyuka ne nyathi gi kede e jikon
'The cook is stirring some gruel for the child with a stick in the kitchen.'

Is assigned the Topic function, we have the construction:

(92) Nyathi jatedo rudo-ne nyuka gi kede e jikon

where the Beneficiary preposition ne is suffixed to the verb rudo, having been left behind by nyathi.

As we shall see below (3.1.5.4.), the occurrence of constituents with Topic function in preverbal position is not unique to such constituents, but we shall be able to note the differences only after we have discussed the other cases.

3.1.5.4. FOCUS

A typology of the various uses to which the Focus function can be put in a language has been provided by Dik (1983:59) in what he calls "the etics" of Focus, in the sense that it identifies the various ways in which Focus can manifest itself, without necessarily implying that these different ways are coded in dissimilar grammatical constructions in natural languages. Ignoring the higher levels of contrast in the differentiation of Focus types, we can, following Dik (ibid:60-66), identify six ultimate types, namely:

(I) Completive Focus - which we speak of "when the Focus information is meant to fill in a gap in the pragmatic information of the addressee".

(II) Selective Focus - which we speak of "when the Focus information selects one item from among a presupposed set of possible values".

(III) Replacing Focus - which we speak of in cases in which a specific item in the pragmatic information of the addressee is removed and replaced by another, correct item.

(IV) Expanding focus - which we speak of in cases in which the Focus information is meant to be added to the antecedently given presupposed information.

(V) Restricting Focus - which is a type of Focus by which an antecedently given presupposed set is restricted to one or more correct values. (VI) Parallel Focus - which we speak of in cases in which a speaker constrasts two pieces of information within one linguistic expression.

The common factor in all these types of Focus is that they are all assigned to information-bearing elements. These six 'etics' of Focus can thus be seen as specifications of conditions under which an element in a predication can be regarded as information-bearing or, more strictly, as bearing the most salient piece of information in a given set of pragmatic conditions. Dholuo does not formally (morphologically) mark all the various types of Focus defined above. Our interest here is only in the formal marking of Focus, whatever may be its particular 'etic' in the typology outlined above.⁷ The Focus marker per excellence in Dholuo is the element e⁸ as in:

(93) Otieno e wuoyi

NM Foc boy
'Otieno IS the boy.' (with stress on 'IS')

The ordinary parallel of (93) is:

(94) Otieno wuoyi
'Otieno is a boy.'

While (94) merely states the sex of Otieno, (93) asserts that Otieno, as opposed to some other boy or boys, is the one who has the real quality of what is expected of a boy. When only emphasis and not Focus is intended, the masculinity of Otieno (or any other boy for that matter) can be commended by the assertion of (94) in a situation where the addressee is already aware of Otieno's sex and the only reason for one to remind him of it would be to stress its special nature.

It is common in Dholuo for the head term in a relative clause to be left out or, more technically, to remain a term variable after term insertion (in the formation of a predication). This normally leads to a juxtaposition of the Focus element e and the relativizer ma. Thus, a predication such as:

To determine this, we need only to place a particular predication in a definite communicative setting and see what part of it fullfills what informational needs on the occasion of its utterance. For example, to the question Ma ang'o? 'What is this?', the element buk, in the response Ma buk 'This is a book.', has completive Focus because it fills a gap in the pragmatic information of the addressee. In a similar manner, we can illustrate the other types of Focus.

⁸ For an alternative account of the function of this element in Dholuo, see Omondi (1981).

(95) Otieno e ng'at ma nyalo konyowa NM Foc person Rel can help-us 'Otieno is the person who can help us.'

is usually expressed as:

(96) Otieno e ma nyalo konyowa

While in such cases the separate functions of e and ma are clear, there are cases where ma may be said to support e in Focus marking. Thus, for example, in the Focus construction:

(97) Chunya e ma rach
 It is my spirit that is bad
 'I am just in low spirits (i.e., nothing else is wrong with me)'

one cannot easily think of what the unrealized head of the relative clause could be. Moreover, Focus constructions involving some question words (as we shall see in chapter 4) contain only ma and cannot possibly have e as a Focus marker. This is what we see in:

(98) Ang'o ma nyathino dwaro kanyo? 'What does that child want there?'

Thus, until further investigation throws more light on this matter, we shall assume that Focus is variously marked in Dholuo by e, ma, or the combination e ma.⁹

Underlyingly, the term assigned the Focus function is marked as such in order for the surface realization rules to place it in the right position, immediately following it with the appropriate Focus element. Thus, for example, Otieno is the term assigned the Focus function in the following underlying predication:¹⁰

(99) negov (X1: Otieno (X1)AGFOC (X2: diel (X2))GO

10 The underlying predications (97) and (98) leave out a number of details which are not crucial for our present purposes.

Our distributional tests have not produced a conclusive result on the environment to be associated with each of these Focus markers. Tentatively, it appears that e alone tends to occur when the rest of the predication (i.e. excluding the term with Focus function) starts with a nominal term (basic or derived), i.e. when the predication consists of a Focus term (coming before e) and a term predicate (placed after e). This is what we see, for example, in Musa e japuonj maber 'Musa is the good teacher.'. Ma alone occurs when the Focus term is a Q-word, e.g. Ng'a ma wuoyo no? 'Who is that talking?'.

where Otieno has the SF of Agent and the PF of Focus while diel has the SF of Goal. Similarly, diel could be assigned the Focus function as in:

(100) $nego_V(X_1 : Otieno(X_1))_{AG}(X_2 : diel(X_2))_{GOFOC}$

The underlying predications (99) and (100) will lead to the surface sentences (101) and (102), respectively:

- (101) Otieno e ma onego diel
 'Otieno it is, that has killed a goat.'
- (102) Diel e ma Otieno onego
 'A goat it is, that Otieno has killed.'

Issues concerning the relization of underlying predications as surface structures are discussed in (3.2.) below.

3.2. EXPRESSION RULES

The general question that this section seeks to answer is how underlying predications such as we have in (100), for example, are related to real life sentences of the kind represented by (101) and (102). To put the question more concretely, how do we tell which constituent should stand where or have what morphological marking in a surface string? The question suggests the need for a mapping relation between underlying representations and surface structures.

If one is reminded of transformations here, that is a justified response. A transformation is indeed a mapping relation, but not all transformations are structure-changing operations, which FG does not use. Underlying representations in the model used here are neutral with respect to syntactic structure - they are not ordered, for example. Thus, a mapping relation which maps, for instance, (100) on to (102) is not a transformation in the sense in which the term is used in Chomskyan grammar.

The realization of actual sentences from underlying representations is the duty (in FG) of what are called "expression rules". Such rules apply to fully or partially specified predications in which, in the words of Hoekstra (1981:13), 'the constituents are labelled for category and for semantic, syntactic and pragmatic functions'. The linguistic features accounted for by the expression rules in FG are as follows:

 the form in which the terms are realized, in particular by cases and/or adpositions;

- (b) the form in which the predicate is realized, in particular the voice, auxiliary elements and agreement phenomena;
- (c) the order of elements;
- (d) stress and intonation.

To state the expression rules discussed below, we shall, following the suggestion made by Dik (1979:20), use the format of 'if - then' conditions as employed elsewhere in modern linguistic descriptions, especially in formalizing morpheme-structure conditions and redundancy rules.

3.2.1. EXPRESSION OF VERBAL PREDICATES

Generally, Dholuo does not have a complex verbal morphology. However, the following expression rules need to be included in an FG account of Dholuo, considering the consequences of the semantic and pragmatic functions which various terms have on the surface forms of the verbs. Since no generally agreed-upon formalism exists for such rules, we shall state them in words.

(103a) IF there is an incomplete predication in the X1 term,

THEN a passive verb form is used, e.g.: oneg diel

'A goat has been killed.'

(103b) IF there is an alpha term in a predication,

THEN an active verb form is used, e.g.:

Ng'ato nego diel

'Someone is killing a goat.'

(103c) IF a term is to be realized in the preverbal position as a result of having a pragmatic function,

THEN the verbal predicate (of the predication) bears, as an affix, the prepositional SF marker of the term in question, e.g.:

Wendo wanego-ne diel

'The guest we are slaughtering a goat for (him).'

To avoid problems that would arise from the general statement of (103c), certain SFs, e.g. Goal, should be specified as having zero prepositional marking. The devices that may be employed to indicate which SF is marked by what preposition are many. Such devices may also be incorporated in the expression-rules component. Our next section deals with such rules.

3.2.2. EXPRESSION OF SEMANTIC FUNCTIONS

The following expression rules are required to relate SFs to their corresponding prepositional markers in the surface structure.¹¹

(104a) IF the SF of a term is Ø, Po, Fo, Proc, or Dir (where there is no content-word preposition),

THEN there is zero prepositional marking for the term, e.g.:

Nyithindo dhi nam

Dir

'The children are going to the lake.'

(104b) IF the SF of a term is Poss,

AND the possessed element is singular,

THEN the term is immediately preceded by mar, e.g.:

Pesa ni mar japidi

Poss

'This money (sg.) belongs to the nurse.'

(104c) IF the SF of a term is Poss,

AND the possessed element is plural,

THEN the term is immediately preceded by mag, e.g.:

Pesa gi mag japidi

Poss

'This money (pl.) belongs to the nurse.'

(104d) IF the SF of a term is Comp or Instr,

THEN the term is immediately preceded by gi, e.g.:

Nyathi wuotho gi min

Comp (= Companion)

'The child is walking with its mother.'

(104e) IF the SF of a term is Ben or Rec,

THEN the term is immediately preceded by ne, e.g.:

Ang'iewo buk ne nyathina

Ren

T've bought a book for my child.'

(104f) IF the SF of a term is Loc, So, or Dir (where there is a content-word preposition).

THEN the term is immediately preceded by e, e.g.:

Aketo chiemo e wi mesa

Loc

'I've placed food on the table.'

(104g) IF any term is assigned a PF,

THEN Rule (103c) applies.

¹¹ As we pointed out in chapter 2, we distinguish between general prepositions and prepositions of greater specificity (content-word prepositions). Only the former are handled by expression rules in Dholuo, at least in this work.

One preposition whose realization has not been dealt with here is the nontarget Direction marker yo (see chapter 2). This preposition is better treated as a content-word preposition though it has the properties of both a specific and a general preposition. Like the latter, it does not allow any other general preposition to accompany it. Thus, only predications like (105a) are wellformed, and not those like (105b).

(105a) Atieno odhi yo sikul go-PF school 'Atieno has gone in the direction of the school.'

(105b) *Atieno odhi e yo sikul

But, like content-word prepositions, it goes to the preverbal position with its term, normally necessitating the suffixing of the general preposition e to the verbal predicate. Hence the realization of predications such as (106).

(106) Yo sikul ema Atieno odhi(y)e

Foc 'It is in the direction of the school that Atieno has gone.'

It, therefore, seems proper to regard yo as a content-word preposition whose general prepositional marker is realized only when the term in which it occurs has a PF function.

3.2.3. EXPRESSION OF PRAGMATIC FUNCTIONS

Since the Theme and Tail of a predication are, in principle, outside the predication proper, their positioning is self-evident from a schema such as the one given in (64) (3.1.5.1.). Given that the assignment of these two functions does not lead to any special marking on the surface realizations of a predication, we shall say no more about them here. The main concern of this section is with the PFs which are within the predication proper, namely, Topic and Focus.

As we have seen in (3.1.5.3.), Topic assignment as such does not have any morphological consequences. However, if a term whose prepositionally marked is assigned the Topic function and, consequently, has to stand in the preverbal position, there will be a morphological effect on the verb form following the specifications of expression rule (103c). As we have already explained in (3.1.5.4.), the assignment of the PF of Focus has, as its morphological consequence, the introduction of e (ma), realized immediately after the term in question. This fact may be stated by expression rule (107).

(107) IF a term X₁ is assigned Focus function,
THEN the term X1 is realized as ...X1 e(ma)..., e.g.:
Juma e ma ji dwaro
Foc
'It is Juma that the people want.'

(For the conditions governing the choice of e or e ma see footnote 9 of this chapter.) As in the case of Topic assignment, the morphological consequences of Focus assignment on the verb will be handled by our expression rule (103c), e.g. Juma (Foc) e ma ji oriedo-ne 'It is for Juma that the people have lined up.'.

3.3. EXPRESSION RULES AND CONSTITUENT ORDER

In chapter 2 we outlined in traditional terms the major clause patterns of Dholuo. As we continue to reanalyse these observations systematically using the theoretical and descriptive strategies of FG, let us highlight some of the most relevant postulates of our theoretical model. The treatment of constituent order in FG is summarized by Dik (1980:19f) as follows:

The predications underlying linguistic expressions are regarded as constructions in which no linear order has been defined over the constituents. In order to arrive at the actual linear order of linguistic expressions, then, we need rules and principles which give a relative order to previously unordered sets of constituents. These rules and principles belong to the expression component of the grammar according to FG.

