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A GRAMMAR OF LOWER GRAND VALLEY DANI

H. Myron Bromley
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This study was originally presented to the faculty of the Graduate School of Yale University for acceptance in 1972, and has been available on order from University Microfilms. In 1974 Professor S.A. Wurm of the Australian National University suggested publication in the Pacific Linguistics series, but the pressure of other tasks has prevented this until now, when in consultation with Professor C.L. Voorhoeve, it appeared possible.

Meanwhile, the field of linguistics has continued to grow and change, but it has not been possible for me to keep fully abreast of these changes in the field situation. Some small additions and revisions interact with recent materials, but there is certainly no overall coverage of the literature since 1970 relevant to the study. However, the major value of this study is descriptive, and that value remains. The data presented in the description have been revised in only some small ways, though some of these are interesting and relevant to the concerns of the study with deictic categories of person reference. Two missionary colleagues, Mrs. Mel Akes, now deceased, and Rev. R.B. Karesky, drew my attention to the most important new data.

For missionary colleagues and others working in Irian Jaya, it would have been valuable to change the orthography used in the study to conform to the spelling now used for and by speakers of Lower Grand Valley Dani. But the phonemic orthography originally used has advantages in the description of morphemes, and for the use of the linguists who may read this study that orthography has been retained in this edition also.

For their scholarly helpfulness, I continue to be indebted to the linguists and anthropologists at Yale, particularly Professor Floyd Lounsbury, my thesis adviser, who recently retired from his quietly brilliant active teaching career.
As the writing of this study was originally possible because of the helpfulness of my wife, Dr. Marjorie J. Bromley, and our children, Mark, Beth and Lois, time for the preparation of this revision has come during a visit to Australia for family medical reasons. For making that visit possible and for constant support in the programme of study that included research in the field and writing of the study, I am indebted to the Division of Overseas Ministries and the Irian Jaya field of the Christian and Missionary Alliance.

Among the many speakers of Lower Grand Valley Dani to whom I am continually indebted, two are the most important: Apsalek Aso of Hepuba, who first guided me into knowledge of the language, and Sygevhvnogo Hesegem of Tangma, who has for many years worked with me in the translation of the Christian Scriptures. This study was originally and remains dedicated to him in whose name it was done, for the better sharing of the Good News of Jesus Christ among the Grand Valley Dani.
SUMMARY

Lower Grand Valley Dani is a non-Austronesian language spoken in the Bima valley in the central mountains of Irian Jaya (formerly West New Guinea), Indonesia. This study is based on monolingual learning and analysis of that language during thirteen years of residence in the area as a missionary, and on analysis of a corpus of recorded texts. Primarily descriptive, the study focuses on the Dani treatment of events, event sequences, and the participants in those events, with particular attention to the speaker and addressee. The approach is eclectic, but a stratificational model is often implicit.

Chapter I relates this study to previous studies of Dani and to current linguistic theory.

Chapters 2, 3 and 4 treat reference to single events. Chapter 2 is a review and re-analysis of the categories of mode, tense, subject, aspect, and syntactic relationships which are marked in verbs. The chapter is organised in terms of 'event nodes', which refer to the speaker's appraisal of an event as factual, hypothetical, or potential. Chapter 3 treats the interrelated categories of voice and case or role. Dani exhibits reflexive and non-reflexive voices and five contrastive sets of relationships of verbs to personal objects, four of which are marked by constructions with auxiliary verbs. Chapter 4 treats deictic-orientation, person and event mode as categories relating the speaker and addressee to the event. It is argued that the reference of these deictic categories is best described not in terms of performative verbs, substitution and deletion, but in terms of reference to the speaker and addressee as integral elements in semological structures.

Chapter 5 treats reference to multiple events in verb sequences within the sentence, thus focusing on the 'chaining' of sentence-medial dependent verb forms and final superordinate verbs.
Chapter 6 is a programmatic treatment of utterances and their relationship to the speaker and addressee, including description of two sets of modal categories as utterance marginal, and the treatment of sentences and information units within sentences as units in the structure of discourse.

The study describes Dam reference to events and participants primarily in terms of verbs, verb sequences and clauses with nuclear verbs, but views these morphological and syntactic structures as realizations of more fundamental semological structures which include elements of both meaning and reference. Deictic reference to the speaker and addressee is pervasive and requires the description of grammar in discourse perspective.
CHAPTER 1

INTRODUCTION

1.1. PREVIOUS DANI STUDIES

In 1945 Margaret Hastings, a survivor of an airplane crash near the Grand Valley of the Baliem in central Irian Jaya (then Netherlands New Guinea; see Map 1) publicised the one 'word' she and the rescue party learned during their month-long stay in 'Shangri-La': whn (1945: 6). Considerably fuller and more trustworthy information about related languages had long been available, dating from the first contact by van Nouhuys and the Lorentz expedition with the Pasewang south of Mount Triton (Wilhelmina) in 1909 (van Nouhuys 1912:266-273). The word lists and observations recorded during those scant four days of contact are remarkably perceptive, even including accurate notation of some stress and juncture phenomena. Twelve years later, in 1921, anthropologist Paul Wirz spent a little more than two months in the Sma Valley as a member of the Kremer expedition, who referred to the local population as Timorini and Oeringoep.¹ His linguistic and ethnographic observations were the first important contribution to our knowledge of any Western Dani population. The name Dani, spelled Ndani, was introduced into the literature by C.C.F.M. Le Roux, geographer-ethnographer of the 1935 Sterling expedition to the upper Rouvier. He used the term for one of three main ethnic groups contacted there. In his comparative list Le Roux recognised that the language he called Ndani was related to the languages earlier reported from the Sma Valley and the upper Lorentz Valley (1950:898-913).²

The Grand Valley of the Baliem was discovered by the Archbold expedition in 1938, but members of that party published no word-lists from that area. In fact, the only word-list available from their work is from the quite different, although related, language of the upper
Habiliwore area (in Le Roux 1959:902-913). Nor are any language data available from the first overland exploratory trip to Grand Valley from the Wissel Lakes, in 1952, although the report of that trek demonstrates the use of the spelling Dani as well as Ndani and explicitly extends the reference of the term to the upper Ibele population bordering Grand Valley (Meijer-Danneftr 1952:66).

When in April, 1954, the missionary team of which I was a member became the first permanent European residents in Grand Valley, there were no wordlists or linguistic data available in any language spoken there, and the wordlists from related languages proved unusable at that stage. The local population tried to make communication easier by greeting the party warmly with cries map, nap; only much later did we realize that this was no local term but was remembered as a greeting used by the Archbold party, who apparently learned it from Nduga speakers passing by Lake Habibema. Save for such unrecognised aids by helpful local friends, the study of the language has been monolingual from the beginning, and has continued during my more than thirteen years of residence in Grand Valley as a missionary of the Christian and Missionary Alliance. Most of this time has been spent in residence in the Lower Grand Valley areas around Hetigma and Tangmg, with periods of several months or more of residence also in mid Grand Valley and upper Grand Valley.

The first descriptive fruit of this research was an analysis of Lower Grand Valley Dani phonology, prepared as a master's thesis (Bronley 1961). A full description was promised, before I realized how impossibly vast the task of a really full description of a language, nor how many other urgent tasks would be at hand. My only other published linguistic report has been a lexico-statistical article outlining the linguistic relationships of Grand Valley Dani (Bronley 1967).

Grand Valley Dani and Western Dani together comprise a central subfamily of the greater Dani language family. Besides Kino, which is probably a separate subfamily, the other large subfamily within that family is the outer group I have called Ngalik-Nduga, which includes North Nealk, also known as Jaly or Jali (Jali in Koch 1967), located across the range north and east of Grand Valley; South Ngalik, including the language of the Pesega, located south of the range forming the southwest border of Grand Valley; and Nduga, farther west along the south side of the same range, as shown on Map 1. This greater Dani family is related to the Damai family, including languages known as Damai or Umbundu, and Amung; the Dani family; and the Kappuku-Mont-Vuda family, within the Irian Jaya highlands phylum. There are traceable links with other non-Austronesian languages of New Guinea, including languages of the south coast of Irian Jaya, the Goliath mountains and
the Star mountains which are now described as related within a large phylum established by Voorhoeve and most recently labeled the Trans-New Guinea Phylum (Voorhoeve 1968; 1969, personal communication; Voorhoeve and McElhiney 1970). Also within that phylum are many languages of the Nation of Papua New Guinea, including those of the Fly delta on the south coast and the Huon peninsula on the north coast. Perhaps within that phylum and certainly related to it are the languages of the East New Guinea Highlands Phylum, established by Wurm (e.g., 1964). The documentation of linguistic relationships among non-Austronesian languages of New Guinea and the surrounding areas is advancing rapidly, and revisions of presently described phyla to include other languages and to be included within still higher level groups is to be expected (see especially Grace 1968; Greenberg 1960, 1971).

Linguistic analysis, mainly by missionaries, has advanced in a number of languages of the greater Dani language family, but most of this research is still in the form of notes or limited mssographet editions of language learning materials or is reflected in primers, readers and Scripture translations produced for the rapidly growing churches in much of the area. Thus while the greater Dani area is becoming increasingly well known ethnographically, it is linguistically still poorly represented in the literature. Gordon Larson's work on Western Dani has included important analysis of dialect relationships and a large but still incomplete Western Dani dictionary. Among many others who are contributing to linguistic research in the area are missionaries Mary Owen, among the Néugs, David Scott, in the Western Dani area, and Siegfried Zillmer, in North Ngaitis or Jaly. A welcome and significant exception to this rule of unpublished work is the monograph by Father F.A.M. van der Staph, G.F.R., on the morphology of the dialect spoken by the Nagano in the lower part of mid Grand Valley (1966).

1.2. THIS STUDY RELATED TO PREVIOUS STUDIES

Father van der Staph's dissertation, a major contribution to the description of Grand Valley Dani, provides a starting point from which to press further. Attention in that work was focused on and limited to morphology, and since Dani morphology has mostly to do with verbs, that book is largely concerned with verb inflection. Included in that description are more than a hundred different numbered sections variously labeled as aspects, tenses, voices and other kinds of verb categories. The great majority of the more than two thousand inflectional possibilities open to some Dani verbs are treated there; the present study will add but few to the total. So far as verb morphology goes, the contribution to be made here will be limited to re-assessment of some
of the data and re-organisation of the material in terms of the fundamental oppositions of three contrastive 'event modes', referring to the speaker’s appraisal of the status of an event as factual, hypothetical or potential, and two major voices, reflexive and non-reflexive, referring to co-referential or non-co-referential subject-object pairs.

Father van der Stapl uses the term voice more broadly, and includes under it the relationships between Dani verbs and objects marked in affixes to verbs. These contrastive relationships are indeed inseparably linked to the more narrowly labeled categories of reflexive and non-reflexive voice used here and comprise one of the more interesting features of Dani grammar, whereby relationships between verbs and personal objects, relationships that in many languages are signaled by prepositions or case endings, are marked by the occurrence of auxiliary verbs with object-marking affixes. Father van der Stapl identified three of these 'object voices'; the present study recognizes one more and re-analyses the form and meaning of these constructions.

As a well-defined study, Father van der Stapl's Outline of Dani Morphology is just that, although some syntactic information could not be avoided. Indeed it is more difficult in Dani than in some other languages to isolate morphology and syntax, for a single verb form is not infrequently a complete sentence including subject and personal object, and a significant proportion of verb inflection signals relationships among verbs in sequence. Dani exhibits what Wurm has called "one of the most striking characteristics" of highlands New Guinea languages, the occurrence of an independent sentence-final verb preceded by dependent sentence-medial verbs marked to indicate identity or non-identity of grammatical subjects (Wurm 1964:81; see also Capell 1962:115). This phenomenon was labeled "chaining" by Joy McCarthy (1965), and has been reported for an increasing number of languages in the area. The pattern is certainly not without parallel elsewhere in the world. Cromack reports verb suffixes which signal "same subject follows" in Cashinawa of Peru (1965:193), and many years ago Swadesh’s sketch of South Greenlandic Eskimo included a category he called "recurrent person" (1946:50). Insofar as markers of 'same' and 'different' subjects serve to keep track of participants, they are also related in function to the better known oviruptive or fourth person category of Algonquian, which refers to "non-identical animate third persons in a context" (Bloomfield 1933:193; compare Frantz 1966b).

The present study moves beyond the description of single verbs and verb forms to study the chained sequences of verbs that characterize Dani, and to find that the ties that link verbs in sequence reach beyond the sentence, as Phyllis Healey has also found in Telefolin
(1966). Those ties particularly involve (1) semantic components of verbs as lexical items and (2) reference to participants, including the speaker and addressee.

1.3. THE LINGUISTIC CLIMATE

This study is primarily descriptive, designed to report a variation on a common theme of highlands New Guinean languages. But it touches on problems which are only now becoming widely recognized as within the province of descriptive linguistics. These include particularly problems involving semantics and problems concerning whiste longer than sentences.

1.3.1. Semantic

At several points in the present description it is suggested that grammatical constructions, both morphological and syntactic, cannot be described apart from the recognition, and at most partial description, of more basic semantic or semelogical relationships. This view has not been characteristic of American linguistics. Bloomfield in Language showed both interest in and insight into many matters of semantic concern, such as the componential relationships in gender: goose :: ram :: cow (1933:146), and the crucial distinction between "distinctive or linguistic meaning (the semantic features)" and "non-distinguishable features of the situation" (1933:141, emphasis his). Yet he did not pursue those insights when he concluded that an adequate study of meaning must involve "accurate knowledge of everything in the speakers' world," a hopeless prospect (1933:139). And it was Bloomfield's despair rather than his interest and insight that set the tone for nearly three decades of American linguistics. The concern was with distribution, and deliberate isolation of the phenomena under study from any higher level phenomena, particularly meaning, was the supposedly ideal procedure (e.g. Bloom 1946; Harris 1951: 5,7). Pike's perceptive questioning of these dogmas was considered heresy ( Pike 1947; Voegelein 1949:79).

The linguistic revolution that began in 1957 with the publication of Syntactic Structures was not revolutionary at this point but rather retained the status quo of a negative attitude toward meaning. Phonology and syntax were wedded, but syntax was clearly master of the house, and semantics was expressly illegitimate or at best subsidiary to syntax. Grammar was narrowly defined as a "self-contained study independent of semantics" (Chomsky 1965:106), and in the charter of the revolution meaning was suggested to be no more relevant to this kind of grammar
than the hair colour of the speakers (Chomsky 1957-1965:93). This strongly negative position was modified by Katz and Yoder's proposal to include within grammar, more broadly conceived, a semantic component designed to provide a semantic interpretation for the fundamental syntactic structures (1963). Sometimes Chomsky himself seems more restrained in his approach and more careful to emphasize what is still not known about semantics and the relationships between syntax and semantics (e.g. 1965:163; 1969:11). But in a recent statement the fundamentally negative attitude of 1957 remains:

It does ... seem noteworthy that the extensive studies of meaning and use that have been undertaken in recent years have put — if the foregoing analysis is correct — given any serious indication that questions of meaning and use are involved in the functioning or choice of grammars in ways beyond those considered in the earliest speculations about these matters, say in Chomsky (1957). (Chomsky 1970:57)

However, preceding the rise of transformational linguistics and progressing simultaneously with it have come the development of a serious and rigorous approach to semantics by anthropologically oriented linguists working especially in the domain of kinship terminology. In pioneering studies by Lounsbury and Goodenough the concepts of contrast and complementation, which had been the central insights facilitating the progress of descriptive linguistics in phonology and grammar, were seen to be equally applicable in semantics (Lounsbury 1954: 1964a; 1964b; 1965; Scheffler and Lounsbury 1971; Goodenough 1951; 1955; 1967; 1968).

Nor has this been the only approach to semantics. Within the stream of work flowing from transformationalists there has developed a strong current (although not the main current of that stream) of proposals that deep structure, the most salient contribution of transformationalism, is in a semantic structure. Elmer Charmey's little-known but insightful dissertation (1966) and the much better known work of Fillmore (e.g. 1968a; 1968b; 1970a; 1970b; 1971) and McCawley (e.g. 1968) are addressed to this question. Charmey proposed to treat many of the syntactic relationships of Chomsky's model in terms of "abstract sentential meaning", thus proposing a fundamental semantic structure not determined by the syntactic structure (1966:61). Fillmore's attention has been focused on the semantic relationships of nouns to verbs in deep structure as exemplifying case relationships labeled with such terms as 'agentive' and 'dative', in contrast with such surface structure relationships as 'subject' or 'indirect object' (1968a:16,21). In his extremely interesting papers it is remarkable that Fillmore retains the surface structure terms 'noun' and 'verb' for the units in semantic deep structure, while clearly pointing out the inappropriateness of surface structure terms for the relationships
between the units.

At this point Eugene Nida has made an important contribution. After working for many years in semantics, even when the domain was officially off-limits according to many linguists, he has in recent years developed a concept of semantic structure consisting of kernel sentences composed of objects, events, abstracts and relations, acknowledging his indebtedness to earlier concepts of Sapir (Nida 1951; 1964:60-62). In his 1964 book he set this suggestion within a transformational framework and even espoused the Katz and Fodor brand of semantic component (Nida 1964:38-40). Despite that professed espousal, his model was and is fundamentally different from the Chomskyan model, for Nida's kernel sentences are semantic structures composed of terms labelled object, event, abstract and relation as "basic semantic categories" (Nida and Taber 1969:37).

Recently he has repudiated the Katz and Fodor tree-diagram of semantic relationships (Nida and Taber 1969:76 fn). Nida has also been pointedly interested in connections between kernels and thus in discourse structure (e.g. Nida and Taber 1969:40 fn; 112-113), although to my knowledge he has not suggested a model to incorporate these suggestions.

Kenneth Pike has long insisted on serious attention to meaning, and in his tagmemic model of language as trimodally structured with interlocking phonology, grammar and lexicon, he treats all linguistic units as form-meaning composites (e.g. 1954:74). Pike's lexicon is not, however, to be equated with semantics or semology, for the elements in that mode are also form-meaning composites, and he has explicitly rejected the primacy of semantics over phonology (1967:64). Two recent pieces of work provide a major revision in this tagmemic model, however, by incorporating a kind of 'deep structure' resembling Fillmore's within the 'lexicon' (Pike and Lowe 1969:70, 73; Wise 1968:40). Pike had earlier discussed such case-like roles as 'agent' and 'goal' as situational roles, contrasted with such grammatical roles as 'subject' and 'object', but the two kinds of roles were treated as two dimensions of the same grammatical matrix (1964:12). Now Wise restructures this very significantly by treating 'subject' and its manifestation as a 'noun phrase' within the grammatical component, and 'agent' with its manifestations as 'single', 'male' and similar elements within the lexicon, re-christened the lexemic component (Wise 1968:40). With this revision, the lexemic component becomes autonomous, with its own units and tactics, and is parallel in many respects to Lamb's semantic stratum.5

Another approach to semantics as central in language is beginning to appear in the work of Wallace Chafe (e.g. 1970a,b). In his model, semantics is explicitly the "upstream" component of language, and what semantics generates is converted by a series of ordered rules to a
phonological output (1968b:601). There are no mid-stream 'strata' in this scheme, however, but only units produced by the rules at various points along the way.6

The stratificational model of language proposed by Sydney Lamb and adapted by Gleason and his students has provided a framework for a series of highly interesting studies of semantic relationships in discourse in exotic languages (for Lamb's model see Lamb 1966, 1964a,b, 1965, 1971; for Gleason's adaptation see Gleason 1964, 1968; and for studies in this framework see V. Austin 1966; Tabor 1966; Fromack 1968; Stennes 1969). In this model Lamb takes the topmost stratum of language semological, overturning the usual spatial metaphor. On the semological stratum, or one of the semological strata in some versions of the model, participants and events, represented as nodes, are inter-related by such semantic valences as case or role relationships in network structures inter-connected through whole discourses. In terms of encoding or speech, these structures are the generative elements of which grammatical or lexico and morpheme structures and finally phonetic structures are realizations on lower strata. Different kinds of semantic phenomena have been described in terms of the semological network or reticular structures: (1) the elements best known as semantic components, familiar from the literature on componential analysis; (2) nodes, often occupied by a bundle of semantic components, and valences representing the semological relationships between nodes, the nodes and valences comprising networks which represent possible semological structures as determined by the tactics of a given language; and (3) networks representing particular discourses or discourse segments, including referential identification or participants and events. The first two involve the semology of language, of language system; the last is a matter of parole, of particular speech events (cf. also Tabor 1966:128,136).

There is still much that is unknown about semological structure, and the work done by stratificational grammarians, like that done by transformationalists, has been in a continuing process of revision (see Lamb 1971). But the combination of phenomena of reference with phenomena of meaning within the proposed semological structures is provocative. Katz and Fodor explicitly excluded the problem of reference from their semantic component (1963:73; Katz 1969), and Chomsky's ginerally approach to the problem in terms of Referential Indices has been widely criticized (Chomsky 1965:145; Karttunen 1968; Leonna 1968b). J. Sampson has penetratingly shown that referential indices cannot be attached to lexical formatives, as Chomsky proposed, but only to referents (1969 and me), and he has proposed a component of grammar to
handle reference of noun phrases (as). The combination of features of reference to participants with features of meaning within a single component of language is distinctive of stratificational grammar, and this combination has proved helpful in the current study of Dani syntax, where features of lexical meaning of verbs and features of reference to participants as the same or different are together the primary determinants in the selection of subordinate verb forms. Further, this model is not limited to the semantics of single words or single sentences, but is intrinsically designed to allow for treatment of whole discourses.

1.3.2. Discourse Studies

There is ample evidence that any description of Dani grammar needs to take into account utterances and sequences of utterances in discourse as relevant units, and the identity and location of the speaker and addressee as relevant values. A generation ago Malinowski approached the problem of language from his background as an anthropological field worker and called for analysis of the "full utterance in its context of situation" (1935-1965:11). That view is not in accord, however, with a linguistic tradition dating back at least to Meillet which made the sentence the largest unit of interest to the linguist. Bloomfield reaffirmed this position in his classic Set of Postulates for the Science of Language: "A maximum form in any utterance is a sentence... a sentence is not part of a larger construction" (1926-1957:28). Nor has the tradition died. Chomsky has been an unformed Bloomfieldian at this point, repeatedly defining a language as a set of sentences (e.g. 1957-1965:13; 1964:9; 1965:8). In a recent and still unpublished paper he discusses and rejects Lakoff's view that a grammar generates pairs consisting of a sentence and the presuppositions relative to which a sentence may be considered grammatical (1970 mimeo). While the discussion thus extends to non-verbal data relevant to sentences, nowhere is a unit longer than a sentence treated as relevant. This position of Chomsky's is the more remarkable in that his mentor, Zellig Harris, was a pioneer in one variety of discourse analysis, concerned with the segmentation of texts and the establishment of substitution classes (1946).

There are now significant indications that some younger linguists using the transformational generative model are turning seriously to problems of discourse. Important but seldom referred to by transformationalists is Williams' dissertation treating the relationships of sentences to discourse in continuous expository written English prose (1966). Jorge Hankamer's recent Yale dissertation on deletion enter
much more actively into dialogue with current transformationalist writings and suggests as "a simple extension" to standard transformational theory what appears rather to be a fundamental revision: "... what the base generates is not isolated sentences but text..." (1971:11, emphasis his).

This resembles the much earlier position of Hjelmslev, who insisted that the primary datum of interest to the linguist is "the unanalyzed text in its undivided and absolute integrity" (1943-1953:7, emphasis his). Charles Fries, while noting that the sentence is the maximum structural unit in language, significantly called attention to formal structural "sequence signals" tying conversations together (1952:240-253). Often a voice in the wilderness, Pike as early as 1945 spoke of units larger than the sentence (1945:38), and he has since then emphasized analysis of the whole discourse including the behavioral context (1954:3; 1964:7). Among Pike's students and colleagues, Waterhouse contributed a seminal paper on dependent sentences (1963), and Longacre, working with other members of the Summer Institute of Linguistics, is producing a stream of studies treating the sentence as a discourse unit in a hierarchy that also includes paragraphs and still larger units (Longacre 1967, 1968, 1970; Reid, Bishop, Button and Longacre 1968; Ballard, Conrad and Longacre 1971). Joseph Grimes, also working in this group, has turned to discourse studies in a recent paper on Sarawakan narrative (1970). Two of the most interesting contributions from linguists have been by Mary Ruth Wise's dissertation on the identification of participants in Konateluenga (1968), and the collaborative paper by Pike and Ivan Lowe using a mathematical model of group structure to treat person reference in conversation (1969).

In the 1970s, since the original writing of this study, a group of linguists including Perlmutter, Postal, Keenan and Comrie, have rejected the transformational-generative model of grammar and developed an alternative model which emphasizes the central importance of such grammatical relations as 'subject of', 'object of' and 'indirect object of' verbs in syntax, and this 'relational grammar' has frequently included attention to discourse (see e.g. Keenan and Schiffrin 1976: 340; Pullum 1977:253 and other articles in Cole and Sadow 1977).

Other parameters of discourse, particularly those connected with utterance or the speech act, have been focused on recently by M.A.K. Halliday of the London school (1967a; 1968; 1970). Halliday is working within the Hallowskian tradition as neutralized by Pirah, but has also been importantly influenced by the Prague school linguists and their rather awkwardly named 'functional sentence perspective', which treats the organization of utterance as a structure distinct from grammatical
structure and semantic structure (e.g. Danell 1964; Pirtas 1964, 1966).

Some of the most promising and detailed work in discourse analysis has been done by Gleason and his students, working with an adaptation of Lamb's stratificational model of language structure (Lamb 1966; Gleason 1968; Austin 1966; Taber 1966; Cromack 1968; Stennes 1969).

The stratificational model seems particularly well adapted to discourse studies, since it postulates metadiscursive structures which are realised, typically, in sequences of clauses up to and including whole discourses. The present study, which concludes with a programmatic initial approach to some discourse phenomena, owes much to this model and makes some suggestions for revision in it, particularly with regard to incorporating the speaker and addressee as intrinsic elements and the sentence as a relevant unit in the semiotic structure.

1.4. THE PRESENT STUDY

1.4.1. Objective

The development of a variety of linguistic models allowing for attention to semantic concerns and discourse phenomena has provided a favourable climate for the present study, and a variety of stratificational model has proven helpful at a number of points in the analysis. This study is not, however, dominated by any single model, or by models as such, nor is its present aim the defense or exposition of stratificational theory. My own training in linguistics began under Pike and Mida at the Summer Institute of Linguistics in 1949, when post-Bloomfeldian structuralism was in its heyday. What treatment there is of morphology in this study reflects that background more than any current model, although a still older approach (now enjoying renewed favour; see Chomsky 1965:178) is reflected in the inclusion of quantities of paradigms. In recent years my thinking has been stimulated by the stratificational linguists, directly by Lamb and indirectly by Gleason and his students, more than by any other theoreticians. But the reader will not find a stratificational treatment of semantic, lexicose, morphemic and phonemic structures related by realisational rules. I share Gleason's suspicion that a three-stratum system may prove adequate (1968:60), as Taber concluded for Sango (1966:192). But this study does not deal with that problem. Nor will the reader find 'wiring diagrams' of the sort which have come to characterize Lamb's own exposition of the stratificational model (e.g. 1966, 1971). It is my judgment that such diagrams may be useful analytical tools but are cumbersome as descriptive devices.

With the multiplication of models and theoretical approaches, there
is a contribution to be made in the description of a segment of Dani grammar by keeping as closely anchored to the data as possible and commenting on certain current issues where the data appear particularly to illuminate those issues. The study is not an exposition of linguistic theory with language data used for illustrative purposes, but rather a description of language data with comments on some theoretical issues. Although a variety of stratificational models is frequently implicit and sometimes explicit, the approach is unapologetically eclectic, and the content is frankly descriptive. There is a twofold justification for such a study. Dani, as a non-Austronesian language of Irian Jaya, represents a family and phylum of languages still little known and less described, so that the study is of interest for purely descriptive and typological purposes. But theoretical advances need to be tested against as wide a variety of languages, and such testing may either proceed by selecting data from a single language or a number of languages to illustrate and test a particular point, or by providing as full data as possible for a selected segment of a particular grammar and speaking to theoretical issues in terms of those data. Much current work, often brilliant, proceeds along the route of selection of data in terms of a particular current issue. Convinced that such an approach makes it easier to sweep problems under the rug and hide data which may become of considerable interest, I have chosen the older approach of description which seeks to elucidate the structure of a language, with the limits and focus of the study suggested by the data of that language.7

Originally the focus of this study was to have been on larger discourse units, but the conviction grew as work progressed that the most needed task was the more modest one of moving one step beyond Foster ran der Stap's foundation work on verb morphology to study the chained sequences of verbs that characterize Dani. However, it proved most useful to define the segment selected to study not in syntactic terms but in semantic terms, since single verb forms in Dani frequently include reference to an event and to participants in that event who function as subject and object of the verb. Noting with Jakobson (1957) that events include both narrated events and the speech event or utterance, the study focuses on relationships between events and personal participants in those events, particularly as they are referred to in verbs and sequences of verbs and verb-nuclear clauses within sentences, but with a programmatic preview of extensions of these relationships to discourse. This is not in any sense a complete description of Dani syntax. So far as the term Dani is concerned, this study is of a single dialect of Lower Grand Valley Dani, that which is spoken in the Aso-Lokobal confederacy area on the southwest side of the Salis river near
the Hetigis mission post (see Map 1). And so far as the term syntax is concerned, this study includes very little about adverbs of time and place and manner and a number of other important clause constituents, and almost nothing about the construction of noun phrases or clauses which do not include verbs. However, the study also extends beyond the traditional bounds of syntax in two directions, by including a review and re-evaluation of verb morphology on the one hand, and a preview and programmatic treatment of utterance-related phenomena on the other. While the original focus of the study on longer discourse structures has shifted, the discourse perspective has been retained in the treatment of verbs, verb sequences and utterances.

1.4.2. Outline

Chapter 2 is a review of verb inflection for mode, subject, aspect and relational categories, excluding detailed consideration of categories of voice and personal object relationships. The chapter is organised according to the three contrastive categories of what is here termed 'event mode', referring to the speaker's evaluation of the status of an event as factual, hypothetical or potential.

Chapter 3 treats the inter-related categories of voice and case or role relevant to personal object relationships, which primarily concern regular or major class verbs, then surveys the irregular or minor class verbs, which are interpreted to be implicitly reflexive, and the secondary verbs, which only occur with inflection-carrying auxiliaries. Chapters 2 and 3 are thus descriptions of single verbs or verbs with auxiliaries, including the subjects and personal objects marked in those forms; these are realisations of single events and the major personal participants in those events.

Chapter 4 is a more detailed look at the categories marked in single verbs which relate them to the speaker and addressees. These include: (1) categories of deictic orientation in space as marked in verbs of directional motion; (2) categories of person; and (3) categories of event mode. These categories relate single events to the participants in the speech event, and the chapter includes a critical evaluation of some models for describing such deictic phenomena.

Chapter 5 describes sequences of verbs and verb-nuclear clauses within the sentence. In the early part of the chapter attention is focused on constructions which include certain non-finite verb forms, where such syntactically relevant categories as sequence and simultaneity are signalled not by word order or overt relational particles or affixes but rather by the relationship of semantic components in the verbs.
involved. This chapter thus describes limited sequences of events and
their relationship to personal participants, including the speaker and
addressee.

Finally, Chapter 6 treats speech events or utterances and their
relationship to the utterance participants. As an introductory probe
into the structure of utterances and discourse in Dani, the chapter
includes a discussion of the work of Halliday and the Prague school
linguists on similar phenomena. For Dani, utterance margins are de-
scribed as including markers of two distinct sets of utterance nodes,
one of which refers to the speaker's stance toward the addressee, and
the other of which distinguishes utterance terminals as interrogative
or non-interrogative. The chapter also includes a brief treatment of
the segmentation of utterances into units which are often not extermi-
nous with units defined by criteria of grammatical dependency. It is
suggested that phonological sentences and units within sentences
associated with intonation contours, pause and often an overt cletic,
are units of information in the structure of utterances. Further, it
is argued that sentences, both the deliberately interrupted kind or
phonological sentences used for special effect and the more usual
variety of sentence also defined by internal relationships of grammatici-
al dependency are relevant units in the semantic or semiological struc-
ture. Brief, programmatic and tentative as this approach to utterance
and discourse structure is, it is made with the conviction that satis-
factory description of any Dani sentence, even of any single verb, must
include attention to categories which are fundamentally utterance-
relative. All of grammar and any segment of grammar must be viewed in
discourse perspective.

1.4.3. Method

This study draws on several different sources of data. Probably the
most important source is the familiarity and fluency gained by constant
use of one or the other of two closely related Lower Grand Valley Dani
dialects during most of my thirteen years of residence in the area.
The second is a lexical file in each of these dialects, together with
a body of verb paradigms and some language learning materials, all
collected or prepared in the course of my linguistic investigations and
missionary service. The narrower base for the study is a collection of
transcribed recorded texts, including conversations, folk tales,
myths, expositions of local cultural activities and narratives of events
both recent and long ago. The total collection includes about two
hundred fifty pages, of which over one hundred pages are in Lower Grand
Valley dialects. Of this collection a few more than fifty pages of
texts in the dialect spoken around Ketigima in the Aso-Lokobal confederacy area have been multilithed on file slips and used in an analytical filing procedure.

All recognizable discourse units were filed in terms of unit margins and links, including all sentence links and then the filing procedure moved to syntactic structures within sentences and to the markers of those structures whether affixes, particles or words of major word classes. There is a large amount of information in the files resulting from these procedures which is not incorporated in this study. In general, every major point in the description rests on data included in the filed corpus, yet the evaluation and interpretation of these data have drawn constantly on my speaking knowledge of the language.

During the study I have become increasingly aware of how really limited that knowledge is, of how much more there is to be known and how very much more there is to be described. This study is only one further short step toward the still distant goal of an adequate description of Dani grammar. It is offered with the hope that some light has been shed on certain problems of Dani grammar, many of which are shared with other languages of the area and some of which, particularly those related to the deictic categories of mode and person, appear to be relevant to problems of general grammar.
NOTES

1. The members of the expedition did not agree on the name. Jongejans, ethnographer with the earlier 1920 phase of the expedition called them Oertigoop; Drijmer, physical anthropologist and health officer, called them Timorini (Le Roux 1948:7). Neither name is now used in such a way by people of that area, a number of whom remember the expedition well (C"Urban 1969a:7). A Honda valley adult whom I once questioned about these names assured me they were names of members of the expedition. The term Pesegen for the population contacted by the Lorentz expedition on the south side of the central range is, in contrast, a well known clan name from that area.

2. It seems probable that the spelling Mxani reflects the pronunciation of the Western Dani term rawa by one of the other ethnic groups of the area. This term, used by many Western Dani to identify themselves ethnically, is pronounced with an initial implosive [ŋ] by Dani speakers and at least some Monis (Gordon Larson, personal communication).

3. The names laei in Lower Grand Valley and dan in mid Grand Valley refer to a particular clan living mainly in Welasi and adjacent areas, where a major Western Dani trade route enters the area. Grand Valley people nowhere use this term for their language or to identify themselves or others ethnically in any wider sense than in reference to that clan or a local confederacy including members of that clan. Most commonly Grand Valley people identify themselves by their local political confederacy, named for a clan or two clans, often of opposite moiety, represented in the composition of the unit. This is the origin of the term Wiligman for the group studied by the Harvard expedition as reported by Broekhuyse (1967) and the doubled doublet
name Williamson-Valera reported from the same area by Heider (1970:12). It was observation of cultural and linguistic similarities with Western Dani groups that prompted the first overland explorers to Grand Valley to extend the reference of the term Ndani, already long in use for Western Dani groups in the Ilaga and Benga valleys, to populations near Grand Valley. This is explicit in the report of that trip:

In the North West Bulem (Malangowae) we met people who called themselves Muerip and Tahonita. In the Thala many Muerips besides Teshonees. From these lists of clan names in the Ilaga and Benga it appears that the Muerips and Tahonita can be counted as Ethnias and do not comprise separate tribes, even though they do not use this name for themselves. (Meijer-Rannof 1952:66, my translation).

The spelling Dani also appears in the same report (Meijer-Rannof 1952:4, 63). The lack of any local term used throughout the area for the language of the Grand Valley has allowed this usage to continue, so that the name Dani has become well established with reference both to Western Dani and Grand Valley Dani groups (Brookhuyse 1967; Bromley 1960, 1961; Heider 1965, 1970; O'Brien 1969a,b; Peters 1965; Ploeg 1964; van der Stap 1966; Koentjaraningrat 1970; Koentjaraningrat and Bachtar 1963).

4. The list of published ethnographic dissertations grows continually and now includes Father Peters' perceptible ethnography from lower mid Grand Valley (1965, Dutch; 1975 English translation), Brookhuyse's ethnography of the Willigman of mid Grand Valley (1967, Dutch), Ploeg's study of government in the Western Dani area around Bokondini (1969), Karl Heider's extensively revised dissertation on the same group studied by Brookhuyse (1970) and Klaus Koch's study of the Jai (Yali or North Aglink) (1979). Still to be published is an excellent ethnography, Denise O'Brien's Yale dissertation on the economics Western Dani marriage, based on fieldwork in the Swart valley area (1969). In Indonesian there is Anwa Iskandar's study of the Mugogo, with a view to their political development (1964). In preparation are a master's thesis by Herman Lanting of the University of Indonesia, based on fieldwork in the Beige valley, below Grand Valley, and a doctoral dissertation by Gordon Laren on the University of Michigan, based on his work among the Ilaga valley Western Dani since 1956. Shorter articles include Heider (1967, 1969a,b); Koch (1968a,b, 1970a,b,c); O'Brien (1969a,b); O'Brien and Ploeg (1968); Ploeg (1966); Bromley (1960); and several papers in the monographed publication Nothing Fayeza 4x Dani Ethnology, No. 1, by the Bureau of Native Affairs (1962).
5. Wise herself takes pains to distinguish her model from Lamb's, particularly noting that each of her components contains units which are form-meaning composites. But what she calls 'meaning' turns out to refer to real-world phenomena "independent of linguistic form" and "non-language specific", including elements like "beneficiary", "naming of participants" and kinship relationships (1968: 10). Other members of the Summer Institute of Linguistics have proposed somewhat similar revisions to Pike's model, e.g. Merrifield, who is explicitly indebted to Lamb but also incorporates many features of transformational grammar (1967:50). However, Pike rejects the semantics of Merrifield's model (1967:62). Wise's model is of particular interest since her dissertation was prepared under Pike's supervision and bears his approval (Pike, personal communication). Longacre, however, has rejected Wise's revision of the tagmemic model in favour of keeping both 'surface' and 'deep' structure within the grammar components (Ballard, Conrad and Longacre 1971:74).

6. It is clear that in fact Chafe does not operate with a completely unstratified system. His phonological output is written in segment symbols, not distinctive feature symbols, although he recognizes distinctive features as the minimal phonological elements (1968b:558). He also describes, like everyone else, words as composed of roots and affixes (e.g. 1970a:14). His negative judgment of stratificational grammar seems directed against a caricature of strata as "sealed-off levels" (1968b:600). In fact, much of Lamb's recent work has involved the mechanism for what might be described as interpenetration of strata. One such development is the concept of 'trace formations' by which relational network connections activated in an utterance are frozen by repetition until complex units from a higher stratum are regularly realised by frozen macro-units on a lower stratum. Also Lamb now allows for alternation at more points in a single stratal system than formerly. In effect this amounts to a kind of rule-ordering within the stratal system (see e.g. Lamb 1970, 1971).

7. This comment is not intended to be disparaging toward many recent studies which are excellent samples of the opposite approach (e.g. Hanksamer 1971). In some recent work with kinship nomenclature in which I wanted to document certain patterns reported from Australian aboriginal languages, I found the earliest and most general descriptive accounts contained the data I was looking for, while multiplied articles written
in more recent times had been pruned to fit the then-current view of Australian social structure and almost invariably omitted the data I needed. My approach in this study has been to select the segment for description in terms of limits which seem to me to be suggested by the data and to try to give as full data as practicable for that segment. I regret that limitations of time have forced me to curtail radically the number of texts included in the appendix. I can only ask the reader's trust that the data have not been selected to fit a particular model or problem defined apart from the structure of Tani, but rather to reveal something about a portion of that structure as I see it. I believe that such descriptive accounts are in the long run more valuable and more valid for testing theoretical hypotheses than accounts which are dominated by and limited to a particular current model.
CHAPTER 2

SINGLE EVENTS AND EVENT PARTICIPANTS:
MODE, SUBJECT, ASPECT AND RELATIONAL CATEGORIES

2.1. INTRODUCTION TO DANI VERB INFLECTION

A considerable amount of the surface complexity of Dani grammar is represented in the verb morphology. It is not the purpose of this study to duplicate the significant work of Father van der Step. However, for the reader to make sense of examples cited, it is of use to have a guide closer to hand, and one which is based on the independent analysis reflected here. This guide is provided in four parts. The present chapter is a survey of the inflection of verbs for mode, subject, aspect and syntactic relational categories. The following chapter examines the categories of case or role and the categories of voice in all classes of verbs, and Chapter 4 is occupied with a closer and more critical look at categories of mode and person, together with some other deictic categories. Finally, illustrative paradigms are provided in Appendix A. Dani forms are cited in an orthography which is in all essential respects the phonemic notation suggested in my earlier study (Bromley 1961:20-69). 1 Where identification of allomorphs occurring in the examples is pertinent, that information is given in parentheses following the form, with the left-pointing arrow indicating that the item preceding the arrow is an allomorph of the morpheme identified by the form to the right of the arrow or is derived from that form. 2 The glossers of examples are identifying labels except where the meaning of the form or category is under discussion. As a convention the category 'third person singular' is glossed by 'he', 'him' or 'his', but the category has no gender specification and is to be understood as referring to a person and number category only:
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wokeate. (woke = wa-ke = 'take'; -ot = ot= -ey = dative, ie object; -o = passive; te = te = subject)

'He gave it to him.'

In this and the following examples in this study, the following symbols are used in the parenthetical identification and glossing of forms:

- 'is an allomorph of' or 'is derived from';
- 'is an allomorph occurring in a phonologically specified environment' (used only where special attention is called to this fact);
- indicates a bound morpheme within a phonologically defined word nucleus or within a single clitic (thus not at clitic boundary);
- indicates a bound morpheme or form with boundary occurring at clitic juncture;
- separates glosses of distinct categories in portmanteau morphemes;
- separates glosses and/or identification of separate morphemes;
- is 'third person singular', and similarly 1s, 1p, 2s, 2p, 3s, for person and number categories identified within parentheses.

2.1.1. Some Morphophonemic Rules

Many of the allomorphs occurring in phonologically specified environments may be accounted for by three morphophonemic rules:

(1) When followed by /m/, /n/ or /l/ within the word (thus whether or not a clitic boundary intervenes), /k/ and for most speakers /t/ are realised as glottal stop //; for other speakers /t/ in this environment is realised as glottal stop in free variation with //:

Issa'no (issaka-) 'steam-cook it later';
lsa'non 'steam-cook it for me now';
haka'no, hakato (hakato-) 'fix it later'.

(2) Following any vowel and preceding a high close vowel /i/ or /u/ within the word nucleus, or within a single clitic (thus not at clitic boundary), any morpheme-final /i/ is realised as //:

wakita (wet=) 'singular subject will come';
hakasim (hakai=) 'you sg. fix it now';
hakasukun 'plural subject will fix it'; compare hakaten 'fix it yourself';
hakatin 'you sg. treat them now'.

In the last two examples /i/ remains // preceding a vowel that is not a high vowel or preceding a high vowel when a clitic boundary intervenes.

(3) Within the word, any sequence of two identical consonants other than stops is realised as one occurrence of that consonant.
pa-tæ̞ka (pal= 'court; -ta= 'imper a process')
'she got out off'
palbo (-bo fastive; -bo abnormal continuative)
'the subject is cutting it off all the same'.

There are a number of other general morphological rules specifying limitations on sequences of vowels, particularly high close vowels, diphthongs, and vowels in the environment of /k/, but for the purposes of this survey it is simpler to cite the forms as they occur (compare Brodsky 1961:63-6). Where an allomorph is accounted for by one of the three general rules given above, no accounting is made in the parenth- esized information with the form.

2.1.2. Verbs, Verb Roots and Verb Classes

Certain roots in Dari may occur with affixes marking such inflectional categories as mode and subject; the resultant units comprise independent words (not clitics) and are here referred to as primary verbs. Other roots occur with affixes marking similar inflectional categories, but the affixed unit comprises a post-clitic presupposing and phonologically dependent on a preceding stem, as in the first example at the top of this page; these post-cliticized inflected units are here referred to as auxiliary verbs. Some auxiliary verbs also occur as primary verbs; others occur only as auxiliaries. Some of the stems preceding and presupposed by auxiliary verbs are primary verb stems, and the auxiliary verbs serve to mark such inflectional categories as progressive aspect or contrastive relationships to personal objects. Other stems preceding and presupposed by auxiliary verbs also occur as members of other major word classes, and the auxiliary verbs serve as carriers of verb inflection with these verbalized stems. Some stems occur primarily preceding and presupposed by auxiliary verbs; these are referred to as secondary verb stems, and the resultant constructions with auxiliary verbs are referred to as secondary verbs. Primary verbs and the constructions of various stems with auxiliary verbs as described above comprise the class of verbs.

Auxiliary verbs are of two basic varieties: (1) an 'outer layer' auxiliary related to the primary verb 'kem= 'continue' and marking the progressive aspect; and (2) a set of 'inner layer' auxiliaries, only one of which may occur in any verb but any of which may occur in the same verb with the 'outer layer' auxiliary. These inner layer auxiliaries include four major ones and one minor one which mark semantic relationships of events to personal objects (van der Stap's "object voices" 1966:87-99).
(a) The auxiliary verb -at- marks dative relationship, where the subject acts and gives the product of his action, material or verbal, to the personal object.

(b) The auxiliary -ha-, which is identical with a primary verb meaning 'put', marks deontic relationship, where the subject acts either placing the personal object or performing a process on some other object and placing that object for the benefit of the personal object.

(c) The auxiliary verb -ae-, which is identical with a primary verb meaning 'see', marks locative relationship, where the subject either looks at, or aims a weapon at, or performs an action on the body surface of, the personal object.

(d) The auxiliary verb -ap- marks general personal objective relationship, where the subject either does something to a personal object or does something for a personal object and the relationship is not specifically marked by auxiliary (a), (b) or (c) above.

(e) In some constructions a substitute auxiliary verb -at- occurs to mark general objective relationship with third person singular objects, both personal and non-personal.

pahye-leokin. (pah- primary verb meaning 'set off'; ph- progressive stem ending; -leokin = wala, lokai = continue', here occurring as an outer layer auxiliary marking progressive aspect) *(singular subject) will keep cutting it off.*

pel-haake (h= 2s object; -et= dative, an inner layer auxiliary) *(singular subject) will cut it off and give it to you.*

pel-bethy-leokin. (h= 2s object; -et= dative inner layer auxiliary; -by- progressive stem; with outer layer auxiliary) *(singular subject) will keep cutting it and giving it to you.*

pel-hakin. (h...-e= deontic inner layer auxiliary; =ak= 2s object) *(singular subject) will cut it (e.g. wood) and leave it for you.*

pel-sekein. (=ak= 2s object; =se= stem formative with la, 2s object; =ak= -ha= locative inner layer auxiliary) *(singular subject) will cut it (e.g. hair) of you.*

pel-sapkin. (h= 2s object; -ap= general personal objective inner layer auxiliary) *(singular subject) will cut you off (as a woman from your family).*

pel-saphy-leokin. (as in the last example, plus outer layer auxiliary) *(singular subject) will keep cutting you off (as a woman from your family).*

heout-walke. (heout= secondary verb stem meaning 'prosee'; -et= substitute general personal objective inner layer auxiliary) *(singular subject) will praise him (or it).*
There are also three inner layer auxiliaries of incurred process, marking semantic relationships similar to middle voice categories in many languages.

(a) The auxiliary verb -lat-, -la- 'cause a process and the resultant state' occurs with a large major class of primary verbs.

(b) The auxiliary -l- 'cause a process and the resultant state' is homophonous with a primary verb meaning 'say'; this auxiliary occurs with a large class of secondary verb stems.

(c) The auxiliary -at-, -at- 'become, incur a state' is homophonous with a primary verb meaning 'acquire'; this auxiliary occurs with verbalised stems.

- saj-sad. (saj = 'cut off'; -sa- Inner layer auxiliary 'cause a process and the resultant state') 'It got cut off.'
- sus-likhe. (sus- a secondary verb root meaning 'explore'; -l- Inner layer auxiliary of incurred process and resultant state) 'It exploded.'
- kok-ska. (kok also occurring as an adjective meaning 'big'; -a- Inner layer auxiliary of incurred state) 'He got big.'
- kok-ska-loboki. (Inner layer auxiliary as in the last example; with outer layer auxiliary) '(Singular subject) will keep getting big.'

Attention in the remainder of this chapter will be confined to primary verbs and constructions of primary verbs with the outer layer auxiliary verb. The sub-classification of primary verbs will be discussed in the next chapter; it may be noted here, however, that there is considerable congruity between the phonological shape of primary verb roots and their distribution, in that verbs with consonant-final roots in general comprise a large major class of primary verbs, while verbs with vowel-final roots in general comprise several minor classes of primary verbs. Primary verb roots occur ending in p, t, k, m, n, l and s; special note needs to be taken (in terms of patterns of inflection) of roots with dipthongs and high open vowels in the final syllable, including roots ending in v, y, v, y, v, w, y, a, a, e and i.

- jepin (jep) 'you ag. fight (or engage in other vigorous reciprocal activity)';
- wasin (wet) 'you ag. hit, kill him';
- hakasin (hakat) 'you ag. flay it, or treat it';
- hisin (hyt) 'you ag. swell up';
- kusin (kut) 'you ag. cut it up for distribution';
- wetasin (wetak) 'you ag. roast it';
- jasin (jake) 'you ag. plant it';
isin (yke) 'you sg.) make it (of a net)';
wasin (wak) 'you sg.) chop it (firewood)';
tem in (tem) 'you sg.) support it' (the only observed examples of a verb root with final m);
watin, wakanin (wan-s, waken) 'you sg.) take it, let it';
pain (pai) 'you sg.) some it';
kalin (kail) 'you sg.) hang it up';
halin (hol) 'you sg.) sprinkle it (as with salt)';
in (in) 'you sg.) say it';
hein (hein) 'you sg.) place it';
ham (ham) 'you sg.) see it';
token (wele, lelen) 'you sg.) remain'.

All the preceding examples are second person singular immediate imperative forms. The parenthesized stems, following the cited inflected forms in these examples, will be used as citation forms in identifying verbs. All verb roots with final k are realised as allomorphs with final t when the root is immediately followed by the factitive event node marker -ae or when, as in non-reflexive voice forms, the root is immediately followed by potential node deinsences. Where the t resulting from these realisations precedes a high close vowel within the same word nucleus of single ellice, that t is then further realised as a according to the second phonophonemic rule cited earlier:

wetas (wet= = wetak = roas= = the factitive) 'he roasted it';
wasin (waset= = wasak = 'rose'= = in potential, immediate imperative, 2s subject) 'you sg.) rose it';
weata-athe (-ath an -at= dative, 3s object; -an factitive) 'he roasted it for him (and gave it to him)'.

2.1.3. Major Categories of Verb Inflection

Many Dait verbs occur inflected to contrast marked reflexive voice with unmarked non-reflexive voice. Most, but not all, of these same verbs also occur inflected for personal objects, with marked categories of first and second person and plural number and an unmarked third person singular (or non-first-or-second-person and non-plural) category. In the case of these verbs, these personal object categories are marked in directly attached affixes, while in all other cases they are marked in affixes to auxiliary verbs occurring in periphrastic construction with verb stems. The personal objects are related to the events referred to in the pertinent verbs by contrastive personal object relationships signalled by the verb or auxiliary verb to which the object markers are attached. These categories of personal object, personal object relation, and voice are inseparably inter-related and constitute an
inner layer of inflection of Dant verbs. Where no auxiliary verb is involved, these categories are marked in prefixes and inner position suffixes to verbs, while all other verbal inflectional categories are marked in various orders of outer position suffixes. The auxiliaries which mark these inner layer categories are inner layer auxiliaries, as earlier listed, which also serve as carriers for the outer position suffixes marking other verbal inflectional categories when no other auxiliaries occur. The description of inner layer categories of voice, personal object and personal object relationship will be deferred until the next chapter.

The present chapter will be concerned with the markers of outer layer inflection of verbs. Verbs are inflected for three contrastive event modes: factive mode, referring fundamentally to events regarded as accomplished fact and so usually to past events; hypothetical mode, referring to events regarded as hypothetical, whether those events might have happened in the past but did not, or might still happen in the future but are not explicitly predicted or ordered by the speaker; and potential mode, referring to events predicted or ordered by the speaker. Factive and hypothetical modes are marked categories, signalled by second-order suffixes to verbs (where the first-order suffix is the reflexive voice marker). The commonest allomorphs of the factive marker are *-v, occurring after consonants, and *-e, occurring after vowels, and the commonest allomorph of the hypothetical mode marker is *-i.

Potential mode is not independently marked but is signalled by portmanteau suffixes also specifying such modal sub-categories as imperative or future and, in most cases, number and usually person of the subject. Verbs marked for event mode categories which are interpreted from the standpoint of the utterance situation, as outlined in the previous paragraph, are finite verbs. Verbs marked for event mode categories which are interpreted relative to the mode category of a superordinate verb or form are considered to be non-finite. Finite verbs may normally occur as the main, final verb in sentences, or are constructed by the addition of suffixes to forms which may so occur. Non-finite verbs normally occur as subordinate forms, presupposing other verbs or forms.

Finite verb forms are also marked in most cases for person and number of the subject, with three persons and singular and plural numbers as contrastive categories. Subject categories are marked in two orders of suffixes to verbs, since some of the markers, particularly second person markers, are segmentable. The subject markers for factive mode are partially identifiable with those for hypothetical mode, but the subject markers for potential mode, as portmanteau suffixes also marking modal categories, are distinctive. The semantics of the categories of event
node, person and number will be further examined in Chapter 8:
washi. (wat = 'hit, kill'; = he, active; =1 is subject) 'I killed him.'
wa'le. (=1= hypothetical; =1 is subject) 'I almost killed him (but
didn't) or 'I'd like to kill him (but don't expect to).' 
wasik. (=1 k potential, hortative/imperative, 1s subject) 'Let me
kill him.'
wa'tya. (=1= reflexive; =1= active; =1 is subject) 'I hurt myself.'
wa'ta. (=1= reflexive; =1= hypothetical; =1 is subject) 'I almost
hurt myself (but didn't) or 'I may hurt myself (but don't expect
to).'
wasik. (=1= reflexive; =1= potential, hortative/imperative, 1s
subject) 'Let me hurt myself.'
Finite verbs in active mood and potential mood may also be inflected
for tense. Although simple active mood forms are unmarked for tense,
they contrast with marked remote past active forms, referring to events
which occurred at a relatively remote time before the speech event.
The time threshold is elastic, but minimally several days and usually
several weeks or months separate the narrated event and the speech
event:
washi. (=1= active; =1 is subject) 'I killed him (recently) or
'I have killed him (right now).'
washiki. (=1= remote past) 'I killed him a long time ago.'
The future category, a sub-category of potential mood, contrasts with
remote future, and this may be considered a contrast of tenses, and
remote future a marked category.8
wasikin. (=1= future; =1K(n) singular subject) '(singular
subject) will kill him.'
wa'ta. (=1= remote future) '(subject) will kill him in the distant
future.'
Potential mood hortative/imperative forms contrast an unmarked immediate
with a marked deferred tense, where the deferred form refers to an
event specified as separated by some interval, even a very short interval,
from the speech event:
wasu. (wat = 'hit, kill him'; =1 immediate, hortative, lp subject)
'Let's kill him now.'
wasuuk. (=1= k deferred) 'Let's kill him later.'
Hypothetical mood forms are fundamentally timeless in reference and do
not occur with contrative tenses.
Verbs are also inflected for category, of aspect. Progressive
aspect is marked by periphrastic constructions with an auxiliary verb
related to the verb wasu, leko= 'continue', and may occur with any
event mode; this aspectual category refers to events occurring over an

Appreciable span of time or to events recurring on several occasions.

Normal aspect pre-supposes event mode and is marked by a suffix in the next order outward from the event mode subject markers. This category refers to events regularly occurring as normal for the subject and event involved. Abnormal continuative aspect is marked in what for most verbs is a single form pre-supposing event mode and marked by a suffix in the next order outward from the event mode subject marker. This form occurs followed by forms of the verb wel-, leka- 'continue' as a carrier of other intransitive categories when such other categories are marked. Abnormal continuative aspect refers to an event or series of events continuing over a period of time in a way that is in some sense abnormal for the subject and event involved. Superficially dissimilar in form and distribution relative to event mode markers, these categories are grouped as aspects because of restrictions on co-occurrence and patterns of substitution. There are also two non-finite verb forms referred to as participles in this study which often signal aspectual meaning. These are the event iterative participle, commonly recognizable as including the event mode marker +/- plus the participle ending +/- which usually signals an interacted series of events sharing some semantic component or components but contrasting in one or more other components; and the potential basic participle, marked by the ending +/-, occurring after consonant-final stems, +/-, occurring after vowel-final stems, where the participle often occurs repeated to signal a protracted event or series of events. All other verb forms are considered to be in an unmarked non-continuative aspect:

-wathy-laky. (+hy- progressive stem marker; -laky + wel- 'continue';
+/- factive; +/- a subject) 'I am killing (or killing) him.'

-wathykek. (+/- factive; +/- a subject; +/- normal; +/- empty closure morph) 'I normally hit (or kill) him (where killing may refer to members of an enemy group, referred to as third person singular).'

-watho welaky. (+/- factive; +/- a non-abnormal continuative)
'I am killing him (the enemy) all the time (as in a warning streak).'

-watay wathyk waka. (+/- factive basic participle) 'killing-him killing-him he-came, i.e. he came killing (the enemy) all along the way.'

-wam kok wathyk, hawalaky wathyk hakatho. 'pig big killing (eat- 'kill';
+/- factive; +/-ky iterative participle) little killing he-eat-its,
+/- he killed pigs, now big ones, now little ones.'

In these last examples, involving more than one word, and in other multi-word examples the convention is adopted of providing a word-for-word gloss followed by a free translation. In the word-for-word gloss, word space corresponds to word space in the Sami example; two hyphens correspond to a single hyphen in the example; and single hyphens join
words used to gloss a single word nucleus or clitic.

The remaining inflectional categories marked in Uam verbs mark
relationships between events, including such temporal relationships as
sequence and simultaneity, such logical relationships as purpose, and
such referential relationships as anticipation of a following or implied
verb with the same subject or a different subject. The formal markers
of these and other verbal inflectional categories will be surveyed in
this chapter, while the syntactic constructions involved will be treated
in Chapter 5.

Each event node occurs with largely distinctive sub-categories.
Discussion of inflectional categories and their markers will proceed
from the more elaborately inflected node, factive, through hypothetical
node to potential node. Both factive node and potential node forms
traduce non-finite as well as finite forms. The chapter concludes with
a separate treatment of periphrastic progressive aspect forms, which
occur in all nodes.

2.2. FACTIVE NODE CATEGORIES

2.2.1. Finite Forms with Contrastive Person Categories of Subject

2.2.1.1. Simple Factive (van der Stap's near past tense 1966:15)
The simple factive paradigm of the verb was = 'he, kill him'
follows:2

\text{washi.} \quad (\text{he} \text{ factive} \quad = \text{1s subject}) \quad 'I \text{ killed him.}'
\text{wathu.} \quad (\text{u} \text{ ip subject}) \quad 'We \text{ killed him.}'
\text{wathin.} \quad (\text{i} \text{ empty stem formative with 2 subject} \quad = \text{2s subject})
'\text{You (sg) killed him.'}
\text{wasin} \quad (\text{i} \text{ as above} \quad = \text{2p subject}) \quad '\text{You (pl) killed him.'}
\text{wasik} \quad (\text{=} \text{3s subject}) \quad '\text{He killed him.'}
\text{wasik} \quad (\text{3p subject}) \quad 'They killed him.'

Other allomorphs of one mode and subject markers may be seen in the
following paradigms, where \text{=k} marks factive:

<table>
<thead>
<tr>
<th></th>
<th>1s</th>
<th>1p</th>
<th>2s</th>
<th>2p</th>
<th>3s</th>
<th>3p</th>
</tr>
</thead>
<tbody>
<tr>
<td>\text{nek}</td>
<td>\text{'es'}</td>
<td>\text{'a'</td>
<td>\text{'a'</td>
<td>\text{'a'</td>
<td>\text{'a'</td>
<td>\text{'a'</td>
</tr>
<tr>
<td>\text{=y}</td>
<td>\text{kk}</td>
<td>\text{k}</td>
<td>\text{k}</td>
<td>\text{k}</td>
<td>\text{k}</td>
<td>\text{k}</td>
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<tr>
<td>\text{=w}</td>
<td>\text{e}</td>
<td>\text{eke}</td>
<td>\text{eke}</td>
<td>\text{eke}</td>
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<td>\text{eke}</td>
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<tr>
<td>\text{=o}</td>
<td>\text{oko}</td>
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<td>\text{oko}</td>
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</tr>
<tr>
<td>\text{=k}</td>
<td>\text{kake}</td>
<td>\text{kake}</td>
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<td>\text{kake}</td>
<td>\text{kake}</td>
<td>\text{kake}</td>
</tr>
</tbody>
</table>

In the above paradigms the person and number symbols refer to subject
categories. A very few other allomorphs of the subject markers occur
in other categories.10 The first person subject markers -y singular
and a plural and the second person markers consisting of the empty stem formative *-s* with *e* singular and *-s* plural occur following the factive marker allomorph *-ke*. The third person subject markers must be described in terms of distribution with specific stems. The factive marker is realised as the allomorph *-k* following vowel-final verb roots and stems and also following the root *nke* 'eat', uniquely. The stem of 'eat' in this category might also be symbolised *nke*, and the stem of 'say' be symbolised *ye*, where *y* is realised as *y* preceding non-continuously a final *y*; as *o* preceding a final *e*; as *i* preceding the third person singular subject marker; and as *e* elsewhere. Paradigms of other verbs in this category are included in the appendix.

The simple factive forms are normally to be glossed by English preterit or perfect, referring to events which are accomplished fast in the immediate or recent past. With verbs of motion, simple factive forms frequently refer to an event that has only begun; sometimes 'come' with a first person subject refers to an event that is certainly planned for the future and considered as good as accomplished. The verb *welke* *kene* 'continue' is unique in a number of respects, which will be treated further in Chapter 3; in simple factive forms it commonly refers to present time, although it may refer to past time:

- *waft*; 'I killed him (recently)' or 'I have killed him (just now).'
- *laky*; 'I went (recently)' or 'I'm going (now).'
- *waky*; 'I came (recently)' or 'I've arrived (now)' or 'I'll come (certainly).'
- *wealky*; 'I am (here)' or 'I was (here).'

2.2.1.2. Remote Past (van der Steip's remote past tense 1966:16)

Events which are considered to have occurred long ago may be referred to in the marked remote past tense category, which requires the factive mode category. The threshold of contrast is flexible, but minimally the five or six days normally counted, and commonly several weeks or months separate the narrated event from the speech event. In texts referring to events of the long ago mainly in the remote past tense, sometimes verbs in simple factive are interspersed, making it clear that the simple factive category is an unmarked category which may include reference to events in the distant as well as the recent past. Remote past forms do not occur interspersed in texts referring to the recent past in the simple factive category.12

The following paradigms are of minimal remote past forms, consisting of the verb root plus the marker of factive mode plus the remote past marker plus the subject marker:
The first form in the first column may be glossed 'I killed him long ago'; the first form in the second column 'I ate it long ago'; the first form in the third column 'I said it long ago'; and the first form in the fourth column 'I went long ago'; and other forms may be glossed analogously.

Morphologically, the first form may be analyzed as:

\( \text{wat} \) (\text{wat} = 'kill'; \text{na} = 'factive'; \text{a} = remote past; \text{a} is subject) \rightarrow \text{'I killed him long ago.'}

The verb \text{nak}, \text{na} = 'eat' occurs with the stem allomorph \text{na} in remote past forms. Verbs with variable vowel stems in simple factive occur with a single unchanging allomorph in remote past, e.g. I = 'say'. In these forms including the remote past marker, the factive category is marked by \text{ak} with the stems \text{la} = 'go', \text{wa}, \text{wet} = 'come', \text{aka} = 'acquire', \text{aka}, \text{ata} = 'become', and \text{laa}, \text{laat} mean a process and the resulting state; following other vowel-final stems in those forms the factive category is marked by the allomorph \text{a}. Elsewhere, following vowel-final stems the allomorph \text{ak} occurs, and following consonant-final stems the allomorph \text{ak} occurs. The remote past marker is best cited as \text{ak}. Following the sequence \text{aak}, the allomorph \text{eak} occurs before \text{ka}, \text{eak} occurs before \text{ha}, and \text{eak} occurs before other endings. Elsewhere (i.e. not after \text{ak}) the allomorph \text{ak} occurs before \text{a}, \text{ak} occurs before \text{ha}, and \text{ik} occurs before other endings.

In first and second person the subject markers in remote past forms are like those occurring in simple factive forms with consonant-final stems. In third person, the singular subject marker is \text{ha}, and the plural subject marker is \text{ha}.

2.2.1.3. Ketaal Aspect (van der Star's habitual aspect, 1966:20)

Normal aspect is a category referring to the aspercfectual quality of events which normally recur, whether frequently or infrequently; this category requires the presence of the modal category factive in the same verb:

\text{naak}. (simple factive) 'They ate it.'

\text{naekataa}. (normal action) 'They normally eat it.'

\text{wataa}. (simple factive) 'They killed him.'
wathatek. (normal action) ‘They normally kill him (as of an enemy group referred to as third person singular, members of which are killed when opportunity permits).’
wa'-lakekhatek. (simple factive) ‘They died.’
wa'-lakekhatek. (normal action) ‘They normally die, i.e. they are mortal (each one dying at the end of his lifetime).’

Normal aspect also occurs in remote past forms, but only when the prior action category to be described also occurs. The simple normal aspect forms of wa= ‘hit, kill’ are:
wathatek. ‘I normally hit him (as kill him).’
wathuske. ‘We normally hit him, etc.’
wathitteke. ‘You (sg) normally hit him, etc.’
wathispek. ‘You (pl) normally hit him, etc.’
wathatek. ‘We normally hit him, etc.’
wathatek. ‘They normally hit him, etc.’

Analogous forms of three other verbs follow:

\begin{itemize}
\item nekiw, ne= ‘eat’ \rightarrow ‘eep’ \rightarrow ‘ge’
\item nekkotek \rightarrow kylek \rightarrow lakylek
\item nekkettek \rightarrow ekettek \rightarrow lakettek
\item nekkesep \rightarrow ekkesep \rightarrow lakkesep
\item nikkettek \rightarrow ikettek \rightarrow lakettek
\item nekkatek \rightarrow ekatek \rightarrow lakelkhatek
\end{itemize}

The form nekkatek may be glossed ‘I normally eat it’; the form nekkytêk ‘I normally say it’; and the form lakettek ‘I normally go.’

The allomorph ‘-e’ of the first person singular subject marker occurs directly following the factive marker when preceding a normal aspect or prior action marker; it also occurs finally directly following the factive marker allomorph ‘-ek*. The basic form of the normal aspect marker is ‘-te’, realised as ‘-sep’ (1) directly preceding ‘-ep’ (see below); and (2) following ‘-ek’ or ‘-ep’ when directly preceding ‘-ek*. When not followed by a marker for prior action, the normal aspect marker is obligatorily followed in second person plural forms by the anastomatically realised subject marker ‘-ep’ and in other forms by the empty closing element ‘-ek*. The sequence ‘-ep’ plus ‘-te’ in second person singular forms is realised as ‘-sep’, and the sequence ‘-ep’ plus ‘-te’ in second person plural forms is thus realised as ‘-sep’; otherwise subject markers occur as in simple factive forms followed by the normal aspect marker and the empty closing element.
2.2.1.4. Pilot Action (van der Steg's perfect past tense, 1966:22)

The category of prior action includes two components of meaning, both involving relationships of events in sequence: (1) completion of the first event before initiation of the second; and (2) anticipation that the verb realizing the second event will have the same subject as the verb realizing the first event. Some qualifications of this second component will be treated in Chapter 5. When an event setting marker, described below, occurs in the same verb, the second of these components is cancelled. The verb marked for prior action refers to the first event as described here. This relationship is common between discrete events of the same major event category, motion followed by motion or process followed by process, where the processes are viewed as discrete wholes and not included as stages in a higher-level process:

lakesik weka, 'he went—prior he-came, i.e. he has gone and come back.'

The second event may be explicit rather than implicit in the context:

lakesik. 'He has gone (and has since then— returned, or gone else-
where).'

This category also occurs with normal aspect marked in the same verb:

wolek wakatesik nekakatek. 'carrying he-normally-comes-prior they-
normally-act-it, i.e. after she brings sweet potatoes) they
(including her) eat them.'

In this last example the referent of the subject of the first verb is included in the reference of the subject of the second, and this counts as 'same subject'. Prior action requires the presence of factive mode in the same verb, and may also occur with normal aspect, as noted, and/or remote past. The forms are surveyed here, and their meaning and use in context will be further treated in Chapter 5.

The simple prior action forms of wet- 'his, kill' are:

wathysik 'after I struck him I....'

wathysik, wathusik 'after we struck him we....'

wathettsik 'after you (sg) struck him you ....'

wathettsip, wathulip 'after you (pl) struck him you....'

wathesik 'after he struck him, he....'

wathesik 'after they struck him, they....'

The forms including normal aspect and prior action are as follows:

wathysesik 'after I strike him, I....'

wathetesesk 'after we strike him, we....'

wathetesik 'after you (sg) strike him, you....'

wathetesip 'after you (pl) strike him, you....'

wathetesik 'after he strike him, he....'

wathetesik 'after they strike him, they....'
The glosses 'strike' and 'struck' have been used in the above paradigms to facilitate comparison of the simple prior forms and those including normal aspect, where the sense 'strike' is more common, but the forms in either paradigm may of course have the sense 'hit'.

In these forms the allomorph -lm of the first person singular subject marker occurs following the factive mode marker and preceding any prior action or normal aspect marker, as already noted for normal aspect forms. The allomorphs -lm of the empty stem formative with second person subjects, and -lm of the first person plural subject marker occur in the speech of some informants when these elements immediately follow the factive mode marker in a form which also includes the prior action marker.

The remote past prior action forms of watt 'hit, kill' are:

wathkitak 'After I struck him long ago, I....'
wathkukusik 'After we struck him long ago, we....'
wathkitik 'After you (sg) struck him long ago, you....'
wathkikilip 'After you (pl) struck him long ago, you....'
wathkikisesik 'After he struck him long ago, he....'
wathkwahkasik 'After they struck him long ago, they....'

The remote past normal aspect prior action forms of this same verb are:

wathkitaktesik 'After I used to strike him long ago, I....'
wathkukutesik 'After we used to strike him long ago, we....'
wathkitiktesik 'After you (sg) used to strike him long ago, you....'
wathkikilip 'After you (pl) used to strike him long ago, you....'
wathkikisesik 'After he used to strike him long ago, he....'
wathkwahmatesik 'After they used to strike him long ago, they....'

The forms in this last paradigm are rather uncommon but do occur. It is to be noted that normal aspect forms with or without the prior action marker have no past reference when the remote past marker is not included, but forms including the remote past marker always refer to past time.

The basic form of the prior action marker may be cited as -lm. The allomorph -lm occurs immediately following the allomorph -lm marking first person singular subject. The allomorph -lm occurs according to the general morphophonemic rule given at the outset, extended in this case to inter-vocalic morpheme-initial (as well as morpheme-final) before a high close vowel. The allomorph -lm, cited as basic, occurs elsewhere. Note that the second person subject markers -lm singular and -lm plural are analytically realised in combination with the prior action marker when it occurs, whether or not a preceding normal aspect marker also occurs: -lm is realised as -lm preceding the prior action
marker -ti-, and -p is realized syntactically immediately following the prior action marker. Where -p marking a second person plural subject does not occur, the empty closing element -k is obligatory. This closing element occurs only once but obligatorily in forms including the normal aspect marker and/or the prior action marker but not including the second person plural subject marker -p. This closing element -k or the second person plural subject marker -p occurs following the prior action marker, if any, or otherwise following the normal action marker, as illustrated in the preceding paradigm.

2.2.1.5. Event Setting

Any of the factive forms described to this point may occur with a further outermost suffix indicating that the event referred to in the verb is viewed as the setting for an event referred to in the following verb or implicit in the context, verbal or situational. The first event, marked with the event setting form on the verb, is viewed as completed before the second event, and the verb referring to the second event is anticipated as having a different subject from the verb referring to the first event. Some further considerations concerning the meaning and use of this category will be included in Chapter 5. The marker of this category is the same morpheme which occurs with nouns and some other stems to mark 'place where':

I 'water'; lem 'in or along the water';
 sill 'courtyard'; sillage 'in the courtyard';
 less 'cookhouse'; lesee 'in the cookhouse'.

With verb forms also this marker sometimes occurs with a spatially defined sense to mark 'place where':

Mola e wathihompi skishihe. 'Mola (a name) house he-built-long-
ago-setting descendant he-name-long-ago, i.e. he came down where
Mola had built his house.'

Very much more frequently the 'event setting' is not spatial in reference
but marks completion of one event and a shift of attention to a differ-
ent participant as subject of the verb referring to a second event, where
this second verb may be implicit; the examples are from texts:

'wathene. 'He has killed him (and now attention is turned to what
others did or will do after that).'

nekkenne. 'You (sg) have eaten him (and I am going to do something
about it).'

lakeihomo...lakekwohe. 'he-went-long-ago-setting they-went-long-ago,
i.e. After she went (leaving her husband), they (the husband and
his party) went (to get payment).'
All factive forms cited in the paradigms presented up to this point may be expanded by the addition of the 'event setting' marker. The allomorphs of this marker are *saa*, *saa*, occurring as follows. The allomorph *saa* occurs following the third person singular subject markers *-a* and *-he*, which are then realised as *-saa* and *-saa*; following the allomorph *saa* of the prior action marker with the associated empty closing element *-k*; and following any syllable including a high close vowel *i* or *u*. Elsewhere, so far as these factive forms are concerned, *saa* occurs. The simple factive forms of *wa*= *'hit, kill' with event setting are as follows:

wahtie* 'After I killed him, (someone else)....'
wathome* 'After we killed him, (someone else)....'
wathono* 'After you (sg) killed him, (someone else)....'
wathipe* 'After you (pl) killed him, (someone else)....'
wathono* 'After he killed him, (someone else)....'
wathome* 'After they killed him, (someone else)....'

Sample forms from other paradigms of this verb follow:

wathyme* 'After I strike him, (someone else)....'
wathymo* 'After I struck him, (someone else)....'
wathatem* 'After I had finished striking him, (someone else)....'
wathetsel* 'After I finish striking him, (someone else)....'
wathikine* 'After I struck him long ago, (someone else)....'
wathikine* 'After I had finished striking him long ago, (someone else)....'
wathikitele* 'After I used to finish striking him long ago, (Someone else)....'

Other forms of these paradigms and analogous forms of other verbs may be seen in Appendix B. The maximal forms described above are rare but do occur. The maximal forms in the filled corpus used as the narrowest base for this study are not simple primary verbs:

wanha-lakatesik-en (wan* 'take'; *-hy* progressive stem; progressive auxiliary - wel*a; wel*a *continuation*; *-ke* factive; *-ak* remote past; *-u* lp subject; *-te* normal aspect; *-al* prior; *-ak* closure; *-en* 'source') 'And after we used to dig (garden), (we used to...)'

ki akalitesik-en (ki potential stem of *enter'; *a* + *wan*, wet* 'come'; *-ke* factive; *-ak* remote past; *-al* ls subject; *-te* normal aspect; *-al* prior; *-ak* closure; *-en* 'source') 'And after I used to come (in here I used to go out again).'

The clitics *-en* glossed 'source' in these examples has a very wide variety of functions and will be treated further, in terms of the sense in these examples, in Chapter 5.
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2.2.2. Finite forms with no contrast of person categories of subject
2.2.2.1. Prohibitive (van der Stapp's short and long prohibitive aspects, 1966:61-62)

The Dani prohibitive category is marked in forms which appear to include the factive mode marker, as if what were prohibited were not the possibility of performing an act, nor the act considered as hypothetical, but the act viewed as fact. The simple prohibitive forms of *wat 'hit, kill' are:

*watwh. 'Don't (you sg) kill him.'
*watwhp. 'Don't (you pl) kill him.'

Some minor class verbs with vowel-final roots exhibit vowel harmony in these forms; the examples are of *i = 'say';

*viwh. 'Don't (you sg) say it.'
*viwhp. 'Don't (you pl) say it.'

The verbs *i = 'go', *wa = 'come', *a = 'acquire', and *li = *lat = 'enter a process', and *ae = 'become' do not exhibit vowel harmony in this category.

*laivwh. 'Don't (you sg) go.'
*laivwhp. 'Don't (you pl) go.'

Forms of other verbs and reflexive voice forms may be seen in Appendix A.

The normal aspect marker with the associated empty closing element occurs with this category; the resultant meaning is often 'don't ever do it', although in some cases simple prohibitive forms and prohibitive forms marked for normal aspect appear to be used interchangeably:

*watwtrk. 'Don't (you sg) ever kill him.'
*watwhwp. 'Don't (you pl) ever kill him.'

Prohibitive forms are analysed as consisting of the verb root plus a reflexive voice marker if any is present, plus the factive mode marker +k with stems ending in vowels and the stem nek, as *esf, or -h elsewhere, plus the prohibitive marker +v, plus the second person singular or plural marker +n or +p, and, optionally, the normal aspect marker +t. When the normal aspect marker occurs, +p plus +t is realised analectically as +sp, and +p plus +t is realised as +tp, obligatorily followed by the empty closing element +k, as in the major factive categories. These facts are summarised in Table 2.
### Table 2

<table>
<thead>
<tr>
<th>Orders of Suffixes in Factive Prohibitive Verb Forms</th>
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<tbody>
<tr>
<td><strong>Order:</strong></td>
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### Suffix Orders

- Suffix orders are numbered for comparison with Table 1 (rather than consecutively). The second person stem formative morphs displayed in Table 1 in order (4), the first person marker displayed in that table in order (7) and the setting marker displayed in order (9) do not occur in prohibitive forms.

### Conditions of Allomorph Occurrence

- Conditions of allomorph occurrence are described in the text.
- If a second person singular subject occurs (5) with normal aspect (6), the subject marker is realised as "+w" before (6).
- If a second person plural subject occurs (5) with normal aspect (6), the subject marker "+w" is realised anaphatically in order (8), and "+w" does not then occur in order (9).

#### 2.2.2.7. Reconstitutive (van der Stapp's common prohibitive aspect, 1966:63)

When an undesirable action has been begun or seems to be actively contemplated, it may be prohibited either with the prohibitive forms described above or with a verb form homophones with the third person singular simple factive form followed by the free particle *wet* 'wrong'. There is no contrast of person or number of the subject in this form, which is most frequently used with second person reference but also occurs with third person reference:

- *wet ha vuk* 'Don't hurt him' (often said to a person or persons who have threatened or attacked someone).

Reflexive voice forms and forms of other verbs may be seen in Appendix A.
2.2.2.3. Abnormal Continuative Aspect (van der Stal's idiosyncratic aspect, 1966:69)

The abnormal continuative aspects refer to events regarded as recurring over a period of time in a way which is unusual either because of a change in a cycle of activity or because of individual specialization in contrast to the activities of others. The non-reflexive voice form of wet= 'hit, kill' is:

wétho 'killing him (e.g. an enemy group) continually';

reflexive voice forms and the forms of some minor class verbs exhibit contrast between singular and plural subject:

wétíko 'singular subject hurting himself continually';

wétvky 'plural subject hurting themselves continually'.

Where such contrast for number of the subject occurs in this category, the singular form is semantically unmarked, i.e., it may occur with reference to either a singular or a plural subject, but the plural form is marked, occurring only with reference to a plural subject.

The reflexive voice markers occurring with this category include unique allomorphs, e.g. -1= in next to the last example. The factive mode marker occurs obligatorily, as -w= after vowel-final roots and stems, and after the allomorphs of the root -w= which occur in those forms, and as -w= elsewhere. The abnormal continuative marker is realized as -w following the factive marker -w= with the roots -w= 'go', -w=, wet= 'come', -w=, at= 'acquire', -w=, at= 'become', -1w=, -lat= 'become a process' and the allomorph -w= of the root -w=, -1, -... elsewhere the category marker is realized as -w= (automatically occurring as -w following the factive marker -w=). The allomorphs -w=, -w=

have two senses, one with reference to a subject of either number, and the second, when contrasted with marked plural subject forms, with implicit reference to a singular subject. The portmanteau -1 occurs as a marker of abnormal continuative aspect and plural subject.