The principles by means of which order is defined for linguistic expressions are based on the view that ordering patterns of each language are the result of different preferential tendencies which in part counteract each other in that they cannot all be complied with at the same time. These preferential tendencies are the following:

- the preference for having constituents with the same functional specification invariably in the same structural position;
- (b) the preference for assigning certain special positions to certain designated categories of constituents and to constituents characterized by pragmatic functions;
- (c) the preference for having constituents ordered from left to right in order of increasing categorial complexity. The first preference is accounted for by the assumption that all languages have one or more "functional patterns" which define a number of crucial positions for constituents of predications to go to.

All these functional patterns are in turn hypothesized to conform to the following language-independent pattern-schema:

(108) Theme, P₁ (V) D (V) O (V), Tail (our numbering) (where P₁ is a special predication-internal position).

The assumptions summarized above represent the standard position of FG with respect to constituent order. Elsewhere, on the basis of evidence from various languages, Dik has expressed the view that, although many languages fit into this pattern schema, one needs, especially for special positions, to be more liberal in handling the peculiarities of individual languages. As Dik (1980:136) puts it: '... within the framework of FG a less restricted typology of "special positions" must be developed'. Some languages, e.g. Serbo-Croatian and Hungarian are reported (Dik 1980:127-136) to have functional patterns which make use of two special positions.

Once the functional patterns of a language are established, it remains the work of expression rules to map constituents of underlying predications on to their correct surface positions, depending on what syntactic or pragmatic functions are assigned to them in the underlying predication. For Dholuo, following our discussion in 3.1.4., the place of syntactic functions in the functional patterns is taken by semantic functions. Moreover, only one alpha term occurs in a predication and such a term automatically goes into the preverbal position A. One of the first three non-alpha terms (Go, Rec, Ben) usually occupies the immediately postverbal position, marked 2 in schema (55). Our discussion up to this point gives us the following functional pattern for Dholuo:

(109) Theme, P1 A V Ø, Tail

where Ø marks the first postverbal position without any suggestion that what occupies that position is an object.

The positions of Theme and Tail are outside the predication proper and are not filled by constituents from the underlying predication. As far as the surface order of constituents goes, our primary concerns are the predication-internal positions P1, A, V, Ø and the position of the non-alpha constituents not occupying the immediately postverbal position Ø. The latter are known in FG as X-constituents and we shall briefly discuss their positioning before we conclude this section.

To put it more explicitly, by X-constituents we tentatively refer to those constituents in a predication which are not among those mapped on to the major pattern positions A V Ø, and are not assigned any special (pragmatic) functions to warrant their going into P1.

Every (term) constituent, 12 whatever its status, has a semantic function. Some of these constituents occur within the nuclear predication, which defines the essential nature of the designated state of affairs, while others occur outside the nuclear predication. In unmarked predications, the postverbal constituents are arranged in order of their relative positions on the SFH, with the highest on that hierarchy coming closest to the verb. Now, the SFH, as it is given in the standard theory (Dik 1978:70), is as follows:

Ag Go Rec Ben Instr Loc Temp

As we have said above, if a predication has an Agent constituent, it will, being an alpha term, automatically occupy the preverbal position, even without having a pragmatic function. The postverbal position of a nuclear predication can be occupied by one of the following constituent combinations, depending on the state of affairs designated by the verbal predicate in question (V shows the position of the Verb):

- (110) V Go
- (111) V Rec Go
- (112) V Ben Go
- (113) V Go Loc13
- (114) V Ø

The majority of the cases are of type (110), respresenting most of the transitive Action verbs. Types (111) and (112) are very few, representing the rare cases in which the Rec or Ben constituent is not marked by a preposition. Such cases can be observed in the following sentences:

- (115) Ng'ato omiyo Atieno pesa mathoth
 Someone give-PF NM(Rec) money rel-much (Go)
 'Someone has given Atieno a lot of money.'
- (116) Jatedo otuono japidi chiemo cook (N) deny-PF (vt) nurse(Ben) food(Go)
 'The cook has denied the nurse food.'

¹² In this study, a distinction is drawn between predicate constituents, e.g. verbal predicates, and term constituents, which function as arguments of a given predicate.

¹³ For the possibility of having the sequence V LOC GO, see 4.9.2..

Type (113) represents those cases in which a post-verbal locative constituent obligatorily occurs within the nuclear predication, coming after the Goal, as in the sentence:

(117) Mama oketo kuon e mesa Mother put-PF ugali (Go) table (Loc) 'Mother has put ugali on the table.'

The last type (114) represents those cases in which the postverbal constituent has a zero semantic function, as is characteristic of state predications, e.g.:

(118) Ng'at cha paro chiege
person that think-IMP wife-3sg Poss
'That man is thinking of his wife.'

Let O represent any postverbal nuclear constituent, and let us say that in each predication, the last nuclear constituent binds (not in the GB sense) the corresponding nuclear predication. If we represent the binding constituent as Ob, we can say that in any nuclear predication all non-binding O's must precede Ob and any constituent that comes after Ob is, therefore, outside the nuclear predication.

We can now reformulate the functional pattern of Dholuo (leaving out the special position P₁) as follows:

(119) A V O Ob

for a predication which has all the nuclear constituents, including the verb and an alpha term (both of which are by their very nature nuclear constituents in Dholuo).

It should be noted that in the cases where only one postverbal nuclear constituent occurs in a predication, then that is necessarily the binding constituent (Ob). Thus, we can say that Go is the binding constituent in predication types (110), (111), and (112). Loc binds type (113) predications, and Ø type (114) predications.

Using the concepts introduced above, an X-constituent can now be defined more precisely as any predication-internal constituent (i.e. not Theme or Tail) which does not have a place in the functional pattern of Dholuo as formulated in (119) and does not occupy the special position P₁. How such

constituents are positioned in Dholuo is the question to be answered in the rest of this section.

We have pointed out earlier in this chapter that there seems to be some amount of freedom in the positioning of the non-alpha terms of Dholuo. Let us now reconsider this idea in the light of the conceptual framework that we have developed above.

Of primary interest are the cases in which what are clearly X-constituents precede a binding nuclear constituent in a given predication. For an example, let us consider the following predication:

(120) Ng'ato tedo rech Someone cook-IMP fish (Go) 'Someone is cooking fish.'

which, being a nuclear predication, shows that the Goal term (rech) is the binding constituent. This predication can be extended by an X-constituent with the SF of Beneficiary to give us:

(121) Ng'ato tedo rech ne welo
visitors (Ben)
'Someone is cooking fish for the visitors.'

Now, so long as the X-constituent comes after the binding constituent, as it does in (121), the position stated above remains uncontradicted. But a problem arises when we meet the paraphrase of (121) contained in the following predication:

(122) Ng'ato tedo ne welo rech Ben Go

Here we have a case in which a non-nuclear constituent occupies an O position, preceding the binding constituent. Since we regard this position as one occupied by constituents which contribute in a fundamental way to the designation of a given state of affairs, it seems reasonable to suppose that certain communicative circumstances may make it necessary for a speaker to give an X-constituent a more central role in a given state of affairs by bringing the constituent within the nuclear predication. We can then say that such an X-constituent has been nuclearized. This information would need to be coded in the underlying representation of the predication in question. The nuclearized constituent in such a case is preprogrammed to go into the non-

binding O position by marking it [+Nuclearized] in the underlying represention.¹⁴

Thus we can account for the expressional differences between (121) and (122) by saying that, although they have basically the same underlying predication, in the latter the Beneficiary constituent is marked [+Nuclearized], while in the former it is not. We may assume a language-specific convention which states that if a given constituent is not marked [+Nuclearized] then it is [-Nuclearized], but the non-nuclearization of a constituent need not be overtly marked in an underlying predication since, in Dholuo, it does not give a constituent any structural commitment.

It appears that the concept of nuclearization can adequately replace (in Dholuo) the standard FG idea of Obj assignment, which we have shown to be inapplicable in an FG account of Dholuo constituent order (cf.: 3.1.4.)

Thinking of all constituents which, either because (for a given state of affairs) they are inherently nuclear constituents or as a result of nuclearization or pragmatic function assignment, have to go into specific pattern positions as (structurally) committed constituents, we can now classify the constituents of a given predication into two categories, namely, committed and uncommitted constituents, all the latter belonging to the set of X-constituents.

In Dholuo, as we shall see in the next chapter, uncommitted constituents are generally free in terms of the sentential positions that they can occupy after the committed constituents have taken their positions.

However, there are restrictions on the freedom of certain types of X-constituents which can be stated only in rules referring specifically to certain semantic functions. Such rules can take the form of distributional redundancies expressed as if-then conditions. Thus, for example, we may capture the observation that a Temporal constituent cannot occur in position O by the redundancy rule:

(123) IF [+Temporal]
THEN [-Nuclearizable]

Strictly speaking, what binds these (nuclear) predications are the constituents bearing the mentioned semantic functions. Let us note, though it looks fairly obvious, that our notion of binding (as applied here) IS NOT RELATED TO THE Chomskyan use of the term in his theory of 'Government and Binding' (Radford 1981:chapter 11).

It should be noted here that the feature specification [-Nuclearizable] means that the constituent in question cannot be nuclearized, as opposed to a situation where a constituent can be but just happens not to have been nuclearized in a particular case, in which case it is [-Nuclearized].

Such a rule will exclude from the set of possible predications of the language such ill-formed constructions as:

(124) *John nego kawuono diel ne welo
NM kill-IMP today (Temp) goat (Go) visitors (Ben)

Outside the confines of this rule (123), the Temporal constituent can occur, no doubt with relative degrees of markedness, practically in any sentential position.

In some cases, rules like (123) will need to be made even more discriminative. For example, in the case of Locative constituents it appears that only deictic ones such as ka 'here' and kanyo 'there' (proximate to Second Person) can be nuclearized, while the non-deictic ones, e.g. tok pacho 'behind the homestead' cannot. Thus, for instance, the constructions of (126) are well-formed while those of (125) are not.

- (125a) *Ondiek onego tok pacho diel Hyena kill-PF behind homestead(Loc) goat(Go)
- (125b) *Jatedo oketo e wi mesa chiemo cook put-PF on table (Loc) food (Go)
- (126a) Ondiek onego diel tok pacho

Go Loc

'A hyena has killed a goat behind the homestead.'

(126b) Jatedo oketo chiemo e wi mesa Go Loc

'The cook has put food on the table'.

(126c) Ondiek onego ka/kanyo diel

Loc Go

'A hyena has killed a goat here/there'.

(126d) Jatedo oketo ka/kanyo chiemo Loc Go

'The cook has put food here/there'.

- (126e) Ondiek onego diel ka/kanyo = (126c)
- (126f) Jatedo oketo chiemo ka/kanyo = (126d)

If the facts are as illustrated by (125) and (126), then a rule such as (127) will be adequate:

(127) IF [+Loc, -Deictic] THEN [-Nuclearizable]

However, if it be, as some Dholuo speakers (including the writer) feel, that even some deictic locatives cannot be nuclearized, then the feature specification [-Nuclearizable] would be a lexical feature rather than a redundancy rule. The intuitions to be captured by such modifications of the lexical entries would be those in which a deictic locative such as kucha 'over there (non-specific)' cannot be nuclearized, excluding from the set of well-formed predications a construction such as:

(128) *Ondiek onego kucha diel (cf. (126))

If, however, specificity is established to be the crucial factor, as seems to be suggested by the acceptability of (129) where kacha 'over there (specific)' is used instead of kucha, then these facts can still be captured by a modified version of (127) which has, among other things, a feature value for specificity.¹⁵

(129) Ondiek onego kacha diel 'A hyena has killed a goat over there.'

To sum up, this chapter has given a broad survey of how Dholuo syntax can be handled using the theoretical postulates and descriptive tools of FG. In this exercise we have had to argue for cases in which Dholuo needs theoretical strategies not found in FG as it stands now.

In particular, the distinction between alpha and non-alpha semantic functions and constituents has been shown to be necessary in accounting for Dholuo constituent order. The introduction of these concepts was necessitated by the finding that the present-day FG concepts of Subject and Object assignment do not seem to have a descriptive function in Dholuo, especially if the chief motivation for their inclusion in the theory is the need to account for such constituent-order phenomena as passivization and what, in TG terms, is known as dative movement.

Another important concept that we have introduced in order to account for constituent order in Dholuo is that of binding of the nuclear predication. As

¹⁵ This problem may be solved by arguing that the non-specific terms here are Directional, rather than Locative, which is the view taken in (4.9.2.).

a consequence of the binding principle, we have found it necessary to introduce the concepts of nuclearization and structural commitment.

We have ignored verbless predications, such as ng'at ni jakuo 'This person (is) a thief.', in which the predicational nexus between the nominal term and the nominal (or adjectival) predicate imposes an invariable Term-Predicate order on all relevant predications.

The application of the principles and strategies summarized above to specific constituent order problems is the subject of the following (last) chapter.

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4. SOME SPECIFIC ORDERING PROBLEMS

The principles and procedures that are used in FG to account for constituent order and those needed for the peculiarities of Dholuo grammar have been outlined in the preceding chapter.

Stated briefly, our methodology for the construction of an ordered surface predication will be as follows:

(i) In each case, an underlying predication, nuclear or extended, will be formed by the insertion of appropriate terms in the argument positions of a given predicate-frame.

(ii) As dictated by the requirements of the communicative setting in which a particular predication is to occur, some of the terms inserted by the procedure in (i) above will be assigned some pragmatic functions (PFs) or marked [+ Nuclearized].

(iii) Either because of their semantic functions (SFs) or as a result of the procedures described in (ii) above, some constituents in a given predication will have the property of being structurally committed (as explained in chapter 3).

(iv) On the basis of their structural commitment, certain constituents will be mapped by the expression rules of Dholuo on to the functional pattern positions shown in schema (v) below.

(v) P1 A V O Ob X (where P1 = the special position for any non-alpha term with a PF; A = the position for an alpha term, with or without a PF; V = the position for the predicate (usually verbal); O = the immediately postverbal nuclear position; Ob = the position for the binding (nuclear) term; X = any structurally uncommitted constituent (position not fixed)).

(vi) The restrictional peculiarities of each X-constituent are explicitly stated in the expression component of the grammar (as we shall attempt to show, where applicable, in this chapter).

In this chapter we shall discuss what our research has revealed to be the major ordering problems in Dholuo syntax.

A number of the constituent-order problems to be discussed here have been accounted for transformationally by Omondi (1982). In the discussion that follows, we shall introduce each problem with a structural account and, where desirable, an indication of its place in the standard TG model, without necessarily basing it on Omondi's treatment (since her handling of a given problem may not always represent what we believe ought to be the TG account of the Luo data in question). After this introductory description of the data, we shall then proceed to offer an FG account of the same material.

Although we may occasionally point out what seems to us to be the superiority or inferiority of the FG account vis-a-vis the TG one, this should not be considered as a central aspect of our thesis. It will, for our present purposes, be enough to demonstrate that a descriptively adequate account of the data is possible without the use of structure-changing operations (i.e. transformations in the TG sense). Our sequential treatment of these constituent-order problems below does not in any sense reflect their relative prominence in the domain of Dholuo syntax.

4.1. ORDERING OF THE GOAL, REC, AND BEN CONSTITUENTS

In traditional terminology, this ordering problem involves the placement of two objects relative to the verb. The Go constituent is usually associated with what is called the Direct Object (DO), while the Rec or Ben constituent is associated with the Indirect Object (IO). The empirical fact to be accounted for is that in Dholuo, as in many other languages, we get pairs of paraphrases in which one member of each pair has the Go constituent immediately after the verb, with the Rec or Ben constituent coming after it, while the other member of the same pair has exactly the reverse order. This phenomenon is illustrated by the difference between the a- and b-parts of examples (1) and (2) below.

- (1a) Karan ndiko baruwa ne jatelo clerk write-IMP letter (Go) boss (Ben)
 'The clerk is writing a letter for the boss.'
- (1b) Karan ndiko ne jatelo baruwa = (a) Ben Go
- (2a) Fundi loso kombe ne sikul carpenter make-IMP chairs (Go) school (Ben)
 'The carpenter is making chairs for the school.'
- (2b) Fundi loso ne sikul kombe = (a)
 Ben Go

These two examples illustrate the ordering possibilities for Go and Ben in the immediately postverbal position. The same possibilities exist for Go and Rec constituents as is illustrated by examples (3) and (4) below.

- (3a) Jatedo tero chiemo ne welo
 cook take-IMP food(Go) guests (Rec)
 'The cook is taking food to the guests.'
- (3b) Jatedo tero ne welo chiemo = (a)
 Rec Go

- (4a) Difri choro opira ne jatugo referee pass-IMP ball (Go) player (Rec) 'The referee is passing the ball to the player.'
- (4b) Difri choro ne jatugo opira = (a) Rec Go

Taking the three SFs involved (Go, Rec, Ben), there are three possible combinations of two each, i.e., Go Rec, Go Ben, and Rec Ben. Each of these combinations has two possible arrangements or permutations, giving us a total of six potential realizations, namely:

Go Rec (5a)(5b)Rec Go (5c) V Go Ben (5d) Ben Go (5e)V Rec Ben

Ben

Rec

V

(5f)

When all the three are represented in a predication, we have six

permutations, giving us another six potential realizations, namely:

v Go Rec Ben (6a) (6b)V Go \mathbf{Ben} Rec Ben (6c)Rec Go (6d) Rec Ben Go (6e)V Ben Go Rec Go (6f) V Ben Rec

Thus, all together, there are twelve potential postverbal patterns that one could get in Dholuo if the language exploited all its permutational possibilities with constituents bearing these three SFs.

However, of these twelve possibilities, quite a number are not actually realized. Some of these unacceptable arrangements, as we shall see below, have a systematic justification for their exclusion; others are excluded on purely accidental grounds, if not, perhaps, as a strategy for reducing ambiguity.

In the first set of possibilities (those in (5)), only the first four are acceptable. Possibilities (5a,b) are illustrated by our examples (3) and (4) above, while (5c,d) are illustrated by (1) and (2). The last two possibilities in this set (i.e. (5e,f)) are systematically excluded because a predication cannot have a Rec without a Go, except in highly restricted contexts in which the Go is clearly understood. Thus constructions such as:

(7) *Atero ne japuonj ne wuonwa
1sg-take-IMP teacher (Rec) father-1Poss (Ben)
'I am taking (?) to the teacher for my father.'

are generally unacceptable.

Moreover, it should also be noted that, as we have already pointed out in chapter 3, some verbs, e.g. miyo 'to give', impose an idiosyncratic restriction on the realization of the generally accepted possibilities by requiring that the Rec must precede the Go in predications built on the frame of such a verb. Thus, while (4a) allows the order Go Rec, an analogous predication involving the verb niyo is not acceptable, as is evidenced by the ill-formedness of (8a) below.

- (8a) *Opiyo miyo buk japuonj V Go Rec
 - (8b) Opiyo miyo japuonj buk

 NM give-IMP teacher (Rec) book (Go)

 'Opiyo is giving a book to the teacher.'

For this reason, (8b) does not have a paraphrase based on the permutational possibilities discussed above. Its counterpart (8a) simply suggests the odd possibility of 'Opiyo giving a teacher to a book'!

Decoding problems arising from the homophony existing between the Rec and Ben prepositional markers, both of which are lexically represented by ne, make predications containing the set of possibilities given in (6) above have a high degree of contextual dependency, and generally a very low level of acceptability. For this reason, they tend to be realized only in situations where the kind of participants involved provide guidance on what would be a sensible interpretation. Thus, for example, in the sentence:

(9) Otieno tero ne min pi ne nyiroye
NM take-to-IMP mother-2sgPoss water calves
(Ben) (Go) (Rec)
'Otieno is taking water to the calves for his mother.'

although the prepositional SF markers are identical, an interpretation in which **min** is the Rec and **nyiroye** is the Ben is excluded by common sense. Going by the possibilities contained in (6), a sentence such as (9) would have the following potential variations:

(10a) Otieno tero pi ne nyiroye ne min V Go Rec Ben

ne nyiroye (10b) *Otieno tero pi ne min Rec Go (10c) Otieno tero ne nyiroye pi ne Rec Go pi ne nyiroye ne min (10d) *Otieno tero Rec Ben Go V (10e) Otieno tero ne min pi ne nyiroye = (9) nyiroye (10f) *Otieno tero pi min ne Go Rec Ben

of which only half are well-formed, the other half (the starred ones) being ill-formed. The results suggest (i) that the Go constituent must occupy one of the first two postverbal positions and (ii) that the Rec constituent must come before the Ben constituent when they follow the Go constituent. The second restriction is accounted for by invoking the SFH: the Ben follows the Rec on the SFH and must keep that position in a predication if it has no structural commitment. The first restriction is accounted for by the fact that where a Go term is the binding constituent of a nuclear predication, only one other constituent can (normally) be nuclearized. We shall come back to this point below.

An account of the facts outlined above in the standard transformational theory would, in its essential form, proceed as follows: the identified paraphrases would be given a deep structure representation in which the Go constituent (as DO) is the first NP (Noun Phrase) after the verb, followed by either the Rec or Ben constituent (as IO) and, perhaps an X to represent any element that might occur after the IO. A transformation called 'Dative Movement' would then be used to account for cases in which IO precedes DO in the postverbal position.² Formally, such a transformation would have the following formulation:

(11) NP V NP NP X SD: 1 2 3 4 5

¹ The possibility contained in (10f) can be realized only if the Ben constituent is expressed in the form of a pronominal affix on the prepositional SF marker (usually affixed on the verb), e.g.

Ter-na ne japuonj gint Ben Rec Go

^{&#}x27;Take this thing to the teacher for me.'

² For a standard TG account of the Dative Movement rule, see Akmajian and Heny (1976:183-186). So far we have not come across any TG account (of any language) that worries about the problem of ordering Rec and Ben constituents.

SC: 1 2 4 3 5
where SD = input structure (structural description)
and SC = output structure (structural change)
(The NP in position 1 is the Subj NP.)

Typically, transformational accounts of such constituent-order phenomena employ movement rules which pay no attention to what comes after the IO (the dative). They concentrate on the possibilities suggested in (5) above. However, in principle, they can also account for the possibilities in (6), usually with a number of conditions on the rule in question to take care of the restrictions noted above. In spite of their mechanical nature, which pays no attention to the communicative significance of the rules and the constituents they affect, such transformational accounts, no doubt, meet the criterion of descriptive adequacy set for them by Chomsky (e.g. 1965).³

The facts presented above have been accounted for elsewhere (Okoth 1983) by claiming that Dholuo has a free-order zone in the postverbal position for Go, Rec, and Ben constituents. It appears that our observations in chapter 3 and the preceding paragraphs of this chapter leave us with no option but to reject this free-order-zone hypothesis. We say that constituents are orderd freely if there is no apparent grammatical reason why their sentential positions should vary. This claim usually remains valid even if there are some restrictions, which may or may not be explainable in any principled way. The free-order claim referred to above was made upon the discovery that Obj assignment, which provides the principled way of accounting for the kind of data we have in (5) and (6) above in the standard FG theory, does not seem to have a place in Dholuo constituent order. We must now abandon this position since out of our discussion in chapter 3 we developed the concepts of nuclearization and structural commitment which, used within the general FG framework, provide us with a principled way of accounting for our Dholuo data and the observations made in the accompanying discussion. In particular, we would like to account for the following facts, which are observable in our example (10) above:

 that the Go constituent may be preceded by either the Rec or Ben constituent in the immediately postverbal position;

³ Although there have been attempts to discuss the communicative functions of syntactic rules in TG (Stockwell 1977: chapter 4), such functions have not been incorporated into the descriptive apparatus of TG.

(ii) that if both the Rec and Ben constituents are preceded by the Go constituent, then the former must occur in the order Rec Ben.

These two data-based observations give us the following patterns (ignoring the preverbal position):

- (12) V Go Rec Ben (=(10a))
- (13) V Rec Go Ben
- (14) V Ben Go Rec

To account for these patterns, let us recall the functional pattern we arrived at for Dholuo in chapter 3, repeated below as item (15) for ease of reference.

(15) A V O Ob where A = an alpha constituent; V = Verb; O = a non-binding constituent within the nuclear predication; Ob = the binding constituent (of the nuclear predication).

The underlying representation of the predication in (10) within the FG model, giving only the essential details for our discussion, would be as follows:

(16)
$$tero_V (X_1 : Otieno(X_1))_{AG} (X_2 : pi(X_2))_{GO} (X_3 : nyiroye(X_3))_{REC} (X_4))_{BEN}$$

Now, the underlying predication (16) captures the fundamental semantic relations between the term constituents of the predication and the verbal predicate **tero**, on whose frame the whole predication is built. This underlying predication is, by the principles of FG, unstructured, and the linear order of the term constituents (X_1, X_2, X_3, X_4) is determined solely by the relative positions of their SFs on the SFH ($_{AG\ GO\ REC\ BEN}...$).

If no pragmatic functions are assigned to the terms in (16) and none of the satellite terms $(X_3 \text{ and } X_4)$ is nuclearized, then this underlying pattern (which is a mere reflection of SFH) will be retained on the surface realization of the predication, giving us pattern (12), ignoring the X_1 term which, being an alpha term, occurs in the preverbal position. We realize that in this kind of predication, position O is empty or, put differently, occupied by a null constituent since the Go term, the binding constituent of the nuclear predication, stands in the immediately postverbal position. Thus, the SFH alone provides the essential input information to the expression rules which give us a surface predication of pattern (12) from the underlying predication represented by (16).