Abnormal continuative forms often occur followed by a form of the verb wel=, lok= 'continue', although they also occur with no other verb following in the sentence of implied:13

wétho wet. (wéth 3s present progressive = wel=, lok= 'continue') 'he is hitting him all the time';

sypptw lik. (lik= -w=, -w= 'eat'; -w= factive; -w= abnormal continuative) 'he is eating sweet potatoes (e.g. after a period of illness or after weaning).'

These forms contrast in meaning with normal aspect and progressive
aspect forms, although the ranges of meaning also overlap:

Japa wamaata. (wan 'take', in this idiom 'dig'; -a = factive;
   -a 3p subject; -a = normal; -a closure) 'garden they-normally-dig,
   i.e. People dig gardens.'

Japa waany-lay. (wyk 3p present progressive stem; -a + wa=,
   leko= 'continue'; -a 3p subject, factive) 'garden they-are-digging,
   i.e. They are digging gardens (now),'

Japa wamaa. (wan 'take', 'hear dig'; -a = factive; -a abnormal
   continuous) 'garden subject-dig-continually-abnormally, i.e.
   (subject) is engaged in a burst of garden digging (in contrast with
   his own previous activity or the activities of others),'

2.2.3. Non-Finite Factive Forms

The remaining factive mood categories are marked in non-finite forms.
The finite forms treated up to this point normally occur as the main,
final verbs in sentences or, in the case of forms including prior action
or event setting markers, are built by the addition of affixes to forms
which so occur. More importantly, in finite forms the event mode
category 'factive' has independent value that may be interpreted from
the standpoint of the context of utterance. In contrast, the category
'factive' in non-finite forms is a relative category that must be
interpreted in terms of the event mode marked in a superordinate verb.
Non-finite forms are normally dependent upon a superordinate verb in
the context and are not constructed by adding affixes to more indepen-
dent forms. It is to be noted that the presupposed superordinate verb
is sometimes implicit rather than explicit.

2.2.3.1. The Factive Subordinate Stem

Several non-finite factive forms are built upon factive stems which
occur with contrast of singular and plural number of the subject. The
categories employing this stem are factive relative to the event
referred to in the superordinate verb. That is to say that from the
vantage point of the event referred to in the superordinate verb, the
event referred to in the subordinate forms is viewed as factual, even
though it is not necessarily factual as yet from the vantage point of
the speaker. The forms are briefly introduced here; they will be
reated in syntactic context in Chapter 5.

The factive subordinate stem when it refers to a singular subject is
homophonous with the third person singular simple factive form. When
this stem refers to a plural subject it is homophonous with the simple
prohibitive form minus the markers of subject categories. The patterns
of inflection may be viewed in Appendix A; these forms for the verb
was- 'his, kill' in a non-reflexive voice are:

was-te- 'singular factive subordinate stem';
was-te- 'plural factive subordinate stem'.

These stems never occur as independent forms without a relational suffix, clitic, or particle marking a particular category, as described below.

(i) Conditional. Partial conditions of the form, 'If X occurs, Y occurs or will occur,' may be expressed in sentences the protasis of which consists of a clause including the factive subordinate stem followed by the relator helek, loosely glossed as 'if,' which is realized as helek with singular subject forms of the subordinate stem and as salek with plural subject forms. This relator is cited to the factive subordinate stem forms; it also occurs as an independent particle with conditional meaning with other verb forms, but in those constructions it occurs only in the form helek. As is even clearer to see in some other dialects, this relator is derived from the verb halek 'see' inflected for what is referred to later in this study as a perfect participle, anticipating a subordinate verb with the same subject. The form salek is derived from a form prefixed to mark a third-person plural personal object, and helek represents the unprefixed form with implicit reference to a third person singular object. It is possible to understand how such forms came to be used in conditional sentences by interpreting examples to have meant, at one stage, 'When the subject of the verb in the apodosis perceives the subject of the verb in the helek protasis having done what is specified in the factive subordinate stem, then he (the subject of the verb in the apodosis) will act as specified in the apodosis.' The forms of the verb was- 'his, kill' in non-reflexive voice are:

was-te-halek.... 'If (singular subject) kills him....'
was-te-salek.... 'If (plural subject) kill him....'
was-te-salek-he, kw-te-wathatek. 'man plural-subject-killing-him-of-topic, white-heron-heavy feathers they normally take.'

i.e. 'If they kill a man, they get white heron feathers.'

The patterns of inflection of reflexive voice forms and of other verbs may be seen in Appendix A. Other examples of conditional sentences with this construction are treated in Chapter 5.

(ii) Coincident Punctiliar. An event which is: (a) regarded as very roughly temporally coincident with another event referred to in a verb with a different subject, and (b) considered as relevant setting for that other event, and (c) not progressive in aspect, is frequently referred to in a verb form consisting of the factive subordinate stem plus the suffixed relator salek. Such forms are frequently chosen to give a point of reference for the time or situation of the event referred
to in the suprordinate verb. The punctillar aspect simply specifies that the verb is not marked as referring to progressive aspect. These forms of the verb were 'kà-bi. kòka-him. In non-reflexive voice 

wathenem.... ‘When (singular subject) kills him, or killed him, 
then....’ 
wathenem.... ‘When (plural subject) kill him, or killed him, then....’ 
sokopepan al wathenem, tum-kòko wathawuwa. ‘pandana-air-roots 
sta-puts’ when singular-subject-basta-is (last two words comprise 
an idiom meaning ‘beat hard’) thrust—manner they-killed-him-long-
ago, i.e., they killed her with a (spear)-thrust when she was 
pounding pandana air-roots (to get fibers).’

Reflexive voice forms and analogous forms of other verbs may be seen in 
Appendix A. Other examples in context are treated in Chapter 5.

There is another sense of these forms which is rare in this dialect 
but does occur, referring to an action which is undesirable. With this 
sense, the second event, for which the event referred to in the new 
form provides a specialised kind of setting, is frequently implicit in 
the situational context. The verb wela, leka ‘continue’ occurs in 
this form only with this sense, and both roots of the verb have been 
recorded: 

welekanem (singular subject) had better not stay. 
lekevnen (plural subject) had better not stay. 

Penti wakamen.... ‘It’s too bad’ Ben is coming for a storm is 
brewing!’

(3) Coincident Progressive. An event which is regarded as (a) 
concurrent but disregarded (or potentially disregarded) background to 
another event referred to in a verb with a different subject, and (b) 
progressive in aspect, may be referred to in a verb form consisting of 
the stative subordinate stem plus the cliticised relator -kakek. The 
forms of the verb wà=bì, kìll in non-reflexive voice in this 
category are: 

wate=kakek, watho-kakek ‘while (singular subject) is hitting, 
killing him....’ 
wath-kakek ‘while (plural subject) are hitting, killing him....’ 
The alternative singular subject form, listed second above, occurs with 
the singular subject marker, normally -e, assimilated to the first 
vowel of ‘kakek. The verb wewa, leka ‘occurs in this category in 
the irregular form wetek- kakek ‘while (subject) is, are continuing or 
staying....’

jytoke wete-kkalek Ik-a! ‘This-way subject-is--while let-me-speak-- 
invitation, i.e. Shall I speak while it (the microphone) is like 
this?’
was: ikka-ikdel tekken. ’taboo singular-subject-saying—while you
(u)-note-is, i.e. you ate it while I was saying that I was
taboo (and disregarded my warning).’

The reflexive voice form and analogous forms of other verbs are displayed
in Appendix A; other contextual examples are provided in Chapter 5.

2.2.3.2. Factive Gerund

A verb form consisting of the verb root or reflexive stem plus the
factive mode marker plus a factive gerund ending, which is most commonly
realised as -wa (or -wa with some minor class verbs) occurs with similar
senses in two common environments: (1) preceding the mental state terms
mesa/’my knowledge, I know how to...’ and mesko/’my ignorance, I don’t
know how to...’ to refer to the action known or unknown by the subject in
terms of his ability to perform it; and (2) with the clitic -kwe ‘push,
direction’ to refer to the place where an action is performed or some-
times to the occasion for performing an action. There is also a
productive derivational pattern in which this form of a verb, most
commonly a verb referring to a process, with -kwe suffixed rather than
cliticised, occurs with reference to the instrument with which a process
is performed. The factive gerund of the verb wa- ‘hit, kill’ in non-
reflexive voice is:

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in this category is:

\texttt{wathyk 'killing him'}.

This form is interpreted to include the factive marker \texttt{`-k'}. The reflexive voice form includes no overt, separate factive marker, however:

\texttt{wathyk 'hurting oneself'}.

In these reflexive voice forms and the forms of some minor class verbs in this category, the iterative participle marker \texttt{`yk} is interpreted to be a portmanteau also signalling factive mode. In this dialect the factive marker does not occur after vowel-final stems, but that marker does occur in this environment in a neighbouring closely related dialect. The loss is interpreted to be the result of a phonological process of weakening of the [j] allophone of \texttt{/k/} intervocally, a process which is also evident in other forms in this dialect and in comparative data. 1

With the roots \texttt{la- = 'go', wa-, ne- = 'come', \textasciitilde{a}-, at- = 'acquire', a=, \textasciitilde{a}t- = 'become' and \textasciitilde{a}m-, \textasciitilde{a}l- = 'cause a process'}, the marker \texttt{`yk} occurs after the stem in its factive form (minus the factive marker) in non-reflexive voice:

\texttt{layk 'going'; wuyk 'coming'}.

With other vowel-final roots and stems, including reflexive forms, the marker \texttt{`yk} occurs with a root or stem allomorph including a final assimilated vowel \texttt{y}:

\texttt{hyyk (- ha) 'saying';
\texttt{vyk (- i) 'saying';
\texttt{wathyk (- wa\textasciitilde{a} = \textasciitilde{a}= reflexive) 'hurting oneself'.

With the root \texttt{nek-}, \texttt{ne- = 'eat'} the marker \texttt{`yk} occurs following a stem consisting of a root allomorph with the vowel \texttt{y} plus the factive marker \texttt{`k'}:

\texttt{muyyk 'eating'}.

With other consonant final roots in non-reflexive voice, the factive marker allomorph \texttt{`yk} occurs followed by the iterative marker \texttt{`yk}:

\texttt{wathyk 'killing him'}.

As a participle presupposing a superordinate verb, this form refers to events as recurrent, particularly to two or more events which share some semantic component or components but contrast in one or more other components and which recur in intercalated sequence, like 'cooking and going', 'coasting and steaming', or 'my carrying it and his carrying it (in turn)'. The modal meaning of these forms, like other non-finite forms, is relative to the superordinate verb:

\texttt{wum kvthyk wathyk \textasciitilde{a}wawthyk liketek. 'pork/pigs carrying killing
\textasciitilde{a} Distributing he-normally-eats, i.e. \textasciitilde{a} regularly carries pork,
\textasciitilde{a} while pigs and distributes pork.'

The senses and environments in which this participle occurs will be
further treated in Chapter 5. This participle is to be compared with
the similar but contrastive basic participle described under potential
mode forms below.

As a form occurring with the negative particle lek in the most common
negative construction in the language this participle apparently speci-
fies the factual status or an event to be negated. But here, as with
other non-finite forms, the modal value of the construction is determined
not from the factive marker in the participle but from the implicit modal
categories in lek as a non-verb predicate (see the discussion on modal
categories in Chapter 6). Such predicates have, unless otherwise marked,
implicit factive event mode. Where another event mode category is
specified, a verb such as weba, lek<sub>wa</sub> 'continue' is included as a
carrier of inflectionally marked categories, and the modal meaning of
the participle is then relative to the modal meaning of that verb:

iew lek. 'going not, i.e. (The subject) didn't go.'

weba lek. 'killing-him not, i.e. (The subject) didn't kill him.'

weba lek lekohin. 'killing not (singular-subject)-will-continue,

i.e. (The subject) will continue or refuse not killing him.'

2.3. HYPOTHETICAL MODE CATEGORIES (van der Toorn's irreal, 1966:34)

Verbs inflected in the hypothetical mode refer to events which are
regarded as hypothetical, whether they are events which might have
happened but did not, or which might still happen but are not predicted
or commanded or advised by the speaker. The marker for this mode may
be cited as basically -<sub>i</sub>, realized as -<sub>ii</sub> after nasals or laterals and as
-w- elsewhere; this marker occurs immediately following a reflexive voice
marker, if any is present, or otherwise immediately following the verb root.

2.3.1. Simple Hypothetical Forms, with Subject Markers

The subject markers occurring in this category exhibit a limited set
of person-number contrasts, with only four contrastive markers occurring.
The morphologically complex marker which in factive mode signals a
second person plural subject is extended in meaning in the hypothetical
mode to refer also to all third person subjects, both singular and
plural:<sup>15</sup>

we'<sub>ii</sub>. 'I might have killed him (but didn't); I would like to kill
him (but am not predicting it).'

wai'. 'He might have killed him (but didn't), etc.'

wai'. 'You (sg) might have killed him (but didn't), etc.'

wai'. 'You (pl), he, she, they might have killed him (but didn't),

etc.'
A very few examples have been observed of verbs in the hypothetical mode with prior action marker suffixed:

ka:n i:loisi:k ... 'desisting we-eaghypothetical-prior, i.e. if we had desisted, then we....'

2.3.2. Prior Action with Hypothetical Mode

These examples suggest that a reflexive voice form is more commonly found in the protasis of contrary-to-fact conditions, with 'if' clauses. These will be treated further in Chapter 5. These forms of the verb we- 'hit, kill' in non-reflexive voice are:

we'te:me 'If I had killed him (but I didn't)...' or 'If I should kill him (but I do not predict that)...'.

we'te:me 'If we had killed him (but we didn't), etc....

we'te:me 'If you (sg) had killed him but you didn't'), etc.

we'te:pea 'If you (pl), he, she, they had killed him (but didn't), etc.'

nap:pal-apapal il:ima-te,... ap-hvny ...nap:pal wantyu-luku:la

'your-skin-your-skin (an idiom for the eternal life possessed by
snakes) eag-hypothetical-2p3-subject-setting-topic people
their-skin take-continue-hypothetical-2p3-subject, i.e. if (the
snake) said, 'Change your skins (i.e. renew your lives), then
people would have kept renewing their lives.'

2.3.3. Event Setting with Hypothetical Mode

Hypothetical forms with the event setting marker are relatively common in the protasis of contrary-to-fact conditions, best glossed in English with 'if' clauses. These will be treated further in Chapter 5. These forms of the verb we- 'hit, kill' in non-reflexive voice are:

we'te:me 'If I had killed him (but I didn't)...' or 'If I should kill him (but I do not predict that)...'.

we'te:me 'If we had killed him (but we didn't), etc....

we'te:me 'If you (sg) had killed him but you didn't'), etc.

we'te:pea 'If you (pl), he, she, they had killed him (but didn't), etc.'

nap:pal-apapal il:ima-te,... ap-hvny ...nap:pal wantyu-luku:la

'your-skin-your-skin (an idiom for the eternal life possessed by
snakes) eag-hypothetical-2p3-subject-setting-topic people
their-skin take-continue-hypothetical-2p3-subject, i.e. if (the
snake) said, 'Change your skins (i.e. renew your lives), then
people would have kept renewing their lives.'

2.4. POTENTIAL MODE CATEGORIES

Potential mode is not marked by a node-specifying affix in the position occupied by the markers of factive and hypothetical modes, but rather is marked in portmanteau suffixes which also specify modal subcategories. The major potential node finite categories are hortative/imperative and future, with several minor categories.
2.4.1. Finite Potential Forms

2.4.1.1. Hortative/Imperative (van der Sijs’s adhortative aspect, 1966:42-56).

There is a set of potential forms which are inflected to refer to the commanding, encouragement or permission of an action, with contrast of ‘immediate’ versus ‘deferred’ and ‘imperative’ versus ‘hortative’ categories. The maximum contrast is observed, as is expected for imperatives, in second person forms; the minimum contrast is observed in first person singular forms. First and third person forms are frequently ambiguous:

wasik. ‘Let me kill him now, or later (asking your permission),’
or ‘I’ll kill him now, or later (reporting my decision),’
waswok. ‘Let’s kill him later (I am directing you to participate),’
or ‘Let’s kill him later (I am needing to your direction),’
wa’sek. ‘Let him, her or them kill him now (implying either that I am giving my permission or an asking you to give your permission or encouragement).’

The forms of the verb wasi ‘strike, kill’ in non-reflexive voice follow; the forms in which there is no contrast of hortative versus imperative are labelled hortative:

wasik. (1s hortative) ‘Let me kill him’, or ‘I’ll kill him’ (now or later).
wasu. (1p immediate hortative) ‘Let’s kill him now.’
waswok. (1p deferred hortative) ‘Let’s kill him later.’
wasin. (2s immediate imperative) ‘(You.sg) kill him now.’
wa’sek. (2s deferred hortative) ‘(You.sg) kill him later please.’
wa’men. (2p immediate imperative) ‘(You.pl) kill him now.’
wasupokik. (2p deferred hortative) ‘(You.pl) kill him later please.’
wa’men. (2p deferred imperative) ‘(You.sg/pl) kill him later.’
wa’sek. (3 immediate hortative) ‘Let him, her, them kill him now.’
waswok. (3 deferred hortative) ‘Let him, her, them kill him later.’

In the discourse context of interrogative logical mode to be discussed in Chapter 6, the first person hortative forms uniquely exhibit a first person inclusive versus exclusive contrast, and the ‘immediate’ versus ‘deferred’ contrast is frequently lost:

nit wasi. (1p exclusive hortative) ‘Shall we (not you) kill him?’
The appropriate answer is:

hit wa’ni. (1p immediate imperative) ‘(You.pl) kill him now.’
nit waswok a’. (1p inclusive hortative) ‘Shall we (including you) kill him?’
The appropriate answer is:

waswok. (1p deferred hortative) ‘Let’s kill him later.’16
Reflexive voice forms and analogous forms of other verbs may be seen in Appendix A. Note the automatic occurrence of allomorphs of verb roots with final $t$ and $k$, realised with final $s$ before $i$ and $u$, and as glottal stop before $u$, according to the general morphophonemic rules. In the non-reflexive voice forms, the $-i$ following the root is interpreted to be a stem-formative empty morph occurring in these forms after consonant-final roots and stems and before suffixes consisting only of a consonant with no vowel. Thus $-i$ is interpreted to be a portmanteau marking first person singular subject, hortative, potential mode; $=n(u)$ is a portmanteau marking non-first person subject, explicitly second person singular and immediate imperative if not otherwise marked, and potential mode. Occurring following this marker $=n(u)$ are: $-i$ marking second person plural; $-e$ marking second person deferred imperative; $-e$ marking third person immediate hortative; and $=o$ marking deferred hortative in this position and also following $=w(u)$. The marker $=w(u)$ may similarly be interpreted as a portmanteau marking hortative, implicitly first person plural immediate unless otherwise marked. Occurring following this $=w(u)$ are: $=o$ (elsewhere $=e$) marking deferred hortative; $=e$ marking second person plural deferred hortative; and $=e$ (elsewhere $=e$) marking third person deferred hortative. In the reflexive forms, which are displayed in the appendix, the basic reflexive marker is $=e$ following the verb root. This reflexive marker $=e$ plus $=w(u)$ are realised as $=e$ before a syllable with the vowel $a$ and as $=w(u)$ elsewhere.

2.4.1.2. Hortative/Imperative/Intentional (van der Stapp's intentional aspect, 1966:57)

The deferred hortative forms (where there is a contrast between deferred and immediate) may occur followed by the post-oticicised form *yik*, the perfect participle of $=i$ 'say', with vowel changes, to refer to intention, planning or preparation for a contemplated action. The forms of the verb wat $='kis, kill!' in non-reflexive voice are:

\begin{align*}
\text{wasik-yik} & \quad \text{('singular subject) is planning to kill him'}; \\
\text{wasuwasik-yik} & \quad \text{('plural subject) are planning to kill him'}; \\
\text{wa'nek-yik} & \quad \text{'(subject) is planning for you (sg) to kill him'}; \\
\text{wasuwasik-yik} & \quad \text{('subject) is planning for you (pl) to kill him'}; \\
\text{wasuwasik-yik} & \quad \text{('subject) is planning for him, her then to kill him'}.
\end{align*}

These glosses may be more easily understood if the form of $=i$ 'say', *yik* 'having said', is interpreted to refer to the inner speech of the planner:

\text{wasik-yik 'subject is saying to himself, 'Let me kill him'.}
Frequently these forms are dependent on a following superordinate verb, but particularly the first person forms may occur as main final verbs. These formally first person forms may refer, as noted above, to any person category because of the quotative construction in the forms:

as laša-olvk: 'I let-me-go/I'll-go--having-said, i.e. I'm getting ready to go.'

2.4.1.3. Hortative/Imperative Facilitative

The same hortative forms which occur in the intentional category described above also occur with the clitizised relator -en (realised as -en after vowels, -en after consonants) 'source' to refer to an event which is facilitated or cued by the event referred to in a following presupposed verb. The forms of the verb were 'his, kill' in non-reflexive voice in this category are:

wasik-en 'so that I may kill him';
wasuwok-en 'so that we may kill him';
wa'nak-en 'so that you (sg) may kill him';
wasupakeik-en 'so that you (pl) may kill him';
wasuwak-en 'so that he, she, they may kill him'.

These forms are treated in this section because they are based on finite forms, even though they are regularly non-finite. In this category the participant marked as subject of the hortative form is considered to have the initiative, as is perhaps indicated by the occurrence of the relator -en, which may often be glossed 'source'.

These forms contrast with the intentional forms described above, where the participant marked as subject of any following superordinate verb and also functioning as subject of the participle -olvk has the initiative and is making the plans:

welo' lóok-en wok-eisán. 'carrying let-3-subject-go--source take--(you-sg) transfer-to-them-now, i.e. Give them to them so that they can carry them off.'

In this example the objects referred to were weapons, given only reluctantly by the addressees to the receivers, who are referred to as the personal object of the final verb and the subject of the facilitative form. Compare:

nanelaik a'molu wa'na'nak-olvk veky. 'my-bulter-shell that-known-to-us take--you(sg) transfer-to-me--having-said I-name, i.e. I have some for you to give me my bulter shell.'

In this last example the subject of the final verb was very anxious to recover his shell, which was only reluctantly surrendered by the subject of the hortative form in the intentional construction. These forms
will be treated further in Chapter 5 with contextual examples, and the inflection of reflexive voice forms and analogous forms of other verbs may be seen in Appendix A.

2.4.1.4.1. Future (van der Step's near future tense, 1966:7)

The future category refers to events that are confidently expected to occur in the future; there is also a distinct and rather uncommon remote future category specifically marked to refer to events anticipated in the distant future. In the regular future forms only number, not person, of subject is contrastive; the forms of wa*[t]i, kil' in non-reflexive voice are:

wa*ški.* '(Singular subject) will kill him.'
wa*škun. '(Plural subject) will kill him.'

Reflexive voice forms and analogous forms of other verbs are displayed in Appendix A.

The marker of the future category is the discontinuous morpheme -(Vik(1)a), intercalated with markers of number of subject: -(i)(k)(a) singular and -(u)(k)a plural, in non-reflexive voice. In reflexive verbs the markers of number of subject are portmanteau affixes also marking the reflexive category: -(i)(k)š(a) singular, reflexive, and -(u)(k)a(š) plural, reflexive:

wa*škein. '(Singular subject) will hurt himself.'

2.4.1.5. Future with Event Setting

The future category forms also occur with the event setting marker to refer to the predicted event as the relevant setting for another event, usually referred to in a verb with a different subject:

wa*škimo.... 'Since (the singular subject) is going to kill him....'
wa*škunomo.... 'Since (the plural subject) are going to kill them....'

honey kukanu yuvke... 'et al. in-appear...
'men's-house plural-
subject-will-enter-setting having-said-topic initiation never-
they-do-to-them, i.e. Since they are going to enter the men's house, (their mothers' brothers) initiate them.'

2.4.1.6. Remote Future

There is an uncommon marked category referring to events predicted for the distant, not the immediate future. This category is not marked for person or number of the subject. In normal use, the future forms described in the preceding sections are unmarked forms semantically, referring either to the immediate or the remote future, but the marked remote future category refers explicitly to the distant future.
The form of the verb was 'hit, kill' is, in non-reflexive voice:

\[ \text{wathv. '(Subject) will kill him in the distant future.'} \]

Reflexive voice forms and analogous forms of other verbs may be viewed in the appendix. These forms are analyzed as including the remote future marker realized as \( \text{wvp after consonants} \) and \( \text{wvp after vowels} \). Like other potential mode category markers, this is a portmanteau also marking the potential mode.\(^{12}\)

2.4.2. Non-Finite Potential Forms

2.4.2.1. Potential Gen (van der Stap's objective infinitive, 1966:66)

There is a potential form referring to events as potential, with no contrast of person or number of the subject; these forms commonly occur preceding the mental state terms: \( \text{na'yt 'my dislike, I don't want to...'} \), \( \text{maj 'my fear, I am afraid to...'} \), \( \text{wast 'desire, (subject) wants to...'} \), and \( \text{sekali 'my embarrassment, I am ashamed to...'} \).

These potential gen forms also occur, but rarely, as final verbs in sentences. The form of \( \text{wats 'hit, kill'} \) in non-reflexive voice is:

- \( \text{wastu 'killing him (regarded as potential).'} \)
- \( \text{wastu na'yt 'killing-him my-dislike, i.e. I don't want to kill him.'} \)
- \( \text{wastu 'this killing-him query, i.e. Would anyone kill this (fellow)?'} \)

Reflexive voice forms and analogous forms of other verbs may be viewed in Appendix A.

2.4.2.2. Potential Gen with Event Setting

The form described in the preceding paragraph also occurs with the event setting marker to refer to future events upon which other events, referred to in verbs with different subjects in most cases, are or will be contingent:

- \( \text{wasumo 'if (subject) kills him, (then someone else...)'} \)

With the post-clitic -te, to be discussed in Chapter 6, these forms occur as final verbs inviting someone to the act referred to, as if the form might be understood as meaning, 'If you did it, then what? (so go ahead and do it?)'?

- \( \text{wastu-te 'Go on and kill him—why don't you?'} \)

2.4.2.3. Potential Gen with Predictive (van der Stap's voluntative gen, 1966:67)

The potential gen (also occurs with the predictive suffix realized as \( \text{wak} \) to refer to events considered as possible, probable or desirable; the context determines the meaning in each case. There is no contrast
of person or number of the subject. The form of the verb waz- 'strike, kill' in non-reflexive voice is:

wassuk. 'The subject might, probably will, ought to kill him.'

...haso asukaya... 'good subject-become-predictive, i.e. (The old war) will probably become peaceful (good).'

In this example the speaker did not relish the thought of peace coming with the advance of government administration, but foresees it as probable:

...sekeleho wasukay.... 'another subject-kill-predictive, i.e. (We) ought to kill some more (but won't get the chance).'

This example from the same text indicates the judgment of the speaker that his side ought to have killed some more of the enemy group, i.e. that such action would be desirable, but the context indicates that he knows this will very likely not be the case.

...an-en wasukay-a? 'me--by subject-kill-predictive--invitation query, i.e. (if we fought, do you think) I could kill him?'

In this example the speaker was asking his addressee whether he, the speaker, would be able or likely to come off as the killer in a personal engagement, thus as to whether the event would be possible, or probable.

This form has been treated in this section on non-finite potential forms even though it is regularly finite, because it is based on a non-finite form.

2.4.2.4. Potential Sound with Partitive

The preclusive category refers to events that would be reasonably expected but are considered practically certain not to occur because of the known nature of the participants or the circumstances; the connotation may be either favourable or unfavourable. The forms marking this category are composed of the potential gerund as a stem, with vowel assimilation of final e to a preceding the category marker, the suffix -nak, which also occurs as an independent particle meaning 'wrong' both in other constructions and the factive renomnactive forms already described. The form of the verb was- 'strike, kill' in non-reflexive voice in this category is:

wassukvak. '(subject) wouldn't kill him (although he might be expected to).'

In this example, the speaker may refer to a situation in which the person who is referred to as object of the verb ought to be struck or killed, but the subject would not perform the deed, because of his cowardice or fear; or he may refer to a situation in which the person ought not, in the speaker's judgment, to be killed or struck, and the subject would not strike him even though he had provocation to do so.
Reflexive voice forms and analogous forms of other verbs may be seen in Appendix A.

2.4.2.5. Potential Stem

There is a potential stem which has never been observed to occur by itself as an independent or sentence-final verb but rather occurs in two main environments: (1) as a stem preceding verbs of directional motion, and (2) with the clitic -neke in the potentiive category described below. There is no contrast of person and number of the subject in this category. The form of the verb wat- 'strike, kill' in non-reflexive voice is:

\[ \text{wat... 'to kill him'} \]

This category, like many others, can be adequately treated only in examples with context, and these will be provided in Chapter 5. This stem is identical in form to the first person singular hortative form minus the subject indicator -ki:

\[ \text{wasik. 'let me kill him.'} \]
\[ \text{wasi lan. 'to-kill-him (you-sg)-go-now, i.e. Go kill him.'} \]
\[ \text{heik. 'let me place it.'} \]
\[ \text{hei lan. 'to-put-it (you-sg)-go-now, i.e. Go put it (there).'} \]

2.4.2.6. Potential Stem with Potentiive (van der Stap's contingent aspect, 1966:69)

There is a potential category referring to events as undesirable but liable to occur and therefore meriting prevention if possible. The forms marking this category consist of the potential stem, described in the preceding section, plus the post-cliticised category marker -neke. There is no contrast of person or number of the subject in this category. The form of the verb wat- 'hit, kill' in non-reflexive voice in this category is:

\[ \text{wat-neke. '(The subject) is liable to kill him (and ought to be prevented from doing so).'} \]

Reflexive voice forms and analogous forms of other verbs may be seen in Appendix A.

2.4.3. The Potential Participles

There are four non-finite potential forms which can be labelled participles. They are assigned to the potential node because they include no marker for either of the marked event node categories, but it is to be understood that the modal meaning of these forms, like all other non-finite forms, is to be interpreted relative to the event node
of the superordinate verb. The last two of these participle categories are set apart from the first two and from all other categories described to this point in that they occur, with some special exceptions to be noted, only for verbs of process and they do not occur with marked reflexive voice or marked personal objects.

2.4.3.1. Basic Participles (van der Stap’s durative aspect, 1966:70)

There is a potential participle which resembles but contrasts with the factive iterative participle. The latter is characterized by the combination of the factive mode marker plus the suffix -yk (but see the exceptions described above); the former, or basic participle, commonly consists of the verb root, with distinctive allomorphs occurring for some verbs, plus the category marker -yk after consonants, -lyk after vowels. This participle is very labelled ‘basic’ because it appears to include the widest range of senses and occur in the widest range of environments of any of the participles. Any label fitting one of these senses seems unsuited for other senses. These senses and uses of this participle in comparison and contrast with other participles, will be treated in Chapter 5. In non-reflexive voice, this form of the verb was ‘hit, kill’ is:

watyk ‘hitting, killing him’.

In reflexive voice the form of this verb in this category is:

watylyk ‘hurting oneself’.

Verbs with roots ending in k occur with allomorphs in which t replaces k in this category, and the verbs -kt, -kt ‘acquire’, -kt ‘become’ and -kt, -kat ‘pursue a process’ occur with the t-final allomorphs in this category. Roots with final akh in reflexive voice stems occur with the stem-final reflexive marker -aw added. Elsewhere, vowel-final roots and stems, including reflexive stems, occur with root or stem allomorphs with final y:

\[
\begin{align*}
  jatyk (jek) & \text{ ‘planting’; } \\
  lyk (i) & \text{ ‘saying’; } \\
  alyk (nek, an) & \text{ ‘eating’; } \\
  lylyk (law) & \text{ ‘going’; } \\
  atyk (am, at) & \text{ ‘acquiring’; } \\
  jahlyk (jak) & \text{ ‘planting for oneself’, }
\end{align*}
\]

These and analogous forms of other verbs are displayed in Appendix 1.

This basic participle occurs in a number of environments.

(a) This participle is the stem form of the main verb in third person present progressive aspect forms to be described below:

waty’t-ake, ‘He is hitting, killing him.’
(b) This particle sometimes occurs duplicated, occasionally with no explicit superordinate verb, to refer to an event which is repeated a number of times:

aye ylik ylik. 'He-talk saying saying, i.e. He kept talking.'

(c) Any verb except a verb of directional motion or the verb glossed 'continue' may occur in this form preceding a verb of directional motion to refer to an event occurring during the motion, when the subjects of the verbs are the same:

 ole ylik ylik k oke boke. 'village firewood putting enter he-came-long-ago, i.e. He invaded, setting fire to the villages as he came.'

(d) This form also occurs preceding another verb in any mode to refer to an event in the same focus of interest, referred to in a verb usually with the same subject, when the event referred to in the basic participle precedes the event referred to in the following verb:

iylik wesi lim. 'having-gave singular-subject-with came, i.e. (Subject) will go and come back.'

(e) This form of the verb wear, leke v 'continue' is lekolyk 'continuing' and occurs in a special sense referring to a state (or event, when used with another verb) which continues throughout the time span of another event referred to in a superordinate verb, where the subjects of the two verbs are the same in reference. This will be treated further as the -lekošy progressive coincident action (same subject) construction in Chapter 5.

joma lekolyk wesi, 'here continuing I-killed-him, i.e. I killed him while I was staying here.'

Further examples and discussion of these uses of the basic participle will be found in Chapter 5.

2.4.3.2. Project Participle (van der Stapp's detached active past participle, 1966:72)

There is another potential participle which occurs to refer to events in relationship to other events, particularly when those other events are events of motion. Verbs referring to carrying or escorting occur in this form to refer to events which are coextensive with the motion event referred to in the following motion verb. Verbs referring to other kinds of actions, which do not presuppose simultaneous motion, occur in this form to refer to events completed before the motion referred to in the following verb. For further elaboration of these senses and uses, see Chapter 5. This form of the verb wae 'hit, kill' in non-reflexive voice is:

we'lik 'having killed him'.
In reflexive voice, this form of this verb is:

\[ \text{wastalekh 'having hurt oneself, themselves'} \]

These forms consist of the verb root plus any reflexive voice marker plus the category marker, realized as \(-\text{iuk} \) after a, 1 and, alternatively, \(p\); as \(-\text{iuk} \) after stops otherwise (alternatively with \(-\text{iil} \) after \(p\)); as \(-\text{aik} \) after \(a\); and as \(-\text{yiv} \) in the form \(\text{yivk}, \) from the root \(\text{i = 'easy'}\).

\[ \text{jetalekh. 'having-slung-him-on-a-pole-reflexive they-went, i.e. They slung him on a pole (for themselves) and carried him off that way.'} \]

\[ \text{wa'-\text{lik} wateikha. 'having-killed-him they-came, i.e. They killed him and then came.'} \]

2.4.3.3. Specialised Perfect Participles

Three forms which are quite clearly perfect participles in origin now function in specialised, different ways, although these functions are related to the meaning of this participial category:

- \(\text{yivk} \) 'having said' (and with many other glosses);\n- \(\text{helek} \) 'li', from the sense 'having perceived';\n- \(\text{walek} \) 'carrying', (from the verb \(\text{wak} \) = \(\text{wan} \) 'take').

These forms will be treated in terms of contextual examples in Chapter 5, but it may be noted that \(\text{yivk} \) 'having said' has been described above as an element in the intentional forms of verbs, and \(\text{telek} \) has been described in its realizations as \(\text{walek} \) and \(\text{walek} \) for active conditional forms.

2.4.3.4. Manner Participle (van der Staal's first bound active past participle, 1966:73)

The manner participle occurs in several senses to be treated in Chapter 5. The commonest sense refers to an event regarded as a preliminary part or stage of a larger event, where the terminal stage of the same larger event is referred to in a superordinate verb. As already noted, this participle does not occur with marked reflexive voice nor with marked personal objects referred to in verbal affixes; in general only process verbs are inflected for this category. This form of the verb \(\text{wa= 'strike, kill'}\) is:

\[ \text{wasteke 'striking, killing'}. \]

Similarly verbs whose roots end in any consonant except \(k\) occur with the category marker \(\text{ake} \) added to the root:

\[ \text{galeke (pal=) 'severing';} \]

\[ \text{kteke (kt=) 'cutting up for distribution'}. \]

Verbs whose roots end in \(ak\) occur with \(we\) suffixed to the root as the
category marker:
  jaka (jak-) 'planting';
  isaka (isak-) 'steam cooking';
  wetako (wetak-) 'roasting'.
Verbs whose roots end in yk or vk occur as an allomorph with the corresponding high close vowel followed by the suffix -hoko as the category marker:
  ikhoka (ykh-) 'making a net';
  wukhoko (wvk-) 'shopping'.
The following examples are only tokens; these forms are treated in context in Chapter 5:
  su jo lako yhatak. 'not cord spinning they-normally-make-nets, i.e. They spin cord and make nets with it.'
  wak wakko hyaloko hakatai. 'pig fte-ear slitting they-normally-put-ftt, i.e. They slit pigs' ears and leave them that way.'
Related to these manner participles in -oko are forms of incurred process secondary verbs which consist of the verb root plus the clitic -hoko after consonant-final roots, -oko after roots with final diphthongs ending in i, and -teke after other vowel-final roots. These forms occur in a wider variety of syntactic contexts than the perfect participles discussed above, and most commonly refer to the manner in which the event referred to in the superordinate verb is performed:
  lapu-lako li ake. 'grouping-manner enter he-one, i.e. (The enemy) grouped and invaded.'
  haneka li soke in. 'your-talk vigorous-manner (you-sg)-buy-now, i.e. Speak loudly or fast.'
  pette-teke ki ake laka. 'crowding-manner enter they-same, i.e. They crowded in here.'

2.4.3.5. last Participant (van der Slap's resultative aspect, 1966:17)
The past participle refers in most cases to the state resultant from the process marked in the verb root, and occurs both as an attributive to nouns and as a substantive. This form of the verb set-
  -hoko, kill' is:
  wetak 'killed' or 'a corpse'.
Similarly verb roots with any final vowel except a high vowel or a diphthong or any final consonant except k occur in this category in a form consisting of the verb root plus the category marker -ek. Verbs with a diphthong ending in i in the final syllable of the root occur in this form without the i in the root and with the past participle marker realised as -ik:
  kelik (keil-) 'hung up'.
Verbs with the vowel v in the final syllable of the root occur in this category in a form consisting of the root plus the category marker realised as -vk:

kvtyk (kvty-) 'cut up for distribution'.

Verbs with roots ending in a vowel occur in a variety of forms. Roots with final -k frequently occur in this category in a form identical to the manner participle, as described in the preceding section:

isak (isak-) 'steep-cooked';

jake (jake-) 'planted'.

Verbs with roots ending in yk or vy frequently occur in this category in forms ending in uku, where the first u replaces the root vowel:

muk (muk-) 'falled';

atu (atu-) 'shattered'.

As has been noted, these forms do not occur with marked reflexive voice or with marked personal objects, and in general only verbs referring to processes are inflected in this form:

wam kvtyk 'pork cut-up, i.e. pork cut (for distribution)';

sil sil pelekg 'grass-skirt severed, i.e. a doffed grass skirt';

kvtyk ukyk 'cut-up I-steal, i.e. I ate the cut up (food)'.

Past participles of some verbs also occur before the verb water.

lekgw 'continue' to refer to a continuing state resulting from the event:

akum wakakew wetek. 'her-husband taken subject-continues, i.e.
She took and still has a husband.'

A related sense is particularly common with verbs of perception and mental activity; in these cases, however, the sense is active rather than passive:

asak holek welatek. 'his-ear hearing he-normally-continues, i.e.
Be keeping listening.'

aspak wetek. 'remembering subject-continues, i.e. (Subject) has it
in mind.'

Related to these past participle forms of primary verbs of process are forms of intransitive process secondary verb which consist of the verb root plus the clitic -sek after consonant-final roots, -tek after vowel-final roots. These forms will be treated in Chapter 3:

tek-sek broken off';

si-tek 'folded'.

There are also several other secondary verb roots which occur with both -sek manner participle forms and -tek past participle forms, not as attributives or substantives but in other uses and senses to be treated in Chapter 5. The forms will be introduced in Chapter 3 under secondary verbs.
2.5. THE CATEGORY OF PROGRESSIVE ASPECT

It was pointed out in the discussion of factive mode categories above that normal aspect forms and abnormal-continuative aspect forms contrast in aspectual meaning with other factive forms. Except for those forms and some constructions including the basic (*-yk, -*lyk) and iterative (*-hyk) participles, the categories of factive, hypothetical and potential event modes discussed to this point may be interpreted to be implicitly non-continuative in aspect. All verbs except the verb weJa, lekaJ: also occur in periphrastic forms marked for progressive aspect in all event modes. The verb weJa, lekaJ: 'continue' is interpreted to include this aspectual meaning implicitly.

Progressive aspect refers ambiguously to: (1) action done repeatedly at intervals (thus overlapping in reference with the normal action forms); or (2) action extended over a period of time. The forms consist of a stem of the verb marked for this category plus a cliticized auxiliary verb derived from the verb weJa, lekaJ: 'continue'. In potential and hypothetical mode categories, the auxiliary is identical with the analogous form of weJa, lekaJ: 'continue'; in factive mode categories the auxiliary may be interpreted to be a contracted form of that verb in its factive stem weJa minus the syllable we, so that here the auxiliary is accidentally homophonous with the analogous forms of the verb la 'go', except for third person forms in the present progressive category. Since progressive aspect forms are related so closely in form and meaning to the verb weJa, lekaJ: 'continue', they might well be treated with that verb, but are included rather as this point in the discussion as forms marking an 'outer layer' intransitive category, occurring in all three event modes. In progressive aspect, there is a further contrast not present in non-progressive categories; this is the contrast between present and past tenses. The forms of the verb weJa, lekaJ: 'continue' and the progressive aspect forms of other verbs are ambiguous in simple factive forms with first and second person subjects; they may refer either to present time or recent past time. In third person, however, the forms which are analogous to simple factive forms of other verbs are only past in reference, and special forms occur with present progressive reference. The first and second person forms may be referred to as present/past progressive aspect forms, and the third person forms referred to specifically as either present or past progressive aspect forms. These forms of the verb weJa 'he, she' in non-reflexive voice are displayed with the analogous forms of weJa, lekaJ: 'continue' and simple factive forms of la 'go' in Table 3.

The ambiguity of the first and second person present/past progressive
<table>
<thead>
<tr>
<th>Present/Past Progressive of</th>
<th>Present/Past of 'continue'</th>
<th>Simple Factive Forms of 1st = 'go'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present/Past</td>
<td>Present/past</td>
<td></td>
</tr>
<tr>
<td>wathy-laky</td>
<td>'I am, was hitting him.'</td>
<td>'I went, am on my way.'</td>
</tr>
<tr>
<td>wathy-lako</td>
<td>'We are, were hitting him.'</td>
<td>'We went, are on our way.'</td>
</tr>
<tr>
<td>wathy-likhen</td>
<td>'You(sg) are, were behitting him.'</td>
<td>'You(sg) went, are on your way.'</td>
</tr>
<tr>
<td>wathy-lakhe</td>
<td>'You(pl) are, were hitting him.'</td>
<td>'You(pl) went, are on your way.'</td>
</tr>
<tr>
<td>Past</td>
<td>Past</td>
<td></td>
</tr>
<tr>
<td>wathy-laky</td>
<td>'He is hitting him.'</td>
<td></td>
</tr>
<tr>
<td>wathy-laq</td>
<td>'They are hitting him.'</td>
<td></td>
</tr>
<tr>
<td>wathy-lanke</td>
<td>'He was hitting him.'</td>
<td></td>
</tr>
<tr>
<td>wathy-lakekha</td>
<td>'They were hitting him.'</td>
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TABLE 3
PRESENT/PAST PROGRESSIVE FORMS OF 1st = 'his, hers' COMPARED WITH ANALOGOUS FORMS OF 1st = 'his, theirs'

WEI = lokal = 'continue' AND SIMPLE FACTIVE FORMS OF 1st = 'go'
aspect forms may be removed by the addition of a prior action marker; the resultant forms then have unambiguous past time reference. It is to be noted that the inflection of progressive aspect forms for the major factitive finite categories employs the past progressive forms in third person. The special present progressive third person forms do not occur with other affixes except for the event setting marker -ma, -me usually in a spatial sense. Normal aspect and abnormal-continuative aspect forms do not occur inflected for progressive aspect, but almost all other finite forms do occur so inflected. 20 However, several non-finite categories do not occur in this aspect. Of the participles, only the basic (-yk, -lyk) participle occurs in progressive aspect and there functions to refer to an event which continues at least throughout the time span of another event referred to in a superordinate verb, where the subjects of the two verbs are the same. These forms will be treated in syntactic context in Chapter 5. The progressive aspect forms of sample verbs are displayed in Appendix A.

It is to be noted that in third person present progressive forms there occur distinctive forms of the auxiliary verb, -lake 'third person singular', and -lay, -isky 'third person plural', and a distinctive progressive stem of the verb which is identical, as already noted, with the basic (-yk, -lyk) participle. Elsewhere, the progressive stem of the verbs la- 'go', wa-, wet- 'come', an- st- 'acquire', an, an- 'become' and -la-, -late 'cease a process' is homophonous with the third person singular simple factitive form. For other verbs with vowel-final roots and for vowel-final reflexive voice stems, there are distinctive present/past progressive stems in the first and second person plural forms. These stems consist of the verb root or reflexive stem allomorph with the vowel w as the syllabic in the final syllable and an added consonant k, followed by the suffixed progressive stem marker allomorph -ky. 21 In first and second person singular forms in the present/past progressive category and in all other progressive aspect categories of these same vowel-final roots and stems, the progressive stem consists of the verb root or reflexive stem allomorph with the vowel y as the syllabic of the final syllable and an added consonant k, followed by the suffixed progressive stem marker allomorph -hy. 21 The verb nek, ne- 'eat' is inflected analogously to these vowel-final verbs, but occurs with the first and second person singular present/past progressive stem (which also occurs elsewhere as noted above), marked with the progressive stem marker allomorph -ye. In non-reflexive voice forms of other verbs with roots with final k, the progressive stem consists of a root allomorph with final t replacing k, followed by the suffixed category marker -hy. All other consonant-final verb roots in non-
Reflexive voice forms exhibit a progressive stem consisting of the verb root plus the progressive stem marker -\(o\). These patterns of inflection are displayed in Appendix A.

The distinctive meaning of progressive aspect forms may be seen in contrastive examples:

- Washi. 'I killed him', or 'I have killed him'.
- Wethy-laky. 'I am killing him' or 'I am killing him'.
- Wethy-laky. 'I killed him and then I...'.
- Wethy-laktyk. 'I used to kill him (of an enemy group) and then I...'.
- Wathiki. 'I killed him long ago'.
- Wethy-lakaki. 'I used to kill him (e.g. an enemy group/long ago) or 'I was killing him long ago'.

In discourse, progressive aspect forms are frequently parallelized by normal aspect forms referring to the same event, where the progressive aspect form concludes one sentence and is recapitulated in the beginning of the next sentence by a normal aspect form:

...ki aka-lakaki. Kli akakteshi... 'enter come...I used to...long ago'.

Enter I-normally-come-long-ago-priv...., i.e. I used to come in here. After I would come in...'.

The iterative participle constructions which carry a kind of aspectual meaning may occur with progressive aspect forms of the inflection-carrying verb:

- Jepu wamhik wepwet jathyk vly'-lay. 'garden digging sweet-potatoes planting they-are-saying, i.e. They are engaged in digging garden and planting sweet potatoes.'

Similar examples occur with normal aspect forms:

- Wam kvthik wamhik wepwet wamhik khetek... 'pork/pig carrying killing distributing he-normally-engage, i.e. He regularly carries pork, kills pigs and distributes pork.'

The overlap of this sense with the meaning of the abnormal-continuative category is evident from the sentence which precedes the last example:

- Kael kvtho wawe metok hakathatek... 'important-men carrying (abnormal-continuative) killing-is(abnormal-continuative)

All together they-normally-in-it, i.e. Big men (in contrast with others) regularly carries (pork) and kill (pigs).'

Normal aspect, abnormal-continuative aspect and progressive aspect as marked aspectual categories share a component of meaning referring to events which are regarded as durative or recurring, in contrast with the unmarked non-continuative aspect implicit in other verb categories. The three major marked aspects, while thus overlapping in meaning, also contrast with each other, as has been discussed under each category.
Normal aspect refers to what the subject normally does whether or not he is currently doing it. Abnormal-continative aspect refers to what the subject does over an appreciable period of time abnormally, contrasting either with his own activity at other periods or with the activities of others. And progressive aspect refers to what the subject is currently doing, in the case of present progressive forms, or to what he was or will be doing at the time specified in other forms:

was wetto. 'pig killing (abnormal-continative), i.e. (subject) is killing pigs (in a bust of pig-killing, as at least some, or to contrast to others, as of a major leader).'

was wety-lokso. 'pig he-is-killing-to (present progressive), i.e. he is killing pigs now (either right now or currently).'

was wathateh. 'pig he-killed-is-normally, i.e. he kills pigs.'

2.5.1. Progressive Prior

There are forms occurring in this dialect with the verb wesea-l, lokel 'continue' and with progressive aspect forms or other verbs to refer to an event which has not yet occurred or is not yet complete but will have been completed before another event referred to in a verb with the same subject. The marker for this category is the suffix -epik occurring with the stem allomorph lokso of wesea-l, lokel 'continue', whether as a primary verb or as the auxiliary marking progressive aspect:

lokoppik 'after (subject) will have continued (or remained), then (that subject.....)';
wathy-lokoppik ‘missing-(or killing)-him-after-the-subject-will-have-continued, i.e. after (the subject) will have kept killing him (or killing him, e.g. of an enemy group), then (that subject will....)';
jakel-ehy-lokoppik-en wysikle-ha? ‘teacher/learn--transferring-to-him-after-subject-will-have-continued-source singular-subject-will-come--query, i.e. After (you) teach him for a while, are (you) coming back?'
1. In all major respects the orthography used here represents the
geminal phonemes as analysed in my description of the phonology
(Boonlay 1961). The following simplifications and adjustments have
been made. In general intervocalic contrasts have been represented
only where crucial to the discussion. Glottal stop before vowel-
initial items at intonation contour onset is omitted here. The velar
nasal phoneme is represented by the familiar digraph ng as in the
currently used practical orthography, and the high open vowels /i/ and
/u/ are represented by the new readily available symbols y and v,
also as in the practical orthography used for Dani speakers. Proper
names are capitalised here, but sentence initial words are not capital-
ised. Examples are punctuated with the common graphic devices of period
to represent sentence terminal with downgliding intonation, question
mark to represent upgliding intonation in questions, exclamation mark
to represent sentence terminal with intonation contours marking surprise
by the inclusion of level one (high in a four-level scale), and comma
to represent sentence medial intonation contour terminal characterised
by pause or potential pause.

Because of the skewness of Lower Grand Valley phonological patterning
as compared with that of neighbouring dialects, the phonemic orthography
sometimes obscures comparison with forms cited by Father van der Stap.
The difficulty is minimal if the reader recalls that initial p, t, k and
medial pp, tt, kk in Lower Grand Valley are reflexes of the proto-
Dani phonemes b', d', g'. Those same proto Dani phonemes have
unaspirated voiceless stop reflexes in the Hugogo dialect described
by van der Stap, as they have in Lower Grand Valley, and he writes b, d
and g as proposed in my earlier study.

Neither the generally phonemic orthography used in this study nor
the cross-dialect practical orthography proposed in my earlier study in

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in current use in material for Dani readers. To make the spelling more readily understandable for non-Dani school teachers, a system more compatible with Indonesian spelling has been adopted. Although a similar system earlier seemed distasteful to me and was rejected (Bromley 1961:93), it has proven to be more practicable and more acceptable to the burgeoning number of new literates than I would have predicted.

For the present descriptive study, however, the phonemic orthography with minor adaptations as noted offers major advantages in morpheme recognition. The reader wishing to pronounce the examples will find detailed phonetic information in my earlier study (1961). As minimal tips for rough approximations, he should recall that intervocalic p is a voiced fricative [f], intervocalic t a voiced flap [f], intervocalic k a voiced fricative [g]; that i and u are very high close and tense vowels, in contrast with the more open and less tense vowels /j/ and /u/ here written y and v; that ei, ai and ei, aw and ou are monosyllabic diphthongs; that ş, ş, ž or k occurring after these diphthongs is palatalised; and that y is often a juncture separating a preceding fully-stressed form from a post-cliticised form with no stress or suppressed stress if only one such juncture occurs in a word. Series of such junctures are more complex.

2. The right hand form in parenthetical identifications of morphemes is thus often equivalent to a lexic unit in Lamb's stratificational model (1966), but this practical guide to morphology does not attempt to treat these data in terms of that model.

3. Clitics are in Dani postposed units which are stressless or have suppressed stress and are thus phonologically dependent on a preceding normally stressed word nucleus (compare Bromley 1961:49-52).

4. The second rule is not an automatic rule of phonotactics throughout the lexicon. Forms with intervocalic t before high close vowels do occur morpheme medially, but the rule as stated, with the proviso 'morpheme finally', is valid. Compare the morphemically simple forms:

\[ \text{wutk 'hard'} \]

pet: 'casuarina species'.

Later in this chapter certain forms will be encountered (the prior action ractive forms) where this rule needs to be extended to intervocalic t before high close vowels morpheme initially, but this extension is not valid for the whole lexicon.
5. The reader will note that this account of verb roots is quite different from that in van der Stap, who describes s and i as the commonest root-final consonants in verbs (1966:165). The description in the text accounts for the occurrence of k and s in such forms as isako 'steam-cooked'; isak-om. 'Steam cook it for him'; hakatoko 'treating'; hakat-inaphatek. 'They normally treat them', as well as accounting for the s in the desinences of isako. 'Steam-cook it', and haksisim. 'Treat him.' Other differences between the description here and that found in van der Stap are based on dialect difference. Still others reflect differences in hearing and phonemic interpretation. Others reflect differences in interpretation of grammatical categories. And yet others reflect different organization of the material. The most important differences phonologically are: (1) his omission of any notation of the juncture between fully-stressed word nuclei and clitics which are stressless or have suppressed stress. He writes wokosie (1966:77) and wetsisim (1966:45) for what are written here wok-osie 'Give it to him now', and wetsasim (with no clitic juncture) 'Steam it now'. Compare laken 'you (sg) went' and laks-em 'so that I may go'. (2) He writes word-medial k where I hear a voiced velar fricative, which I interpret to be an allophone of /k/ and write k. Compare his waky (1966:13) for what is written here waky 'I came'. The most important differences in interpretation of verb categories are the description here of two contrastive voices and three contrastive modes, and the treatment here of his three object voices as three of four contrastive personal object roles and relationships (1966:87-100).

The work of Father van der Stap is highly important and praiseworthy; it is the first and only major publication on Dani grammar. His description of 'energetic voice' prompted the re-examination of my own analysis, and the new insight gained is reflected in the interpretation incorporated in this study. My interpretation is not the same as his but includes insights of his which I had simply missed. For the most part, however, this study is independent of his work and is based on my own earlier and continuing research. I have the great advantage of being able to move the focus of attention beyond morphology per se because so much of the morphology has been reported, even if often differently analysed and worded, in his pioneering monograph.

6. Categories of event mode are not the only mode categories in Dani. In Chapter 6 two further sets of modal categories, relative to utterances as much rather than verbs, will be introduced. One of these is what may be labelled 'dialogue mode', referring to the attitude of the
speaker to the addressee’s further participation in the dialogue. Dialogue mode categories are optionally marked in clitics attached to words of various classes, but are constituents in construction with whole utterances in most cases. The other major kind of modal category is what may be termed ‘logical mode’, contrasting interrogative with non-interrogative utterances. This contrast is marked by the use of question words and by intonation. Thus Dani treats the categories traditionally described in English grammar as declarative, imperative and interrogative moods in three distinct sets of modal categories. The function of English imperative mood is fulfilled by Dani hortative/imperative forms of potential event mode, together with non-interrogative logical mode and optionally also with ‘decisive’ dialogue mode. The relationships and meanings of these modal categories will be treated in Chapter 6.

7. The glosses of reflexive voice forms given here are by no means exhaustive. For the range of senses of reflexive voice see the discussion in Chapter 3.

8. The term "mark" is used in this study in two different senses. In such forms as "marker" the term is used to refer to morphemes or combinations of morphemes which indicate the presence of a category or categories in a form. The term "marked category" or "semantically marked" refers not to the addition of morphological markers, but rather to semantic relationships in the sense specified by Jakobson:

The general meaning of a marked category states the presence of a certain (whether positive or negative) property A; the general meaning of the corresponding unmarked category states nothing about the presence of A, and is used chiefly, but not exclusively, to indicate the absence of A.

(1957:5)

Unmarked categories thus have two senses, one including the sense of the related marked category, and the other excluding it. In the example in the text, both future and remote future are morphologically 'marked', but only the latter is the semantically marked member of the pair, since the future category occurs both in a wide sense to refer to an event in the near or distant future, and also in a narrow sense, in contrast to the remote future, to refer to the near future. Remote future, as a marked category, refers only to the remote future, never to the near future.

9. The order of presentation of person and number categories in paradigms is determined by the structure of the paradigm in question. Most
paradigms are presented in the order: first person singular, first person plural, second person singular, second person plural, third person singular, third person plural. I am indebted to Professor Lounsbury for suggesting this simple but often illuminating shift in order of display. There are some cases where another order is more illuminating, as in certain progressive aspect categories, where the following order is adopted: first person singular, second person singular, first person plural, second person plural, third person singular, third person plural.

10. The allomorphs of these markers are summarized in a note in the discussion of hypothetical mode forms below.

11. Earlier I thought I recorded one example in this dialect of reference to an immediately accomplished event as well and truly done by the use of a remote past form. Further check makes this suspicious as probably a misheard simple factive reflexive form, since I was aware of remote past forms at the time but was not aware that the verb in question occurred in reflexive voice. What I thought I heard as jakkulki! 'I learned it long ago' was probably jakkulyky 'I've learned it myself.'

12. The logic of this inclusion of the prohibitive category in the factive mode seems less than transparent. There is one bit of evidence that might lead one to treat the markers that appear to be factive mode markers as rather homophonous with those markers. That evidence is the fact that the verb glossed 'continue' is inflected in the major factive categories by use of the root meku, but is inflected in the major potential categories and hypothetical categories by use of the root leku-, and it is the latter root which occurs in the prohibitive forms for this verb. However, this evidence is not clearcut, since there are a few categories which occur with either root of this verb; and the verb meku-, as 'eat' occurs in simple factive forms with the former root, but in remote past, which is clearly a factive category, with the latter root, which also occurs in potential and hypothetical categories. All other verbs occur in the prohibitive category in forms which may be interpreted as factive. Also, this is the only category besides the major factive forms already described which has been observed to include the normal aspect marker.
13. Father van der Stapp calls attention to the unusual character of action marked in this category by his label 'idiosyncratic'. In Lower Grand Valley a number of examples indicate that the remarkable quality of the event is not necessarily idiosyncratic in the sense of the contrast of the actions of one participant with the actions of others, but is even more often unusual in the sense of contrast of successive periods of action by the same participant or participants. These forms are frequently encountered in comment on burets of changed activity at turns of the warfare or gardening cycle or changes in health or personal maturation.

14. Compare the alternative roots maka' and 'taka' both occurring in this dialect, and the local term pek 'forest animal' with the Mek and upper valley term bpek 'forest animal'. The latter form is also cognate with the Lower Grand Valley form maked 'rat'; pek appears to be a cognate form borrowed from the south Ngali language area.

15. According to this interpretation, the four subject markers which do occur in hypothetical mode may be identified with the subject markers occurring with factive mode. The allomorphs of these markers may now be summarized.

First person singular: y-(-) occurs finally following the factive allomorph -k^; medially following any factive marker and preceding a normal aspect or prior action marker: ykv 'I sold it'; wamhytek 'I normally took it'; wamhytek 'I took it (and then I,...)

=e(-) occurs following the hypothetical marker: we'se 'I almost hit him (or killed him) but didn't'.

-1(-) occurs elsewhere: wathi 'I hit him'; lakahi 'I met a long time ago'; wathiktekitik 'after I used to hit him long ago'. Note that in this last example the subject marker =i-, which is the middle i in the form, follows the remote past marker -ik^, not the preceding factive marker =k^.

'Following' and 'preceding' are thus to be understood as meaning 'immediately following' and 'immediately preceding' unless otherwise specified.

First person plural: =e(-) occurs finally following the factive marker allomorph -k^; medially following any factive marker allomorph and preceding a sequence of normal and prior markers, or, in some informants' speech, preceding either alone; and following the hypothetical marker: oko 'We said it'; wathotesik 'after we hit him (as we normally do)'; wathesik, wathesik 'after we hit him'; wathwek, wathotesik (latter less common) 'We normally hit him'; wathesik 'We almost hit him (but didn't)'.
(w) occurs elsewhere: wathu 'We hit him'; lakaku 'We went long ago'; wathuketik 'after we went to hit him long ago'.

Empty second person stem formative: **m** occurs following the sequence ak where the k is theative marker and a normal or prior marker occurs in the form: laketek 'You (sg) normally go'; lakattik 'after you (eg) went'; lakattetik 'after you (sg) go (as you normally do)'.

**w** occurs following the active marker allomorph **h** when no prior marker occurs in the form; and following any remote past marker: wathin 'You (eg) hit him, killed him'; lakakin 'You (eg) went long ago'; wathittek 'You (sg) normally hit him'; wathitiketik 'after you (eg) hit him'.

**e** occurs elsewhere, i.e. following the active marker allomorph **h** where that marker is not proceeded by a, and following the active marker allomorph **he** where there is a prior marker in the form and following the hypothetical marker: wateken 'You (eg) hurt yourself'; nnekkep 'You (pl) ate it'; wathesep 'after you (pl) hit him'; watheteketik 'after you (eg) hit him (as you normally do)'; waleen 'You (sg) almost hit him (but didn't)'.

The empty second person stem formative does not occur in prohibitive forms.

Second person singular: **e** occurs preceding the normal marker **te** or the prior marker **ti**: for order see Table 1, p.36 and Table 2, p.40: wathitik 'after you (eg) hit him'; wathittek 'You (eg) normally hit him'; wathetetik 'after you (eg) hit him (as you normally do)'.

**am** occurs elsewhere: wathin 'You (sg) hit him'; nnekkep 'You (sg) ate it'; wathinno 'after you (sg) hit someone else....'; waleen 'You (sg) almost hit him (but didn't)'.

Second person plural (the basic sense of the category): **am** occurs in all environments. For position in active forms see Table 3, p.36, and Table 2, p.40: wathie 'You (pl) hit him'; wathisep 'You (pl) normally hit him'; wathetesep 'after you (pl) hit him (as you normally do)'.

Second person plural plus third person (extended sense of the category, occurring only in hypothetical mode): **am** occurs in all environments: walep 'You (pl), he, she, is or they almost hit him (but didn't)!'.

Third person singular (in active mode only): **am** occurs with the verbs la 'go'; wa, we, 'come'; aw, a, 'acquire'; -an, a, 'become' and -l, -l, 'suffer a process when no reflexive voice or remote past marker occurs in the form: 'lak 'He went'; wata'etik 'after he comes (as he normally does)'.
"e=+" occurs following the +e+ allomorph of the active marker with the verb nek+; nek= 'eat' and following the +e=+ allomorph of the active marker (with +e=+ as a freely varying and more common alternate form before a suffix or clitic with the vowel o in the initial syllable): nika 'He ate it'; watahe 'He hit him.'

"e(+) occurs as a freely varying more common alternate form in the same environments as +e=+ preceding a suffix or clitic with the vowel o in the initial syllable: wathwewo, wathewo 'after he hit him (someone else...').

"he(+) occurs elsewhere: lke 'He said it'; nasikhe 'He ate it long ago.' (Here also +he(+) occurs as a freely varying and more common alternate form before a suffix or clitic with the vowel o in the initial syllable.)

"he(+) occurs as a freely varying more common alternate form in the same environments as +he(+) preceding a suffix or clitic with the vowel o in the initial syllable: ikhehwo, ikhehwo 'after he said it (someone else...)'; nasikhehwo, nasikhehwo 'after he ate it long ago (someone else...').

Third person plural (in active mode only): +ikhehwo(+) occurs with +e=+ 'go'; wa+, wet= 'come'; +at= 'acquire'; +a-, at= 'become'; and +la-, +lat= 'know a process' when no reflexive voice or remote past marker occurs in the form: lakaikhwe 'They went'; wathkhehatesik 'after they came (as they normally do!).

"e(+) occurs following the active marker allomorphs +e=+ and +e+: eka 'They said it'; neke 'They ate it'; watahe 'They hit him'; wathatesik 'after they hit him (as they normally do!).

"he(+) occurs elsewhere: lakhehwo 'They went long ago'; lasikhe 'They ate it long ago'; wathamatesik 'after they used to hit him long ago'.

The subject markers described above occur only in active and hypothetical modes, with the singular and perhaps accidental exceptions of +a+ also occurring to mark second person singular in immediate imperative forms of potential mode and +e=+ also occurring to mark first person plural in immediate hortative forms of potential mode.

16. This contrast was drawn to my attention by missionary colleague Mel Akes, now deceased. Another missionary colleague, Rev. R.B. Karosky, on reading this study as originally written, asked why I had not included the form lve 'let's go.' This form is not paralleled in other verbs, but is of real interest. I interpret it to mark first person plural immediate imperative.
ive. (lp immediate imperative) ‘Let’s go now! (with command to get going).’ If this form is taken into account, the morpheme analysis given in the text needs to be revised to indicate that -a is a portmanteau marking subject other than first person singular (the speaker by himself), implicitly second person singular and immediate imperative if not otherwise marked, and potential mode. Occurring following this marker are: -1 marking plural of subject; (this -a is realised as -a following a syllable with a high open vowel); -m marking second person deferred imperative; -a k marking third person immediate hortative; and -a k marking deferred hortative in this position and also following -a. The marker -a may similarly be interpreted as a portmanteau marking hortative/imperative, implicitly first person plural immediate unless otherwise marked as third person. The person category in this morpheme is retained and the implicit second person category in -a is lost in the combination of these morphemes. Occurring following this -a are: for the verb la- ‘go’ the combination -a with -1, with resultant first person plural immediate imperative meaning; -a k elsewhere -a k marking deferred hortative; -a k marking second person plural deferred hortative; and -a k elsewhere -a k marking third person deferred hortative. In the reflexive forms, which are displayed in the appendix, the basic reflexive marker is -a following the verb root. The combination of this or any other stem final a plus -a is realised as -a before a syllable with the vowel a and as -a elsewhere.

One other form has also been observed which is not taken into account in the test of the study as originally written:

waselak. (ls deferred hortative) ‘let me kill him later’, or ‘I’ll kill him later’. This form is encountered for many verbs but is not used by many speakers in the dialect being described; it is, however, common in the sub-dialect spoken across the Palm river from Kurima. If these forms are taken into account the -1 following the root can be interpreted not as a stem-formative empty morph but rather as a morpheme implicitly marking first person singular subject unless another person marker occurs, and -a k in the common first person singular form can be interpreted to mark hortative and potential mode following -1.

-3. The relator -aa, -aa ‘source’ also occurs following many other verb forms, as well as words of other classes. The verb forms include a number already described with no mention of the possibility of the addition of this relator. With those other verb forms, however, the function of the relator is essentially conjunctive, without modifying
the grammatical meaning of the verb to which it is attached. In this
facilitative category the semantic relationship of the relator to the
verb is much closer and does importantly change the grammatical meaning
cf. the verb. The conjunctive use of -en, -een with other verb forms
will be discussed in Chapter 5, and some of the other uses of this
relator are treated in Chapter 3.

18. This category is not the same as van der Syp's indefinite future.
His examples include, and are all analogous to, "wetasi:kin", which he
glosses with two senses, "singular actor will roost (later)" and "one
actor will roost in the dim future" (1906:10). I interpret this form
to include the potential stem wetas: 'roost c' and a contracted
form of wakik 'singular subject will come', with the resultant
meaning 'singular subject will come to roost c'. In the dialect
described in this study, the analogous form would be: wetas: wakik
'singular subject will come to roost c'. If my interpretation is
correct, the future category here is not remote future but simply future.

19. These forms include an n or k that is homophonous with the factive
mode marker. It might be possible to interpret these forms to include
the factive marker and this category thus be a factive mode category.
If that interpretation were adopted, it could be observed that many
events which can not confidently be predicted as long as the time-span
is limited can be predicted with full confidence for the indefinite
future. Thus one may not say with complete confidence, "It will rain
tomorrow", but one can say with as complete confidence as is possible,
"It will rain sometime". However, this interpretation, which was
earlier adopted, has been rejected for the following reasons.

(1) Local speakers link the remote future category with the future
and may use the latter whenever they may use the former; they
do not use any factive category in these environments.

(2) There are some speakers of this dialect who employ forms of the
verb 'come' in this category which do not contain the troublesome
consonant: wakyp, wesp. 'Subject will come in the remote future'.
The second of these alternatives employs the root allocomorph which other-
wise occurs in potential mode forms. Also the verb wela, 'lokol-
'sometime' is inflected for this category in a form employing the root
lokol, which otherwise occurs in potential and hypothetical mode
categories, with a few exceptions: lokokyp. 'Subject will stay (there)
in the remote future'. (See however note 12, p.69, where similar
evidence, so far as the roots of 'sometime' are concerned, was not
considered sufficient to determine the mode of prohibitive forms.)
Other evidence motivates different decisions in the two cases, as noted in the discussions of the two cases.)

20. Demonstrative forms and the construction of the iterative participle with the negative particle lek have not been observed in progressive aspect.

21. As will be described in Chapter 3, verb roots ending in $, k$ or a vowel occur in reflexive voice with final $k$ (which replaces $p$ in that case, or is added in the case of the vowel-final roots) plus $h$. These root allomorphs are followed by a vowel marking reflexive voice, and it is following that voice marker that the progressive stem allomorph $\text{vh}$ occurs preceded by an added $k$. That $k$ is here assigned to the voice marker. Thus the consonant $k$ is added twice in these forms, once in special root allomorphs, and again in special reflexive voice marker allomorphs:

\[ \text{hakhyy}khi-\text{lay}y. \quad \text{'I am placing it for myself.'} \]

In this example $\text{hakh-}$ is a special root allomorph of $\text{hah-} = \text{put}$; $\text{w}k$ is a special allomorph of the reflexive voice marker; $\text{\text{-vh}}$ is the progressive stem marker; and the auxiliary includes the root $\text{-lay}y$, interpreted as a contraction from $\text{wale-}$, $\text{loke}$ = 'continue', plus the factive marker $\text{-k}$ and the first person singular subject marker $\text{-y}$. 
CHAPTER 3

SINGLE EVENTS AND EVENT PARTICIPANTS:
CATEGORIES OF CASE AND VOICE

In the last chapter, the inflection of Dani verbs was partially sketched as a background for the remainder of this study. Deliberately omitted from that chapter was consideration in any detail of categories of voice or personal object, which are marked in an 'inner layer' of inflection. Attention may now be turned to these matters and others that concern the relationship of participants, particularly personal participants, to single events as referred to in what are here termed single verbs, which may include one or two post-cliticised auxiliary verbs.

These are the relationships of case and voice that have been in the focus of attention of linguists in recent years, particularly in the work of Charles J. Fillmore (1966b, 1968a, 1968b, 1971), but also and independently in the studies published by the tagmecticists (e.g. Pike 1964; Wise 1968:39–40), the stratificationalists (e.g. Lamb 1968; Gleason 1968; Taber 1966; Cromack 1968), Wallace Chafe in his own version of generative semantics (especially 1970b), and M.A.K. Halliday of the London school (1967a, 1967b, 1968, 1970). Most of this work has been done on English and has emphasized the discrepancy between the underlying semantic relations Fillmore labels 'case' and the surface structures in which these are encoded. However, the discussion has also involved other languages, and specific sets of case relationships have been suggested as language universals (e.g. Fillmore 1968a:1–5). To the familiar inventory of devices utilized to encode case relationships, such as prepositions and case endings, Dani adds constructions with auxiliary verbs, so that the data are of interest in terms of the developing study of 'case' in a sampling of languages of the world.

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3.1. CASE RELATIONSHIPS MARKED BY POSTPOSED RELATIVES

The semantic relationships of participants to events in Dandi are signalled by one or more of the following devices: word order; semantic components of the lexical items; postposed relatives, including post-position, post-elictics and suffixes; direct affixation to verbs; and affixation to auxiliary verbs. The relationships marked by postposed relatives are also, in several cases, marked by one of the other devices as well, so that it is useful to begin the description with those relatives.

3.1.1. Spatially Oriented Relatives

3.1.1.1. Locative Relatives

Locative relatives: senses of 'target' and 'locus'. An important set of relatives has fundamentally locative senses, 'including in each case a sense referring to the goal or target of motion and a sense referring to the location of an event or participant; the context disambiguates these two kinds of locative senses, which may be labelled 'target' and 'locus'.

(1) The suffix -se. There is a non-productive suffix -se occurring with a few stems in a locative sense. In the filed corpus it occurs only with the noun eki 'his hand, arm';

'jy makkik neko lokolyke,..., 'this my-hand-in grasping while-same-subject-continues--topic, i.e. while I am keeping hold of this in my hand,...'

'ekin heike, 'his-hand-in he-put-in, i.e. He put it into his hand.'

(2) The suffix -ia. There is a productive although relatively uncommon suffix -ia occurring in locative senses with the specific meanings 'inside' or 'into'. In the corpus filed for this study it occurs with two stems: au 'net'; ay 'his house'. Other stems recorded with this suffix includes: al-auf 'his stomach'; akw 'his (mace-up) pouch'; tooka 'inhabited valley';

'akwivien it suke wotom,..., 'his-headnes they not-inside carrying-setting, i.e. when they were carrying his headnes in their nets'.

'akw akewa, 'pouch-into he-entered, i.e. In (the baby mace-up) put into its (mother's) pouch.'

'wotom awa neko suku,..., 'pandowu his-house-inside along we-cross- long ago, i.e. He slept in the pandowu (season) house.'

(3) Related to the suffix -ia is the form a'ia, an obligatorily possessed noun also serving as a relayer and meaning 'inside him, her or it';
...otto a'la hikuca... 'automobile ita-inside us-entered-long-ago,' i.e. 'We got into the car,...'
ma's-en kaka'likin. 'my-inside-source singular-subject-will-split-it, i.e. 'I'm going to think it up from inside myself.'

(4) The suffix -ma, -na. There is a productive and very common suffix -ma, -na occurring in a number of senses and functions, including a locative sense with the meanings 'toward' or 'to, in' a place such as a village, stream or valley. Stems with which this suffix occurs may be indicated in the lexicon, but among them are demonstrative stems in the following combinations:

jona 'here' (compare jy 'this');
atona 'there (closeby)' (compare aty 'that, closely');
atena 'there (non-spatial)' (compare aty 'that, abstract');
alona 'there (distant)' (compare yly 'that, distant');
a'lena 'there (as referred to in the immediate context)' (compare a'ly 'that, as referred to in the immediate context').

This suffix is also used in the construction of place names; a particularly common pattern of village naming employs this suffix following names of streams or sites:

Minimo 'village and area along the stream Min.'
Sakou'ma 'village and area in the gorge'; sakou 'gorge';
Hetti'yama 'village and area along the Hetti'y creek' (= Hetti'ky plus ima = i 'water', ma 'at, in').

This suffix also occurs with many noun stems, but by no means all nouns, particularly with reference to valleys, streams, villages and some kinds of houses, in locative senses meaning 'to' or 'at, in':
ime 'in the water' or 'along the stream' (= i 'water');
oma 'home, at home' (= a 'village, house');
tokoma 'in, to the inhabited valley' (tokke 'inhabited valley');
o-kkama 'in, to the forest' (o-ka 'wild vegetation' = a 'wild plant, tree', eka 'leaf');
leema 'in, to the cookhouse' (= le 'cookhouse');
hettama 'on, onto the fire' (hettok 'fire');
japaumo 'on, to the garden being dug' (japa 'garden being dug');
silimo 'in, to the village yard' (still 'courtyard').

All of these forms including -ma, -na occur in clauses both to specify location 'where' and location 'to which':
oma weyek. 'home (subject)-stage, i.e. (subject) is home.'
omi lak. 'home he-went, i.e. He went home.'
Minimo welako. 'Minimo we-stage, i.e. We are in Minimo.'
Minimo lake. 'Minimo we-went, i.e. We are going to Minimo.'
joma loko, 'here you[sg]-stay-now, i.e. Stay here.'
joma nna, 'here you[sg]-come-now, i.e. Come here.'

With stems not referring to place, the suffix -ma, -mo also occur to refer to time in the sense 'time when', and to condition in the sense 'in the condition specified as':
opsana 'when it (is) unfinished' or 'in an unfinished condition' (opsan 'unfinished');
BMI vena 'when or where (it is) good' or 'in a good condition' (BMI vena 'good');
ehekemwe lekitik, 'outstanding-staying I-stay, i.e. I am situated in a very nice place' (ehekikke 'outstanding');
at elumo inelekika lekalikhe, 'he his-knowledge-staying their-lands—direction he-normally-encounters, i.e. Since it (a supernaturally endowed land) house (the thieves), it goes up their avenues' (elik his-knowledge).

Other functions and senses of -ma, -mo in sequences of verbs have been introduced in the preceding chapter and will be further treated in Chapter 5. The glosses of many of the examples there and here indicate that a common feature labelled 'setting' occurs in these various senses.

(5) The clitic -opa, -pa (the former following consonants, the latter following vowels) 'on, onto'. This clitic occurs in several of the same senses as the suffix -ma, -mo, although frequently with different stems, as well as in distinctive senses.

This clitic occurs in a locative sense with the meanings 'place to which, onto which' and 'place at which, on which'. Where -ma, -mo typically occur in a locative sense with stems referring to streams, valleys and enclosures like houses or villages, the clitic -opa, -pa typically occurs with stems referring to mountains, plateaus, house tops and other elevated places:

iks-pa laka, 'platoe-on we-went-long-ago, i.e. We travelled on the plateau.'
o-pa welake, 'tree-on he-stayed-long-ago, i.e. He stayed up in the tree.'

But with the stem ay 'his house', this clitic occurs in a sense indistinguishable from the sense of -ma, -mo with o 'house, village':
ay-pa wetak. 'his-house-at subject-is, i.e. He is at home.'

Compare asa wetak. 'He is at home.'

There are examples where the sense 'place on which' and 'place at which' appear to be clearly distinguishable:
ke-pa helo-opa kelik... 'doorway—at ceiling-poles—on hung-up, i.e. (it is) hung on the ceiling-poles by the doorway.'
The sense 'place on which' is figuratively extended to refer to a thing, person or action on which someone or something depends:

\(\text{tway-pa weleko, 'sacred-battle-objects—on we-stay, i.e. We depend on the sacred objects dedicated to warfare.'}\)

The spatial or literal locative sense occurs meaning 'place to which' as well as 'place at which', and 'place onto which' as well as 'place on which';

\(\text{ay-pa lake. 'his-house—to he-went, i.e. He went home.'}\)

\(\text{twu-pa lakaliikha, 'roof—onto he-assisted-long-ago, i.e. He climbed up onto the roof.'}\)

The clitic -opa, -pa also occurs with personal names to refer to the person to or toward whom motion is directed:

\(\text{tstai-pa wake. 'Rose—to we-came, i.e. We came to Mr. Rose.'}\)

With terms other than personal names, the form -opa occurs as a separate postposed particle with obligatory person-marking prefixes to specify the person toward whom the motion is directed:

\(\text{nopa 'to me';}\)
\(\text{hopa 'to you(sg)';}\)
\(\text{opa 'to him, her, it';}\)
\(\text{inopa 'to them.'}\)

\(\text{tek-sek-he ninopa wakakik ay, 'arrow—only—topic to-us it—came-prior that—closeby, i.e. That is the arrow and that is all that came to us.'}\)

...namy-lak imopa-te, wakakik welakiki. 'my maternal-uncle—sends to-them—topic, it—came—long-prior it—stayed—long-ago, i.e. I came to my uncle and stayed.'

Both the cliticized and independent forms of this relation occur with terms referring to persons also to specify the person on whose person, either literally or metaphorically, an event takes place:

\(\text{imopa hakathetek, 'on-them they-normally-do-it, i.e. They perform ceremonies (e.g. of healing) on them.'}\)

\(\text{imopa-ke watoke hgekatek, 'on-them—direction striking leave—they-normally-say, i.e. They apply (the mud pigment) to them and leave it.'}\)

This clitic -opa, -pa also occurs in several non-locative senses. Frequently it occurs with nouns to refer to the instrument or material with which an action is performed:

...\(\text{Henaypp posije-pa lipiloko wate,... 'Henaypp (a name) axe—with lacerating he-hit—her, i.e. He lacerated Henaypp with an axe.'}\)

...\(\text{pyte ekka-pa jeiloko wek-othukwka, 'two leaf—with wrapping take—they-transferred—to-him-long-ago, i.e. They gave him two wrapped up in a leaf.'}\)
This clitic also occurs to specify the price of an item or the thing given in exchange for something in barter:

wan-opa wahi., 'pig--with I-bought-it, i.e. I bought it for a pig.'
Further, -opa, -pa occurs with terms referring to stages in the day, the life cycle or the feast cycle or other cycle of activity to specify the occasion or stage at which an event occurs:

...ly-rpa ja hekšepov takeni-r, 'light--at here sleeping-floor
you(pl)-send-now--deselect, i.e. go up on the sleeping floor
right now in the daylight.'
... jeketek-opa-at...wakki.... 'child--at--predicate I-am-same-long-
ago, i.e. It was when I was just a child that I came here.'
wan meke waky-en hopuk ktwk-nike-pa sokote-n-at. 'pig major-feast
killing--source later cut-up--verb--on we-normally-put-it--also,
i.e. After we kill the pigs at the major feast, later, during the
time when the cut-up meat is still around, we place it (a
ceremonial bit of pork on the fireplace pole) then also.'

In a related sense, this clitic occurs to specify extent of time or
space or number, particularly with counted units:

nokki-te, jone-te, lye-ro nok-o-tos'me-ne-en.... 'their hand--topic,
here--topic, this--at sleep--we-said-prior-setting--source, i.e.
After we had slept this many nights (counted on the hand)....'

(6) Historically and semantically the clitic -pake is related to
the clitic -opa, -pa, but both occur now in the dialect under study,
although -pake is very much less common. Every example with -pake
is paralleled by examples with -opa, -pa in similar senses, but the
converse is not true:

...ula elo-pake wisih layk sashakwhe.... 'firewood source--at to-
chop-reflexive going-iterative they-cooked-it-long-ago,
i.e. They made repeated trips to the woods to chop their own
firewood and thus cook the meal.'

In the last example -pake specifies 'place near',

...elo layksha-hera-pake-at.... 'earlier they-went-topic-query--
basics--predicate, i.e. It was on the supposition that maybe they
had gone ahead....'

Here -pake specifies the basis on which a further action is performed.

The relator marking 'push', -ke, -kwa. Another spatially oriented
sense, distinct from the locative senses of 'target' and 'locom' is
frequently marked in the post-cliticized relator -kka, -kwa, which is
semantically related to and derived from the independent noun ke, kwa
'target'. This relator may occur in expressions which appear to mark
the locative senses of 'target' and 'locom', but also and more commonly
occurs to specify the route of motion, where other expressions occur to specify its target. With demonstrative stems it specifies direction or route deictically, i.e. oriented to the location of the speaker and addressee:

- jy-kke 'in this direction' or 'on this route' (jy 'this')
- yl-kke 'in that direction (as a distance)' or 'on that (distant) route'.

This clitic also occurs with place names and other locative constructions, including those in which one of the locative relatives (-va; -nu, -no; -o, -v) occurs:

- wve ask jy-pa-kke.... 'On water's-edge this-on-direction, i.e. On this side of the water river....';
- ooms-kke 'this-village-setting-direction, i.e. toward the village' or 'on the village route';
- lma-kke 'water-setting-direction, i.e. toward the water' or 'via the water route (either in the water or along the stream)';
- lma-kke lamaa.... 'water-setting-direction we-ascent-long-ago, i.e. We went up (by boat) on the river.'
- Vasakeima-kke (Kuegou stream name)-setting-direction, i.e. toward Kuegouma;
- ...tvan-lak Vasakeima-kke ki skouwa.... 'European-and-associate Kuegouma-direction enter they-came-long-ago, i.e. The Europeans came in via Kuegouma (the landing site of the Arbuckle expedition).'

This clitic also occurs with some bound stems, including etik- 'outside';
- tla-kke 'toward or via the outside',
with similar 'directional senses, this clitic occurs with other stems, including the noun appit 'his back' in a construction referring to reversing the direction of motion:

- wve-napat-kke taka.... 'my-house-to-my-back-direction I-went-long-ago, i.e. I went back home.'
- ...ep-hvny lay-pa-kke, syan-likk-e....ooms-kke ma-noko hyli
- lakaakwa, 'people their-house-to-direction vacant-direction...
- village-setting-direction those-known putting they-went-long-ago, i.e. They went depositing (blood) as they went via the people's houses, the vacant villages and those villages (there).'

With the stem esp'ma 'some' this clitic occurs in a metaphorically extended sense to refer to different segments of a whole:

- esp'ma-kke lomo (purusa elsewhere).

In a similar sense this relative occurs as a suffix with a contracted and cliticized form of week '(the subject) stays' to refer to opposed parties in war, feud or exchange:
Wamatu nit-stekke akasik wathene-he.... 'Wamuru our--side he-- became-prior when-he-killed-him-topic, i.e. When Wamuru joined our side and killed (a man)....'

The clitic -en, -nen marking source. The postclitic -en, -nen (the former following vowels, the latter following consonants) occurs in a variety of senses.

(1) As with others of the relatere, it is useful to consider the spatial sense with resultant meaning 'place from which' as fundamental for this clitic. It is to be noted that this clitic in this sense does not occur as a member of the same class as the suffix -na, -no or the clitic -spa, -pa. Rather the clitic -en, -nen occurs with terms which are implicitly locative, such as place names, or are marked with locative relatere, and adds the further meaning 'from which':

'Etset omu-nen lakeswewha.... 'Etset his-village-setting--from they-ascended-long-ago, i.e. They went up from Etset's village.'

...etset-en wan at-ta-ten he...Nolama wake. 'Rose--at--from that--source-topic Nolama we--come, i.e. From that place Rose's we come to Nolama.'

...Pasema-nen wokw wakekhatok. 'Pasema--source carrying-it they--normally--come, i.e. They bring it from Pasema.'

The clitic -en, -nen also occurs following the clitic -spa, -pa in expressions that might be glossed 'on the basis of the term specified'. This is thus a figurative extension of the sense 'place from which' was at-ta-ten wanussa-at 'pig that--on--source subject could take--query, i.e. Can he receive it on the basis of (killing) pig?'

(2) This 'clitic also occurs in a metaphorical sense specifying the 'person by whom', i.e. the agent of transitive verbs. The relationship of this sense to the spatially defined sense 'place from which' is clear in a number of examples where the source of an event referred to in a transitive verb is specified in spatial terms:

...joma-nen mottok wathetak. 'here--from altogether-they--normally-kill-her, i.e. This side (of the war) keeps killing the enemy.'

...joma-nen je wannukwa.... 'here--from wealth-stone they--took--long-ago, i.e. This side made a wealth-stone payment....'

Where the unmarked order, which is subject, personal object, verb, is altered and/or there is any ambiguity sensed by the speaker, the subject of a transitive verb, occupying the role 'agent', is frequently marked by this clitic:

...vkwil-epa-kke wam-en nasheke-kke.... 'his-head--on--direction pig--by he--ate-long-ago--direction, i.e. ...on his head, where the pig had eaten....'
...ap-hveiya palu-nen nasukena... 'people python--by they-ate-long ago, i.e. As for the people, the python ate them.'

In these last two examples, it is uncommon for pigs or pythons to eat people. It is particularly uncommon for a non-human participant as subject to be referred to in a subject marking affix specifying plural number, as in the last example. In both cases, the clitic -nen 'source' occurs to mark the subject unambiguously.

...ap Wvekka-hveiya Meake-nen ta! wukisa ki akileke. 'men Wuka-Bubi Meage--by first chase--to-do is--reward-then enter-he-name-long ago, i.e. As for the Wuka-Bubi, the Meage first (moved in this direction to chase them out.)

Here the Wuka-Bubi have been topicalized by placing the term in initial position, but the Meage are unambiguously marked as the referents of the subject by the occurrence of -nen. This marker also occurs in many examples where there would be no ambiguity without it:

...It insakuny-nen-he, wam mottok washyr-lilekhatiseki.... 'they their husbands-by-topics, pig altogether take-they-normally-continue-prior, i.e. Their husbands, after they finish collecting all the pigs,...'

To anticipate the discussion of intransitive verbs and reflexive voice forms, it is important to note that the marker -en, -nen 'source' does not occur with the subjects of intransitive verbs nor of reflexive verbs where the subject occupies both agent and patient roles:

as laky, 'I went, i.e. I went.'

Never, in this simple sense: (enan laky.)

as watky: 'I hurt myself.'

Never, in this sense: (enan watky.)

But where the subject of a reflexive voice verb does not occupy the patient role and there is another occupant of that role, reflexive voice forms may occur with the subject marked with -en, -nen:

as watky, 'I killed it--reflexive, i.e. I killed it for myself.'

In this sense also: anen watky, 'I-source I-killed-it--reflexive, i.e. I killed it for myself.'

Thus the clitic -en, -nen is an optional marker of subjects of transitive verbs where those subjects are not also direct objects in reflexive constructions.

(3) The clitic -en, -nen also occurs to refer to the 'instrument' of an action, in two sub-senses. Body parts and psychological faculties considered to be the source or bodily instrument of an action may be marked with this clitic:

nam-zen ka-welikin. 'my-inside-from singular-subject-will-split-its, i.e. I'll think it up from inside me.'
...an rekki-ren wan watako ithiki.... 'I my-hand-with pig killing
I-nested-him-long-ago, i.e. I married her with pigs I killed
myself (i.e. from my own herd and by my own action, whoever
actually shot them).' This clitic also occurs with some other instruments which are not body
parts, particularly help 'stone';

akelike hely-en wata. 'another stone—with they-killed him,
I.e. They killed another with a stone.'

(4) The clitic -en, -ene also occurs to specify the cause of an
action, including events referred to in intransitive verbs:

ape-te ouk-en wa'-lakea.... 'his-self—topic stokke—source die—
he-knewed, i.e. As for him himself, he died of stokkes.'
a hotok-te-en-he men-akelike. 'village close—predicate—from—topic
stand—he-old-long-ago, i.e. Because the village was near by, he
stopped.'

inajv-en heise mottok pukuleka.... 'their-fear—from flight
altogether they-disappeared-themselves, i.e. They dispersed and fled
because they were afraid.'

(5) The facilitative construction introduced in the preceding
chapter and further described in Chapter 5 includes the clitic -en,
-ene:

wale' baok-en woel-eisam. 'carrying 1st-3ap-go—source take—transfer-
it-to-him-now-(2s-subject), i.e. Give it to them so that they can
carry it off.'

(6) This clitic also occur optionally with some expressions of
time to refer to 'time when':

...hopuk-en wo-nothene. 'later—source take—he—transferred-it-to-me,
I.e. Later he gave it to me.'
...ninakki akelike-ene-he...wathuku. 'own-hand another—source—
topic...we-killed-him-long-ago, i.e. On another day we killed him.'

(7) Further, the clitic -en, -ene also occurs, as will be noted
again in Chapter 5, as an optional loose link within sentences occurring
with clauses or non-finite verb forms outside the nuclear verb phrase
(see Chapter 5); some forms, including the facilitative construction,
which already includes -en, -ene, do not occur with this link. This use
of this clitic as a link occurs most commonly in narrative, where earlier
events may be viewed as the 'source' (in a very loose sense) of later
events:

wo'-nesi akelike-ene...akelike wo'-methikhe. 'take—to-transfer-it—
to-me they-came-long-ago—source...another take—he—transferred-it—
to-me-long-ago, i.e. They came and gave me one, and then he gave
me another.'
wale' lythis-ken hyt-hano-o. 'carrying having-gone--source (you)-
seeness-seen-to-decisive, i.e. after you take it (there), look
at it.'
...wakelaha soko hytken...ki aky. 'thatch covering having-put--
source enter I-came, i.e. after we finished putting on the thatch,
I came in here.'
...uma pi kikelkasik-en wa-takelika,... 'home descend he-came-
long-ago-prior--source die--he-inured-long-ago, i.e. after he
came down here he died.'
welakorasik-en, pkv-skanes-en heta-sa hokotek. 'we normally-continue-
prior-source dry--when-I-been-source grass-fire we-normally-
put-it, i.e. after we have walked a while, when it dried up, we
set grass fires.'
uma wuluphukis!no-en...numul akewuka. 'home we-exited-long-ago-
prior-setting--source... to-run they-came-long-ago, i.e. after we
had gone out to the village, they came running.'

3.1.1.2. Relative Order of Spatially Oriented Postposed Relators

The postposed reletors surveyed thus far have fundamental senses which
are spatially oriented although most of them occur in non-spatial
extended senses as well. This basic set of postposed relatives occurs
in three distinct relative orders. The first order is occupied by any
member of the subset including the suffixes -la 'inside, into' and ma,
=mo 'at, in, to' and the clitics -osa, -pa 'on, at, onto', and more
rarely -paka 'on'; only one member of this subset may occur in a con-
struction. The second order is occupied by the subset which includes
only the directional clitic -kke, and the third order is occupied by
the subset which includes only the preposition -en, -nen in the sense '(place)
from which':

<table>
<thead>
<tr>
<th>FIRST ORDER</th>
<th>SECOND ORDER</th>
<th>THIRD ORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>-la 'into, inside'</td>
<td>-kke 'direction' or 'out'</td>
<td>-en, -nen '(place) from which'</td>
</tr>
<tr>
<td>=ma, =mo 'at, in, to'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-osa, -pa 'onto, on, at'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-paka 'at, on'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


3.1.2. Non-spatially Oriented Relators

Besides the important set of spatially oriented postposed relators surveyed above, there are a number of other postposed relators. Some function specifically in the structure of utterances and will be considered in Chapter 6. Others function primarily in relating events to other events, as referred to in clauses and non-finite verb forms within sentences and will be considered in Chapter 5. The remaining relators will be briefly surveyed here.

3.1.2.1. The Benefactive Relator hesik

The postpositional particle hesik occurs in several senses. Following substantive expressions it occurs to specify the person or persons or situations because of whom or in whose interest or for the sake of which an action is performed:

wath!...no hesik-at, 'I-killed-it man for-predicate, i.e. I killed it to a pig; it was for a male (child).'
hat hesik wok-hosi sky, 'you (ag) for take--to-transfer-to-you (ag) I-came, i.e. For your sake I brought it to give to you.'

The relator hesik also occurs with substantive expressions to refer to the intended referent of a comment, where the reference was not obvious or was even deliberately willed:

...no hesik attoko ykh-yakoskwa... 'som about that-way speak--the-
used-to-long-ago, i.e. About the sun they used to say that or talk
that way.).'

In a related sense, the postposition hesik occurs with substantive expressions and some verb forms, including basic (nya, -lyk) participles and coincident punctiliar (ween) forms, to refer to the element or event which is considered to be the explanatory basis for an action:

ap atyk hesik heka, 'man killing (= wetyk) because of they-placed-
it, i.e. They placed it because they had killed a man.'
he hesik wather=al wan hesik wather=, 'woman because-of they-killed-
him--invitation-query pig because-of they-killed-him--invitation,
i.e. Was it over a woman or a pig that they killed him?'

This postposition also occurs in a special sense suffixed to the
numeral root *maaky-* 'one' to mean 'in one operation, without repetition': *maakyhesik* we-no. 'once (now)(some later), i.e. once just once (and yet the matter settled to that one visit)'

3.1.2.2. Substantive Co-ordinators: Intonation

Nouns and noun phrases are frequently co-ordinated by juxtaposition, with only intonation as an overt relator:

\[ \text{Nouns and noun phrases are frequently co-ordinated by juxtaposition, with only intonation as an overt relator:} \]

\[ \begin{align*}
 \text{ne} & \quad \text{Mulak-he} \\
 \text{4} & \quad \text{2} \\
 \text{2} & \quad \text{3} \\
 \text{3} & \quad \text{2} \\
 \text{2} & \quad \text{4} \\
 \text{4} & \quad \text{3} \\
 \end{align*} \]

\[ \text{mea} \quad \text{yea} \quad \text{hay} \quad \text{hay} \quad \text{hay} \quad \text{hay} \]

\[ \text{--sort flyes yowe-papilomat a carrying they-came-long-ago, i.e.} \\
\text{and as for the Mulak clan, they brought flies and yowe cores.} \]

\[ \text{2} \quad \text{3} \\
\text{2} \quad \text{4} \\
\text{2} \quad \text{2} \\
\text{3} \quad \text{4} \\
\]

\[ \text{je, make ty-mike etake pairlikhe, 'this--sort that-- sort its--}
\text{same he-(mokhaku)-long-ago, i.e. He called on all sorts of}
\text{things.'} \]

3.1.2.3. Co-ordinating Clitics -non, -on

When the list is considered complete, frequently the substantive expressions are co-ordinated by the postclitic -non, -on (the former following vowels, the latter following consonants), attached to each item in the list, including the last. Frequently the 'overt comma' or topic marker -te, -he is further postcliticized to all but the last item:

\[ \text{Hapua-non-he, Lekalek-on-he, akeikha Mulak'-make-non hyaken wetu.} \]

\[ \text{Nubula--and-topic Lekalek--and-topic another Mulak--sort--and} \\
\text{three we-killed-him, i.e. We killed three, Lekalek and another who was of the Mulak clan.} \]

\[ \text{Wetapo hele-on-he paly-non molok weokweha, 'Wetapo stone--and--} \\
\text{topic sibana--and carrying they-came-long-ago, i.e. The Wetapo} \\
\text{(clan) brought stones and sibana.'} \]

3.1.2.4. The Particle mel as a Co-ordinator

Lists may also be co-ordinated by the inclusion of the particle mel (men in some sub-dialects) after each item, including the last. This particle occurs elsewhere as a hesitation form:

\[ \text{...helte mel, hakki mel, hom mel, supp:iv mel tahyosen-he...} \]

\[ \text{'ginger or bananas or taro or sweet-potatoes or when plural--} \\
\text{subject-dig--topic, i.e. When they dig sweet potatoes or taro or} \\
\text{bananas or ginger...'} \]

Note in this last example that the verb is in fact only appropriate for getting sweet potatoes, but here occurs also as a kind of surrogate for the verb appropriate for the other objects in a special kind of
"gapping" (Ross 1968).
...je mel, sail mel ama-noko... 'wealth-stones and course-shell-belt and those-known-to-us, i.e. ...those wealth stones and course shell belt...'.

3.1.2.5. The Negative Particle lek as a Co-ordinate

Like at least one other language in the highlands of Irian Jaya, Dani utilizes the particle lek, which elsewhere means 'not', to co-ordinate lists with the meaning 'neither...nor' (specifically not the meaning 'neither...nor'); the particle follows each term, including the last.7

hat-he hake lek, hatok lek, has lek atty... 'you-topic your (sg)-wife and your(sg)-younger-sibling and, your(sg)-older-sibling and that, i.e. As for you, your wife and younger and older siblings...'.

3.1.2.6. Constructions with the Relators appetak and inom 'together with'

Related to the co-ordinate constructions treated above, but different from them in most cases, are the constructions with the particles meaning 'together with'. The form appetak 'together with one other person' is used of two persons (or anthropomorphized terms), and obligatorily includes the prefix m- if the speaker is one of the persons, or the prefix h- if the addressee (but not the speaker) is one of the persons. This particle occurs only once in the construction following the independently expressed term or terms. Particularly when the speaker or addressee is one of the persons referred to, he is often referred to only in the prefix:

hat hakot saka appetak-he-.... 'you(sg) your(sg)-younger-sibling his-wife two-together-topic, i.e. your younger brother and his wife...'.

appetak hopuk look-at 'one-with-me later let's-go-later--invitation-query, i.e. Shall we two go together later?'

The form inom 'together (of more than two persons, or of non-personal things)' also obligatorily includes the prefix m- if the speaker is included in the reference, or h- if the addressee (but not the speaker) is included in the reference.8 This particle may occur once following the independently expressed term or terms:

an it nann-at akoko-at hakoty-lokossat-o. 'If they we(-y)-together--predicate that-way--predicate doing--subject would-continue--decisive, i.e. I can keep on doing it just that way with them.'

The form inom, particularly with the 'manner' olitic -hoko, -toke (the
Former following consonants, the latter following vowels), also occur following each term in a list, like the co-ordinating particles described above:

van enak inos-hoko-te, musan-neke inos-hoko... 'pig (its-fat together--manner--topic, Genanche-javence-forms together-manner, i.e. ...pig fat with Queen Anne's Lane (?).'

3.1.2.7. Relations Marking Resemblance or Comparison

The post-clitic -neken occurs with adjective and some other stems to refer to a moderate degree of the quality or characteristic specified by the stem:

ko-neken 'big--rather, i.e. rather big (ones)';
...sve akkyete-neken hae-neken tasikhe.... 'bird little-one--rather quickly--rather he-ate-(it-long-ago, i.e. he ate the rather small bird, up pretty quickly.'

The independent post-position hakke 'like' and the related, shorter form hak 'like' occur following words of all classes to specify a term resembling the preceding term:

Hinakakoko hakke.... Aakalay hakke.... '(a boy) like Nimanumogu,' (a boy) like Aplah.'

Istak hakke, 'subject-should-go like, i.e. It looks as if (subject) might go.'

Lek hakke 'not resembling, i.e. almost none' or 'apparently not'.

3.1.2.8. Relations Specifying Exclusion

The independent post-position enak, nek (the former after consonants, the latter after vowels) 'only, exclusively' occurs after words of several classes. Following substantive expressions it specifies that the referents of the substantive expression are the only referents included:

It Eileenekow-lak, Lyo-lak enak, Apaane mel nek nebonshe.
'then Eileenekow-and-associates Lyo-and-associates only, Apaane also only chase--we-old-toward-them, i.e. We drove out only Eileenekow and his followers and Lyo and his followers and also Apaane--just them.'

Wakanow nek elu. 'Naganogo only his-knowledge, i.e. Only Naganogo knows.'

pelai-ona-ke, sve isipile-non nek-he..., 'make--and-topic, bird ibiblo(species name)--and only--topic, i.e. The snake and the bird named Ibiblo, just then.'
Following predicates, this relator specifies that the predicate applies to all cases; cases to which it does not apply are excluded:
elu nek. 'his-knowledge only, i.e. He knows them all (there is none he doesn't know).'
wakekha nek. 'they-same only, i.e. They all came (there is none who didn't come).'
The function of the relator hako in conditional sentences, introduced in the preceding chapter, will be further treated in Chapter 5. This relator also occurs with substantive expressions in a sense that may be glossed 'in the case of':
...jykytvy hako, inapa hakathatek-at. 'children if on-them they-
normally-go-to-also, i.e. In the case of children, they treat
them also.'
...okka hako-he, Eeese-men wo-niseok. 'payment if-topic, Eeese--
from take--let-third-person-transfer-to-us, i.e. So far as payment
goes, let Eeese give it to us.'

3.1.2.9. The Post-clitic -hoko 'manner'
The post-clitic which is realized as -hoko after consomants, -sake after diphthongs ending in i and -toke after other vowels, occurs with secondary verb stems and some other stems to form manner-specifying adverbs. Adjective stems occur both with and without this clitic with no apparent difference of meaning:
eksa haco isathatek. eksa hanco-toko isatyh-ke.... 'leaves good they-
normally-cook-it. leaves good-manner havings-cooked-it-topic,
i.e. They cook greens well. And after they have cooked the greens
well....'
inoe-hoko loppok loppok wakekhe-take-nakeke. 'they-together--manner
orderly orderly they-normally-also-about-topic, i.e. They
normally come together in careful order, but at this time,'
...loppok-hoko se-'also' itakau-nakeke.... 'orderly--manner watch--
seeing-us subject-continue-about-adversative, i.e. They ought to have
waited for us carefully, but....'
This same clitic also occurs with pronouns and nouns to emphasize contrast between participants:
...hit-hoko hitall'i'ma walep....an-hoko nall'war-e nexti-e-o.
'you(pl)-contrast your(pl)-aimmore-setting you(pl)-kill-
hypothetical...In-contrast my-alone-more-setting--also singular-
subject-will-eat-it-decisive, i.e. about you (I wish that) you
would kill (your festive pig) by yourselves...as for me, I'm going
to eat (the feast) by myself, too (i.e. at a separate time).'
3.1.2.10. The Post-clitic -mekke

The post-clitic -mekke is one of the most widely distributed relators in the language, and occurs in a number of senses. These senses concerned with relationships between clauses will be treated in Chapter 5.

The relator also occurs in several senses in substantive expressions:

1. Post-cliticised to a noun or noun or pronoun, it often means that the referent of that term is the owner, in some sense, of the item that usually precedes but may follow the term to which -mekke is cliticised:

   ...vkkvlswu alee'-mekke... 'his headnet Alee--', i.e. Alee's headnet';
   ...vkkynhrstuk- mekke am... 'Kumkheartk- --'s pig'.

2. Post-cliticised to names, pronouns or other substantive expressions referring to persons, this clitic also occurs to specify that someone else is a member of the social group, such as a moiety or clan, to which the person or persons referred to in the -mekke expression belong:

   ...n ay nittmekke... 'man that uh--sp?r, i.e. That man belongs to our group (clan, moiety, etc.).'

3. Post-cliticised to expressions of location, origin, size or quality, the clitic -mekke specifies that the class characterized by the preceding term includes the item under discussion; the construction with -mekke may be attributable to another substantive or may itself function as a substantive:

   akko pte jakatatse-mekke... 'his pig-two Jakarta--sort, i.e. M's two pigs from Jakarta';
   ...han jy-mekke... 'close-by this--sort, i.e. (people) of the close by group';
   nakln jy-te alve-mekke. 'my husband this--topic nature--sort, i.e. My husband here is an old man.'
   sukken-opa-mekke 'sacred-stones--one--sort, i.e. the (pigs) which are "on" (i.e. consecrated for) the sacred stones'.

4. The post-clitic -mekke may occur to specify that the item under discussion is of the material or substance referred to in the term to which -mekke is cliticised:

   htk-ekek je-mekke 'sacred-power--seed wealth-stone--sort, i.e. a sacred object made from a wealth stone';
   vyhlwam am ake-mekke lakasikha. 'pandanaus pig (ts-tal)--sort it- went-up-long-age, i.e. Pandanaus, that's a pig's tail that went up (into the forest).'

5. Post-cliticised to substantive expressions -mekke may occur to contrast participants (compare -hoke above):
at-mekke kalatek a'moko ki akãkkolet-he, an-mekke wekatek waky.
'I contrast toward that-mekka— to— he enter,
I—contrast downward I— come, i.e. while HE was coming in that way,
I came down.

(6) Although no examples occur in the filed corpus, -mekke also occurs to specify that the referent of the term to which it is cliticised is or was in fact the real item for which something else was mistaken or substituted. This adversative sense, related to sense (5) above, is also related to an important sense of -mekke as a marker of inter-clause relationships; this will be treated in Chapter 5.

an-mekke-at-he, ukúmbheuky ake. 'If— adversative— predicate— topic,
ukúmbheuky they— said, i.e. it was really me, but they said it was
ukúmbheuky.'

wan-mekke sve ekatek. 'pig— adversative bird they— normally— say,
i.e. They are really pigs, but they say they are birds.'

3.2 CASE RELATIONS MARKED IN POST-POSITIONS AND VERBS

It has been noted that all the post-posed relatives with locative reference are ambiguous; depending on the context they may refer to position in a location or to motion toward or to the location. The ambiguous category may be labelled 'locative', and the specific included senses 'locus', referring to location in a position, and 'target', referring to orientation toward or to a position. These relations are also marked by some verbs, and the roles marked by post-posed relatives may be identified with those marked by verbs, to be described below.

It has also been noted that the post-clitic 'en', 'en 'source' refers both to movement from a location, when post-cliticised to terms of location, and to agency with substantive expressions referring to the agent of transitive verbs. The identification of these relations is more problematic, however, although the gloss 'source' has been suggested for the common feature of these meanings. It would be possible to postulate a 'source' or 'ablative' role with specific subclasses 'place from which' and 'agent', but that would suggest that the 'agent' role is oblique, when in fact the 'agent' role is clearly opposed to all other roles occurring with events and is normally realised by the grammatical subject of the verb. As will be noted, if any occupant of the 'agent' role occurs, that occupant will be realised as subject. The identification of the senses of 'en, 'en marking 'place from which' and 'agent' as subclasses of a single role is therefore rejected, although the semantic relationship is clear.

Of the post-posed relatives which are not spatially defined, the
particle he sk 'for, because of' marks some relations which are also marked by verbs and auxiliaries. The sense 'for the benefit of', frequently observed with this particle may be identified with the 'beneficiary' role also marked by verbs and auxiliary verbs.

3.3. CASE RELATIONSHIPS MARKED IN VERBS

3.1.1. Survey of Verb Classes

Case and role relationships marked by postposed relators have been treated together, since a number of these relationships occur with several classes of verbs. The remaining semantic relationships of participants to events are most easily described in terms of the events and the verbs realizing them. Both on a gross scale, in terms of large classes of verbs, and on a fine scale, in terms of specific lexical verbs, there are contrastive possibilities for 'case' relationships (cf. Wilmore 1960b). Transitive verbs, for example, occur with objects realizing roles in a pattern different from and larger than the pattern observed with intransitive verbs. In Dani, however, the grossest classification of primary verbs (i.e. verb stems which may be directly inflected as verbs) is not into transitives and intransitives, but rather into a very large major class of 'process' verbs and a small closed minor class of other primary verbs. This distinction was already introduced in Chapter 2 in terms of the phonological shape of the verb roots involved; in a very high percentage of cases, but not all, the roots of major class verbs end in a consonant, and the roots of minor class verbs end in a vowel. This correlation is not, of course, complete. The label 'process verbs' suggests that members of the class share a semantic component 'process', referring to what is conceived to be directed toward a change of state in the patient, often realized as a direct object. Minor class verbs refer to events not including this component of 'process'. This contrast is reflected in contrastive possibilities of inflection and occurrence. A minor class verb occurs with the auxiliary verb -laa', -la': 'owe a process', nor with any of the four auxiliaries to be described as specifying contrastive relationship with personal objects. Nor does any minor class verb occur inflected in an -er past participle in a sense that might be glossed 'processed in the way specified', nor in an -es manner participle in a sense that might be glossed 'processing the patient in the way specified', as most such participles may be glossed. All of these possibilities are open for most major class verbs. It is useful, then, to begin with verbs with the largest array of role possibilities, the major class verbs, and of these the transitive major class verbs. For
reasons which will become apparent in the course of the study, two minor class verbs which also function as auxiliaries, three other auxiliaries and some secondary verb atoms are also included in the discussion in this section.

3.3.2. Case Relationships Marked in Verbs: Major Class Transitives

3.3.2.1. Word Order as a Marker of Case

So far as substantives referring to the major personal participants in an event are concerned, it is clear that the unmarked word order in Lower Grand Valley Dini is subject, direct object, indirect object, verb, where the subject occupies an 'agent' role, the direct object a 'patient' role, and the indirect object a role such as 'beneficiary', and where the subject and one other personal participant, functioning either as direct or indirect object, are commonly also referred to in affixes to the verb with its auxiliaries. Where this order of external substantives occurs, the substantive referring to the subject realizing the role 'agent' is frequently not otherwise marked; external substantives referring to objects are regularly not otherwise marked:

...Jaukaleke he ythe... 'Jaukaleke woman he-nested-her,

I.e. Jaukaleke gave a woman in marriage.'

...ap kwir-esi wanxatak. 'man white he-son-...his-feathers they-normally-

have, i.e. Men got white hison feathers.'

epa na'lok-ak jy wak-o-th-o. 'itself my-man's-daughter--one this

take--I-transferred-it-to-her--decisive, i.e. I gave the (bird)

itself to this daughter of mine.'

In the above examples, as in most cases, features of verb agreement and the semantic components of the terms further serve to mark relationships. In the first example above, both speaker and addressee know Jaukaleke to be a leading man and know that men give women in marriage, not vice versa, and these semantic and cultural facts serve to reinforce the word order marking the sentence as a subject-object-verb construction.

When for purposes of topicalization the unmarked order of elements is altered, the subject realizing an 'agent' role frequently remains unmarked if the semantic features of the terms allow for little ambiguity:

...was at na'k-avg... 'pig he let-me-eat-it--having said,

i.e. as for pork, he's preparing to eat (the feast).'

Here the likelihood of pigs eating man is remote (although one example occurs in the field corpus), and the context removes any possibility of that interpretation, so the subject remains unmarked. But where the unmarked order of participants is altered and/or there is any ambiguity
sensed by the speaker, the subject may be marked by the relator -ee.

...vikk-qa-kke wa-en na:ikhe-kke.... 'his head-on-him direction pig-by he-at-long-ago--direction, i.e. on his head, where the pig had eaten (his flesh)...'

Here the noun was 'pig' is marked as referring to the subject (also marked in the verb) by the clitic -ee 'source', so that the uncommon event of a pig eating a person may be unambiguously understood as intended by the speaker.

3.3.2.2. Case Relations Marked by Direct Affixation to Verbs: Subjects

3.3.2.2.1. Subject as Agent

Every finite verb in Dani has a subject implicit or explicit, and in most cases, as already described in Chapter 2, the number and/or person of the subject is marked in a suffix to the verb. Further attention will be turned to the roles occupied by the subjects of minor class verbs, but it is important to note that with major class verbs, there is a simple rule for realization as subject. If there is an occupant of an agent role with an event, whether that occupant is referred to in a verbal affix or external substantive or is implicit in the verb, the occupant of that role is realized as subject, whether or not the same participant also occupies some other role with the same event:

an wath. 'I killed-him, i.e. 'killed him,' Also:

wath. 'I killed-him, i.e. I killed him.'

Here the speaker as agent is realized as subject, marked in the first person singular subject marker -e suffixed to the verb and, optionally, in the independent pronoun as 'I'.

an wayky. 'I hurt-myself' (one sense of this form),

i.e. I hurt myself.' Also:

wayky. 'I hurt-myself.'

In this reflexive form, to be discussed further, the speaker occupies both 'agent' and 'patient' roles and is realized as subject, marked in the first person singular subject marker -y suffixed to the verb and, optionally, in the independent external pronoun as 'I'.

3.3.2.2.2. Subject as Patient

If there is no agent role with an event, the occupant of the patient role is realized as subject of the verb:

o pale. 'mother is severed, i.e. The mother cleared.'
an wa'-lak. 'I die=wat= 'hit, kill'?--i-smurred, i.e. I died
(or fainted).' Also:
wa'-lak. 'die--i-smurred, i.e. I died (or fainted).'
In the first example a 'waereker' is patient in the event and is subject,
as marked in the *e* third person singular subject marker suffixed to
the verb. In the second and third examples, the speaker is patient
and is realized as subject, as marked in the first person singular
subject marker *w* suffixed to the auxiliary verb.\footnote{3.3.2.3. Case Relations Marked by Direct Affixation to Verbs: Objects
Verbs may be marked for objects as well as subjects, but here a
clear distinction is made between human (or in some cases animate)
objects and non-human (or inanimate) objects. All transitive verbs
have an object, implicit or explicit, but only human (or in some cases
animate) objects may be marked in affixes to verbs. These overtly
marked objects may thus be referred to as 'personal objects', and they
may be either direct or indirect objects. Indeed, the marking of these
objects is determined not primarily by the contrast between direct and
indirect object categories but rather first by the contrast between
personal and non-personal object categories, and then further, in the
case of personal objects, but contrastive semantic relationships,
including case relationships, between the verb and the personal object,
whether direct or indirect. These major contrasts, excluding the case
categories, are represented in Figure 2, where the horizontal line
marks the first contrast in Dani, but the vertical line the first
contrast in English.

\begin{figure}
\centering
\begin{tabular}{|c|c|}
\hline
Types of Objects of Verbs & \\
\hline
Personal direct & Personal indirect \\
\hline
Non-personal direct & \textit{xx} \\
\hline
\end{tabular}
\caption{Types of Objects of Verbs}
\end{figure}

Dani overtly contrasts five sets of semantic relationships between
verbs and personal objects marked in affixes to verbs. Any of these
five sets of relationships may include personal objects as either direct
or indirect objects. Only direct personal objects are marked in the
prefixes which may be directly attached to the stem of the verb \textit{wat=}
'hit, kill', and this is the only major class verb which occurs with
such directly attached object-marking prefixes. Two minor class verbs,
hae 'perspective' and hei= 'put' also occur with personal objects marked by direct affixation to the primary verb stem. Otherwise, overtly marked personal objects occur only with major class verbs and some secondary verbs but are marked in prefixes to post-criticised auxiliary verbs, which specify the semantic relationship of the main verb to the personal object. There are four of these auxiliaries, one identical to the primary verb hae = 'perspective', one identical to the primary verb hei = 'put', and two which occur only as auxiliaries, -et marking dative relationships, and -ap marking generalised personal objective relationships. These auxiliaries do not function like the auxiliaries in familiar Indo-European languages to mark such categories as tense or mode, but rather to mark semantic relationships of verbs and personal objects, including case relationships which are often marked in other languages by prepositions or case endings. Like those other means of marking such relationships, all four auxiliaries do not occur with every major class verb. Rather it must be specified for each verb in the lexicon which auxiliaries may occur and what the resultant meaning of each combination is, for while general areas of meaning can be assigned to the auxiliaries as such, specific meanings and senses vary in combination with different verbs.

3.3.2.3.1. Personal Object as Patient: The verb wat= 'hit, kill'

The verb wat= 'hit, kill' is unique in several respects, including the fact noted above that only this verb of all major class verbs occurs with personal objects marked in prefixes directly attached to the verb. The paradigm of this verb in the simple factive category is displayed in Table 5. The notes to that table point out some of the morphological facts that are relevant. It should be noted that the object markers are overt only in first and second persons and plural number: =p first person; =t second person; =pl plural, where the plural marker occurs suffixed to the overt person marker, if any, or if none, initially, and the whole person and number marking unit occurs replacing the initial w of the verb root wat. By this analysis the category 'third person singular object' is implicit in the root of this verb and every transitive verb (cf. Aschmann and Wonderly 1952:144-149). Also, as with three of the four auxiliaries and minor class verbs which occur with personal object prefixes, the unmarked third person singular category may refer to an object which is human, non-human but animate, or inanimate:

ap wat=he. 'man 3s-killed-3s, i.e. He killed a man.'
was wat=he. 'pig 3s-killed-3s, i.e. He killed a pig.'
sall'ip wat=he. 'stopper 3s-applied-3s, i.e. He put the stopper in.'
### TABLE 5
PERSONAL OBJECT PREFIXES WITH THE VERB **wet = 'hit, kill'** IN THE SIMPLE PACTIVE CATEGORY

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>ME</th>
<th>US</th>
<th>YOWSG</th>
<th>YOWFL</th>
<th>SIMH/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>xx*</td>
<td>xx</td>
<td>hathi</td>
<td>hinhath</td>
<td>wathi</td>
<td>inathi</td>
</tr>
<tr>
<td>NP</td>
<td>xx</td>
<td>xx</td>
<td>hathu</td>
<td>hinhathu</td>
<td>wathu</td>
<td>inathu</td>
</tr>
<tr>
<td>YOWSG</td>
<td>nathin</td>
<td>nathin</td>
<td>xx</td>
<td>xx</td>
<td>wathin</td>
<td>inathin</td>
</tr>
<tr>
<td>YOWFL</td>
<td>nathip</td>
<td>nathip</td>
<td>xx</td>
<td>xx</td>
<td>wathip</td>
<td>inathip</td>
</tr>
<tr>
<td>SHE/SHE/IT</td>
<td>natho</td>
<td>natho</td>
<td>hatho</td>
<td>hinhatho</td>
<td>watho</td>
<td>inatho</td>
</tr>
<tr>
<td>THEY</td>
<td>natho</td>
<td>natho</td>
<td>hatho</td>
<td>hinhatho</td>
<td>watho</td>
<td>inatho</td>
</tr>
</tbody>
</table>

*verbs with personal objects with reference identical to or including or included in the range of reference of the subject are inflected in distinct reflexive voice forms.

**NOTES ON MORPHOLOGY:**

Stem: **wet**, **wet**, the latter occurring with personal object prefixes. Where no prefix occurs, a third person singular object 'he, her, it' is implicit.

Personal Object Prefixes: = 'first person'; = 'second person'; (=) = 'plural of personal object'. The plural marker occurs suffixed to the person marker, if any, or otherwise initially, and any person and/or number marking prefix occurs with the bound root allomorph.

Mode Suffix: = 'pactive'.

Subject Marking Suffixes: = 'first person singular'; = 'first person plural'; = 'second person singular'; = 'second person plural'; = 'third person singular'; = 'third person plural'. The second person suffixes may be segmented; see note 15, p.71-73.
In the close pluses of these examples, category symbols have been deliberately substituted for the pronouns used in most cases, as a reminder that there is no contrast of gender in these affixes. The objects in these examples and all objects referred to in the person and number marking prefixes directly attached to this verb are direct objects occupying a 'patient' role. This patient role is thus interpreted to be the same for both personal and non-personal objects.

While wata- 'his, kill' is the only major class verb which occurs with directly attached prefixes marking personal objects, this pattern of prefixation is not the only pattern of reference to personal objects occurring with this verb. It shares with many other major class verbs the possibility of referring to other contrastive relationships with personal objects by means of periphrastic constructions with any one of four auxiliary verbs. The constructions with these auxiliary verbs modify the major class verb in three ways.

1. They permit affixed marking of a personal object in marked person and number categories, i.e. first and second person and plural number, where otherwise major class verbs other than wata- 'his, kill' are not marked for personal objects.

2. They modify and enlarge the selection of roles available for occupancy by a personal object.

3. As if forming a compound verb, they add a semantic component to the verb which characterizes the total event in its relationships to the participants involved. Since two of the auxiliary verbs employed also occur as minor class primary verbs in related senses, it is useful to treat the minor class verb first in each case, followed by its use as an auxiliary.

3.3.2.3.2. The Verb of Deposition, hei- 'pour'

The verb hei- 'pour' occurs with directly affixed markers of personal object categories in a pattern unique to this verb. The paradigm of this verb in the simple factive category is presented in Table 4. The alternative forms with first person objects reflect a reinterpretation of what, according to evidence from other dialects, were the older forms, and the creation by analogic change of new forms patterned after other constructions with person-marking prefixes. The marker of second person in the older paradigm is -e#, occurring, uniquely, prefixed between the initial h= of the verb root and a vowel which may be interpreted as part of root allomorphs. The marker of first person, in the older forms, is -e#, suffixed to the h= allomorph representing the verb root. The marker of plural of first and second persons in this older paradigm is -i#, uniquely prefixed to the person markers.
<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>EUR</th>
<th>US</th>
<th>TOV(SG)</th>
<th>TOV(PL)</th>
<th>RIN/HER/IT</th>
<th>THEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>xx*</td>
<td>xx</td>
<td>hakaky</td>
<td>hinakaky</td>
<td>hyky</td>
<td>hisky</td>
</tr>
<tr>
<td>WE</td>
<td>xx</td>
<td>xx</td>
<td>hakoko</td>
<td>hinakoko</td>
<td>hoko</td>
<td>hisoko</td>
</tr>
<tr>
<td>TOV(SG)</td>
<td>hahlin, nakeken</td>
<td>hahlin, nakeken</td>
<td>xx</td>
<td>xx</td>
<td>heken</td>
<td>hiseken</td>
</tr>
<tr>
<td>TOV(PL)</td>
<td>hahlin, nakeken</td>
<td>hahlin, nakeken</td>
<td>xx</td>
<td>xx</td>
<td>heken</td>
<td>hiseken</td>
</tr>
<tr>
<td>RE/SHE/IT</td>
<td>hahshe, nakekhe</td>
<td>hahshe, nakekhe</td>
<td>hakekhe</td>
<td>hinakakekhe</td>
<td>helke</td>
<td>hisikhe</td>
</tr>
<tr>
<td>THEY</td>
<td>hahshe, nakeka</td>
<td>hahshe, nakeka</td>
<td>hakeka</td>
<td>hinakakeka</td>
<td>heka</td>
<td>hiseka</td>
</tr>
</tbody>
</table>

*Reflexive forms are distinctively inflected; see text and also note on Table 5.

NOTES ON MORPHOLOGY:

- Stem (older form) = h before object markers with final n; hi= if no object marker; h...v elsewhere.
- y here = y before ky; o before ko; i after ic before kha; e elsewhere before khe; e elsewhere. If no object marker occurs, 3s object is implicit.
- Stem (newer form): third person object forms as above; elsewhere, -he= before kha, -he elsewhere.
- Personal Object Affixes: (old) -he = 'first person'; -he= = 'second person'; -he= = 'plural of first, second person'; -is= = 'plural of third person' (person category implicit). Plural markers are prefixed to person markers, if any, and any person and/or number marking affix occurs following the initial h of the root.
- New Object Affixes: -he= 'first person'; -he= 'second person'; -is= = 'plural of first, second person', suffixed to the person marker; first or second person marker plus plural marker, if any, occur prefixed to =is= stem formative with marked personal object categories (first or second person), and this unit occurs prefixed to the stem; -is= = 'plural of third person' as in old paradigm.

Mode Suffix: -h after consonants, -he elsewhere 'factive'.

Subject Markers: See note 15, p.71-73.
But by reinterpretation and analogic change, the initial -h- in the second person forms is treated as the marker of second person, followed by the pluraliser -m- where it occurs, and the initial -e- of the newer forms similarly marks first person object, also followed by the pluraliser -m- where it occurs. In this paradigm, the verb root in first and second person forms may be interpreted to be -a^k-', where the quality of the final vowel is determined by the environment, or the root may be interpreted to be just -k-', remembering that k and s are reflexes of the same proto-Dani phoneme, and the initial -a-, following the object person and number markers, be interpreted to be a marker of the presence of a prefixed personal object of first or second person, analogous to the e occurring with possessive prefixes with nouns which are not obligatorily possessed:

su 'net';
asu 'his, her net';
masu 'my net';
basu 'our(sg) net'.

The third person plural object forms are best interpreted as consisting of -i- as a marker of 'plural of third person' infixed in the verb root consisting of the initial h and a following vowel. The third person singular object category is implicit in the verb root when no other object marker occurs, and may refer to a human, non-human but animate or inanimate object.

The personal object of this verb may be either direct or indirect; when direct, the object may be considered to occupy a patient role, and when indirect, to occupy a beneficiary role:

hat jowa hakako... 'you(sg) here we-placed-you(sg), i.e. we have stationed you here.'
...esi henoke hakako... 'i.e.-feathers pulling-out we-put-for-you(sg),
i.e. We have saved its feathers for you.'

In the first example the personal object is direct, and in the second example it is indirect, but it is important to note that the verb form is identical in the two cases.

3.3.2.3.3. The Auxiliary of Deposition, -hei-

An auxiliary verb which, with minor exceptions to be noted, is identical to the primary verb -hei- 'pue' occurs with a number of major class and secondary verb stems in several senses, all of which include a component of deposition or 'putting'.

(1) With secondary verb stems referring to direction and distance, the auxiliary -hei- occurs in constructions meaning to send or propel
a person or thing in the direction or over distance as specified. These secondary verb stems are in effect attributive stems to the verb hei- 'put' in this construction, although formally -hei here fulfills the definition adopted for an auxiliary. The semantic relationships with personal objects are the same as those noted for the primary verb hei- 'put'. These secondary verb stems include:

- iyak- 'upwards'
- pelak-, also wulak- 'downward';
- wulak- 'outward';
- kelak- also melak- 'imward';
- wellak- 'across a stream';
- hak- 'over a distance'.

In the same pattern observed for the primary verb hei- 'put', first or second person or plural personal objects are marked in affixes to the auxiliary, whether the person or persons referred to are direct objects, occupying a patient role, or indirect objects, occupying a beneficiary role:

- svp'iyak kelak- 'nakekhe, 'sweet potatoes toward-he-put-for-me, i.e. he sent sweet potatoes into (the house) for me.'
- snepu a'la kelak- 'nakekhe, 'airplane (one of its noises), 'pu [ku] 'noon') inside-it toward-he-put-me, i.e. he put me into the airplane.'

In the first example the personal object is indirect, occupying a beneficiary role, and in the second example the personal object is direct, occupying a patient role, but the verb forms are identical.

(2) With a number of major class verb stems, the auxiliary -hei- occurs in constructions referring to the performing of an event in such a way that something is considered to be 'deposited' in some sense. Thus this auxiliary adds a semantic component of 'putting' to the meaning of the verb unit and also specifies role relationships with participants in the event. In observed cases with major class verbs where a personal object occurs marked in a prefix to this auxiliary, the personal object is indirect and occupies a role as beneficiary in any of several senses. The resulting verb with the auxiliary might often be loosely glossed 'do it and leave or deposit the product for the personal object.' Where the direct object occupying the patient role is a product of the event and is left at a distance from the beneficiary, this is the verb construction commonly employed:

- hakki jukal-hanhe, 'because change-colour—he-put-for-me, i.e. he put some bananas away to ripen for me.'
- eka lipat-hanhe, 'leaves rip—he-put-for-me, i.e. he ripped out some weeds for me.'
su hikkal-hanse, *sett untle-ke-put-for-me, i.e. He smirched a
net for me."
hettoo nokkal-hanse, *fire kindle-ke-put-for-me, i.e. He lit a
fire for me."
poke hipl-hanse, *hole dig-ke-put-for-me, i.e. He dug a hole for
me."
su kall-hanse, *net hang-ke-put-for-me, i.e. He hung a net up for
me."
holy wok-hanse, *firewood chop-ke-put-for-me, i.e. He chopped some
firewood for me."

The factor of distance from the beneficiary is not, however, a
critical element. The product may be deposited directly on the
beneficiary's body. Here however, the meaning overlaps with the
meaning of the construction with the locative auxiliary to be described,
and in a number of cases both constructions occur with reference to the
same kind of event, as will be noted. The construction with -hel
emphasizes the 'depositional' character of the event and is preferred,
e.g., for reference to application of pigment:

wekki wat-hanse, *charcoal strike-ke-put-for-me, i.e. He put
charcoal pigment on me (for me)."

i kezal-hanse, *water pour-out-ke-put-for-me, i.e. He poured water
over me (for me)."

nei-eken hekken-hanse, *my-eye-open-tm my-eye open-ke-put-for-me,
i.e. He opened my eyes for me (as when the lid is exerted shut
with mucous matter)."

holin y'nekelhe, (yek* make net; don apparel') *phalacrocyt don-
ke-put-for-me, i.e. He put a guard on me (for me)."

In some examples something is removed from the beneficiary, so that it
appears to be a part of the beneficiary that is 'deposited' or left as
affected. In all such examples, the same event may be referred to
with the 'locative' auxiliary to be described:

nak tale-nekelhe, *my-mouth dig-out-ke-put-for-me, i.e. He dug
something out of my mouth for me."

In some examples the event is psychologically; the verb in the follow-
ing example also occurs with the 'locative' auxiliary in a similar
sense:
epa'-nekelhe, *think-ke-put-for-me, i.e. He reminded me."

(3) The component of 'putting' or deposition frequently is associated
with a completive sense. Constructions with the auxiliary -hel
frequently occur in discourse as recapitulations of the preceding event,
marking it as completed before the next event begins. This is only one
of several devices so employed, but highlights the completive sense
sometimes signalled by this construction:

*wtana-se me wathetek. me wathelhetsa-tse-wa ta phethak.

*‘pandane-topic pandane-flowers is-normally-bears (idiomatic sense of wat, only with pandane flowers). pandane-flowers bear-is-normally.put-prior-topic, is-self it-normally-bears, i.e. As for pandane, it bears flowers. After it finishes bearing the flowers, it bears fruit.’

...hymeken wathaku. wath-hylek-tse sekelokwa nasuku. ‘three we-killed-him-long-ago. kill-pushing-topic cutting-up-now we-ate-it-long-ago, i.e. We killed three, after we had killed them (left them dead) we cut them up and ate them.’

(4) With the deplasional auxiliary -heli more than with any of the other auxiliaries to be described, there are a number of special allomorphs that occur in particular constructions or with particular senses. The following treatment is illustrative, not exhaustive.

(a) The secondary verb root hep ‘spare, leave out, neglect’ occurs only with special allomorphs based on the forms of the older paradigm of -heli, but with no initial h. The person or persons referred to in the object-marking prefix may be occupying a patient role as a direct object or a benefactive role as an indirect object:

\[
\text{an hep-anhe. ‘he spare-he-put-me, i.e. He spared me (and did not kill me when he might have).’}
\]

\[
\text{was hep-anhe, ‘my neglect-he-put-for-me, i.e. He neglected to designate a pig for me.’}
\]

(b) A verb root war- historically related to the major class primary verb wae- ‘hit, kill’, occurs with the auxiliary -heli in a special sense connoting humiliating punishment or defeat:

\[
\text{was-hakay. ‘defeat—i-looked-down, i.e. I have roundly trounced you (said to the leader of a defeated group, or to an individual punished by beating or wounding).’}
\]

(c) With the roots hep and war and many other verb roots, the form of the auxiliary -heli marked for third person plural object reference occurs either as listed in Table 6, p.102, or in shortened forms minus the initial syllable h-, with no apparent reference to plural benefactaries or personal patients but rather with direct objects which are often inanimate but are treated with a connotation of carelessness or negative evaluation:13

\[
\text{hep-san. Also: hep-sane. ‘Discard it,’ or ‘Forget about it.’}
\]

\[
\text{Contrast:}
\]

\[
\text{hep-sen. ‘Spare him,’ or ‘Leave it alone.’}
\]

\[
\text{war-hise. Also: war-sen. ‘Beat him, her, them up,’ or ‘Punish him, her, them.’14}
\]
henet-hisan. 'pull-out--put-it-for-them, i.e. Pull it out for them,' or 'Sank it out."

Compare the form with the contracted auxiliary:

henet-san. 'pull-out--put-it-carelessly, i.e. Sank it out.'
tot-hisan. 'wipe--put-it-for-them, i.e. Wipe it off for them,' or 'Sub it out.'

Compare the form with the contracted auxiliary:

tot-san. 'wipe--put-it-carelessly, i.e. Sub it out (it's worthless).'

3.3.2.3.4. The verb of perception, hea 'perceive, see'

The third of the three primary verbs occurring with directly affixed markers of personal object categories is hea 'perceive, see'. The paradigm of this verb in the simple factitive category is displayed in Table 7. Here again the marker of first person objects is ae, of second person objects ha, and the marker of plural with personal objects, in all persons, is (+)iae, which is suffixed to the person marker, if any, or if none, occurs initially. Here there is also an empty morph consisting of a vowel occurring following the person marking prefixes when no plural marker occurs; the quality of the vowel is determined by the following vowel, as noted in Table 7. With this verb, as with kea 'hit, kill' and hea 'put' the verb stem without object-marking prefixes is interpreted to include implicit reference to a third person singular object, which may be human, non-human but animate, or inanimate. As a primary verb, this verb occurs only with direct objects; these are not, however, interpreted to occupy a 'patient' role, for neither the state nor the position of the object is changed. Rather, for reasons that will become more apparent, it is suggested that the objects of the verb hea 'perceive' occupy a role which may be narrowly labelled 'target', which is one sense or sub-role of a larger set of sub-roles with the general label 'locative'. The persons referred to in the personal object marking prefixes occupy this role, as do third person singular objects, including inanimate objects, occurring with the forms of the verb with no object-marking prefixes:

\[\text{seeken-e? you(ego)-see-me--invitation-query, i.e. Did you see me?}\]

\[\text{byky. 'I saw him, her, it.'}\]
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<th>S</th>
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<th>YOU(PL)</th>
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<td>heeka</td>
<td>iseka</td>
<td>heka</td>
<td>iseka</td>
</tr>
</tbody>
</table>

Notes on morphology:
- Stem: hy if no object marker; s= elsewhere; V = γ before ky; e before ke; i after iC before ke; e elsewhere. The basic root of this verb in many categories is ha-. If no object marker occurs, a third person singular object is implicit.
- Personal object prefixes: m= 'first person'; h= 'second person'; =V stem formative with first, second person where no plural marker occurs, where V = γ before γ; e elsewhere; (=V)= 'plural of person'. The first or second person stem formative or the 'plural of person' marker occurs suffixed to any first or second person marker or, if none, the 'plural of person' marker occurs initially. Any person and/or number marking unit occurs prefixed to the bound allomorph of the root.
- Subject marking suffixes: 'γ 'first singular'; e= 'first plural'; 'en 'second singular'; 'ep 'second plural'; 'he 'third singular'; 'he 'third plural'. See note 15, p.71-73.
3.3.2.3.5. The locative Auxiliary +he

An auxiliary verb which is identical in form to the primary verb he- 'perceive' occurs with a number of secondary and major class primary verb stems in several senses.

(1) With secondary verb stems referring to direction and distance, the auxiliary +he occurs to refer to seeing in the direction or over the distance specified. These secondary verb stems are the same as those noted under sense (1) of the deontic auxiliary +he above.

Certain other secondary verb stems particularly related to watching, looking, examining and other events of visual perception also occur with the auxiliary +he. These include:

- **bhy- 'examining';**
- **set- 'writhe for, wait for';**

All of these constructions occur with direct objects occupying the 'target' sub-role of the locative role, as discussed above:

- **e11:9KK: kels-neelke. 'his-eye-seek=his-eye (ward)=he-see-me,**
  i.e. 'He looked in at me.'
- **hys-neen. 'exam(ine)-(you-agl)=see-me-saw,** i.e. 'Examine me.'

All of the secondary verb stems treated in this section (sense (1) of +he 'perceive') are semantically attributable to the verb +he, which is equivalent to the primary verb he- in these constructions, although formally this verb fulfills the definition of an auxiliary. The semantic relationships with personal objects are those noted for the primary verb he- 'perceive'.

(2) The secondary verb root sük- 'chase' and the secondary verbs of pointing weapons occur with the auxiliary +he. These stems include:

- **munut- 'threateningly point (or thrust without contact) a weapon,'**
- **fist or tool';**
- **papakat- 'threateningly pull a bow';**
- **piseit- 'discharges an arrow';**
- **tumut- 'threat with a spear'.**

The personal objects marked in the prefixes to the auxiliary are here interpreted to be direct objects occupying a 'target' role as suggested above for objects of he- 'perceive'. The weapon, if mentioned, may be interpreted to occupy an instrument role:

- **tok piseit-neelke. 'arrow shoot=he-did-at-me,** i.e. 'He shot at me with an arrow.'
- **seke tumu-neelke. 'spear thrust=he-did-at-me,** i.e. 'He thrust at me with a spear.'
- **mu-missikhe. 'chase-out=he-did-at-us-long-ago,** i.e. 'He chased us out.'
(3) With a number of major class verb stems, the auxiliary "he" occurs with prefixes marking personal objects to refer to the person on or near whose body surface an event occurs. It will be recalled that the post-positional relators referring to location are ambiguous and refer, depending on the context, both to 'place at or in which' and 'place to which'. It is suggested here that the auxiliary "he" may be interpreted to have a similar range of meanings. When this verb occurs as a primary verb meaning 'perceive' and as an auxiliary with senses related to perception and to the pointing of weapons and chasing, the object, whether personal or non-personal is the 'target' to which the event is directed. As an auxiliary with many major class verbs, "he" is part of a construction with two objects, one direct, occupying a 'patient' role, and one indirect and personal, occupying a locative role, specifying the 'locus' or place at which the event occurs. The sub-roles 'target' and 'locus' or 'place to which' and 'place at which' comprise the role labelled 'locative'. Examples of this construction include:

napa pa-neeikhe. "my-beard out(sae= 'esser')-he-did-on-me, i.e. He cut my beard (on and for me)."
neik tale-neeikhe. "my-tooth hollow-out(tale= 'hollow out')-he-did-on-me, i.e. He dug (something) out of my tooth."
ok ko-neeikhe, 'net take-off(ket= 'remove net')--he-did-on-me, i.e. He took my net off me.
ok kene-neeikhe. 'arrow pull-out(keaat=)-he-did-on-me, i.e. He pulled an arrow out of me.'
napy saka-neeikhe. 'my-louse crush(sakel=)-he-did-on-me, i.e. He crushed my louse.'
napy wa-neeikhe. 'my-louse kill(watu=)-he-did-on-me, i.e. He killed my louse.'
kasa-neeikhe. 'water pour-out(kesel=)-he-did-on-me, i.e. He poured water over me (in treating illness).'
neii-ekken hekke-neeikhe. 'my-eye-see(d=eye) open-(hekke=)-he-did-on-me, i.e. He opened my eyes (as when cemented with muov).'
nekkki sopaa-neeikhe. 'my-hand wash-psopel=)-he-did-on-me, i.e. He washed my hands.'
nel-ekken mule-neeikhe. 'my-eye-see(d=eye) muddy-(mule=)-he-did-on-me, i.e. He put mud into my eye.'
hesi juku-neeikhe. 'mud-fragment colour-change-(juku=)-he-did-on-me, i.e. He painted me with mud pigment.'
nome lapa-neeikhe. 'my-ears close-(lapet=)-he-did-on-me, i.e. He covered my ears (as with a leaf).'
There is one common example in which the event is located spatially but not on the body surface:

kwe hv'-niekehe. 'door open-(hv')--he-did-on-me, i.e. be opened the door for me.'

This example is most easily treated as an idiomatic extension of the person's presence to include the door in his immediate surroundings.

The event may be psychological or verbal:

etake ep'-niekehe. 'his-name think-(spet')--he-did-on-me, i.e. be reminded of his name.'

hinok wo'-niekehe. 'inquiring role-(wok-'= wakane)--he-did-at-me, i.e. be inquired (about something) from me.'

There are a few examples with major class and secondary verb stems in which the personal object is the only object and appears to occupy both the 'locus' locative role and the 'patient' role:

joky-niekehe. 'do-this-(joky')--he-did-on-me, i.e. he did this to me (implying an event on the body surface),'

hu'-niekehe. 'blow-(hot')--he-did-on-me, i.e. he blow on me (in treatment of pain or illness).'

In all of the examples with personal objects occupying a 'locus' locative role, the reader may suggest that the relationship is in every case also 'benefactive' to just as great an extent as the relationships described in terms of a 'beneficial' role with the auxiliary -he- above. This is indeed true, and it would be possible to postulate that each of the personal objects treated under this sense of the locative auxiliary -he- occupies an additional role, 'beneficial', as well as the 'locus' sense of the locative role. However, the locative relationship is criterial for the fundamental sense of these uses of the auxiliary -he-, and it appears unnecessary to multiply roles postulated or to complicate names for roles by labelling the relationship under discussion 'locative benefactive' as compared with the simple 'benefactive' or 'beneficial' label employed in relation to the depositional auxiliary -he-.

(a) The auxiliary -he- also occurs with a number of secondary verb stems and some major class verb stems without any reference to a personal object. In these cases it appears useful to interpret this direct non-personal object as occupying both the 'locus' variety of locative role and the 'patient' role. In many of these cases the resultant meaning is to activate the object or put it into motion, so that an inceptive sense is present: 16

wan sel'-han. 'pig flush-(sel')--do-it, i.e. flush the pig (out of the brush).'
a vat-han, 'tree strike--do-it, i.e. push the tree over.'
esse hyok-han, 'torch illumines' (hyok- 'shine', \textit{vt--transitiviser})
\textit{--do-it}, i.e. light a torch.
heki: langat-han, 'your(eg-)hand outstretches' (lang- 'spread', \textit{vt--transitiviser})--do-it, i.e. spread your arms.'

There are other related examples which, by virtue of the meaning of the verb root, refer to the restraining or ending of activity, but even here, the sense of the auxiliary seems to mark the initiation or activation of the process of restraint or termination:
sepet-han, 'hold down--sepet')--do-it, i.e. hold it down.'
haly sijok-han, 'firewood removes' (sijok- 'separate', \textit{vt--transitiviser})--do-it, i.e. spread the (burning) firewood (so as to cool the fire down).'

Inoko qop-han, 'their pigs castrate--qop-')--do-it, i.e. fettle their pigs off.'

3.2.3.6. The dative auxiliary \textit{-et}

Personal objects of verbs, including the majority of personal objects that would be glossed by English indirect objects, are also marked by personal and number prefixes to the dative auxiliary \textit{-et}, which does not occur as a primary verb. The paradigm of this auxiliary in the simple factitive category is displayed in Table 8. The markers of personal categories are \textit{et} 'first person' and \textit{et} 'second person'. The unmarked auxiliary root \textit{-et} is interpreted to include an implicit category 'third person singular personal object'. In this case, the third person singular category refers only to humans and animals, not to inanimate objects. The forms marking plural personal objects are not inflected forms of \textit{-et} but are rather identical with the analogous forms of the locative auxiliary \textit{-ha} as described above. Thus with plural personal objects, the contrast between the dative auxiliary and the locative auxiliary is neutralised.

The personal object marked in prefixes to the dative auxiliary are interpreted to occupy a 'recipient' role. In almost all examples either a process is performed on a direct object and the processed product is given to the recipient, or a verbal expression is directed toward, and believed to be heard by, the recipient.

In many examples, it is the direct object which is received:
avamoke pse-nethe, 'sweet-potatoes leaves out--pse')--he-transferred-to-me, i.e. He cut sweet potato leaves for me and gave them to me.'
ku ca-nethe, 'not mend-(kat-)-he-transferred-to-me, i.e. He mended the net for me and gave it to me.'
<table>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* 'It' here refers only to animals; inanimate objects do not occur with this auxiliary. ** Reflexive forms are distinctively inflected; see text and note in Table 5.

NOTES ON MORPHOLOGY:
- With Plural Personal Objects forms identical with the analogous forms of the locative auxiliary 'ha-' are used; see Table 7, p.108.
- Stem in forms with singular objects: 'et'. If no object marker occurs, the initial 'e' of the auxiliary is lost following a vowel-final verb root: jake 'self' = 'etbi' = 'joo-ethi' 'I told him.' Following a verb root with final ak, ak or ok, the third person singular object forms occur with an initial vowel of the quality of the final root vowel: wak 'snake, nun' = 'ethi = wak-ethi' 'I gave it to him.' Where no object marking prefix occurs, a third person singular human or animate object is implied. With the third person plural object marker, in normal rapid speech the auxiliary occurs following verb roots with final ak or ok in forms beginning 'eik': wak- + -isiky = wak-isyky 'I gave it to them.'
- Personal Object Prefixes: 'e' 'first person'; 'b' 'second person'; where no plural marker occurs, person markers are prefixed directly to the auxiliary; plural object forms are, as noted, identical with analogous forms of the locative auxiliary 'ha-' or ha-'perceptive'.

Node Suffix: 'w' after stem-final consonants; 'a' elsewhere, 'factive'.

Subject Marking Suffixes: 'y' after ak 'factive'; 'a' elsewhere, 'first singular'; 'o' after aw 'factive', 'a' elsewhere, second singular; 'a' after ak 'factive'; 'a' elsewhere, 'second plural'; 'a' after h, 'a' elsewhere 'third singular'; 'a' third plural.

See note 15, p.71-73.
su ko '-nethe. 'net doff-(hotel)-he-transferred-to-me, i.e. He took off (his) net and gave it to me.'
wam k' '-nethe. 'pork carve-(kite)-he-transferred-to-me, i.e. He cut a piece of pork and gave it to me.'
i hime'-nethe. 'water fill-vessel-(kitek)-he-transferred-to-me, i.e. He got me some water in a vessel and gave it to me.'
wam wa '-nethe. 'pig kill-(wet)-he-transferred-to-me, i.e. He killed a pig for me and gave it to me.'
su wa '-nethe. 'net take-(wok = wakan)-he-transferred-to-me, i.e. He gave me a net.'

This last example includes the regular expression for giving physically transferrable items when no other process is involved.
su y' '-nethe. 'net make-net-(yk)-he-transferred-to-me, i.e. He made a net for me and gave it to me.'
he y' '-nethe. 'human ceremonially-marry(idiomatic extension from 'make a net')-he-transferred-to-me, i.e. He gave me a wife (in ceremonial first marriage).'

In some examples the event is in two stages with a time interval between them, the transfer occurring at a later time than the process:
wam pa '-nethe. 'pig sewer-(pal)-he-transferred-to-me, i.e. He set a pig (from a litter) aside and gave it to me (even though I may not receive it immediately).'
wam ku '-nethe. 'pig foster-(kul)-he-transferred-to-me, i.e. He raised (my) pig for me and gave it to me.'

In some cases it is not the direct object which is received by the recipient, but rather the product or item processed by the action on the direct object:
eka pule '-nethe. 'leaf unwrap-(pule)-he-transferred-to-me, i.e. He took off the wrapper and gave (the unwrapped item) to me.'
wokkul to '-nethe. 'mud wipe-off-(tote)-he-transferred-to-me, i.e. He wiped off the mud and gave (the wiped object) to me.'

The recipient of a verbal message is marked as the personal object of most verbs of telling, teaching, confessing and rebuking by the occurrence of personal object prefixes with the dative auxiliary -et:
wee joko '-nethe. 'message tell-(joko)-he-transferred-to-me, i.e. He told me the message.'
atake jakku '-nethe. 'his-name teach/learn-(jakku)-he-transferred-to-me, i.e. He taught me his name.'
wam pukka '-nethe. 'pig expose-(pukkal)-he-transferred-to-me, i.e. He confessed (the matter of) the pig to me.'

There is one common verb of rebuking which takes only one object, the personal object occupying the recipient role. Thus, so far as
clause or surface structure is concerned, it is useful to consider the personal object to be the direct object, but it also appears useful to consider that object to occupy the recipient role. The verbal message which is transferred is implicit in the root:

\[ \text{an nema'nathe, 'no robuke-(wanake)--he transferred to me,} \]

\[ \text{i.e. he bowed me over.} \]

In the above illustrations of verbal events, the message transferred or the term referring to that message presents a problem in terms of the specification of the role occupied. This problem will be discussed further in connection with the minor class verb \( \text{is} \ '\text{aap}', \) below.

3.3.2.3.7. The Generalised Personal Object auxiliary \( \text{aap} \)

The last of the auxiliaries occurring with personal object prefixes is what is here labelled, for want of a better term, the generalised personal object auxiliary \( \text{aap} \). This auxiliary, like the passive auxiliary \( \text{aay} \), does not occur as a primary verb. The paradigm of \( \text{aap} \) in the simple factive category is presented in Table 9. The markers of person and number of personal objects with this auxiliary are those familiar already from their occurrence with \( \text{aay} \) 'bit, kill' as first person, second person, and \( \text{aaj} \) plural of person categories, this last marker occurring unfixed to the person marker, if any, or if none, initially; the whole person and number marking unit occurs prefixed to the auxiliary root \( \text{aap} \). This auxiliary does not occur in this dialect without a person and/or number marking prefix. That is to say that, unlike the other auxiliaries and primary verbs occurring with prefixes referring to personal objects, the auxiliary \( \text{aap} \) includes no implicit category of 'third person singular object' in the unmarked root. With a few secondary verb stems this lack is compensated for by the occurrence of the relatively uncommon auxiliary verb \( \text{aap} \) with implicit reference to a third person singular object. With major class primary verb stems, however, no such substitute auxiliary occurs, and the simple, directly inflected verb occurs ambiguously, referring either to the patient role elsewhere signalled by the simple form, or to the generalised personal objective relationship with patient role elsewhere signalled by the occurrence of \( \text{aap} \) in one sente.

The meaning of the relationship signalled by this auxiliary in its various senses is best approached inductively through examples. Some major class verbs occur with this auxiliary and an independent noun occupying the patient role. In these cases, the personal object marked in the prefix to the auxiliary occupies a beneficiary role. The event is not viewed as one of depositing something for the beneficiary, nor as an event located on his body, nor as an event of transfer of an object or message, but rather as an event in which the personal object
### Table V

**Personal Object Prefixes with the Generalised Personal Objective Auxiliary -ap**

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Reflexives are distinctively inflected; see text and note on Table 5.

*This auxiliary does not occur without a personal object prefix. Verbs with third person singular objects semantically related to the verb like objects marked in prefixes to this auxiliary in other persons or plural number occur with no auxiliary: wo-'napha 'We received me'; wamhe 'We received him' or 'We took it.' The sound stem wak- occurs with this auxiliary in the sense 'carry something for someone' with third person plural object markers for all third person objects: wak-inapha 'He carried it for him, them.' A few secondary verb roots occur with a substitute auxiliary -at- with implicit third person singular object reference: hokot-ate 'He praised him, her, its'; compare: hoko-'napha 'He praised me.'

**Notes on Morphology:**

- **Stem:** -ap-. There is no implicit object category with this auxiliary.

- **Personal Object Prefixes:** a = 'first person'; b = 'second person'; =pl = 'plural of person'; the plural marker occurs suffixed to the person marker, if any, or otherwise initially, and any person and/or number marker occurs prefixed to -ap.

- **Mode Suffix:** =m = 'factive'.

- **Subject Marking Suffixes:** i = 'first person singular'; m = 'first person plural'; m= = 'second person singular'; m= = 'second person plural'; m = 'third person singular'; m = 'third person plural'.

See note 15, p.71-73.
is, as a person, relieved, favoured or ceremonially benefitted. In
other words, the personal object is related to the event in some other
way than those specified by the depositional auxiliary -he-', the
locative auxiliary -he', thestatic auxiliary -st' or by direct pre-
fixation to the verb was 'hit, kill'.

nal soma'-naphé. 'my-façcas-(m) first person; façcas) disposed-
(somak') -he-did-for-me-as-person, i.e. He disposed of my façcas
for me (as a person of favour, i.e. for a stok person).

su-kkwe wo'-naphé. 'baggy pig take-(wak= waken) -he-did-for-me-
as-person, i.e. He carried the load for me (relieving me).

wakam wa'-naphé. 'funeral-pig kill-(wak) -he-did-for-me-as-person,
(i.e. He killed a funeral pig for me (read, e.g., by a ghost).'

sill mits'-naphé. 'grass-skirt assemble-(mitsak') -he-did-for-me-
as-person, i.e. He made a grass skirt for me (with emphasis on
the personal favour).'

svuukka keta-naphé. 'sweet-potato-leaves tie-up-(keta) -he-did-
for-me-as-person, i.e. He tied up the greens for me (for preparation
for cooking).

In many more examples, however, no noun referring to another patient
occurs, and the person referred to in the prefix to the auxiliary is
the direct object of the verb unit (including the primary verb and the
auxiliary) and occupies the patient role. This is the construction
used to refer to personal direct objects of most major class verbs.
When asked what things people steal, an informant listed sweet potatoes,
bananas, and item like nets, all with constructions including the
major class primary verb waken 'take, move', with no auxiliary. In
the same list he included women, but here the verb construction shifted
to the bound pre-auxiliary stem wok- of the verb waken 'take, move',
with the generalised personal objective auxiliary:

wak-inaphatek. 'take-(wak)-they-normally-do-to-them-as-persons,
1.e. They normally they take them."

This is the construction used to refer to life crises, like birth,
initiation, marriage and cremation:

josa ta'-nehukwa. 'here produce-(take) -they-did-to-me-as-
person-long-age, i.e. They (my parents) begat and bore me here.'

kw-naphé. 'foster-(kwe) -he-did-to-me-as-person, i.e. He raised me.'

y'-naphé. 'marry-(extension of meaning from yw 'make me') -he-
did-to-me-as-person, i.e. He married me,' or 'He gave me in
ceremonial marriage,' (where the subject may be either the
brother or the husband of the bride).

lei-naphé. 'burn-up-(lei) -he-did-to-me-as-person, i.e. He cremated
me (as said by a ghost)."
There are many other verbs occurring with this auxiliary:
je-napha, 'put-on-pole-(jet=)--they-did-to-me-as-person,
   i.e. They slung me on a pole (to carry me).'
ps-napha, 'seven-(pal=)--he-did-to-me-as-person, i.e. He cut me
   off (from my family), taking me as his wife.'

Sometimes a body part is affected, but this construction is used not
to emphasise the location of the event but only its personal effect:
naki saka-napha, 'my-hand arush-(sakal=)--he-did-to-me-as-person,
   i.e. He crushed my hand.'
naki homa-napha, 'my-hand tie-up-(homak=)--he-did-to-me-as-
   person, i.e. He tied up my hands, arrested me.'

In the above two examples the body part terms may be considered to
occupy the 'locus' locative role.

There are a number of idioms including verbs with the generalised
personal objective auxiliary in which a noun is a constituent with the
verb stem to form an idiomatic phrase unit which is in effect a single
verb. This noun is in such cases not considered to occupy a patient
role; the person referred to in the person-marking prefixes to the
auxiliary verb is considered to occupy the patient role, as in the
preceding examples:
hak wa-napha, 'happiness strike-(wat=)--he-did-to-me-as-person,
   i.e. He greeted me,' or 'He thanked me.'
wit pa-napha, 'ceremonial-initiation-term sever-(pal=)--he-did-to-
   me-as-person, i.e. He initiated me.'
netake sa-napha, 'my-name cover-(sal=)--he-did-to-me-as-person,
   i.e. He named me.'
jokal y-napha, 'married-woman's-skirt marry(extended from yk-
   'make net')--he-did-to-me-as-person, i.e. He married me
   ceremonially,' or 'He gave me in ceremonial marriage.'

This last example occurs either with or without the noun jokal 'married
woman's skirt' with no apparent difference in meaning. It appears clear
that the personal object marked in the prefix to the auxiliary is a
direct object, occupying a patient role, for if one asks concerning this
event, "What did he net?", he will often be corrected to ask "Whom did
he net?" or will receive an answer to the latter question as if that
had been asked.

There are also some problem examples, where there may be an idiomatic
noun-verb unit forming a phrase-verb, but the situation is not clear:
eil-ekken siki-napha, 'his-eye agent-(sikil=)--he-did-for-me-as-
   person, i.e. He squinted (toackets) me.'
hinek wa-napha, 'inquiry take-(wak= wakan=)--he-did-for(1)-me-as-
   person, i.e. He inquired about me.'
3.3.2.3.8. Summary of Personal Object Relationships

To review the constructions of verbs and auxiliary verbs with personal objects, Table 10 is provided.

<table>
<thead>
<tr>
<th>VERB</th>
<th>MEANING OF VERB, OR SEMANTIC COMPONENT</th>
<th>ROLES AVAILABLE TO PERSONAL OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>set=</td>
<td>'hit, kill (him)'</td>
<td>patient (direct object) beneficiary (indirect object)</td>
</tr>
<tr>
<td>hel=</td>
<td>'put'</td>
<td>patient (direct object) beneficiary (indirect object)</td>
</tr>
<tr>
<td>hel=</td>
<td>depositional auxiliary, something is deposited, either the person or something for him.</td>
<td>patient (direct object) beneficiary (indirect object)</td>
</tr>
<tr>
<td>hel=</td>
<td>'see'</td>
<td>target (direct object)</td>
</tr>
<tr>
<td>ha=</td>
<td>locative auxiliary, something (1) aimed at the person or (2) done on his body surface.</td>
<td>target (direct object) locus (indirect or direct object)</td>
</tr>
<tr>
<td>ha=</td>
<td>'give'</td>
<td>recipient (indirect or rarely direct object)</td>
</tr>
<tr>
<td>hel=</td>
<td>dative auxiliary, something is done for the personal object and the product given to him, or a verbal message is given him.</td>
<td>patient (direct object) beneficiary (indirect object)</td>
</tr>
<tr>
<td>hel=</td>
<td>generalised personal objective auxiliary, something is done for or to the personal object in a way not specified by other auxiliaries.</td>
<td>patient (direct object) beneficiary (indirect object)</td>
</tr>
</tbody>
</table>

Table 10 is arranged, as the discussion has been arranged, to suggest that the semantic component added by the auxiliary 'ap' is a generalised value including all personal object relationships not specified by the other auxiliaries. Among these are, as noted in the discussion, the nebulous relationships involved in ceremonial treatment and other events where the person is affected as a person. This means that 'ap' is the unmarked member of the set of person-object-marking auxiliaries, and the forms referring to third person singular objects lend supporting evidence to this interpretation:

pel-hel. 'saw-put-és-for-him, i.e. Cut it and leave it for him (i.e. of grass).'
pel-han. 'seven-do-it-on-him, i.e. Cut it (e.g. hair) on him,' pel-as-hin. 'seven-transfer-it-to-him' (less common but regular alternate form for the more common irregular pel-en), i.e.
Cut it (i.e. a stalk of bananas) and give it to him.'
pel-im. 'seven-it, him, i.e. Cut it,' or 'Take her (by severing her from her family) as a wife.'
The particular semantic relationships marked by the other auxiliaries are still marked with third person singular personal objects, even though the personal object is then implicit in the auxiliary. But the relationship marked by the auxiliary -wa with other persons and plural number is not overtly marked with third person singular objects, so that the simple verb, with no auxiliary, becomes an unmarked form ambiguously referring either simply to an implicit non-personal object occupying a patient role, or to a personal object occupying a patient role.