The nuclearization of X_3 puts the Rec constituent in the O position, giving us a (surface) structure of pattern (13); whereas the nuclearization X_4 puts the Ben constituent in the O position, leading to a surface structure of pattern (14).

The same descriptive apparatus which we have used to account for the various well-formed constituent orders arising from (16) also helps us to account for the ill-formed ones, namely (10b), (10d), and (10f). The first one (10b), violates the SFH by putting a (non-nuclearized) Ben constituent before the Rec constituent while the next two, (10d) and (10f), violate the restriction that, in general, only one (satellite) constituent can be nuclearized in Dholuo predications. (Possible exceptions to this restriction will be discussed later in this chapter.)

4.2. THE OCCURRENCE OF NON-ALPHA CONSTITUENTS IN THE PREVERBAL POSITION

We discuss here the constituent-order phenomena treated under the operation of topicalization or Y-movement in transformational grammar (Lakoff 1974). More or less similar phenomena encountered in cleft-constructions are left for another section below.

In transformational accounts, the operation involves the placement of an NP dominated by the VP node in the deep structure of a given sentence before the Subj NP, formally the NP dominated by the S node (Chomsky 1965).

The observable data behind this idea are constituted by the paraphrase relationship between the a-, b- and c-parts of the sentences given in (17) to (21) below.

- (17a) Jodongo gero ot elders (Ag) build-IMP house (Go) 'The elders are building a house.'
- (17b) Ot jodongo gero Go Ag V
- (18a) Ng'ato okelo ne japuonj ndiga someone (AG) bring-PF teacher (Rec) bicycle (Go) 'Someone has brought a bicycle to the teacher.'
- (18b) Japuonj ng'ato okelo ne ndiga Rec Ag V Go
- (18c) Ndiga ng'ato okelo ne japuonj Go Ag V Rec

- (19a) Jakwath oyang'o diel gi beti herdsman (Ag) skin-PF goat (Go) panga (Instr) 'The herdsman has skinned a goat with a panga.'
- (19b) Beti jakwath oyang'o-go diel⁴ Instr Ag V Go
- (19c) Diel jakwath oyang'o gi beti Go Ag V Instr
- (20a) Atieno ong'iewo nanga ne nyathi
 NM (Ag) buy-PF dress (Go) baby (Ben)
 'Atieno has bought a dress for the baby.'
- (20b) Nanga Atieno ong'iewo ne nyathi Go Ag V Ben
- (20c) Nyathi Atieno ong'iewo-ne nanga Ben Ag V Go
- (21a) Jalupo oting'o rech e okapu fisherman (Po) carry-IMP fich (Go) basket (Loc) 'The fisherman is carrying fish in a basket.'
- (21b) Rech jalupo oting'o e okapu Go Po V Loc
- (21c) Okapu jalupo oting'o-e rech Loc Po V Go

The paraphrase relationship between the variants of each sentence is only a logical one, established by truth-value considerations. That is, in each case, we cannot assert the a-sentence and deny its b- or c-counterpart. This relationship is well accounted for by standard transformational grammars, which derive each set of such paraphrases from a common deep structure which usually has the constituent order of the a-sentence. However, such accounts give the false impression that such paraphrases are free variants. They thus miss the communicative function of this constituent-order variation, which is explained by Stockwell (1977:69) as follows:

...the sentence element that is the subject of discussion, the topic of that part of the discourse - either because it has been mentioned previously or because it is conspicuous in the environment tends to come first and to be destressed (downgraded by intonation or even reduced to some substitute form such as pronoun) in subsequent references to it, whereas the new information, the comment, tends to come near the end and to be highlighted by intonation.

This broad idea of the phenomenon of topicalization is condensed in the FG definition of the pragmatic function Topic as given in chapter 3. Just to

⁴ Note the prepositional Instr marker changes from gi to go (affixed on the verb) when the Instr term is placed before the verbal predicate of the predication in question.

remind ourselves: 'The Topic presents the entity about which the predication predicates something in the given setting' (Dik 1978:19).

All that is required adequately to account for the constituent-order variations of the kind exemplified by (17)-(21) above is a procedure that assigns Topic function to a term which satisfies the pragmatic requirements for Topic assignment as suggested in the above definition and a set of expression rules to map the subsequent underlying represention on to an acceptable functional pattern.

This kind of procedure can be conceptualized as a non-language-specific aspect of a speaker's competence which requires only that the speaker will be able to identify in a given pragmatic setting what constituent of his predication can be regarded as 'the entity about which the predication predicates something'.

Assuming this kind of competence in a speaker, we can provide a formal account of how the assignment of the Topic function leads to the constituent-order variation under discussion.

Let us recall that the functional pattern of Dholuo has a special position P1 coming before the Alpha position as in (22) below.⁵

(22) P1 A V O Ob

Now, let us take (for purposes of illustration) the following underlying predication:

(23) $tero_V(X_1:Opiyo(X_1))_{AG}(X_2:chiemo(X_2))_{GO}]_{ACHION}(Y_1:jakwath(Y_1)_{REC})$

We can imagine three different communicative circumstances in which the requirements for Topic assignment are met successively by the constituents represented by the terms X_1 , X_2 , and Y_1 . This situation would give us three different surface realizations of the underlying predication (23). These would be (24), in which the alpha term is also the Topic, (25), in which the Go constituent is the Topic, and (26), in which the Rec constituent is the Topic.

⁵ Since some predications do not have an alpha constituent, the P₁ position and the immediately preverbal position are, in such cases, indistinguishable.

- (24) Opiyo tero chiemo ne jakwath
 Ag Top take-IMP food (Go) herdsman (Rec)
 'Opiyo is taking food to the herdsman.'
- (25) Chiemo Opiyo tero ne jakwath Go Top Ag V Rec
- (26) Jakwath Opiyo tero ne chiemo Rec Ag V Go

As was pointed out above, the paraphrase relationship between such constructions relates only to their truth-value, which is the same in any given communicative setting, i.e., if any one of them is true, then the other two are also true, and if one is false, the same applies to the other two. However, they are not free variants, since the pragmatic circumstances which lead to the utterance of any one of them is different from those that lead to the utterance of the others. Thus, in (24) the communicative concern is with what Opiyo is doing; in (25), it is with what is happening to chiemo (for example: Why is the speaker not allowed to eat it?), and in (26), the concern is with jakwath (i.e.: Who is taking food to him?).

Since the constituent order of (24) is the unmarked pattern for Dholuo, the Topic sense of Opiyo is neutralized by the ordinary interpretation associated with this pattern. Unless the alpha constituent is replaced by a pronoun, as in

(27) O-tero chiemo ne jakwath
3sgA-take-IMP food (Go) herdsman (Rec)
'He is taking food to the herdsman.'

the Topic function of such a constituent usually lacks prominence. However, the issue here is not whether or not a given pragmatic function is conspicuous, but the fact that its assignment accounts for constituent-order variations which are observable in the language.

4.3. Q-WORD FRONTING

The constituent-order phenomenon under discussion here involves the placement of question words seeking the identity of non-alpha terms in preverbal position.

Paraphrase relations arising from this phenomenon are found in languages such as Dholuo in which the question-word can occur before or after the verb. Such paraphrases are exemplified by the a- and b-parts of (28) and (29) below:

- (28a) Nyathi dwaro ang'o? child want-IMP what 'What does the child want?'
- (28b) Ang'o ma nyathy dwaro?
- (29a) Ji tho kamano kanye?

 People die like-that where
 'Where do people die like that?'
- (29b) Kanye ma ji tho-e kamano?

It is worth noting, if constrast may shed some light on our data, that predications in which the informational gap happens to be in an alpha term, e.g. (30) below, do not have paraphrases of the type found in the aconstructions above.

(30) Ng'a ma dwaro ruoth? Who wants the chief?

In transformational accounts the kind of data given in (28) and (29) can be taken care of by using an optional Q-fronting rule which applies to deep structures akin to the a-type of construction to produce phrase-markers for the b-types.

The fact that b-type constructions have the Focus-marking element material tends to lure one into using the assignment of the pragmatic function of Focus to account for the difference between the a- and b-type constructions. What is puzzling, however, is that even (30), which has the question-word in its unmarked position, has an obligatory Focus-marking element.

We, therefore, need to investigate the underlying source of preverbal question-words in Dholuo a little further. Our main concern here is with the Focus-marked ones, since they are more problematic than others. To gain some insight into this problem, let us begin by re-examining the theoretical status of Focus constructions in general.

In the standard FG theory, as we have observed in chapter 3, Focus constructions are regarded as consequences of the assignment of the PF (pragmatic function) Focus to a given term of an underlying predication. Later observation of various linguistic data led to a slight modification of the status of Focus constructions in the theory. This modification is outlined in Dik (1980) as follows:

The general schema underlying the Focus construction can be represented as {(term_i)}_{FOC} (term_i)_Ø Top in which term_i contains a description of an entity

the existence of which is presupposed, but the identity of which is at issue; term; is either a questioned term asking for identification of the entity described in term;, or a non-questioned term providing the requested identification; the distribution of Topic and Focus is fixed as indicated in the schema.

Applying this analysis to interrogative Focus constructions, Dik (1980:225) arrives at the following 'distribution of interrogative constructions across languages', to use his own phraseology:

- (i) Only straight interrogatives;
- (ii) only questioned Focus constructions;
- (iii) straight and Focus interrogatives in free variation;
- (iv) straight and Focus interrogatives in (partial) complementary distribution.

It can be demonstrated that Dholuo has something of (i), (ii), and (iv) as given in this typology.

Type (i) interrogatives are mainly those with the confirmation-seeking Q-words bende, donge, koso, and the information-seeking Q-word ere, as in

- (31) Bende oyud jakuo?
 Is-it-that find-PASSPF thief
 'Has the thief been found?'
- (32) Donge oyud jakuo?
 Isn't-it-that
 'Hasn't the thief been found?'
 - (33) Koso ng'ato onge?

 Might-it-be-that someone be-absent

 'Might it be that someone is absent (i.e. Am I right to assume that everyone is present)?'
 - (34) Ere wuon ot?
 Where is owner of house
 'Where is the owner of the house?'

These, whatever variation they may allow in the positioning of the Q-word, are always "straight interrogatives".

Type (ii) consists of interrogatives containing an information-seeking Q-word which seeks the identity of an alpha term, as in:

- (35a) Ng'a ma chamo punda?
 Who eat-IMP donkey
 'Who eats a donkey?'
- (35b) Punda ng'a ma chamo? (=a)

- (36a) Ang'o ma oyiecho lawe?
 what tear-PF garment-3sg Poss
 'What has torn his garment?'
- (36b) Lawe ang'o ma oyiecho? (=a)

It should be noted that even when a non-alpha term is placed in the special position (P₁) by Topic assignment, the Focus element in the construction remains unaffected, as demonstrated by the fact that **ma** is realized after the Q-word in both the a- and b-sentences.

Type (iv) consists of interrogatives containing a non-alpha term in either the preverbal position (in which case we have a Focus interrogative) or in the postverbal position (in which case we have a straight interrogative), as can be observed by comparing the a- and b-sentences below:

- (37a) Jakuo okawo ang'o? thief take-PF what 'What has the thief taken?'
- (37b) Ang'o ma jakuo okawo?
 'What is it that the thief has taken?'
- (38a) Sibuor ochamo ng'a?
 lion eat-PF who
 'Whom has the lion eaten?'
- (38b) Ng'a ma sibuor ochamo?

 'Whom is it that the lion has eaten?'

For further insight into the nature of our problem, let us look again at the nature of declarative Focus constructions. Consider the following pairs of constructions:

- (39a) Juma kelo kong'o

 NM bring-IMP beer

 'Juma is bringing beer.'
- (39b) Juma e ma kelo kong'o
 'It is Juma who is bringing beer.'
- (40a) Kwach omako diel leopard capture-PF goat 'A leopard has captured a goat.'
- (40b) Kwach e ma omako diel

 'It is a leopard that has captured a goat.'

In constructions of this type, it is fairly clear that the pragmatic circumstances leading to the utterance of the a-type constructions are different from those that lead to the utterance of the b-type ones. Thus, (39a) can answer, among others, the question:

(41) Juma timo ang'o? NM do-IMP what 'What is Juma doing?'

but it cannot normally answer the question:

(42) Ng'a ma kelo kong'o?

'Who is (it that is) bringing beer?'

for which, given the right communicative setting, (43) could also be an appropriate response.

(43) Juma.

It is questions such as (42) that are answered by constructions of the type represented by (39b), if an elliptical form (e.g. (43)) is not used.

Such are the kind of observations which led Dik (1980) to conclude that Focus constructions have special underlying predications, different from those of non-Focus predications in the crucial fact that the former start with a Focus marking from the very beginning (of their derivation), since this Focus element is part of the general schema underlying the predications in question. This is the schema that we gave above. For ease of reference, let us repeat it below as item (44), with the interpretation given above.

(44) $\{(\text{term}_i)\}_{FOC} (\text{term}_i)_{\emptyset TOP}$

Now, the relationship between corresponding straight and Focus interrogatives in type (iv) above is that while they involve different strategies for solving the same problem, their equivalence 'can be established via the presuppositions connected with them' (Dik 1980:224). Thus, both (37a) and (37b) presuppose the propositional content of (45).

(45) Jakuo okawo gimoro
Thief take-PF something
'The thief has taken something.'

In this case, each of the questions (37a) and (37b) is aimed at identifying what the thief has taken. But they employ different strategies, (37a) using a non-Focus construction to ask the question while (37b) uses a Focus construction to do the same thing.

We shall now go back to our original problem of constituent order and see how what we have said so far helps us to deal with the so-called Q-word fronting phenomenon. The representative data we need for our discussion is as follows:

- (46a) Japuonj dwaro ang'o? Teacher want what
- (46b) Ang'o ma japuonj dwaro? What Foc teacher wants
- (47) Ng'a ma dwaro ruoth? who Foc want chief
- (48a) Pala ere? knife where
- (48b) Ere pala? where knife

In this set of data, (48) represents our type (i) above, (47) represents our type (ii), and (46) represents type (iv).

From our discussion above, we can now account for the difference between (46a) and (46b) as follows. The paraphrase relationship between the two questions is based on the fact that they share a presupposition. That is, both of them presuppose (the propositional content of) (49).

(49) Japuonj dwaro gimoro 'The teacher wants something.'

The informational gap in (49) is in the identity of what the teacher wants. In asking the question which seeks to fill this gap, one can adopt either a Focus-construction or a non-Focus-construction strategy. The former gives us (46b) while the latter leads to (46a). In other words, the preverbal position of the Q-word in type (iv) questions is a result of the adoption of a Focus-construction strategy for question-formation. The underlying predication of such a question is constructed by filling in the pertinent terms into the relevant positions of schema (44), as in (50) below.

(50) Pres $\{QX_j \text{ ang'o } (X_j)\}_{FOC} (d_1X_i : Pres dwaro_V (japuonj)_{\emptyset} (X_i)_{\emptyset})_{\emptyset TOP}$

The important thing to note in this rather elaborate underlying predication is that since it is built upon the schema for Focus constructions, it must be realized as a Focus construction, with the Q-word ang'o in the special position (P₁).

Type (ii), represented here by (47), does not pose an ordering problem, since the Q-word, which seeks to identify an alpha term, invariably occupies its unmarked position. To account for the Focus element which obligatorily accompanies it, our grammar needs to state only that when the term whose identity is sought (by a Q-word) is an alpha term, then the relevant question must be a Focus construction.

Inasfar as it concerns constituent order, type (i), represented here by (48), has to do with the positional peculiarities of some specific words, e.g. ere, and will, therefore, be dealt with in the relevant section below (see 4.8.).

4.4. THE POSITIONING OF THE TIME-ADVERB

The distributional behaviour of Dholuo Time-Adverbs (TAs) provides one of the best examples of the operation known as permutation in transformational grammar. This behaviour is well illustrated by the positioning of the TA kawuono in the sentences of (51) which, logically speaking, are paraphrases.

- (51a) Otieno nyalo loso kom ne min kawuono NM can make chair mother-3sgPoss today 'Otieno can make a chair for his mother today.'
- (51b) Otieno nyalo loso kom kawuono ne min
- (51c) Otieno kawuono nyalo loso kom ne min
- (51d) Kawuono Otieno nyalo loso kom ne min

Of the various forms of (51), (51b) is the most marked, but no interviewed Dholuo speaker considered it completely ill-formed. The variations of (51) which speakers found completely ill-formed are:

- (51e) *Otieno nyalo loso kawuono kom ne min
- (51f) *Otieno nyalo kawuono loso kom ne min

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Of these two, (51f) does not relate to the term positions of the verb loso. Since nyalo is a modal auxiliary, nyalo loso is a unit constituent in the functional pattern of Dholuo. As such, its two elements together occupy the V position and their unity cannot (at least in Dholuo) be tampered with as has been done in (51f). This leaves the ill-formedness of (51e) as the only case involving the distributional relationship between the term constituents.

That the TA is at least tolerated in moreorless all positions except between the verbal predicate and the binding constituent, i.e. in the O position in the sequence ... V O Ob..., is illustrated by (52), in all of whose variations only (52e) is definitely ill-formed.

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- (52a) Otieno loso kom ne min gi spana e skul kawuono
 NM make-IMP chair mother-3sg Poss spanner today
 (Ag) (Go) (Ben) (Instr) (Temp)
 'Otieno is making a chair with a spanner for his mother at school today.'
- (52b) Otieno loso kom ne min gi spana kawuono e skul
- (52c) Otieno loso kom ne min kawuono gi spana e skul
- (52d) Otieno loso kom kawuono ne min gi spana e skul
- (52e) *Otieno loso kawuono kom ne min gi spana e skul
- (52f) Otieno kawuono loso kom ne min gi spana e skul
- (52g) Kawuono Otieno loso kom ne min gi spana e skul

Let us point out that predications such as (52), which we need for testing constituent positions, are rare and, therefore, tend to feel forced, since we do not, in natural communicative settings, usually find the need to string so many terms in one predication. No doubt the well-formed constructions of (52) have relative degrees of markedness. Of the six well-formed constructions, half ((52a), (52f), (52g)) have a higher degree of acceptability than the other half ((52b), (52c), (52d)).

We account for the high acceptability of (52a) by the fact that all the term constituents are in their expected order according to the SFH. That of (52g) is accounted for by the fact that the TA is in P₁ position, clearly as the Topic element since there is no Focus marking.

The claim that the TA occupies P_1 position as a result of Top assignment can be tested only by creating a pertinent pragmatic setting. Let us consider question (53) below and its response (54).

- (53) Nyoro Otieno nyo-otimo ang'o?
 Yesterday NM yesterday-do-PF what
 'What did Otieno do yesterday?'
- (54) Nyo-olwoko lepe Yesterday-3sgA-wash-PF clothes-3sgPoss 'He washed his clothes.'

If the response (54) is followed by the question:

(55) To kawuono?
And today?

Of the six well-formed realizations of (52), (52g) is the most appropriate response to (55). This is just as it should be since (55) makes the TA kawuono the Top of the predication made in response to it.

The status of the TA in (52f) is perhaps the most controversial in the whole set of possibilities. While, as we have pointed out above, it is definitely acceptable, there is the problem of whether or not it can be said to have a structural commitment in this position. The possibilities are as follows: (i) its position is an alternative P₁ position and, therefore, it is a variant of (52g), (ii) it occupies this position as a free element without any structural commitment, and (iii) it occupies this position as a result of nuclearization.

The first possibility has against it the fact that it does not seem to be a normal response to a question such as (55). So far I have not found a speaker of Dholuo who considers it a possible response to (55) without much hesitation. It is, therefore, difficult to reconcile this TA's low rating as a possible Top element with (52f)'s high degree of acceptability as a sentence.

The second possibility is highly probable. However, it has against it the fact that the TA seems to have a higher prominence in this position than in the positions it occupies in (52a), (52b), (52c), and (52d). Before we conclude our discussion of this possibility, let us look at the last one.

We have no well-motivated justification for invoking the notion of nuclearization here. First, the variety of (52) which fits well into our idea of a predication with a nuclearized constituent, as explained in chapter 3, is (52e) which, as we have noted above, is decidedly ill-formed. This agrees well with our observation in chapter 3 that [+Temp] constituents are [-Nuclearizable]. Second, we have no independent evidence to argue for the occurrence of nuclearized constituents in the preverbal position, especially in Dholuo.⁶

Weighing our evidence for and against each possibility, in the light of what we are sure of now, it appears that (ii) is the most plausible account of the

⁶ It appears that the concept of nuclearization may be used to replace not only Obj assignment but also Subj assignment. In the latter case, having a non-alpha constituent in what is now called the Subj position in a passive construction may be reinterpreted as a denuclearization of the alpha term. Since the kind of investigation required to test the validity of this view would involve the use of data from outside Dholuo grammar, we shall not engage in such an investigation here.

positioning of the TA in (52f). The feelings of relative prominence which seem to be associated with the (structurally uncommitted) positional free variation of the TA in such constructions as (52b), (52c), (52d), and its SFH-determined occurrence in (52a) may be explained in terms of the recently-introduced concept of 'focal value' (Schutter and Nuyts 1983:402). If this turns out to be the preferred explanation, then further investigation will be needed to determine the relative focal values of the various constituent positions of a Dholuo predication since we suspect that this is unlikely to be a language-universal. We shall discuss some other types of adverbials in section (4.9.) below.

4.5. CLEFT-CONSTRUCTIONS

The sentences in (56) below represent what are referred to as cleft-constructions.

- (56a) Rech e ma nyathi dwaro
 Fish Foc child want
 'It is fish that the child wants.'
- 56b) Gi ma nyathi dwaro en rech
 Thing rel/Foc child want cop. fish
 'What the child wants is fish (The thing that...).'
- (56c) Gi ma japuonj ni timo en (mana) chwado nyithindo Thing rel/Foc teacher this do cop. (only) beat children 'What this teacher does is beat children.'
- (56d) Japuonj no e ma jodongo ohero
 Teacher that Foc elders like
 'It is that teacher whom the elders like.'

The notion of a cleft-construction is based on the apparent relationship between constructions such as the ones given above and those in (57) below.

- (57a) Nyathi dwaro rech
 '(The) child want(s) fish.'
- (57b) Japuonj ni chwado nyithindo 'This teacher beats(s) children.'
- (57c) Jodongo ohero japuonj no '(The) elders like that teacher.'

Relating (57) to (56), we can say that (57a) is the non-cleft form of (56a) and (56b); (57b) is the non-cleft form of (56c); and (57c) is the non-cleft form of (56d).

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The cleft-constructions themselves fall into two categories, namely, cleft-constructions proper ((56a) and (56d)) and pseudo-cleft constructions ((56b) and (56c)). To the extent that both of them are believed to 'split up' what is a unified phrase in a corresponding non-cleft construction, they are both cleft-constructions. The difference is that in the pseudo-cleft ones the verb still has what, in traditional terms, can be called its object. In either case, the non-cleft variety is considered to be the unmarked form. That is why transformational accounts of pseudo-cleft constructions work with deep structures corresponding more closely to the non-cleft constructions (Stockwell 1977:158).

From their surface forms, there is no doubt that cleft-constructions are Focus constructions. The pseudo-cleft ones involve only the insertion of some lexical forms in certain positions; and this can easily be handled by expression rules and the procedure for building predications from predicate-frames. The same can be said of cleft-constructions in which an alpha term has a Focus function and is, therefore, placed in its right position according to the functional patterns of a language and a Focus marker (e (ma)) postposed to it by expression rules. This will take care of those cleft-constructions which would not require a movement rule even in a transformational account. Here, such cases include (56b) and (56c).

Thus, the only kind of cleft-construction that would require a movement rule in a TG account is the cleft-construction proper, in our case, (56a) and (56d), in which non-alpha terms **rech** and **japuonj no**, respectively, stand in the preverbal position.

In the approach adopted in this study, (56a) and (56d) do not present any problem so long as we think of them as normal Focus constructions in which the Focus constituents are non-alpha terms. We can, therefore, account for them without any need for special strategies by using the schema presented in (44) above for the underlying predications of all Focus constructions.

Thus, for the sake of illustration, the underlying predication of (56a) will be as in (58) below (showing only the essential details).

(58) Pres $\{X_j : \mathbf{rech}(X_j)\}_{Foc} (d_1X_i : \mathbf{Pres} \ \mathbf{dwaro} \ (\mathbf{nyathi})_{\emptyset} \ (X_i))_{\#}$

Noting that in (58) X_j provides the identity of X_i , which is what the child (nyathi) wants, we are now in a position to leave the rest of the work to

expression rules which, to give us the surface realization (56a), will, among other things

- place rech in P₁ position, the special position for constituent terms with Foc and/or Top functions; and
- (ii) insert the Foc marker e ma after rech.

Following our discussion in chapter 3, if it is believed that ma is only a relativizer and is not necessarily connected with Focus marking, then these rules will also have the responsibility of realizing the head of the embedded relative clause contained in such a predication as zero element.

4.6. THE POSITIONING OF CONSTITUENT TERMS IN COMPLEX SENTENCES

We discuss here the ordering phenomenon known as raising in transformational theory. In TG, this phenomenon involves a paraphrase relationship between two or more sentences in which a constituent term in a lower clause in one sentence is realized in a higher clause of its paraphrase.

The kind of Dholuo data that could be accounted for in these terms are exemplified by (59) and (60) below, each of which contains a pair of paraphrases, in the sense that we cannot in each case assert the a-sentence and deny its b-counterpart or vice versa.