It is to be noted that this interpretation does not equate the relationship between the personal object of wat 'hit, kill' marked by direct affiliation to that verb, and the relationship between the personal object of that verb or any other marked by affiliation to the auxiliary -wa. The role occupied by the personal object is in the first case always and in the second case often a patient role, but in the second case the semantic component 'personal objective relationship' has been added to the verb with which the object occurs. Only the verb wat 'hit, kill' occurs in all five possible constructions:

nate. 'He hit me,' or 'He killed me,' (with the personal object direct and occupying a patient role).
wakun wa-napha, 'funeral-pig kill—he-did-for-me-as-person, i.e. He killed a funeral pig for me (said by a ghost),' (where the personal object is indirect and occupies a beneficiary role).
hak wa-napha, 'happiness strike—he-did-to-me-as-person, i.e. He greeted me,' (where the personal object is direct and occupies the patient role).
was wa-nethe, 'pig kill—he-transferred-it-to-me, i.e. He killed a pig for me and gave it to me,' (where the personal object is indirect and occupies the recipient role).
napy wa-neelke, 'my-life kill—he-did-on-me, i.e. He killed my life,' (where the personal object is indirect and occupies the locus sub-role of the locutive role).
hesi wa-nakeilke: or hesi wa-namhe. 'mud strike—he-put-it-for-me, i.e. He put mud-pigment on me,' (where the personal object is indirect and occupies the beneficiary role).
The stem wo-, which is the bound pre-auxiliary stem form of the verb elsewhere realised as wanaa, waa 'take, move', occurs with the four auxiliaries:

wo'-napha. 'take-he-did-to-me-as-person, i.e. He received me,' (where the personal object is direct and occupies the patient role).

su-kwe wo'-napha. 'baggage take-he-did-for-me-as-person, i.e. He carried my load (relieving me),' (where the personal object is indirect, occupying the beneficiary role).

hinok wo'-napha. 'inquiry take-he-did-for(?)me-as-person, i.e. He inquired about me,' (where the personal object is perhaps indirect, occupying the beneficiary role, but the case is problematical).

wan wo'-nethe. 'pig take-he-transferred-to-me, i.e. He gave me a pig,' (where the personal object is indirect, occupying the recipient role).

swupeto wo'-nepaka. 'my-beard take-he-did-it-on-me, i.e. He plucked my beard,' (where the personal object is indirect, occupying the locative role).

hinok wo'-nasakhe. 'inquiry take-he-did-to-me, i.e. He inquired (about something) from me,' (where the personal object is perhaps indirect, and in any case may be interpreted to occupy the locative role).

japu wo'-nakekhe. 'garden take-here, idiomatically, dig-he-put-it-for-me, i.e. He dug the garden for me,' (where the personal object is indirect, occupying the beneficiary role).

The verb pæ-'seven' also occurs with all four personal object-marking auxiliaries:

pæ-napha. 'seven-he-did-to-me-as-person, i.e. He covered me (from my family, taking me as his wife),' (where the personal object is direct, occupying the patient role).

wæt pæ-napha. 'initiation-term seven-he-did-to-me-as-person, i.e. He initiated me,' (where the personal object is direct, occupying the patient role, and the noun preceding the verb forms an idiomatic unit with the verb).

wan pæ-nethe. 'pig seven-he-transferred-to-me, i.e. He set a pig apart and gave it to me (although the transfer may be later),' (where the personal object is indirect, occupying the recipient role).

hakki pæ-nethe. 'bananas seven-he-transferred-to-me, i.e. He cut a stalk of bananas for me and gave it to me,' (where the personal object is indirect, occupying the recipient role).
nest pe-neekhe. "my-hair seven--he-did-on-me, i.e. He cut my hair,"
(where the personal object is indirect, occupying the locative role).

nekki pe-neekhe. "bananas seven--he-put-it-for-me, i.e. He cut
a stalk of bananas and saved it for me, i.e. (where the personal
object is indirect, occupying the beneficiary role).

It is to be noted that the relationships specified by these auxili-
aries are not mutually exclusive, and that where they overlap, more
than one construction may be employed to refer to the same event viewed
differently. The idiom "tie a person's hands" has come to mean 'arrest';
this event may be viewed as occurring on the body surface and referred
to with the locative auxiliary, or as placing rope on the person and
referred to with the depositional auxiliary, or as personally affecting
the one arrested in a general way and referred to with the generalized
personal objective auxiliary:

sekki hele home'--neekhe. "my-hand tying-vine tie-up--he-did-on-me,
I.e. He tied rope on my hands," or "He arrested me."

sekki hele home'--neekhe. "my-hand tying-vine tie-up--he-put-it-
for-me, i.e. He left my hands tied with rope," or "He arrested me.

sekki hele home'--nephe. "my-hand tying-vine tie-up--he-did-to-me-
as-person, i.e. He tied me up with rope on my hands," or "He
arrested me."

Applying fat or pigment to the skin may be viewed in terms of the
location of the event on the body or in terms of the 'putting' of the
pigment on the skin; the latter is preferred but both occur:

wakki lapu-neekhe. "charcoal smear--(lip)---he-did-on-me, i.e.
He put charcoal on me."

wakki lapu-neekhe. "charcoal smear--he-put-it-for-me, i.e. He
put charcoal on me."

There are some alternative expressions and some regularly used
expressions which are still problematic in terms of the scheme of
contrasts outlined here:

hetamo'-nether. "sharp-rebuke-(hetamot)--he-transferred-to-me,
I.e. He bawled me out."

This last example occurs as expected with the active auxiliary, like
other verbs of telling, rebuking, etc. But also occurring is:

hetamo'-neekhe. "sharp-rebuke--he-put-it-for-me, i.e. He bawled
me out."

However, if this verb is derivationally related to hetamo, a kind of
magical curse put especially on pigs, occurrence of the depositional
auxiliary -hel- is not exceptional, and the second example could be
glossed, 'He put me under a curse,' understood as hyperbole.
Transitivised secondary verb stems, a construction to be noted later also, occur either with the depositional auxiliary -hel or the locative auxiliary -ha; some stems have been observed to occur with one of these auxiliaries, while others occur with either, in what appears sometimes to be an arbitrary classification. A number of these stems which occur with only one auxiliary occur with personal objects marked in prefixes to that auxiliary even when the semantic relationship seems inappropriate according to the patterns observed with other verbs. One commonly recorded example is the generalised expression for help with physical labour:

\[\text{jamakat-her. 'Help him.'}\]
\[\text{femne jamah-nealke. 'femne help-ke-did-on-me?}, \text{i.e. 'Be helped me (but) a femne.'}\]

It seems difficult to see how any sense of location on or even near the body surface of the personal object could be involved here.

1.3.2.1.9. \text{Multiple Personal Objects: Reverses and Restrictions}

The discussion thus far has neglected the fact, obvious in several of the examples, that the same verb sometimes occurs with two personal objects:

\[\text{he y'-nethe. 'woman marry-(extended from yk 'make net')--he- transferred-to-me, i.e. 'he gave me a wife in ceremonial marriage.'}\]
Here both the object occupying the recipient role, marked in the prefix as 'first person', and the object occupying the patient role, referred to overtly in the independent noun he 'woman', are personal. Exactly analogous examples occur with other verbs:

\[\text{ap wa'-nethe. 'man kill-he-transferred-to-me, i.e. 'He killed a man for me (and gave me the symbol of the victim, where the speaker is the man responsible for a battle, or battle with a particular group).'}\]

In all such examples, only one personal object is overtly marked.\textsuperscript{19} This is selected according to criteria of person categories and the possibilities of overt marking. Where more than one personal object occurs, a first person object, whether direct or indirect or whatever its role relationship to the event, takes priority over any other. If no first person object occurs, a second person object takes priority over any other. If the persons involved are all referred to in the third person, a role which may be marked overtly takes priority, and/or the speaker's focus of attention determines the choice. The following examples are all possible statements about a wedding:

\[\text{he y'-nethe. 'woman marry-he-transferred-to-me, i.e. 'He gave me a wife in ceremonial marriage.'}\]
Here the first person object marker refers to the speaker as groom, occupying the 'recipient' role, and this person category is selected for overt marking with the dative auxiliary.

net-aas y'-asphe. 'my-oppo-site-sex-sibling-he marry-he-did-to-me-as-person, i.e. My brother gave me in marriage.'
The first person reference to the speaker as bride, the direct object occupying a patient role with the generalised personal objective relationship, is selected for overt marking.

ye-ythe. 'he marry-he-transferred-to-you, i.e. Whom did he give you as a wife?'
The second person reference to the addressee as groom, the indirect object occupying a recipient role, is selected for overt marking.

he-ythe. 'his-wife marry-he-transferred-to-him, i.e. He gave him a wife in ceremonial marriage.'
The dative relationship, with the personal object occupying a recipient role, may be overtly marked with a third person singular object, and is selected for marking. But if the speaker does not wish to refer to this dative relationship and simply speaks of the ceremonial marriage of the bride with no mention of the groom, or if the groom functions as subject, occupying an agent role, the simple verb occurs, since the generalised personal objective auxiliary -asp does not occur with third person singular objects:

he-ythe. 'woman he-married-her', i.e. either 'He gave a girl in ceremonial marriage,' or 'He ceremonially married a wife.'

3.1.2.4. Reflexive Voice

If a person or persons occupying an agent role realised at subject of a verb are co-referential with the person or persons occupying any other role elsewhere realised as a personal object, whether direct or indirect and regardless of the oblique roles involved, the contractive object relationships are neutralised, and the verb occurs in a marked reflexive voice form. Co-referentiality refers not only to cases of identical reference, but also to cases of included reference, where the persons who are agents include or are included, among the occupants of an oblique role. Thus in these forms the contrast between direct and indirect objects and the contrasts among the object-marking roles are neutralised. Morphologically, verb roots with final s occur in these forms with final k replacing the s, and the verb roots with final vowels which occur inflected for reflexive voice occur with an added final k. All k final stems in these forms occur with m h following the k. These forms are then, in general, inflected like the analogous forms of the verb ba- 'persuade'. The reflexive forms of
samples of these various classes of verbs in the simple factive category are displayed in Table 11. These forms afford further evidence for the assertion that the category 'personal object' is a higher level category than the contrastive object or oblique role-specifying categories, as it was earlier demonstrated that the role-specifying categories are higher level categories than the category 'direct' and 'indirect' with reference to objects. Note these examples with the verb wet= 'kî, kill':

*netha. 'He hit me.'

watyky. 'I hurt myself,' (with subject occupying agent and patient roles).

hesi wet'=naleikhe. 'He put mud on me.'

hesi wetky. 'I put mud on myself,' (with subject occupying agent and beneficiary roles).

narti wet'=naleikhe. 'He killed my lîa,'

narti wetky. 'I killed my own lîa,' (with subject occupying agent and locus locative roles).

ap wet'=netha. 'He killed a man for me and symbolically gave him to me.'

ap wetky. 'I killed a man for myself (as the leader responsible for the battle),' (with subject occupying agent and recipient roles).

haik wet'=nephe. 'He greeted me.'

haik wetky. 'I greeted myself (said in irony),' (with subject occupying agent and patient roles).

In the first two examples and the last two examples, the personal objects are interpreted to be direct objects; in the other examples they are indirect objects.20

3.3.2.4.1. Reflexive Forms of the Dative auxiliary

There is one exception to the generalization that the contrastive object relationships are neutralized in reflexive voice. With certain stems, reflexive forms of the dative auxiliary are observed to occur in two different senses. First, with some verbs of verbal communication, reflexive forms of this auxiliary occur to refer to the subject addressing himself: joko-thî. 'self-(joko= secondary verb, 'self')--I-transferred-to-him, i.e. I told him.'

joko-tyky. 'self--I-transferred-to-myself, i.e. I told myself.'

wenak-ssthî. 'rebuke--I-transferred-to-him, i.e. I rebuked him.'

wenak-ssthy. 'rebuke--I-transferred-to-myself, i.e. I rebuked myself.'
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>VERB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>jakheky* watky</td>
<td>'fight'</td>
</tr>
<tr>
<td>WE</td>
<td>jakhoko wathek</td>
<td>'hit'</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>jakheken wathek</td>
<td>'hit'</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>jakhekep wathek</td>
<td>'hit'</td>
</tr>
<tr>
<td>HE/SEE/IT</td>
<td>jakhikhe waktikhe</td>
<td>'see'</td>
</tr>
<tr>
<td>THEY</td>
<td>jakheka waktikhe</td>
<td>'see'</td>
</tr>
<tr>
<td>I</td>
<td>wukhikhe likhikhe</td>
<td>'acquire'</td>
</tr>
<tr>
<td>WE</td>
<td>wukhoko likhoko</td>
<td>'acquire'</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>wukheken likhheken</td>
<td>'acquire'</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>wukhekep likhhekep</td>
<td>'acquire'</td>
</tr>
<tr>
<td>HE/SEE/IT</td>
<td>wukhekhe likhekhe</td>
<td>'acquire'</td>
</tr>
<tr>
<td>THEY</td>
<td>wukheka likheka</td>
<td>'acquire'</td>
</tr>
</tbody>
</table>

*For glosses of tense forms, see the text. They are ambiguous in multiple senses; e.g. watky 'I hurt myself'; 'I killed it for myself'; 'I applied (ligament) to myself'; 'I greeted myself' (with halo).

NOTES ON MORPHOLOGY:
Stems: In this category, roots with final p occur with p replaced with final k; roots with final vowel occur with added final k; all roots and stems with final k occur with added h following k.

Reflective Marker: The whole inflectional desinence signals 'reflective', but in terms of morpheme analysis, the vowel following the root or stem may be isolated as the 'reflective' marker, where that vowel is y before ky, e before ke, i before ke after a preceding high close vowel, a before ke elsewhere; a elsewhere.

Mode Suffix: -ek 'factive'.
Subject Markers: See note 15, p.71-73.
But reflexive forms of the active auxiliary have also been observed, although rarely, in which a third person singular referent occupies the recipient role, but the subject occupies an agent role which has been in some sense reinforced to signify that the subject himself acts in a way which is particularly right and proper for him. This might be interpreted in terms of a beneficiary role occupied by the subject simultaneously with the agent role to signify that the subject acted for his own benefit. But that misses the sense of the construction. It appears preferable to suggest here and in some other reflexive forms to be discussed the most satisfying interpretation is in terms of a secondary reinforcement of a single role, in this case the agent role, to mean that this agent and no one else acted in a way particularly proper or fitting for him. Compare the English sentences: "I bought it for myself," where the subject acts for his own benefit, and "I bought it myself," where the subject and no other acts.

napb tsuk olb. 'my-mon-e son move--I transferred to him,' i.e. I gave it to my son.'
napb tsuk otyk. 'my-mon-e son move--I transferred reflexive, i.e. I gave it to my son myself.'

3.3.2.4.2. The Auxiliary -lat-, -lat- 'cause a process'

Most transitive major class primary verbs also occur with the auxiliary verb -la-, -lat- (with allomorphs minus the initial - following verbs with final - or 1). This auxiliary verb is inflected like the minor class verb ca-, cet 'become', which it resembles both in form and in meaning. The auxiliary -la-, -lat- specifies that the subject as patient incurs the full process referred to in the preceding verb stem and as a result is changed in state. There is no implication or specification of agency in this construction, however, although indeed the event in the real world may have resulted from an agent's act. Indeed, no agent role may occur except in the rather rare reflexive forms, where the subject may occupy both patient and agent roles. The resultant meaning of this construction is thus different from English passive constructions, which do imply agency, and resembles middle voice constructions in many languages. These facts have as corollaries two restrictions on the occurrence of this auxiliary. The subject of a construction of a verb stem with this auxiliary occupies simply the patient role. But most verbs without auxiliaries do not occur with personal occupant of the patient role; rather, most major class verbs occur with a personal object of marked person and/or number category occupying a patient role only in construction with the generalised personal objective auxiliary -sp-.
Where no auxiliary is present, only the verb wa-'at, 'at', of major class verbs, occurs with personal objects occupying simply a patient role. So also, of major class verbs, only the verb wa-'at has been recorded with personal subjects in the construction including the auxiliary -law, -law-. With other major class verbs, only non-personal subjects occur in this construction. Second, the verb wa-'at, which elsewhere occurs in the senses 'hat, kill', occurs in this construction only in senses related to 'kill', involving the completed process. There are other major class verbs with similar varieties of senses; the verb hetaek occurs in the senses 'hunt for' and 'find', and only the latter sense occurs in the construction with -law, -law.23

wa-'law. 'I died (as said by a ghost, or, in a weakened sense, of fasting).'
wa-'laka. 'He, she, it (of an animal) died,' or 'I got firmly cussed (of a stopper).'
pal-aka. 'It got out off.'
hen-'laka. 'It got pulled out (henet).'
wa-'laka. 'It got moved,' or 'It got dug (of a garden).'

There are problems in the English glosses of these examples. English has no simple term bridging the senses 'kill' and 'die'; either one needs to gloss 'kill' as 'cause to die', or preferably, as 'end life', which in most verb forms occurs in an unmarked active sense, but in the construction with the auxiliary -law, -law occurs in a marked sense meaning 'enter the state of ended life'. Further the English glosses including 'got' have more implication of agency than the Dantu forms. The form pal-aka may refer to the result of an agent's effort or to the result of an inherent process ofrotting or weakening; it simply states that the subject incurred the process of severing to the point of becoming severed.

The auxiliary -law, -law 'involve a process', also occurs with a few secondary verb stems of body position, and with these secondary verbs the subject occupies the roles of 'patient' and 'agent':

hu-'laka. 'He sat down."
sm-naka. 'He stood up."
we-naka. 'He lay down."

This auxiliary also occurs contrastively inflicted for reflexive voice. In some cases the reflexive forms signal that the subject occupies an agent role as well as the patient role:

wo-lakkeke, 'he left,' or 'he cleared out.'

The second gloss deliberately attempts to capture the connotation of sarcasm or irony which often occurs. In many cases the reflexive forms occur in ironic or abusive speech. In these forms the subject appears often not to occupy an agent role simultaneously with the patient role,
to indicate that he acted to incur the process specified, but rather to occupy a reinforced patient role, analogous to the reinforced agent role suggested for some reflexive forms of the dative auxiliary -it-. The resultant meaning is that the subject has undergone or incurred the process inexplicably and often finally, often with the exclusion of the possibility of agency. While the non-reflexive forms of the auxiliary -ie-, -le- do not imply or specify agency, they do not exclude the possibility. In many cases, the reflexive forms of this auxiliary appear to exclude that possibility:

wa'-iaka, 'end-life--he-incurred, i.e. He died.'
wa'-iakahekehehe, 'end-life--he-incurred-reflexive, i.e. ns we and died (inexplicably).' This example was extracted from a text about a pig that unexpectedly and inexplicably died. Imperative forms of this construction frequently occur in abusive speech:

wa'-iekhan, 'Drop dead!'
wa'-iekhan, 'Clear out!'
The second example occurs in a speech of a headman ordering his younger half-brother to leave his village and garden area not just momentarily but finally.

3.3.3. Case Relationships: Major Class Intransitive Verbs

There are major class process verbs which occur both transitively and intransitively, and others which occur only intransitively, besides a very large number which occur only transitively. Of about 250 major class process verb roots, thirty have been observed to occur both transitively and intransitively, and six to occur only intransitively. The intransitive major class process verbs, and the intransitive senses of major class process verbs which also occur transitively share the identifying characteristics of the major class of process verbs as a whole: (1) Phonologically, these roots end in consonants. (2) These verbs refer to a process, that is an event that changes the state of a patient. (3) These verbs occur inffected in past participle and manner participle forms. (4) Most of these verbs occur with the auxiliary -ie-, -ile- 'occur a process'.

Like constructions with the auxiliary -ie-, -ile-, the intransitive process verbs in many cases occur only with non-personal subjects occupying a patient role:

o pelhe, 'weather is-covered, i.e. The weather cleared.'

enpelhe, 'tying-wine he-covered-it, i.e. He cut the tying wine.'

Creatures
In this transitive use, the subject occupies an agent role, the object a patient role:

*Hele peleka. 'Lying vine severed-it-became, i.e. The lying vine became severed.'*

*O pal-aka. 'Weather severed-it-became, i.e. The weather cleared.'*

In both of the last two examples, the subject occupies a patient role. It is not clear what semantic contrast, if any, there is between the last example and the first example, with the intransitive verb. Other examples of major class verbs also occurring transitively but occurring intransitively with non-personal subjects are:

*Eken tolo. 'Fruit it-fell-off, i.e. The fruit fell off,' or 'Fruit he-picked-it, i.e. He picked the fruit.'*

*Eken tole. 'Fruit fallen, i.e. Wind-felled,' or 'Fruit picked, i.e. Picked fruit.'*

*O hanea. 'Weather it-brightened, i.e. The day dawned.'*

*Eika hanea. 'Leaves he-exposed-to-light, i.e. He spread the leaves out for exposure to light.'*

*Soleke. 'Tomorrow (idiomatically tuned form).'

There are other major class process verbs which occur only intransitively with subjects occupying a patient role:

*Inepa hythe. 'Their-selves they-swallowed, i.e. They filled out.'*

*Owome hythe. 'His-selves it-swallowed, i.e. His selves swallowed.'*

*Owome hytyk. 'His-selves swallowed, i.e. He swallowed.'*

*Other examples occur only with non-personal subjects:* *Eka hiselhe. 'Leaf it-got-dark, i.e. The leaves turned dark (green).'*

*Eka hiselhek. 'Leaf darkened, i.e. Dark green leaves.'*

*Eken huleshe. 'Seed it-sprouted, i.e. The seed sprouted.'*

*Eken hulesek. 'Seed sprouted, i.e. A sprouted seed.'*

There are other examples of major class verbs occurring intransitively to realise events which are consciously instigated by personal subjects occupying, apparently, both agent and patient roles. These verbs, however, are not marked for reflexive voice:

*Nattokotha. 'They-gathered (intransitively), i.e. They gathered together' or 'They-gathered-it (transitively), i.e. They gathered it up.'*

*Nattokote. 'Gathered (either of collected things or of assembled people).'*

*Ettene. 'He-turned-around (intransitively), i.e. He turned around,' or 'He-turned-it-over (transitively), i.e. He turned it over.'*

*Ettenek. 'Turned (either of things that have been turned over or people who have turned around).'*
The two intransitive finite verbs in the last four examples are interpreted to have personal subjects occupying both agent and patient roles: the transitive senses of these verbs have personal subjects occupying only an agent role. There are several other examples, all of them semantically grouped with one or the other of the two verbs in the last four examples: (1) verbs referring to gathering and scattering where each participant moves himself but the status of the group is changed; and (2) verbs referring to changes of location or position of one or more participants in relation to a preceding position or the position or location of another or others in the group, apart from delictic and geographic orientation. Examples of the first category are:

"nattoket= 'gather'; tekele= 'gather'; koll= 'mass together';

hven= 'join together'.

Examples of the second category are:

atth= 'turn around'; suku= 'turn back'; koll= 'hang on', i.e.,

attach oneself to (another person);

hky= 'move out of the way'; kile= 'fall away, leave'.

The intransitive major class verbs which are interpreted to occur with personal subjects occupying both agent and patient roles are semantically similar to the reflexive forms of other major class verbs; with one possible exception (tek in a special sense 'push up and move'), these verbs have not been observed marked for reflexive voice. Nor have the intransitive major class verbs with non-personal subjects occupying patient roles been observed inflected for reflexive voice in these senses. The shared semantic and distributional characteristics of these verbs make them a significant sub-class of major class process verbs.

There is one major class process verb in the present lexicon which occurs only in marked reflexive voice forms, with personal subjects occupying a patient role:

'ktyntynty. 'I got superficially scratched.'

ktytnt 'superficially scratched'.

Thus this verb, although a major class intransitive verb, differs in important ways from the other major class intransitive verbs.

3.3.4. Case and Role Categories Marked in Minor Class Verbs

Minor class verbs were provisionally characterized in Chapter 2 as having vowel-final roots, in contrast with major class verbs, which have consonant-final roots. This phonological contrast is not perfectly correlated with the more important semantic and syntactic criteria, however. Minor class verbs, insofar as they realise events, realise
events which do not include the semantic component 'process' referring to an event directed toward a change of state in the patient. Minor class verbs do not occur with any of the inner layer auxiliary verbs, i.e. with neither the object-role-marking auxiliaries nor the auxiliary -ke, -let 'know a process'. Nor do minor class verbs occur inflected in the past participle -wak or the manner participle -waka forms in senses referring to changed states or processes affecting patients. When attention is turned to positive properties shared by minor class verbs, the formal fact that almost all of these verbs have vowel-final roots means that they resemble the reflexive forms of major class verbs. In discussing reflexive forms of major class verbs this resemblance was noted from the other direction when it was stated that reflexive forms are inflected like the minor class verb ke 'persevere'. But minor class verbs also appear to resemble reflexive voice forms semantically in that the subject of these verbs appears very often to occupy some additional role besides agent.

It appears useful to recognize at least one minor class verb as realizing not events but semantic properties of events elsewhere realized with the verb and, on the surface, as a carrier of inflectional endings. This verb is wēs, lokē 'continue', which also occurs as an auxiliary.

3.3.4.1. Minor Class Verbs of Directional Motion

There is a finite set of twelve minor class verbs realizing events referring to the movement of a participant through space in a single direction defined in terms of deltic and in ten cases also geographic orientation. There are two verbs of simple deltic motion:

\[ \text{lakē} = \text{'go'}; \text{lokē} = \text{'he went'}; \]
\[ \text{wēs}, \text{wēt} = \text{'come'}; \text{waka} = \text{'he came'} . \]

Besides these there are ten verbs of topographically and deltically oriented motion, including five simple verbs referring to topographically oriented motion which is also deltically oriented as motion away from the speaker and/or addressee:

\[ \text{likē} = \text{'go up'}; \text{likēkõ} = \text{'he went up'}; \]
\[ \text{plē} = \text{'go down'}; \text{plõkõ} = \text{'he went down'}; \]
\[ \text{wulō} = \text{'go out'}; \text{wulõkõ} = \text{'he went out'}; \]
\[ \text{hōkē} = \text{'go in'}; \text{hõkõ} = \text{'he went in'}; \]
\[ \text{wuttē} = \text{'go across'}; \text{wuttõkõ} = \text{'he went across'} . \]

These same stems occur with a postposed contracted form derived from wēs, wēt = 'come' in periphrastic constructions referring to analogous movements toward the speaker and/or addressee:
lakel-aka. 'He came up.'
pi-aka. 'He came down.'
ki-aka. 'He came in.'
wulupi-aka. 'He came out.'
wutta-aka. 'He came across.'

The semantics of deictic and geographic orientation in this set of verbs will be further discussed in Chapter 4.

The verbs of directional motion exhibit no contrast between reflexive and non-reflexive voice, but it is attractive to consider them implicitly reflexive. The subject of these verbs occupies an obligatory patient role and usually also an optional agent role referring to the instigator of the movement. Where both roles are interpreted to occur, the occupant or occupants must be identical:

'pike. 'He went down' (with the subject occupying agent and patient roles) or 'He fell down' (with the subject occupying a patient role).

wasi pky. 'I-self-hypothetical I-descended, i.e. I fell where one is liable to fall' (with the subject occupying only a patient role).

The form pke is now 'frozen' as an idiomatic manner adverb, occurring in this form with all person categories.

was pky. 'to-kill-it I-descended, i.e. I went down to kill it.'

Here the transitive major class verb stem wasi (wes 'hits, kill') requires an agent role with the construction, and thus signals the occurrence of the agent role, besides the obligatory patient role with the motion verb.

Since with verbs of motion there is never an occupant of the patient role that is different from the occupant of the agent role, where that occurs, and the occupant of the patient role is always subject, any independent noun or pronoun referring to the subject is not marked with the clitic -nes 'source', as has already been noted. Rather, this clitic occurs with locative terms to mark 'place from which', as other relatives occur to mark a locative relationship which with motion verbs signals 'place to which'. These have been treated earlier in this chapter.

The directional motion verbs are involved in important restrictions on the sequence of verbs; these restrictions classify these verbs into a set which contrasts with all other verbs. These matters will be further treated in Chapter 5.

3.3.4.1. The Verb of Consumption: nek, ne = 'eat, consume'

The verb nek, ne refers to eating food, drinking liquids, smoking tobacco, and to the consumption of combustibles by fire. It is uniquely
inflected in inchoative categories as the only verb in the language with a root-final consonant k which is a reflex of proto-Danish *fy/. This verb, like the directional motion verbs, is not inflected to contrast reflexive and non-reflexive voices. There is an obligatory patient role occurring with this verb, but this role is never overtly marked in affixes to the verb, even with reference to cannibalistic eating of human patients. The role is rather implicit in the stem of the verb and may also, of course, be occupied by independent nouns. The verb is thus clearly transitive, and the subject occupies the agent role. Any independent noun or pronoun referring to the subject may be marked by the clitic -ne 'source'. It is useful to treat hetto 'owe', when it occurs as subject of this verb, as also occupying the agent role. However, as a minor class verb, this verb is quite different from major class process verbs. The patient is not 'processed' but rather consumed. Past participles, manner participles and constructions with la- 'let' 'incur a process' do not (with one problematical exception) occur with this verb. Further, the fact that this verb, as a minor class verb, does not occur with any of the object-role-marking auxiliaries, makes it an interesting hypothesis to suggest that this also is an implicitly reflexive verb, and that the subject occupies a beneficiary role as well as an agent role.

nikke. 'He ate it' (with the subject occupying the agent and possibly also beneficiary roles, and the unspecified object inherent in the stem occupying the patient role). at-enn nikke. 'him--by he-e ate it, i.e. He ate it' (with the subject, referred to both in the verb suffix -e and the independent pronoun at, occupying the agent role). wan nikke. 'pig he-e ate it', i.e. either, and more probably, 'He ate pork', (with the external noun wan occupying the patient role) or 'The pig ate it' (with the external noun wan and the verb suffix -e referring to the subject occupying the agent and possibly also beneficiary roles.

3.3.4.1.2. The verb of believing: akka= 'believe'

The verb akka= 'believe' refers to understanding and believing propositions. Like the verbs of directional motion and the verb nek-, ne= 'consume', this verb is not inflected to contrast reflexive and non-reflexive voices. Most typically it occurs with a preposed clause referring to a proposition or statement which is believed, in a construction which is analogous to quoted clauses with the verb 'say' and other verbs of speaking. The interpretation of roles occurring with this verb is still problematical. Both Chafe (1976;144f) and Fillmore
in recent writings (e.g. 1970b:116) have used the term 'experience' to label the role occupied by the subject of verbs similar to this, including, for Oha'ni, mental states like 'know' and 'like', mental processes like 'see' and 'learn', and derivative mental actions like 'teach' and 'remind' (1970b:144-146). Dani surface structure clearly distinguishes four types of mental activity. Mental states are realised as special possessed nouns functioning as sentence nuclei; these include nulu 'my knowledge', nukot 'my ignorance', na'couk 'my affection', nanolo 'my sickness', nai'yi 'my dislike' and na'ya 'my fear'. There are other verbs of mental activity, like pet 'think, remember, figure out', which are major class process verbs. There are also several secondary verbs of mental activity, including ha'ha' 'recognise, get the point', mo'ha' 'not recognise, not get the point'. And there are at least two verbs of mental activity, he 'persuade' and aka 'believe' which are minor class verbs.

Indeed it is the point of analysis of roles to recognise similar semantic relationships signalled by diverse surface structures, but it appears that in these cases it may be presumptuous to settle quickly for a role labelled 'experience' to handle all four types. There are several threads of Dani evidence that make it a tempting, if hesitant and tentative, analysis of the roles occupied by the subject of aka 'believe' to suggest that these are the roles 'agent' and 'patient'. First, like other minor class verbs, this verb formally resembles reflexive voice forms of major class verbs in its pattern of inflection, and most such forms signal that the subject occupies an agent role and some oblique role. Second, the subject does not occur marked with the clitic -en in the fixed corpus, and this construction seems unnatural, so that the subject is not treated like the subject of a transitive verb with a separate patient. Third, this verb occurs in imperative forms which are exhortations and commands, not just imperatives. Verbs that occur with subjects occupying only a patient role have not been observed to occur with imperative forms which are exhortations and commands.

Two other roles occurring with the verb aka 'believe' need to be noted. Very frequently the obligatorily possessed noun a'la 'his dear self' occurs preceding this verb to specify the psychological faculty involved in the event. It is perhaps useful to identify this role with the role 'instrument' also occurring with reference to instruments external to the agent, although such external instruments are commonly marked with post-clitics, particularly -es, -as 'loasive' and -en 'source', while a'la is not so marked in this construction.

Further this verb occurs typically with a proposed clause referring
to a proposition or statement which is believed. The construction parallels the construction of the verb 'say' with quotative clauses. In the case of the verb akwa 'believe', what is believed seems clearly not to be a patient; this is no entity which is processed, moved or otherwise affected. Rather it is suggested that the 'believer' is a patient, as well as an agent, and what is believed is an integral and inseparable part of the very event of 'believing'. This kind of element has been called 'complement' by Chafe, in that the occupant of this role 'completes the meaning of the verb' in the fashion observed in 'sing a song' (1970b:195-6; 8); Fillmore had earlier used the more obscure term 'factitive' for this relationship (1968a:25). It is here suggested that the traditional grammatical term 'cognate' may be more suitable and more specific for this relationship, although it must be re-defined in terms of meaning rather than form, so that 'fight a war', 'believe a proposition' and 'say a statement' are all examples of the relationship:

... maawape:li: a sk okote:ma yivk na:la akkynky:lay, 'our-mouths-lying we-normally-say-setting having-said my-inner-self believing--I-am... i.e. I am believing that we lie (about that matter)'; or

'I am becoming convinced that we lie (about that matter)'.

In this example, according to the hesitant, tentative role analysis suggested above, the speaker occupies the agent, and patient roles with the final verb; the term na:la 'my inner self' occupies the instrument role, and the clause concluding with the quotative form yivk 'having said' occupies the cognate role.

The function of 'believe' and 'say' in parallel ways to refer to the speaker's involvement in narrated events will be further treated in Chapter 6.

3.3.4.7. Minor Class Verbs with Contrastive Reflexive Voice Forms

The remaining minor class verbs which realize events exhibit marked contrast of reflexive versus non-reflexive voice. This may be unexpected that these verbs cannot be interpreted as implicitly reflexive. However, it is also possible to treat this contrast as in some sense secondary like the occurrence of reflexive forms of the dative auxiliary -st- described earlier in this chapter. In these minor class verbs, as well as those described above, there appears to be implicit the same kind of restricted range of personal reference which constitutes the main meaning of 'reflexive', and marked reflexive voice appears to add a further semantic specification.
3.3.4.2.1. The Verb of Poly-directional Motion: *nee* 'move about'

The verb *nee* 'move about' implicitly refers to multiple events and as a consequence is defective in its inflection, occurring only in such categories as normally refer to multiple events. It has not been observed in simple imperative or future forms, only in progressive aspect periphrastic constructions. It has not been observed alone in simple factive form, but is observed in normal action forms and the 'abnormal-continual' *nee* aspect, as well as in progressive action constructions. It also occurs as the initial member of a derivational paired verb construction with the second member *wee*, otherwise non-occurring, and this construction, which refers to multiple events by its derivation, has been observed in simple factive categories. In non-reflexive voice this verb is inflected like *nee* 'put', but in reflexive voice occurs with the stem *neika*, with *k* and *h* added to the vowel final root as described for reflexives, rather than with a form analogous to the irregular reflexive forms of *nee* 'put'.

This verb has not been recorded with reference to involuntary movement, so that the subject appears to occupy obligatorily the roles 'agent' and 'patient', as suggested for the directional motion verbs when referring to voluntary movement. In the reflexive voice forms, the subject may be considered to occupy a reinforced agent role as well as the patient role. In the observed examples there appears to be a connotation of extra effort and intensity expended by the subject, and this sense may perhaps best be captured by positing a reinforced agent role analogous to chat suggested for reflexive forms of the dative auxiliary *etw*. The resultant sense here is that the subject himself moves about with intensity, with the component of intensity signalled both by the frequently observed paired stem and the reflexive form:

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kke sakeke. 'path subject-normally-move, i.e. they travel around.'
kke n'ikho. 'path subject-abnormally-continue-moving, i.e. he's travelling around (e.g. after a period at home), or he's up and around (after a period of illness), or he's walking (after learning to walk).'
nyky wnyky. 'I-moved-around (with paired echo verb signalling intensity), i.e. I went all over.'
neikhyke neikhyke. 'I-moved-around-reflexive (with paired echo verb signalling intensity), i.e. I myself travelled all over.'
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3.3.4.2.2. The Verb of Speech: *ine* 'say'

The verb *ine* 'say it, speak' occurs inflected in the pattern displayed in the appendix. The subject of this verb appears to occupy the role
'agent', at least, and any independent noun or pronoun referring to the subject is frequently marked with the post-clitic -ne 'source', like the subject of other transitive verbs. This verb is typically preceded by a noun like wene 'message' or one 'his voice', or by a quotative clause; these elements are here interpreted to occupy a cognate role analogous to that proposed for the verb aaka- 'believe'. What is said is an implicit and inseparable part of the event of speaking. This verb also occurs, although rarely, inflected for marked reflexive voice. The reflexive forms do not refer to talking to oneself, but rather occur with a sarcastic connotation which may be attributed to the occurrence of a reinforced agent role occupied by the subject, analogous to that suggested for the reflexive forms of the dative auxiliary -et. The resultant sense is that the subject said it himself, often with a connotation of finality. If the verb i-, like other minor class verbs, is considered to be in some sense implicitly reflexive in all forms, it may be suggested hesitantly that the subject of all forms occupies a beneficiary role as well as an agent or reinforced agent role, to indicate that speaking is always an event in the speaker's own sphere of concern as a producer of speech, as eating is an event in the speaker's sphere of concern as a consumer of food. An alternative interpretation would be to suggest that the subject occupies both an agent role and a source role similar to that occupied with spatial terms referring to 'place from which'.

wene ike ike 'message he-said-it, i.e. he told the news', (where wene is interpreted to occupy a cognate role, the subject to occupy an agent role and, according to the interpretation adopted above, also a beneficiary role).

wene ike ike 'his voice he-said-it, i.e. he spoke on his own, he spoke his piece', (where wene is interpreted to occupy a cognate role, and the third person singular subject marked in the verbal suffix -ne to occupy the agent role, reinforced in the reflexive form, and the beneficiary role as explained above).

What may be interpreted to be this verb i- 'say' also occurs as part of several noun-verb phrase units which are in effect idiomatic verbs in which the verb element acts as the carrier of inflectional endings. In these cases the meaning 'say' is no longer present in any literal sense, and the roles associated with these idiomatic verb units are in some cases different from those associated with the verb i- meaning 'say'. With the nouns we 'dew' and hi 'dusk', which only occur in these phrases, the verb i- does not occur with contrasting reflexive forms, and it appears that the noun o 'weather', which commonly precedes these units, occupies a patient role. With the nouns nake, nako 'sleep'
and kase ‘devel-sig’ all forms of the verb, including marked reflexive forms, occur. In these latter cases, any independent noun or pronoun referring to the subject is not marked with -nen ‘source’, and it appears useful to suggest that the subject occupies agent and patient roles in the non-reflexive (i.e. implicitly reflexive) forms, and a reinforced agent role as well as a patient role in the reflexive forms:

- o we ikhe. ‘weather dawn it = -sad’, i.e. It dawned, (where the subject, o ‘weather’, is interpreted to occupy a patient role).
- mko ikhe. ‘sleep he = -sad’, i.e. he slept, (where the subject is interpreted to occupy agent and patient roles).
- mko ikhe. ‘sleep he = said-reflexive, i.e. he went off to sleep himself, (where the subject is interpreted to occupy a reinforced agent role and patient role.)

This verb also occurs as an auxiliary, as will be noted, with a large class of secondary verb stems.

3.3.4.2.3. The Verb of Inceptive Possession: a=, at= ‘acquire’

The verb a=, at= ‘acquire’, is inflected in the pattern displayed in the appendix, with the root allomorph a= occurring in most factive categories, and the root allomorph at= occurring in most potential and hypothetical categories. The subject of this verb appears to occupy a role which may be identified with the recipiend role which also occurs with the dative auxiliary -et; in some examples the subject appears also to occupy an agent role simultaneously with the dative recipient role. This verb also occurs with marking reflexive voice forms, and the subject of these forms may be interpreted to occupy a reinforced agent role as well as the recipiend role. In one example in the field corpus, the subject of a reflexive form of this verb occurs marked with the post-clitic ‘-nen ‘source’’. The item or person possessed may be considered to occupy a patient role:

- at was a=. ‘he pig he-acquired, i.e. he acquired a pig (by some choice or act), or he get a pig (by no act of his own),’ (where was ‘pig’ is interpreted to occupy a patient role, and the subject is interpreted to occupy, in one sense, only a recipient role and in the other sense agent and recipient roles.
- at =a= akheike. ‘he-hy pig he-acquired-reflexive, i.e. he took the pig for himself, (where the subject is interpreted to occupy a reinforced agent role and a recipient role, and was ‘pig’ to occupy a patient role).
3.3.4.2.4. The Verb of Perception: haaw 'see, perceive'

This verb and the related locative auxiliary -haaw have been introduced already in the discussion of markers of personal objects. The roles occupied by the objects of this verb and the related auxiliary were suggested to be the 'target' and 'locus' sub-senses of the locative role in most cases. The primary verb haaw 'see', as a minor class verb of mental activity, appears to be similar to the verb akkaaw 'understand' in terms of the roles occupied by the subject. It was hastily suggested for the latter verb that the subject occupies the familiar agent and patient roles simultaneously, rather than the 'experiencer' role proposed by Fillmore and Chafe. The evidence cited there is relevant to this case also: the reflexive-like pattern of inflection suggests that the subject occupies an agent role plus some oblique role, and the apparent infrequency or awkwardness of the marker -men with the independent pronoun or noun referring to the subject suggests that the subject occupies both agent and patient roles. However the verb haaw 'perceive' and the related locative auxiliary, unlike the verb akkaaw 'understand', also occur in forms contrastively marked for reflexive voice. It is suggested that the subject of these reflexive forms occupies a reinforced agent role as well as a patient role, to indicate that the subject saw something himself.

Very frequently the obligatorily possessed noun ali-ekken 'his eye' occurs occupying an instrument role preceding the primary verb haaw 'perceive' or the related auxiliary where it has the sense 'see'; an ali-ekken hyky. 'If my-eye-seek (= 'my eye') I-saw-it, i.e. I see it'; where ali-ekken occupies an instrument role, the unspecified object implicit in the stem occupies a target role, and the subject, referred to in the independent pronoun in and the verbal suffix -y, occupies, according to the interpretation above, agent and patient roles.

an ali-ekken haakhyky. 'If my-eye-seek (= 'my eye') I-saw-it-reflexive, i.e. I saw it myself, ' (where the roles are as in the previous example except that the agent role is reinforced; this reflexive form is rare).

In constructions where the locative auxiliary -haaw occurs in senses other than 'see', the roles occurring are distinct from those occurring with haaw 'perceive' and are determined by the verb as a unit including the auxiliary. In all such cases, the subject appears to occupy the agent role, but in only a very few cases does it also occupy the patient role;
seke tumut-han. 'spear thrust--do-it-on-him/sis, i.e. thrust the spear at him, or thrust the (garden) spade (into the ground),' (where seke 'spear' occupies an instrument role, the unspecified object implicit in the auxiliary stem occupies a target role, and the subject marked in the verbal suffix = second person singular, occupies an agent role).

hyekil-han. 'remove--do-it-on-him, i.e. Get out of the (this) way, Move over', (where there is an unspecified object implicit in the stem occupying the locus role, and the subject, marked in the verbal suffix = second person singular, occupies the agent and patient roles.

3.3.4.2.5. the Verb of Deposition; he= 'put'

The verb he= 'put' and its related depositional auxiliary -he= have been introduced in the discussion of markers of personal objects. In that discussion the roles occupied by the objects of this verb and the related auxiliary were suggested to be in most cases the roles 'patient' and 'beneficiary'. Clearly the subject occupies at least the agent role, and a noun or pronoun referring to the subject is very frequently marked by the post-clitic -as 'source'. This verb, like other minor class verbs, resembles the reflexive forms of major class verbs in its pattern of inflection and is interpreted to be in some sense implicitly reflexive. It is suggested here that the subject occupies agent and beneficiary roles simultaneously when there is no separate occupant of the beneficiary role. However, this verb and the related auxiliary occur contrastively inflected for reflexive voice, and it is attractive to suggest that the subject of reflexive forms occupies simultaneously the agent role and, in this case, a reinforced beneficiary role, analogous to the reinforced agent role suggested for some examples of the reflexive form of the native auxiliary -et', and the reinforced patient role suggested for the reflexive forms of the auxiliary -la', -lat= 'through a process'. This interpretation is suggested by such examples as the following:

hat hakheike-\=s? ekakatek hakheike-\=s. 'you he-put-for-you--query himself he-put-reflexive--query, i.e. did he give it for you or did he keep it for himself?' (where the subject of the final reflexive verb is interpreted to occupy agent and reinforced beneficiary roles; the subject of the first verb occupies the agent role and the personal object referred to in the independent pronoun hat 'you(sg)' and the verbal suffix -as occupies the beneficiary role).
3.3.4.3. Some Problem Verbs

As noted above, the criteria for distinguishing major and minor class verbs are multiple, and as is usual the case with classes determined by more than one criterion, the classes defined by the various criteria are not exactly the same. Like maps of dialects bounded by isoglosses, the major distinctions are clear, but there are border areas where classification is more problematic. Two examples of a half dozen observed cases will be treated:

3.3.4.3.1. The Verb of Vigorous Reciprocal Action: jape 'fight'

The verb jape 'fight' has some characteristics of major class verbs, in that, phonologically, it has a consonant-final root and the manner participle form japoke has been recorded. However, no past participle form has been recorded, and the verb does not occur with the auxiliary -la, -late 'have a process' nor with any of the other inner layer auxiliary verbs. The event referred to in this verb is not treated, thus, as a process. It is rather a reciprocal event, and the specific kind of event is specified in a preposed noun which occupies what may be labelled a cognate role, analogous to the role occupied by 'song' in 'sing a song':

wel jape. 'war they-fought, i.e. They fought a war, battle,' won jape. 'talk they-fought, i.e. They argued,' s jape. 'intercourse they 'fought', i.e. They operated.' jale jape. 'playfight they-fought, i.e. They played war.'

This verb has been observed in marked reflexive forms, but only rarely:

nael jape, 'my-battle I-fought-reflexive, i.e. I fought my own war (the one for which I was ceremonially responsible).'

Here it appears that the subject occupies agent and beneficiary roles. Elsewhere, in non-reflexive forms, it is to be noted that the verb is normally implicitly reciprocal and commonly occurs with a plural subject, so that the subject realizes both agent and, in a somewhat special sense, patient roles:

wel jape. 'war they-fought, i.e. They fought a battle (with each other),' (where the subject may be interpreted to occupy agent and patient roles).

This verb shares more characteristics with minor class than major class verbs, and may be considered a borderline minor class verb.

3.3.4.3.2. The Verb of Hearing: hale 'hear'

The verb hale 'hear' exhibits some characteristics of major class verbs, in that it has a consonant-final root and is inflected for what are, in form, past and manner participles, holek and holoko. It does
Not occur with the inner layer auxiliary verbs, however, and the participles do not occur with reference to process: at one holoke. The his-talk heard-obeyed, i.e. (someone or some person) listen to his words (and obey them), or his words are obeyed by someone or some person,' where the participle has an implicit subject, unlike past participles of most major class verbs.

holoke lokokin, 'hearing/obeying singular-subject-will-continue, i.e. (singular subject) will keep on listening, or obeying.' Manner participles of transitive major class verbs do not occur in this construction. In most examples, the subject of this verb appears to occupy an agent role and also, in some sense, a patient role, in the way those roles are interpreted to occur with the verb has 'see', also. What is heard is here interpreted to occupy a cognate role. The verb is thus interpreted to be a minor class verb.

3.4.3.3. The verb of progressive aspect: welin, lokin 'continue'
The minor class verbs described thus far include verbs which occur as primary verbs to realise events and also occur as auxiliary verbs to realise grammatical categories related to events referred to in other verbs. There remains for consideration one verb which realises grammatical categories related to events or propositions which are elsewhere referred to in clauses without verbs.
The verb of progressive aspect: welin, lokin 'continue' is unique in several respects. The gloss 'continue' suggests that the meaning of this verb is similar to the grammatical category 'progressive aspect'. Indeed, 'progressive aspect' may be considered to be an extension of the meaning of this verb and to be signalled by an auxiliary identical to or in some form contracted from forms of this verb. Only this verb, of all primary verbs, does not occur with periphrastic progressive aspect forms, since it implicitly includes this category in its meaning and is itself the matter of the category. Sample forms of this verb have already been displayed in Table 3, p.62, besides the simple factive forms of the verb has 'see' and the present past progressive aspect forms of the verb was 'he, she'. The forms of was 'he, she', like most factive forms, have as their commonest time reference the recent past, although like other notional verbs, these forms also refer to motion begun and in progress. The analogous forms of welin, lokin 'continue', in contrast, have as their commonest time reference the present, although they may refer to any span of time in the past that continues to and includes the present. Note that the third person forms both of the verb welin, lokin 'continue' and of the auxiliary occurring in the present progressive forms of was 'he, she', are irregular when they are compared.
with the analogous form of 1saw 'go', and that the forms resembling the analogous forms of Isaw occur only with unambiguous past time reference. Further, it is to be noted that the verb welaky, lokein 'continue' occurs as a primary verb most often, although not always, in clauses which also occur with no verb:

an jana. 'I here, i.e. I am here, I'll stay here.'
an jana welaky. 'I here I-continue, i.e. I am here, or, I am staying here.'
an hano welaky. 'I good, i.e. I'm all right, I'm good.'
an hano welaky. 'I good I-continue, i.e. I am all right (not just as the present moment).'

Where no other predication is made than existence or presence this verb is required, however:

an welaky. 'I continue' or welaky. 'I-continue', i.e. 'I'm present' or 'I'm still alive'.
wan wetek. 'pig is-continues', i.e. There is a pig, or There is some pork.'

In view of these facts, this verb is here interpreted to occur as a primary verb in one sense meaning 'be present' and in another related sense meaning 'continue to be in the state specified by the preceding term'. This second sense is in fact the progressive aspect category, here seen to be a category occurring in equational clauses as well as with verbs.

This verb does not occur inflected for reflexive roles, nor does it occur with any auxiliary verb. The subject of this verb is here considered to occupy the role 'patient' to mean that the occupant of the role is in the state or location specified by the preceding term. This is simply an extension of the meaning of the patient role from those cases where it refers to the participant who undergoes a change of state or location to cases where it refers to the participant who is in a specified state or condition. 29 There are also examples where the subject is the instigator of the event, and may be considered to occupy agent and patient roles simultaneously:

o hano lokein. 'weather good singular-subject-will-continue, i.e. The weather will stay good,' (where the subject, a 'weather' is considered to occupy simply the patient role.
an jana lokein. 'I here singular-subject-will-continue, i.e. I will stay here,' (where the subject is instigator of the "staying" and is considered to occupy the agent role as well as the patient role.
3.3.4.3.4. The Auxiliary Verb of Progressive Aspect: -wel-, -law, -lokali- ‘continue’.

The outer layer auxiliary specifying progressive aspect is in all forms except the past and present progressive forms homophonous with the verb wel-, lokali- ‘continue’ as described above. What are here interpreted to be contracted forms derived from that verb are employed in the past (including the remote past) and present progressive forms. Forms of this auxiliary and the analogous forms of the primary verb meaning ‘continue’ are displayed in Table 12. This auxiliary, as the outer layer or final verb element in a verb which includes it, carries the inflectional affixes specifying mode (but not voice) and subject person and number. However the roles occurring with the verb are determined by the preceding verb stem and inner layer auxiliary, if any.

3.3.5. Case Relationships Marked in Verbs: Verbalised Stems
(and Mental State Terms)

3.3.5.1. The Auxiliary -es, -etas ‘become’

The auxiliary verb -es, -etas ‘become’ is homophonous with the verb meaning ‘acquire’ already described above. This auxiliary occurs post-cliticised to adjectives, nouns referring to achievable status or condition, the negative particle taw and certain adjective and noun phrases. The resultant constructions are interpreted to be verbalised stems referring to entering the state described by the preceding element. This meaning is semantically very similar to that signalled by the auxiliary -el, -elat ‘finish a process’ with major class process stems and a few others, and by the auxiliary -la ‘finish a process’ with secondary verbs of incurred process. The auxiliary -es, -etas, like the minor class primary verb with which it is homophonous, is inflected like the auxiliary -el, -elat ‘finish a process’. The subject of this auxiliary, too, is interpreted to occupy a patient role, and the subject of marked reflexive voice forms is interpreted to occupy a reinforced patient role:

1st-asu, ‘not-it-became, i.e. It went out, or He disappeared,’ (where the unspecified subject is interpreted to occupy a patient role).

2nd-asu, ‘big--he-became, i.e. He grew large,’

3rd-asu, ‘man--he-became, i.e. He became a man,’

1st-ashekha, ‘not-it-become-reflexive, i.e. It just went out (inexplicably, or finally), or He disappeared (inexplicably, or finally),’ (where the unspecified subject is interpreted to occupy a reinforced patient role).
<table>
<thead>
<tr>
<th>Present/past Progressive: See Table 3, p.63.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive with Prior Marker</td>
<td></td>
</tr>
<tr>
<td>welaktyk 'I was staying'</td>
<td>wathy-laktyk 'I was hitting him'</td>
</tr>
<tr>
<td>welakosik 'we were staying'</td>
<td>wathy-lakosik 'we were hitting him'</td>
</tr>
<tr>
<td>welakattik 'you(sg) were staying'</td>
<td>wathy-lakattik 'you(sg) were hitting him'</td>
</tr>
<tr>
<td>welakasip 'you(pl) were staying'</td>
<td>wathy-lakasip 'you(pl) were hitting him'</td>
</tr>
<tr>
<td>welakasik 'he/she/it was staying'</td>
<td>wathy-lakasik 'he/she/it was hitting him'</td>
</tr>
<tr>
<td>welakekhasik 'they were staying'</td>
<td>wathy-lakekhasik 'they were hitting him'</td>
</tr>
<tr>
<td>Future</td>
<td></td>
</tr>
<tr>
<td>lokokin '(sg subject) will stay'</td>
<td>wathy-lokokin '(sg subject) will keep hitting him'</td>
</tr>
<tr>
<td>lokokun '(pl subject) will stay'</td>
<td>wathy-lokokun '(pl subject) will keep hitting him'</td>
</tr>
<tr>
<td>Immediate Imperative</td>
<td></td>
</tr>
<tr>
<td>lokelik 'let me stay'</td>
<td>wathy-lokelik 'let me keep hitting him'</td>
</tr>
<tr>
<td>lokou, lokouk 'let's stay (now)'</td>
<td>wathy-lokou(k) 'let's keep hitting him (now)'</td>
</tr>
<tr>
<td>lokon 'you sg) stay (now)'</td>
<td>wathy-lokon '(you sg) keep hitting him (now)'</td>
</tr>
<tr>
<td>lokoni 'you(pl) stay (now)'</td>
<td>wathy-lokon '(you pl) keep hitting him (now)'</td>
</tr>
<tr>
<td>lokolin 'let him/her/it/them stay (now)'</td>
<td>wathy-lokolinek 'let him/her/it/them keep hitting him (now)'</td>
</tr>
</tbody>
</table>

*Occurs both with and without final k.
with phrases, this auxiliary is alliterated to the last word in the phrase, but the whole phrase comes, in effect, a secondary verb stem: 

hina lek-haeke nek-seki... 'you-legs not—ever only—your(pl)—became', i.e. You are all turning out not to have very good walking legs,' (where 'hake' is a constituent with lek, meaning 'rather not' or 'resembling not'; this construction is a constituent with hina 'your legs', meaning 'walking legs' (that are) like no (legs)', and the relator nek 'exclusively' is a constituent with this whole construction, the auxiliary form -sek 'you became' is in turn a constituent with the whole construction that precedes).³⁰

3.3.5.2. Mental State Terms

Passing reference has been made to the fact that Dani handles psychological events and states in four different ways. There are some psychological events which are referred to in major class verbs, including spe= 'believe, remember'. Others are referred to in minor class verbs, including nek= 'believes' and hae= 'perceives'. Still others are referred to in secondary verbs, including hv= which occurs with he= to mean 'recognise, get the point', and ne=, which occurs with he= to mean 'fail to recognise, miss the point'. But mental states are referred to in a special set of nouns, almost all of them obligatorily possessed, which function as predicates. The possessive prefix, with or without an independent noun or pronoun, refers to the person experiencing the mental state, a patient relationship. The commonest terms are:

nele 'my-knowledge, i.e. I know';
nokot 'my-ignorance, i.e. I don't know';
ne'mouk 'my-affection, i.e. I like (a person)';
namato 'my-large-intestine, extended to my-liking, i.e. I like (a thing or event)';
natty-ehen 'my-heart, extended to my-fondness (for a person)';
walek (desire, i.e. (someone) likes (thing or event)';
nal'ny, mepst (my-dislike, i.e. I don't like (thing or person), I don't want to (event)';
najek 'my-fear, i.e. I am afraid of (person, thing, event)';
nekley 'my-shame, i.e. I am ashamed or embarrassed.'

As suggested in the glosses, these terms have implicit present tense reference. When reference to another time or some verbal aspect is intended, these nouns occur with inflected verbs, particularly the auxiliary -se, -at = 'become' and also the verb velae, lokol= 'continue'. Frequently the subject of the auxiliary or verb is the patient also referred to in the prefix on the possessed noun, but the noun which
specifies the mental state may also be treated as the subject:
nelu-sky, 'my-knowledge---I-become, i.e., I have come to know,'
nelu-ska, 'my-knowledge---is-become, i.e., I have come to know,'
majv wkly, 'my-fear I-stay, i.e., I am afraid (not just momentarily),'
majv wakel, 'my-fear it-is, i.e., I am afraid, I have fear.'

These terms may occur with reference to a person or thing concerning
whom the state is experienced or felt, and that person or thing may be
said to occupy a cognate role:
ne nekket, 'village my-ignorance, i.e., I don't know the village,'
ne ne majv, 'your-speech my-fear, i.e., I am afraid of your talk.'

These terms may also occur with reference to events in terms of the
participation of the person occupying the patient role in the mental
state terms. The words of knowledge and ignorance occur with the
factive gerund, and the other terms occur with the potential gerund,
as described in Chapter 7.

nakat nu, 'doing-is my-knowledge, i.e., I know how to do it,'
nakat nekket, 'doing-is my-ignorance, i.e., I don't know how to
do it,'

nuqte neyt, 'do-es my-dislike, i.e., I don't want to do it, or
I don't like to do it,'

nuqte nekkel, 'do-es my-shame, i.e., I am ashamed (or embarrassed)
to do it,'

3.3.6. Late Relationships Marked in Verbs: Secondary Verbs

Although adjectives and nouns and other forms occurring with the
auxiliary *-1/-2 -become' are described above as a variety of
secondary verb stems, they are really contextualized in those constructions
and regularly occur without the auxiliary, which, in effect, is a
carrier of inflectional endings in what are elsewhere clauses without
surface verbs. There are other stems, including one very large class
and a number of smaller classes, which do not commonly occur indepen-
dently but which do commonly occur with post-cliticized auxiliary verbs.
These are the stems which, with the accompanying auxiliaries, comprise
the major varieties of secondary verbs.

3.3.6.1. Incurred Process Secondary Verbs

Besides the major class primary verbs there is a very large class
of secondary verb roots which refer to processes as incurred and to
the resultant states. In terms of the number of roots in the lexicon,
this class is indeed observed to be larger than the major class of
primary verbs, but in terms of frequency in text, the number of primary verbs is much larger. The primary verbs also demonstrate more stability in form and meaning as evidenced in comparison of related dialects and languages. It appears that the primary verbs are closer to the heart of the lexicon, and these secondary incurred process verbs are more peripheral, as evidenced in the considerable degree of formal and semantic variation displayed by related dialects. There are sub-classes of these roots in terms of their distribution, but typically these roots occur: (1) as verbs with the auxiliary verb -i- related to the homophonous verb meaning 'easy' signalling that the subject incurs the process specified; (2) as manner adverbs, semantically similar to one sub-structure of the -aka manner participles of major class process verbs, with the post-clitic -aka, -aka, (the former occurring after consonant-final stems, the latter after vowel-final stems); (3) as adjectives, semantically similar to past participles of major class process verbs, with the post-clitic -sek, -sek (the former occurring after consonant-final stems, the latter after vowel-final stems) to specify the state resultant from the process. In addition, a number of these roots, along with many adjectives and the negative particle lek, occur with a verbalising/transitivising morpheme (-y)i-, followed by the deponential auxiliary -he- or the locative auxiliary -he-). Some of these roots also occur, like some major class process verb roots, as independent words, particularly in sacred incantations and formulas.

3.3.2. Constructions with the Auxiliary Verb -i- 'know a process'
The auxiliary verb -i- 'know a process' is related to and homophonous with the verb -i- 'easy' and occurs with the secondary verb roots of incurred process. The resultant construction refers to incurring the process and coming into the resultant state. This is thus analogous in meaning to the constructions of major class verbs with lek, lek- and has a sense comparable to the middle voice of many languages. The subject of the verb thus occupies a patient role and in most cases is a non-personal referent marked in third person singular subject-marking affixes on the auxiliary. There are a few of these roots which, in construction with the auxiliary -i- 'know a state', occur with personal subjects which appear to occupy simultaneously both agent and patient roles:

-tip-aka. 'abst--is-did, i.e. It abusted,' (where subject occupies the patient role).
sw-paka. 'explode--is-did, i.e. It exploded,' (where subject occupies the patient role).
katok-ike. 'stay-put--its-did, i.e. It (e.g. of rain) stayed put (and didn't come as expected, or, he stayed put,' (where the personal subject appears to occupy both agent and patient roles).

katok-kyu. 'stay-put--its-did, i.e. I stayed put.' (where the subject appears to occupy both agent and patient roles).

A few of these roots which may occur with personal subjects of the verb construction have been observed with reflexive forms of the auxiliary. Here it appears that the subject occupies a reinforced agent role as well as the patient role.31 
apo-ikhime. 'side--he-did-reflexive, i.e. He hid himself,' (where the subject is interpreted to occupy a reinforced agent role and the patient role).

3.3.6.3. Constructions with the Nouncc Clitic -hoka, -toko

The secondary verb roots of intransitive process also occur with the clitic -hoka (after consonant-final stems), -toko (realised as -toke after animal stems with final i, and after vowel-final stems) preceding other verbs, both transitive and intransitive, to specify the manner of the event referred to in the verb. Implicitly associated with the root is a patient role, which may be occupied by an unspecified referent identifiable from the context or by an independent noun or pronoun.

tip-hoka hel. 'tightly (shutted) manner put-it, i.e. Place it tightly shutting (on something),' (where an unspecified referent in the context occupies the patient role implicit in the root tip-).

tek-wo-ake. 'served-manner he-went, i.e. He left permanently,' (where the subject of the verb ake occupies the patient role implicit in the root tek-).

In other examples, these forms appear to refer to a process which is a preliminary stage or operation the completion or concluding stage of which is referred to in the following verb; this parallels many examples of 'manner participle of major class verbs':32 

tek-hoka wo-ahe. 'served-manner move--he transferred-to-me, i.e. He broke it off and gave it to me,' (where a referent identifiable from the unquoted context as a piece of pork occupies the patient role implicit in the root tek-).

sappatak ahe-te-ake. 'side-together move--me-came-into-possession, i.e. We broke it in the middle and each took half,' (where the referent also implicit in the third person singular possessive form of ahe (its main part) also occupies the patient role implicit in the root tek-).
3.3.6.4. Constructions with the State-Marking Clitic -sek, -tek

The secondary verb roots of incurring process also occur with the clitic -set (after consonant-final stems), -tek (after vowel-final stems) to specify the state resultant from the process. The associated noun or pronoun occupies the patient role implicit in the secondary verb root:

*opst ti-p-tek. 'his-disposition absented, i.e. He is tight.'
*hele tek-sek. 'tying-material severed, i.e. The tying vine is broken off.'

3.3.6.5. Constructions with the Transitivity/Verbalising Morpheme -(i)yt-

The constructions of secondary verb roots of incurring process with the transitiviser -(i)yt- parallel constructions of adjective roots with this same morpheme as a verbaliser; however, the morphology appears to be more complex in the case of the secondary verb roots, so that they are treated separately here. The transitivising element has several allomorphs.

(a) There is a set of secondary verb roots with final k which occur with root allomorphs minus this k preceding the suffixed allomorph -et- of the transitiviser; in effect, the final k of the root is replaced by t:

*ketek = kettet-: ketek-tekho 'tightly (of binding)';
ketett-han. 'Tighten it.'
*te'mek = te'met-: te'mek-tekho 'tightly (of door)';
te'met-han. 'Must it tightly.'
*myek = myet-: myek-tekho 'in an opened-out manner';
myet-han. 'Open it out (e.g. of sweet potato).'

(b) Vowel-final secondary verbs occur with a suffixed t in the transitivised stem:

*si = sit-: si-toke 'folding'; si-ikhe. 'It folded';
sit-han. 'Fold it.'
some = somat-: some-toke 'bending over'; some-ikhe 'He bent over';
somat-han. 'Bend it over.'
so = sot-: so-toke 'cooking off'; so-ikhe. 'It cooled off';
sot-han. 'Cool it off.'

(c) If not members of the set described under (a), secondary verb roots with final k and a diphthong in the final syllable, roots with the vowel e in the final syllable and some roots with other vowels in the final syllable occur with the allomorph -et- of the transitiviser cliticised, or often in rapid speech suffixed to the secondary verb root...
root. The suffixed forms will be cited:

- makout- + makout-ike: 'It went out (of fire).'
- makout-iken: 'Put it out.'
- hauk- + hauket-: hauk-hako 'sitting up'; hauket-hein. 'Pick it up (only in a special idiom).'
- hek- + heket-: hek-ike. 'Is come to be separated from something slightly.'
- heket-han. 'Separate a little (from something).'
- sykyek- + sykyeket-: sykyek-hein. 'It become abundant, excessive,' sykyeket-hein. 'Make it abundant.' (This root, a form derived by echo pairing from the simpler root syk, occurs in a neighbouring dialect as seikpaik-, with a diphthong in the final syllable.)

(d) Elsewhere (i.e. consonant final roots not included in the sets described under (a) or (b) above), the secondary verb roots occur with an allomorph of the transitiviser which consists of a vowel of the quality of the final vowel, or the initial vowel phoneme of the final diphthong of the root plus 1, and this (e)vt- unit is post-ellipsisised, or often in rapid speech suffixed to the root. The suffixed forms will be cited:

- sikkip- + sikkipit-: sikkip-hako 'breaking off';
- sikkipit-han. 'Break it off.'
- hylyng- + hylyngit-: The simple root is observed only in the form hylynghylyng 'squeaking'; hylyngit-han. 'Squeak is (pig's back).'
- hyak- + hyaket-: hyak-hako 'put in the open (e.g. of pigs);'
- hyaket-han. 'Put them (pigs) in the open (as before the feast).'
- kyak- + kyakot-: kyak-hako 'is (a torch); kyakot-han. 'Kindle (a torch).'
- houn- + hounot-: houn-ike. 'Is smarled,' houn-ikehe. 'Is smarled at me.'
- hvtk- + hvtkvit-: hvtk-hako 'dunking into the water (of people);'
- hvtkvit-hen. 'Push him down in the water.'
- heppuk- + heppukit-: heppuk-hako 'namely'; heppukit-hein 'Calm him, quiet it, steady it.'

The transitivised stems occur primarily with the locative auxiliary -ha- and the depositional auxiliary -he-; some of these constructions have been observed to include marked personal objects, but with other secondary verb roots, marked personal objects do not occur. A very few of the roots occur with the personal benefactive auxiliary -ap- with marked personal objects, and a very few others have been observed to occur with the auxiliary -la-, -lat- 'found a process', which otherwise occurs with major class verbs. Some roots occur with both
the locative auxiliary -ha- and the depositionsal auxiliary -hei- with what appears to be semantic contrast:

hesok heket- haunt. 'your-foot/leg separate-transitive--do (it on it),
i.e. Move your foot away from (the fire),' (where the focus is on
initiating movement of the object, which is also part of the
body).

hely heket- hein. 'firewood separate-transitive--put-it, i.e. Move
the firewood away from (the fire),' (where the focus is on the
placing of the firewood as the end of the operation).

But this kind of suggested contrast does not prove to be consistent,
and to a large extent it appears that some roots occur with the
locative auxiliary -ha- predominantly or exclusively, and a smaller
number occur with the depositionsal auxiliary -hei- predominantly or
exclusively, and these facts must be stated in the lexicon:

hu-'neike 'blow-transitive (+hut-)--he-did-on-me, i.e. He blew
on me (to treat me).'

teka'-nekike 'broken-off-transitive--he-put-it-for-me, i.e.
He broke the firewood in too for me.'

mynn'-naphe. 'entailing-away--he-did-to-me-as-person, i.e. He
entailed me to leave.' (This root has not been observed as a
simple root mynn- in this dialect, but does occur in a
neighbouring dialect.)

tilip'-laka. 'broken-and-separated--transitive--it-beoms, i.e.
It broke in two.' (The root is tilip-.)

The last two examples are rare constructions.

A few examples of 'transitivised' secondary verb roots have been
observed with intransitive meaning, or, more accurately, reflexive
meaning without reflexive form:

he'net-hu. (he'nok- 'stretching legs, standing on tip-toe') Let's
hurry up.

helm-ke e'n. 'gather-transitive--de some(plural), Come gather
together.'

In these last examples the subject of the final verb is interpreted to
occupy both agent and patient roles with the transitiivised secondary
verbs.

3.3.6.6. Secondary Verb Roots as Independent Words

Some of the secondary verb roots of incursive process also occur as
independent words, particularly in sacred incantations and formulas.
A few major class verb roots also occur thus:
3.3.4.7. **Motivational Relationships between Secondary Verbs of Incurred Process and Major Class Primary Verbs**

A great many of the secondary verbs of incurred process appear to be derivationally related to primary verbs, although evidence for the direction of derivation is somewhat tenuous. Particularly, many major class verb stems with final i are related to incurred process stems with final k:

- lyolehe. (lyole) 'He made peace.'
- lyok-eikhe. (lyok) 'It become peaceful, pleasant.'
- katelehe. (kate) 'He trimmed the ends.'
- katok-eikhe. (katok) 'The ends got even.'
- kakehe. (kake) 'It split it.'
- kake-k-ihe. (kake-k) 'It split.'

Not all major class primary verbs with roots with final i are related in this way to secondary verbs of incurred process, nor are all secondary verbs of incurred process related in this way to observed primary verbs. When such pairs occur, there appears to be a semantic difference between the secondary verb root and the primary verb root. Most major class primary verbs are implicitly transitive, whereas the secondary verbs of incurred process are implicitly intransitive. Major class verbs occur with the auxiliary -ia, -iat:

- o kake-aks (kake + -ia, -iat) 'Wood split--it-became, i.e. The wood split (either as the result of a man's splitting it or from natural causes).'
- o kakek-ihe. 'Wood split--it-became, i.e. The wood split, (e.g. as it dried in the sun).'
- o kake-kakelehe. (kake + -ia reflexive) 'The wood split (ineptically or finally).'

There are also a number of major class primary verbs which appear to have been derived from transitivised secondary verbs:

- tekahe. (teka) 'He severed it, broke it off.'
- teka-khe. (teka) 'It broke off.'
- teka-ke-khe. (teka + -i transitive) 'He broke it off.'

A number of observed major class primary verbs similarly appear to have been derived from transitivised secondary verbs, but the secondary verbs...
no longer occur or are not current in this dialect:

nakehe. (nake-) 'be dailed, took excessive time.'
nakakake. (nakkakake-) 'They gathered together, or They gathered it up.'

3.3.6.8. Secondary Verb Stems Derived from Adjectives and Other Stems

A number of adjectives and some other roots, including the negative particle lek, occur with the verbalising/transitivising morpheme -vi- as transitivised secondary verb stems. The construction is thus parallel to what was described for secondary verbs of incurred process occurring with this morpheme, but there are several apparent differences in detail. Morphologically, no adjectives have been observed with stem allomorphs in this construction, and a more restricted set of allomorphs of the transitivising morpheme has been observed:

(a) With vowel-final roots, the allomorph -vi- is suffixed to the root:

han 'good' - hanot-: hanot-heike. 'He made it good, fixed it.'
ivivivky 'crazy' - ivivivky-: ivivivky'-nape. 'He made a fool of me.'

(b) With roots with final k, the allomorphs symbolised -vit- occur cliticised or suffixed to the root; the vowel i is of the quality of the final vowel of the root, except that in these forms some speakers pronounce i following both wk and uk. Suffixed forms are cited:

weak 'bad' - wekak-: wekak-kan. 'Spell it.'
kek 'big' - kekat-: kekat-hen. 'Make it big.'
eluk 'him-moake, him-allow' - elukit-: elukit-: elukat-hen. 'Koke him up.'

(c) With roots with final consonants other than k, the allomorph -vit- occurs cliticised or often suffixed to the root. Suffixed forms are cited:

hikak 'straight' - xikak-: xikak-hen. 'Straighten it.'
selang 'loose' - selangat-: selangat-hen. 'Make it loose.'
ken 'important (in social status)' - kekit-: kekit-keaken. 'You made me important.'

Further, these forms occur frequently not only with the locative auxiliary -we- and the depositional auxiliary -twk-, but also with the generalized personal objective auxiliary -ap-, which is rare with incurred process secondary verb stems:

menelekuv-nesikke. 'me-awake-transitive-he-did-on-us, i.e. He woke us up.'
weka-kesikke. 'bad-transitive-Aw-pat-ua, i.e. He ruined me.'
3.3.5.9. Other Secondary Verbs

There are a number of other classes of secondary verb roots, all of them smaller than the class of intransitive process verbs. Also, as has already been noted, there are a number of kinds of phrase verbs, in which a noun object of some kind plus a verb have become idiomatic verb units. These will not be included in the brief survey here, which is restricted to roots and stems occurring with italicised auxiliary verbs. This survey includes all the classes of roots for which the data in the lexical files are clear, but it appears certain that there are other secondary verb roots, and other constructions with those which are listed, which have not been recorded. This list gives a raw sampling of the kinds of roots and constructions involved.

(1) There are three secondary verb roots of posture or body position occurring most commonly with the auxiliary verb -le, -la, usually glossed 'know a process (and the resulting state)'. The subjects of these verbs occupy the patient role and, unlike the subjects of most verbs with this auxiliary, also in most cases the agent role:

* -la. (vvt-) 'He sat down.'
* nei-aka. Also: men-aka. (mel-, men-; mette) 'He stood up.'
* wein-aka. (wein-, mette) 'He lay down.'

The last two roots, in the form which occurs before auxiliaries (indicated by hypens in the examples), also occur with the delexicalized auxiliary -ne, specifying that the agent, realised as personal object, to assume the specified position, or puts some other patient into the specified position for the benefit of the participant realised as personal object, occupying a beneficiary role:

* men-akeln. (men’ + makein 2a-pur-1s, or 2a-pur-for-1s) 'Stand me up.' or 'Stand it up for me.'

This root has also been observed with the auxiliary -he in a construction meaning 'stand the personal object up':

* men-zen. (men’ + mean 2a-do-towards-1s) 'Stand me up.'

These roots also occur in forms analogous to past participles of major class verbs, referring to the state of being in the position specified:

* vntek 'seated';
* mettek 'standing';
* wettik 'lying down'.

(2) There are distance and direction marking roots already noted in the discussion of the locative auxiliary -ha- and the depositional auxiliary -hei-. These roots are:

- lak- 'over a distance';
- lyak- 'upward';
- pelak- also wusak- 'downward';
- wulak- 'outward';
- keleak- also melak- 'east';
- wustelak- 'across the stream'.

All of these occur with the locative auxiliary -ha- to refer to directional looking, and with the depositional auxiliary -hei- to refer to sending a person over a distance or in a direction. The direction-specifying roots also occur with the generalized personal objective auxiliary -ap- to refer to placing a person or assisting a person to move in the direction specified:

- ls-seekhe- 'over-distance-hee-saw-me, i.e. He looked at me (from a distance),' (where the subject occupies the agent and patient roles suggested for verbs of perception, and the personal object occupies the locative role 'target').
- lak-hane- 'over-distance-hee-put-me, i.e. He sent me (some distance in a direction away from the speaker and addressee),' (where the subject occupies the agent role and the personal object occupies the patient role in this depositional relationship).
- lye-napha- 'upward-hee-add-to-me-as-person, i.e. He put me up,' (where the subject occupies the agent role and the personal object occupies the patient role in this generalized personal objective relationship). The directional roots also occur as major class verb roots with final p: lyap- 'put up'; pelap- 'put down'; wulap- 'put out'; keleap- 'put in'; wustalap- 'put across a stream'.

(3) There are roots referring to holding and to imparting directional motion, where the agent who imparts the motion maintains contact with the patient who is held or moved:

- hak- 'grasping';
- lek- 'lifting';
- sepet- 'holding down';
- lit- 'pulling';
- hoekot- 'shoving'.

These roots all occur with the locative auxiliary -ha- to form verbs the subject of which occupies the agent role and the personal object of which occupies the patient role.
ha'-meelikhe, 'grasp--he-did-on-me, i.e. Be grabbed me,`
seepa'-meelikhe, 'hold-down--he-did-on-me, i.e. Be held me down."
Except for the root heket- 'shoving', these roots also occur in
participle-like forms:
ha'ko 'holding';
leko-leko 'holding up';
sesetek 'held down';
leko-loko 'pulling'...
This last form may also be derived from the major class verb li='pull'.
(4) There are roots referring to specialised kinds of looking;
these occur with the auxiliary -he' with the same roles as were
described for the verb hae 'perceive':
set- 'watch for, guard';
hyt- 'examine';
hy'-meelikhe. 'examine--he-saw-me, i.e. Be examined me.'
These roots also occur with what are analogs of -oko manner participles
of major class verbs:
setoko 'watching for, guarding';
hiteko 'examing, watching'.
(5) There is a class of stems referring to pointing or discharging
weapons; these occur with the locative auxiliary -he'. The subject of
the resultant verbs occupies the agent role, and the personal object
occupies the locative role 'target'. Derivationally, these stems are
constructions including the -oi transitivizer/verbalizer and a
secondary verb root, but they most commonly occur in this form:
nomut- 'threateningly gesture with a weapon, tool or flat';
pappakat- 'prepare to shoot a bow by tensing the string and aiming';
plissinit- 'shoot an arrow';
nomut- 'thrust a spear or blade';
plissinit-meelikhe. 'Shoot-arrow--he-did-towards-you(sg), i.e. Be shot
an arrow at you.'
nomut-meelikhe. 'Thrust-spear--he-did-towards-you(sg), i.e. Be thrust
the spear at you.'
(6) There are roots referring to chasing; these occur with the
locative auxiliary -he'. The subject of the resulting verbs occupies
the agent role, and the personal object occupies the locative role
'target' or 'locus' :
muk- 'chase';
set- 'drive (a pig); keep (flight) off';
mu'-meelikhe. 'chase--he-did-towards-me, i.e. Be chased me out.'
(where the speaker occupies the 'target' locative role).
se-neekhe, 'choo-he-did-on-me, i.e. He chased (flies) off me,'  
(where the speaker occupies the 'locus' locative role).

(7) There are roots referring to understanding or recognition and 
mis-understanding or non-recognition; these occur both with the locative 
auxiliary 'he' and the depositional auxiliary 'hehi'. The personal 
object is interpreted to occupy the 'target' locative role with 'he' 
or the patient role with 'hehi':

\[ \text{hvt- 'understand, recognize'}; \]
\[ \text{not- 'misunderstand, fail to recognize'.} \]
\[ \text{hvt-hane. 'recognize-he-did-on-me, i.e. He recognised me.'} \]
\[ \text{hvt-hane. 'recognize-he-put-me, i.e. He recognized me.'} \]
Both these stems occur in forms analogous to past participle forms of 
major class verbs, but with an included clitic juncture:

\[ \text{hvt-ek 'understood, or recognised, or recognisable'}; \]
\[ \text{not-ek 'misunderstood, or unrecognised, or hard to recognize'.} \]

(8) There is a root referring to experimentation or performance 
for the first time; the root occurs with the locative auxiliary 'he' 
in verbs the subject of which occupies the agent role and the personal 
object of which occupies the 'locus' role:

\[ \text{wal- 'experiment, try, do for the first time';} \]
\[ \text{wa-nean. 'try-do-it-on-me, i.e. Try it on me (e.g. of an armband).'} \]

(9) There are a number of roots occurring with the locative 
auxiliary 'heal' but taking no personal object markers. The subject of 
these verbs occupies the agent role, and a non-personal referent 
implicit in the stem or specified in an external noun occupies a patient 
role; among these are:

\[ \text{nik- 'taste it'}; \]
\[ \text{pelo- 'poke at it';} \]
\[ \text{hot- 'pound on it (as of a wedge)';} \]
\[ \text{nik-hehe. 'He tasted it.'} \]

(10) There are several roots of rejection or repriamand occurring 
with the auxiliary 'heal' with marked personal objects, but not with the 
unmarked forms of that auxiliary. The forms marked for third person 
plural personal objects are used for all third person objects; these 
include:

\[ \text{halotot- 'neglect';} \]
\[ \text{hetemot- 'rebuke severely';} \]
\[ \text{hetemot-hisan. 'strong-rebuke-2s-places-for-3p, i.e. Rebuke him or 
them severely,' (where the personal object occupies the patient 
role and the subject occupies the agent role).} \]
(11) The stem hatek- 'leave alone' occurs with all forms of the depositional auxiliary -heih:
    hatek-heih. 'leave-alone-2s-put-3p. i.e. Leave him, her, it alone,'
    (where the subject occupies the agent role, and the object
     implicit in the stem occupies the patient role).
(12) The stem hep- 'leave alone, forget all' occurs with the auxiliary -heih but requires the older first
     person object marking forms, and all forms of the auxiliary occurring with this root occur
     as allomorphs minus the initial h. The unmarked auxiliary, with
     implicit third person singular object as patient connotes positive
     evaluation, and the third person plural object-marking form of the
     auxiliary connotes negative evaluation of the patient:
        hep-er. 'leave-alone-2s-place-3p, i.e. Leaves him/her or it alone.'
        hep-isan, hep-san. 'leave-alone-2s-place-3p, i.e. Forget about it,
        him, her, them.'
(13) The stem go- 'roughly place' occurs with the auxiliary -heih with
     third person plural object-marked forms only, particularly the
     contracted forms like -san:
        go-san. 'roughly-place-2s-put-3p. i.e. Put it, him, her, them
        down roughly.'
(14) There are several secondary verbs roots occurring only with
     the dative auxiliary -et-. The subject of the resulting verbs occupies
     the agent role, and the object occupies the recipient role:
        jok- 'tell';
        mok- also melak- 'share food with';
        mok- 'feed mouth-to-mouth with shared food';
        jok- the. 'tell-he-transferred-to-him, i.e. He told him.'
        melak-the. 'share-food-he-transferred-to-me, i.e. He shared
        food with me.'
        melak-ma. 'feed-mouth-to-mouth-he-transferred-to-him, i.e. She fed
        him (her baby) some [food] mouth-to-mouth.'
(15) The root hoko- 'praise, compliment, express amazement at',
     and the derives stem nymnyt- 'entice' occur with the generalized
     personal objective auxiliary -weh with first and second person
     and plural personal objects and with the auxiliary -et- with third
     person singular personal objects and, in the case of hoko-.
     also with non-
     personal objects. The subject of the resulting verbs occupies
     the agent role, and the personal object occupies the patient role in these
     constructions:
        hoko- mahe. 'praise-he-did-to-me-as-person, i.e. He complimented
        me, or He expressed amazement at me.'
        nymnyt-she. 'entice-he-did-to-her, i.e. He enticed her.'
(16) The roots hang- 'come to the ready with a weapon' and let-
'dry out' occur with the depositional auxiliary -he1- and the auxiliary
-er-. The root hang- has also been observed, like a secondary verb of
incurred process, with the clitics -sek and -boko:

hang-the. 'He brought (his spear) to the ready.'
let-he1-ke. 'Dry—he-placed-him-it, He put it out to dry, dried it
out.'

hang-sek wetek. 'The subject is at the ready.'

(17) There are a number of 'bound adjective' roots which are
observed to occur, like adjectives, with the auxiliary -se-, -st-
'become' and/or with the verbalizer/transitivizer -vit- and an auxiliary
verb. These roots have not been observed as independent words, however.
Examples include:

nouk- 'lost'; nouk-sek. 'He got lost, or Be lost out.'
nouke-*naphe. (nouk- + -st- transitive) 'lose-out—transitive—
held-to-me-as-person, I.e. He made me lose out, cheated me.'
nono- 'confused' or 'left out';
nono-sek. 'Confused—I-became, I.e. I got confused, or I was left
out (didn't get the hoped-for award, e.g.).'

3.4. SUMMARY

This chapter has surveyed the semantic relationships of participants,
especially personal participants, to events as realised in Dari verbs.
These relationships of case or role are signalled by word order, overt
post-predicate relators (suffixed, cliticised and as independent particles),
and by affixes attached directly to verbs and auxiliary verbs. It has
been shown that Dari makes a high level contrast between personal and
non-personal objects of verbs, and that subordinate to this contrast
is a five-way contrast of semantic relationships of personal objects,
whether direct or indirect, to the events referred to in the verbs, and
that the contrast between direct and indirect objects is subordinate to
both of these. Only one verb, wet- 'hit, kill', of the large major
class of verbs occurs with directly attached affixes referring to
personal objects other than third person singular objects. Other major
class verbs take personal objects of other person and number categories
by periphrastic construction with one of four auxiliary verbs which
specify the semantic relationship of the object of the verb, whether
the object is direct or indirect. These relationships specify an event
as 'depositional', whether it is the personal object who is placed or
something else is placed for his benefit; or 'located on the body
surface', where either a second object is processed or, rarely, the
personal object himself is processed on or near his body surface; or
'dative', where the product of a process or a message is given to the personal object; or 'generalised personal objective', where an event of processing either something external or the personal object himself is viewed as personally affecting him in some way not specified by one of the three other auxiliaries. These contrasts are in almost all cases neutralised in reflexive voice, which is employed if the subject occupies an agent role plus any oblique role, whether that oblique role is a patient role otherwise occupied by a direct object or one of the other oblique roles otherwise occupied by an indirect object.

A small class of verbs resembles reflexive voice forms of the major class verbs. These minor class verbs, including verbs of motion like 'go', 'come', 'receive' and nine others, as well as other verbs like 'see', 'believe', 'eat' and 'get' are interpreted to be implicitly reflexive, with the subject occupying, typically, some oblique role as well as the agent role. Some of these verbs and some auxiliaries also occur in marked reflexive voice forms which are interpreted to mark reinforced roles, in some cases a reinforced agent role, in other cases a reinforced patient role, and in still other cases a reinforced beneficiary role.

A variety of classes of secondary verb roots and stems occur only with auxiliary verbs; the largest of these classes most commonly refers to events of incurred process, with the resulting state. The roots of these incurred process secondary verbs are implicitly intransitive and refer primarily to events incurred by non-personal participants as subjects. This construction with this class of verbs and a construction of major class process verb stems with another auxiliary are semantically similar to the category labelled middle voice in many languages.

The roles occurring with different classes of verbs and constructions of verbs with the various auxiliary verbs are summarised in Tables 13 and 14.
<table>
<thead>
<tr>
<th>VERB CLASS, VERB</th>
<th>SEMANTIC VALUE</th>
<th>SUBJECT OF NON-REFLEXIVE</th>
<th>SUBJECT OF REFLEXIVE</th>
<th>DIRECT OBJECT</th>
<th>INDIRECT OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major class, transitive, no aux.</td>
<td>process directed to change of state in patient</td>
<td>agent</td>
<td>agent plus (pnt, repnt, ben or loc)</td>
<td>patient (only)</td>
<td>xx</td>
</tr>
<tr>
<td>with aux.: -la-</td>
<td>incur a process, resulting state</td>
<td>pnt (non-personal except wat)</td>
<td>participant (reinforced)</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>aux.: -he-</td>
<td>put; completeive</td>
<td>agent</td>
<td>patient</td>
<td>($) ben</td>
<td></td>
</tr>
<tr>
<td>aux.: -he-</td>
<td>on body; Inceptive</td>
<td>agent</td>
<td>pnt (± loc)</td>
<td>($) loc</td>
<td></td>
</tr>
<tr>
<td>aux.: -et-</td>
<td>dative</td>
<td>agent</td>
<td>agent plus recipient; or sgt (reinf)</td>
<td>pnt (or repnt with weak only)</td>
<td>repnt</td>
</tr>
<tr>
<td>aux.: -ap-</td>
<td>personally affected object</td>
<td>agent</td>
<td>xx</td>
<td>patient</td>
<td>xx</td>
</tr>
<tr>
<td>Major class, Intransitive</td>
<td>process (naturally occurring; or relative motion—see text)</td>
<td>agent</td>
<td>pnt (± sgt with relative motion verba)</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>Secondary, Intransitive</td>
<td>process with -i-</td>
<td>pnt (± sgt with personal subject)</td>
<td>pnt plus sgt (only with personal subject)</td>
<td>xx</td>
<td>xx</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ABBREVIATIONS:</th>
<th>sgt = agent; aux = auxiliary; ben = beneficiary; loc = locus; pnt = patient; repnt = recipient; reinf = reinforced.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where the direct object occupies this role, no indirect object occurs.</td>
<td></td>
</tr>
<tr>
<td>Verb</td>
<td>Directional motion verbs</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td><em>be</em></td>
<td>(be =) 'go,' 'come,' 'move'</td>
</tr>
<tr>
<td><em>rise</em></td>
<td>(rise =) 'stand,' 'get up,' 'arise'</td>
</tr>
<tr>
<td><em>fall</em></td>
<td>(fall =) 'lie,' 'rest'</td>
</tr>
<tr>
<td><em>write</em></td>
<td>XX</td>
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<tr>
<td><em>ask</em></td>
<td>XX</td>
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<td><em>say</em></td>
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<td><em>install</em></td>
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<td><em>repair</em></td>
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<td><em>fix</em></td>
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<td><em>assemble</em></td>
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<tr>
<td><em>assemble</em></td>
<td>XX</td>
</tr>
<tr>
<td><em>disassemble</em></td>
<td>XX</td>
</tr>
</tbody>
</table>

*Explicitly restrictive; see text. **Role realised with agent role as subject if not realised.**
1. The allomorphic alternation between *ma, *wo is not fully predict-
able on the basis of the phonological shape of stems, although the
regularities are pervasive. The allomorph *wo occurs only following
stems with the syllables i, ei, e, y, v, ou, and u in the final
syllable of the stem (whether that syllable is open or closed), except
for: (1) one perhaps doctful recording of *wo with the obscure plant
species name keli; and, more importantly, (2) active verb forms,
where *wo follows the third person singular subject markers otherwise
realised as *e and *he but realised in this environment as *wo and *he;
wahe 'he his him'; wathema 'he his him and then someone else....'/
However, there are also stems with vowels including those listed above
in the final syllable which nevertheless occur with the allomorph *ma,
particularly:

  I 'water'; isaa 'in the water' or 'along the stream';
  ouw = o 'house, village'; owaa 'in the house, village.'

A number of place names consist of the names of streams plus this
suffix. Stream names ending in vowels, except for those ending in the
vowel i and also including the vowel i in the preceding syllable of a
two-syllable form, occur with the form isaa post-criticised to the
stream name, with loss of a final i or y of the stem and shift of the
clitic juncture to precede the suffix *ma:

   Nini stream name;   Minimo 'along the Nini';
   Juki stream name;   Jukimsa 'along the Juki';
   Hettky stream name; Hettikyima 'along the Hettky';

Verb forms including the allomorph -tyk of the prior action marker are
followed by the allomorph *ma, as expected, but some phonologically
similar forms are followed by *wo:

   waktyyk 'I came (and then I....); waktyymo 'I had come (and then
   someone else....)/'
   yttyma 'outside' (The simple form yttyk does not occur.)
   y[line]kk 'sloping up'; ylyymo 'on the upward slope'.

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2. The form oke with obligatory prefixation for person and/or number categories may be considered for practical purposes a homophone, although it is probably historically and semantically related. The form refers to possessed crops and commonly occurs with the suffix "ma 'setting' or the post-clitic -ke 'direction':
  "an nokesa 'among the plants which, with their promo, belong to me.'"

3. Fillmore notes that David Bennett has also referred to a relationship he labels 'path' and suggests, hesitantly, calling this the Path or Itinervative case, noting that it is distinct from his 'goal' case (Fillmore 1971:28-29).

4. The marking of independent nouns and pronouns occupying the agent role has suggested to some observers an ergative case structure, in which the subject of transitive verbs is marked in a way contrastive with the object of transitive verbs, which, like the subject of intransitive verbs, is unmarked or differently marked. So far as independent nouns and pronouns are concerned, Dani indeed resembles such a pattern:
  an taky. 'I I-went.' Never: (an-en taky); see note 5 below.
  an mawe. 'me he-hit-me, i.e. He hit me.' Never: (er-en mawe.)
  an waht. 'I I-hit-him, i.e. I hit him.' Also:
  en-en waht. 'ly I-hit-him, i.e. I hit him.'

However agent and patient roles are obligatorily occupied by persons referred to in verbal affixes or implicit in verb stems, as well as optionally occupied by independent nouns or pronouns. But the obligatory affixed markers of subject are identical for transitive and intransitive verbs of the same conjugation class:
  hyky. 'I-placed-it.'
  pyky. 'I-descended.'
  o pith. 'wood he-cut-its, i.e. He cut the wood off.'
  o pith. 'weather is-set-ridden, i.e. The weather cleared.'

In the first two of these last four examples, -sy marks first person singular subject, and in the last two, -sy marks third person singular subject; o 'wood, tree' and o 'weather-time universe' are homophones.

Personal objects, on the other hand, are marked very differently, as will be described in the text. The ergative pattern of cases at first suggested by the occurrence of -sy as an optional marker of agent with transitive verbs is not reflected in the verb morphology, as it is in true ergative languages. The clitic -sy appears to have as its first meaning a spatially defined sense 'place from which,' and
its use to mark subjects of transitive verbs appears to be based on a metaphorical extension of that sense to refer to the subject as the source of the action, the participant out from whom the action moves.

5. Ungrammatical forms are marked here in three ways, simultaneously: the citation is preceded by a term like 'never'; the linguistic forms are not underlined; and the forms are parenthesized. These conventions have been adopted here to avoid the use of the asterisk, in the fashion of current literature, in a way which is contrary to its use in historical and comparative linguistics and sometimes in structural linguistics. There are indeed three examples (in the filed corpus) of motion verbs with subjects referred to in independent pronoun followed by 'men. These cases appear to be of different kinds. In one example, a pause of self-interruption follows the 'men, so that the speaker may have altered his intended sentence in mid-passage. In another, the subject of the motion verb is also subject of an immediately following transitive verb, and the motion verb is related by a nominalizing clitic to the independent pronoun subject; it is the function with the transitive verb which appears to be marked in the clitic 'men. In the third case, the 'men is further followed by the clitic 'at, and this combination, as well as the clitic 'men by itself in other examples outside the filed corpus, does appear to occur before motion verbs as well as other intransitive verbs in a special sense referring to the action as emphatically the subject's own idea, not the result of someone else's planning. Thus one normally says:

\[ \text{es wak. 'I i-come, i.e. I have come.'} \]

And in this sense one does not say:

\[ \text{(es-es wak.)} \]

But if it is desired to emphasize that the subject came of his own initiative, it is possible to say:

\[ \text{es-es-at wak. 'es-\text{-}\text{men}-predictor I-come, i.e. It was my idea that I came.'} \]

Also, rarely:

\[ \text{es-\text{-}\text{men wak. 'es-\text{-}\text{men}-phrase I-come, i.e. I came of my own initiative.'} \}

This last example sounds rather strange, and clearly the use of 'men with independent subjects of motion verbs is abnormal.

6. The noun hekhe 'stone' is more animate for Tami speakers than 'stone' is for English speakers. When asked what besides people are or is like people, an informant listed stones first, referring to several particular stones and also to a myth about the origin of stones in general. In one text a boy who refused to keep the proper food
taboo goes to sleep on a rock which seizes him and holds him forever:

...heles-en motto' nye-hoko hat-hasikheko... 'stone--by altogether
tight--manner grab--is-did-on-him-setting, i.e. The stone seized
him very tightly....'

It may be that this animateness of stones is reflected in the use of
-nen with stones as instruments, or it may be that -nen is used to
eliminate the possible locative understanding that the clitic -ops,
used with many instruments, might convey:

heles-en wathi. 'stone--with I-hits-him, i.e. I hit him with a stone.'

heles-ops wathi. 'stone--on/stone--by I-hits-him, i.e. I hit him on a
stone, or I hit him with a stone.'

7. A very similar pattern is observed in Kapauku or Eka’i (Ekari),
the language spoken in the vicinity of Lake Paniai in the western
highlands of Irian Jaya (Soble 1960).

A. It is to be noted that usually non-personal referents, particularly
inanimate referents, are treated in Dani as third person singular.

Here such referents are treated as third person plural. The only other
place where this may be interpreted to occur is with certain occurrences
of the depositional auxiliary -h(e), which as a primary verb means
'put'; this auxiliary sometimes occurs with third person plural object-
marking prefixes with apparent reference to inanimate objects:

loh-hisan, or: loh-san. 'Layer it up (with a connotation of
carelessness or negative valuation).

It appears to be unmotivated to postulate an implicit third person
plural indirect object in this kind of example.

9. The reader will note that these simple rules for realisation of role
occupants as subject are quite different from the rules in English or
other languages with true passive constructions. In English the agent
is frequently present as a role in an event realized as a verb the
subject of which is the occupant of a patient role, and occupants of
other roles, e.g. Instrument, also occur realized as subjects:

I was hit by John.

John’s bat hit me.

10. Verbs marking case relationships have been reported from
Nachiguenga of Latin America and Kinyarwanda of East Africa (Gary and
11. It will be noted that the verb wata is polysynthetic, with two major senses reflected in the glosses 'hit' and 'kill' provided in some of the examples. This kind of polysynthesis is shared by a few other process verbs which occur with one sense referring to the initiation or carrying on of a process without bringing it to completion in such a way that the patient is changed, and with another sense referring to completion of the process in such a way that the patient is changed. These two senses of wata 'hit, kill' occur with all of the person-marking prefixes:

nath. 'He hit me, or He killed me (said by a ghost).'
heath. 'I hit you, or I killed you (said over a holy).'

This contrast also occurs in other meanings of this verb, where the death of animate creatures is not involved, so that object-marking prefixes do not occur, but the contrast is correlated with the possibility of occurrence of the auxiliary verb -ia, -iat 'show a process and resulting state', which only occurs with senses referring to completed processes involving a change of state in the patient. This will be further discussed in connection with this auxiliary.

In an earlier version of this chapter, it was proposed to treat this contrast in terms of contrastive patient roles, 'aFFECTed patient' and 'patient'. In view of the limited number of verbs involved it has been suggested that the contrast might better be handled in terms of polysyntactic of the verbs, as described above, with the patient role considered the same with both meanings. I at very much indebted here, and in much of the treatment of personal objects, to some observations and suggestions of Professor Lounsbury, my thesis advisor, although he of course is not responsible for the remaining infelicities of treatment.

12. It is to be noted that both h and k are reflexes of the same proto-Dani phoneme *h/ (Bronley 1961:16-19). Father van der Stap refers to most of the personal object markers as infixes (e.g. 1966:89). I restrict the reference of the term 'infix' to morphemes occurring inserted into another and otherwise unsegmentable morpheme; according to the analysis proposed here, there are very few such cases. The reader may compare Father van der Stap's different segmentation of morphemes.

13. It appears unmotivated to postulate reference to third person plural beneficiaries here, as if doing something for some unspecified 'them' (in contrast to doing it for 'me' or 'you' or 'us' or 'him') were to do it carelessly. No informant has ever reacted that this is his interpretation of those forms, and it seems more likely that there
is here special idiomatic use of third person plural reference to inanimate direct objects with this special sense. It will be recalled that the relator noun, with third person plural prefixation, is also used of inanimate referents.

14. The root *was-* does not occur with the unmarked forms of *-he-*.

15. The stems ending in *-s-* are transitivised secondary verb stems of incurred process. This derivational construction will be treated in connection with secondary verbs later in this chapter.

16. Note Father van der Stap's term 'energetic voice' for some constructions with *-he-* (1966:79-81).

17. This is in contrast with what is reported from the Mukuoko area by Father van der Stap (1966:91-92), but is in agreement with my data for the other dialects in Grand Valley which I have studied.

18. In an earlier version of this chapter I interpreted the direct personal objects of verbs occurring with *-sp-* as occupying both a patient and a beneficiary role, to distinguish the personal quality of this relationship from the simple non-personal patient relationship occurring with simple verbs, with no auxiliary, and from the patient relationship occurring with personal objects marked in prefixes attached directly to the verb with *'hi*, *ki'*. It now appears much simpler to recognise that each auxiliary adds not only role possibilities to the verb, but also a semantic component to what becomes a kind of verb compound, and that this component distinguishes the relationships signalled by the generalised personal objective marker *-sp.* This auxiliary is then parallel with the other three in that a personal object can occur as either a direct object or an indirect object, but that in either case, a distinctive semantic component is present in the verb-auxiliary unit.

19. There are a few reflexive forms where the subject also occupies a personal object role and a distinct personal object also occurs occupying a different personal object role. Even in those forms there is only one personal object marked as object in terms of verb affixes, since the object role occupied by the subject is ambiguously marked in the reflexive voice form. These cases will be treated under the discussion of reflexive voice, below.
20. Although further check is needed, it appears that where the
personal object is direct and occupies a patient role and is corefer-
ential with the occupant of the agent role, any independent noun or
pronoun referring to this person or these persons may not be marked
with the clitic -me, but where there is a distinct occupant of the
patient role, this clitic may optionally occur with the form referring
to the agent:

  at-en nathe. 'him-by he-hit-me, i.e. he hit me,'
  an watky. 'I-hurt-myself, i.e. I hurt myself,'
In the sense of the last example one may not say: (an-en watky).
  at-en hesi wa' nakeike. 'him-by mud arikke-naput-for-me,
  i.e. he put mud-pigment on me.'
In this sense, with hesi 'mud' as a separate occupant of the patient
role, one may say:
  an-en hesi watky. 'me--by mud I-struck-myself, i.e. I put mud on
  myself.'

21. Fillmore in recent work explicitly allows for the same 'argument'
to serve more than one role or case (1970b:116). He also explicitly
rejects the possibility of more than one noun phrase serving in the
same case role within a single simple clause (1971:7). The suggestion
made in the text for Dani is different from either of these. It is
here proposed that the same participant may be related to as event not
only by more than one role, as in most senses of the reflexive voice,
but also, in certain cases, by a reinforced occurrence of a single role.

22. Father Van der Staph refers to this construction as medial voice

23. A thorough re-check of all verbs in the lexicon must be made before
a satisfactory list of such verbs can be compiled. Gero Bauer makes a
similar distinction for English verbs and uses the labels 'telic' and
'atelic', but for distinct verbs rather than distinct senses of the

24. After adopting this analysis I encountered Fillmore's treatment
of English 'rise', in which he proposes a required object case and an
optional agent case, the latter occurring in such examples as 'John
rose', but not in such examples as 'The smoke rose'. This is equivalent
to the description adopted here. Compare Fillmore (1970b:117). It is
also interesting to note that a number of the verbs of motion in Koind
Greek are middle voice verbs, suggesting that the moving participant
is in Greek also related to the motion by more than just an agent role.

25. There is a fairly uncommon form ekeko used only in the sense 'burned' which occurs like a past participle in construction with patient nouns. No such form has been recorded in the senses glossed 'eaten', 'smoked' or 'drunk'.

26. The verb of poly-directional motion is thus different in its semantic structure from the verbs of unidirectional motion. The latter do not occur with marked reflexive voice forms and may occur with the subject occupying only the patient role. Note that there are other verbs referring to events of motion which also differ from the directional motion verbs; the verbs of 'gathering', 'scattering' and 'changing direction' are major class intransitives, as described earlier in this chapter.

27. This pattern of paired stems with varying kinds of phonological modification is a productive pattern of derivation of both noun and verb stems, with a number of resulting senses, most of which include a component of intensity. Like most derivational phenomena, this pattern has been excluded from treatment here.

28. Fillmore employs roles labelled 'source' and 'goal' in combination with other roles to describe both spatial and abstract relationships. For example, he suggests that the subject of 'sell' occupies simultaneously the roles 'agent' and 'source' (1970b:117; compare 1971:12). That pattern of analysis was adopted by Donald Pratts in his dissertation on Blackfoot (1970). There are many attractive features to that sort of analysis for Dani also, particularly when one noted that the same surface marker, the post-clitic -see, is frequently employed to mark 'place from which' and 'agent' of transitive verbs. However, after having been considered, that analysis has been rejected here. It required a great many more examples to be analysed in terms of two roles occupied by a single participant, where the present analysis limits this kind of plural role occupancy largely to reflexives and what are interpreted to be implicit reflexives. Further the overt marker -see occurs in Dani to mark an agent only where the subject does not also occupy a patient role. The absence of such a role for the subject, usually together with occupancy of the patient role by another participant already accounts for what would be redundantly marked by positing a source role as well as an agent role for occupancy by the subject.
29. This is essentially the sense of the term 'patient' used by Chafe for the role of the noun accompanying verbs of state, which in his system include adjectives (1970:98).

30. The relator -we is normally a post-clitic but here receives word stress. There are problems of analysis and description of sequences of what are elsewhere clitics, and these problems are not adequately treated in my description of Dani phonology (Bromley 1961:52), nor will they be treated here.

31. It is clear that there are semantic differences between the roots which occur only in verbs with non-personal subjects and those which occur also in verbs with personal subjects. Further study of this class and the semantic composition of the members is needed. See also the section below on the relationship of many of these roots to major class process verb.

32. These forms of secondary incurred process verb roots occur with a much less restricted array of superordinate verbs than is the case with the parallel -we manner participles of major class verbs. In general, -we manner participles of major class transitive verbs which do not also occur in an intransitive sense occur only preceding transitive verbs, and only -we manner participles of intransitive major class verbs which are both transitive and intransitive may occur before intransitive verbs. Apparently these secondary verb stems are implicitly intransitive, and 'intransitive' is an unmarked category which in the context of transitive verbs has transitive reference. Most major class process verbs are implicitly transitive, and 'transitive' is a marked category which never has intransitive reference:

- watoko wo'-nethe. 'Killing nose--he-transferred-fi-to-me, i.e. He killed it and gave it to me.'
- But one may not say:
- (watoko ako.) 'Killing we-came-into-possession, i.e. We killed it and took it.'
CHAPTER 4
SINGLE EVENTS AND UTTERANCE PARTICIPANTS:
CATEGORIES OF DEICTIC ORIENTATION, PERSON, AND EVENT MODE

The preceding chapter described the categories of voice and role
relating participants to single events. The relationships of those
participants to the speech event was passed by without remark except
for notation of person and mode categories in examples and paradigms.
But in fact every event in discourse is oriented within the speech
event, and the utterance-relative or deictic categories which reflect
that orientation comprise some of the most important links tying events
together in discourse. The positions of the speaker and addressee in
time and space, the speaker's evaluation of the factual status of the
events narrated, the identity of the speaker and addressee and their
shared knowledge concerning the events are among the major deictic
systems of concern. In this chapter these categories will be examined
in relation to single events. In the next chapter, categories of per-
sion and mode in sequences of verbs in sentences are examined, and in
Chapter 6 deictic categories will be examined in utterance context.

Before proceeding to treatment of these deictic systems it is useful
to define some units of discourse. An utterance is here defined as the
uninterrupted speech of one speaker (or, in the rare event of union
speech, one set of speakers in union) to one addressee or set of
addressees on one occasion. Uninterrupted speech is considered to be
speech in which the speaker's role is not surrendered to silence
except for what he and his addressees would consider to be pause or
hesitation in the same conversation or monologue, nor is it surrendered
to another speaker for other than brief signals that the addressee is
listening. Utterance is thus equivalent to Pike's monologue (Pike and
Lowe 1969:14). A discourse is defined as the speech of one or more

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speakers to each other or the same or overlapping sets of addressees on one occasion. Tentatively, the topic of discourse is not included in these definitions, as very frequently topics shift through discourse without destroying demonstrable continuity. Other units need to be defined, but at least these are basic to any treatment of deixis.

4.1. PLACE DEIXIS AND THE VERBS OF UNIDIRECTIONAL MOTION

The location of the speaker and addressee(s) in space is marked in several 'null' word sets. The most important of these sets in discourse is the set of unidirectional motion verbs already encountered in Chapter 2. These verbs are of high frequency in a number of kinds of discourse, but are also of interest in terms of their semantic structure and their patterning in sequences; with other verbs, the former is treated here, and the latter is treated in Chapter 5. This set may be displayed in a paradigm with marked contrast of two kinds of orientation: (1) deixis orientation toward or away from the position of the speaker and/or addressee; (2) topographical orientation to one of three frames of reference - a valley, an enclosed space or a stream at or near one point in its course. In a valley, motion is either up or down, whether along the course if the stream or perpendicularly to the stream on the valley slopes, or vertically up or down. With reference to a house, a village area or some inhabited valleys and population centers, motion is oriented in or out of the enclosed area. A point in the course of a stream, motion is across the stream.

<table>
<thead>
<tr>
<th>TABLE 16 VERBS OF UNIDIRECTIONAL MOTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOPOGRAPHIC ORIENTATION</td>
</tr>
<tr>
<td>Irrelevant</td>
</tr>
</tbody>
</table>
| Centripetal (down) | laki = 'upped' | laki = 'some up'
| Centrifugal (up) | pl = 'descend' | pl = 'some down' |
| Centripetal (in) | wutu = 'in' | wutu = 'some in'
| Centrifugal (out) | kiki = 'outside' | kiki = 'some out' |
| To valley: | wa, wita = 'some across' |
| To enclosed space: | wa, wita = 'some across' |
| To stream at point: | wa, wita = 'some across' |

*a* here is a contraction from wa, a stem of 'come'.
The left hand column of verbs referring to motion away from the speaker and/or addressee(s) includes in each case a single verb root, whereas the right hand column includes verbs with two roots, one referring to directional motion as topographically oriented, the second referring to directional motion descriptively oriented. So far as semantic complexity is concerned, the columns are equivalent; this would be more apparent if the left hand forms were glossed ‘go up’, ‘go down’, etc.

The forms in the right hand column are semantically marked, however. The verb *la* = ‘go’, for example, is the unmarked member of this paradigm. This is the verb used where direction is irrelevant, e.g. of a child creeping:

> wamappuk *ly'l=lay* - ‘creeping going--he-is, i.e. He is creeping.’

(of a child’s stage of development).

Further, in each horizontal pair, the left hand member is unmarked and used where deictic orientation is irrelevant:

> ilyyk -pyyk *ly'l=lay* - ‘ascending--descending saying--they-are, i.e. They are going up and down.’

In the two pairs of motions in opposite directions included in the left hand column, the upper verb is regularly listed first in paired constructions like the last example:

> wjlyyk - *ly'l=lay* - (wlyyk = wyl= alternate root meaning ‘exit’)  
> ‘coming--entering saying--they-are, i.e. They are going out and in.’

Compare:

> ilyyk - wlyyk *ly'l=lay* - ‘going--coming saying--they-are, i.e. They are going and coming.’

The arrangement of verbs in Table 15 is thus not arbitrary but reflects distributional clues to semantic mark-ness.

There is also a verb of poly-directional motion which, as was noted in Chapter 3, is defective in its inflection (e.g. no simple imperative/hortative forms occur); it is also distinctive in distribution from the verbs of unidirectional motion:

> nykhy-loken, ‘moving-around--you agi=continue, i.e. Keep on the move.’

4.1.1. Other Unidirectional Verbs

Verbs of directional looking and directional sending may be displayed in a paradigm exactly analogous to Table 15:
<table>
<thead>
<tr>
<th>TOPOGRAPHIC ORIENTATION</th>
<th>DEICTIC ORIENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant</td>
<td>lak-hei = 'send away' lak-hei = 'send here'</td>
</tr>
</tbody>
</table>

### Table 16: Verbs of Directional Looking

<table>
<thead>
<tr>
<th>To valley:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Up</td>
<td>lyak-hei = 'look up there' lyak-hei a = 'look up here'</td>
</tr>
<tr>
<td>Down</td>
<td>pelak-hei = 'look down there' pelak-hei a = 'look down here'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To enclosed space:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Out</td>
<td>wulak-hei = 'look out there' wulak-hei a = 'look out here'</td>
</tr>
<tr>
<td>In</td>
<td>kelak-hei = 'look in there' kelak-hei a = 'look in here'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To stream at point:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Across</td>
<td>wuttelak-hei = 'look across there' wuttelak-hei a = 'look across here'</td>
</tr>
</tbody>
</table>

In most cases the noun kell-ekken 'your(egg) eyes' (or another form of this noun) precedes examples like those in Table 16.

### Table 17: Verbs of Directional Sending

<table>
<thead>
<tr>
<th>TOPOGRAPHIC ORIENTATION</th>
<th>DEICTIC ORIENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant</td>
<td>lak-hei = 'send away' lak-hei a = 'send here'</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>To valley:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Up</td>
<td>lyak-hei = 'send up there' lyak-hei a = 'send up here'</td>
</tr>
<tr>
<td>Down</td>
<td>pelak-hei = 'send down there' pelak-hei a = 'send down here'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To enclosed space:</th>
<th></th>
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<tbody>
<tr>
<td>Out</td>
<td>wulak-hei = 'send out there' wulak-hei a = 'send out here'</td>
</tr>
<tr>
<td>In</td>
<td>kelak-hei = 'send in there' kelak-hei a = 'send in here'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To stream at point:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Across</td>
<td>wuttelak-hei = 'send across there' wuttelak-hei a = 'send across here'</td>
</tr>
</tbody>
</table>
4.1.2. Topographical Orientation

The components of topographic orientation presuppose valleys, streams and enclosed areas like houses, valleys and some large population units. Part of the ranges of reference of these terms is indicated in Figure 3:

**FIGURE 3**

**REFERENCE OF TOPOGRAPHIC DIRECTIONAL TERMS**

Motion 'down' and 'in' is toward a more restricted range of destinations than motion 'up' and 'out'. It is suggested here that motion 'in' and motion 'down' share a semantic component which may be labelled 'centripetal' as over against motion 'up' and motion 'out', which share a component which may be labelled 'centrifugal'. In general, orientation to a valley or valley system is used for most motion, from short trips to the longest journeys. Motion oriented to enclosures is restricted to houses, villages and certain centres of population. And motion across a stream is referred to with the verb of crossing only when one stream is involved and the points of reference are fairly close to the stream. However, there are unpredictable patterns of reference of these terms with reference to different areas and from different vantage points. From Retigima, where most of the data in this study were recorded, one goes 'in' to the next confederacy area down the Balin valley on the same side of the river, and goes 'down' to the next confederacy area down valley on the other side of the river. From Tangma, a point about fifteen miles down valley, where a slightly different dialect of Lower Grand Valley Dani is spoken, one goes 'down' to the next confederacy area down the Balin gorge on the same side and 'goes' to the next confederacy area down valley on the other side. These considerations may be excluded from attention here.

4.1.3. Deictic Orientation

A few years ago Charles Fillmore called attention to the deictic categories presupposed in the English verbs 'come' and 'go' (1966a). If some inconsistencies in his stimulating article are corrected, the
rules which he proposes for determining the presupposed deictic meaning of these verbs will work equally well for Dani. In lower Grand Valley Dani, if motion is toward the position of either the speaker or the addressee at the time of utterance or at a time yet future, it is defined as motion 'toward' the deictic reference point:

- emo. 'Come here (toward the speaker now),'
- waky. 'I'm coming (toward the addressee now),'
- oheleka w'amo. 'Tomorrow (you go) come-later, i.e. Come tomorrow (toward where the speaker or addressee is now, or where the speaker will be tomorrow).'
- oheleka w'ayki. 'Tomorrow I-come, i.e. I'll come tomorrow (toward where the speaker or addressee is now or where the addressee will be tomorrow).'

When referring to motion in the past there is an option of selection of a past position of the speaker or addressee at or near the time of the event, or, occasionally of selection of a point of vicarious reference even though neither the speaker nor the addressee participated in the events. However this selection of a vicarious reference point is very much less common than in English. There is only one example in the nine fairy tales in the filled corpus. Normally the narrator tells his tale as if it occurred in the setting of the utterance and uses the location of himself and his audience for deictic reference. Whenever a deictic reference point is established, it remains constant for long segments of discourse. Neither of these conventions is observed in English, where vicarious reference points are constantly established and moved to be 'where the action is'.

4.1.4. Motion Verbs as Discourse Links

These verbs of directional motion serve as important discourse links. The retention of constant deictic reference points through long sections of discourse is a kind of linking mechanism. In one long travel narrative, the speaker shifted his point of reference to the site of the major developments in the tale (in which he was a participant), then later shifted back to the setting of the utterance. Meanwhile his local listener was confused and 'corrected' his three times, suggesting forms oriented to the speaker's and addressee's location at the time of utterance. In one fairy tale the deictic reference point was similarly moved to the scene of most of the events in the story, although of course neither speaker nor addressee participated in those events. But those examples are exceptions. In most fairy tales, as noted, the setting of the utterance is near the setting of the tale.
Dani also tends to include explicit reference to entrance of participants onto the scene and their departure from the scene; this also serves to tie narrative discourse together. This is not a rule without exceptions, and the 'exceptions' are partially a matter of backgrounding and foregrounding of participants in regular ways. This kind of explicit reference to movements of participants and to stages of their movements has been observed in other languages as well (e.g. Saramaccan of Suriname, by Grimes and Glock 1970:18; Tonga of eastern Africa, by Jones and Carter 1967:113).

These mechanisms function the more noticeably because of the Dani opposition, already observed, of directional motion events on the one hand and all other kinds of events on the other. This opposition determines selection of verb categories used in referring to sequences of events, as will be described in Chapter 5. The syntactic contrasts serve to establish a continuity of movements of the participants, providing a setting for other events in relation to those movements.

4.2. EVENT NODE

An event with its directly involved participants is commonly represented graphically by stratificational grammarians with the device of a node, labelled with a gloss, identifying the event, and lateral solid lines with labels indicating roles which connect the event and the event participants, who are also labelled with glosses or names. It is convenient to put all event participants who are not either speaker or addressee on one side of such a diagram. Figure 4 partially represents the semological elements and relationships in a clause glossed, 'Ukumhezirk killed Lio'. The representation is only partial, however.

**FIGURE 4**

<table>
<thead>
<tr>
<th>process</th>
<th>AGENT</th>
<th>Lio</th>
</tr>
</thead>
<tbody>
<tr>
<td>kill</td>
<td>Vukhezetyk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PATIENT</td>
<td></td>
</tr>
</tbody>
</table>

for it does not include an indication of whether this event is reported as a fact, with the appropriate gloss as given above, or whether it is reported as hypothetical, so that it might be glossed, 'Ukumhezirk nearly killed Lio (but didn't)!', or whether it is reported as potential, so that it might be glossed, 'Ukumhezirk will kill (or might kill, or is liable to kill) Lio.' Every finite verb in the language is in fact, as described in Chapter 2, unambiguously inflected for one of these categories of event node. Each of these nodes refers to the judgment
of the speaker concerning the status of event as factual, hypothetical or potential as he reports it to the addressee. Thus the diagram above needs to be extended to include the speaker and addressee and their connection to the event via those utterance roles and the modal category:

**FIGURE 5**

**DIAGRAM OF AN EVENT INCLUDING THE MODAL CATEGORY**

The label 'factive' indicates that the event represented as a process, killing, is reported as a fact. It is significant that the modal category is differently related to the event from the more lexical components included in the box in Figure 5. Those components specify the event as a member of the class of processes and, within that class, as the process of killing. The event is related via the mode category to the speaker and addressee whether or not they are overtly referred to in the utterance; they are not overtly referred to in the clause realizing the structure diagramed in Figure 5. The relationship of the event to the speaker and addressee might at first appear to involve only the former and his judgment about the event, but it also involves the addressee. In one text in the filed corpus the speaker says to an addressee concerning a proposed trip with a third person who is present:

hap3it yiy'-iske. 'my-dislike suppose-he-is, i.e. he says he doesn't want to.'

The finite verb in this example is in present progressive aspect, factive mode. But the speaker then turns to the concerned third party and says:

lakel5-ne: hap3it-ne. 'plural-subject-will-go--query pour(s)-'

dislike-query, i.e. are we going to go or don't you want to?'

The finite verb in the second example is in the potential mode. What was reported as fact to one addressee is reported as a potential matter to another who will be making the decisions involved. Event mode is thus a category involving both speaker and addressee and is an obligatory category in all finite verbs.

### 4.2.1. Other Models for Describing Modal Categories

Related phenomena in English have recently been treated by John Robert Ross within a transformational framework. Ross notes that certain occurrences of reflexive pronouns in declarative sentences can
be accounted for by positing a 'performative' clause of the type 'I tell
you' as the highest level clause in the deep structure. This clause is
then regularly deleted in declarative sentences, so that what in deep
structure was an embedded clause appears in surface structure as an
independent clause. Within the framework of tagmemic and, so far as
I know, independently of Ross's work, Pike and Lowe have come to an
equivalent position:

In every declaration, be it a business letter, a book preface, a
political manifesto, a simple monologue or a quotation of someone
else's speech, the 'I-say' type of declaration like I tell you, I say
so on, is implicit (1969:85ff).

The main point in these positions is that every sentence is structurally
related to its deictic setting within the context of utterance, includ-
ing the speaker and addressee. The question of interest is how this
structural relationship, now recognised, can best be described. It may
be noted first that commonly in connected discourse a modal category is
relevant not to one clause only, but to long sequences of clauses.
Therefore any clause by clause treatment is wasteful. However, Ross's
model might be revised by positing a higher level 'performative' verb
relevant to a string of clauses or sentences labelled or treated as a
unit.

A more basic objection is that this 'deep structural' relationship
does not have the characteristics of 'surface structure' clauses. It
is arbitrary to say, for example, whether the 'deep structure' verb is
'I tell you' or 'I declare to you' or 'I say to you'. It is also not
possible to posit anything other than a present tense declarative verb;
there seems no useful purpose or even any possibility for positing a
deleted form like 'I said to you' or 'I will say to you'. In other
words, the elements that are relevant are not 'verbs' or 'clauses' but
rather the utterance participants, the speaker and addressee, and the
modal category relating them to the utterance. These elements and
relationships are more economically treated in the stratificational
model in terms of semological nodes and relationships as suggested
here, with the speaker and addressee relevant for whole utterances.
And, as will be evident in the discussion in Chapters 5 and 6, this
inclusion of the speaker and addressee in the semological structure of
every utterance is useful for and required by several sets of phenomena,
including pronominalisation, as well as mode categories.
4.2.2. Semantic Values of Dani Event Modes

The modal categories under discussion at this point are not exactly those treated by Ross. Categories like 'declarative', which he treated, and 'interrogative' are handled in Dani by mechanisms utilizing intonation and optional clitics to mark what will be described in Chapter 6 as 'dialogue mode' and 'logical mode'. But the modal categories which are obligatory in Dani finite verbs are also distinct in reference. They have been identified in Chapter 2 as factive mode (including van der Staal's near past tense, remote past tense, habitual aspect, perfect past tense, etc. 1966:15-25), hypothetical mode (van der Staal's unreal aspect 1966:39) and potential mode (including van der Staal's near future tense and indefinite future tense 1966:7, 10; assertive aspect 1966:42-56; intentional aspect 1966:57, etc.). These categories are here interpreted to be fundamentally modal because of what they contrast with and what they refer to. That these are categories of a single kind is suggested by the morphological pattern of verbal inflection described in Chapter 2, in which the second relative order of suffixation of primary verbs is occupied by the markers of these categories: (1) + after consonants or - after vowels (both are reflexes of proto-Dani c/h/), except that -e occurs after vowels before the remote past marker -ik, -uk; these mark factive mode; (2) -er (-er after /n/, /l/ and freely varying with -er after /s/, -er elsewhere); this marks hypothetical mode; (3) the absence of either of these and the occurrence of suffixes which mark sub-modal categories and potential mode as portmanteau morphemes:

waitin (-er) -factive 'you (sg) killed, hit him';
waiten (-er) -hypothetical 'you (sg) almost killed him, (might have bus didn't, etc.)';
wait (-en) -potential, immediate imperative, 2s subject) 'kill him now (said to one person)';
waiten (-en) -factive 'you hurt yourself';
waiten (-en) -hypothetical 'you almost hurt yourself' wait (-en) -reflexive; -en potential, immediate imperative, 2s subject) 'hurt yourself now (to one person), etc.'

4.2.2.1. Hypothetical Mode

In this three-way contrast, the most semantically homogeneous category is that marked by the suffix -er, -er-. Clearly the reference of these forms is to hypothetical status of an event, whether in past, present or future time. The glosses above served only as labels and need to be expanded by examples giving further evidence of the range of
meaning of this category:
... hína'i'ma wa'lel,... 'your-(pl)-aloneness-setting you-(pl)-kill-
hypothetical, i.e. You ought to kill the feast pigs off by
yourselves', (said concerning a feast not yet begun, with
the expectation that the addressee will not heed the advice).
... wego lel lekolema, koma-mke wa'lel. 't'we-ma-soo
(flightless); not te-continued-hypothetical-setting, whereas-see-
to-get he-go-hypothetical, i.e. If there had been no airplanes,
where would he have been able to go to get (white pigs)?'
(concerning the introduction of white pigs by missionaries several
years before the utterance).

Thus the range of meaning of the hypothetical mode is clearly not
confined to any time span, and the following glosses are all possible:
wa'le. 'I almost killed him (but didn't)', or 'I'd like to kill him
(now or in the future, but don't expect it will be possible).'

4.2.2.2. Factive Mode

When one turns to factive categories, it is with the recognition
that the factive marker contrasts with the hypothetical marker, and
that the latter has no time or tense reference. Further, categories
including the factive marker do not all have past time reference; note
particularly the normal action forms:

wehatek. 'They normally kill (e.g. pigs, antelope).'

Similarly the present progressive aspect forms are best interpreted as
factives:

wathayi. 'I am killing him, it.'

Further, the simple factive forms of some minor class verbs, particularly,
are not limited in reference to past time, but include the present:

nelleken hely, 'my-eye-see-factive, i.e. I see it, or I saw it.'

wek akky, 'Bad I-believe-factive, i.e. I believe it's bad.'

As was noted in Chapter 3, the time reference of first and second
person simple factive forms of the verb lekole, welel 'continue' is
primarily to present time; the present is the reference understood
unless the context makes it plain that past reference is intended.

jone wely, 'have I-continuous-factive, i.e. I am here, or less
commonly, I was here.'

With verbs of unidirectional motion, if the speaker is the subject and
particularly if the motion is directed toward the addressee, the simple
factive form occurs in the sense 'as good as done already'. Here the
subject is in control of the event and can predict it with full
confidence:
as waky. 'I'm coming, or I'm on my way,' (e.g. in reply to a call),
as chelak waky. 'I tomorrow in-one-factive, i.e. I'll be here (at
the addressee's future or present position) tomorrow.'
This specialised sense of factive node with motion verbs might be
treated as an extension of meaning from the basic past tense sense, but
normal action forms are less amenable to such treatment, and the con-
trast with hypothetical forms makes it clear that the fundamental mean-
ing of this category is modal.
Only the factive sub-category 'remote past' appears to be primarily
a tense category. It has never been observed in reference to future
events. One example was recorded earlier of what appeared to be a
remote past form with reference to an immediately past event, but this
may very well have been a misheard example of the reflexive form in
simple factive node category. Normal action forms occur with the remote
past marker, always with past reference, and so also the minor class
verbs in remote past clearly have past time reference:
wašlikitsik... (-k- factive; -ik- remote past; -te- normal;
-sik prior action plus closure) 'after I used to kill them
(e.g. of pigs)....'
wmakii. (-k- factive; -ak- remote past) 'I came some time ago,'
joos welakaki. 'I used to be here a long time ago,'
In connected discourse, a series of remote past forms is sometimes and
by some speakers interpenetrated with simple factive forms referring to
events in the same series with no apparent contrast of meaning:
...wuk-issikhaet, wuk-iskihen.... 'chase-he-did-at-them-
long-ago-also, chase-he-did-at-them-source.... i.e. he
chased them out too (remote past). after he chased them out
(simple factive)....'
askikha ninatha, ninathakwena-nen... 'another they-killed-us
(simple factive). And after they had killed us (remote past)....'
Both these examples are from the same text, only five sentences apart.
In each example, both verbs refer to the same event; the second verb
of each pair introduces a new sentence by recapitulating the last verb
of the preceding sentence. In the first example, the sentence-final
verb is remote past and the recapitulatory verb is simple factive. In
the second example the sentence-final verb is simple factive and the
recapitulatory verb is remote past. Most of the finite verbs in this
text are in the remote past tense.
4.2.2.3. Potential Mode

Potential mode, as noted in Chapter 2 is not marked by a specific mode-marking suffix in the second relative order, but by portmanteau affixes that also mark modal sub-categories and also, in some of these sub-categories, subject. Typical potential categories, as already described, are future and hortative/imperative. But one potential form has been drafted for much wider service in the pidgin Dani now widely used in communication between some outsiders and some Dani speakers (see comment by Heider 1970:13). In this dialect, the second person singular immediate imperative form with collocated particles, has become the uninflected surrogate for the more than 2,000 inflected forms of some major class process verbs. This form was not a random choice by outsiders, however. It apparently was established for use in widened sense before 1953, when we became the first permanent European residents in the area; there is an example of a widened sense early in my first notebook. The semantic structure of Dani modes apparently facilitates this development. Compare:

as 'laky, 'I went, or I'm on my way (factive),' - normal Dani.
as 'leq at-at. 'I go finished, i.e. I went,' - pidgin Dani.

Interestingly enough, it is the outer layer mode and subject and relational markers that do not occur in this pidgin, and some Dani speakers tend to retain the inner personal object markers when they speak pidgin:
as wametha, 'I move--he transferred is to me (factive) i.e.
be gave it to me. - normal Dani.
as wamese at-at. 'I move--transferred to me, finished, i.e.
(S)ubject gave it to me' - pidgin Dani.

This wider sense of the form has never been observed in conversation between Dani speakers (except for rare and obvious emulation and 'out-of-context' use of pidgin Dani for personal reasons); it does not occur in any of the recorded texts. The form is however certainly regular in pidgin Dani. The developing wider sense and the presupposing factors in the language which made that development possible are reflected in Father van der Stap's label 'infinitive' applied to this form in its wider use, considered separately from its use as an imperative form (1966:15). The potential mode may be seen to be the unmarked mode, occurring in a wider sense with reference to events of any modal category, as well as in narrower senses.

At a lower level of contrast, potential mode forms occur in contrast with factitive forms but interchangeably with hypothetical forms. The potential ground form (as labelled in Chapter 2) occurs thus:
minom is-make. 'we-together go(potential ground)--sent i.e. We ought to go, or to have gone, together'

minom telo. 'we-together we-go-hypothetical, i.e. We might have gone together (but didn't), or we ought to go together (but it isn't convenient to suggest it directly).'

Contrast:

minom taka. 'we-together we-went, i.e. We went, or have started off, together (factive).'

In contrary-to-fact conditions, hypothetical forms normally occur in both protasis and apodosis, but several examples have been recorded with potential forms in one or both positions:

...et-ta ilema-te ... jo-te yuma-at washly-lokele. 'the(abstact)-predicate 2p/3s解析-hypothetical-setting-topic-marker... cord-topic-marker event-setting-predicate take-2p/3-continue-hypothetical, i.e. If they had said that, then people would have (begun and) continued to get cord already made.'

...et-ta ilema-te ... jo-te yuma-at washly-lokele-te. 'the(abstact)-predicate 2p/3s解析-hypothetical-setting-topic-marker cord-topic-marker event-setting-predicate take-subject-could-continue-(potential-predictive)—sent. take-2p/3-continue-hypothetical, i.e. If they had said that, then they could have (begun and) continued getting it (but didn't).'

These two examples from the same section of the same text refer to the conclusion of a myth about the reason for the work involved in setting. In the first example, the apodosis of the condition is an hypothetical node. In the second example, the apodosis, referring to the same event, is in potential mode, then is recapitulated by a form in hypothetical mode.

These relationships of event modes may be diagrammed as a tree of senses, with unmarked senses identified by a minus sign, marked senses identified by a plus sign, as in Figure 6.

**FIGURE 6**

**Semantic Relationships of Dani Event Modes**

- Potential mode, widest sense 3 (any relationship of event to fact)
  - Passive mode (+) (events regarded as fact)
    - Hypothetical (+) (events regarded as hypothetical)
      - Potential mode, sense 1 (event regarded as potential; predicted or ordered)
      - Potential mode, sense 2 (events not regarded as fact)
    - Potential mode, sense 3 (events not regarded as fact)
The numbered senses in Figure 6 refer to successive extensions of the meaning of potential mode, from the primary sense of events as not yet facts but predicted or advised by the speaker, to the widest sense of events with any relationship to fact. Plus signs indicate marked categories, and minus signs unmarked categories.

4.2.2.4. Mode as a Discourse Linking Mechanism

The discussion of mode thus far has largely concerned single events realised as single verbs and has demonstrated how such clearly tense-like categories as remote past are subsumed under fundamental mode categories like 'factive'. Within a given discourse or major discourse segment there is commonly a predominant modal category, one of the subcategories described in Chapter 2. In the fixed corpus of seventy-five texts utilised as the narrower basis for this study, there are texts which have as the predominant category remote past, simple factive, normal aspect, present, past and remote past progressive aspect, future and remote future; there are included segments paralleled easily outside the corpus with predominant hortative/imperative modal subcategory. A shift in the predominant modal category usually signals a division of the discourse, although shifts from remote past to simple factive occur commonly with some speakers with no apparent contrast in meaning or segmentation of the discourse. In sixteen of the texts in the corpus there is a shift from the predominant modal category in the body of the text to another category in the conclusion. Two of these examples are explanatory folk tales told in the remote past with conclusions in the normal or progressive aspect categories and hypothetical mode to say, "Because they did that, today we do this; if they had done otherwise, today we would be doing otherwise." There are also four other examples, including two folk tales and two local historical narratives, that bring the results of events in the remote past body of the text into normal or progressive action conclusions.

Besides the predominant modes of discourse and the major shifts of mode, there are in any sustained text multiplied examples of subordinate verbs with mode relative to the predominant mode. It is more useful to describe modal categories in subordinate verbs together with the person categories also marked in most such verbs, and these will be treated in Chapter 5.
4.3. PERSON CATEGORIES

Person categories referring to the speaker, the addressee, persons grouped with either by the speaker, and persons grouped with neither, are marked in several classes of Cant words, including the independent personal pronouns; verbs with person categories of subject and various kinds of personal objects; alienably and inalienably possessed nouns; and certain post-positions referring to personal destinations, locations and companions.

4.3.1. Markers of Person Categories

4.3.1.1. The independent pronouns

The independent pronouns are:

-an 'I, us, my';
-hat 'you (sg), your (sg)';
-at 'he, him, his, she, her, (rarely its, its)';
-nit 'we, us, our';
-hilt 'you (pl), your (pl)';
-it 'they, them, their'.

4.3.1.2. Possessing prefixes

These independent pronouns include the set of person markers which also occur as prefixes to nouns, some verbs and post-positions: m= 'first person', n= 'second person', implicit third person. These markers occur in more regularly shaped form as possessive prefixes to nouns, e.g. the inalienably possessed kinship terms and body parts:

-mopass 'my father';
-hopass 'your (sg) father';
-opass 'his, her father';
-minopass 'our father';
-hinopass 'your (pl) father';
-inopass 'their father'.

Alienably possessed nouns with consonant-initial roots are marked for possession with a vowel prefix, m= in this dialect, and then inflected as above:

-su 'my net';
-nasu 'my net';
-nasu 'your (sg) net';
-asu 'his, her net';
-minasu 'our net';
-hinasu 'your (pl) net';
-inasu 'their net'.

The possessed stem of alienably possessed nouns and the stem of inalienably possessed nouns may be considered to include the category 'third person singular' implicitly unless another person and/or number marking prefix occurs prefixed, and then the implicit category is cancelled (cf. Wonderly in Aschmann and Wonderly 1992:124-5).

The same and other similar sets of person markers have already been observed as markers of various categories of personal objects of verbs. There, too, first and second person categories and plural number are overtly marked and third person singular is an implicit category. One paradigm only may be reviewed as illustrative:

nathe 'he hits me';
hathe 'he hits you (sg)';
wathe 'he hits him' or 'he hits it';
minathe 'he hits us';
hinathe 'he hits you (pl)';
inathe 'he hits them'.

Here again the overt markers are as 'first person'; he 'second person'; and here the 'plural of person' marker is (w)at. The plural marker is postposed to any overt person category marker, and that construction, including the person category marker if any, is prefixed to the stem. The third person singular category is implicit in the stem.

The same set of markers occurs with post-positions of place, including the 'towards, on him, her, it'; appelik 'immediately behind him, her'; a'la 'inside him, her, it'; etepat 'together with him, her (of two people)'; ienom 'together with it, them (of three or more if personal)';

repetak 'with me';
kepetak 'with you (sg)';
epetak 'with him, her';
imenom 'together with me, we (total of three or more)';
inomom 'together with you (total of three or more)';
imenom 'together with them, us (of people, total of three or more)'.

4.3.1.3. Suffixes Person/Number Markers (marking subjects of verbs)

The suffixes to verbs which mark person and number categories of subjects of verbs have already been surveyed in Chapter 2 and are further displayed in the appendix. While all of the sets of person-marking prefixes with various word classes include some form of the marker 'first person' and he or ke 'second person', the person and number marking suffixes do not resemble those markers in form. Also,
the subject-marking suffixes display neutralization and extensions of person and number meaning which are not observed with the prefixes. The full set of contrasts of three persons and two numbers is marked in the simple factitive category, it will be recalled:

\[
\begin{align*}
\text{wasi:} & \quad \text{'I hit, killed him';} \\
\text{wastin:} & \quad \text{'you (sg) hit, killed him';} \\
\text{wathu:} & \quad \text{'he hit, killed him (not himself), her, it';} \\
\text{wathu:} & \quad \text{'we hit, killed him';} \\
\text{wathin:} & \quad \text{'you (pl) hit, killed him';} \\
\text{waths:} & \quad \text{'they hit, killed him'.}
\end{align*}
\]

In these forms \text{\textit{w\textendash}w marks 'active mode' and the more distal suffix (interpreted to be complex in the second person forms) marks person and number. Some factitive/imperative sets display a five-way contrast, with number non-contrastive in third person:

\[
\begin{align*}
\text{wasik:} & \quad \text{'let me hit, kill him';} \\
\text{wasin:} & \quad \text{'kill him now (to one person)'} \\
\text{wassu:} & \quad \text{'let's hit, kill him now';} \\
\text{wasni:} & \quad \text{'hit, kill him now (to two persons or more)';} \\
\text{wasnek:} & \quad \text{'let him, her, them hit, kill him now'.}
\end{align*}
\]

In these forms it is useful to consider \text{\textit{w\textendash}w in wasik and wasin as a stem-formative (or empty morph) in hortative/imperative categories with consonant-final stems and consonant-initial suffixes with no syllable.\(^5\)} Then \text{\textit{w\textendash}w may be considered to mark 'first person singular hortative, potential mode'; \text{\textit{w\textendash}w} non-first person hortative/imperative, implicitly immediate, potential mode; \text{\textit{w\textendash}w} non-first person singular immediate if not otherwise marked, potential mode; \text{\textit{w\textendash}w} second person plural immediate (occurring only after \text{\textit{w\textendash}w} non-first); \text{\textit{w\textendash}w} third person immediate (occurring only after \text{\textit{w\textendash}w} non-first).

The hypothetical mode exhibits a four-way contrast of person and number categories marking the subject; the markers partially resemble the subject markers found in factitive forms and may be identified with those markers with extension of meaning of the second person plural subject marker to include third person singular and plural.

\[
\begin{align*}
\text{wa\-'e:} & \quad \text{'I almost hit, killed him, but didn't, etc.'} \\
\text{wa\-'wil:} & \quad \text{'you (sg) almost hit, killed him, but didn't, etc.'} \\
\text{wa\-'e:} & \quad \text{'we almost hit, killed him, but didn't, etc.'} \\
\text{wa\-'lep:} & \quad \text{'you (pl), he, she, they almost hit, killed him, but didn't, etc.'}
\end{align*}
\]

In these forms \text{\textit{w\textendash}w marks hypothetical mode, and it is useful to consider \text{\textit{w\textendash}w simply a marker of first person singular subject and as such
an allomorph of the marker also occurring as -μ and -λ in factive; -α is then considered a marker of first person plural subject, an allomorph of the marker also occurring as -α in factive; the -σ in the second and last forms may be treated as a stem formative (or empty morph), -γ the marker here of second person singular and -η here, in hypothetical mode, extended here to mark second person plural or third person.

Some categories, including the future category of potential mode, exhibit only the contrasts singular versus plural, with no person contrast:

wasitin 'singular subject will hit, kill him';
wasukan 'plural subject will hit, kill him'.

And there are a number of categories, already presented in Chapter 2, which are unmarked for person or number of the subject; these categories include the potential predictive:

wasuk 'the subject could, probably will or ought to hit, kill him'.

The segmentations noted above involve some problems and matters of interest. There are indications that a matrix analysis of the sort proposed in recent years by Fiske (e.g. 1962) may be possible. Note that there is a positive correlation between front vowels and singular number, back vowels and plural number, high vowels in first person forms, lower vowels in third person forms, with second person forms sometimes exhibiting vowels of intermediate height. These correlations have not yet been satisfactorily formalised. But another pattern of formal/semantic correspondence emerges in these paradigms. It has been noted in Chapter 2 that -α 'second person singular' and -σ 'second person plural (extended in hypothetical forms to include third person)' are isolable segments. Further note that -μ appears to occur in all three modes with semantic and formal similarity although this may be accidental:

wasitin 'you (sg) killed him (factive)';
wasitin 'you (sg) almost killed him (hypothetical)';
wasitin 'kill him now (to one person)'.

In the immediate imperative forms as noted above it appears that this marker -μ occurs in the sense 'non-first person':

wasitin 'kill him now (to one person)';
wasitin 'kill him now (to two or more)';
wasuk 'let him, her, them kill him now'.

If -μ is here recognised as marking non-first person, and implicitly referring to 'second person singular' where not otherwise marked, there is a formal correlate for the semantic oppositions that are observed in the hypothetical mode, where -μ marks 'second person plural or third person (singular or plural).'
Clearly Dani person and number markers are all identifiable in terms of the familiar oppositions of two numbers and three persons, and the full six-way contrast is commonly observed. But there are many indications that these contrasts are not best represented as a lattice diagram with vectors of equal and independent value. Note, first, that number is frequently non-contrastive in third person (e.g. the immediate and deferred hortative categories); number is non-contrastive in one category in second person (the deferred imperative), but there is no category in which either person or number is contrastively marked and number is non-contrastive in first person. The first person singular category referring to the speaker is the focal category around which the set of person/number contrasts is built. This set of contrasts then expands in two dimensions, a dimension of 'person', defined by participatory role in the utterance, and a dimension of number, defined in terms of maximum and minimum number of individuals referred to.

In the dimension of 'person' the first contrast is between 'speaker' or 'first person' and 'non-speaker' or 'non-first person'. The Dani immediate imperative forms provide, as noted above, a formal correlate for this semantic opposition. The further person contrast is between the category 'participant in the utterance event' and 'non-participant in the utterance event', where participation does not refer to presence or participation in the discourse but to participation in a particular single utterance as speaker, addressee or an associate included by the speaker with either. Thus in an example already referred to in terms of modal categories, there is in the corpus a three-way conversation among persons that may be labelled M1, A, and B. Here M1 says to A, concerning B, "He says he does not want to go," then he turns to B and says, "Are we going or don't you want to? Let's go this afternoon." All three individuals are present and taking part in the conversation, but B is an utterance participant, a participant in the sense used to define person contrast, only in the second utterance, that which is addressed to B. Within two sentences B is referred to in first, second and third person categories.

Number in these categories does not, it should be noted, specify the number of persons of the designated person category. Rather each person/number category is defined by (1) the utterance participant (or requirement that there be none) who is the focal member of the category, and (2) the number of individuals referred to. Thus 'first person plural' does not refer commonly to two or more speakers, but to a group of at least two individuals one of whom is a speaker. This point
has been made for English pronouns by Glasson (1965:125) and for general grammar by Jespersen (1924-1965:21). Definitions of person/number categories are thus different from componential definitions of e.g. kin classes such as 'father', where the members of the class are kin types, e.g. P, PB, PFBs. Each type is simultaneously and equally a member of the first ascending generation, is male, is patrilinearly related, and shares any other defining properties for the class in the particular system under discussion. Number is not involved. But in person/number categories, the members of the defined class are sets of positions in utterance participatory roles. Thus the 'first person plural' category has as its members sets like 'speaker plus addressee'; 'speaker plus speaker (unison)'; 'speaker plus non-participant'; each such set is defined as having the properties of (1) including the speaker and (2) minimum membership of two individuals.

To define the six person and number categories exhibited in Dami, note needs to be made of the fact that the addressee is the 'focal non-speaker'. To put it another way, unless otherwise specified, the non-speaker is the addressee. The label 'addressee' is simply shorthand for 'focal non-speaker'. But if the focus of a class can be specified, the rest of the class can be specified as 'non-focal'. It appears that this is a useful way of treating the person/number categories or hypothetical node, where the -s suffix in, e.g. we're 'you (pl)', he, she, they might have killed him', is extended in reference from 'second person plural', to which it basically refers in active mode, to include third person as well, i.e. all non-focal non-speaker categories.

One way of viewing these relationships is graphically:

FIGURE 7

CATEGORIES OF PERSON REFERENCE

Here the circle including the area labelled 1 represents the 'speaker', that including the area labelled 2 represents the focal non-speaker or addressee, and that including the area labelled 3 represents any other non-speaker, a non-participant in the utterance. It is the areas of overlap that are of interest. In Dami the set 'speaker plus addressee'
represented by area A (the Philippine language first-second-person category of minimal membership, Cooklin 1962:134-5; Thomae 1955:205); the set 'speaker plus non-participant' (traditional 'first person exclusive') represented by area B, and the set 'speaker plus addressee plus non-participant' (traditional 'first person inclusive') represented by area X are all first person plural categories. But as noted in Chapter 2, the first person plural hortative-imperative forms in the logical interrogative mode, and only then, exhibit a contrast between the set 'speaker plus addressee' together with 'speaker plus addressee plus non-participant' versus 'speaker plus non-participant (excluding the addressee)'.

The set 'addressee plus non-participant' represented by area C is normally the second person plural category, but as part of the 'non-speaker' category also involving the sets and persons represented by areas A, 2, 3 and B, enters into three other combinations of these areas: (1) All these areas may be included in a category that could be labelled 'not the speaker by himself', with area 2 considered focal. This is the analysis which has been suggested as possible for the marker \(*\) in immediate imperative forms, as noted above. (2) Areas 2 and C may be opposed to area 3, thus 'second person' as opposed to 'third person'. This is exhibited in the deferred imperative form, e.g. we're 'Will die fester (to one or more addressees)'. (3) Areas C and 3 may be grouped as opposed to area 2, thus contrasting 'focal non-speaker' with 'non-focal non-speaker'. This is the contrast documented in Dani hypothetical mode.

4.3.2. Person Categories and the Problem of Reference
4.3.2.1. What Do Person Categories Mean? : It was implicit in the discussion above that person categories refer ultimately to participatory roles in the utterance and not to noun phrases or any other elements in the verbal context which may refer to these roles or their occupants. This point is not commonly made. Bloomfield, for example, said, "...I replaces any singular substantive expression provided that the substantive expression denotes the speaker of the very utterance in which the I is produced..." (1933:248). This makes 'I' a substitute for a noun phrase, although Bloomfield qualified this position by saying, "the first person substitute I replaces mention of the speaker, and the second person substitute thou of the nearer. These are independent substitutes, requiring no antecedent utterance of the replaced form" (1933:255). Thus there is, in Bloomfield's analysis, a replaced element which need not be overt. This is not very
different from Chomsky's interpretation that pronouns are the products of a pronominalization rule operating on deep structure referential lexical items indexed for identity (1965:145-6, 226fn); i.e. they reflect an abstract noun phrase in the deep structure which does not necessarily appear in the surface structure. But what noun phrase is represented by the first person category? Is it the speaker's name? If so, which name of the several which most Dami speakers have? Is it a descriptive phrase? If so which? The fact is that in this and many other examples the positioning of any noun phrase or substantive element is arbitrary. Of the first 17 texts in the corpus, 16 include a first or second person category within the first two sentences, and no noun phrase occurs to identify any of these.

In the discussion of mode categories reference was made to John Robert Ross's proposal that every declarative sentence presupposes that the highest level clause in the underlying deep structure is a clause of the type, "I tell you", with the speaker as subject and addressee an object or indirect object of what Austin called a performative verb (Ross 1970:223-4, J.L. Austin 1962:67). Ross uses this device to explain certain phenomena of reflexivisation, and McCawley adopts it to treat first and second person categories.

However, this proposal does both too much and too little to be a satisfying solution. It does too much, as was noted in the discussion of mode categories, in repeating the proposal mechanism for every sentence, whereas reference to the speaker and the addressee extend over the spans of utterances as they have been defined in this chapter. The proposal does too little by not identifying the referents of the pronominal categories 'I' and 'you'. In any conversation including more than two persons, the speaker and the addressee for each utterance must be identified. The three-way conversation referred to above illustrates this point. In this conversation participant N says to A about B, "He says he doesn't want to go" and then turning to B says, "Are we going or don't you want to?" It is crucial to understanding these sentences to know that the addressee of the second sentence is different from the addressee in the first sentence but identical to the referent of the category glossed 'be' in the first sentence. Similar phenomena have been studied by Pike and Love, who suggest that person reference in conversation involves at least these independent vectors; (1) identification of the members of the cast; (2) the 'person' roles in the speech event; and (3) the 'case' roles in the narrated events (1969:70). First and second person reference is not to noun phrases or deleted substantives but to utterance participatory roles and their identified occupants. This means that such identified utterance role
occupants are relevant to the linguistic structure and may, in a
stratificational model, be interpreted to be elements or nodes in the
semiological structure. These nodes are not lexical items as in Chomsky's
model or deep structure clause elements as in Ross's model, but rather
semiological nodes or elements referring to real-world participants in
the particular discourse. These are deictic elements, the interpretation
of which is relative to the particular utterances in which they occur.

4.3.2. The Notion of Third Person

Fillmore speaks of third person as a non-deictic concept (1968:203),
and Jakobson implies this in his brilliant paper on shifters (1957:4),
but there is a very important sense of the notion 'third person' which
refers to any person who is not the speaker or addressee or associated
by the speaker with either in a particular utterance. Such reference
is by definition as deictic as first or second person reference.
Reference to any individual changes from third to first or second person
as that individual occurs as, or is grouped with, one of the primary
utterance participants. There is, of course, a wider sense of third
person which includes first and second person categories in indefinite
third person plural reference. The Dani corpus particularly studied in
preparation of this thesis has many examples of this:

'ekakaky, 'they-normally-talk not I-believed, i.e. They
(all local persons including the speaker) don't talk about it,
you know.'

But even this wider sense of 'third person' is deictic in its interpreta-
tion in a very fundamental sense.

The point was made for first and second person reference that it is
not to noun phrases either in the verbal context or in the deep struc-
ture out to semiological elements of reference. This point is just as
valid for third person reference, and has in fact been penetratingly
made for English by several recent observers, including Geoffrey
Sampson (1969 and 1969a). Sampson points out that Chomsky's referential
indices cannot refer to lexical items, since the same lexical items
can refer to different individuals, and different lexical items can
refer to the same individual (1969a:60). His point is part of an approach
to a general theory of reference which makes the referents of noun
phrases not items in the real world but elements in what he proposed
as a referential component of a grammar, that component to contain all
referents known to the speaker and addressee. This proposal is an
advance beyond two other recent treatments of the same problem, par-
ticularly the treatment by Lauri Karttunen, who handles reference in
terms of 'mental images' in the speaker's mind (1968:27), and McCawley.
who treats the problem in term of intended reference and the "conceptual repertoire" of the speaker (1968:139). Sampson's proposal is a significant improvement over these in that he includes the addressee in his consideration.

There have been similar proposals earlier, notably Strawson's 1950 treatment of the problem of reference, in which he stressed the great importance of the "context of utterance" including "the time, the place, the situation, the identity of the speakers, the subjects which form the immediate focus of interest and the personal histories of both the speaker and those he is addressing" (1950-1968:77). The fundamental insight is that reference, whether of pronouns or nouns, is not to lexical items or noun phrases but to referential elements which are dependent for their interpretation on the shared knowledge of the speaker and addressee. The whole problem of reference in general, including third person reference, is thus fundamentally deictic, dependent upon particular utterances and their 'context of situation' for interpretation.

4.3.2.3. Suggested limits for a Theory of Reference

Sampson, and Strawson long before him, have rightly emphasised the deictic character of the problem of reference. But to follow their suggestions consistently it is to despair of ever handling the problem of reference, as Bloomefield despaired of handling the problem of meaning, because one would have to know everything in the speaker's world (cf. Bloomefield 1933:139). The way out of Bloomfield's despair with regard to meaning has been the way he himself pointed out in isolating "distinction of linguistic meaning" from meaning in general (1933:101, italics his). Similarly there are features of reference which are selected out of the ever-varying world of reference and structurally contrasted in language. It is to these features that the linguist's attention must be turned. It is no novelty to observe that many languages, perhaps all, contrast: (1) features of reference to the speaker, the addressee and others, or categories of person; (2) reference to positions in space and time relative to the positions of the speaker and addressee, or categories of deictic orientation and tense; (3) reference to two participants or terms as the same or different, e.g. in reflexive constructions, in categories of coreference; and (4) reference to what is known to both the speaker and addressee as contrasted with what is not known to both, e.g. in the use of such markers as the definite article, in categories of definite versus indefinite identity (compare Weinreich's list of deictic elements 1963-1966:154).
These and other structurally contrastive features of reference draw upon the wide and every-varying range of knowledge of speakers and addresses in any utterance situation, but it is the contrasts, not the whole universe of possible reference, that may be brought within the linguist's grasp. It was by perceiving the principle of structural contrast that the universe of phonetic infinity was brought into the manageable dimensions of phonetic patterns, and descriptive linguistics was born. It has been by pursuing this same principle that the study of semantics has pushed significantly forward in recent years (e.g. Bendix 1966; Goodenough 1956, 1967, 1968; Lamb 1964b, 1965, 1970; Lounsbury 1956, 1964a, 1964b, 1965; Lyons 1968, 1970; Morris 1938; Nida 1951, 1964; Scheffler and Lounsbury 1971; Weinreich 1953-1966; for a cautionary view see Wells 1969). Surely it is by pursuing this principle that the problem of reference can be brought within the domain of structural linguistics.

The present study does not attempt to construct a theory of reference in general, nor to treat the whole problem of reference for Dani in particular. It does attempt to treat contrastive deixis features which are utilized in Dani reference. Categories of deictic spatial orientation have been surveyed at the beginning of this chapter, and categories of deictic time orientation, particularly the features 'remote' versus 'immediate', were surveyed in Chapter 2. Person categories have been critically surveyed in the preceding discussion. Categories of coreference will be treated in the next chapter in the discussion of verbs in sequence, and have already been involved in the discussion of reflexive voice in Chapter 3. But there are other elements, which are also employed as contrastive features of reference. Attention may now be turned briefly to some of these. Reference to participants by suffixes, independent pronouns and noun phrases involves such features as focus of attention, and reference by a pair of demonstrative terms involves features of shared knowledge. There is much work remaining to be done in these areas, but some contrasts and conclusions are clear.

4.3.3. Dani Mechanisms of Reference to Participants
4.3.3.1. Adjecta, Possessa and Noun Phrases

There are, basically, three ways to refer to human participants in Dani. The least explicit, simplest means is the use of a person/number marking affix, particularly an object-marking prefix or subject-marking suffix to a verb. This reference may be accentuated by inclusion of an independent personal pronoun, normally in agreement with the verbal
affix categories. Further, an independent noun phrase or other identifying phrase may be used either with or without the independent pronoun to identify the referent of the verbal affix:

waky. 'I-have-see'
as waky. 'I have seen [someone else hasn't].'
as Wakanoko waky. 'I Wakanoko I-have-see, i.e. I Wakanoko have seen.'

waky. 'be-has-see'
at waky. 'be hes-bee'

Wakanoko waky. 'be Wakanoko be-has-see'

Wakanoko. 'Wakanoko be-has-see, i.e. Wakanoko has seen.'

There are, of course, verb categories where person/number contrasts are fewer or absent, as described in Chapter 2. But the mechanisms involved are perhaps most clearly seen in terms of the fully inflected categories like simple factitive. Let it first be noted that the same real world event is referred to in all the above examples; a person named Wakanoko arrives at a place where the speaker and/or addressee is/are at the time of utterance or the time of arrival. In the first three examples Wakanoko is the speaker; in the last four he is neither speaker nor addressee. The difference among these expressions is not in terms of the event but in terms of the identifiability of the event participant in the context, including the verbal context and the context of situation or deixic context involving the knowledge of speaker and addressee. The expressions also differ in terms of the relationship of the referent of the event participant role to other participants and roles already established either in the discourse or in the knowledge of the speaker and addressee; these may be either roles in the utterance event or in the narrated events.

4.3.3.2. Introducing Participants

It has been said for more than one language that in a narrative each participant is realised once by a noun phrase to introduce it (e.g. for Kate by Gleason 1968:53; for Sango by Taber 1966:153; for English by Gleason 1965:336). This clearly is not true for Dany and is clearly also is not true for English. When the participants are known to both speaker and addressee and are sufficiently identified in the context and are neither contrasted with other participants nor in particular focus of attention, they are normally referred to in Dany by the minimal mechanism of person/number marking affixes even discourse initially:

lypoOr-ke, at-ke hotol walha-o. 'across-stream--topic finished thing they-made--decision, i.e. Across the river they've made peace.'
essa atok-te, as-ta bekata akikky, 'bridge that-known--topic, finished they-joined I-believed, i.e. They have finished joining the bridge you know.'

etey atok-te wary-1ay-ha kep-seka, 'victory-dance those--known seeking-they-are--query instead--they-have, i.e. Are they having that victory dance or have they cancelled it?'

Each of these three examples is discourse-initial, and in each of the above cases attention is on some other element in the event which identifies it sufficiently that the participants realised as subjects of the verbs are referred to only in the verbal affixes. Of course, this minimal reference is very common to items or persons in the context of situation.

Jake atty oko-kakke asuk holhe, 'there, that we-said--sort is--ear is-heard, i.e. There, it (she recorder) has heard what we said'.

The 'context of situation' includes the speaker and addressee, and the speaker, in the literal sense of oral speech, normally introduces himself without an independent noun phrase. If his role is not contrasted with the roles of others the speaker may introduce himself in the verbal affix only:

ik-1? 'I-speak-hortative--query, i.e. Shall I speak?'

y. a'sook lakak akikky, 'oh-yes that-known I-went-long ago I-believed, i.e. Oh yes, you know I made this trip.'

One text is a woman's description of the planned activities of the next day, and there is no noun phrase or independent pronoun in the whole text to refer to the participants, who are the speaker and her associates. The sole reference to them is in the verbal affixes from beginning to end of the paragraph, and these affixes on future forms actually specify only that the subject is plural:

megyit resukun...jokalukun...topalukun... 'Plural subject will dig sweet potatoes, will put them in store, will wash them.'

The principle is clear and simple; where the speaker is adequately identified he normally never uses an independent noun phrase to identify himself, but where he is not adequately identified he may.

One recorded example is a man's call across the river from a distance too great for clear identification:

an Wurika. 'I Wurika, i.e. I'm Wurika.'

With the introduction of writing and the multiplication of correspondence, the principle becomes clearer. Rather than leave identification of the writer to the end, following the Indonesian pattern taught to school children, Dani letters usually begin with identification:

an Elisa-nen jakath-i-o. 'I Elisa-by I-did-it--declarative, i.e. I, Elisa, have written (this).';
The same principle applies to persons referred to in the third person. If identity is not sufficiently clear to the addressee, in the speaker's estimation, identifying phrases, frequently noun phrases or phrases including demonstratives, occur at the introduction to identify the participant:

*Nagawu*-from he-asked-long-ago that-known-to-us-invitation-query, i.e. *Are you referring to those comments of Nagawa?*

Here the participant who is subject is introduced by name.