- (59a) Nenorena ni nyathi ni ok dwar yath appear-to-me that child this not want medicine. It appears to me that this child does not want medicine.'
- (59b) Nyathi ni nenorena ni ok dwar yath (=a)
- (60a) Ong'ere ni Yesu biro duogo know-PF-PASS that Jesus come return It is known that Jesus will come back.'
- (60b) Yesu ong'ere ni biro duogo (=a)

In an FG account, the b-sentences of (59) and (60) can be derived by assigning Topic function to a term in the embedded clause. When this procedure puts a term before a verb in a higher clause, we end up with a surface construction which, in TG, would be regarded as a result of a raising rule. Thus (60) would have an FG-kind underlying predication of basically the following formulation:

(61) PASS $\operatorname{ng'ere}_{V}[X_{1}: \operatorname{FUT} \operatorname{tho}_{V}(\operatorname{d}X_{i}: \operatorname{Yesu}_{N}(X_{i})_{\emptyset}(X_{1}))]$

where the verbal predicate ng'ere applies to a term X_1 which is itself a full predication with the as its verbal predicate.

Given the underlying predication (61), if no special function assignment takes place, it will be realized as (60a). If the PF of Top is assigned to Yesu then we shall have (60b), in which the underlying embedded term is in sentence-initial position, occupying the P₁ slot.⁷

We could similarly account for (59) and other surface constructions of Dholuo which appear to require a raising rule. Such a rule, we believe, is an artefact of the transformational model and is not necessitated by linguistic data per se.

4.7. RELATIVE CLAUSE REORGANIZATION

The notion of relative clause reorganization was applied to Dholuo by Omondi (1982:245) to account for constituent-order variations exemplified by the following pairs of sentences:

- (62a) Nyako ma-lando achiel Girl rel-brown one One brown girl'
- (62b) Nyako achiel ma-lando (=a)
- (63a) Dhok ma-dongo ariyo cows rel-big two Two big cows'
- (63b) Dhok ariyo ma-dongo (=a)

Whether a rule of relative-clause reorganization of the kind suggested by Omondi (ibid.) is necessary within her model of description (TG) or whether, indeed, her specific rule meets the adequacy conditions of TG is not our concern here. We simply want to show that, like the other constituent-order problems we have discussed so far, this kind of data can be accounted for adequately within a descriptive model, in our case FG, which makes no use of structure-changing operations.

In general, the FG account of relative clauses is briefly as follows (Dik 1979:9). The relative clause is a complex term in which the head noun is further restricted by a subordinate clause introduced by a relativizer - usually known as the relative pronoun. Dik (ibid.) hints at problems which arise due to differences in form of the English relative pronoun for which

⁷ In both cases, an expression rule is required to realize an indefinite future as biro.

necessary strategies have to be worked out. However, for Dholuo, no such problems arise because Dholuo has only one linguistic form ma for the relative pronoun, and it is used in all environments which require such a word. That makes it justifiable for us to adopt Dik's second strategy for a relative-term entry in which 'the operator subordinator (Sub) is simply preposed to the second restrictor of the term variable' (1979:9).

We can now see how this strategy helps in the derivation of the constructions of, for example, (62) above. The underlying representation of (62) is as follows:

(64)
$$(d_1X_i : nyako_N(X_i)_{\emptyset} : achiel_{NUM}(X_i) : Sub lando_{ADJ}(X_i)_{\emptyset})$$

where the variable term X_i is first determined by the operators d and 1, showing that it is definite and singular, and further qualified by the restrictors nyako, achiel, and lando, the first restrictor being the head noun. The subordination is on the restrictor lando only. For the surface realization, an expression rule of the kind shown in (65) below:

(65) Sub
$$\rightarrow$$
 ma / __X

will prepose the relativizer ma to whatever comes after Sub in a given underlying representation, e.g. (64).

The realization of either (62a) or (62b) is allowed by a general rule of free order for the numerator and the relativized restrictor. We account for the native speaker's feeling that the b-type realizations are more marked by invoking the FG principle of LIPOC, whose requirement, with respect to subordinate clauses, is as follows:

since SUB has almost the last position in LIPOC (...) we may expect that there is a strong pressure for them to tend towards the final position in the clause (...). (Dik 1978:204)

In our example above, ma-lando is a minimal relative clause, consisting of only the Sub and the adjectival restrictor. This minimal complexity of the relative clause gives it the cognitive status of an attributive adjective and tends to allow it greater freedom of occurrence. The freedom diminishes as the relative clause becomes more and more complex. Hence the diminishing acceptability of relative clause reorganization, if we may employ that term here, in the following constructions:

- (66a) Nyako achiel ma-nyadudo Girl one rel-short
- (66b) Nyako ma-nyadundo achiel (-a)
- (67a) Nyako achiel ma ok ong'eyo somo Neg know-PF read 'One girl who does not know how to read'
- (67b) Nyako ma ok ong'eyo somo achiel (=a)
- (68a) Nyako achiel ma nyoro okelo baruwa gokinyi
 Yesterday bring-PF letter in-the-morning
 'One girl who brought a letter in the morning yesterday'
- (68b) ?? Nyako ma nyoro okelo baruwa gokinyi achiel (=a)

The acceptability of the b-constructions diminishes with the increased complexity of the relative clause. We have, thus, shown not only that the descriptive apparatus of FG can account for constituent-order problems encountered in relative clauses but, even more important, that its descriptive principles can explain the native speaker's judgments regarding markedness and scales of acceptability.

4.8. ORDERING PROBLEMS INVOLVING SPECIFIC WORDS

The constituent-order problems so far discussed in this study are those that involve whole constituent-types, defined in terms of either their semantic functions or some structural property as spelt out in each case. In TG such cases are handled by the more orthodox rules, which apply to tree-nodes identified by such categorial symbols as NP, AUX, PP, etc.

The kind of constituent-order problems dealt with in this section are those that TG would account for by means of rules which make specific mention of certain lexical items.⁸

A number of Dholuo words have distributional properties relating to constituent-order which can be handled only by referring specifically to the word in question. In some cases such words may belong to a small closed class and some amount of generalization may be possible. We shall consider, for the sake of illustration, two such constituent-order problems below.

Such rules include the Imperative Transformation, whose SD mentions the element YOU specifically. Similar rules are It-Deletion and There-Insertion, both of whose SDs make specific mention of lexical items.

4.8.1. THE POSITIONING OF THE LOC Q-WORD 'ERE'

In section 4.3. we met, but postponed discussion of such sentences as:

- (69a) Pala ere knife where-is
- (69b) Ere pala (=a)

Now, the word ere is a complex lexical item in the sense that it semantically combines the signification of the term kanye 'where' and that of the locative copula ni, thus being equivalent to ni kanye 'is where?' It is, however, interesting to note that the latter has a different distribution from ere, and would have a b-type construction only if it is a Foc construction. Note that (70b) is ill-formed while (70c) is well-formed.

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- (70a) Pala ni kanye? knife be where 'Where is the knife?'
- (70b) *Ni kanye pala
- (70c) Kanye ma pala nitie (=a)

(In a c-type construction, the Loc copula is realized as nitie (re).)

A further distributional fact regarding ere and ni kanye is that the former can occur only in the present tense, hence the ill-formedness of (71a).

- (71a) *Pala ne ere knife PST where
- (71b) Pala ne ni kanye?

Moreover, when the term whose location is sought is pronominal, then ere can occur only before the term, as in

(72) ere-i
'Where (are) you (sg.)?'

but not as in

(73) *i-ere

For the (73)-type construction, we have to use the free pronominal form (see chapter 2) and kanye without the support of the loc copula, as in

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(74) In kanye You (are) where These facts hold true for all the pronouns of Dholuo. It appears that the choice between (ni) kanye and ere is a lexical choice which, save for the restrictions outlined above, is arbitrary. If that is the case, then it would be desirable to derive the constructions in which they occur from the same underlying representations. In this case we need to point out a further restriction on their distribution, namely, that only ni kanye occurs in Foc constructions, e.g. (70c).

Like other Foc constructions, (70c)-type structures derive from underlying representations based on schema (44), as explained in section 4.3..

For the non-Focus constructions, e.g. (69) and (70a), we can have the following underlying representation:

(75) Pres $\{(QX_j : Place(X_j))\}\ (1X_i : Pala_N(X_i))_\emptyset$

where X_j is a term predicate of the kind defended in Dik (1980:100-102) applied to the term pala, or any other term as the case may be.

It is at the surface realization stage that the restrictions discussed above are considered. For example, since the tense of (75) is Pres, X_j may be represented lexically by either ere or kanye; with the proviso that in the case of the latter not only must the copula-support rule apply to introduce ni, but the surface constituent ni kanye must be restricted to the position after the term, in the above case pala. Moreover, if the tense happens to be something other than Pres, then only kanye, and not ere, can represent X_j in the surface realization.

Restrictions aside, we can now say that if the lexical choice is ere, then it can occur either before or after the term X_i . This accounts for our constituent-order problem regarding the word ere.

The particular appeal of this account is that, in addition to accounting for the positioning of ere, it also captures its distributional relationship to (ni) kanye.

4.8.2. THE POSITIONING OF THE NEGATIVE ELEMENT 'OK'

The negative morpheme ok can occur in two structural positions, namely, either immediately before or immediately after the sentence-initial

⁹ Further restrictions will be observed. For example, if the tense is FUT(URE) then the copula is followed by bed(o) as in Chieng' ni bed kanye? 'Where will you be?'.

constituent (referring expression). We can see this kind of distribution in the following constructions, of which only two are well-formed.

- (76a) Ok ng'at ni nyal ketho gira kamano Neg person this can spoil thing-1sg.Poss like-that 'This man cannot spoil my property like that.'
- (76b) Ng'at ni ok nyal ketho gira kamano (=a)
- (76c) *Ng'at ni nyal ok ketho gira kamano
- (76d) *Ng'at ni nyal ketho ok gira kamano
- (76e) *Ng'at ni nyal ketho gira kamano ok

The general statement made above concerning the positioning of **ok** needs some modification in the light of what we see in (77) below.

- (77a) Gira ok ng'at ni nyal ketho kamano (=76) Go Top
- (77b) Gira ng'at ni ok nyal ketho kamano (=76) Go Top
- In (77) a referring expression gira, comes into sentence-initial position by Top assignment. However, the term that ok can occur immediately after or before is still ng'at ni. An attempt to apply our general statement, which refers to the sentence-initial term, to (77) will produce (77 a) and (78).
 - (78) *Ok gira ng'at ni nyal ketho kamano

But (78) is ill-formed, or at least, highly marked (according to some Dholuo speakers).

We can explain these observations by saying that the crucial constituent for the positioning of ok in the above examples is **ng'at ni** or, generally, the alpha term in the construction. Thus, our statement of the distribution of ok is more accurate if we modify it to say that the negative morpheme ok is placed immediately after the alpha term.

While this statement captures the facts in (76), (77) and (78) above, it does not answer yet another question. What happens in the case of predications without an alpha term? E.g.

(79) Okel ne japidi nanga bring-PF-PASS nurse dress 'The nurse has been brought a dress.'

There are five positions in which ok can stand as shown in (80) below.

- (80a) Ok okel ne japidi nanga
- (80b) *Okel ok ne japidi nanga
- (80c) *Okel ne ok japidi nanga
- (80d) *Okel ne japidi nanga ok

Of these five possibilities, only (80a) is well-formed. This suggests that in the absence of an alpha term ok must stay in the preverbal position anyway. Moreover, since pragmatic function assignment can place some non-alpha term before the verb, as in (81), we must insist on the immediate preverbal position.

- (81a) Japidi ok okel-ne nanga Rec Top
 - (81b) Japidi e ma ok okel-ne nanga Rec Foc

But an element which is regarded as being co-functional with the verb, e.g. bi(ro) 'to come' as a FUT marker, must also be preceded by ok. Consider the possibilities revealed by (82).

- (82a) Ok bi neg diel ne welo
 kill goat guests
 'A goat will not be slaughtered for the guests.'
- (82b) Diel ok bi neg ne welo Go Top
- (82c) Welo ok bi neg ne-gi diel Ben Top
- (82d) *Bi ok neg diel ne welo
- (82c) *Diel bi ok neg ne welo

The facts of (82) are consistent with our observations above so long as we maintain the view expressed earlier in this chapter that auxiliaries and their main verbs are, in any given predication, co-fillers of the V position.

However, there is one more constituent whose placement with respect to ok still requires some investigation: the Time Adverb (TA). The ordering problems concerning the TA itself were discussed in 4.4. above. Our real concern here is how it relates to the positioning of ok. For some insight into the problem, let us consider the constructions in (83) below.

we shall to the West open, the sales

- (83a) Otieno ok bi neno sinema kawuono
 TA
 see film today
 'Otieno won't watch the film today.'
- (83b) Otieno kawuono ok bi neno sinema TA
- (83c) Kawuono Otieno ok bi neno sinema TA
- (83d) ? Otieno ok kawuono bi neno sinema
- (83e) ? Ok kawuono Otieno bi neno sinema TA

As we noted in 4.4., the TA is a constituent which enjoys a greater freedom of occurrence than most, if not all, other constituents of Dholuo predications. In (83) the arrangements which obey the restrictions mentioned above are more acceptable than the ones which do not, namely (83d) and (83e). A number of Dholuo speakers find the latter doubtful cases, but few are ready to declare them definitely ill-formed. The usefulness of our generalizations concerning the occurrence of ok is that they enable us to explain the intuitions concerning the relative markedness of constructions such as those of (83) in a principled way.