...he *Hensawu*-nan-he... *women Hensawu*-by-topic, i.e. As for the woman Hensawu's deeds...

In this last example, the participant is introduced by a classificatory noun with a name.

*jykktyku* hylweykktyku holna wani kkkvnen,... *'children girls crayfish to-get when-plural-subject-goes-in, i.e. When some boys and girls went in to catch crayfish...'*

Here the participants are introduced by a noun phrase.

The inclusion or use of an independent pronoun in introducing reference to participants serves not for identification, obviously, but rather to focus attention on the participant rather than or as well as on the event, or to contrast the participant concerned with others, or to indicate that the participant occupies a role already established in the discourse or situation. These functions are involved with matters to be mentioned again in Chapter 6, but the following examples serve to illustrate the point:

*nhe, jekketa-oo-te... 'it-topic, child-on-topic, i.e. It when I was a child...'

In this last example, the speaker is also referred to in the subject-marker on the following verb, but focuses further attention on himself by the inclusion of the topicalised pronoun.

*nhe a'oko hep-issuku, 'we-topic that-we-know discard-we-did-it-long-ago, i.e. We disregarded it although others may have paid some attention...'

In this example the speaker contrasts himself and her group with others by inclusion of the pronoun.

*It'en wein ayetek Nattkkvne-lak wein spok ekasik-he...* *'then--by battle permanent-resident Nattkkvne(name)--and-associates battle sumono they-asked-price-topic, i.e. after permanent resident Nattkkvne and his group called for battle, they...'*

The initial pronoun in this last example is a convention for reference to enemy groups. In one text in the field corpus local men are referred
to in the third person plural subject-marking affixes to verbs with no independent pronouns or noun phrases from the beginning of the text:

hony-te, t'imu-kke hat-ekken kakkok paloko hekeke, 'men's-house--topic, back-of-house--direction sacredness--seed(her an idiom for a kind of sacred objects) cupboard cutting they-normally-put-it, i.e. As for men's houses, they normally build cupboards for the sacred stones at the back and put them there.'

This text carries on through a description of the sacred stones and associated rites until there is reference to warfare. Then local men are referred to still in third person plural subject-marking suffixes to verbs, but enemies are referred to in the third person plural category with the added independent pronoun it 'they'. Interestingly, as objects of verbs, enemies are often referred to collectively in third person singular categories, while local men as objects are often referred to distributively in third person plural forms:

hopuk a'nako-mekko-at wathatek...nes it-en instyk-he.... 'later that-we-know-sort--also they-normally-kill-him....then them--by having-killed-them--topic, i.e. Later they (locals) kill 'him' (the enemy) the same way. Then we kill they (enemies) kill them (locals)....'

4.3.3.3. A Model for Handling Reference to Participants

Attention in the above discussion has been largely focused on introductory reference to participants. In Dani a participant may be introduced into the discourse by a person and/or number marking affix, or by such an affix plus an identifying phrase, or by an affix plus an independent pronoun, or by an affix, an identifying phrase and an independent pronoun, depending on the amount of information needed to identify the participant to the addressee and on the relationship of the participant to the discourse. The function of pronouns and pronominal affixes is thus clearly not simply a matter of serving as "substitutes for substantive expressions" (Bloomefield 1933:256-7).

That view of these elements underlies much recent work also, including Fillmore's work; he treats pronominal affixes as reflecting an "understood NP" (1968a:56-57). Even Gleenon, who has contributed as much as any contemporary linguist to the study of reference to participants in discourse, says in Linguistics and English Grammar, "When a discourse is initiated noun phrases are used to introduce the dramatic personas. Thereafter pronouns are substituted in the majority of possible occurrences" (1965:346).

These views are not adequate to describe the Dani data, where as we
have noted there is frequently no noun phrase used to introduce a participant, where commonly a noun phrase and an independent pronoun occur together with reference to the same participant, and where regularly any noun phrase referring to the subject of a verb occurs with and presupposes a subject category usually marked in an affix to the verb. All these ways of referring to a participant (pronominal affix, independent pronoun, noun phrase or other identifying phrase) are mechanisms which can be usefully considered as alternative realizations of underlying referential elements.

Gleason's adaptation of Lamb's stratificational grammar affords a useful model for handling these phenomena by treating each participant in a discourse as a single 'node' in the semological structure (Gleason 1968:51). This model, with some modifications, has already been employed earlier in this chapter to treat node categories. A sentence glossed 'Okunhearki hit me,' might be partially diagrammed as in Figure 6, labelling the speaker as X, the addressee as Y:

**FIGURE 6**

**PARTIAL DIAGRAM OF AN EVENT**

\[ \text{Y} \quad \text{PART}}\text{licative process AGENT \quad \text{ADDRESSEE}} \quad \text{SPAKER} \quad \text{PATIENT} \quad \text{Vkunheartyk} \quad \text{(incomplete)} \quad \text{his} \]

The same basic semological structure might be realized in several different ways, however, depending on factors which have not been included in this partial diagram. If Ukunhearki steps up and hits the speaker, the latter may report this fact, which is in the center of attention for both the speaker and any addressee observing the event, by using the affixed verb alone:

nath. 'Nk-hit-me.'

If Ukunhearki has not just hit him but is known by the speaker to be in the forefront of the addressee's attention, either because of their conversation or because they have just seen him, this basic semological structure could be realized as:

nath. 'an he-hit-me, i.e. Nk hit me.'

Or, in this same general context, if the speaker wants to emphasize that it was Ukunhearki who hit him, and Ukunhearki is in the forefront of the addressee's attention, the sentence might be:

nath. 'him-by he-hit-me, i.e. Nk hit me.'

If Ukunhearki is not in the forefront of attention, the sentence might be:

Vkunheartyk-en nth. 'Okunhearki-by he-hit-me, i.e. Ukunhearki hit me.'
If Vunubearit is not in the forefront of attention, or not alone in the forefront of attention, and so needs to be identified, but is also referred to as occupying some known role, the sentence might be: at Vunubearit's gate, 'he Vunubearit—by he-hit-me, i.e. It was Vunubearit that hit me, or Vunubearit in his function as headman hit me.'

These various possibilities are not differentiated in the simple diagram which is Figure 8. However, if one assumes that any surface contrast has a semantic correlate, since 'contrast' by definition involves meaning contrast, these variations must be formalisable. Most of this work remains to be done, but some elements which must be included in the treatment of this problem are further discussed in Chapter 6.

There are two other kinds of delict reference which point strongly to the conclusion that reference is not a phenomenon relevant only to noun phrases, referring to participants in events, but that any model for reference must allow for treatment of reference to events in verbs, as well.

4.3.1.4. Shared-knowledge Deixis

Many examples have included one of two morphemes which exhibit another delict in contrast, referring to shared knowledge. These morphemes are -koko and -naka, most frequently encountered in the delict pronoun attributes -koko and -naka. Of these, the first is much more common than the second. This term, -koko, refers to what is supposed by the speaker to be known to the addressee. Such a supposition may be based on previous introduction in the discourse or on the previous experience of the participants; the form might be glossed roughly, 'the one I believe you know about'. These forms are used in fairy tales and second-hand reports of events which neither the speaker nor the addressee directly experienced but which are known by both on the basis of shared information.

The contrasted form -naka is restricted to reference to what is known from first-hand experience by one, but only one, of the speaker-addressee pair. It often serves to alert the addressee by indicating that the item referred to is not directly familiar to him. It might often be roughly paraphrased in English as 'the one we didn't observe together which is recognizable from the experience of one of us':

\[ \text{waka a'inka, 'he-name that-we-know, i.e. Be same (as we both know).} \]

\[ \text{waka a'inka, 'he-name that-know-to-one-of-us, i.e. Be same (although I didn't see it you did), or Be same (although you didn't see it I did).} \]

Often the form -naka is used in giving instructions about things
which the addressee has not yet observed but will observe:

hykma a'naka. 'I-put-it-setting that-known-to-one-of-us, i.e. (it's there) where I put it (and although you haven't seen it, you will recognize it)'.

An example from text illustrates the contrast involved in these terms: ...

...nako ke-pa...watok a'naka baki hak-helyk...lano isikhe. Isikhe-

maka, wan a'moko eki hak-helyk' lek-at.... 'my-pig trail-on...it-

is that-known-to-one-of-us your-hand grasp-holding-pig...you-put-

later he-said-long-ago, he-said-long-ago--adversative, pig that-

we-know his-hand grasp--put not--predicate, i.e. 'those pigs of

mine along the trail (you will see them), touch them as you go'

he said. He said this, but he (the addressee) didn't touch those

pigs with his hand....'

In this example the speaker of the quoted instructions, who knows about

the pigs, uses a'moko in instructing his addressee, who has not yet

seen them. Then the discourse speaker or narrator, referring to the

same pigs but speaking now to the discourse addressees, uses a'moko,

given they are now familiar by virtue of the mention made in the earlier

part of the sentence.

These forms referring to shared knowledge are not like definite

articles in English and many other languages, for they occur attributive

either to verbs or to nouns. And indeed, although much recent dis-

cussion of the problem of reference has been limited to noun phrases

(e.g. Sampson 93), it is certainly true of Dani and appears to be true

of English as well that either events or participants may be definite,

and in Dani either may be referred to with the 'shared-knowledge'

attributives.

4.3.3.5. Deictic Stems ± Variable Head-Class

A further bit of evidence for including reference to events in a

model for handling reference is the set of demonstrative roots which may

occur simply as demonstrative pronouns, or with a clitic as pro-adverbs,

or as derived pro-adjectives or pro-verbs, as seen below in Table 18.
<table>
<thead>
<tr>
<th>DEMONSTRATIVE PRONOUNS</th>
<th>PRO-ADVERBS</th>
<th>PRO-ADJECTIVES</th>
<th>PRO-VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>jy 'this'</td>
<td>jy-toko 'this way'</td>
<td>jykynu' 'this'</td>
<td>jykyne, 'He did this.'</td>
</tr>
<tr>
<td>aty 'that'</td>
<td>aty-toko 'that way'</td>
<td>atykynu' 'that'</td>
<td>atykyne, 'He did that.'</td>
</tr>
<tr>
<td>aty (abstract)</td>
<td>aty-toko 'that way'</td>
<td>atykynu' 'that'</td>
<td>atykyne, 'He did that.'</td>
</tr>
<tr>
<td>nene 'who'</td>
<td>nkyky-toko 'who way'</td>
<td>nkykynu' 'who'</td>
<td>nkykyne, 'He did who.'</td>
</tr>
</tbody>
</table>

There are alternate forms for the pro-adverbs, but those listed in Table 18 are the most common. It is perhaps strange to list the pro-adjectives separately, for these are only the past participles of the verbs listed in the right hand column. However, these deictic forms appear frequently to be used with no reference to a state resulting from a process, but only to resemblance. The pro-adverb forms are derived from the demonstrative pronouns and not the verb stems. For the pro-verbs, one inflected form was cited in Table 18, but they are inflected as major class process verbs:

nykyne=nape: 'What--he did-to-you-as-person, i.e. What did he do to you?'

atykyne-tokon. 'that-Eng-(you-ag) continuous, i.e. Keep doing that.'

There are two other common demonstratives that have not been observed in this pattern of multi-class membership:

'aIy 'that (as referred to in the immediate context)';

yly 'that (in the distance)'.

This section has merely introduced these forms and not attempted to describe their occurrence in detail. The point to be made is the point also made in the preceding section concerning shared-knowledge deixis, that a model for describing reference must include more than noun phrases. The present study does not attempt to finalise such a model, but to make suggestions from the Dani data as to what that model should include.

4.4. SUMMARY

The present chapter has turned attention to the speaker and addressee as participants in events and has treated particularly the deictic categories of spatial orientation, event mode and tense, and person A
critical review of the reference of person categories indicated the fundamentally deictic character of referential identification in general, and a brief look at some other deictic categories indicated that the problem of referential identification involves reference to events as well as participants. It has been suggested in this chapter that deictic categories, whether of mode or person, are utterance-relative categories that cannot be described economically in terms of syntactic structures of clauses or sentences with a performative verb modal. Gleason's variety of stratification: modal appears promising to handle these phenomena, but needs to be modified explicitly to include the speaker and addressee in the semological structure of every utterance. While the phenomena under discussion are fundamentally related to utterances, attention in this chapter has been largely confined to deictic categories in single events realised in single verbs. In the following chapter attention is turned to multiple events realised in sequences of verbs, and to the combination of features of meaning and reference that tie these sequences together.
NOTES

1. Fillmore says in his supposition rules, "The place to which one COMES is a place where I am or where you are," but inconsistently refers only to the speaker's location in the further statement, "...the place to which one COMES is a place where I am not." This should of course be amended to add, "or you are not" (Fillmore 1966a:223). Similarly he limits attention too narrowly in discussing the example, "WHERE DID YOU COME TO THE SHOP?" when he states that the supposition behind the example is, "I, the speaker, am in the shop." But this should be amended to add, "or you are in the shop," relevant when the example is part of a telephone conversation. Further, his rule three about the location of participants at times other than the time of utterance will not do for English, because English uses 'come' and 'go' in narrative with other reference points than the position of the speaker and hearer. Also his time restrictions will not work as they stand. "I CAME THERE YESTERDAY MORNING" supposes that YOU WERE THERE YESTERDAY MORNING" (1966a:225); it may suppose that you are there now. Motion toward either the speaker's or hearer's position at either the time of utterance or the time of action is referred to by 'come'.

The same set of rules appears to work equally well for the Koine Greek of the New Testament whenever deistic orientation is marked. However, there the verb erchethai 'come' is the unmarked term. When the speaker or addressee is involved in the narrated events, erchethai 'come' contrasts with such verbs as paraerchethai 'go'.

I say to this one, "Go," and he goes (paraerchetai) and to another, "Come," and he comes (erchetai). Luke 7:8.

There are at least two possible ways to handle the pattern of occurrence of these verbs, with erchethai 'come' repeatedly used of movement in one direction and shortly thereafter of movement in the
opposite direction. In Mark 1:9, Jesus 'came' from Nazareth to the
Jordan to be baptized, and in Mark 3:18 he 'came' (Nahum in both cases)
from the baptism and temptation back to Galilee. One could consider
orchestral 'come' as unmarked for deictic reference in Koine Greek,
and this was the solution adopted in writing this dissertation origi-
inally. However, noting both the very widespread, possibly universal,
semantic markedness of 'come' in relation to 'go' in other languages,
and the structure of narrative Greek in the New Testament, it now
appears more useful to describe the deictic reference point as movable,
the viewpoint of a vicarious observer who precedes the participants
but always keeps his eye turned back on their movement, like a movie
camera man going ahead of the actors. This kind of mobile deictic
reference point is normal in Koine Greek, but very infrequent and,
when it does occur, sometimes confusing to speakers of Dani.
Even the rules for establishing the deictic reference point with
regard to the speaker and addressee in the context of their discourse
with each other appear not to be universal, however. One observed
example which requires rules different from those discussed above is
Myang in northern Thailand, as described by Mundhenk. In that language
the position of the addressee is the deictic reference point when writing
letters, and the writer says, "I hope you'll be able to go see me soon,"
and, "...when you go back here" (1967:92). Dani letters are like
English at this point, and so are the Greek letters of the New Testament.
While not universal, it looks as if Villarceau's supposition rules are less
language-specific than he supposed.

2. The regularities involved both in Dani and in Koine Greek or
English become obvious when one translates from one language into
another. Informants helping to translate portions of the Christian
scriptures into Dani have frequently commented on these problems. An
informant who had understood that Jesus went up a hill in Mark 3:13
commented that he ought to come back down before entering the house in
3:20. Dani Reaction to John the Baptist's 'appearing', if translated
literally, is to regard him as one of the original ancestors or other
supernatural beings appearing by magical means. Humans 'come' or 'go'
to appear in a narrative.

3. I first approached these problems in a brief and hurried study of
English discourse prepared as a course paper in 1965 and never
published. In that paper I treated each event node as including speaker
and addressee valence to specific participants in the conversation, but
did not use any graphic device to connect the occurrences of the same
participant as related by utterance roles to successive events. In effect, that treatment exhibited the same wasteful repetition as Ross's proposal, but in a stratifi- tional model did not require deletion of verbs or clauses (Ironley 1965 ms).

4. In some related dialects there are regular patterns of selection of distinct vowels marking the possessed stem of alienated possessed (and, historically, also inalienably possessed) nouns. This pattern is in those dialects determined by the articulatory features of the initial consonant and vowel of the root. There is a pattern of vowel dis- similation determined by the articulatory position of the relevant consonants. Thus in those dialects noun roots with the vowel a in the first syllable of the root occur with a prefix consisting of another vowel marking possession; e.g. = occurs before root-initial bilabial consonants followed by a, and = occurs before tongue tip and blade articulated consonants followed by a. This pattern is no longer productive in the Hetigma dialect of Lower Grand Valley Dani, which is the primary basis for this description. In this dialect the prefix = is used before any consonant-initial noun root. Traces of the older pattern are still observable in inalienably possessed nouns, however:

noppes ~my father';
nomame ~my strength';
netsake ~my lung';
nasaava ~my ear'.

In the neighbouring dialect spoken at Tanga, this pattern is still partially productive; the possessed form of jepu ~garden being dug' is ajepu ~his garden' in Hetigma, but is more commonly ajepu ~his garden' in Tanga.

5. If as was noted in Chapter 2 above (see note 16) the form ivoj
 'Let's go now (with command to get going)!' is taken into account, the morpheme =n(-) indicates subject other than first person singular (thus not the speaker by himself), implicitly second person singular and immediate imperative if not otherwise marked.

6. This understanding of number is normal for Dani. Singular versus plural is a contrast marked in only two semantic areas: (1) the area under discussion, i.e. person and number categories marked in inflectional prefixes and suffixes; and (2) kinship terms and a few other social role terms. The meaning of the contrast between mawke ~my husband' and mawke ~my husband' is not a matter of polyandry. The plural forms of kinship terms refer to a group (or even a single non-
focal member of a group) or set which is defined in part by its
inclusion of a kinsman of the specified relationship. Thus Nkveny 'my
husbands' occurs in one sense that may be more adequately glossed as
'my husband and his associated relatives'.
CHAPTER 5

MUTLIPLE EVENTS: VERBS IN SEQUENCE IN SENTENCES

In the last chapter attention was turned to the speaker and addressee as participants in events and to such deixis categories as mode and person. These and related categories are important in the construction of sequences of verbs and clauses. Like many other languages of the highlands of Irian Jaya and its international neighbour Papua New Guinea, Dani exhibits verb 'chains', which typically include one final finite verb in each sentence. That verb is marked for event mode, and person and number of the subject, but is often preceded by medial verbs which are not marked independently for these categories but must be interpreted relative to the categories of the final verb. Particularly, very many of these medial verbs are marked to indicate whether the subject is or is not coreferential with the subject of the superordinate verb (cf. McCaughy 1965; Capell 1962:115, 119; Wurm 1964:88). This chapter treats sequences of verbs and clauses within sentences. It does not attempt to describe Dani syntax exhaustively, but is rather restricted to verbs and sequences of verbs and verb-nuclear clauses.

5.1. THE NUCLEAR VERB PHRASE

5.1.1. The Verb

A single verb, as described in Chapters 2 and 3, may be a simple primary verb, a primary verb stem with one inner layer auxiliary verb and/or one outer layer auxiliary verb, or a secondary verb consisting of a stem plus one inner layer auxiliary, plus or minus one outer layer auxiliary. A single event mode category and a single set of person and/or number categories of the subject are relevant for the whole unit:

pathe. (the fictive; = 3s subject) 'He severed it.'
pal-bh-la-sk. (why progressive stem marker; -la = wem 'continue' in the outer layer auxiliary if progressive aspect; -sk = factitive; -n is subject) 'He was severing it.'

pal-tshy-la-sk. (h= is object; -la= inner layer dative auxiliary; -shy= progressive stem marker; -la= outer layer auxiliary as in the last example) 'He was severing it for you(eg) and giving it to you.'

pal-zha-la-sk. (-za = -la-sk, -zha= inner layer incurred process auxiliary; -sk = progressive stem marker; -la= outer layer auxiliary as in the last two examples) 'It was becoming severed.'

tip-khe, (tip- = secondary verb root; -khe= inner layer auxiliary of incurred process; -k = factitive; -n is subject) 'It abated.'

tip-ykh-y-la-sk. (-yk= root allomorph of inner layer auxiliary of incurred process; -sk = progressive stem marker; -la= outer layer auxiliary as in the second example above) 'It was abating.'

5.1.2. Motion Verbs

Unidirectional motion verbs may consist, as described in Chapter 4, or a simple verb of delocally oriented motion, a simple verb of topographically oriented motion with implicit delocity orientation away from the speaker and/or addressee, or the stem of any of the verbs of topographically oriented motion with a contracted form of the verb wem, wem 'come' to mark the unit as delocally oriented toward the speaker and/or addressee. Any of these verbs may be followed by an outer layer auxiliary marking progressive action:

pi-khe. (pi = 'desend'; -khe = factitive; -n is subject) 'He went down, or he fell.'

pl aha. (pl potential stem of 'desend'; -ha = wem, wem = 'come'; -k = factitive; -n is subject) 'He came down, or he fell down here.'

pl aha-la-sk. (aha = wem, wem = 'come'; -sk = progressive stem marker; -la = wem, la= 'continue' as outer auxiliary of progressive aspect; -sk = factitive; -n is subject) 'He was coming down, or he was falling down here.'

In these verbs, too, event mode and person and/or number of the subject are categories which are relevant for the whole unit.

5.1.3. Motion Verbs Plus Potential Stem

Outside of, and normally preceding, the unit here labelled verb, forms of other verbs may occur in varying degrees of dependency on that verb. The closest degree of dependency is represented in the occurrence of a potential stem of one verb, which may not be a unidirectional
motion verb nor the verb wela, lake= 'convers*', preceding a form of a unidirectional motion verb, whether simple or maximally expanded as described in the preceding paragraph. The proposed verb may consist either of the potential stem of a simple primary verb or of a verb root or reflexive stem with the potential stem of an inner layer auxiliary:

peli pi skes-lake. 'to-sever descend coming--he-not, i.e. Be used to come down to cut it off.

In this example the proposed potential stem peli 'to sever' occurs in construction with the maximally expanded verb of motion which follows.

pa-nesi pi skes-lake. 'sever-to-transfer-to-me descend coming--he

use, i.e. Be used to come down to cut it off for me and give it to me.'

Here the proposed form is a construction of the verb root pali, auto-

matically realised as pali before n, with the potential stem of the
dative inner layer auxiliary -nse.

There are two distinct semantic relationships realised by this con-

struction of the potential stem with a motion verb. If the proposed

potential stem, which may in no case be a unidirectional motion verb,

implies simultaneous motion of the subject, the total construction

specifies a single motion of the subject. Preposed forms of this kind

thus refer to the manner or method of motion and include such stems

as those which may be glossed 'running' or 'leaving':

bumalaka pi ake. (bumat= secondary verb stem 'run'; -aka potential

stem of the locative auxiliary) 'run-do descend he-came, i.e.

He came running down.'

wo-lake lyphe. (wo= wak= 'move, take'; -ake =laka reflexive voice

potential stem of -aka, -laka 'through a process'; lyphe = wylyphe)

'move=focus-one's-self he-noted, i.e. He cleared out.'

This analysis indicates that the semantic or semological constructions

realised by these verb phrases must be described to include semantic

components, such as the component 'motion' of verbs including the

unidirectional motion verbs, and also specifications for some elements

that they presuppose certain semantic components in other elements.

Thus the semological units realised as the proposed potential stems in

the last two examples must be described as presupposing the component

'motion' in the element realised as the motion verbs. This is not

merely a matter of semantic co-occurrence restrictions but is crucial

to the interpretation of the semantic relationship of the two elements.

Thus this analysis views what underlies these two-verb constructions not

as two sentences which might be glossed, in the case of the third

example on this page, 'He ran', and 'He came', but as semological

constructions of elements which are semantic components and
specifications; these elements occur in 'bundles', with the tenses of their occurrence and the rules of their realisation specific for each language. While English provides a rather large number of surface verbs which often include components of motion, direction of motion and manner or method of motion, e.g. 'crawl', 'walk', 'run', 'swim', 'fly', Dati factors similar components in every case into two 'bundles', one including only the component 'motion' and a component of deictic direction 'toward' or 'away from' the speaker and/or addresser, with or without a component of topographic direction like 'up', 'down', 'in', 'out' or 'across', and the other a 'bundle' including the other components and the specification 'simultaneous motion of the subject presupposed'. In the case of many elements referring to the manner of motion, the manner-specifying element is realised as a potential stem of a verb proposed to a unidirectional motion verb. Some other elements are realised in other ways, all separately from the verb of unidirectional motion, and it remains an unsolved problem how to specify which elements are realised in which way in all cases.

If the proposed potential stem does not presuppose simultaneous motion of the subject, the event referred to in the proposed stem occurs upon completion of the movement specified in the motion verb:

pali: pi saka. 'to-sever descend he-came, i.e. He came down to cut it off.'

'paka. 'to-get he-wrote, i.e. He went out to get it.'

Again, this analysis views what underlies these two verb constructions as two events but not as two sentences which might be glossed, in the case of the first example above, as 'He came down,' and 'He severed it.' Two such sentences are of course possible in Dati:

pi saka. 'descend he-came, i.e. He came down.'

paka. 'he-severed-it, i.e. He cut it off.'

These may be joined by a device to be described later in this chapter to form a single sentence:

pi saka:he paka. 'descend he-came:topic he-severed-it, i.e. after he came down he severed it.'

But this last example is clearly distinct in meaning from the similar example above with a potential stem, where the potential stem specifies the event referred to to be the purpose of the motion. Neglecting for the moment the personal participants in the events, these relationships may be tentatively graphically represented by including components of 'bundled' semantic components and specifications within a single box and labelling semantic relationships between these 'bundles' with terms in upper case letters, as in Figure 9. The realisation rules must then specify that configurations like those labelled a. and c. in Figure 8.
are realised by verb phrases consisting of a preposed potential stem and a unidirectional motion verb, with the motion verb realised as the last constituent, while a configuration like b. is realised as indicated with the constituents in logical order. If configurations a. and c. were diagrammed to include the participants, the agent role with each of the events would be occupied by the same participants. Realisation rules would further specify that person and number categories appropriate for this participant, and the modal category for the events, be specified once, on the verb of motion, for configurations a. and c., but twice, once on each verb, for configuration b.3

**Figure 9**

PARTIAL DIAGRAMS OF SOME TWO-EVENT CONSTRUCTIONS

<table>
<thead>
<tr>
<th>MANNER</th>
<th>SEQUENCE</th>
<th>EVENT-GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>motion &quot;toward&quot; 'descend'</td>
<td>process 'sever'</td>
<td>process 'sever'</td>
</tr>
<tr>
<td>motion 'toward' 'descend'</td>
<td>motion 'toward' 'descend'</td>
<td></td>
</tr>
<tr>
<td>a. hunut-ka pi akə.</td>
<td>b. pi asik-ka pahe.</td>
<td>c. pali pi akə.</td>
</tr>
<tr>
<td>'He came running'</td>
<td>'After he came down'</td>
<td>'He came down to sever it.'</td>
</tr>
</tbody>
</table>

Verbs and verb phrases as described above constitute very close knit surface constructions. All of them include only one event node category and one marker of person and/or number of the subject categories for the whole phrase. These phrases may not be interrupted by another lexical item nor by the topic-marking clitic -ak to be described in the following chapter. Further, the potential stem may not occur alone without the remainder of the phrase, even in replies. These facts and restrictions motivate the treatment of verbs and constructions of potential stems with motion verbs as nuclear verb phrases, closer knit constructions than any to be considered hereunder.

5.2. THE VERB-NUCLEAR CLAUSE

5.2.1. Close-Knit Constructions with Participles

Outside the nuclear verb phrase, as described above, there are several usefully distinguishable sorts of constructions, from those which are relatively close-knit to those which are maximally loose-knit in terms of syntactic cohesion and dependence. Constructions which
include only one finite verb or verb phrase comprise verb-nuclear
classes, and these may include close-knit constructions with participles
and loose-knit constructions with non-finite forms marking coincident
events. The closest knit of these constructions are those which include
the participles described in Chapter 2. These include the iterative
participle (marked with *-a* active plus *-yk* in major class verbs),
the basic participle (marked with *-yk* after consonants, *-yk* after
vowels), the perfect participle (marked with *-ya*), the manner participle
(commonly marked with *-oke*) and the past participle (commonly marked
with *-ax*). None of these labels is entirely felicitous, and the most
typical marker is retained as a mnemonic aid for purposes of citation
and identification.

All of these participles, like the potential stem constructions with
motion verbs described in the preceding section, occur in multiple
senses in the constructions to be described, and these senses are largely
determined by the semantic composition of the events realised in the
verbs involved. Contrastive elements include whether or not the event
is an event of motion; whether a motion event is an event of addirec-
tional motion; whether the event presupposes a component of motion
elsewhere in the construction; whether an event presupposing motion
presupposes simultaneous or sequential motion; whether the event is
considered a preliminary or terminal part of a larger event; and
whether the events involved are related as number and class. Each of
these participles occurs in a sense referring to an event simultaneous
with the event specified by the superordinate verb, and each also occurs
in a sense referring to an event preceding the event specified by the
superordinate verb, as summarised in Table 19.

The constructions charted in Table 19 are not all of the same degree
of syntactic cohesiveness. The potential stem construction, included
for purposes of comparison, has been described as significantly closer
akin than any of the others and constituting what has been labelled
the nuclear verb phrase. The constructions with the *-yk* basic partic-
iple are also of differing degrees of cohesiveness. The construction
with the resultant sense of simultaneity, where a non-terminal non-
motion event referred to in the basic *-yk* participle occurs during the
motion event referred to in the superordinate verb, is markedly closer
akin than the constructions with a resultant sense of sequence. The
former are rarely interrupted by other lexical items or the topic-marking
clitic *-ke*, while the latter constructions, with the sense of sequential
relationship, are most commonly observed with the clitic *-ke* postponed
to the participle. All of the charted constructions, however, share the
property of signalling distinct, multiple senses or semantic relation-
ships of the constituents, including relationships of sequence and
<table>
<thead>
<tr>
<th>Form of Particle</th>
<th>Specification of Events, Verbs</th>
<th>Resultant Sense of Relation of Events (A), (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*oko</td>
<td>event specifying manner of motion (intransitive verb or phrase)</td>
<td>simultaneity; motion or continuing (B) occurs in (A) manner</td>
</tr>
<tr>
<td></td>
<td>event which is a member of class (B)</td>
<td>simultaneity or identity; (B) performed in (A) manner or by means of (A)</td>
</tr>
<tr>
<td>**this sense also ** <em>ox</em></td>
<td>limited list of secondary verbs of perception, directionality</td>
<td>simultaneity; (A) is performed during (B)</td>
</tr>
<tr>
<td></td>
<td>process &amp;([A] is attributive to noun or is substantive)</td>
<td>(A) is performed on noun, or noun referent has had (A) performed on it</td>
</tr>
<tr>
<td></td>
<td>process, preliminary stage preceding (B)</td>
<td>sequence; (A) performed before (B)</td>
</tr>
<tr>
<td></td>
<td>later or terminal stage of same process as (A); or ‘put’</td>
<td></td>
</tr>
<tr>
<td>*oko</td>
<td>secondary verb of incurred process</td>
<td>identity; (B) occurs in (A) manner</td>
</tr>
<tr>
<td><strong>luk</strong></td>
<td>terminal stage of process, no portable product; or ‘put’</td>
<td>sequence; subject does (A) then moves as specified in (B)</td>
</tr>
<tr>
<td></td>
<td>process with portable product</td>
<td>sequence and simultaneity; subject does (A), carries product while moving as in (B)</td>
</tr>
<tr>
<td></td>
<td>process, presupposes simultaneous motion, e.g. ‘crack’</td>
<td>simultaneity; subject does (A) while moving as in (B)</td>
</tr>
<tr>
<td><strong>(=luk)</strong> yivu</td>
<td>‘say’</td>
<td>identity; subject speaks as specified in (B)</td>
</tr>
<tr>
<td></td>
<td>any event other than speaking</td>
<td>sequence; subject speaks as in (A), then does (B)</td>
</tr>
<tr>
<td>Form of Participle</td>
<td>Specification of Events, Verbs</td>
<td>Resultant Sense of Relation of Events (A), (B)</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>*hyk</td>
<td>preliminary repeated stage of process, stage of same process as (A)</td>
<td>sequence or repeated sequence, i.e. AAB or ABAA</td>
</tr>
<tr>
<td></td>
<td>included stage or process of larger event (B); repeated larger event, including (A)</td>
<td>simultaneity or identity; subject does (B) by doing (A) repeatedly</td>
</tr>
<tr>
<td></td>
<td>non-motion repeated motion</td>
<td>simultaneity; subject repeatedly does (A) while moving as in (B)</td>
</tr>
<tr>
<td></td>
<td>any category of event repeated 'say', 'do' or 'continue' as quasi-auxiliary</td>
<td>identity; subject does (A) repeatedly</td>
</tr>
<tr>
<td>*yk</td>
<td>non-motion; verb does not include auxilliary 'be= incomplete' motion of subject</td>
<td>simultaneity; subject does (A) while moving as in (B)</td>
</tr>
<tr>
<td></td>
<td>non-motion; verb does not include auxilliary 'be= incomplete' motion of event (A)</td>
<td>event (A) moves like wave as specified in (B)</td>
</tr>
<tr>
<td></td>
<td>motion includes 'be= incomplete' motion</td>
<td>sequence; subject does (A) then moves as in (B)</td>
</tr>
<tr>
<td></td>
<td>non-motion non-motion</td>
<td>sequence; subject does (A) then (B)</td>
</tr>
<tr>
<td>*1 potential steps</td>
<td>non-motion, simultaneous motion</td>
<td>unidirectional sequence; subject moves as in (B) to do (A) at completion of motion</td>
</tr>
<tr>
<td></td>
<td>simultaneous motion not presupposed</td>
<td>identity; subject moves in (B) direction, (A) manner</td>
</tr>
</tbody>
</table>
simultaneity, determined by the semantic composition of those constituents. All other constructions involving the contrastive relationship of sequence or simultaneity include unambiguous overt markers signalling the contrast. Further, all of the charted constructions share the property of requiring that the subject of the verbs involved be the same and the event mode category be the same; this requirement is shared by some other constructions. These constructions may be surveyed one by one, from the relatively closest knit within the group to the loosest knit within the group, which as a group of constructions is close-knit relative to other constructions to be described.

5.2.1.1. The -hoko Manner Participle Constructions

The -hoko manner participle described in Chapter 2 occurs in several senses. It bears formal and sometimes semantic resemblance to adjectival and other forms occurring in construction with the post-clitic -hoko (-hoko after diphthongs ending in i; -hoko after other vowels; -hoko elsewhere) to specify in some sense the manner of an action or event referred to in the following verb:

kak-hoko wo‘-methe. (kak 'big') 'big-manner move--ke-transferred-to-me, i.e. He gave it to me generously.'

hymaken-hoko pete-take wo‘-nesikke. 'three-manner two-manner move--singular-subject-will-transfer-to-me, i.e. (He) will give it to me in triple or double measure....'

(1) A similar sense of -hoko manner participles of verbs occurs with intransitive verb stems (and some verbs with noun objects comprising idiomatic units equivalent to intransitive verb stems) preceding verbs of motion or the verb welax, lokal= 'continue' to specify the manner of motion or of remaining in a place:

vakwus-ek palak layyyyyloko wak.... 'head--its-bone severed rolling its-name, i.e. The severed head name rolling.'

...ellwoven watoko lokolheete. 'knot tying(striking) 2p/3-subject-continue-hypothetical-setting-topic, i.e. If they had kept 'tying knots' (going around in circles)...'

o bolsma o watoko kiwkkhesitke. 'house floor-mem-setting coil striking it-entered-long-ago-prior-topic, i.e. After it (the snake) entered the room coiling as it entered....'

This sense, specifying 'manner of action' also occurs in constructions where the participle refers to an event which is a member of a larger class of events referred to in the following superordinate verb:
posij-ya sipi loga wa/the... 'one-after tearing ke-hit-ke, i.e. he incised her with an axe.'

Here 'tearing', as with teeth or claws, is conceived of as a kind of wounding, and this must be specified in the lexicon, along with the specification of this sense of wet 'hit, kill'.

ake skeike watoko skeikeke watoko skeikeke watoko hakatha... 'one of group wounding one-of-group wounding one-of-group wounding they-did-it, i.e. They wounded one, then another, then another with spear.

Here 'wounding' is a kind of 'doing', and this relationship must be specified in the lexicon.

(2) What may be interpreted as a related sense of the 'ake manner participle occurs with a group of secondary verb stems, some of which (but not all) relate to 'looking', and with the primary verb he: 'hear (or, sometimes, smell). The secondary verb stems involved are:

ht- 'examine, watch from close up';
set- 'wait for, guard';
lak- '(look or send) over a distance';
hak- 'group';
lak- 'lift';
setat- 'push down';
lit- 'pull';
hakat- 'shove'.

All of these secondary verb stems occur with the auxiliary verb -ha, and also occur with suffixed participle endings. The 'ake manner participles of these verbs are closely related to the 'ake past participle forms; indeed the two endings alternate in the same construction as determined by the particular stem involved and the number category of the marked personal object. Further sample paradigms may be viewed in section D of Appendix A:

hy-`amatek 'examining me';
ht-hatek 'examining you(sg)';
hyoko 'examining him, her, it';
hy-`iseark 'examining us';
hy-bisek 'examining you(pl)';
hit-isek 'examining them'.

These forms commonly occur with the superordinate verb mela- lokai- 'persuade' and have been observed occasionally occurring with other verbs, where the time reference of the participle and the superordinate verb are the same, and the participle may be interpreted as specifying an activity of the subject while he remains, or, in a loose sense, the 'manner' of his remaining.
Sve setoko wete. ...'bird watching'-is subject-continuous, i.e. He is watching the birds.'

Heli, hele, setoko wete ne. 'Your (sg)-eye watching-6s you (sg)-continue, i.e. You are staring at it.'

...heney setoko wem japhy-lokoku. ...'men's-house watching-6s battle fighting'-plural-subject-will-continue, i.e. They will keep fighting battles in guarding the men's house.'

(3) There are a few cases where the *oko manner participle is equivalent to an *ek past participle as an attributive. In Chapter 2 it was noted that some verbs, particularly those with roots in final *ek, form the past participle in this way:

Iseko 'steam-cooked' (isako).

But some other verbs which are inflected in an *ek past participle form also are observed to occur inflected in an *oko manner participle form in this sense:

...aput s'oko setoko swvkkara isako wete na. ...'He-son that-we-know killed asset-potato-leaves...on steamed subject-continuous-setting, i.e. (there) where his son was, killed and steam cooked on the asset potato greens.'

Here isako is the normal past participle form of isako 'steam cook'. But wete is the normal past participle form of weto 'his, kill'.

(3) The commonest sense of the *oko manner participle is reference to a preliminary stage of a process a later or terminal stage of which is referred to in the sup-ordinate verb. A common marker of terminality or completion of the whole larger event is the verb hai 'put' either as an independent verb or as an auxiliary. In this sense, the event referred to in the participle precedes the event referred to in the presupposed verb:

Sekkako nusiku. 'Cutting-up-now (causally) we-see-long-ago, i.e. We cut (them) up raw and ate them (causally),'...Heliseko nekasik. ...'Opening-opening-pit they ate prior, i.e. They opened the pit and ate the food, then....'

So je setoko yimata. 'Put squid opening they normally make-nate, i.e. They open squid and make nice of it.'

...tepek kappako, ooke paloko-en hele paloko hokasik-en. ...'Pape sharpening cross-pieces severing-source tying-fine severing蔚 put-prior-source, i.e. After we sharpened the pape and cut the cross pieces and then out the tying vine and Bradford these things, then we made the raft.'
5.2.1.1. Semantic Relationships in "oko Manner Participle Constructions"

It is important to note that one cannot interpret the relative time of occurrence of events referred to in constructions with *oko manner participles without knowing the semantic composition and relationship of the events. Specifically, one must know whether the event referred to in the participle is a stage within a larger process, all of which is referred to in the superordinate verb, or is a stage preceding a later or terminal stage referred to in that superordinate verb:

zo lo leloko yhatek. 'nets cord spinning they-normally-make-nets, i.e. They spin cord and (then) make nets of it.'

...wam watoko ithiki. 'pig killing I'-"killed"-her-long-ago, i.e. I gave her in marriage (or married her) by killing pigs.'

...posja-pa liplogo wahe. 'are-with lacerating he-wounded-him, i.e. He wounded her by lacerating her with an axe.'

In the last example, as already noted, 'lacerating' is a kind of 'wounding', and the events referred to in the two verbs are identical; in other words, the two verbs refer to the same event. In next to the last example, killing pigs is one stage in the marriage rites, so that the second verb refers to a larger whole of which the first verb specifies a part. But in the first example the spinning of cord is an early stage in a process which is completed in making the net, so that the events referred to are sequential parts of the same unnamed larger process. The information needed for correct interpretation of these constructions can perhaps be included in a thesaurus with entries in the lexicon keyed to the thesaurus. Only the most tentative approaches have been made to this task, and they are not included in this study.

5.2.1.1.2. Manner Participle Constructions as Close-Knit

It may be observed that *oko manner participle constructions are relatively more close-knit than constructions with *yk iterative participles, *yk basic participles or *ek perfect participles. First, it may be noted that *oko manner participles are less frequently separated from their superordinate verbs than are the other participles; only infrequently are *oko manner participles set off by the topic-marking clitic -he. Second, *oko manner participles and *ek past participles occur as forms of major class process verbs only, except for forms of some secondary verbs occurring in special senses as described in section (2) above. Minor class verbs and auxiliary verbs are not inflected for this category. Since in the great majority of cases personal objects are marked in prefixes to auxiliary verbs, and
those have no -oko participles, -oko manner participles cannot be
independently marked for personal object categories. Like other par-
ticiples, -oko manner participles imply the event mode and subject
categories marked in the superordinate verb, but unlike other participles,
these forms thus also imply the personal object categories, if any, which
are marked in the superordinate verb. Iterative, basic and perfect
participles all occur as forms of inner layer auxiliary verbs to mark
personal object categories independently of the superordinate verb.

5.2.1.3. Forms of Secondary Verbs and Other Stems with -hoko

Many secondary verb stems of acquired process and some other stems
occur in constructions similar to those described for the first sense
of -oko manner participles. Since such stems, unlike most of the major
class process verbs, have no implicit transitivitity, these forms occur
in the sense of manner-specifying terms both with intransitive super-
ordinate verbs like unidirectional motion verbs and also with transitive
superordinate verbs:

spek-hoko-at lak-slek isik... 'secret--manner-predicate-marker
let-me-go--having-seen I-seen-long-ago, i.e. I said I was planning
to secretly, or I planned to go secretly.'

oke akxe anoko taak-hoko-te Wëseli isakikhe...'Ogre his-wife
that-we-know separating--manner-topic Wëseli she-went-long-ago,
I.e. That wife of Ogre's left him and went to Wëseli.'

netey-ken kokuk-hoko ikim, 'my-heart-seed(heart) splitting--
manner singular-subject-will-eat, i.e. I will speak contempor-
aneously.'

Examples of these -hoko forms with transitive verbs include:

ek tipli-lapak-hoko masikhe, 'hia-tooth tearing-(intensive stem,
reduplicated)--manner he-tea(-t-long-ago, i.e. It is wild pig)
ripped him all up with its teeth as it ate him.'

'te'nek-hoko hak-hasikhe, 'eighth--manner grab--it-did-on-him-long-
ago, i.e. It seized him tightly.'

...heleng-hoko ku-isasuku, 'exhaustive--manner chase-out--we-did-
toward-them-long-ago, i.e. We drove them all out.'

In these constructions, as in constructions with -oko manner participles
of major class verbs, a patient noun may occur with the participle, the
noun plus participle then functioning as a phrase specifying 'manner':

japu opli-ekken tikki-tekke toko wany'-lake, 'garden side-seed(ribs)
protruding(intensive reduplicated stem)--manner digging--he-is,
i.e. He is digging garden so hard he is getting skinny (in a rib-
protruding manner).'
5.2.1.2. Constructions with the *-luk Perfect Participle

The *-luk perfect participle as introduced in Chapter 2 occurs in three related basic senses, besides specialized sense with particular verbs.

(1) In sentences which may be glossed, *'He did it and went,' the non-motion event may be realised as a *-luk perfect participle of the appropriate verb. If no result or product of the non-motion event accompanies the subject as he moves, the non-motion event is complete before the motion event begins:

wa'leka saloku helva'en hvepakko mottok ki sky, *'thatch covering having-put--sour-corn might altogether enter I-came, i.e. After we finished the thatching, when it was completely dark, I came in here.'

(2) If, however, any product of the non-motion event may accompany the subject as he moves, such accomplishment is implicit, and the event thus both precedes and is simultaneous with the motion event:

...hvepvyt we'a'leuk we'no. *'sweet-potatoes having-roasted (you)--some-later, i.e. roast sweet potatoes and bring them.'

...alay we'olok lakoukwa. *'Firewood having-chopped they-went-long-ago, i.e. They chopped firewood and took it.'

an melik a'ly i'luuk nykby-lektuk... *I bailer-ash-shell-con-tense having-put-on move-around--I-continued-prior, i.e. I used to put that bailer shell ornament on and wear it around.'

(3) Similarly, some non-motion events presuppose simultaneous or partially simultaneous movement of the subject, and in this case the non-motion event usually begins immediately before the motion event and continues throughout it. Verbs of carrying and escorting are the commonest examples:

jetoek lakoukwa. *'him-slung-on-a-pole they-went-long-ago, i.e. They carried him (a corpse) off slung on a pole.'

se ke lile-holok kukan... *'spear pull-having done plural-subject-will-enter, i.e. They will pull their spears along as they go in.'

The first two examples under this sense might also be interpreted as examples of sense (2); the first example might be glossed, *'Having slung him on a pole they went carrying him.' But this last example is clearly of events that are coterminous both at the beginning and end.

The specialised form welok *'carring, escorting', derived from the verb stem wek*, which is in turn a bound pre-slitic allomorph of we-
"waka-" 'take', is special only in form. Its sense and distribution are like the *-iuk participles presupposing simultaneous motion of the subject as described above. This form implies a third person singular personal or non-personal object. If other person or number categories of a personal object are marked, the following forms occur:

- wo-*natek 'carrying, escorting me';
- wok-hatek 'carrying, escorting you(sg)';
- wo-*niisek 'carrying, escorting us';
- wok-hisisek 'carrying, escorting you(pl)';
- wok-psiisek 'carrying, escorting them'.

These forms are exactly parallel to forms described above for certain secondary verbs occurring with *-iuk manner participle inflection.

*a*tuk-ke, a*ventek welel-ke, rewe-kiljak etelme lakukeke.

'Having-killed-as---topic bird-killed carrying--topic Rubi-tiak subject-continues-setting they-were-long-ago, i.e. After they killed some of our people, they took the 'dead birds' (weapons symbolising the victims) and went to the Rubi-tiak area.'

In this example the first *-iuk form refers to an event preceding the motion, but the symbolic product of that event is carried as specified in the construction with wokel 'carrying'.

The *-iuk perfect participle of the verb 1ste- 'say' occurs in the forms *iuk and *iyuk as free variants, with the latter more common in this dialect. This form occurs mainly in quotative constructions, which will be separately treated. If it precedes a superordinate verb of saying or speaking, the participle and superordinate verb refer to the same speech event. If it is subordinate to any other kind of verb, the speech event precedes the non-speech event:

...we*niuk yluk usa*-mekke... 'let-third-person-now-new having-said subject-should-say--adverative, i.e. One ought to say, "Let them come," but...'

...isakan yluk wok-othatek... '(you-sg)-stem-cook-it-now-reflexive having-said take--they-normally-transfer-it-to-him, i.e. They say, "Cook this for yourself", and give it to him.'

The special function of yluk in intentional constructions, already introduced in Chapter 2, will be treated separately, as will the function of halok in the sense 'of', although in form halok is the *-iuk perfect participle of the verb ha- 'posessive'.

...
5.2.1.3. Constructions with the -hyk Iterative Participle

The iterative participle, as introduced in Chapter 2, occurs in two major kinds of constructions: one, with the negative particle le in the commonest negative construction in the language; and the other with a superordinate verb. It is the latter use which is of concern in this section. Like other participles, the iterative participle implies the tense and person and/or number of the subject of the superordinate verb. However, more frequently than with other participles, the relationship of the implicit subject of the participle to the subject of the superordinate verb is one of membership in a larger group, or common membership in the same larger group. As will be noted, the -hyk iterative participles of related but contrastive meaning are often subordinate to the same verb but have different subjects, both included in the subject of the superordinate verb. This participle occurs in three main senses in construction with superordinate verbs:

1. Iterative participles of one or more major class process verbs referring to repeated or intercalated prior stages of a larger event may occur subordinate to a verb referring to the terminal stage or a later stage of what is viewed as the same larger event. The later stage may occur after the completion of all the earlier stage events, or recurrently after each of them. The superordinate verb in this construction is either a process verb or the verb he' or a verb form including the depositional auxiliary -he'is:

...jakehi' nano, 'seedling (you)-eat-it-later, i.e. After the repeated seedlings, eat (the sweet potatoes),'

an-he jakei hykyk, jakei hykyk, jakei hykyk wak-heski'kei-he....

'Past-topic same putting, same putting, same putting more (dit)-1-put-it-long-age-prior-topic, i.e. As for me, with repeated requests for help (after each of which some of the garden was dug)

I finished digging it and then...'

2. Related to sense (1) is the sense signalled when the events referred to in the participle are stages included in a larger event and the superordinate verb refers to the larger event. The last example above is a borderline case that might be interpreted either way. If interpreted in the sense suggested here, the events referred to in the participles are included in the event referred to in the superordinate verb:

...jakei hykyk pyy-he yive somasy-lay, 'ascending descending--topic

sols stockpiling--they-are, i.e. By making repeated trips up and

down they are stockpiling sols.'

The senses of the iterative participle discussed in sections (1)
and (3) above are parallel to senses discussed for *heke manner partic-
iples. The manner participles signal events considered as single
units, while the iterative participles signal events considered as
repeated or intercalated:

sal-hyyk-he, epe ep'e-khe t'ak-hyyk nakkokesik-he, epe'ma-khe vkkv
saloko hokokesik-en, ke l'asheksue. 'cover—putting—topic, real-
things some—direction dig—putting we-normally-set-in-prior—topic,
some—direction its—head covering we-normally-put—its—source trail
we-normally-close—its, i.e. After covering some and digging others
of the tubers, we eat the dug ones and then, covering up the
rest and leaving them, we close off the trail.'

In this example the early covering and digging is repeated and is
referred to in iterative participles, but then there is a final covering
reported as a single event in the *heke manner participle saloko
'covering'.

(3) When the superordinate verb is a verb of motion, the iterative
participles refer to repeated events during the movement of the subject.
This meaning resembles one sense of the *yk basic participle to be
described. The iterative participle is preferred where two verbs occur
to refer to intercalated or alternating events, or elsewhere where the
distinctiveness of the repeated events is emphasized:

swl 'anoko ek! ja hak-hyyk la hak-hyyk-he, leopa lakasihe.
'rotoh teu-ke@-hand here grasp—doing-it-on-it there
grasp—doing-it-on—it—topic, to—them he—went—up—long—ago.
I.e. He climbed up to them grasping the rotoh rope hand over
hand.'

esa lokohykk, Kupam-ttappo, Aso-ttappo, Aso-ttippo, Aso-lokkopal
lokohykk kihereke. 'fighting-company mastering [four sub-
confederacy names] mastering ko-normally-enter in, i.e. The fighting
companies muster in turn, the Kupam-ttappo, Aso-ttappo, Aso-ttippo and
Aso-lokkosal muster in turn, as the whole group goes in.'

(4) The *yk iterative participle also occurs preceding and in
construction with the verbs iw 'eag', welse, lokol 'continue' or
hala 'do, treat, make', where the second verb then functions essen-
tially like an auxiliary. However, since the particular second verb
used in these constructions is not predictable, it is difficult to
describe them as single verbs, even though in each of these cases the
second verb is in essence a 'carrier' for the mode and subject categor-
es relevant to the events referred to in the participles:
at-en seke t'uwut-hyyk, an-en seke t'uwut-hyyk-et isu. 'Our-by
spear thrusting—doing-toward-me, me-by spear thrust—doing-toward-
him—also we-said—long—ago, i.e. He thrust his spear at me and I
thrust my spear at him (back and forth).'
The -yk basic participle occurs in the widest variety of environments of any of the participles, and the constructions in which it occurs in different senses range from relatively close-knit to the loosest knot of the participle constructions. In all the senses of simultaneity and sequence to be described, this participle frequently occurs repeated to signal an added aspectual sense referring to an extended event or series of events (compare van der Steg's label 'durative aspect' for this category as marked by these forms 1966:70).

(1) When the basic participle is of any non-moment verb which does not include the auxiliary -he- in a completive sense, and occurs with a superordinate verb referring to motion of the subject, the event referred to in the basic participle occurs during the motion of the subject. This construction is relatively close-knit; the constituents are seldom separated by other lexical items or the topic-marking little -he:

...haly hylyk, ap-hvnyh inatky kl akahkhesik..., 'village firewood putting people killing-then enter he-came-long-ago-prior, i.e. after (the enemy) invaded this area, setting fire to villages and killing people as he came,...'
it a'los puwały wakv-skolok.... 'they off-there confeesing plural-
subject-one--while-others, i.e. While those folks off there are
confeesing the matter one after another, so that the confusion
moves through the group.....'

...imep hv'-latyłkył yłyk'en.... 'their-persons sit--doing going--
source, i.e. After they sit down, one after the other.....'

In this example the subjects do not sit down as they go, but the 'sitting'
move along the row of men lined up for a ceremony.

...svpptv lσtyłk lakel akoukwa.... 'sweet-potatoes steaming second
they-came-long-ago, i.e. They (prepared) the steam cooking (pits)
(filling it) from bottom to top.'

Here it is not the women filling the pits who climbed, but the prep-
aration of the meal involves placement of food and hot stones in pits,
and this activity 'sームe' from the bottom of the pit to the top.

(3) When an -yk basic participle of a verb of any non-motion
category marked for terminality (by the occurrence of the depositional
auxiliary -he-) occurs with a superordinate verb of motion, the event
referred to in the participle precedes the motion event:

hèl wi-hłyk wensphy-lakolylk.... 'амbush cover--haring-put
(completive) eating-as-one-subject-continued, i.e. After we
had set the ambush and come out.....'

(4) When an -yk basic participle of a verb of unidirectional motion
occurs with a superordinate verb, which may be another verb of
unidirectional motion, the events are in sequence:

lłyk wem'm, 'going (you) came-later, i.e. So and then come back.'
wtyłk-he, joka-isskakat, 'coming-topic tell-they-normally-transfor-
mit-to-them, i.e. After they arrive they tell them' (where the two
'they' are co-referential).

...me pətyłk-hé, it jəpu teke tumut-lłyk-yakoukwa-at. 'to-me
gone-going-topic they garden sowe/spade throw--putting--they-
continued-long-ago--also, i.e. They went to my place and after
they arrived they used to dig with garden-dipping-stick also.'

(5) Similarly, when an -yk basic participle of a non-motion verb
is subordinate to another non-motion verb, the events are in sequence:

wty-si wanyłk-he, hopuk-he səll-əkken wenskata, 'white-heron-its-
feathers taking-topic, later-topic sowe-seeds(shells) they-
normally-take, i.e. After they get white heron feathers, then
later they get soury shells.'

hakko jy tak nyłyk-en, Jesu one wakini.... 'my-ply this first
eating--source Jesus his-talk singular-subject-will-take, i.e.
After I first set my pips (at the feast) I will receive Jesus' words.'
The sequence in such case may be of successive time spans of the same event:

kak-akyk hanlvk kak-akyk kak-akyk-he kok-skelkhe. 'big--
becoming little big--becoming big--becoming big--becoming--topic-
marker big--he-became long-ago, i.e. Growing a little at a time,
he grew and grew until he had grown up.'

5.2.1.5. The loose-knit quality of Some Basic Participle Constructions

It was pointed out above that some -yk basic participle constructions are relatively loose-knit. One piece of evidence for this is the occurrence of -yk basic participles with other relators postponed in patterns not observed with other participles functioning as participles: With halok 'if':

an kyno jok-o-akyk halok. Apalek nakeljek... 'he requests tell--
transforming-to-me if, Apalek, my-friend, i.e. If they are
asking me for it, (they would say) "apalek, my friend,..."'

In this example, the construction of the -yk participle of a verb of speech plus the relator halok before a direct quotation results in a sense of simultaneity or identity of events; the direct quotation is the request referred to in the participle.

Constructions with hesik 'because of':

ap akyk hesik heka. 'man killing-him (=watyk) because-of they-put-
it, i.e. They placed it because they had killed a man.'

Ino paatayk hesik hokotek-at. 'on-then treating because-if un-
normally-place-it--also, i.e. We also place it because we have
treated people.'

In these last two examples, the event referred to in the -yk basic participle precedes the event referred to in the superordinate verb.

Constructions with -me 'setting':

There are no examples in the filed corpus, but -yk basic participles with the setting marker -me are not uncommon in constructions marking sequence of events with change of grammatical subject:

an alyly'no, at wesikin. 'I going-setting he singular-subject will-
come, i.e. After I have gone, he will come.'

Further, -yk basic participles signalling sequence of events occasionally occur with a different grammatical subject from the superordinate verb, provided that the speaker views the sequence of events as if it were the activity of a single participant:

at ki iyy-ke, wein lek-skhekin atty. 'he enter coming-topic-
marker, battle not--singular-subject-will-become-reflexive that-
abstract, i.e. After he (the government official) comes in, the
warfare is going to disappear, that's it.'
In both of these last examples, the grammatical subject of the superordinate verb is different from the subject implicit in the participle, but in each case the events referred to in the two verbs are regarded as, in a sense, single larger events.

5.2.2. Loose-Knit Constructions with Markers of Coincidence

As well as close-knit constructions with participles, verb-nuclear clauses also include looser knit constructions with non-finite verb forms marking coincident action. It was noted for each of the participles discussed in the preceding section that it occurs in a sense signalling sequence of events, with the event referred to in the participle preceding the event referred to in the superordinate verb, and also in a sense signalling simultaneity or identity of events. There is another set of three non-finite verb forms which signal only events regarded as coincident: the -leke forms marking progressive coincident events and anticipating a superordinate verb with the same subject; the -seen forms marking non-progressive coincident action or events and anticipating a superordinate verb with a different subject; and the -kolek forms marking progressive coincident action or events and anticipating a superordinate verb with a different subject. There are other features of meaning to be considered for these forms as they are treated individually. These forms differ from the participles in significant ways. The two 'different subject' forms, while including no markers of person or number of the subject, signal that the implicit subject of the form is neither identical with nor included in the range of reference of the subject of the superordinate verb. These 'different subject' forms are also based on factive mode stems, and unlike the potential mode of the potential stem, for example, the factive mode category in these constructions may be interpreted as 'factive from the standpoint of the superordinate verb.' Thus they are more loose-knit in terms of independent marking of mode, person and number categories than are the participles. The -leke forms, while not more loose-knit in these terms, are more loose-knit than the participles in that they mark simultaneity independently of the semantic composition of the superordinate verb.
5.2.1. Progressive Coincident Events, Same Subject -lokolyk

The form -lokolyk is in fact the -yk basic participle of the verb wele-, leko- 'continue', and occurs both as a participle of that verb as an independent primary verb and as an auxiliary with the progressive stem of other verbs marking progressive aspect. Unlike -yk participles of other verbs, this form does not occur in any construction to signal an event preceding the event referred to in the superordinate verb; it always signals an event simultaneous with the event referred to in the superordinate verb.

(1) The participle lokolyk as a form of the primary verb wele-, leko- 'continue' occurs with proposed location terms or adjectives or -yk iterative participle forms, e.g., to specify the location or condition of the subject during the event referred to in the superordinate verb:

nimow layk wayk...lokolyk-ne, ap Wkka-hwy Meke-nen ta' mu-13 karukhe, 'we-together going coming continuing--topic man Wkka--huk Meke--by fires chase-out--to-do-towards them enter he-come--long-ago, i.e. While we were going back and forth (on good terms), the Meke fires invaded and drove out the Wkka-huk.'

(2) The participle -lokolyk as a form of the auxiliary verb marking progressive aspect occurs with the progressive stem of other verbs, as described in Chapter 2, to refer to an event which continues at least throughout the time span of the event referred to in the superordinate verb, where the subjects of both verbs are the same. It thus serves as a marker of progressive coincident or simultaneous action by the same subject. There are semantic restrictions on this construction such that the verb occurring with -lokolyk may not normally be a non-motion verb if the superordinate verb is a motion verb. Motion is normally conceived of as an implicitly durative category that can serve as a setting during which other events can occur, but motion is not normally regarded as set in the context of non-motion events as a background or setting. The -lokolyk form may, however, refer to a non-motion event during which the same subject performs some other non-motion event:

...wele-tya lokolyk-he hymmek wele-tya, 'setting-continuing--topic three we-killed-he-long-ago, i.e. As we went out (of ambush) we killed three.'
le ake-lokolyk-ke, wakun mottok nasu, 'weeping doing (literally becoming)—continuing—topic funeral pig altogether we-ate-it—long-ago, i.e. As we wept, we ate the funeral pig up.'

The -lokolyk forms described above are potentially looser knit constructions than most participle constructions. Like certain other constructions with -ny basic participles, -lokolyk constructions have been observed with such postposed relatives as kake 'of':

o meslay-lokolyk kake-ke, heup wawoak-lok-ke, 'house raising—continuing if—topic later let's—build-it-later—having-sold—topic, i.e. In case they are tearing the house down in order to re-build it.'

5.2.2.2. Progressive coincident events, different subjects: -kkelek

Part of the motivation for treatment of -lokolyk forms and constructions separately from other -ny basic participle constructions is the existence of the distinctive -kkelek forms and constructions specifying the setting for simultaneous action by a different subject. The event referred to in the subordinate -kkelek forms extends throughout a time span at least co-extensive with the time span of the event referred to in the superordinate verb. Further, the event referred to in the subordinate -kkelek form is backgrounded in the sense that this is the form of choice for referring to an event which was disregarded or neglected, although the superordinate verb refers to an event that took place during the disregarded event. Formally, as described in Chapter 2, most subordinate -kkelek forms are composed of the inactive subordinate stem plus the clitic -kkelek. Other observed -kkelek forms are composed of the abnormal continuous aspect form, the past participle, the form wetek of the verb wela, lokél 'continue', and some stems of other classes than verbs, plus the clitic -kkelek:

...wass ikke-kakelek nkyky-laken... taboo saying—while eating—you(all)-are, i.e. While folks are saying, "It's taboo," you're eating it.'

Here it is not one speech of warning that is in view in the subordinate verb, but the continuing normal warnings against which the eating of the taboo item is set.

ep-hny wetek wetek-kakelek-ke, pnya s'oko...wlsyheket, 'people killed subject—continues—while—topic, lizard that we-know it—normally-eats, i.e. After (literally while) the person is dead, that lizard goes out.'

It a'lonw pawaklok kakelek, s'he laken-lake, 'they off-there confessing plural-subjects-some—while he—topic concealing—his brother, i.e. While those folks off there are confessing the matter, with the confession passing through their group, he is concealing it.'
3.7.2.3. Non-Progressive Coincident Events, Different Subjects: -mem

In contrast with the -koelk forms described above are other coincident action forms constructed with the factive subordinate stem but with the suffix -mem, as described in Chapter 2. These forms contrast with the -koelk forms in that they are not marked for progressive action; the action or event referred to in the subordinate -mem form may but usually does not extend throughout the time span occupied by the event referred to in the superordinate verb. The verb mem, long-ago 'continue', which has an implicit component 'progressive' does not occur in this form in this sense. Further, the event referred to in the -mem form is not backgrounded in the sense of being neglected or disregarded, but rather is the event of reference or the basis for reaction for the event referred to in the superordinate verb.

'Coincident' here is not quite the same as simultaneous; frequently the event specified in the subordinate -mem form occurs just preceding the event specified in the superordinate verb, but this form does not specify the relationship of the events as sequential. Further, there are some, although not many, instances of -mem forms with the same implicit subject as the superordinate verb, while -koelk forms have been observed only with different subjects from the superordinate verb. These -mem forms also occur not infrequently subordinate not to a single superordinate verb but rather to a whole discourse section or discourse for which the -mem form gives the time setting:

jykkytvyk hylym-kytvyk holm anet kkvmen yly'-lay, boyz girs oolyfish go-get when-plural-subject-enter saying-they-are, i.e. They say (it happened) when some boys and girls went in (to the water) to get oolyfish.'

In this example, which is the initial sentence in the discourse, the -mem form provides the time setting for the whole discourse.

he wthaka sakoletas ai, wthaka moka wthakahe, 'woman one-of-pancakes eat-root refuse when-singular-subject-strike thrust-manner they-killed-her-long-ago, i.e. They killed a woman with a spear thrust when she was eating pandanus air-roots.'

In this example the woman's action actually lasted much longer than the killing, but the point is that it was the relevant context for the attack.

...hele kkvmen-he ki ake-lakaki, 'take-yourself enter-now when-plural-subject-said-topic enter coming-1-continued-long-ago, i.e. When they said, 'Get yourself in there!' I used to come in.'

Here the event referred to in the -mem form precedes each event referred to in the progressive action superordinate verb. The node category of the -mem form is relative to and interpreted from the standpoint of the
superordinate verb.

This is one of the rare examples of a base form with the same implicit subject as the subject of the superordinate verb. Apparently the speaker does not set the accident in the context of the homeward trip and say, 'As they came they fell', using an -loke- form, but makes the trip an event of time reference, as if the subject were different.

The relationships of non-finite verb constructions marking coincident events are summarized in Table 28.

<table>
<thead>
<tr>
<th>SUBORDINATE VERB:</th>
<th>same form of any verb</th>
<th>superordinate</th>
<th>exception 'continue'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-progressive,</td>
<td>-yak basic participle</td>
<td>motion verb</td>
<td>any verb</td>
</tr>
<tr>
<td>of non-motion verb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPERORDINATE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>progressive,</td>
<td>-loke- form of any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>background event</td>
<td>verb (not a non-verb)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>motion verb if superordinate verb is of motion;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPERORDINATE</td>
<td>see above</td>
<td></td>
<td>any verb</td>
</tr>
</tbody>
</table>

Note that while Table 28 includes the component of the close-knit participle constructions marking simultaneous events, the -yak basic participle of a non-motion verb occurring with a superordinate motion verb, it does not include the other participle constructions referring to simultaneous events.

The constructions with participles and with other non-finite verb forms referring to coincident events are usefully considered to be within the same clause as the superordinate verbs, although in most cases separate events are referred to in the subordinate and superordinate verbs. In all cases, the event node category and the subject category of person of the non-finite verb form are relative to the categories of the superordinate verb; i.e. the non-finite forms treated in this section are not independently marked for person of the subject, and the
mode category marked in these forms must be interpreted relative to the
category of the superordinate verb. The verb-nuclear clause in hand
may be defined to include one and only one finite verb form; it thus
also includes any non-finite verb forms subordinate to a finite verb.

It is currently common to derive such non-finite verbs from
clauses or sentences (e.g. Chomsky 1965:185; Longacre 1970). The
interplay of categories of reference to participants and semantic
components of meaning which characterizes these constructions makes it
more attractive to derive them not from sequence of sentences which
become conjoined or embedded but directly from the semological structures
realised in these surface constructions. The present study is only a
first step toward describing these structures and their realizations.

5.3. SUBORDINATE CLAUSES

The constructions described thus far in this chapter have all
included non-finite verb forms, which are not independently marked for
mode and subject person categories. They are thus verbs, which are
dependent on superordinate verbs within the same clause in the usual
cases. There are also constructions employing finite forms of verbs
which are marked for mode categories and, when contrastive, for subject
person categories, yet are also marked as dependent upon a superordinate
verb or clause. It is useful to consider these constructions to be
subordinate clauses, constructions more loosely related to the super-
ordinate clause than non-finite verb forms are related to finite verbs
within the clause, but also more dependent on and tightly knit with the
superordinate clause than other clause types to be described. Since
mode categories are often specified in these constructions they will be
presented in terms of the mode category specified.

5.3.1. Subordinate Clauses with Specified Potential Mode

5.3.1.1. Clauses of Interrupted Events, Marked with ha'ma

There are two commonly occurring constructions with a relativizer and a
future form of the verb in the subordinate clause to refer to interrupted
events. The superordinate clause normally has a verb in simple factive
or remote past active mode. The relativizer ha'ma (sometimes a'la) is used
in such constructions to refer to an event that was begun or was about
to begin but was interrupted either by the agent of the original event
or by someone else:

...pete-takes we'esehki he'ma, makes-at we'ehnta. 'two--manner
more--singular-subject-will-transfer-to-me interrupted one more--
he-transferred-to-me, i.e. As he was about to give me two he gave
me one.'
In this example the verbs in the subordinate and superordinate clauses have the same subject.

**palk wanin ha'ma, wa me to-nen-he...epe motok nasikhe. 'forest-animal singular-subject-will-kill-it interrupted pig wild-source--topic his-person altogether he-ate-it-long-ago, i.e. As he was about to kill a forest animal, a wild pig ate him up.'**

In this example the verbs in the subordinate and superordinate clauses have different subjects.

### 5.3.1.2. Clauses of Interrupted Events Masked with akka-

The verb akka- 'understand' in factive forms is also used as a relator following future forms of other verbs. This subordinate clause occurs with a superordinate clause including a verb of the same node category as the akka- form and, normally, with a different subject from the subordinate future form; the akka- form and the subordinate future form share the same subject. The resultant subordinate clause refers to the frustration of the subject's purpose or plan.

---

**alokkop palk-yiVik ikin akkasikhe...hemeloko heikhe. 'her-throat let-me-out--having-said singular-subject-will-say he-understanding-long-ago... vomiting she-put-him, i.e. As he was about to cut her throat, she vomited him (another participant) up.'**

---

**hang asukun akake-te...heleng-hako watho... with-arm-used-readied plural-subject-will-become they-understanding--topic exhaustive--manner they-killed-him, i.e. As they were about to bring their weapons to the ready position, (the enemies) killed them all.'**

### 5.3.1.3. Clauses of Mistaken Suppositions, Masked with saltak

The relator saltak occurs following future forms of verbs in subordinate clauses referring to an event which the subject of the superordinate clause wrongly supposes will happen or has happened and on that basis acts as specified in the verb of the superordinate clause. The superordinate clause normally has a verb in a factive form, either simple factive or remote past, specifying that the event referred to in that verb has already occurred. It should be noted that the person who wrongly supposed that the event would happen was, at the time of his action based on that supposition, predicting a still future event. The speaker now reporting the event knows that the supposition was false and the predicted event did not happen, but that the event reported in the superordinate clause did happen. Neither event is appropriately referred to in the hypothetical mode.
5.3.14. Clauses of Confident Prediction, Future with *mo

The event-setting suffix *mo occurs with future forms to refer to an event confidently predicted, on the basis of which the event specified in the superordinate clause occurs. The subordinate clause and the superordinate clause have verbs with different subjects, as with other constructions including the relator *mo:

...wa wa tetek-koqek...jokolikinee atty-re, at hopuk-at jokolusak-o.
'taboo subject-continuous-while singular-subject-will-wood-setting 
that--topic, he later--predicate subject-ought-to-wood--desire, 
i.e. Since it is the case that he is going to wood (this garden) 
while he has taboo objects, he (another participant) ought to 
used his later.'

5.3.15. Clauses of Intention, Marked with *ylv

In Chapter 2 verb forms occurring in two types of purpose construction were described. In each case the subordinate clause has a verb in deferred hortative form, a potential mode category. The first of these clause types has a deferred hortative verb form plus a cliticised form derived from ylv 'having said', the *ylv perfect participle of the verb *lv 'say'. The pattern of the paradigm was described in Chapter 2 and is further displayed in the appendix. This construction refers to a planned event in the subordinate clause, in preparation for which the planner acts in the superordinate clause. If the subject of both verbs is the same, first person forms are used in the subordinate verb. If the subject of the subordinate verb is different from the subject of the superordinate verb and is the addressee or addressers, second person forms are used in the subordinate verb. If the subject of the subordinate verb is different from the subject of the superordinate verb and is not the addressee or addressers, third person forms are used in the subordinate verb. This relative person reference is summarised in Table 21.
### Table 7: Relative Person Reference in Intentional Clauses

<table>
<thead>
<tr>
<th>Subordinate Intentional Verb</th>
<th>Same (*) or Different (?)</th>
<th>Superordinate Verb (Form and Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>(1,2,3)a**</td>
<td>(1,2,3)a**</td>
</tr>
<tr>
<td>1p</td>
<td>(1,2,3)p**</td>
<td>(1,2,3)(s,p)**</td>
</tr>
<tr>
<td>2a</td>
<td>2a</td>
<td>(1,3) (s,p)</td>
</tr>
<tr>
<td>2p</td>
<td>2p</td>
<td>(1,3) (s,p)</td>
</tr>
<tr>
<td>3</td>
<td>(1,3)(s,p)</td>
<td>(1,2,3)(s,p)</td>
</tr>
</tbody>
</table>

* 'Same' subject here refers to identical or included reference, i.e. the subject of the subordinate verb is the same as or includes the subject of the superordinate verb.

** Person reference is the same in the two verbs.

Thus in effect, where the subjects of the subordinate and superordinate verbs are coreferential, or the subject of the superordinate verb is included in the reference of the subject of the subordinate verb, the person category of the subject of the subordinate verb is interpreted as if the subject of the superordinate verb were the speaker or speakers. But where the subjects of the two verbs are different, then second person forms of the subordinate verb are interpreted from the standpoint of the actual speaker, and third person forms are used in all other cases. Because of this pattern of relative person reference, first person forms are very much the most common in subordinate intentional clauses. In the following examples, note is made of the form and reference of the verb in the subordinate intentional clause and whether or not the verb in that clause has the same subject as the verb in the superordinate clause:

- **Same subject, first person singular form and reference:**
  - *waawik-ylvk iakasi,... 'let-me-get-having-said I-went-long-age, i.e. I went to get it.'*
  - Same subject, first person singular form, third person singular reference:
    - *paawik-wamik-ylvk wakamas... 'forest-animals let-me-kill-it-having-said he-came-sitting, i.e. He has come to kill forest animals.'*
  - Same subject, first person plural form, third person plural reference:
    - *vayping yvok-olvk wakamas... 'sweet-potatoes let-us-hear-having-said they-came-long-age, i.e. They came to eat sweet potatoes.'*

- **Same subject, first person singular form, second person singular reference:**
wasi kulva aken! 'let-me-kill-him-having-said you(agi)-said query,
I.e. Were you planning to kill him?'

Different subjects, second person singular form and reference:
wo'-me'ok olvk waky... 'move-you(agi)-transfer-to-me-later-
harvesting-having-said I-came, i.e. I have come for you to give
is to me.'

Different subjects, third person form and reference:
wawawak olvk-be, wii-eken...wok-ekaletek. 'let-third-person-
come-having-said-topic query-seed(shells) move-us-normally-
transfer-it-to-them, i.e. We give query shells to the (medium)
so that (the spirits) will come.'

Different subjects, third person form, first person singular reference
(example from a neighboring dialect in lieu of an example in the filed
corpus):
nele-eken hok-olv wo'-natek laasak. 'my-eye-seed(eye) let-third-
Person-see-it-having-said take-doing-on-me(disorting-me) subject-
ought-to-go, i.e. (You) ought to take me so that I can see it.'

In the last example, note that 'eye' is construed as having persons as
subjects, and 'eye' is in effect an instrument. Compare an example with
this construction, where the verbs in the two clauses have the same
subject:
nele-eken hok-olv waky. 'my-eye-seed(eye) let-me-see-it-having-
said I-came, i.e. I came to see it.'

The following constructed example is not paralleled in the filed corpus
but is common conversational hand:
kepp aywok olvk jok-eneken? 'important let-third-person-
become-later-having-said tell-you-transferred-to-us query, i.e.
Did you tell us that so that we would become nobodies?'

In this last example, also, the subordinate intensional clause has
third person form but first person plural reference.

In these same forms, the person reference of any personal object-
marking prefixes is interpreted from the standpoint of the speaker in
all cases, so that in this construction, and only here, there occur
verb forms which have first person object markers, referring to the
speaker or the speaker with others, and also first person subject
markers, where these refer to the addressee or any other non-speaker,
since the marked subject person category is not interpreted from the
standpoint of the speaker but of the subject of the superordinate verb:
neswok olvk-at phy-ikeuskwa. 'let-us-kill-me-having-said-
predicate saying-they-were-long-ago, i.e. They used to make plans
to kill me.'

In this example, the planners are the referents of the first person
plural subject marker on the verb in the subordinate intentional clause, and the speaker is the referent of the first person singular object marker.

we'mesik-ylik eken? ‘move-let-me-transfer-it-to-me-having-said did-you(aq)-say, i.e. Did you say that you were planning to give it to me?’

In this example the first person singular subject marker on the verb in the subordinate intentional clause refers to the addressees, who is subject of the superordinate verb, and the first person singular object marker refers to the speaker.

These intentional clauses may occur sentence and even utterance finally, where they presuppose not a superordinate clause in the linguistic context but an event in the situational context:

an laka-ylik. ‘If let-me-go-having-said, i.e. I’m getting ready to go, or I have decided to go.’

hat-he Pasena loka-ylik eks... ‘you(aq)-topic Pasena let-me-go-later-having-said they-said, i.e. They said that you and others were planning to go to Pasena.’

5.3.1.6. Facilitative Clauses, Marked with -nen

Subordinate clauses with verbs in the deferred hortative form plus the post-cliticized relator -nen ‘source’ occur in construction with superordinate clauses with verbs in any modal category appropriate to the discourse. The subordinate clause then refers to an action performed by a participant considered to be the principal or proper actor, who is often also the planar; the superordinate clause refers to an action or event which facilitates the action in the subordinate clause:

syybatok sa eseg-wa we-isa lan. ‘ever-potatoes to-eat let-third-person-nom.-later-source call-to-transfer-to then you(pl-goe-now, i.e. Go call them so that they can come and eat the sweet potatoes.’

In this example the men who are called to the meal are those who requested it to be prepared; they are the ‘principals’ in the event.

vakvamensik wataak-wa ha, wa-star ak wok-aai llok. ‘Okumbearrik(nmen) let-third-person-strike-it-celebrate-reflexive-source-topic bird-killed him move-to-transfer-to-him let’s-go-later, i.e. Let’s go give the ‘dead bird’ (symbol of battle victim) to Okumbearrik so that he can celebrate (the victory dance) for himself.’

Here Okumbearrik is regarded as the leader with primary rights against
the enemies of whom one was killed by the speaker's group; they give him the symbol of the victory, and while they are the planners, he is the 'principal'.

Note the contrast between faciliative clauses and intentional clauses; in the *-vilv intentional clause, the subject of the subordinate verb is the planner, whereas in the faciliative clause, the subject of the subordinate verb is the principal participant and often the planner:

'woke' look-on wak-eisen, 'carrying-it let-third-person-go-later--
source move-you(sg)-transfer-it-to-them now, i.e. give (their spear) to them so that they can carry them off.'

In this example the subject of the subordinate clause had seized weapons from a group of the enemies. These enemies, under escort of a government officer, receive them back when the officer, in this example, orders the leader who had seized them to return them to their owners. He was reluctant but complied. The subject of the faciliative subordinate clause is the group who owned the weapons, the 'principals' in relation to those objects, and the speaker, who was the government officer, is the planner but not overtly referred to in the example.

nane iki a'no'ko wo'-ne'no'ki-o'kye wak. 'my-butter-shell that-we-know
move-you(sg)-transfer-it-to-me-later--having-said I-came, i.e.
I came for you so that your shell smell of mine.'

In this example the subject of the verb in the subordinate clause made a trip to recover a stolen shell, which had been given by the thief to the addressee, who only reluctantly surrendered the goods. The subject of the subordinate clause is the planner and the principal participant in the event.

§2.1.1. Portentive Clauses of Negative Purpose: *i-no-a-nilv

The potential portentive forms, consisting of the potential stem plus the post-clitic *-no, occur with a further post-clitised contracted form of *vilv 'having said', the perfect participle of *i 'say', in a clause of negative purpose. The portentive form with *-no, while based on the potential stem, can be considered finite as a verb form even though it does not mark contrast of person categories of the subject, since it does not require or presuppose a following verb with those categories marked. In this construction, which is here included among subordinate clause types, the resultant meaning is related to the meaning of the intentional clauses treated above, but the distinctive pattern of relative person reference associated with the intentional clauses is not observed in these portentive clauses.11
are no examples of this clause in the field corpus, but it occurs not
infrequently:

weak esi-noko-1v1 hakathi. 'bad-to-become--liable-to--having-said
l-did-it, i.e. I did it to keep it from spoiling.'

5.3.1.8. Generalized Conditional Clauses with Potential Ground plus -no

The potential ground as described in Chapter 5 occurs with the event
setting marker -no (regardless of the phono-logical shape of the ground)
in the protasis of what may be called generalized conditional clauses.
These clauses are not marked to refer to the condition as contrary to
fact nor as anticipated fact but represent the sense of potential event
mode described in Chapter 4 in which the opposition of hypothetical
mode to potential mode in its narrowest sense is neutralized. Only one
example of this kind of clause occurs in the field corpus:

inom appy-toto hakasuma-te, y. an nane yky a-noko-nen.... 'they-
together simultaneous--manner if--subject-does--topic, yes. I
my-color I-said that-we-know--source, i.e. if (you) should do it
at the same time (the might say), "So there. It was from that
pronouncement of mine (that they did it)."

5.3.2. Subordinate Clauses with Specified Hypothetical Mode

5.3.2.1. Contrary-to-fact Conditional Clauses

Hypothetical mode forms with the suffixed event setting marker -no
occur in the protasis of contrary-to-fact conditions, and either other
hypothetical forms or potential mode forms occur in the subordinate
clause which is the apodosis:

palal ta' llylyk, napvlal-hapvlal [ap-va-n] napvlal
wanly-lokoellep. 'snake first having-gone my-epidermis--your(epi-
epidermis--idion for changing skin and thereby renewing life like
snakes, in the local view) (f-2p/3-subject-eg-hypothetical--topic
people their-epidermis taking-2p/3-subject-continous-hypothetical,
i.e. If the snake had arrived first and said, "change skins,"
people would have kept changing their skins (and not died).'

In this example the verbs in both the subordinate protasis and the
superordinate apodosis are in hypothetical event mode.

...elok skelkhe ma-ey'ap-1apnwa ek-osi eu-makke. 'life-lose-condition
one-of-group shape--2p/3-subject-transfer-lis-to-me-hypothetical-
setting now--co-transfer-to-he subject-some-adversative, i.e.
If they had given me a live (pig), I could have brought it and
given it to him (but he didn't give me enough shells to make that
possible).''
In this example the verb in the subordinate clause which is the protasis is in hypothetical mode, and the verb in the superordinate apodosis is in potential mode, in the wider sense of that mode in which the contrast between hypothetical mode and the narrower sense of potential mode is neutralised.

5.3.3. Subordinate Classes with Specified Factive Mode

5.3.3.1. Factive Conditional Clauses, Marked with -halok

Conditional sentences which refer to what is regarded as a real possibility in the future or to normally recurring relationships of contingency are commonly constructed with a subordinate protasis including a verb form consisting of the factive subordinate stem or the abnormal continuative aspect ron plus the relator halok. With the factive subordinate stem this relator is postciticised, and occurs in the form -selok after stems marked for plural subject, as described in Chapter 2. The verb in the apodosis is commonly a future or other potential form of the verb, or a normal aspect form. This same type of subordinate clause also occurs preceding factive forms in what would not traditionally be considered to be conditional sentences but could be glossed, 'Since A did X, B did Y.' In both kinds of case, however, the first clause refers to the determining event upon which the event referred to in the superordinate clause is or was contingent. If the second clause employs a factive form with past reference, the contingent event has occurred; if it employs a normal aspect form, the contingent event normally occurs when the condition specified in the protasis is fulfilled. If the apodosis employs a potential form, the contingency is still open. It will be recalled that -halok is in form the -selok perfect participle of ha-

'thereupon', and that in many examples it is possible to gloss the form, 'When the subject of the verb in the apodosis sees that the subject of the verb in the protasis has done what that latter verb specifies, he acts, acts or will act as specified in the verb in the apodosis.' However, this sense is now often lost, and conditional sentences in this form occur with verbs with the same subject in both the protasis and apodosis, where the literal kind of gloss suggested above seems inappropriate.

These constructions with the factive subordinate stem are non-finite verb constructions, but the clause in which they occur are best treated with other subordinate clauses rather than as intra-clause verbs like the forms referring to coincident events.
weim japhy-lokon! likhe-salok-he, hano-at japhy-lokokum. 'battle-fighting—pluralsubj will continue, i.e. if he says, 'Keep on fighting,' then we will keep on fighting—that will be good.'

ap-hvny inath-salok-he, ap kvy-esi wathatek. 'people plural-subject—kill-them—if—topic men white-heron—its-feathers they-normally-take, i.e. if they kill people, the men procure white heron feathers.'

uwani ak'kwy-salok-he, heb-loko. 'stolen-pig plural-subject-eats—if-topic diseased—we-did-to-them,' i.e. since they had stolen the pig and eaten it, we forgot about it.

The same conditional relator helok with no alternate form marked for plural subject also occurs following a number of other verb categories in looser constructions but all with meanings similar to those described above. In these cases also, this relator must sometime be glossed 'if,' and sometimes be glossed 'since,' but the logical relationship of clauses seems to have a common feature in all cases: 15

yly'-lake helok-he, atti wessate eks atti. 'saying—he-ta if—topic that medium-woman they-said that, i.e. since (the familiar spirits) speak, that's why they said that woman is a medium.'

weak-sakma helok, inne we'-laskin helok eks. 'bad—its-became-setting if, their-persons singular-subject-will-die if they-said, i.e. since it (the disease-river) had gone bad (had given a bad prognosis), and the patient (referred to as plural, but literally one person) will die, they said that.'

5.3.3.2. Factive Negative Clauses, with the Iterative Participle

It was earlier noted that the iterative participle occurs in two major senses, one of which occurs preceding a superordinate verb in a close-unit intra-clause participle construction, and the other of which occurs in construction with the negative particle lik 'not'. It is useful to interpret this negative particle as a non-verb predicate, usually with implicit factive mode, as will be discussed again in Chapter 6. The negative clause is then usefully treated as subordinate to that non-verb predicate, constituting a non-verb clause. When lex occurs sentence finally following such a negative clause, the factive mode category implicit in non-verb predicates is understood. When a verb-nuclear superordinate clause follows, the negative clause implies the same event mode and the same subject as the verb in the superordinate clause. The negative particle also occurs followed by a form of weim, lokoi 'continue' as a carrier of inflection to signal other
modal categories than the simple factive category implicit in the form:

1...nyk' lek lakekhatat... 'water consuming not steep-normally-go, i.e. They travel without drinking (on the way).'

This example includes a sense of the iterative particle that bridges the two major senses, or includes them, in that the non-motion event referred to in the subordinate clause occurs during the motion referred to in the superordinate verb-nuclear clause, even though there is, in the interpretation adopted here, an intervening non-verb clause to which the negative clause is subordinate and which is in turn subordinate to the superordinate clause.

E.g. 'Nek lek lakekhatat... 'water consuming not steep-normally-go, i.e. [Singular subject] will continue to refrain from drinking water.'

Here the modal category 'future', a potential mode category, is marked in the verb 'continue' as a carrier of inflection, and the modal meaning of the negative clause is understood relative to that mode.

These negative clauses also occur with the relator 'na 'setting' suffixed to the negative particle 'lek'; in such cases a superordinate verb-nuclear clause occurs with a verb with a subject different from that of the subordinate clause:

1...enek-enek' lema-at ainsuk-at lakekha. 'rebuke--transfer-to-them not-setting-predicate their-violent-predicate they-went, i.e. They went off of their own accord when they hadn't been reprimanded at all.'

Here the relator 'na signals sequence of events as well as change of subject.

Negative clauses of this form also occur with the relator 'maek' 'If':

1...enek yky lek halak-he.... 'you (sg)--cook-it-norm-saying not-verb-topic, i.e. If they don't say, "Steam cook it,..."'.

5.3.4. Subordinate Clauses with Specified Factive or Potential Mode

5.3.4.1. Clauses of Place, Marked with 'ma, '-ma

The locative role with its sub-senses 'target' and 'locus', and the meaning 'place from which' may be filled not only by place names or locational phrases with appropriate relators, but also by clauses specifying place. The most common relator marking clauses specifying place is the suffix 'ma, '-ma 'setting', in a locative rather than a temporal sense:
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ma-nsa Minimo Holamelaik a'lii lu pi akasi'no-nen, o wuthikweno pi
akasi'no-nen... 'down-setting Minimo(place) Bromley yard descend
he-came-prior-setting-source, house he-built-long-ago-setting
descent he-came-prior-setting-source, i.e. After he(the enemy,
referred to in third person singular) had come down to Minimo, to
Bromley's yard, after he (the enemy) had come down where he
(Bromley) had built his house...'

In this example, the repeated verb pi akasi'no-nen 'after he had come
down, then...' includes the relator me 'setting' as a marker of change
of subject and of sequence, as will be further described. The clause
o wuthikweno 'house where he built it long ago,' or 'where he built the
house long ago' serves only to specify the location or 'place to which'
the subject came down, although the relator me is the same morpheme
as that which occurs in another sense in the other verbs. One overt
cue that the event of building referred to in this verb is not part
of this sequence of events is the fact that this verb is the only
remote past form in the discourse. While it is not uncommon for the
speaker to shift from remote past to factitive here and there through a
discourse, the reverse shift is significant. The remote past factitive
form specifies that the house had been built before the other narrated
events, but the clause functions in the same way as the non-verb
locational expressions occurring before the first motion verb.

5.3.4.2. Clauses of Place Marked with -oasa

No example occurs in the listed corpus, nor is it a common construc-
tion, but the relator -oasa (after consonant-final stems), -asa (after
vowel-final stems) 'on, to' also occurs with clauses of place like the
following constructed example:

at weleikhepa lokokin. 'he he-continued-long-ago-on singular-
subject-will-continue, i.e. (s) will stay where he stayed.'

5.3.4.3. Clauses of Basis with -oasa

In an extended, figurative sense, the relator -oasa, -asa 'on, to'
occur post clitised to verbs in clauses referring to an event which
is considered to be the basis for the event referred to in a following
supordinate clause. There is only one example in the listed corpus:
ninashuka-pa-lee-he...sihe kakal-hylik-he Vukka-vepy inathu
inathu inathu weleka... 'they-killed-us-long-ago-on-source-
topic...how split--deposing-topic Vuka-Huk we-killed-him-
(three times) we-continue, i.e. Because (on the basis that) they
killed some of us back then, we made bows and have kept killing
them and are still (killing them).'
§3.6.4. Clauses of Prolonged Events, with Repeated Verbs

There are in the field corpus a number of examples of verbs and
verb phrases repeated to refer to single prolonged events or a pro-
longed series of events. Often the sequence is so tight-knit, negating
no other lexical items or clitics into the series, that it is tempting
to consider these constructions as within the verb-phrase, equivalent
to an inflectional category of verbs. But the repeated forms are
very frequently finite verbs with each form marked for person and
event node in a way otherwise quite foreign to the nuclear verb phrase.
Further and more importantly, the repeated forms do not normally occur
sentence finally but rather occur subordinate to a following verb.
They therefore constitute the predicate of a kind of subordinate clause
which is internally quite tight-knit. Repeated verb forms observed
include simple factive forms, remote past factive forms, normal aspect
factive forms, progressive aspect forms, coincident punctiliar forms,
and a variety of participles, including the -wək basic participle,
the -ək manner participle and the parallel -hək forms of secondary
verbs of incurred process, the -wək perfect participle, the -wək past
participle and the -wək iterative participle, as introduced in Chapter 2
and discussed as single forms earlier in this chapter. Semantically,
these constructions usually emphasize the duration of an event and thus
overlap in meaning with the progressive action forms. The forms con-
sisting of repeated verbs appear to emphasize the duration of the event
more than progressive aspect forms do. Distributionally, the progressive
aspect forms may occur freely as the final verb in a sentence, while the
repeated verb constructions normally occur preceding a following super-
ordinate verb:

lakakusikhe,  'we-went-long-ago-prior-topic
khe-pa lakaku lakaku plateau-on we-went-long-ago
lakaku lakaku lakaku (repeated six times)

lakaku-te, wəkenema --topic, wəkenema
noka lakakusikhe... sleep we-said-long-ago Prior-topic...

i.e. 'After we started out we travelled on and on and on and on
on and on on the plateau, then after we slept in wəkenema...'

Note that in this example the subordinate clause with repeated verb
forms is connected by no overt relator (except the topic marker -te)
with the superordinate clause.
...sv 'lona-en-at 'up off-there--from-predicate
hinek, wanyk wanyk inquiry-taking (repeated seven
times)
wanyk wanyk wakelike he-came-long-ago (repeated
seven times)
wakelike wakelike
wakelike wakelike
yuk, lak-at yk predicate saying (repeated)
lak-at ikhe, lak-at no-predicate he-said, no--
wakelike wakelike, he-came-long-ago (repeated),
leko. Kut apprehen--
o! Kut-(stream) mouth-setting--
leko. Kut apprehsen--
st pikawhe.
I.e. '...From away off up there he came inquiring, repeatedly
inquiring as he came on and on, and (the person asked) said, "Not
there either," (and they kept saying), "Not there either," as he
came on and on, and so that use it. Finally they arrived down at
the mouth of the Kut stream.'

This last example includes 'yk basic participles, 'yk iterative
participles and remote past active forms in subordinate clauses with
repeated verbs. Further, the example includes repeated quotative
clauses, indicating that larger constructions than just the verb may
be repeated. It is possible to interpret the constructions with
repeated participles as at a lower level of subordination than the
constructions with repeated finite verbs. The main point about these
constructions is that those with repeated finite verbs are marked as
subordinate clauses by that repetition.

Japu eee mottak 'garden-being-dug itself altogether
wahuek wahuek we-normally-dig-it(repeated three
times) finished move(dig)--depositing--
wak-hlya-he, topic plants women out-for-distribution--
ey hyew kut-isakotek. we-normally-transfer-to-them,'
I.e. 'We keep digging the garden until we have finished digging
it, and then we out (sweet potato) plants and give them to the
women.'

The reader will note that very frequently the clauses with repeated
verbs refer to the middle portion of a long-lasting event, the begin-
ing of which and the end of which may be referred to in a separate
verb set off from the repeated series.
5.4. OTHER CLAUSE TYPES

The buildup of Dani sentences may be compared to the making up of a railroad train, except that the 'engine' or most presupposed element comes last rather than first. Like a multi-unit engine, the verb which is this most presupposed unit may itself, as noted earlier, consist of a stem plus one or two auxiliary verbs. Preceding motion verbs the potential stem of a non-motion verb may be preposed within the nuclear verb phrase, like the tender of steam trains of another era. Still tightly attached, but more loosely-knit than these, can come non-finite verb constructions, including participles and non-finite forms marking coincident events, with varying degrees of 'tightness' as measured in terms of freedom of position of occurrence, and independently marked categories. It is perhaps forcing the figure to liken these to the mail and baggage cars of passenger trains. In any case, a further degree of looseness was described for the constructions with finite verbs which have been treated as subordinate clauses in the preceding section. These clauses are relatively more independent than the non-finite participles and forms marking coincident events, but they are still clearly subordinate. In many cases this subordination is indicated by the specification of event node categories which are not those of the main or final finite verbs in the discourse but are specifically determined by types of subordinate clause relationship.

There is one further degree of looseness observed in constructions which might be termed quasi-co-ordinate clauses. These clauses potentially include within their construction all the layers of dependency already described. They are, in the figure introduced above, like trains coupled together as whole units. Yet these clauses appear to be more clearly marked as presupposing a following final clause than are co-ordinate clauses in most languages; for this reason, which will become clear as the discussion proceeds, the term 'co-ordinate' has been modified by the prefix 'quasi-'. This kind of construction is the characteristic pattern of Dani sentences in narrative discourse. There are also clauses which do not fit this scheme neatly; these include quotative clauses and some noun clauses, which will be treated later in this chapter. There are also some sentence relativizers and sentence-related elements which characteristically occur in distribution related to sentences as wholes; some of these will be treated in Chapter 6. It proves useful to discuss the quasi-co-ordinate clauses, which are primarily temporally ordered, separately from the other clauses, which are non-temporally ordered.
5.4.1. Temporarily Ordered Loose-knit or Quasi-co-ordinate Clauses

Any finite verb form in the simple factive, remote past or normal aspect category, occurring as the final verb in a sentence, may be preceded by another finite verb in the same modal category occurring as the superordinate verb in a preceding loose-knit or quasi-co-ordinate clause, where the events referred to by the two verbs are sequential. The verbs in such quasi-co-ordinate clauses are normally marked to indicate that they anticipate a following finite verb.

5.4.1.1. 'Same Subject' Quasi-co-ordinate Clauses with *tik

If the two finite verbs in factive mode referring to events in sequence have the same subject, the preceding verb may be overtly linked to the following clause by the suffix *tik in its various allomorphs as the prior action marker. This suffix is semantically complex, as already noted in Chapter 2, including the components: (1) 'same subject', but note the qualifications below, and (2) loose-knit sequence, implying that the preceding event is considered as distinct from, and completed before, the following event. No span of time need separate the events. The component 'same subject' in most cases marks co-referentiality or included reference as the relationship between the subjects of the verbs, but there are cases when the subjects of the verbs linked with this suffix are different and neither is included in the other. In many such cases, the speaker has shifted mental gears in mid-sentence after production of the marked verb form and proceeds with a verb having a different subject. There are a number of examples in the field corpus, and many observed in daily conversation, where the speaker explicitly changes form from an already enunciated prior action form to a form marked for a different subject, both referring to the same event. This kind of correction and editing has frequently been observed when informants assist in the transcription of recorded texts. However, there are other cases where it appears highbanded to treat the data in this way.

At least two other approaches are possible. One is to describe the relationship in the problem cases as a sequence which the speaker treats as if it were a 'same subject' sequence because the subjects are in some way closely related. Another approach may reflect Duni categories more closely. It will be noted that in these loose-knit clauses, as in several other constructions already described, the setting marker *wa, *we usually marks 'change of subject'. Elsewhere this marker also occurs to refer to the place where an event occurs or to which motion is directed. If there is any common feature in these senses, a feature
that might be glossed 'setting', it indicates that to change the subject
is to move that participant into the 'setting' for the next event. This
could then be contrasted with the prior action marker -wik, which might
be understood to mark 'continuing attention on the participant function-
ing as subject'. Examples of occurrence of prior action form preceding
verbs with different subjects might in a number of cases be understood,
on this hypothesis, to refer to a continuing attention on the subject of
the preceding verb while also turning attention to the subject of
the following verb. A new actor is introduced without moving the
participant who has played his momentary bit into the setting or back-
ground. It is to be noted that some sequences of clauses linked by
the verb suffix -wik are semantically closely tied. The label 'lowe-
knit' as applied to these clauses refers to: (1) independent marking
of person and mode categories appropriate to the discourse in which the
clause occurs, so that the verb marked with -wik might, minus this
relator, stand as an utterance-final verb; and (2) potential expansion
of the clause to include all the layers of dependency described earlier
in this chapter.

lakkusik-he, lakaku lakaku... 'we-went-long-ago-prior--topic-
marker we-went-long-ago (repeated), i.e. We started out and went
on and on....'

Appa o'mon yepeta' lakkusik-he pyte wolok wakaku. 'Appa's name
that-we-knew one-together-with-nwe we-went-long-ago-prior--topic
two carrying-two we-came-long-ago, i.e. we and I went together
and bought two (pigs) back.'

wolok wakatesik yeketes, 'carrying-two he-normally-came-prior
they-normally-eat, i.e. after she brings (the sweet potatoes),
they (including her) eat them.'

In this example the reference of the subject of the final superordinate
verb includes the subject of the preceding quasi-co-ordinate verb.

hane akosik-he, layk waylay wakakikasik-en..., 'good we-
became-prior--topic going going going they-continued-prior
--source, i.e. after we had come on good terms with each other,
and they had been travelling back and forth....'

In this last example the reference of the subject of the first verb
includes the subject of the final verb.

ay jihatesiik-he, hopihe wak wakolakes. 'plants they-normally-
plant-prior--topic later--topic weeding they-normally-weed, i.e.
after they plant the plants they later weed the garden.'
walokhe-ke walokhe-te wa sek wo loko ke...lakokwaha.
'...they-hit-him-long-ago-prior--topic they-hit-him-long-ago-setting--topic spear wounded carrying-him-topic...they-went-long-ago, i.e. after they had killed him, then they...after they, had killed him, then they carried the man with the spear wound off.'

In this last example the subscript numbers index reference; identical subscripts indicate coreferentiality. This is an example of explicit revision or self-correction in the course of the utterance, where a verb marked for anticipation of a verb with the same subject is followed by a revised version of the same verb marked for anticipation of a verb with a different subject.

It should be noted that the marking of 'same' or 'different' subjects is not in terms of the subjects of successive verbs necessarily, but in terms of subject of verbs at the same or higher level of dependency. Separating two verbs marked for 'same subject' in relation to each other may be a verb with a different subject which is subordinate to the second in a construction specifying or permitting different subjects, and vice versa:

jasu jokko 'garden summons
hesikhesik-he, ha-put-long-ago-prior--topic
hym-nen-he women--source--topic
haly wusi lan. firedwood to-chop you(sg)-go-now
haly wusi ne firedwood to-chop you(sg)-come-now
isukwana-mke they-said-long-ago-adversative
haly wukhyik firedwood chopping-reflexive
isa'ni ylvk isikhe, you(pl)-steam-cook-now having-said he-said-long-ago.'

i.e. 'After he called for help in the garden digging, the woman said, "Go chop the firewood."' "Come chop the firewood," but he said, "Chop the firewood yourselves and cook the meal."

In this example the first verb includes the prior action suffix *k as anticipating a verb with the same subject. However the next two verbs are imperative forms which are included in the quotative clauses occurring with the next verb 'they said'. This verb however has a different subject from the first verb, and it is not until the final verb of the example that a verb of the same or higher level of dependency as the first verb occurs with the same subject as that first verb. It is useful to consider the quotative clause with 'they said' as marked by *weke to be a kind of nominalised clause, included in the final clause. An alternative treatment of this example is to consider that attention remains upon the man who is subject of the first verb throughout the example.
an-boko ma-kke jy 'I--contrastive down--direction this
ki aksekisik-he, enter I--same-long ago-prior--topic
Hesakkenesk-ee Hesakkenesk--source
jesu weneth homo, garden move--he-transferred-to-me
an-he long ago-setting I--topic
jokko hykyj jokko summon--pusing (three instances)
hyky jokko hyky (hyky pair alternate here for hyky
wok--hesikisik-he, move/dig--I--just-long ago-prior--topic.
'de. 'As for me, after I came down into this area, when hesakkenesk gave me a garden area, I kept asking for help and with it I finished digging the garden, and then I....'
In this last example the clause 'hesakkenesk gave me a garden area' is a clause with a different subject from that of the preceding verb, which was marked for anticipation of a verb with the 'same subject'. Again, it is possible to treat this clause as subordinated by the speaker to the following, final clause of the example, which does have the same subject as the first clause, or alternatively, to consider the attention of the speaker to remain on the subject of the first clause, himself, throughout the example, but attention to be moved away from hesakkenesk after the clause in which he is subject.
wat-esikhesik-he nasikhesik-he, lekeni-o...leikhe. 'killa--transferred-to-him-long ago-prior--topic (alternate form for regular local wat-esikhesik-he he--ate-long ago-prior--topic you(pl)--go-up-now--dative he--sold-long ago, I.e. after she1 killed (the pig) for her2 and she2 ate it, she1 said, "climb up here.")'
In this last example subscript numbers index reference to participants. The two verbs at the beginning of the example are marked to anticipate a verb with the same subject, but in fact, as the translation indicates, the subject of the second verb is different from that of the first and final verbs. This example appears to be best interpreted in terms of continuing attention on the participants functioning as subjects, without moving them into the setting or background as is normal preceding a verb with a different subject.
lakasik-he, sepuyu kula-neska. 'we-went-prior-topie sweet-potatoes toward-they-transferred-to-us, I.e. after we arrived, they sent sweet potatoes into the house for us.'
This example may be treated in the same way as the preceding example. papy lakekatesik-he, o weak ekatek atto-o. 'pabu-tree they-normally-choose-prior--topic (idiom for committing moiety incest) weather had to-normally become-there--derivative, I.e. after people commit moiety incest, the weather goes bad.'
It should be noted that with 'same subject' quasi-co-ordinate clauses as described above, there are only very limited possibilities for the occurrence of an independent noun phrase or pronoun subject of the following clause, whether the subjects are coreferential or only in the same 'focus of attention'. Sometimes as in the example on page 258 above, an independent pronoun occurs after a clause with a different subject, and sometimes, as in the last example on page 258 an independent noun occurs as the distinct subject of the second verb. Where the subjects of the two verbs are coreferential or one includes the other, and there is no interrupting clause with a different subject, independent noun or pronoun references to the subject do not occur in the second clause.

Further, it should be emphasised that this section of the discussion has been mainly concerned with exceptional cases, and that in the great majority of cases, quasi-co-ordinate clauses marked with the prior action morpheme occur with a subject which is coreferential with the subject of the following verb of the same or higher level of dependency.

5.4.1.2. 'Different Subject' Quasi-co-ordinate Clauses with =sa, =no

The examples given in the preceding section have included some in which the 'different subject' quasi-co-ordinate clause, analogous to the 'same subject' quasi-co-ordinate clause marked with =ni, is marked by the verb suffix =sa, =no, which has been loosely glossed 'setting' or 'event setting'; clauses with this marker anticipate a following verb at the same or higher level of dependency with a subject which is neither the same as the subject of the quasi-co-ordinate clause, nor does either subject include the other. The event referred to in the quasi-co-ordinate clause may in the case of a motion event be only begun before the event in the following clause, although normally with non-motion events the first event is complete before the second event; there need be no interval between the events.

Iskaka ekate’sa a’no a lako lako kheteks. ‘you (sg)-steam-cook-(it)-you- reflexive they-normally-say-setting that-we-know he-normally-steam- cook-(it)-reflexive, i.e. when they say, "Steam it for yourself (as they give it to pig)", that means then steam is for himself.'

Kake’ne’no rykya-te kake-netshama sekiske wothi. ‘split-(kaka)’—
(you)-transfer-(it)-to-me-later 1-solid-setting-topic split-they- transferred-(it)-to-me-setting one-of-group 1-built-it, i.e. When I
split, "Split some (boards) for me", they split them for me, and I
built another (house).’
Welsei lakelikomo-te, oeke, akotomy pyte ihe-thono ihe-ekwesik
-he... 'Welsei he-went-long-ago-setting-topic, Ogege his-
younger-siblings two they-together-manner they-went-long-ago-
prior--topic, i.e. After she went to Welsei, Ogege with two of
his young men went...'

5.4.1.3. 'Different Subject' Quasi-Co-ordinate Clauses with -ti'mo

The setting marker "me may occur suffixed to verb forms which
already include the prior action marker -ti, and in such cases the
component 'same subject' is cancelled from the meaning of the prior
action marker, which then simply marks the completion of the preceding
event before the second event begins. The setting marker "me normally
implies sequence also, but the inclusion of the prior action marker
removes the residual ambiguity resultant from the occurrence of "me in
clauses of place, as described earlier in this chapter. This con-
struction with a verb marked with both the prior action and setting
markers also more readily allows for a time gap between the events
referred to in the quasi-co-ordinate clause and the following clause,
although it does not require it.

lakasikhele'mo-men, o a'neko heti tattak-thono o lak-tasikomo...
'he-ascended-long-ago-prior-setting--source, wood that-we-know
tying-vine securing--manner wood over-distance--he-put-them-
long-ago-setting, i.e. After he had climbed the tree, then
he_2 cut the vines that held the climbing ladder and pushed it
away...'

In this example, the boy who is subject of the first verb reaches the
top of the tree before the jealous older brother cuts away the ladder,
and completion of the climbing before the cutting is unambiguous!
marked by the inclusion of -ti'mo.

...oama wulupukusa'mo-men...ka'kuk hueus akokw'he, 'home we-visited-
long-ago-prior-setting--source later run they-same-long-ago, i.e.
After we had gone out (of the forest) to the villages, later they
some running back.'

In this example again the first motion event is specified unambiguously
as completed before the beginning of the second event by the inclusion
of the prior action marker as well as the setting marker in the verb
of the first clause. In contrast, in an example like the first one on
this page, the first motion event, linked only by the setting marker
"me, need only be begun before the initiation of the second event.

Just as some occurrences of verbs marked as anticipating a verb
with the 'same subject' are observed actually preceding verbs with
different subjects, there are verbs, although many fewer, which are
marked with the suffix -mo, -mo but actually occur preceding verbs of the same subject:
weį-at waktyk ylv ikhono-te spakake-s hule helehe, 'battle-predicate I-name-prior having-said he-said-setting-topic main-trail signal-smoke he-pus, i.e. 'If I've come just for battle', he said, and set a signal fire on the main trail.'
Examples of this sort in the filed corpus and other available texts are too few for significant analysis.

5.4.1.4. Clauses Masked as Quasi-Co-ordinate Sentence Finally
Verbs marked with -tik 'prior action' and/or -mo, -mo 'setting' most frequently presuppose another clause, as noted in the examples above. But clauses including verbs with these markers may also occur sentence-finally, presupposing an event in the situational context. The examples that occur, particularly in conversation, indicate that the presupposed but not verbally expressed event is an event which, if verbally expressed, would occur with the appropriate 'same' or 'different' subject from the verb including the marker:
...a'ma atme meko-kosik, 'inside there sleep-we-said-prior, i.e. We slept in that area (and I have now come here),'...
...iinepi jy lol-hisassik ylv ek. 'their-bodies this burn-we-put-them-prior saying they-said, i.e. They said, "We burned their bodies here (and have come to tell you)."'
...ihat nakkem-wo liske. 'you(eg) you(eg)-set-him-setting-definite he-said-long-ag, i.e. "You did eat him! (and I can't find him)," he said.'
...at atek-akam-ix-nameme hky. 'finished met-it-become-setting give-in-marriage(male not) they-did-to-them-as-persons-setting 3-plural, i.e. I see the supply (of marriageable girls) has run out; they have given them in marriage (and there are no more),' an epa nukkem-wo ykhy-lakym. 'I ito-self my-ignorance-setting saying-I-was-setting, i.e. I was speaking out of my ignorance (and you corrected me).'

Note also these common conversational expressions about travel:
at lašaik, 'he he-went-prior, i.e. He has gone (and returned),'
at lakam, 'he he-went-setting, i.e. He has left (and we report that).'
In the first of these last two examples, attention is still on the subject of the verb, and implicit reference is made to his further activity. In the second example, attention turns from the subject and his deeds; he has left the scene of attention.
5.4.1.6. Restrictions on Negative Constructions in Clause Sequence

It was suggested above that the temporally ordered loose-knit clauses discussed here might be labelled quasi-co-ordinate, and there are limitations that motivate the inclusion of the prefix 'quasi-'. Quasi-co-ordinate clauses come under a general constraint on negative constructions whereby any finite sentence-final verb form may be constructed with the particle lek 'no, not', but negative verb constructions sentence internally (apart from quotative constructions) are in all cases in the field corpus cast into the subordinate clause construction with the wayk iterative participle and lek 'no, not'. In the case of some kinds of clauses, this constraint needs to be studied further, but it appears clear that clauses with verbs suffixed with the prior action marker and/or the setting marker may not include the negative particle in construction with these verbs. 17

5.4.2. Non-temporally Ordered Loose-knit Clauses

There are several types of clauses including finite verbs which are loosely knit in relation to a following verb, and where that relationship is not temporally ordered. Because the verbs in these clauses are finite and are not restricted to a specific modal category other than the category of the discourse matrix, they may be called 'loose-knit clauses'. These non-temporally ordered sequences of clauses do not mark the contrast 'same subject' versus 'different subject' consistently and pervasively, as do the very great majority of temporally ordered clause sequences.

5.4.2.1. Clauses with the Relator -mekke

The relator -mekke occurs, like a number of other Bantu relators, both as a link between words and phrases and as a link between clauses. The senses and uses of this relator with words and phrases have already been surveyed in Chapter 3. At the clause level, -mekke functions in two major senses, both of which are related to its functions at lower levels:

1. Attributive clauses with -mekke. Clauses identifying or characteristicising nouns, pronouns and other kinds of noun phrases occur following the noun or pronoun and marked as related to that substantive by the post-clitic -mekke following the verb of the clause:

was ap ishu-speaking, apa nshu-speaking, apa watek speaking...
'talk, pig man we-killed-him-long-age-sort at-Tife we-killed-him-long-age-sort man killed we-covered-him-long-age-sort, i.e., pig killed to a man we killed, one we killed at Tife, and to our ceremonial "covering up" of the "dead man" (symbol of the killed enemy)."
In this example the first and last -mekke clauses identify the woman in the story as a woman who was killed. The middle -mekke clause identifies the killed man as one killed at Tibe.

The example shows that the -mekke clause is used to introduce a topic, i.e., a woman I took (from her family).

There are constructions with past participles of verbs and -mekke occurring attributive to nouns in similar fashion:

mele: an uku-mekke-te... 'boiler-shell I donned--sort--topic,...

i.e. a boiler shell I had worn.

Similar clauses with -mekke may occur without a preceding substantive to which they are attributive; these -mekke clauses thus function as substantive clauses:

ows wanyuy-lay-mekke inopa hakathatek-at. 'sickness carrying--they-are--sort on-them they-normally-treat-him also, i.e. They also treat those who are sick.'

wan inopa hakathate-mekke jy hesi wani lekelkhathek. 'park on-them they-normally-treat-him--sort this mud to-get they-normally-go, i.e. These (literally this) who treat them with (rites involving) pigs for park go and get mud.'

ja wanehe-t-mekke s'moko tak isakhan ylvk wch-othatak. 'ceremonial-wealth-stone he-normally-takes--sort that we know first you(g)-steam-cook-in non-reflexive having-said now they-normally-transfer-it-to-him, i.e. They give (a pig) to that fellow who furnishes the wealth stone, saying, "You took this for yourself first.'

The -mekke attributive and substantive clauses described above are loose-suit clauses including finite verbs, independently merged for mode and person, and are included at this point along with one other major kind of -mekke clauses. These attributive and substantive clauses are, however, clearly not co-ordinate or quasi-co-ordinate clauses.

(2) Adverbial clauses with -mekke. In very many cases, clauses related by -mekke have an adverbial or 'but' sense of several varieties:

(a) Clauses with -mekke attributive to noun expressions referring to participants (so that they might also be included with the examples in section (1) above) may be used to contrast the participants, even when the attributive clauses are identical:
at Vkkvnh-ntykh  ‘he Skumhwalk
kih-be-nankke...  he-entered—contrast
Hak-e-pypv pohl-e-pa  Henafyu aae—with
i ploko wathwen-eh...  Incorporating when—he-struck—her
Jameke  --topic Jameke
kih-be-nankke  he-entered—contrast
seke watoko po—ilikhé  spear wounding toes-down—he-did-on—"them"—
long-ago,'
I.e. 'Skumhwalk entering the scene incorporated Henafyu with an aae,
and then Jameke entering the scene wounded her with a spear and
left her there.'
(b) A clause with -mekke may refer to an event with the same par-
ticipants as a following event, where the events contrast. This is
particularly common with wak predictive forms of the verb in the -mekke
clause, contrasting what ought to have been done or could have been
done with what was in fact done:
ja naqsa-‘mekke-te, hap—why-lakwukwe. 'here subject—should—
could—kill—me—adversative—topic spare—depositing—me—
they were, i.e. They might have killed me here, but they used
to spare me.'
Jvkhkselmé noko usa‘—mekke-te...it a'noko wo‘—lahasukwe.
'Jukangla sleep subject—ought—to-say—adversative—topic...
they that—we-know where—they-become-long-ago—reflective, i.e.
Those folk ought to have slept at Jukangla, but they cleared
out.'
pllo-mekke alykhnu. 'we—descend—hypothetical—adversative we—
did—that-long-ago, i.e. We ought to have gone down there (safely)
but we did (what I've just told you).'
(a) A clause with -mekke may refer to an event with a different
patient and/or a different action from a following event, where both
events have the same agent:
nalikha-mekke, an hele-pa hité ja noko elk ylyk ylyk... ...
'he ate—it-long-ago—adversative I stone—on direction here asleep
let-me-say saying saying... i.e. He ate it and then kept saying,
'I'll go to sleep here on this stone in this direction.'
(d) A clause with -mekke may refer to an event with a different
agent from the event referred to in the following clause, where both
events have the same patient:
helekeak aseleka aalí ken peloko...hak-kesikheneke wala’ ilekikhe.
girl one-of-group her—grass—skirt (off) ken—grass doffing(shearing)
grasp—she-did—it-long-ago—adversative carrying—it he-went-long-ago,
i.e. A girl had taken off her skirt made of ken grass and deposited
it (to save it) for herself, but he (a dog) carried it off.'
A clause with -mekke may refer to an event with a beneficiary or patient who is agent of the event referred to in the following clause. In such cases, this is the clause type of choice:

nimathulha-meke welakoši-th-en... 'they killed some long ago--adversative we-continued-prior--source, i.e. They killed some of our side, and then after we had waited for some time....'

...kwe-nusa-meke an lekein. 'the European and--adversative rebuke--would-transfer-to-me--adversative I singular-subject-will-go, i.e. The Europeans are liable to bowl me out, so I'll go.'

wathikha-meke swap hutik-at pu-toko lakekhesik.... 'he hit it--long ago--adversative bird-arrow penetrating-predicate flying--manner it-went-long-ago-prior.... i.e. He hit it, but it flew off with the bird-arrow stuck into it....'

A clause with -mekke may refer to an event with different participants and different action from the following clause:

okko kek-ylyv yk-mekke, Mepakason wele phalesik-he... 'payment let-me-put its--having-got I-said--adversative Mepakason talk he-answered-prior--topic, i.e. I was planning to make a payment, but Mepakason forbade it and then....'

A clause with -mekke may occur sentence or even utterance finally, presupposing an event which is contrastive in one of the senses listed above:

so, jo-te ukumo-at washy-lokouša-meke. 'net, cord--topic nested-settling-predicate taking-subject-would-continue--adversative, i.e. We should keep getting nets with the cord already nested (but we won't, because the insect who wanted to keep spinning got his way.)'

In all the above adversative senses of -mekke, temporal sequence is not of primary importance, but rather the adversative relationship. All possible temporal relationships occur. The event in the -mekke clause may follow the event in the succeeding clause, or it may precede it, or it may be simultaneous with it.

5.4.2.2. Substantive Clauses with Final Demonstratives

Any clause which does not have a demonstrative pronoun or adverb for its predicate may occur with such a pronoun as a final element which is
in appositional relation to the whole clause. The demonstratives which may so occur are:

   jy 'this';
   jona 'here';
   atma 'there (close)';
   atma 'there (non-spatial)';
   yly 'that (distant)';
   eloma 'there (distant)';
   sa'ly 'that (in context)';
   s'oma 'there (in context)';
   sa'noke 'that (known to speaker and addressee)';
   a'noke 'that (known to speaker or addressee at first hand)';
   ama'noke 'this (known to speaker and addressee)';
   am'a'noke 'those (known to speaker or addressee)';

Such substantival clauses may occur as utterance final clauses with reference to something outside the sentence in the verbal or situational context, or as dependent clauses presupposing other constituents within the sentence:

   a'syt iho-kkolek a noke-te. 'my-dislike say(singular-subject)--
   while that-we-know-topics, i.e. While she was saying, "I don't
   want to (be your wife)," (Like) that, huh?'
   ...
   ...heil-setken hytoko hytoko welaken am-a'ty! your(sg)-eye-seed(eye)
   watching watching you(sg)-continue these-exclamation, i.e. You
   are staring and staring there!'

wathu atty. 'we-kill-ed-him that, i.e. That's the story of our killing
   them (the enemy referred to as third person singular).'

   ...
   ...lep akosuwha a'noke iheppolek wakaku, 'earlier they-become-long-
   ago that-we-know behind-them we-same-long-ago, i.e. They came
   ahead like that and we came behind them.'

   wvpho atty-te, ninepe wai-lasuwun atty. 'he-visited that-top:
   our-persons plural-subject-will-do-that, i.e. That's it, he's
   gone, and that's it, we're going to die.'

5.4.2.3. The Generalised Relator -nen 'source'

The clitic -nen has already been introduced as a marker of a number
of intra-clause relations, including 'place from which' and 'agent' of
transitive verbs with distinct patients. It was also noted earlier in
this chapter as an obligatory relator occurring with the deferred
hortative forms of verbs in the facilitative construction, where the
event referred to in the hortative form is facilitated by the event
referred to in the superordinate verb. All these uses share some
sense of 'source' as a common feature. But this relator also occurs
with a large number of other verb forms within sentences not as an
obligatory relator but as an optional relator often occurring following
other relators already treated in this chapter. It is commonly observed
with finite factive verbs, with -vk basic and -lk perfect participles
when they signal sequential events, with -mn coincident non-progressive
forms, and following -halok in conditional clauses. It occurs relating
verbs and clauses with both the same subjects and different subjects.
It has not been observed with the potential stem construction preceding
motion verbs, nor with -vk basic, -lk perfect or -oke manner participles
when they signal an event identical to or simultaneous with the event
referred to in the superordinate verb, nor with -kolok forms marking
simultaneous progressive action with different subjects, nor with
intentional verbs or clauses, nor forms of interrupted action marked
with he'aa or akka, nor with clauses of mistaken supposition with
%-sa, nor with imperative (as contrasted with hortative) forms of
verbs.

In many of the observed cases there is a relationship either of
sequence or 'reason' involved, so that the sense glossed 'source' may
be considered to be present. This does not appear to be the case when
%-mn occurs with -mn coincident progressive forms, however:

muk-isikhe-enen... o muk-hoko-te Okylyk lyak-asukwa. 'chase--
he-did-toward-them-source village chase--manner-topic Okylyk
upward--they-put-them-long ago, i.e. since he drove them out,
driving them out of the villages they chased them up to Okylyk.'

Here %-mn follows a simple factive verb, in a remote past discourse
matrix, and may be understood either to refer to sequence, treating the
initial act of eviction separately from the follow-through, or to
refer to reason, as glossed here, describing the initial eviction by the
enemy as a group, referred to in third person singular, as the basis
or reason for the further chasing by members of the group, referred to
in the third person plural.

hettok aruok hvk-seen-en,... nikket' ekkete' nikketek-en nokol-
aka-halok-en, yjtekhe hyt-hvkkhekhe... 'fire its-flame when-
plural-subject-put-source f-normally-ate-(repeated)-source
acting-subjected-its-becomes-its-source, the-way examine-when-
plural-subjects-see-its-topic, i.e. After they put the flaming
fire there and it has been burning for a while, when it goes out
and they examine it like this,...'

Here %-mn occurs following a -mn form, a normal aspect construction
of repeated verbs and a conditional clause with -halok; it is apparently
a loose link inserted at what the speaker considers to be breaks between
stages of the event, and it thus signals sequence in a loose sense.
weikelkhaik-en, it-en hopuk nit pyt na-thukwa, 'they-continued-pure-source-they-source later we saw they-killed-us-long-ago, i.e. after they had waited, they later killed two from our side.' Here -en follows a factitive form with the prior marker, and again appears to signal sequence and a transition between stages of the event. ...ki akekehoi'en-en-hyaiken watoku. 'enter he-came-long-ago-prior-setting-source...three we-killed-him-long-ago, i.e. after he invaded, we killed three of his side.' ...hekeokeko-en watok pi iko. 'tying-manner-source carrying-it descend us-came, i.e. we tied them up and brought them down here.'

In the next to the last example, -en follows prior and setting markers, again marking a loose link and a shift of stages in the event. In the last example, -en follows an -en manner participle and again appears to signal sequence of stages.

...aty-toko heluk-r'men'fnethir-al 'that-manner having-put-source rebuker-you-ag, transferred-to-me-invitation query, i.e. Had you told me a display like that before you rebuked me?

Here -en follows a -en perfect participle, again signalling sequence and looser linkage than the participle alone. Every one of these examples can be paralleled by others without the -en without the relator -en. When this clitic occurs, the linkage is both phonologically and grammatically looser. This clitic may be followed by the topic marker -he (see also Chapter 6):

vakikhi-en-he, it ap a'goto japu euppy-lakoukwa,... 'he-came-long-ago-source-topic they men that we knew garden digging-they-were-long-ago, i.e. after they came then those men were digging garden...'

There are several examples in the corpus of a construction consisting of a verb form plus -en plus the relator -enke plus another -en; these forms require further study to specify the exact sense signalled:

...ki akekehoi'en-enke-en, hopuk-he,...waka/hyp hotok jy-seke
mekiseke-en. 'enter he-came-long-ago-source-adversative-source later-topic... Waka/heap close this-shift chase-he-old-toward-them-long-ago-also, i.e. After he had invaded them later he also drove out the Waka/heap close by here.'

In general, then, -en occurs as a relator between verbs and clauses as, in these cases, an optional marker of sequence or change of event stages or, occasionally, of 'reason'.

6.4.2.4. Clauses Juxtaposed without Specialised Relators

Most intra-sentence relationships between clauses are overtly marked by suffixes or post-clitics attached to the subordinate or proposed quasi-co-ordinate or loose-knit verb and specify the kind of relation-
ship involved. There are numbers of examples, however, of clauses that are simply juxtaposed with no overt link except intonation and, optionally a generalised clitic like -nen 'source' or the topic marker -ke; such relators do not mark specific grammatical relationships of the sorts discussed in this chapter but, particularly so far as the topic marker -ke goes, serve rather in the information structure of the discourse in ways to be suggested in the next chapter. Such juxtaposed clauses frequently mark events in sequence and occur both with the same subject and with different subjects in the two clauses. Repeated verb constructions as subordinate clauses are frequently related by simple juxtaposition to the superordinate clause:

...poko poko-te, we-descended (repeated)--topic
hopuk ylyk lakoko later upward we-descended
lakoko hopuk kelakeik (repeated) later inward
koko koko hopuk nkkvlyk we-entered (repeated) later
'ems koko koko koko level inside-there we-entered
koko-te, o-te le! (four instances)--topic village
pelatoko by lana wusi steps forward up there to-build
lakasukwema. they-assembled-long-agoga-setting,'

i.e. 'He went down and down, then up and up, then in and on in, then we went along the level farther and farther and farther and farther in there to where they had made steps and went way up there to build their village.'

...'a hyh yak-lakeikhatek, lak halok-ba,... 'inside examine--
plural-subject-sees--they-normally-are, not if--topic--
1st. They examine the inside, and if there is nothing (to see). ...'

...konk nelkhyyw wekhvyw mottok -- hynamke-kkokke he! kykyty'mo-
men.--coming-for I-travelled I-travelled (intensive) altogether
-- afternoon to-put-her I-entered-prior-setting--source, i.e. I went all over watching over her and in the afternoon, after I had put her in (the village). ...'

5.4.2.5. Quotative Clauses

Quotative clauses are in a sense a category apart from other clauses (cf. Longacre 1970:796), since they allow for embedding of any utterance, even including extensive discourse units, within what becomes a kind of hyper-sentence unit: Discourse unit markers, which will be briefly treated in the next chapter, may thus also be included within quotative clauses, although they occur in no other medial clauses.
5.4.2.6. Direct Quotation

Any utterance may be quoted directly. A common order of constituents in direct quotation is: (1) identification of the speaker or speakers, often with the source-marker -en; (2) the quoted utterance; (3) the participle yiyi 'having said', which is the 'first perfect participle of i= 'say'; (4) a verb or expression of speaking:

ike-n-he, them-source-topic, Keppalyk, o-kwam Keppalyk(name), forest-setting palk westk-yik animal let-me-hill-it--saying wakam yik-he he-same-setting saying--topic welesi-ten jokko Welesi-source message-bearing wakukukha they-name-long-ago,

i.e. "They came from Welesi with a message, saying, "Keppalyk has come into the forest to hunt.""

No one of the constituents marginal to the quotation is obligatory:

y y. wo'-lakha lvhe uken he'awte... oh oh, noun-to-favor reflexive he-existed plural-subject-will-say interrupted-topic, i.e. As they were about to say, "Oh oh. She's gone!"

monetsh-sakke-te nokkot yiyl-ako. ag-discontaminated-him--adversative--topic my-ignorance-predicate saying--he-is, i.e. We ceremonially treated him (so present from the effects of his act of incest), but he keeps saying, "I don't know (anything about it)."

je wamette'-mekke an'oko tak isakhani yikk wok-othathek. 'health-stones he-normally-takes--minimaliser that-who-know first person-steam-nook-is-reflexive saying nower-they-normally-transfer-it-to him, i.e. They give the fellow who furnishes the health-stones (as gift) saying, "Cook this for yourself first."

In these examples the speaker or speakers are identifiable from the context and so are not specified in the actual quotation margin. In the first two examples on this page, the participle yiyi, a kind of closing quotation mark, is omitted, and in the last example only yikk remains as a verb of speaking, subordinated to the following verb.

It he an'oko 'they woman that-who-know

ap an'oko westk-in? man that-who-know singular-subject-will-com--

westkin-a? westkin-a? (repeated four times)

westkin-a? ape lekaat- hie-person not--predicate--

an-he, hopuk source--topic later

ime ha-hasukha their-voice grab--they-did-on-him,

i.e. "They, that woman (and her child) were saying, "Is that man coming back? Is he coming? Is he coming? Is he coming?" and because he didn't appear, they called him."
In this last example there is neither a participle ylvk nor a verb of speaking but only the directly quoted words, in a mode contrastive with the discourse matrix, to mark the quotative clauses.

The quoted material may include several sentences, and the speaker may then choose either to use a closing quotation margin with each sentence or to use one such margin with the whole unit. In the former case, frequently the verb of speaking occurs without the participle ylvk:

\[ \text{nit-he minakot-at eka.} \quad \text{\textit{we-topic our-ignorance--predicate}} \]
\[ \quad \text{they-said} \]
\[ \text{hinakasoko-at} \quad \text{hidden-predicate} \]
\[ \text{wathana eka.} \quad \text{they-killed-in-setting they-said} \]
\[ \text{ninei-ekken} \quad \text{our-eye--see(eyes)} \]
\[ \text{lak-eisoko lek eka.} \quad \text{over-distance--we-saw-them not they-said,'} \]
\[ \text{i.e.} \quad \text{\textit{As for us, we don't know either}, they said. \text{"They killed it secretly," they said. \text{"We didn't see them," they said.}} \text{\textit{Your friend--deATIVE}}} \]
\[ \text{hak-hasihkoma-te,} \quad \text{grab--he-did-on-him-setting--topic} \]
\[ \text{ek-i-o. nakeljak-o.} \quad \text{pity--deATIVE my-friend--deATIVE} \]
\[ \text{hast-he joma-at lokon-o.} \quad \text{you-topic here--predicate you(eg)-continue-now--deATIVE} \]
\[ \text{psik vkkvi-oak wessa} \quad \text{forest-animal its-head--bone} \]
\[ \text{lkha-skolek} \quad \text{taboo saying--while} \]
\[ \text{nykky-laken s'noko-te} \quad \text{eating--you-are that-we-know--topic that} \]
\[ \text{joma lokon-o,} \quad \text{here you(eg)-continue-now--deATIVE saying tell--having transferred-to-him-topic--...} \]
\[ \text{i.e.} \quad \text{\textit{When (the stone) held him, (his father said), \text{"What a pity, son. You stay here. While folks are saying that the heads of forest animals are taboo, you are eating them, and there you see the result. Stay here," he told him...}}} \]

Such quotations can be very much longer still. There is one fairy tale with more than two pages of text concluding with a single quotative type margin, 'they say'.

5.4.2.7. Indirect Quotation

Besides direct quotation, where the words spoken are quoted as the speaker wishes to report them to have been spoken, there are also indirect quotation constructions. Speech may be indirectly quoted, but Dani speakers show a distinct preference for direct quotation. Indirect quotations may be detected by such characteristics as shifts of person reference to fit the utterance situation of the discourse.
rather than the utterance situation of the quoted matter:

semp a'nao-te, hets hine-a-wake sak, 'first that we knew--topic
you(ER) your(pl)-women's child--identified they said, i.e.
That first one was your (and your relatives') niece they said.'

In this example the second person reference is appropriate to the
utterance situation of this example, but not to the utterance situation
of the quotation.

hats-ke Pasena loc-wolv eka a'ntoka... you(ING)--topic Pasena
let's-go-later--having-said they said that we know, i.e.
They said that you (and your associates) were planning to go to
Pasena, and there (you are going).'</n
Frequently indirect quotations are employed with no final verb of
speaking to report not an actual utterance but rather the subject's inner
reaction. Indirect questions often mark mystification:

inam ka-kokne-ke jy ako yly'--lako jytok-o-at.
'their-voice where--direction--source--topic this its-voice
saying--its--this-way--predicate, i.e. Their voice--where do
they come from?--are like the way this (tape recorder) speaks,
this same way.'
nyykktytoko i eskin-he, wokul mottok lapuk hakah-hoko
lakelake. 'You enter singular-subject--will-come--topic mud
also together wearing--(intensive)--manner doing--he was-long ago,
I.e. Now in the world was he going to come in. He was wallowing
in the mud, or 'Trying to find' how in the world he could come
in he was wallowing in the mud.'

There are no examples in the field corpus, but there are numerous examples
in everyday conversation of indirect quotation constructions reporting
the thought or supposition of the subject rather than his speech:

wak ylvk kep-isky. 'He saying decided--I did--made--then', i.e.
I decided to because I thought it was bad.'

nguy ylvk kamo-ike. 'My dislikes saying refrain-from-travel--he
said, i.e. He didn't go because he didn't want to.

In this last example the speaker may not imply or intend to quote the
words of the person referred to in the first person singular prefix on
the first word, but only to report his attitude. It is of course also
possible to treat these last examples as direct quotations, but the
treatment here is preferable in that direct quotations may always
include a verb of speaking following the participle ylvk 'having said',
but this is inappropriate in these examples.
5.4.3. The Limits of Grammatical Dependency Chains

This chapter has been a survey of verbs and verb-nuclear clauses in sequence, with attention implicitly limited, except in the case of quotative constructions, to constructions within sentences. Indeed, the kind of marked dependency relationships treated in this chapter are characteristically intra-sentence phenomena, and one definition of the Danti sentence may usefully be based on these phenomena. Mellet's dictum, as quoted by Bloomfield, that the sentence is the maximum form or construction in any utterance is true of the kinds of constructions presented in this chapter (1926-1957:28). Among the pervasive characteristics of narrative and procedural discourse, one of the most pervasive is the ending at sentence terminal of verb and clause chains with marked dependency relations of these kinds, and the initiation of new chains by the repetition of a verb from the preceding sentence, not in the form it had in that sentence but marked for dependency relationship in the new sentence. Very commonly the final verb of the preceding sentence, which is characteristically not marked for any dependency relationship of these kinds, is repeated in the next sentence, but is now marked as anticipating a following verb:

...lyak-sasukwa. "upward--they-put-them-long-ago"
lyak-sylyk-he. "upward--putting-them--topic"

Hpwy-kkijak nimos hano Subi-hkak we-together good
sos. hano akosik-he... we-become good we-become-prior--topic'
1.e. '...they drove them up there. Having driven them up there, the Subi-hkak came on good terms with us. After we came on good terms...'

Neither the choice of this type of recapitulatory linkage nor the choice of what is repeated is automatic; the speaker has an array of options. But whatever option he employs, the sentence as a unit of marked internal grammatical dependency of the kinds discussed in this chapter is characteristically well defined. There are extremely important kinds of linguistically structured links across sentence boundaries. These include reference to participants, discourse introductory and concluding elements, sentence-linking constructions, and many other kinds of phenomena, some of which will be treated in Chapter 6. But verb and clause chains marked for dependency in the ways described in this chapter end at the terminal of the sentence as defined by these criteria. In a very large percentage of cases the sentence as defined by these criteria of grammatical dependency coincides with the sentence as defined by phonological criteria. Some significant exceptions will be discussed in the next chapter.

Within the sentence as defined by the possibility of overt marking
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*These clause types are correct; embedded in other clauses but share other features with the other clauses in the same column.
of these sorts of dependency relations, the general kinds of verb and clause sequences described in this chapter are schematically summarised in Table 22. In this chart, only the nuclear verb phrase, together with the final clause margin, if any, is tightly fixed in order and rigidly limited to a maximum of one constituent in each position. Preceding the nuclear verb phrase there is much more flexibility. Finite loose-knit clauses, including both quasi-co-ordinate clauses particularly and also the other types described in this chapter, may include by recursion any of the kinds of constructions described for the sentence as a whole, except for the restrictions on negative constructions noted briefly above. Further, any of the other dependent constructions, i.e. what are listed in the chart as subordinate clauses and as non-finite forms within the clause, may function as superordinate verbs in included constructions, within limits.

The limitations on recursive subordination to subordinate forms and constructions need further study, but the following general patterns are clear in the filled corpus.

1. In most cases the secondary subordinate form or construction is of a more dependent or tighter-knit type than the first-layer subordinate form on which it is dependent; in Table 22, a secondary subordinate form is normally of a sort farther to the right than the form on which it depends. In the corpus filled for this study, -oko manner participles, and the similar -heko forms of secondary verbs of incurred process, occur with only other -oko or -heko forms clearly directly subordinate to them; as noted in the table, these are considered to be the tightest-knit of the subordinate forms outside the nuclear verb phrase.

As exceptions to the general pattern outlined above, there are a very few examples in the corpus of a loose-knit clause subordinate to a non-finite verb form:

\[ \text{Wamare an-\text{-stakek asayik watheneen-\text{-he}... 'Wamare our-\text{-side he- became-prior when-he-killed-him-topic, i.e. When Wamare joined our side and killed a man...'}} \]

In this example the loose-knit clause glossed 'when Wamare joined our side' anticipates and is in construction with the non-finite verb form watheneen 'when he killed him', so that the non-finite construction includes the loose-knit clause, as is indicated by translating 'when' at the beginning of the example. In the very large majority of cases, however, subordinate and included constructions are of a more dependent or tighter-knit type than the superordinate constructions on which they depend.

2. There is only shallow layering of this kind of included or embedded subordinate construction. Commonly one form or clause may be
5.5. CONCLUSION

There is a great deal about syntax both in terms of surface constructions and of underlying semantical constructions and their interrelations which has not been touched upon in this chapter, and a very great deal which has not been adequately described. Attention has been focused on person and mode categories as they are marked in verbs in sequence. It is precisely these categories, dictive categories with domain reaching beyond the limits of the sentence, which are employed to link verbs and clauses in sequence within sentences. One fundamentally dictive pair of categories has been pointed out as basic in the construction of Dani sentences: the pair 'same' versus 'different' subject.

As has been suggested, forms marked for what is in most instances anticipation of a following verb with the 'same' subject sometimes in fact anticipate a verb with a different subject, and sometimes, although less commonly, verbs marked for what in most instances is anticipation of a verb with a 'different' subject in fact precede a verb with the 'same' subject. It has been suggested that many such cases are merely 'unnoticed mistakes' which the informant would wish to revise if given the opportunity, as evidenced by many parallel examples in the texts in which the informant backs up and revises his construction in mid-sentence.

There are other examples, however, which appear to indicate that underlying the opposition 'same' versus 'different' subject is a more fundamental opposition of categories that might be glossed 'participants under continuing attention' versus 'participants moved out of attention'.

Further, it has been noted that in certain tight-knit constructions of verbs with superordinate verb forms, categories like 'sequence' and 'simultaneity' are not signalled by the construction or elements marking the construction; the constructions are ambiguous and these categories are signalled by the product of semantic components of the included verbs. That is, in a loose sense, analogous to the ambiguity of surface constructions in many languages, including English constructions with non-finite verbs like 'the shooting of the hunters'. In those cases, disambiguation is possible by describing what underlies the surface constructions as clause-like constructions in some deeper structure, with a subject-verb relationship in one sense of the ambiguous construction, and a verb-object relationship in the other (as in Chemsky 1957-1965:88-9).
In the Dani case, however, what underlies the verb sequences comes out in those terms as verb-verb, with need for specification or simultaneity or sequence. Here at least the underlying structure is most usefully treated not in terms of clause constructions but in terms of semantic constructions including semantic components that occur in 'bundles', and the relationships among these 'bundles' of components. Functioning in these same structures are also referential elements.

Although this chapter has not been organised in terms of theoretical dialogue or discussion, the material surveyed is highly relevant to the ongoing discussion of pronominalisation and deletion (for references see e.g. Lakoff 1968a, 1968b, Hanks 1971). Most of that discussion, including a perceptive paper by Gleason within the framework of stratificational grammar, has treated the problem exclusively in terms of independent noun phrases and independent pronouns, even when the verb forms cited obviously include pronominal affixes (e.g. Gleason 1968:53).

But as the discussion in Chapter 4 pointed out, whatever mechanism or model is proposed to treat pronominalisation must treat noun phrases, independent pronouns and pronominal affixes. Further, pronouns and pronominal affixes, where the latter have been treated, have been treated in terms of substitutes for noun phrases (e.g. Bloomfield 1933: 257; Fillmore 1968a:55). The inadequacy of that position was discussed in Chapter 4. The present chapter has described levels of constructions in Dani syntax including tight-unit constructions with non-finite verb forms where neither independent noun phrases nor pronouns nor pronominal affixes occur to mark the subject of the subordinate verb, and other loose-unit constructions where pronominal affixes must occur but independent pronouns or noun phrases do not normally occur.

There are a number of unsolved problems here, but it seems highly uneconomical and arbitrary to attempt to treat these phenomena in terms of a base structure in which only 'noun phrases' occur to refer to participants and these are deleted in most instances. The discussions which make this proposal treat reference to the speaker and addressee differently in terms of deep-structure pronouns (e.g. Hanks 1971:185; Ross 1970:122). Surely there is more promise in the stratificational proposal to treat reference to participants, whether speaker, addressee or others, in terms of referential nodes which are relevant through whole utterances, and realisation of those nodes by pronominal affixes, independent pronouns or noun phrases or combinations of these. The present chapter has not spelled out these realisations in terms of rules but has provided a description of the constructions which must be accounted for and some elements which must be included in that account.
Further, much of the current discussion is focused on co-ordinate constructions (e.g. Koutsoudas 1970, Hanksner 1971). The Dani facts described in this chapter include no construction of verbs or clauses in sequence which can be simply and without qualification labelled co-ordinate. The addition of the prefix 'quasi-' in the term quasi-co-ordinate as used here was deliberate. Dani constructions of verbs and clauses which are analogous to co-ordinate constructions in many other languages all involve other components in the relationship, particularly semantic components like 'sequence' and referential components like 'same subject', so that the co-ordinate construction of English verbs and clauses corresponds to a number of distinctly marked relationships and constructions in Dani. A model which treats 'deletion' only in terms of co-ordinate constructions will not get us very far. Again, a model which treats the underlying structures as composed of referential nodes, including semantic components, with these nodes linked by semantically specified relations holds more promise for Dani. This chapter has not attempted to provide a model for the semological structures suggested. Brief, illustrative treatment of a suggested representation of such a model will be included in Chapter 6. This chapter in particular, and the dissertation in general, are primarily descriptive, but included in the description are requirements and suggestions for any adequate model.
NOTES

1. Note that this construction is distinct from the expanded forms of unidirectional motion verbs including a contracted form of 'come' to specify motion toward the speaker and/or addressee. Any unidirectional motion verb, including the most expanded forms described above, may occur with a further proposed potential stem of an appropriate verb to form a verb phrase, whereas such a verb phrase is not further expandable by this device, i.e. recursion is not permitted.

2. Some of the different realisations possible for such elements may be listed.
   Realisation as a potential stem: see the examples in the text.
   Realisation as an -ek or -eko participle:
     humwak waka. 'running hi-came, i.e. He came running.'
     tappytiko waka. 'rolling it-came, i.e. It came rolling.'
     pu-ake laka. 'flying--manner is-went, i.e. It flew off.'
   Realisation as a manner term which is not a verb:
     haise laka. 'sliding he-went, i.e. He fled away.'
     wapiappuk laka. 'creeping he-went, i.e. He crept off.'

3. Although the potential stem was introduced in Chapter 2 as a potential node form, it will be recalled that potential node is the unmarked node. In the verb phrase, where one modal category is relevant for the whole unit, the node marked in the final element is the relevant category.

4. See note 3 above.
5. Some secondary verb stems occur with *ek past participle forms with implicit third person singular object reference, although forms in *ako also occur in the observed cases. These include directional stems:

kalapak, kalakasoko 'looking inward (at him)';
whaipek, whaikasoko 'looking outward (at him)';
luyapak, luykasoko 'looking upward (at him)';
sepapak, sepapasoko 'pushing (him) down'.

This list is merely illustrative. Two stems which differ in several important ways from those discussed here but which do occur with *ek past participles with marked personal object reference are suk- 'choose out, pursue' and wok- 'take, move';

musek 'choosing him, her, it';
mu'-natek 'choosing me';

wolok 'carrying, taking him, her, it';
wo'-natek 'taking us'.

For a full list of the observed forms see Appendix A, section D.

6. These examples may also be interpreted as single-verb constructions, the participle functioning as a kind of stem and the verb *ako- 'ake' 'continue' functioning as an auxiliary verb. In favour of this interpretation are the facts that most of the stems treated in this section are secondary verb stems, requiring an auxiliary verb when in verb function, and that the verb 'continue', as described in Chapter 3, very commonly realises not an event but the aspectual category 'progressive'. However, the fact that some primary verbs, e.g. hel- 'hear', occur in this construction with this sense, and that 'continue' sometimes realises an event that may be glossed 'to remain in a place' have prompted treating these constructions in this section.

7. It is also possible to interpret watake in this sentence as a manner participle in the commoner sense referring to a stage of the process preliminary to the steam cooking, so that it is subordinate to the manner participle *ako.

8. The only possibility for marking personal object categories on *ako participles is, rarely, with the verb we- 'hét, ké'lif', which occurs with directly prefixed personal object markers. The *ako manner participle form sinatake 'killing us' has been recorded, but is rare; in the recorded instance, the presupposed verb also had the same personal object. It is to be noted that *ako participles frequently occur with a non-personal object distinct from the object of the superordinate verb.
9. This construction differs from the *-oke constructions in that the
*oke participles, if 'transformed' into independent clauses, would have
the same subject as the superordinate verb in each case:
vkv'oak lynlyoko waka. 'He-head--bone rolling to-same, i.e.
He's skull same rolling this way.'
Compare:
lynyoko. 'It rolled, or He rolled it.'
But the *hoko forms in the examples would have different subjects if
transformed into independent clauses:
nettay-kken kakooj-hoko ik. 'my-heart--seed spittling--manner
let-me-speak, i.e. Let me speak extemporaneously.'
Compare:
...nettay-kken kakooj-like. 'my-heart split--is-not, i.e. I got
an inspiration.'
There are at least two possible interpretations of these facts. One
may consider that these *hoke forms are not fundamentally verbs but
constructions with stems which, when they occur with auxiliary verbs,
are verbalized but which with *hoke are adverbs of manner which retain
the verb-like property of occurring with patient nouns but which may
not be said to have a subject, either implicit or explicit. Another
possible interpretation is to note that the patient nouns would have
been subjects were no agent noun present, but in the example above,
the agent noun with the verb 'say' becomes subject of the construction.
This is then only an instance of application of the general subject
realisation rules.

10. There is one example in the rided corpus in which the implicit
subject of the *ykh participles is different from the subject of what
appears to be the superordinate verb:
lek-ay yyk lek-ay yyk, wakelke wakelke.... 'no-predicate saying
no-predicate saying he-same-long-ago (repeated), i.e. 'She's not (here) either', (they said as) he came; they kept saying this
as he came (i.e. in a number of villages and areas).'
This example is taken from a story of a man looking for an attractive
woman who had fled from him. On his searching journey he receives
repeated negative replies from various areas. Apparently the speaker
here views the events of interrogation and reply and the journey during
which they occurred as a single larger event even though in fact involv-
ing different subjects. This kind of phenomenon also occurs in looser-
knit constructions, although it is not common. Normally one participant,
having acted his bit at that point, is moved into the background for the
next participant's action, as it were; sometimes two or more participants
are treated as one and both or all kept is the foreground of attention.
11. The derivation of this relator is not clear. Some speakers employ the form -ha'nes, which is identical to or homophonic with a post-nominal used in a spatial sense meaning 'under' or 'down inside'. This sense might be extended to the temporal sense here. However the form -ha'na is more common as a clause relator, and it would be possible to derive this from -hak 'sort, resembling' plus -na 'setting', but I know of no evidence that significantly supports that suggestion. It is probably better just to consider this relator as a unit which refers to interruption of activity already begun or about to begin.

12. This construction is unique among those described in this study, in that a finite verb functions as a relator. This same verb in first person singular forms function in discourse as a marker of the speaker's confidence in the narrated material, and that construction, to be introduced in Chapter 6, may be labelled 'quasi-quotative'. The construction discussed in the text above is quite different in that it refers not to the speech participants but the participants in the narrated events and that it is preceded not by a verb or verbs in the dominant modal category of the discourse but by a verb marked as subordinate by its contrastive mode. Further, here, but not in the 'quasi-quotative' construction, the aken form itself is not in a different modal category from the discourse matrix, but rather is in the predominant modal category of the discourse in which it occurs. Nor does it seem useful to treat this use of aken simply as a type of regular quotative construction, for such constructions normally have quotative verbs marked to indicate linkage to a following verb in the chain of verbs in the sentence. The forms of aken under discussion here are not suffixed to indicate sequence or dependence nor do marked subordinate forms of aken occur in this sense. Although these forms are dependent on and presuppose a following verb, they are not overtly marked to indicate that dependence or anticipation in any of the ways commonly observed with other verbs. The simplest treatment appears to be to treat aken here as itself a relator, or verb in conjunctive function. Other examples of verb forms as relators occur, e.g. yivk 'saying' used in quotative clauses and intentional clauses, and helak 'cf' or 'since', derived from the verb halk 'see', but these other examples are only non-finite verb forms. Only these factive forms of aken occur as finite verbs functioning as relators, but they are parallel in function and distribution to such relational particles as ha'nes, described above.
13. For these forms Greenberg's generalisations about the markedness of person categories are in part valid and in part invalid (1966:85). Second person forms appear indeed, as he postulated, to be the most marked forms in this construction, with reference only to addressees. However, first person forms, contrary to his postulation, are in this construction the least marked, with reference to the speaker, the addressee or any other participant. Third person forms are here the intermediate category, with reference to the speaker or to a third person referent. This hierarchy of markedness of person categories is not valid, however, for the language in general, but only for these forms, which are unique in their relative person categories. Elsewhere, as discussed in the preceding chapter, it appears valid to see the fundamental person contrast to be 'speaker' versus all 'non-speaker' categories, so that first person singular is the most marked category.

14. At least in the neighbouring sub-dialect spoken at Tanga, where we are now resident, younger speakers increasingly use constructions of other verb forms and non-verb phrases with noko-lv in a periphrastic sense but to express the background or reason for the event referred to in the superordinate verb:

kweeue haue-lv a telei noko-lv he, hakete huleleke, 'earth little predicate-setting theme—saying topic early-predicate is-agreed-long-ago, i.e. Because there was only a little dirt, it spread quickly (long ago).'

15. The relator halok, like many other Dani relators, functions not only to relate verbs and clauses, like a conjunction, but also to relate nouns and phrases to other words and phrases, like a preposition. These cases are out in the focus of this study, but note may be made of examples: nukke-at halok we-nom. 'one-predicate just noun-you-ag) transfer-to-to-me-now, i.e. Give me just one.'

In this example other cases are excluded and the case is limited to that specified by the preceding element, as in conditional sentences the case is limited to the situation specified in the protasis.

...jorkytyvky halok, Inapa hakatehak-at. 'children off-on-them they normally-do-to-also, i.e. In the case of children, they treat them also.'

weme halok-en elone shelupi ska-lokeusak. 'talk (f-source off-there to-sell coming—would-continue, i.e. Only if there is some major business or trouble am I likely to keep coming out here.'

...halok-he nit-he okko halok-he essehe-nen wese-nok. 'f-source we-topic price (f-topic essehe—source move—let-third-person-transfer-to-to-us, i.e. In this case, so far as we are concerned, if there is to be a payment, let essehe pay us.'
There appear to be different senses of haik in these examples, one where it means something like 'only if' or 'just', and another where it means something like 'also if' as in the first of the last three examples, and perhaps still another where it means something like 'is that matter' or 'is that case', as in the last example.

16. Father van der Stap treats repeated (his term is "reduplicated") verbs as a kind of inflectional category, with a note that they might be described as a matter of syntax (1966:75).

17. Both the field corpus and a larger corpus of texts including about two hundred more pages were surveyed with regard to these constructions, and the constraint suggested in the text is valid for the dialect under study or two neighboring dialects also. My non-native 'intuition' based on speaking experience in the language for thirteen years suggests that there are possible constructions of verbs with lek sentence medially which are not paralleled in the corpus, but that non-finite verb forms and finite forms suffixed with -ia, -so or -tiwo (i.e. with the prior action or setting marker or both) do not occur with the particle lek.

18. In the following chapter the use of quasi-quotative constructions in discourse will be treated as contrastive in several ways as compared with regular quotative constructions treated here, although both kinds of construction share many features. The fairy tale text mentioned in the text above may in fact be better treated as a quasi-quotative construction. Such constructions, like normal quotative constructions, may include multiple sentences and mark them with quotative margins either at the end of each sentence or at the end of the whole unit.

19. Constructions of intention with deferred hortative forms plus a form derived from ylk 'saying' have been described above under subordinate clauses with finite verb forms. Because of this tight-knit subordinate construction, with specified modal category and marked relative person category, intentional constructions were included there rather than under indirect quotative constructions here, although they include the particle ylk 'saying'. Negative purpose constructions with permissive forms of the verb have also been included under subordinate clauses, since this construction also occurs only with a specified modal category, although it, too, includes ylk.
20. Further study of these problems needs to be made with a very much larger corpus and access to informants, but clearly the limitations involved here are related to the sorts treated by Hale (1969) in his debate with the transformationalists about the finiteness of natural language. The term 'finite', it seems to me, is misleading here, but the Dani data manifest the kinds of limitation Heich discusses and attributes rightly, it would appear, to the limitations on human short term memory.
CHAPTER 6
UTTERANCES AND UTTERANCE PARTICIPANTS: SOME DISCOURSE CATEGORIES

6.1. INTRODUCTION

The preceding chapters have highlighted the ways in which the speaker and addressee are related to the events and participants in discourse, particularly by means of the categories of event mode, referring to the speaker's report of events as factual, potential or hypothetical, and the category of person and related phenomena of participant identification. But the involvement of the speaker and addressee in discourse only begins here. Linguists of the Prague school have developed a model of language structure involving multiple levels, particularly three levels of syntactic structure: the grammatical structure of the sentence, involving elements like subject and predicate; the semantic structure of the sentence, involving elements like actor and event; and the 'organisation of utterance' involving elements like topic and comment, or in their terms, theme and rheme (Danes 1964:225). Grammatical structure appears to be roughly equivalent to the grammar of tagnemics, the lexemic stratum of stratificational theory, and, with less isomorphism, the surface structure of transformationalists. Semantic structure in this model seems to include phenomena deeper and more universal than deep structure in a transformational model or the lexicon of pragmatics, and indeed appears in some ways to resemble what Lamb currently calls gnosticisms, the extra-linguistic organisation of knowledge and experience, as well as what he calls semantics (1971:30). Danes says that his semantic categories are extra-linguistic and seen to be universal or nearly so (1964:237). The third level in the Prague school model, the organisation of utterance, "makes it possible to
understand how the semantic and grammatical structure function in the very act of communication" (Danell 1956:227). This involves the organization of sentences, for example, into 'theme' and 'rhemé', usually roughly equivalent to 'topics' and 'comment' or 'old information' and 'new information'. Prague school interest in these matters dates back to Hatterus, the founder of the school, and a 1926 paper on theme and rheme in English; more recently the awkward label "functional sentence perspective" has been used in their writings for this "third level" of syntactic structure (see Pirhas 1966:239). Whatever the name applied, this "third plan of syntax" involves "all that is connected with the processual aspects of utterance" (Danell 1956:227). This is to take parole and find structure in it, to bring it within the field of linguistics (cf. de Saussure 1959:15; Greenberg 1974:73; Tabor 1966:131). It is also to recognize the deictic element in discourse as of fundamental interest.

M.A.K. Halliday in his system-structure grammar has adapted and elaborated these Prague school contributions. He views language as having multiple functions, including the textual function, which includes the thematic structure of texts and the information structure of texts. These are separable structures in his view. For him, in contrast with the Prague school writers like Pirhas, English sentences begin with a theme and conclude with a rheme, but given and new information may be distributed differently. Halliday gives as an example:

"this gazobo can't have been built by us"  
In this example, he calls "this gazobo" the theme, and the remainder of the sentence the rheme. He divides the sentence into two information units similarly, with "this gazobo" consisting of new information; in the second unit, "can't" is said to be new information, and the remainder of the sentence old information (1970:160-168). Pirhas does not distinguish these parameters, treating both in the theme-rheme structure and subsuming the matter of old and new information under his concept of degrees of "communicative dynamism" (1956:269); this appears to be equivalent to the concepts of redundancy and information in information theory.

Wallace Chafe has also devoted an interesting chapter in his most recent book to the subject of new and old information; he makes the point, as others have also said, that English passive serves primarily as a device to put a participant into the 'old information' position in the sentence (1970b:210-233, esp. 219). Chafe, however, unlike either Halliday or the Prague school writers, incorporates his treatment of new and old information into the semantic structures he postulates.

Within the framework of stratificational grammar, Croft has
treated some of these problems in terms of what he terms "functional cohesion systems" which regulate focus and modality by means of semolexical realisation rules (1968:14-21). Stennes, building on the earlier work of Taber and Cromack within the framework of Gleason's version of stratificational grammar, has handled matters of focus and secondary focus by positing semological units on which the semolexical realisational rules operate (1969:84-90).

There are two related problems in these various approaches. The first is the recognition and description of the organisation of discourse in terms of the flow of information as a separable parameter of language. The second is the fitting of this parameter into an overall model of language organisation. It is not a novelty to propose that the same linguistic string exhibits simultaneously distinct constituent structures. Kenneth and Buntice Pike more than twenty years ago proposed that there are immediate constituents in phonology as well as grammar (1947), and Swalley's dissertation on Khu'a was based on immediate constituent analysis of both phonology and morphology (1981). Perhaps the most significant tenet of Lamb's stratificational grammar is that each stratum of language (the number posited has varied from time to time) has its own tactics; in other words there are constituents and constructions to be identified in each stratum. In the sentence 'if a raining', this is clearly so. Phonologically 'if a' is structured as a syllable of which if is a constituent. Grammatically in the clause structure, 'if a is part of the predicate 'a raining, in construction with 'if' as subject. But the constituent 'if' is a dummy inserted to fit the clause structure tactic rules and is not present in the semology, where one set of constituents may be identified as the element realised as 'rain' in construction with an element large 'present progressive'; there are other constituents as well.

What the Prague school linguists and Halliday have done is to say that in many sentences and utterances there is a distinct further set of constituents observable. Halliday gives as an example:

"next year this gazebo will be restored by the Borough Council". In this sentence we suggest that "next year" is the theme, the remainder the rhyme; "this gazebo" is modal subject, the remainder might be termed predicate; and "the Borough Council" is, in Halliday's terms, actor, in construction with the process realised as "will be restored" in the same semantic structure as the element 'goal', a role occupied by what is realised as "gazebo" (1970:165). There are alternative treatments of this example possible. One alternative is to treat "next year" as indeed a constituent in construction with the rest of the sentence, but proceed from there in further constituent cuts into
subject and predicate and the constituents within each. This in effect conflates what might be called thematic structure or information structure with the grammatical structure of the clause and sentence. Another possibility is to tag the circumstantial element realised as "next year" as focal in the semological structure, and state in a realisation rule that such focal items are realised sentence initially. This in effect conflates what might be called thematic structure with the semantic structure or semology.