The facts noted above can be captured in a transformational account by a movement rule, which will have to decide for its structural index, which of the two unmarked positions of ok is the deep-structure one.

As for an FG account of ok, let us start by noting the following. Apart from the distributional restrictions outlined above, ok has only a semantic function and no structural commitment (as defined in chapter 3). Its scope is usually the whole of the negated declarative predication to which it is applied, though it may also have a smaller scope in a given predication. Since its positioning is restricted, as stated above, variations in scope are determined only by context, occasionally with the aid of some lexical cues in the predication. A common way of indicating the scope of ok in conversation is to produce an utterance consisting of only ok and the constituent within the scope of negation, e.g. (85), coming as a response to (84).

(84) Ng'a na noketho gini? who rel. spoil-PST thing-this 'Who spoilt this thing?' (85) Ok an me 'Not I.'

Since ok is a higher predicate in the sense of Stockwell (1977:40), it has the whole of a predication (nuclear or extended) as its argument. Its surface positioning is not determined by the assignment of any special functions, but only by the expression rules, which take into account the restrictions outlined above. 10

4.9. SOME OTHER CONSTITUENTS

All the principles and descriptive strategies required for providing an adequate account of Dholuo constituent order¹¹ have been illustrated in the discussion of the ordering problems presented in the first eight sections of this chapter.

However, for the sake of completeness, we shall discuss here the ordering of three other constituents which seem to have a conspicuous place in Dholuo grammar.

4.9.1. THE CONDITIONAL CLAUSE

The conditional clause in Dholuo is signalled by the clause-bound morpheme ka, whose semantic range covers the senses of both 'if' and 'when' in English. (This semantic problem will be ignored here since it does not have any distributional consequences in Dholuo.) The positioning of this clause is illustrated by the following paraphrases.

- (86a) Ka ng'ato dwaro chiemo to (mondo) otedi if someone want food then let 3SgA-cook 'If someone wants food, (then) let him cook.'
- (86b) Ng'ato ka dwaro chiemo to (mondo) otedi
- (86c) Ng'ato (mondo) otedi ka odwaro chiemo

Only (a) and (c) show variation in the positions of the clause. The variation represented by (b) involves only ka (as a single-word constituent) and the

There is one use of ok which is not related to what we have discussed here. This concerns using it as a particle for introducing a predication. For example, asked why it is crying, a child may respond by saying Ok Atieno e ma goya 'It is Atieno who is beating me.', where the intention is to affirm rather than deny what is said. Although this ok stays in the preverbal position, it is often found in environments considered out of bounds for the negative ok.

¹¹ In the senses of adequacy indicated in chapter 1.

alpha term (in this case ng'ato). This is accounted for by the freedom of occurrence which ka has in relation to the nominal constituent that occurs in the preverbal position. Notice that such a constituent need not be an alpha term, as we can see in the following example, where (in (b) and (c)) a Go term standing in the P₁ position (as a result of Top assignment) behaves like ng'ato in (86) above.

- (87a) Ka oriemb japuonj to an bende aa expel-PF-PASS teacher then I also I-leave 'If the teacher is sent away (then) I'll also go.'
- (87b) Ka japuonj oriembi to an bende aa Go Top
- (87c) Japuonj ka oriembi to an bende aa Go Top

(The difference between **oriemb** and **oriembi** is phonologically conditioned, and should be ignored here.)

This freedom of **ka** around the preverbal nominal constituent is usually restricted to the left-most of such constituents. Thus, for instance, we can have either the patterns in (88) or those in (89), but pattern (90), even to those native speakers who accept it (not the writer), is doubtful.

- (88a) Ka guok onego paka to wan gi chandruok
 dog kill cat then we-are with trouble
 'If the dog kills the cat (then) we shall be in trouble.'
- (88b) Guok ka onego paka to wan gi chandruok
- (89a) Kapaka guok onego to wan gi chandruok Go Top
- (89b) Paka ka guok onego to wan gi chandruok Go Top
- (90) Paka guok ka onego to wan gi chandruok

(Note that an arrangement that places ka before guok in (90) will produce the same pattern as (89b).)

We can thus say that the pattern of (86b) is accounted for by the freedom of ka around the left-most preverbal nominal constituent. This leaves us with the variation between (86a) and (86c) as the only ordering problem involving the conditional clause proper. This same pattern variation is observed in the following paraphrases.

- (91a) Ka koth chwe to kik uluok lewni rain fall then Neg 2Pl-wash clothes 'If it is raining, do not wash the clothes.'
- (91b) Kik uluok lewni ka koth chwe

Now, as we observed in chapter 2, the conditional clause is, in terms of syntactic categories, an adverbial element. Moreover, it is a kind of adverbial constituent whose scope (of modification) is the whole of the independent clause to which it is appended. This means that in the FG frame-work the conditional clause is an adverbial satellite term with the SF of Conditional (Con.). We can, therefore, give (91) the following underlying representation.

(92) [Neg luoko $_V(X_1:2Pl(X_1))_{AG}(X_2:lewni(X_2))_{GO}](Y_1:chwe_V(X_i:koth(X_i)(Y_1))_{CON})$

From this underlying predication, the expression rules of Dholuo will give us either of the positional variants of (91). Since we want to state this observation in more general terms, let us note the following facts:

- (i) The whole of the construction in which the conditional clause occurs is a predication or, to be more exact, an extended predication;
- (ii) any given predication can be extended by a conditional satellite so long as no semantic anomaly arises from such extension;
- (iii) any given predication, nuclear or extended, which is (further) extended by a conditional satellite, as in (ii) above, falls within the scope of the adverbial which constitutes the (Con.) satellite.

We can, therefore, generalize the derivational observations made with respect to (92) above as follows:

- (93) Given any underlying predication (Q) which is (further) extended by a conditional satellite (S), the resulting (underlying) extended predication QS will by the appropriate expression rules be realized on the surface either as
 - (i) Ka S to mondo Q or
 - (ii) Q ka S

The conditions governing where **mondo** may or may not optionally occur will be stated in the lexical entry of the word **mondo** itself. The actual formulation of such conditions can be done according to any of the strategies outlined in chapter 3 (for expression rules).

Although (93) above will take care of the majority of our derivational requirements involving conditional clauses, it seems to need one restriction. It will be realized that from (ii) above it is possible to have a situation in which Q already contains a conditional satellite before it is further extended by (another) S. This could give us a sentence such as:

(94) Kain gi kuon to pogae ka ok otinni
2Sg-be-with ugali then divide-for-me Neg it-be-little-for-you
'If you have ugali (please) give me some if it is not too little for you
(to share).'

It is not common to have more than two conditional clauses in one Dholuo sentence. This seems to be merely a matter of taste or our natural tendency to avoid too much embedding as has been explained by Chomsky (1965). Though not so frequently, one occasionally hears sentences such as:

(95) Ka in gi pesa to wadhi e duka ka meru ok nyal dhaw kaobiro oyudo ka waonge
'If you have money then let us go to the shop (shops) if your mother cannot complain if she comes and finds us absent.'
(Notice that the ka in ka waonge is temporal rather than conditional.)

Now, notice that a variation of (94) which starts with the second conditional clause *ka ok otinni ... is surely ill-formed. One is, therefore, tempted to think that the ordering freedom stated in (93) above is in some way restricted if there are two (or more) conditional clauses in one sentence. But before we draw our conclusions, let us consider the following paraphrases, which show some patterns that would be unacceptable if the restriction suggested above were actually there.

- (96a) Ka in gi kuon to pognae ka meru ok nyal dhaw
 'If you have ugali (then) give me some if your mother will (can) not complain.'
- (96b) Ka meru ok nyal dhaw to pognae kuon ka in go
- (96c) Ka meru ok nyal dhaw to ka in gi kuon to pognae
- (96d) Ka in gi kuon to ka meru ok nyal dhaw to pognae
- (96e) *Ka in go to pognae kuon ka meru ok nyai dhaw
- (96f) *Ka in go to ka meru ok nyal dhaw to pognae kuon

The well-formedness of (a), (b), (c), and (d) - even though the latter two are less acceptable than the first two - argues against the restriction suggested above, thus providing further evidence for our generalization given in (93). But the last two, which are clearly ill-formed, are even more important because they help us to gain some insight into the kind of problem that was observed in (94) when we suggested the possibility of starting with *ka ok otinni.... Now, notice that this possibility, like the ill-formed ones of (96), tries to have a pronominal element (in this case the o- in otinni) precede its noun (in this example kuon). As a rule Dholuo does not allow pronominal

elements to precede their co-referential nominals. This is a general rule of the language, which has a wider scope of application than just the ordering of conditional clauses. We, therefore, need not have it as a special restriction on the application of (93). All we need is a general meta-rule for Dholuo grammar which says, as a condition for well-formedness, that no rule may generate a structural form which places a pronoun before its antecedent. Once this condition is adhered to, then the positioning of conditional clauses in Dholuo is adequately accounted for by the generalization formulated as (93) in this discussion.

4.9.2. THE LOCATIVE CONSTITUENT

Dholuo Locative constituents fall into two broad classes, namely

(a) the closed class of the deictic elements such as:

ka

'here' - Proximate to speaker

kanyo

'there' - Proximate to Addressee but not to Speaker

kacha

'there' - Not Proximate to both Speaker and Addressee and

(b) the open class of prepositional phrases such as:

e sikul

'at school'

e (wi) mesa

'on the table'

e dho nam

'at the lake shore'

e wi got

'on top of the mountain', etc.

The fundamental formal difference between the a-type and the b-type is that while the former functions without a prepositional marker, the latter usually (though sometimes optionally as in the case of (e) nam 'at the lake') require the prepositional marker e. We shall in this discussion distinguish between them by referring to the a-type as the deictic locative (DL) and to the b-type as the non-deictic locative (NDL). We need these two locative types in order to make generalizations about their pattern regularities. Now, consider the following pairs of constructions, all of which are intended to be Dholuo equivalents of the English sentence: "The teacher is writing a letter to his child with a pen here/at school now." (Such long sentences usually feel forced, but we need them for tests of this kind.)

- (97a) Japuonj ndiko baruwa ne nyathine gi kalam sani e sikull*ka
- (97b) Japuonj ndiko baruwa ne nyathine gi kalam e sikul/ka sani
- (97c) Japuonj ndiko baruwa ne nyathine e sikul/?ka gi kalam sani 3
- (97d) Japuonj ndiko baruwa e sikul/ka ne nyathine gi kalam sani
- (97e) Japuonj ndiko *e sikul/ka baruwa ne nyathine gi kalam sani
- (97f) Japuonj *e sikul/*ka ndiko baruwa ne nyathine gi kalam sani
- (97g) Sikul/ka japuonj ndikoe baruwa ne nyathine gi kalam sani 7

The pattern possibilities tested above give us a fairly reliable result. Of the seven semantic functions shown on the SFH that we talked about in chapter 3 (and earlier in this chapter), only Ben is not represented here because of the confusions arising from its formal similarity with the Rec (here represented by ne nyathine). The verbal predicate (ndiko) and the six semantic functions around it allow us seven pattern positions (in terms of spaces) which can be occupied by any one constituent in the sentence. As a control measure we have kept all the other constituents fixed, only varying the position of the Locative constituent for each possibility. In each case we have used two independently functioning Locative elements, one (e sikul) representing the NDL, and the other (ka) representing the DL - the two Locative classes that we identified above. Each sentential possibility was read twice to feel its correctness, first with the NDL element, and then with the DL element. Our results are as follows:

- I. Patterns Permissible for Both NDL and DL
- (b) Ag V Go Rec Instr Loc Temp
- (c) Ag V Go Rec Loc Instr Temp
- (d) Ag V Go Loc Rec Instr Temp
- (g) Loc Ag V Go Rec Instr Temp
- II. Patterns Not Permissible for Both NDL and DL
- (f) Ag Loc V Go Rec Instr Temp
- III. Patterns Permissible for NDL but not for DL
- (a) Ag V Go Rec Instr Temp Loc
- IV. Patterns Permissible for DL but not NDL
- (e) Ag V Loc Go Rec Instr Temp

Another test performed involved the possibility of having a supportive combination of both NDL and DL together functioning as the Locative constituent. The results show first that their order is fixed as NDL followed by DL (i.e. as e sikul ka and not as *ka e sikul); and second that all the patterns permissible for NDL (i.e. both I and III) are permissible for the combination NDL + DL.

Two more observations need to be made. First, of all the permissible patterns noted above, only (g) may be said to be a result of Top (function) assignment. In this respect we should note that only (g) can provide an unmarked response to the question:

(98) Ang'o ma timore e sikul? 'What is happening at school?'

(Other less-marked responses to this question are possible, but they will not have the Loc constituent.)

Second, some amount of prominence seems to be borne by the Loc constituent in the (e) pattern, where only DL is allowed as a Loc (see result IV). It should be remembered from our discussion in chapter 3 that Loc is usually an X-constituent, meaning that, in the absence of structural commitment (as defined in chapter 3) it should occur outside the nuclear construction, after the binding constituent, in the above example, the Go(al). The prominence felt on Loc in (e) is what we associate with the phenomenon of nuclearization, which (as we defined it in chapter 3) brings a non-nuclear constituent within the nuclear predication. If this is the case here, then we can explain result IV by saying that of the two classes of Loc constituents defined above only deictic locatives (DLs) are capable of nuclearization, an observation which may be stated as one of the rules of Dholuo grammar.

To sum up, we have observed that there are clear regularities concerning the positioning of the Loc constituent in Dholuo. Two of the pattern positions identified above can be accounted for by Top assignment, for pattern (g), and nuclearization, for pattern (e). The rest are free-pattern positions which may be occupied by an appropriate Loc constituent in the absence of any structural commitment. This information will be contained in the expression component of the grammar so that the correct constituent order may be realized.

4.9.3. THE Q-WORDS 'DONGE', 'BENDE' AND 'NANG'O'

Each of the Q-words donge 'Isn't it the case that...?', bende 'Is it the case that...?', and nang'o 'Why?'¹² is a single-word constituent with its own semantic role as a Q-element. In terms of constituent order they are all free constituents, not capable of any structural commitment. Moreover, like ok, they usually have the whole predication within their scope. However, like all other free constituents so far discussed, they have certain pattern restrictions which the expression rules handling their surface positioning must respect. Let us look at each of them in turn.

The normal pattern positions of donge are shown by its occurrence in the following paraphrases, with the accompanying ill-formed constructions exemplifying its limitations. All of them are supposed to mean 'Isn't the chief bringing money to his workers today?'.

- (99a) Donge ruoth kelo pesa ne jotichne kawuono?
- (99b) Ruoth donge kelo pesa ne jotichne kawuono?
- (99c) *Ruoth kelo donge pesa ne jotichne kawuono?
- (99d) *Ruoth kelo pesa donge ne jotichne kawuono?
- (99e) *Ruoth kelo pesa ne jotichne dongo kawuono?
- (99f) Ruoth kelo pesa ne jotichne kawuono, donge?
- (99g) Donge pesa ruoth kelo ne jotichne kawuono? Go Top
- (99h) Pesa donge ruoth kelo ne jotichne kawuono? Go Top
- (99i) ? Pesa ruoth donge kelo ne jotichne kawuono? Go Top
- (99j) *Pesa ruoth kelo donge? Go Top
- (99k) *Pesa ruoth kelo ne jotichne donge kawuono? Go Top
- (991) Pesa ruoth kelo ne jotichne kawuono, donge? Go Top

In our examples above, (a)-(f) show the pattern positions of donge when only an alpha constituent is in the preverbal position. For further testing, we

¹² The orthographic word nang'o represents two separate words, distinguished tonally. One of them, with the tone pattern HH, means 'how?' while the other one, whose pattern is HH, means 'why?'. Only the latter is discussed here - the former being fairly restricted to the sentence-final position.

have given (g)-(l), in which a Topic constituent pesa is in the P₁ position. The results are quite clear. Donge occurs fairly freely in the preverbal position, but in the post-verbal position its only place is the sentence-final slot, where it occurs as a question tag, separated from the rest of the sentence with a non-terminal pause, hence our commas in (f) and (l).

The occurence of **bende** can be observed in the following examples, all supposed to mean 'Is the chief bringing money to his workers today?' (Whatever semantic differences there might be among them will be discussed below.)

- (100a) Bende ruoth kelo pesa ne jotichne kawuono?
- (100b) Ruoth bende kelo pesa ...?
- (100c) *Ruoth kelo bende pesa ...?
- (100d) ?*Ruoth kelo pesa bende ne jotichne kawuono?
- (100e) *Ruoth kelo pesa ne jotichne bende kawuono?
- (100f) ?*Ruoth kelo pesa ne jotichne kawuono bende?
- (100g) ? Bende pesa ruoth kelo ne jotichne kawuono? Go Top
- (100h) Pesa bende ruoth kelo ...?
- (100i) *Pesa ruoth bende kelo ...?
- (100j) *Pesa ruoth kelo bende ...?
- (100k) ?*Pesa ruoth kelo ne jotichne bende kawuono?
- (1001) ?*Pesa ruoth kelo ne jotichne kawuono bende?

The unmarked position for bende is before or after the alpha constituent (in the preverbal position). Unlike donge, it is accepted only reluctantly before a Top constituent, as we see in (g). (Because of the freedom of the T-Adverb, which we have demonstrated earlier in this chapter, a sentence such as (g) is more acceptable with kawuono standing where pesa is.) It is normally unaccepted immediately after the verb except in very rare cases, e.g. in sentences which overtly seek to confirm the truth of a statement, as illustrated by (101) (see (b)).

- (101a) Bende uwacho adieri ni pesa onge
- (101b) Uwacho bende adieri ...
- (101c) *Uwacho adieri ni bende pesa onge
- (101d) Uwacho adieri ni pesa onge bende

(All meant to mean 'Are you (pl.) telling the truth that there is no money?')

In the other cases, e.g. (100f), where there is a star preceded by a question mark, the sentence in question does not have the intended interpretation but could mean something else. For example, in many contexts bende has the sense of 'also', in which case its scope is restricted to the constituent it immediately follows. Thus (100f) could be possible in a context where the intention is to find out if the chief is bringing money today, too.

Finally, let us look at the positioning of nang'o using the following test-frame. (The sentences are intended to mean 'Why is Maria eating fish in the kitchen today?'.)

- (102a) Nang'o Maria chamo rech e jikon kawuono?
- (102b) ? Maria nang'o chamo rech e jikon kawuono?
- (102c) *Maria chamo nang'o rech e jikon kawuono?
- (102d) ? Maria chamo rech nang'o e jikon kawuono?
- (102e) Maria chamo rech e jikon nang'o kawuono?
- (102f) Maria chamo rech e jikon kawuono nang'o?

From this set of data we can say that nang'o enjoys a very high degree of freedom in surface positioning. In fact, even in the cases where there is a low acceptability level, it appears that moving another constituent, especially the Temp element (kawuono) to the preverbal positions tends, at least for some speakers, to give a doubtful sentence a higher level of acceptability. Thus some speakers consider (103) more acceptable than (102b).

(103) Maria nang'o kawuono chamo rech e jikon? Temp

Although intuitions tend to differ quite a bit on issues such as this, at least there is total agreement on what is definitely ill-formed. There is also a reasonable amount of agreement on the observation that the sentence-final position (as in (102f)) is the most unmarked place for nang'o. Thus, so long as we do not violate the distributional constraints governing the positioning of the other constituents, any alternative arrangement of (102) which puts nang'o at the end of the sentence seems to be acceptable. While we do not wish to go through all the 6! = 720 possible permutations of this pattern, the following examples will illustrate our point:

- (104a) Maria kawuono chamo rech e jikon nang'o?
- (104b) Maria chamo rech e jikon kawuono nang'o?
- (104c) Rech kawuono Maria chamo e jikon nang'o?
- (104d) Jikon kawuono Maria chamo-e rech nang'o?
- (104e) ? Kawuono rech Maria chamo e jikon nang'o?
- (104f) Rech Maria kawuono chamo e jikon nang'o?
- (104g) Rech Maria chamo e jikon kawuono nang'o?

As we pointed out above, so long as nang'o stays in the sentence-final position we have no acceptability problem based on its positioning. Thus, even the doubt over the acceptability of (e) is not based on the position of nang'o but on the fact that the preverbal sequence TA Top Alpha ... is a rather marked pattern in Dholuo, the preferred alternatives being Top TA Alpha ... as in (d) and Top Alpha TA as in (105) below, which is another acceptable permutation of (104).

(105) Jikon Maria kawuono chamo-e rech nang'o?

In general, these three question words are single-word constituents whose placement has nothing to do with the assignment of any special functions. They are simply higher predicates (or operators, in FG terminology) with definable scopes. In terms of positioning, they are generally free elements which can occur anywhere so long as such placement does not conflict with their specific pattern or occurrence restrictions of the type we have outlined above. Such restrictions are contained in the expression component of the grammar, as was explained in chapter 3. Whether or not all such restrictions and other regularities have been identified in the foregoing discussion is an empirical question which we have no way of confirming. But, as is the nature of empirical science, a falsifiying example will always be easier to find than conclusive proof. Our hope is not that such examples will not be found, but that the general approach adopted here and the principles and tools of analysis suggested in this work will prove illuminating to further research in this area.

SUMMARY AND CONCLUSIONS

This study started in an exploratory manner, by investigating the grammatical categories and functions that are found in Dholuo. Such categories and the functions performed by them form the constituents whose ordering regularities were the central concern of this study. Since syntactic constituency is a property of constructions of a higher order than words, we also explored the nature of Dholuo phrases and the major clause patterns of the language at the initial stages of the study. Then, by trying to fit a reasonable proportion of Dholuo grammar into the Functional model, we were able to see to what extent one could account for its structural properties using the theory of FG as contained in the literature reviewed in chapter 1.

This investigation revealed that several of the descriptive tools of FG needed to be discarded and new strategies be adopted in order to handle the aspects of Dholuo grammar which do not seem to be accommodated by the standard FG theory. In particular, we have argued that a Functional account of Dholuo does not need the concepts of Subject and Object Assignment as defined in the theory. We found that with a well-defined distinction between alpha and non-alpha semantic functions, and consequently, terms and constituents, it was possible to predict what would or would not occupy the preverbal position of a Dholuo predication (or sentence) in the absence of any pragmatic function assignments. It was demonstrated that as long as there was an alpha constituent in a Dholuo predication it would, by that fact alone, be realized in the preverbal position. This, added to the fact that there are no genuine constituent-order phenomena in Dholuo associated with the passive construction, removed the need for Subj assignment. This led to a new problem. In FG theory, the concept of Obj assignment is defined relative to Subj assignment, which is supposed to take place before it. In terms of linguistic data, Obj assignment takes care of the kind of constituent order phenomena handled by the Dative Movement rule in TG. Our problem was that there was evidence of this phenomenon in Dholuo, and yet - having argued away the need for Subj assignment - we could not meaningfully talk about Obj assignment. We finally resolved this problem by introducing (in chapter 3) the notion of nuclearization, a concept which turned out to be quite useful in explaining certain generalities and intuitions about constituent patterns in Dholuo. Adding to these strategies the FG concepts of pragmatic function assignment, functional patterns, and expression rules,

we were able to provide a fairly satisfactory account of Dholuo constituentorder without having to resort to the use of the structure-changing operations known as movement rules in TG.

In accounting for the communicative competence of a (native) speaker, the functional paradigm seems to have a reasonable amount of explanatory power.

It has come out in this study that Dholuo makes extensive use of Pragmatic Function Assignment. Many puzzling combinations involving pronoun-pronoun or noun-pronoun sequences were shown, expecially in chapter 3, to be attributable to the interaction between Themes and Topics. Moreover, Topic and Focus Assignment account for a good number of preverbal occurrences of non-alpha constituents.

There are a number of constituents, especially of the single-word type, which enjoy a fairly high degree of freedom within the sentence in terms of their positioning. We cannot (at least at the moment) account for the ordering of such constituents in terms of the assignment of any functions. It thus remains unclear what the communicative role of the positional variations associated with them might be. Is this kind of (stylistic) variation motivated only by the beauty of variety? Our theoretical model shares this weakness with its predecessors although (as we pointed out in chapter 4) new concepts such as "focal value" (Schutter and Nuyts 1983:390) may later be of some use in this line of investigation. However, it does not at all appear out of the ordinary that constituents which have no structural commitment in the sense defined in this study (chapter 3), may be free to stand in more than one sentential position, subject only to some general and word-specific restrictions - perhaps motivated by matters such as those relating to scope clarity and ambiguity reduction.

Moreover, the motivation for such variable positioning of lexical constituents and the attendant restrictions upon them may be found in the tension created by the constant struggle between the actual functional patterns of a language and the universal principle of LIPOC as explained in Dik (1978:21). These issues and the theoretical strategies needed to tackle them will probably become clearer when research in matters of performance and communicative competence has reached an advanced stage.

SUMMARY 173

At the moment one can only hope that studies such as this one, at least by identifying the problems that need the linguist's attention, will stimulate further research on these matters. Our ideas may be ignored, but our data will keep on posing a challenge to both the theoretician and the descriptivist.

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