Each of these possible treatments of the phenomena in question has been advocated, as we have noted. The Prague school linguists and Halliday make the informational organisation a separate "level" (Danell 1964) or "component" (Halliday 1970:106). Czumack, with attention to the dynamic character of the phenomena of information structure, treats them in semi-lexic realisation rules. Chafe and Stevens incorporate the phenomena in the semantic or semological structure (Chafe 1970b:210-233; Stevens 1969:84-90). Longacre and his colleagues in the Summer Institute of Linguistics have been, in effect, adopting the other possibility of handling the structure of discourse in the same hierarchy as other grammatical structures (Longacre 1968, 1970). All of these models allow for focusing attention on an area that has been largely neglected outside the Prague school. The model suggested by Pirbas and that suggested by Halliday view these textual/informational phenomena as relatively autonomous from semantics and grammar in the narrower sense, thus giving the maximum possibility of treating them as important in their own right. Yet such an autonomous component needs to be related meaningfully to the other components of language in a way discouraged by emphasis on autonomy, although that criticism is not as valid for Halliday as for the Prague school linguists. Czumack attempts to account for a number of these phenomena by semi-lexic realisation rules and thus emphasizes the fact that these are phenomena intimately related to the production of actual utterances. However, realisation rules need an input of semological elements that trigger their operation. The same logic is relevant that motivated transformational grammarians to eliminate optional transformations and replace them by obligatory transformations keyed to markers already in the string in the base component (Chomsky 1965:132). In many ways the most attractive of these models is Stevens' version of Gleason's reticular model. That model, by incorporating referential nodes in its reticula is already a model of the semology of particular utterances. When modified as suggested in the last chapter to incorporate the speaker and addressee explicitly in every reticulum, that model appears to provide a framework for treating the deictic phenomena involved in informatim structure. Some further...
modifications of the model will be suggested as the Dani data are presented.

But the focus of this study is not on models nor on graphic representations of models. What attention is given to these devices is largely programmatic, with suggestions of improvements for future application. The present chapter is rather a beginning venture into the structure of Dani discourse, with a survey of some of the devices employed. The discussion of theory and models has been included to indicate the route along which the writer's thinking has moved in approaching these problems, and along which it now appears further study can most usefully advance.

6.1.1. The Dani Case

The proof of any theoretical pudding must ultimately be in the eating, the application of theory to data, and the study of data in the light of theory. What contribution is made in this chapter is in terms of a survey and initial analysis of data with a few suggestions for modification of the model which underlies but is not the focus of attention of this study. There is still much in Dani discourse that remains to be analysed and described; but a beginning, however small, is worth the attempt. In Chapter 4 the categories of event mode and person were described as they relate the speaker and addressee to other participants and single events realised in single verbs. Chapter 5 was an extension of that description to multiple events realised within single sentences. The systems to be examined in this chapter relate the speaker and addressee to the discourse itself as a communicative event.

6.2. DISCOURSE MARGINS

6.2.1. The Arrangement of Information in Discourse

Of all units of speech, discourse has, by definition, the most recognizable beginning and ending. These end points are not only marked in terms of silence, or complete shift of speaker-addressee sets, or other observable real-world phenomena, but also usually by distinctive introductory and concluding linguistic material. It is useful to speak of margins of discourse consisting partially of these introductory and concluding materials. Within these margins it is also useful to distinguish 'outer' utterance-setting or deictic margins and 'inner' context margins.
6.2.1.1. Introductory Outer Margins

The outer margin is typically occupied at discourse introduction by such items as calls or greetings or other items establishing the speaker-addressee setting; the inner margin is typically occupied by such items as topic specification. Many of the texts in the filed corpus lack some typical outer margin elements since they were recorded, often several in fairly close sequence, in a speaker-addressee situation already established when the recording began. Some of the corpus texts retain this margin however, and there are a number of quoted or embedded discourses in the texts with these features. In conversation or any discourse it is clearly necessary to establish the speaker-addressee context. Since in oral discourse in face-to-face societies the speaker is usually self-identifying, the margin of discourse needs, where there is any ambiguity, only to identify the addressee:

Asukwele'lek, paly lek-skama, 'sengareklek, tobacco not-its-became-setting, i.e. 'sengareklek. (I've) run out of tobacco.'

In this example the name serves both to identify the addressee among the several persons present and to get his attention. (quoted discourse) be bymynake. hea leeka. 'woman bymynake yeer(se)-woman's-child crying-he-became, i.e. bymynake, your baby is crying.'

In this example the name serves as an attention getting device, for only the speaker and addressee and the baby are present in the scene.

'Outer margin' is not always a manner of linear order. Other items, most frequently inner margin items, may occur preceding these elements: hit hyamakane hime-lapok wera amake nyeko nyakki-toko seko. 'you(pl) yesterday your(pl)-faces(greeting) me those-known-to-us how--manner you(pl)-said, i.e. You followed yesterday—good morning—about that conversation, what did you say?'

Here hime-lapok is a greeting and an 'outer margin' element preceded by the inner margin topic element hyamakane 'yesterday'.

In the texts in the corpus there is an additional and sometimes lengthy kind of outer margin element relating to the recording situation. This is not a totally foreign kind of element, however, for often in local discussions, particularly deliberations of leaders, a speaker may request permission to speak. Typical examples in the corpus are:

ik-a? ty Meake-te.... 'let-me-speak--invitation-query what Meake--topic-marker, i.e. Shall I speak now? As for that (story), about the Meake....'

kake-wa-hako-at ik-at 'splitting--manner--just let-me-speak--invitation, i.e. Shall I speak extemporaneously?'
One further element may be assigned to the outer margin of many or
the corpus texts, and that is hypostatized reference to the discourse
as a whole by use of a demonstrative or other element. In the examples
in the corpus this commonly refers back to a query or cue that prompted
the discourse, and forward to the whole discourse to follow:
'at'y-e, Steke akwe a'neko tank-heko-za kelel! lakulakhe akkye.
'that.(inmediate-context)--topic-marker, Orge his wife eat-we-
know separating--manner--topic-marker Welset(place) she-went-long-
age I-believe, i.e. As for that story, Orge's wife (you know about
her) left him and went to Welset you know (literally, I believe).'
Here at'y refers back to an immediately preceding request for a clarifi-
cation of a story previously heard from another informant and thus
forward to this retold version.
keke hote-at heke. 'the-presence-shorts-predicate sort, i.e.
It's a rather shorts (story).'
Here again keke refers to a prior comment by the speaker about the
subject of his proposed discourse, and thus forward also to the dis-
course as a whole.

6.7.1.2. Introduction Inner Margin

The introductory inner margin of discourse typically includes
elements specifying the topic of the discourse; this may occupy a sen-
tence or only a part of a sentence. The topic often is a multi-position
element, including most frequently: (1) specification of the key
participants, and (2) some further specification of setting, major non-
personal element or event:

'at y maok-ne, motok maok mto' leken-he. Lappulukok ejokke
hykkyyhe, ev jy-meke pal! mahe. 'that I raft--topic-marker,
altogether raft altogether not-source--topic-marker, Lappulukok
summons-to-He in-past-prior--topic-marker, up here--sort to-not
we-went-up, i.e. About that, about me and the raft, because I
had no raft at all, I asked Lappulukok to help me and we went
up and out one of those up here.'

Here the initial word aty is a demonstrative referring to a previous
mention of this incident as a topic of interest; it is an outer margin
element. The pronoun en refers to the speaker as the main participant,
and the noun maok 'rafts' specifically mentions the major non-personal
element in the discourse. This much of the sentence is usefully
considered discourse margin.

In the genre which can be called folk tales, the topic of discourse
is very commonly, although not always, an initial sentence identifying
the main participants as resembling some known local persons of known kinship relationship. A story about a father and his son begins in one version:

Nenabu hakke-non-he, Apple'ma hakke-non gily-lay. 'Nenabu sort--
and--topic-marker, Apple'ma sort--and saying-they-are, i.e.
(There once were a father) like Nenabu and (a son) like Apple'ma
they say.'

Frequently the discourse topic is included in a sentence of which
it is not an appropriate topic:

jose-te tvky ay, ap-hvny isath-vulok-he, ap kvtsi wanbatek.
'Here--topic-marker ovadei(kind of sacred object) is-house,
people plural-subject-kill-them-of--topic-marker, men white-
herons-feather they-normally-take, i.e. Here, so far as the
houses for sacred var objects go, if they (of the enemy group)
have killed them (locally), the men get white but feathers.'

In this example, the text goes on to talk about the house where the
sacred objects connected with warfare are kept, but nothing of that
is included in this sentence except for the topic. There are a number
of similar examples.

A discourse may begin with no isolable topic simply by starting with
an initial episode which sufficiently introduces the major participants
or initial participants. One folk tale was recorded with this kind of
introduction:

ap-mkke akekhe jaru jkkko hesikhe gily-lay, 'man-eat one-of-
group garden swmmone he-put-long-ago saying-they-are, i.e.
(There once was) a man who called for help in digging garden
they say.'

6.2.1.3. Closing Margins of Discourse

There are recognisable elements at the close of discourse as at its
beginning. Here as at the beginning of discourse it is useful to dis-
tinguish inner margin elements, like the summary and/or application,
from outer margin elements, like greetings and reference to the record-
ning situation. Often all of these occur in sequence:

nakke-he Wuka-hvpy ta'vuk-hasikhe. at maikjar. et-at. hal-la-
ok. 'Beginning--topic-marker Wuka-hvpy (alone) first he-called-
him-out-long-ago, that my-friend, finished, your-faces(greet-
ing), i.e. In the beginning they drove the Wuka-hvpy out firsts.
That's the story, friend. That's the end. Thank you.'

This example concludes a text which begins with the evocation of the
Wuka-hvpy and goes on to describe the resultant eviction of part of
another confederacy. At the conclusion, attention is turned back to the starting event, the key to the series. Such reference back to the 'source' event is very frequent. After a whole text on the course of a battle the speaker concludes:

'battle-topic-marker then-source they-took-setting main-trail he-opened-setting. his-foot (es-source turned?) i.e. as for the battle, they started it, they (literally he) opened it up on the main trail. They turned their legs upside down (lost men in the battle they started).'

In one kind of explanatory folk tale the conclusion includes an explicit statement of what the tale explains:

hasi jyuk hasi jyuk isikhemo-te, hasi jukushate atty. wa-lakelehate atty, men pelal te lyfyk, napvi1 napvi1 llepema-te, ap-nvry lamunkly-pekke mel-ekke napvi1 wanya-koekke. mud smeared mud smeared he-said-long-age-setting-topico-marker, mud they-normally-smeared that. they-normally-die that. then snake first having-gone my-epidemic your-epidemic he-said-hypothetical-setting-topic-marker, people older-sorts also their-epidemic taking—they remain-hypothetical, i.e. he said, "smeared on mud, smeared on mud", and that's why they smear on mud. That's why they die. But if the snake had got there first and had said "change skins", people, even the elderly, would have kept on changing their skins (and not dying).'

The explicit mention of an alternative conclusion, of what might have happened if events had taken another turn, also occurs in one long personal travel narrative about a trip on which two members of the party got lost and were cannibalised by savages:

'...pykykt piloo-loxo ... pilo. pilo-loke stykyhuku stykkyk. directly slipping-manner we-deed-hypothetical. we-deed-hypothetical-adversative we, did-that-long-age i-believe, i.e. (if we had done differently) we might have slipped right through and gone down there. We might have gone down (safely), but in fact we did what I've just told you you know.'

Discourses may of course simply conclude with the last event in a chain in narrative or some kinds of expository discourse:

'pity having-said-topic-marker, weeping—they normally-become. corpse that-we-know they-normally-burn-it (literally them), i.e. They say, "What a pity", and weep. They cremate him.'

Examples of hortatory discourse are few in the corpus, but the best example concludes like very many observed hortatory discourses, with
a command:

Aeg-tsan-o, 'discard-you(pl). do-so-then-decide, i.e. throw it away!'

This last example concludes a speech of a major leader to enemies being escorted by the government officer through his territory. Morallyising the warfare is finished and carrying weapons is bad, he called on his audience to throw the spears away but in fact dispatched some of his own younger followers to do the job for them. Outer marginal elements in the conclusion of discourse may refer back to the text as a whole, a hypo-statified unit:

...jako-thi a'hoka. nekejak atty, 'self--I transferred-to.him that-what-know. My-friend the(abstract), i.e. (That's what) I told lie, as you know. Thank you. That's (the story).'

One example includes reference to the discourse genre:

pi-siiske atty. atty-ya akkyky. ekokek a'oka. weyayya. 'The-time-dawn-long-ago that. that-to I-believe. they-normally-say that-known-to-one-of-us folk-tale, i.e. He came down and there he was. (The story goes) to that point, you know (literally, I believe). They tell it that way (although you wouldn't have known it). It's a folk tale.'

One example above included a greeting, and these are very common in concluding outer margins in comparison with introductory margins, although still only a sixth of the texts in the corpus include them. The term at-at 'finished' occurs both in inner and outer concluding margins of discourse. In inner margins it refers to the conclusion of the events or content of the discourse, and in outer margins to the discourse about them:

wuthusik ne at-at wuthu. 'we-built-prior-topics-narrator finished we-built, i.e. And so after-working on the building we finished it.'

In this example at-at is an inner marginal element.

at-at yhy ss. 'finished I-said of-course, i.e. I've finished telling it of course.'

In this example at-at is an outer marginal element. There are also a number of references to the recording situation in the texts in the corpus, and these are considered to be outer margin elements:

jako heikhe. nekejak. te. 'someone he-pur. my-friend. here-take-it, i.e. . . . . . he called for the men. Thank you. Here take it (the microphone).'

The marginal elements in the texts in this corpus may be summarised as follows:
<table>
<thead>
<tr>
<th>INITIAL</th>
<th>MARGIN</th>
<th>FINAL</th>
<th>MARGIN</th>
<th>OUTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call, greeting</td>
<td>Discourse topic; Identification of key participants; Further specification (May be fused with body of discourse as initial episode)</td>
<td>Flashback to 'source' or key element; Summary; Application; Appeal (May be fused with body of discourse as final episode)</td>
<td>Creating</td>
<td>Reference to utterance situation; Hypostatized reference to discourse</td>
</tr>
</tbody>
</table>

### 6.3. UTTERANCE MARGINS

The internal structuring of the body of discourse involves first of all segmentation into utterances, and discourse-medial utterances are characteristically different from discourse-initial or discourse-final utterances or one-utterance discourse. Multi-utterance discourses are dialogues or conversations, and utterances in such discourses occur with margins which are distinctive from discourse margins. Perhaps the most important of these margins are the clitics marking what may be called dialogue mode.

#### 6.3.1. Dialogue Modes

##### 6.3.1.1. Invitational Dialogue Node

The very first sentence of the first text file in the corpus used as the narrower basis for this study is marked in multiple ways for involvement of the speaker and addressee: "Shall I speak?"

The suffix -<w> in this example was described in Chapter 2 as a portmanteau marker of potential event mode, hortative category and first-person singular of 'speaker as subject', these categories all directly presupposing the speaker and the addressee. The example also includes the clitic -<w> which is a marker of another kind of modal category. While event mode is an obligatory category marked by the desinences in finite verbs and referring to the speaker's evaluation of the addressee of the factual status of an event, dialogue mode is an optional category marked by clitics attached to words of all classes occurring as predicates, and it marks the speaker's stance toward the addressee's further
participation in the dialogue. The clitic -a invites the addressee to respond, whether verbally or in non-verbal action. It normally carries intonation contours or contour terminals which further specify the invitation. In the following examples particularly relevant intonation contours are transcribed using the numbers one through four, from highest to lowest intonational levels, in slant lines above the segmental text.  

\[ /2-3/ \]
akeike seke-non-a. 'one-of-group out-up-raw-you(sg)-transfer-to-me-now--invitation, i.e. Please out some for me (interestingly).'

Here the /2-3/ downgliding intonation specifies the invitation as a plea. The verb is in the potential event node, immediate imperative category, indicating that the sentence is a directive to the addressee, but the clitic -a with this intonation contour marks the stance of the speaker as inviting or entreaty rather than commanding.

\[ /2-3/ \]
wein-at waapytik-a. 'battle-just 1-name-priv--invitation, i.e. I've come just to fight - come on!' (a shouted challenge to battle).

Here the /2-3/ downgliding intonation and the clitic -a specify that the event referred to in factive node in the verb is indeed an invitation to respond, a plea or challenge to fight.

\[ /2-4/ \]
any'we-he lek-a. 'shouting--topic-marker not--invitation, i.e. There is no shouting (but I stand to be corrected).'

In this example the downgliding intonation with no question word word, with no dialogue clitic present, indicate a report or statement; the presence of this invitation-marking clitic invites correction from the hearer.

The commonest use of this clitic is however in yes-no questions. Commonly, although not obligatorily, such questions explicitly include both alternatives:

\[ /3-2/ \]
/3-2/
hekep-a? lek-a. 'you(pl)-raw--invitation not--invitation, I.e. Have you seen it?' (Literally, add 'or not', but the bare explicit alternative does not carry the connotation of impatience frequently associated with the explicit alternative in English questions of this type).

\[ /3-2/ \]
/or-kep aty-a? 'you(pl) eyes you(pl)-provided that--invitation, i.e. That was it, did you see it?'

\[ /3-2/ \]
hekep-elekep aty-a. 'your(sg)-women's-child-topic-marker boy--invitation? girl--invitation, i.e. Is your child a boy or a girl?'
There is a less common clitic -a which in questions seems nearly synonymous with -e, but which has not been observed to occur in all the non-question invitational contexts where -e is found. It appears to mark invitational dialogue mode plus a further component of probability:

...wakka-ekke a'la kolo akara ha... 'ghost--ones his-insides crooked it-became-setting probably, i.e. (it looks as if maybe) the ancestral spirits are displeased.'

6.3.1.2. Decisive Dialogue Mode

In contrast with the invitational dialogue mode marker are two other major markers. One of these marks a decisive statement by the speaker to the addressee, not inviting his comment but rather finalising the statement of issue.

hakep-e' lek-e....leko- 'you(pl)--persuaded--invitation not--invitation. not--decisive, i.e. Have you seen it (literally, add or not)? No.'

This dialogue mode is however not analogous with declarative mode as traditionally described e.g. for English. The past dialogue mode is optional and rarely occurs in monologue except, of course, in quoted dialogue embedded within the monologue.

Jappe ette a st-yo. 'your-grandfather his-name that--decisive, i.e. That is your grandfather's name (a statement in the ritual of initiation).'

Frequently this clitic occurs with imperative and hortative forms adding a further element of decisiveness:

jowa-at leko- 'here--predictor you(or) stay--decisive, i.e. Stay right here.'

This last example in a father's farewell to his son who has become permanently fastened to or incorporated in a book as a punishment for misdeeds.

The relatively few examples in monologue are instructive. In one text about gardening, the whole process is recounted step by step, then the speaker goes back to the beginning in a briefer summary:

...nakkun av jak-hanti-k-he, nakkun wus jakohuseke-o. 'beginning plant plant--having-pu--topic-marker, beginning needs we-normally- weed--decisive, i.e. In the beginning, after we plant the cuttings, as the first step, then, we weed.'
There are no other occurrences of this clitic preceding or following this example in this discourse. Here the speaker begins his summary section with a statement to the effect, "This is indeed the way we do it."

In only one monologue in the corpus are there repeated occurrences of this clitic. The text was a report by the informant of an exposition by an elderly, respected local man about the sun and moon. The informant had repeated to the old man my answers to queries about what we believed the sun and moon to be like. The old man was upset and strongly rejected these heresies, according to the report of the informant:

- ə-my, no, he-o, man talk my ay-o, 'sun that, sun, woman--decisive, then moon that non-decisive, i.e. As for the sun, that is a woman, and the moon, that is a man.'

This clitic occurs a number of other times in this discourse as the speaker strongly defends his position. Clearly it is a category related to the utterance and says in effect, "I am telling you that this is so."

There is another clitic -v which appears to be very closely related in meaning to -o, and indeed no clear contrast has been established, although in some cases it appears that -v is more emphatic than -o. However, the phonological shape of the preceding word is also involved in the distribution. All words occurring followed by -v also occur followed by -o, but only words with a limited variety of phonemic shapes occur followed by -v; these include words with final ək and ok and o:

- lək-v, 'certainly not.' Compare lək-e 'no' or 'certainly not'.
- hə-mə,v, 'That's indeed good.' Compare hə-mə ə-e 'That's good.'

6.3.1.3. Differential Dialogue Node

In contrast with both invitation and deictic dialogue modes is a category typically marked by a less common clitic -e, which defines the stance of the speaker toward the addressee as deferential or ingratiating. This clitic has not been observed in monologue (except in quoted dialogue, of course), but is very commonly observed with greetings in dialogue:

- nə-kə-e, 'my-friend (literally my-sibling)--deferential, i.e. "Hello", (said in an ingratiating manner).

In one folk-tale a sneering bird finds himself in the village of the butt of his ridicule and discovers him to be a wealthy and influential man. Trying quickly to shift his stance appropriately, he repeatedly...
includes this clitic in his speech:

wam jy wahan naj-x-e. 'pig this you-killed my-fear--deferrntial,
  i.e. My, I'm impressed with this pig you've killed!
In some contexts a complaint is softened in tone by this marker:

nopp-sal-eke nayt-x-e. 'my-surprise--hold my-dislike--deferrntial,
  i.e. I'm rather chilly, and find it unpleasant.'

There is another clitic -y which is very closely related in meaning
  to -e; its occurrence is most common with the highest intonation level
  as contour terminal. The combination of clitic and intonation appear
  to mark a more emphatic or excited deferrntial stance than is signalled
  by -e:

/3-1/
  eik-y! 'How!'  
This clitic has also been recorded with other intonation contours.5

6.3.1.4. Contrast of Dialogue Nodes

All of the dialogue-mode marking clitics occur with some stems,
  particularly the interjection eik- which requires one of these mode-
  marking clitics. In the folk tale about the sneering bird confronted
  by the real wealth and influence of one of the butts of his lies, the
  bird exclaims in amazement:

/2-3/
  eik-y! 'Wow!' (deferrntial amazement).

Then the former object of his derision shoots and wounds him super-
  ficially and seizes him as the bird appeals:

/1-3/
  eik-e: 'Oh oh!' (deferrntial, appealing, surprised).

In the same line he shifts to invitational dialogue mode:

/1-3/  /2-3/  /3-3/
  eik-e. noe haj-xap-k-e. eik-e. 'oh-oh my-other sibling greetings--
  invitation exclamation--invitation, i.e. 'Oh Oh, Please, sir!
  Please!'  

In another folk-tale concerning a boy who has become petrified or at
  least permanently fastened to a rock in punishment for his transgressions
  of taboo, the father comments:

/1-1/  /3-3/
  eik-e. naroxjak-x-e. 'exclamation--decisive my-sibling--decisive,
  i.e. What a pity, lad!

This expression of pity implies, by the addition of the clitic -e, that
  the speaker considers that nothing can be done about it.

Similarly contrasting examples are recorded of nayt, na'yt 'my
  dislike':

he atx na'yt-x-e. 'woman that my-dislike--decisive, i.e. 'I don't
  like (or don't want) that woman.'
Here the comment is decisive, reporting a decision.
"ai-akke napyt-e. 'cold my-dislike--deferential, i.e. I dislike the cold, an unpleasantly cold.'"

Here the comment is deferential. The comment was made in a host's house in the host's hearing, but is normal, and may simply indicate that the chilly person is at the mercy of the cold.
"lekei-a? napyt-e. 'singular-subject-will-go--invitation my-dislike--invitation, i.e. Shall (I) go or don't I want to?'

6.3.1.5. The Relationship of Dialogue Mode and Intonation

The examples cited above do not provide sufficient evidence for isolating dialogue mode categories from categories signalled by the intonation contour, but do offer evidence of their independence:

/2-2/
lek-e. 'No.' (decisively).
/3-2/
lek-a. 'No.' (allowing for correction).

No new study of intonation has been made as part of this investigation, but it is clear that intonation alone can distinguish question from statement:

/2-4/
lek. 'No.' (statement).
/3-4/
lek-a? 'No?' (question).

It is also clear that the distinction between question and statement is partially independent of the contrast between invitational dialogue mode and decisive dialogue mode:

/3-2/
lek-a? 'No?' (question).
/2-4/
lek-e. 'No.' (statement, open for correction).

Further it is clear that the distinction between question and statement is signalled not only by intonation but also by question words, the analogues of English wh- words:

/3-2/
haet-e. 'Is it you?'
/2-3/
hek-a. 'Who are you?'

Note that the last example carries the intonation contour which, when no question word occurs, marks a statement.

A further detailed study of the grammar and semantics of Dani intonation-marked contrasts is needed but not possible here. However these conclusions may be drawn:
6.3.2. Logical Mode

The discussion above has indicated that some questions are signalled by intonation contours, with or without accompanying invitational dialogue mode, while others are signalled by question words. However, it is clear that for Dani speakers as for us, both kinds of question are subsumed under the same category, referred to in the Dani term hino 'inquiry'. Of either sort of question an observer may state:

hino wanyi 'lako. 'Inquiry taking-he is, i.e. He is asking a question, or questions.'

This category appears to contrast with what might best be labelled 'non-inquiry', referring both to statements and commands. Of both these kinds of utterances one may say:

wene jokoły 'lako. 'New telling—transferring-to him he is,
\ i.e. He is telling him something.'

Yet there is recognizable ambiguity in such sentences as:

weim lek. 'Battle not—i.e. either, 'There is no fighting (we got
\ rained out, or the enemies didn't show up), or let there be no
\ fighting.'

Such ambiguity can be resolved by paraphrases:

weim japy-aly lek. 'Battle fighting—they are not, i.e. They
\ aren't fighting' (a statement of fact).

weim lek a'nek. 'Battle not let—be now, i.e. Let fighting
\ cease' (an exhortation or command).

There are at least two possible analyses of this second ambiguity. One might posit distinct covert logical modes of 'statement' and 'command'. If this alternative were taken, the covert logical modes posited would be related as indicated in Figure 10, with 'question' as a marked category opposed to an unmarked category 'non-question', and that unmarked category including a subordinate opposition between the
marked category 'command' and the unmarked category 'statement'.

**FIGURE 10**

**REJECTED ALTERNATE RELATIONSHIPS OF COVERT LOGICAL MODE CATEGORIES**

```
(--) utterance
    
    question (*)

    non-question

command (*)

(--) statement
```

Another solution is suggested when it is noted that the paraphrases resolving the ambiguity are marked with factive and potential-hortative event mode categories. It is thus possible and attractive to posit these categories as covertly implicit in sentences where there are no verbs with desinences marked to contrast event modes. There are no covert mode categories, however, to contrast 'interrogative' with 'non-interrogative' categories, and it is proposed to posit these two and only these two covert categories of 'logical' mode. This solution reduces by two the number of new categories posited and utilizes instead categories required elsewhere. The logical mode categories are then related simply as in Figure 11:

**FIGURE 11**

**RELATIONSHIPS OF COVERT LOGICAL MODE CATEGORIES**

```
(--) utterance
    
    question (*)

    utterance--implicitly non-question

'interrogative'

'non-interrogative'
```

6.3.3. Mode and Modes

For English, Halliday has described mood as "the grammar of speech function" representing the "organisation of participants in speech situations, providing options in the form of speaker roles: the speaker may inform, question or command...." (1967:199). It appears clear that modal functions are separated in Dani into two overtly marked contrastive sets of categories and one covert set, as described in Chapters 2, 4 and above. Event mode is a set of evaluative categories relating the speaker and addressee to the extra-linguistic events referred to in discourse, and in Dani the notion of command is
a function subsumed under potential event mode. Event mode is an
obligatory category in finite verbs, and in the interpretation adopted
above, is also covertly present category in predications without verbs.
Dialogue mode is indeed a mode of "speech functions in speech situ-
ations" but marks the stance of the speaker toward the addressee, so
that the opposition 'invitational' versus 'decisive' proposed in the
analysis here is related to but not identical with the familiar
opposition 'interrogative' versus 'declarative'. Logical mode can be
defended as a covert category in Dani distinguishing questions from
statements and commands, but in the analysis adopted here, the oppo-
sition in logical mode is between question and non-question or inter-
rogative and non-interrogative, and the distinction between command
and statement is treated in terms of event mode categories. Note that
exhortations as a kind of command can be either questions or statements;
I.e. non-questions:

\[1-1\]

\text{5/7-8/}

\text{hat fanka. 'Go (later)', (stated exhortation).} \[1-2\]

\text{5/2-3/}

\text{hat sanok? 'Will you come to go?' (questioned exhortation).} \[1-4\]

This \text{when parallels propositions of fact:}

\[1-4\]

\text{5/7-8/}

\text{hat tken. 'You sent', (factive mode, statement of fact).} \[1-2\]

\text{5/2-3/}

\text{hat tken? 'Did you go or Are you going?' (factive mode, question
of fact).}

Statements about the future are also parallel:

\[1-4\]

\text{5/7-8/}

\text{hat tken. 'You are going to go', (potential mode, future, not a
question).} \[1-2\]

\text{5/2-3/}

\text{hat tken? 'Are you going to go?' (potential mode, future,
question).}

Commonly, English grammar treats 'declarative', 'interrogative' and
'implicative' as members of the same set of mode categories, and
Halliday has adopted this view. However, Dani handles the contrast
between command and statement in the system of event mode categories
diagrammed in Figure 12, below. This elaborates the diagram earlier
presented in Figure 6, p.188. The dotted line represents the contrast
between 'hortative-implicative', a potential mode category, and other
event mode categories, corresponding to the contrast 'command' versus
'statement' and 'question' together. It will be noted that 'hortative-
implicative' is a marked category, as indicated by the plus sign
adjacent to that label, in opposition to non-implicative potential
categories; but that it is an unmarked category, as indicated by the
minus sign below the plus sign, in relation to the subordinate hortative and imperative categories. Of these, hortative appears to be the

FIGURE 10
SEMANTIC RELATIONSHIPS OF EVENT MODE CATEGORIES

(-) Potential mode, widest sense  

Pastive (+)  

Hypothetical (+)  

(-) Potential mode, narrower sense  

(-) Non-imperative  

Hortative (+)  

Imperative (+)  

(-) Hortative

Although unmarked category and imperative the marked category, despite the fact that some hortative forms consist of imperative forms

plus an affix. Dani treats the contrast 'interrogative' versus 'non-

interrogative', however, in terms of covert categories of logical mode, almost completely independently of the contrastive event modes.

'Question' versus 'non-question' is a contrast related to utterances as such; 'command' versus 'non-command' is a contrast relating utter-

ance participants to events. The Dani distinction of event modes, as categories referring to events, and logical modes together with dialogue

modes as categories referring to utterances, perhaps illuminates a con-

trast that is relevant for general grammar.

The inter-relationships of these modal categories are partially
diagrammed in Figure 13. Lines and brackets indicate selectional
possibilities and restrictions. Thus a predicate verb may be marked
for any possible event mode, but a non-verb predicate may include only
an implicit factive or potential event mode category. If the imperative
category occurs only non-interrogative logical mode is possible. The
vertical lines following the label 'question words' under logical mode
categories indicate that dialogue mode markers are not commonly
observed following question words. There are several problems not
handled in this diagram. Real questions are not distinguished from
rhetorical questions, although they are obviously in almost all cases
distinguishable in the intent of the speaker and the understanding of the
addressee. Further, the diagram does not specify the domains of these
modal categories. Clearly event mode is a category relevant to events
and other predications, while both logical mode and dialogue mode are
in some sense utterance categories, even though a single utterance may
indeed include more than one marker of these categories.

**FIGURE 15**

INTERRELATIONSHIPS OF DANI MODES

<table>
<thead>
<tr>
<th>PREDICATE TYPE</th>
<th>OBLIGATORY EVENT MODE</th>
<th>OBLIGATORY LOGICAL MODE</th>
<th>OPTIONAL DIALOGUE MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verb</td>
<td>Hypothetical</td>
<td>Interrogative:</td>
<td>Invitational</td>
</tr>
<tr>
<td></td>
<td>Pactive</td>
<td></td>
<td>Decisive</td>
</tr>
<tr>
<td></td>
<td>Potential:</td>
<td></td>
<td>Deferential</td>
</tr>
<tr>
<td></td>
<td>Future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-verb</td>
<td>Hortative/Impressive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-implicative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.3.4. Attention Signals

Another set of elements marginal to utterances comprises the short
utterances which Prie referred to as "signales of attention" (1952:49).
During or immediately following an utterance by one speaker there may
occur short utterances by his addressee to indicate agreement, surprise,
and similar reactions, or simply to assure the speaker that he is
listening. These might be treated as discourse marginals but appear to
be better considered as utterances by one speaker which are marginal
to the utterance of another speaker. In the following example, speakers
are identified by capital letters:

K esaa hane i laka, 'there-for something-to-say he-went, i.e. He
went off for a swim'.
A ya? Yes? i.e. Is that so?
K i laka-ne-te,... 'to-say he-went-setting-topic-marker, i.e.
and after he left (for the swim)...'

In this and many other examples, these attention signals are clearly
marginal to the content-carrying utterance, which continues uninterrupted
or takes up again as if uninterrupted. Greetings also frequently serve
as attention signals, but these require a response from the other
speaker; in this case both greetings are marginal to the content-
carrying utterance:

B attaykhuhku shekky, 'we-did-that-long-ago I-believe, i.e. That's
what we did, you know.'
J hal-le-ok, 'Greetings.'
6.3.5. Internal Margins - Quasi-quotatives

If attention signals by the addressee are marginal to the utterance of the speaker, certain elements in the speaker's own utterance are primarily concerned with the utterance as such. One such element is the stylised kind of quotation, together with some similarly used devices, employed to refer to the authority appealed to in some kinds of discourse. The most common occurrence of such a device is the use of a quasi-quotative formula which might be glossed 'they say' when telling a folk tale. There are good indications that this kind of device is an utterance-related phenomenon. First, the continuity of the narrative content is unaffected by the quotative elements, and there is no marked continuity relating the quotative elements to each other. Quotative verbs functioning primarily to mark quotations in narrative, however, are often affixed for relationships of sequence, simultaneity, etc., as part of the narrative continuum. Contrast these kinds of elements in the following example:

...sijakkyyo ykyh-lakoukwas yly'lay. ykyh lakouk-whasik-he....

'sharcouf-deictive saying--they-were-long-ago-saying--they-are saying--they-were-long-ago-prior--topic-marker, i.e. They were saying, "It's charcoal", they say. And then (after they were saying that)....'

Here the first verb, ykyh-lakoukwa 'they were saying long ago' is a quotation verb in the narrative, and the narrative continues by a recapitulatory repetition of that verb. But the following verb, yly'lay 'they say' is inserted in the sequence without interrupting the continuity. In this version of this folk tale, nearly every sentence concludes with this stylised quasi-quotative element. In effect it serves as signal to the addressee that he is hearing a folk tale. A second evidence that these quasi-quotative elements are tactically marginal to the utterance rather than the sentence is that other versions of these folk tales, recorded from other informants, may utilise a single quotative verb at the end of the whole tale. One alternative version of the folk tale from which the last example was taken is very much longer but includes no quasi-quotative device until the end:
ekasak a'nsak, wenevulgo, 'they normally say that known-to-one of us. folk-tale, i.e. That's the way they tell it (you wouldn't have known about it). It's a folk-tale,' In other kinds of discourse the verb akkyky 'I believe' is very frequently encountered in a similar function. This is not used as a disclaimer, as one might suspect from the gloss, to say 'I believe but am not sure,' but rather as an assertion to say 'I am confident.' Of more than ninety occurrences of this form in this kind of function in the corpus, more than sixty refer to events of which the speaker had first-hand knowledge: 

...ekasi wuhiphi akkyky, 'carrying I-went-out-long-ago I-believe, i.e. I slumped (wish) her you know (literally I believe),' In some cases both speaker and addressee had first-hand knowledge of the event involved:

...jokomathl akkyky, 'tell-I-transferred-to-you(sg) I-believe, i.e. I told you that you know.' In these examples the freer translation has included 'you know' rather than 'I believe,' for this English device serves a similar discourse function to the Demi device and like the Demi device represents a positive assertion rather than a disclaimer.

There are cases where this form is used for events of which neither speaker nor addressee had first-hand knowledge. One folk tale was recorded with six occurrences of this verb in this function, as well as three occurrences of yly'-lay they say.

sve lappv sty one pakwek akkyky, welaikh yly'-lay. 'bird lappv that his voice very-dry I-believe. it-continued-long-ago saying--- they are, i.e. That bird the lapp is very harsh in what he says you know. Be sure that say they say.'

...lol-isasuwha akkyky. lol-isasuwhame-te, one pkv lek asekha yly'-lay. 'bird-up they-did-on-them-long-ago I-believe bird-up--- they-did-on-them-long-ago-setting-topic-marker, his voice dry not it-became-long-ago saying--- they are, i.e. They burned him up (like trash) you know, and after they burned him up, they say his harsh talk disappeared.'

It is to be noted that akkyky 'I believe' in this quasi-quotative function occurs only in the simple factive first person singular form. Any other form of the verb signals another sense of the verb. The forms of 'say' used in quasi-quotative function are less restricted, although quite limited; past progressive, remote past progressive and normal notion forms have been recorded. In the case of 'I believe' the speaker's relation to the function of the element is explicit; it is in Austin's terms a kind of 'performative verb.' In the case of
they say', the speaker's relationship to the formula is implicit and might be paraphrased as, 'I am telling you that others say that'.

There are also other elements which do not include verbs but which appear to function very similarly to the quasi-quotatives akkyky 'I believe' and ylyl-lay 'they say'. Commonest among these is a series of elements usually including the postposition -hakke 'sort, resembling', plus, usually, a demonstrative jy 'this', jona 'here', or else a 'there-

far-away', plus either the interjection as 'of course' or the topic-

marking clitic -he. Combinations observed in the corpus are:

...-hakke joma-te; ...-hakke joma sa; -hakke loma-te; -hakke jy-te;

-hakke atty-te; -hakke jona; -hakke joma-ty; and perhaps to be

included here also: -ama-ty; -ame-ty; and aly-ty;

All of these combinations occur in contexts where the speaker is trying to make a point or persuade the addressee of the matter in question. Because of this, they do not normally occur sprinkled through whole texts as do akkyky 'I believe' and ylyl-lay 'they say'. These combina-
tions are in no sense disclaimers that could be glossed 'it looks

like' or 'it's sort of...' but rather are persuasive elements that

might be glossed 'here (or there, etc.) it is plain that....' and the

final clitic or interjection invites the addressee to be persuaded by

the evidence. Several examples of these forms come in a long travel

narrative about a trip on which two of the party were lost and

cannibalised in an energy territory. The speaker, a leader of the party,

is addressing a fellow villager of the victims and trying to establish

his own innocence in the tragedy:

it alone Venakasyoppolik lakovaha-hakke loma-te. 'they there-

far-away Wenagoaagy (man's name) behind him they went-long-ag-

sort there-distant-topic-marker, i.e. They followed Wenagoaagy,

don't you see?'

That no disclaimer is involved is clear from references to the speaker's

own activities:

...vete'-ma jako. mite-wakku-hakke jona-te. 'subject-continues

(there)-setting so-then. we-topic-marker we-came-long-age sort

here-topic-marker, i.e. While they were there, we'll now. We

arrived, don't you see?'

Other examples occur in a text in which the speaker recounts an

argument he had had:

hajau-meike hakke loma-te, helan-he. 'you[sg]-garden-nominaliser

sort there-far-off-topic-marker take-(dig)-it-for-yourself-topic-

marker, i.e. It's your garden, don't you see; well so ahead and

dig it yourself!'
It appears thus that there are three contrastive kinds of what may be termed 'utterance quotes' or quasi-quotatives, specifying the speaker's appraisal of his authority for the content. (1) Most folk-tales are recited by most speakers with the quotative formula 'they say' repeated after many, sometimes nearly all, the sentences in the narrative. This element served to say, in effect, 'I am telling you a folk-tale'. (2) In several kinds of discourse, including some first person narratives, the formula akkyky 'I believe' is employed to report confidence in the preceding sentence or utterance. (3) In discourse involving persuasion or argument by the speaker one of a number of possible formulas may occur, formulas which might be woodenly glossed as '(it's) like this here', but which function to report an event to the addressee with added persuasiveness. Although the surface realizations of these three kinds of 'utterance quote' are quite disparate, it is to be noted that implicit in each of these formulas are the structurally relevant categories 'speaker' and 'addressee'. It is as if in each case the speaker said, 'I am telling you a folk tale,' or "I am telling you this confidently" or "I am telling you this for you to appraise and concur in my judgment." But there is no verb in first person singular except in the 'confident utterance quote' with akkyky 'I believe'. When it is suggested here that the other formulas also imply something like, 'I am telling you', it should be made clear that it is not necessary to handle these cases by actually positing a 'performative verb' and then deleting it (cf. Ross 1970), but rather by including the elements 'speaker' and 'addressee' explicitly in the semological structure posited for such sentences.

Of course there are many utterances with none of these marked 'utterance quote' categories; these are not obligatory. When the markers do occur, they are marginal elements to the utterances of which they are a part and refer to the speaker's report to the addressee of his authority for or confidence in the events reported.

6.4. THE BODY OF THE UTTERANCE

Attention to utterances has thus far been directed to marginal elements like dialogue mode, logical mode and utterance quote categories. All of these elements are directly involved with the categories 'speaker' and 'addressee' implicit in every utterance. It is useful to turn attention back to the 'main line' of events in the discourse, those referred to as 'narrated events' in the description of event mode categories in Chapter 4. It is the semological relationships among these events that Gleason's 'event line' was designed to portray (1968):
(48-52). It is useful to examine the surface signals of relationships in one short segment of Dani narrative text to see how one utterance is tied together. A narrative is chosen to begin with because the connective devices employed are more explicit and isolable than in some other kinds of discourse. A part of a text from the filed corpus follows, broken up into small units as indicated by intonation contours and overt clitics marking units; the full text may be seen in Appendix B:

1 A'ly-te, that-in-immediate-context-topic
2 Oteke akwe 'noko, Ogera his-wife that-known
3 taul-hoko-te separating-manner-topic-marker
4 Welesi lakelkhe akky, Welesi(place) she-went-long-ago I-believe
5 Welesi lakelkho-i-te, Welesi she-went-long-ago-setting-topic-marker
6 Oteke, Ogera
7 aktymy pyte inom-hoko his-younger-siblings tuo they-together-manner
8 lakoukhusik-ke, they-went-long-ago-prior-topic-marker
9 ws they
10 mel-mekke filler-possessive
11 Pililo-mekke Pililo-possessive
12 wolok wakoukwa akky, carrying they-same-long-ago I-believe
13 wolok wakoukwa they
14 lamapulik carrying when-plural subject-same-topic
15 imeuk hyling yling them behind-them
16 la-wa waka-lakoukwa, their feet tracking tracking
17 la-la-wa they-same-long-ago-topic-marker
18 neuk akoukwa they-same-long-ago-adv-locative
19 Pililo la-en-he, Pililo and-associates-by-topic-marker
20 wak haw-hlyk-he, pig grab-having-done-topic
21 Oteke seke tum-hoko they-struck-him-long-ago I-believe
\[ wakoukwa akky, \]

It is immediately observable that markers, representing recognizable phonological sentence terminals, have been written following items 4, 12, 16 and 21. These phonological terminals have been treated elsewhere (Bronley 1961:57-58), but it is to be noted that in this segment and very commonly in narrative discourse there are other signals of sentence breaks in utterances. At three of the four breaks an 'utterance quote' element, akky, occurs, and at each of the breaks a recapitulatory verb
occurs to begin the new sentence and tie it in with what has preceded.
This piece of text can be re-charted in terms of these units and the
verbs and events referred to, numbering the sentence units with Roman
numerals, the real-world events with letters, and the verbs referring
to those events with Arabic numerals:

<table>
<thead>
<tr>
<th>Utterance-Event Verbs</th>
<th>Narrative-Event Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I akkky 'I believe'</td>
<td>a. lakelike 'Ogege's wife went'</td>
</tr>
<tr>
<td>II</td>
<td>b. lakelikho-me 'after she went'</td>
</tr>
<tr>
<td></td>
<td>c. lakoukwhasik-he 'Ogege and two followers went and then'</td>
</tr>
<tr>
<td>akkky 'I believe'</td>
<td>a. wok akoukwha '(Ogege and followers) brought a pig'</td>
</tr>
<tr>
<td>III</td>
<td>b. wok wakwem-he 'when (Ogege and followers) brought it'</td>
</tr>
<tr>
<td></td>
<td>c. wakoukwha-te 'Pililo and followers) came'</td>
</tr>
<tr>
<td></td>
<td>d. 7. wakw-lakoukwha 'Pililo and followers) were coming'</td>
</tr>
<tr>
<td>IV</td>
<td>e. 8. wok wakoukwhasii-no-nen-he 'after (Ogege and followers) had-brought-it'</td>
</tr>
<tr>
<td></td>
<td>f. 9. wakoukwha-nenke 'they (Ogege and followers) came-but'</td>
</tr>
<tr>
<td></td>
<td>g. 10. hakw-hylik-he 'Pililo and followers) having grabbed (the pig)'</td>
</tr>
<tr>
<td>akkky 'I believe'</td>
<td>h. 11. watsukwha 'Pililo and followers) struck (Ogege)'</td>
</tr>
</tbody>
</table>

There are thus eleven main verbs (wok has been counted with the
following motion verbs for this purpose, but could as well be counted
separately) referring to six real-world events, organised in four
sentences. The disparity in number between verbs and events is the
result of the same events being referred to at the end of one sentence
and at the beginning of another, to tie the following sentence into the
discourse.

The initial sentence links the whole discourse (of which what has
been represented above is only the first segment) into the situational
context with the demonstrative aly, referring to a query about this
incident. This demonstrative is thus in the outer margin of the dis-
course, although included in the first sentence. From this beginning,
the content of the utterance (which in this monologue is coterminous
with the discourse) is organised into sentences, as noted, with
recapitulatory verbs linking sentence to sentence. Note that the
relationships within sentences are handled by quite different mechanisms, not by recapitulation. Such recapitulatory links have been reported for a number of languages (e.g. recently Tonga of East Africa by Jones and Carter 1967:111, 118; Sarangani Bisaon of the Philippines by Longacre 1970:792). This is by far the most common sentence connective device in any Dani discourse where the content is basically oriented in time sequence. The recapitulatory verbs function thus like conjunctions in many languages where sentences have overt linking conjunctions, e.g. kai in Kokni Greek.

It was earlier suggested that these linking verbs might be considered as duplicate realizations in the 'surface' structure of single elements in the underlying semological structure, the repetition being automatically inserted by the grammatical specifications of clause and sentence construction. There are serious problems when one tries to apply this suggestion to real data however. The speaker in narrative discourse does not always opt for a recapitulatory verb as a sentence link, although he often does. Further, if he does opt for a recapitulatory verb as a sentence link, he does not automatically insert the last preceding verb. Note in the segment above that both sentences III and IV are linked back to sentence II by recapitulation of the last verb phrase in that sentence. It appears that this linking device must be specified in terms of a semological element calling for a recapitulatory link and further specifying the event to be recapitulated.

Other options for sentence linking are available. A frequent device is the pairing of terms or larger constructions by means of shared and contrasted components of meaning:

holl pv-vke-emeke...jkkuk-iskhe, 'embush up--direction--sort come-out-of embush—he-said-long-ago.'

mekke-neke walu'lux laker iselkhe... 'down--direction--sort going-out ascend he-came-long-ago, i.e. The ambush that was set up the hill came out. The one down the hill (came) out and came up,'

sp aty stouk-o. skwe hvk-o. 'man that opposite-see-sibling--decide his-sons wrong--decide i.e. That woman is that man’s sister. She is not his wife.'

Sometimes the linkage of sentences is not in terms of semantic components of the words in the discourse, but in terms of common membership in what Fish would call a 'behavioural':

ten hakatela? ninety' le'ma hvk-o, 'courtship-sing they-did.

reflexive query hill—we not-setting wrong--decide, i.e. Did they have a courtship sing for themselves? But it’s not as if we hadn’t had a man killed,'
In this example the speaker and hearer both understand that courtship sings are held only after battle victories, i.e. after a man has been killed by the local group since a local person was killed by the enemies. Therefore the speaker answers his own question by noting that it would be wrong to think a courtship sing possible.

hesi jukulhatek atty. wa'-lakehake they-normally-change-colour that. die--they-normally-know that. i.e. So it is they swear on mud. So it is they die.

In this last example both speaker and addressee understand that 'swear- ing on mud' is a symbol of mourning for the dead. These examples indicate that the relationship of vocabulary elements in culturally defined assemblages as well as in linguistically defined pairings and groupings is employed as a linguistic device.

In any text which is primarily sequence oriented, such as narrative or procedural discourse, by far the common sentence linking device is, however, the use of recapitulatory verbs, and there must be, as we have noted, a semological element selecting this kind of linkage where it occurs and further specifying the event to be recapitulated.

If this is the case, this is further evidence that the sentence as a unit is not only a surface unit but also represents or realizes a sentence analog in the underlying semological structure, for linking by recapitulation is in Dani clearly a phenomenon describable in terms of sentences, not clauses or events or utterances as wholes. This conclusion is contrary to my own earlier judgment and to the conclusion of Taber, (with which Gleason agrees) that there is no such unit as the sentence in the semological network (Taber 1966:90-91; Gleason, personal communication). Cromack modified this position to define sentences as lexemic units including one independent clause, defined as a clause with a clitic realizing a sememic node (1968:145-146), but he comes out in monologue with many sentences which are coterminal with the monologue. It seems unlikely that such sentences are at all isomorphic with the phonologically recognizable units that have been called sentences here. The units recognizable by phonological criteria as sentences seem to be simply shorter units of the same kind as the "major text blocks" that Taber and Cromack recognized as semologically relevant units by marking them on their 'story line' in their recticular model of semological structure. And this 'story line' seems to be a representation of what Halliday calls "the textual organization of language" (1970:162).

Figure 14, p.316, is a simplified and schematised diagram of what is here suggested to be the semological structure underlying the segment of text used as illustrative in the discussion of recapitulatory verbs.
as sentence links. The diagram is slightly modified from the reticular diagrams developed by Gleeson, Taber, Cromack and others. Most importantly, the utterance participants are here explicitly included in the diagram, and sentences are recognised as textual units, with termini and linkages specified on what has been re-christened the 'text line'. This study has not included extensive diagrams of this sort but, for a programmatic beginning, includes this diagram as a suggestion of some small but perhaps important ways in which the 'reticulum' developed by Gleeson and his students may be modified to be an even more useful device for representing the semological structure underlying texts.

The major part of the work in analysis and description of Dani discourse structure remains to be done. The specific patterns employed in sentence linkage could alone occupy a sizable monograph (compare Williams' work on English 1965). Time and space permit only this brief introduction and evidence to indicate that sentences are linked by linguistically relevant devices which must be realisations of elements in the underlying semological structure.

6.4.1. Utterance Links

The same mechanisms that link sentences together in strings in utterances are also used to link utterances and even discourses. A lad who had been talking about his father's supernatural 'servants' had first discussed a lizard which could track and kill thieves. The second story, recorded a few minutes later, was about the night bird called sijo, and began:

\[ \text{akeke-te sijo. Healgyik atakekkete. 'one-of-group--topic-marker sijo. Healgyik-} \text{-(name) his-possession--topic, i.e. Another one is the sijo, of Healgyik's 'possessions'.} \]

Indeed all the mechanisms which can be employed to link sentences (and only a few have been introduced here) within utterances can also be employed to link utterances of different speakers in discourse. There do not happen to be any examples of recapitulatory verbs linking utterances in the corpus, but this mechanism surely occurs in sentences like: A: \text{akehl. 'if singular-subject-will-go i.e. I'm going.'} B: \text{lyik-he, westik-sat 'having-gone--topic singular-subject-will-com---

satisfaction-query, i.e. After you go, will you come back?'}

Of course there are special utterance links, particularly questions followed by answers, exhortations or commands followed by comments of assent or refusal, statements followed by comments, corrections, challenges or exclamations. While all examples of such linkages in the corpus have been filed in the course of this study, there is very little that is distinctive. Most such patterns resemble patterns
familiar from English: 10
J Sokelk-opa cie nel-a, Wajasew a 'Nogeljoka boy filler--invitation, 
Wajase--invitation, i.e. is Nogeljoka that follow, what's-his-
name, Wajase?'
B lek. 'Go.'
H ...lamek-en.... 'you(go)-go-later-source, i.e. ...so that you can
...go.'
B y-a. minn levok. 'yes--deeds, we-together let's-go-later, i.e.
all right. Let's go together.'

6.4.2. Utterance Segmentation into Sentences

The above extremely sketchy survey of sentence and utterance linkage,
showing some of the ways in which sentences are tied together in dis-
course, may be complemented by a brief survey of some devices employed
to segment discourse into sentences. There are clear indications that
the length of sentences is deliberately manipulated and that the system
involved has to do with the flow of information in discourse. As a
background comment, it may be noted that the Dani patterns of intra-
sentence strings with cumulative build-ups of events in sequence, or
simultaneous events, allow for rather long sentences, particularly in
narrative text. Counting clitics as parts of the words to which they
are cliticised, so that the count is lower than for English, sentences
of forty to fifty words are not uncommon in narrative, and one of over
eighty words occurs in the filed corpus. Nortatory discourse and
dialogue are characterised by shorter sentences. However, as a text
becomes exciting to the speaker or he wishes to convey a sense of
excitement or importance to the addressee, the speaker very frequently
employs devices to interrupt the flow of the sentence and produce
shorter sentences. Those devices include makaik 'my sibling',
hal-la-ek 'greetings', and other greetings; wulak 'man!' used in this
dialect only in this function as a kind of interjection; joke 'that's
it' or 'there, now!' used elsewhere as the cue for united effort when in
English we would say 'one, two, three, prec etc.; hink 'inquiry';
we, and other interjections. In this way sentences get interrupted
into units which are incomplete in terms of grammatical structure but
are phonologically marked as sentences. The following example comes
from a travel narrative near the dramatic denouement:

/3-3/
tow-en laak heq' neken, mounatin source this-way that-way sort

/4-4/
weling giving cheekaq-ke, strolling, strolling morning--topic

/3-4/
joke. that's-it
Wekisa na aten hak joko.
pl akouwahasil wete'ma

Wekisa (place) down there like that's-it
desend they-same-long-ago-prior subject
continue-setting

/j-3-a/
joko.

that's-it

nit-he

we-topic-marker

wakakusake jone-te.

we-same-long-ago sort here-topic-marker

Free translation: 'Because of the mountain it was back and forth, round and round, and in the morning—we'll now. It was like right down here (literally there-close) at Wekisa—we'll now. They had come down and were there and then—we'll now. As for us, we arrived, didn't you see?' This translation fails to communicate the sense of excitement intended in the Dami interrupted sentences. But note that if the interrupting words joko are eliminated, the first point at which the sentence could be stopped and be a grammatically complete unit in terms of marked dependence and independence is after wakakusake in the last line. There are clearly grammatical constraints upon the placement of the interrupting elements; none has been observed, e.g., within the verb phrase consisting of a potential stem of a non-motion verb followed by any form, including periphrastic forms, of motion verbs, or any verb phrase consisting of a main verb plus auxiliaries. On the other hand, interruptive elements have been observed following only a conjunctive particle plus the clitic -he.

...jy-nen-he

this-source-topic

neil-ekken hakhykhy-lakaki-te my-eye seeing-for-myself-I was-long-

age-topic-marker

joko.

well-now or that's-it

ap tathikomo.

man she-bore-long-ago-setting

mene-he.

then-topic-marker

joko.

well-now

napput ap tathikomo

my-mane-sen man she-bore-long-ago-
sitting

wok-hasikl

take-I-ed-on-him-long-ago

lak-en-he

note-source-topic-marker

joko.

well-now

svpytvu tsakosoko nalok-he

sweet-food steamed-manner having-
eaten-topic-marker

wo'-lakhe-lvphatek.

more-inner-reflexive-they

Free translation: 'On this day (counted on fingers) I had a good look for myself, and—well. She had given birth to a boy. And so,—well.'
Since she had given birth to a boy, my son, I received him (killing a pig for him). When there is no (pig)-well. They eat steamed sweet potatoes and just go out themselves (like mothers with their babies).

There are a number of other examples in the texts in the corpus which further demonstrate that the length of phonologically recognisable sentences is deliberately reduced in certain contexts by the insertion of sentence interrupters to achieve an effect of involvement and heightened interest. There are thus, in effect, two kinds of sentences which in most cases are isomorphic: one is a unit defined by marked dependency relationships within and between clauses; the other is a phonologically defined unit recognised by intonation contours, and/or pause or potential pause, often accompanied by interjections.

It appears clear that both kinds of sentences are units determined by the structure of discourse. Sentences defined in terms of chains of marked grammatical dependences are, as noted above, typically much longer in narrative than in hortatory discourse, in contrast to the pattern in some other languages.

But sentences as phonologically recognisable units are sometimes non-isomorphic with the grammatically defined units, and in these cases sentence segmentation appears to be imposed by a governing mechanism signalling the speaker's involvement and excitement and stance toward the addressee. These are also discourse-related phenomena. Both kinds of sentence are thus units in the organisation of texts that must be represented in the semological structure underlying surface utterances. Neither is determined automatically by rules of clause structure. The markers of sentence beginning and ending are, in both kinds of sentence units, recognisable unit boundary markers in the structure of texts just as much as major text block boundary markers.

6.4.3. The Organisation of Information in Sentences

The discussion above suggests that the sentence is, from one point of view at least, a unit of text determined in the structured organisation of texts as communication or information bearing elements. Traditionally sentences have been defined in terms of grammatical structures of dependency; Bloomfield, for example, said that "...each sentence is an independent linguistic form not included by virtue of any grammatical construction in any larger linguistic form" (1933:170). This kind of definition is implicit in the concept of sentence in transformational grammar as the unit to which structural descriptions are assigned (Chomsky 1965:4-5). As a matter of fact, Bloomfield noted that features of modulation or intonation mark off sentences, and these
are of course not immediately definable as features of "grammatical constructions" (Bloomfield 1933:114, 170-171). Even Lyons' recent treatment of the problem does not advance beyond an ad hoc mixture of two kinds of criteria for defining sentences (1968:176, 180). Longacre's recent work has been pioneering in describing the grammatical and logical structures of sentences as distinct from clauses, but he has professed to downgrade intonation as a guide to sentence boundaries (1967:23; cf. 1970). As noted in the discussion earlier, Taber, working within the framework of Gleason's version of stratificational grammar, confined the relevance of the unit labelled sentence to the lexeme or grammatical stratum and explicitly stated that no such unit as the sentence exists on the semiological stratum (1966:90-91). Cronin, in the same framework, defined sentences in Cashanawa as lexemic units which are the domain for realising semiological modal elements, but came out with some monologue-long sentences (1968:145-146). Working with Dani data has shown that there are recognisable phonological criteria for terminals of units which may usefully be called phonological sentences (see Bromley 1961: 57-58). Halliday's recent work has emphasised how very closely units of information are related to intonation bearing units (1970:162-3) and it is a useful working hypothesis that the phonological sentence is one kind of unit in the system of textual organisation or information distribution.

This exploratory sketch recognises the phonological sentence as a useful and relevant unit of discourse, and further recognises that this unit is not always isomorphic with grammatically defined sentences. However, as a starting point, attention may be turned to cases where the two kinds of criteria coincide to define the same units as sentences. In such cases, we may observe several things about positions within the sentence:

(1) The final position of the sentence is the most fixed. In a sentence including a finite verb, this comes last, except that it may be followed by a negative particle like lek 'not' or hwe 'wrong', a demonstrative referring back to the clause in which it occurs or to the sentence as a whole, or one of a few discourse-related interjections or utterance or discourse marginal items already discussed:

an hopuk ki saka-lokekin lek. 'I later enter coming-will-continue not, i.e. I'm not going to keep on coming in here any longer.'

lakoukwa a'no. 'They went long ago that we know, i.e. They went a long time ago as you know, or That is, they took a long time ago.'

tok enek-he, ninopa wakata' aty. 'Arrow only-topic-marker to-us it-name-prior that, i.e. Only the arrow got to us, and there it is, or That is the arrow; that is all that got as far as us.'
ke ylukwe ayya ne, 'truly and at-one-of-courses, i.e. The trails come together there of course.'

(2) The initial position in the sentence is much less fixed and may be occupied by almost any other element in the sentence, including any one of the major role-occupying participants in the event. But initial position is also related to the sentence as a unit, and not just to the event referred to in one clause. Not infrequently the term which occurs in initial position is repeated later in the sentence in normal position for its clause function:

inappelak-at, at-an lasikin khemu ylvk Wettipo-heselo
inappelak-at ylv-ley,... they're-lying-predicador him-by
singular-subject-will-kill-then he said-saying having-said the
Wettipo-Heselo their-lying-predicador saying-they-are, i.e.
They are lying, the Wettipo-Heselo are just lying and saying,
"Be said he was going to kill us (literally them)."

We have noted already that in narrative text, sentence initial position in sentences that are not initial in utterances is commonly occupied by a declarative verb linking the sentence to what precedes. Initial position thus serves to link the sentence with the context and to specify topic elements in the sentence:

Agent initial: an jokotte'sne, Hesehen a'me atty, wasikin.
'I today Keeyem inside that singular-subject-will-kill-him, i.e. I'm going to attack the Keeyem in there today.'

Patient initial: Tips a'moka ohealek wasikin. 'The that-known tomorrow singular-subject-will-kill-him, i.e. Those folk I'm going to kill tomorrow.'

see an akilke seka-nom-a. 'Bird me one-of-group out-row-iyou transfer-to-me-to-move-orientation, i.e. Please cut me some of the bird, or (that) bird-please cut me some.'

Beneficiary initial: hek elak wok-osi ne. 'your(ng)-woman's-child it's-breast move-to-transfer-to-him come, i.e. Come give your baby the breast, or your baby-some give him the breast.'

Place initial: lysaen-he at-at hokat wathere. 's downtown-clause-mark finisher inside they-made-decision, i.e. Across the river they have finished making peace.'

Time initial: ohealek kolek atoko-at nykky-lakeileke. 'next-day-simultaneous that-way-predicador saying-he-was-long-ago, i.e. The next day he kept going just the same way....'

Manner initial: lo-toko nykka-at-ta al'a hano ahana ne. 'outstandingly ancestral-spirits inside-him good it has become-setting maybe, i.e. (it worked) nicely the ancestral spirits have become well-disposed, maybe.'
Clearly the clause elements subject, object, indirect object, verb occur in that order as the unmarked order, but seldom are all these elements realised in independent words or phrases in one sentence; there are only three examples in the corpus. Time and place specifications have not been in the central focus of attention in this study, but it is clear that both are complex. Place specifications include 'place toward or at which' an event is oriented. Time specifications include at least 'time when' and 'relative time, or order of events'. The unmarked order for time specifications appears to be following the subject for 'time when' but preceding the verb for 'order'. Place specifications most commonly follow the subject and any time specification, but occur in various orders with relation to objects and verbs, depending on meaningful constituent relationships. Nearer terms occur in unmarked order immediately preceding the verb. The point here, however, is that any one of these elements may occur initially.

It should be noted that the term in initial position is not necessarily 'old information' recoverable from the linguistic context or known from the non-linguistic context, although it frequently is. In general the sentence moves from the most known element to the least known element, with the 'least known element' not necessarily or even normally the final verb, because of its fixed position, but often the element preceding the final verb or verb phrase. Note the effect of shifting elements in the third example on page 322:

jokotte 'ne an Heseegen a'ma atty wasikin. *Today I'm going to attack the Heseegen in there (as over against some other group of enemies, who may be attacked some other day).*

Heseegen a'ma atty an jokotte 'ne wasikin. *Those Heseegen in there I'm going to attack today (as over against some other day).*

The example as originally given in the text is a statement about the speaker; the first perturbation above is a statement about today and its plans; the second perturbation is a statement about the Heseegen.

The 'initial position' in sentences, as in utterances and discourses, is not restricted to one term or element. Often several distinct elements are observable, including: (1) a linking element tying the sentence to the preceding discourse or the 'context of situation'; (2) a topic participant; and (3) often some other topic element relating to the topic participant; one example begins:

nen an Wya elesien aty ekke na! akker wusa jokoly-kh... "then I Wya headwaters-at that leaf dark when-it-becomes weeds having-needed--topic-marker, i.e. And as for me, when the Wya headwaters garden leaves get dark and I have needed it,..."
Here nen is a generalised conjunctive particle serving as a link, as 'I' is the topic participant, and Wya states my 'that one at the Wya head'-water' is a location term functioning as topical.

4.4.3.1. Sentence Appendages

The 'final position' of the sentence is fixed in terms of the grammatical structure, as noted above. But not infrequently the speaker recalls some item omitted from the sentence and adds it at the end of the sentence grammatically and intonationally. He adds the omitted item with lowered intonational pitch:

\[\text{Wamare-wa ka-si}kha \text{ with } \text{Wamare-wa} \text{, } \text{Wamare-wa} \text{ as one of group he-killed-him. Mean} \text{en-sort, i.e. wamare killed another, a Wamare fellow.}\]

Such appendages were considered separate phonological sentences in my earlier description of phonology (1961:61). This is analogous to Peterhouse's later and much more detailed description of similar elements as 'dependent sentences', although she entertained and then rejected the alternative description of the appended units as parts of the preceding sentences (1963:51). If sentences are at least in one sense derivable in terms of the arrangement of information, these appended elements, which are in Dani normally marked as appended by the intonation contours, are better treated as parts of the preceding sentences.

6.4.3.2. The CLITIC -he

Linear order is not the only device employed in organizing information in the sentence. Lower Grand Valley Dani texts are sprinkled with multiplied occurrences of the clitic -he (realized as -he after consonants, -as after vowels). This clitic may occur at intonation contour terminal and marks a point for possible pause. Very frequently this clitic occurs with items which are also in sentence initial position:

\[\text{aikla, nakeja-k-a, hahe jone-at lokos-a, ..., exclamation-declarative my-thing-declare you-topic-marker here-predicate you-stay-declarative, i.e. What a pity, son. Is for you, just stay right here! as-he stears, hahe at-tako selos-an wentsa-ethis-a mel-sa.}\]

\[I-topic-marker there, you-topic-marker that-way having-pur-source you-refused-me-invitation? filler-invitation, i.e. As for me, (my possessions are) there. As for you, had you made a display like that when you rebuked me?\]
Tek, minopa wakasik aty. nen sva-te, jona way' lek. 'arrow to-us is-same-prior that. then bird--topic-marker here some-not, i.e. The arrow did come to us; that is it there. But as for the bird, it didn't come here.'

In the examples above, the clitic -te occurs on sentence initial topic items. But this device also allows items which are not sentence initial to be marked as focal of special attention or as links to the preceding context or as topics. In an account of a ceremonial wealth presentation in memory of the speaker's dead relative, the speaker recounts his reciprocation of this presentation by killing a pig for the payment-makora:

...All wanyi-lakouwka-te, an kisiki-mekke, oan houkke ama wam it-he wet-sassik. 'his-intention taking-they-were-long-ago-topic-marker, I entered-long-ago--adverbative, gelding big those pig them--topic-marker kill-I-transferred-it-to-them-long-ago, i.e. ...they had been making the post-funeral presentation; I went in and killed a big gelding for them.'

In this example, the first -te is attached to the reciprocational link with the preceding context, but the -he attached to it 'them' in it-he allows this pronoun 'them' to occur in the normal unmarked position for an indirect object, immediately preceding the verb, but still be tagged as topical for this part of the sentence. It is as if the sentence were glossed, "They made a presentation to me, so for them I killed a big pig." It may be useful to consider that the item tagged with -he and all that precedes it in the same sentence is to be taken as thematic or topical, a constituent in construction with what follows.

This overt clitic is also very common as a marker of the appended status of sentence appendages; it indicates that the appended item is part of the preceding unit in terms of its content or information and is a topical or thematic appendage. Note that such appendages do not normally add new information but supply what was presupposed or not mentioned:

/3/ /2/ /1/ 
...yla'lay. inane-te. 'they-are-saying. their-talk-topic-marker, i.e. ...they say, with their voices.

/3/ /2/ /1/ 
akeihe-te sijo. Healylyk atakekka-te. 'one-of-group--topic-marker sijo. Healylyk his-possession-topic-marker, i.e. Another is the sijo (bird). of Healylyk's possessions.'

Imepo lokolek-at neka. wam epe-te. 'their-persons many they-ate--it. pig die-presence--topic-marker, i.e. Many of them ate it, the main part of the pork.'
6.4.3.2.1. ohe: Sentence-final Uses of -he

The function of -he at the ends of sentence appendages indicates clearly that this clitic is not merely a pause point, but does indeed mark relationships. This is even clearer in those cases where -he occurs sentence finally with no intonational or other indications of the presence of a sentence appendage. Such sentences occur as topics to which the addressee is invited to add the comment:

/2-4/
...helen-he. 'Dy it yourself--go on!'

/2/
...henll-ekken hopakik-er-he. 'Your(pl)-eyes you(pl)may see--
deferred-source--topic-marker, i.e. Please have a look at it.'

/2-4/
It a'askarte. 'They that-known--topic-marker, i.e. What about them (where are they)?'

This last example is the first comment when members were missed from a party of travellers. Similarly in everyday contacts, a person who meets another on the trail and greets him may ask about his plans or destination simply by tagging the second person pronoun with the clitic -he:

/2-4/
hat-he, 'you(sg)--topic-marker, i.e. What about you?'

These examples are clearly understood as inviting comment, as a kind of implicit question. The examples of one kind of 'utterance quote' introduced earlier in the discussion of utterance margins also include this kind of use of -he:

0 IIKKE hake jome-te. 'day midday sort here--topic-marker, i.e.
It's midday, don't you see.'

This example was a comment to persuade the addressee to push on on the trail. As was noted in the discussion of these formulas, they typically occur when the speaker is attempting to make a point or get the addressee to accept his evidence. Frequent in discourse the addressee utters an 'attention signal' at these points.

B nih-he wakku hake jome-te. 'we--topic-marker we-came-long-ago
sort here--topic-marker, i.e. As for us, we arrived, don't you
see?' (where the speaker comes to the critical point in a narrative
and wants to persuade the addressee of his innocence in the events
recounted).

A hel lapok. 'Greetings', (where the addressee signals attention, and
a sympathetic stance).

B hel-la-ok. 'Greetings'.
6.4.3.2.2. Successive Occurrences of -he

The examples so far in this discussion of sentences have included, for the most part, only one sentence-medial occurrence of -he. There is certainly no 'one-sentence one-occurrence' rule however. Even with simple sentences with single verbs there may be multiple occurrences of this marker:

nen hat-he hæseliik-he helan.... 'then you[sg]--topic-marker
your[sg]--baister-shell--topic-marker take-us-yourself.'

This example occurs in a text about a stolen baister shell. The victim of the theft visits the receivers of the stolen goods and asks for return of the shell, whereupon he is told that the thief should pay them compensation, but (in the example sentence) that he, the victim, may take his own shell. Similar multiple occurrences are observed discoursally initially:

nen at sve okolak ayt-te ayt-te Jaismo-mekke yly'-lak.
'then he bird agolaik that--topic-marker his-house--topic-marker
Jaismo-sori saying--they-are, i.e. then as for that bird the
agolaik, so far as his [original] home is concerned, he was) a
Jaismo (bird) they say.'

Since the use of this clitic is also connected with intonation contours and potential pause, frequently a hesitant speaker inserts this clitic along with repetitions and speech-filler dummies like mel:

/2/- /3/-
men, mel an-he, svkkvi-oak-he, kykyapit-at. '/-topic-marker
hesitation(repeated) my-head-topic-marker pointy-shaped-predicator,
i.e. 'as for me, well, as for me, as for my head, it is pointy-
shaped (meaning uncertain).'

In such hesitant speech, this clitic has been observed even after the generalized conjunctive particle nen 'and, then';

nen, he,
and-topic-marker
hat-he,
you[sg]--topic-marker
hastake kyppe ayt-te,
your[sg]-name Amaranthus that-topic
kay-pa-te,
your[sg]-home-at--topic-marker
kypp-te,
eMBED--topic-marker
lekk jome-te,
not here-topic-marker
an-he,
I--topic-marker,
an say-pa eloma-te
I my-home-at there-for--topic-marker
mottok,
altogether
kypp wette,
Amaranthus, Physalis
nen at,
then (3rd singular)
also
weasily, helekken,
using-beans (Psophocarpus tetragonolobus)'lina' beans (Dolichos lablab)
jy-mekke ty-mekke,
this--sort that--sort
mottok aypik,
altogether much.
Free translation: 'Then, you, your name is spinach, but in your home, so far as spinach goes there isn't any you see, while as for me, in my home far away, (there is) everything, spinach and Phyllostachys, then there are also vining beans and 'lima' beans.

all kinds of things in abundance.'

Although the proliferation of -he in this example indeed marks hesitant speech, note that this is in the introductory, topical segment of the sentence.

The most common situation for the occurrence of multiply repeated examples of the clitic -he is in the buildup of Dani sentences with successive verbs and clauses cumulatively dependent on a final verb. A typical narrative sentence follows, with segments numbered for reference:

1 lakkusik-he, 2 lakkusik-he, 3 Wuwenema noko-iso-
4 moso sit apik-en-he, 5 we sit apik-en-he, 6 we welakaku welakaku-
7 likke pivemut, 8 ykkhesheima noko- usa'-nekke-te
9 lit, mel lak, 10 Wesom mel, 11 Weegasuyi mel,
12 ykkusik-at lakkusikwa. they directly they-went-long-ago.

Free translation: 'After we climbed up, we kept going on and on along the plateau, and after we slept at Wuwenema, because of the heavy drizzle, we just waited idly, waited and waited; we had gone in at midday and should have slept at ykkhesheima, but they, what's-their-names, Wesom and Weegasuyi, they went straight on.'

In this sentence each occurrence of -he ties the preceding part of the sentence to what follows, not in terms of grammatical dependence as signalled by suffixes marking sequence, simultaneity and the like, but rather in terms of the organisation of the utterance as an utterance into manageable units of material so strung together that all that precedes at any point is in a loose, cumulative sense of the word
'topic' for what follows. Some of these units include finite verbs not marked by any affix for dependence on a following verb; these include the verbs in segments 2 and 6. Others include finite verbs affixed to indicate that a following verb is presupposed; these include segments 1, 3, and 7. Segment 8 has a nominalised verbal which may occur independently. Segments 4 and 5 are marked for grammatical dependency on and inclusion in the clause ending with segment 6. Segments 2 and 6 include repeated verbs signalling prolonged action continuing over an appreciable period of time or distance. Grammatically, thus, the units marked with -he are disparate, but the occurrence of this clitic has the effect of levelling them as units of information or text.

It has already been noted in passing that written materials including multiplied occurrences of -he in the same sentence frequently prompt negative reactions from local readers. This kind of reaction has been received from readers asked to correct or improve translated portions of the Christian Scriptures, but it has also been observed when readers are confronted with exactly transcribed local texts. The editorial reaction is not, however, to eliminate all instances of -he but rather to limit them frequently to one per sentence, where the clitic occurs attached to an element that may be considered as topical for the sentence.

The clitic -he as a topic marker and linking device has in effect a function which is the converse of the function of jake and related sentence interrupters. Grammatical restraints on the placement of these elements are similar. The verb phrase which may not be interrupted by jake is the same unit within which -he does not occur. Either may occur after any major clause or sentence constituent, including an introductory conjunction. One serves to tie cumulative strings of text into longer units, for which all that precedes is in some sense topical for the concluding segment. The other serves to segment sentences into short units, interrupting grammatically marked dependency relationships. The one serves in narrative to keep the story moving along in large sweeps; the other breaks it up as interest and excitement increase in the narrative.

6.5. CONCLUSION

At the beginning of this chapter attention was called to the work of the Prague school linguists, Halliday, Chafe and Gleason's students on the problem of the structure of texts and sentences in terms of their information context and textual function. The remainder of the chapter has presented an initial survey of some raw data related to
the organisation of discourse, utterance and sentence in parameters which cannot be described in terms of the structure of individual clauses. Some features of Dani discourse which may prove of interest for general grammar include the distinction between modal categories which are features of utterances and include the contrast between questions and non-questions, and modal categories which are features of verbs and include the contrast between commands and non-commands. The traditional set of declarative, interrogative and imperative modes, among others, proves to be a conflation of what, in Dani, are treated in three distinct systems of modes.

The Dani contrasts serve to illuminate the apparently universal fact that 'interrogative' is a category relating the speaker and addressee to an utterance which anticipates another utterance, while 'imperative' is a category relating them to an event, which, although referred to in an utterance, is not required to be a speech event.

It has further been suggested that Dani sentences are units which are not ultimate but are rather segments of discourses, and that the segmentation of discourses and utterances into sentences, whether defined by criteria of marked grammatical dependency or by phonological criteria, is a function of discourse construction. The length of phonological sentences is sometimes deliberately manipulated in a fashion which is partially independent of grammatical dependency structures to gain special effect in discourse. Sentences as defined by chains of grammatical dependency are linked together in discourse by structured devices, particularly, in narrative and procedural discourse, the device of recapitulatory verbs at the beginnings of discourse medial sentences. The choice of linking devices is not automatic, and it has been suggested that the sentence is a unit of discourse not only on the surface but also in the underlying semology. This conclusion is at variance with the conclusion of Tabor that no such unit as the sentence exists in semological structure (1966:90-91).

Finally attention was turned to the organisation of information within sentences, and it was shown that the distribution of the clitic -he in Dani indicates the relevance of units which are partially independent of such grammatical units as clauses. These units appear to be 'information units', manageable chunks of utterance which may be set off by intonation or overt markers, and which, within Dani sentences with their sequences of chained clauses, tend to build a cumulative 'topic' before a concluding 'comment'. This organisation extends beyond sentence boundaries and appears to be an integral part of the organisation of information in discourse as a whole.
The organisation of sentences as well as the organisation of discourse as a whole into units connected from introductory margins to concluding margins is fundamentally a deictic phenomenon. Case and roles within clauses reflect real world relationships fairly closely. The structure of clauses reflects those synchronically structured real world relationships and the grammatical structure of the language. But the organisation of discourse reflects the speaker's evaluation of the events, his selection of topic elements, his organisation of the discourse into units from large text blocks down to sentences and information units within sentences, all in terms of his intention, the addressee and his knowledge, and the situation.

This chapter has been an exploratory study, beginning work thebulk of which remains to be done. Nothing has been said about units intermediate in length between full utterances and sentences, although such units as paragraphs and chapters will certainly prove relevant. A larger corpus including more long texts needs to be studied for really meaningful conclusions at that level. A study of sentence linkages has only been foreshadowed here; a detailed study, which promises to entail semantic analysis of large segments of the lexicon, needs to be made. While the stratificational model of language, as developed by Lamb and particularly as modified and applied by Gleason and his students to discourse structure, has been found a useful model, this study has not been primarily model-oriented. Some suggestions for improvements in that model have been made, particularly to incorporate the speaker and addressee as structurally relevant to every utterance, and also to indicate sentences as units in the semological structure. However, there are still problems, the solution to which is not now apparent to me. Particularly it is difficult to see how the information units which appear to be part and parcel of discourse organisation can be incorporated into the model, since they are linear surface units presupposing clause structure. And finally, the problem of reference to participants through discourse, although anticipated in Chapter 4 and recently made the focus of attention in work by Wise (1968), Stennes (1969), Pike and Lowe (1969) and others, has been left without further treatment in this chapter. Much insight has been gained into this problem in the course of this study, but a satisfactory description will require further work with informants available.

The present description is offered as one step forward in our knowledge and understanding of Dari grammar. Phrases related to chained sequences of verbs and clauses have prompted treatment of morphological and syntactic structures as realisations of more fundamental semological structures including elements of both meaning and reference. Reference
to participants as the 'same' or 'different' or by person categories, and reference to events by mode and tense categories are delictic phenomena which are most economically treated not in terms of clauses or sentences but utterances in the situational context. Dani grammar requires discourse perspective for adequate description of even the smallest units and illustrates the fundamental correctness of Malinowski's position: "The real linguistic fact is the full utterance in its context of situation." (1935-1965:11).
NOTES

1. Compare Longacre (1970:178) for a similar treatment of sentence constituents, with a proposal that the model is relevant for discourse also. In the Dani materials vocatives, which Longacre includes in his 'outer periphery' of sentences, are clearly not sentence constituents but utterance and discourse constituents.

2. The tag or clitic - he glossed as 'topic-marker' above, will be further discussed under treatment of the arrangement of information in sentences. It may be noted here that it is a cliticised element inserted at some intonation contour terminals as a kind of segmental comma, a point to pause. Sometimes it is only that, apparently, when the speaker, thinking as he speaks, attaches this clitic to a number of constituents in sequence. However, reader reaction to written material with proliferated use of this clitic is often explicitly negative to excessive use but positive toward the use of this clitic at certain points, usually no more than one or two in a sentence. These few spots that local 'editors' would leave occupied by this clitic appear to be at points where the preceding element or segment of the sentence is the topic of the sentence, the element about which the rest of the sentence makes some comment. Thus this clitic serves as a carrier of contour final intonation, as a pause point or potential point for pause and frequently as a marker of topic.

3. The skeptical reader may well wonder whether this is just the analyst's familiarity with Pike's analysis of English intonation imposed on Dani. It is not, although I gladly acknowledge my debt to Pike here as in many other areas. For further phonetic details on this system of pitches used in Dani intonation and similarities and differences from English intonation, see the brief treatment by Bromley (1961:49-61).

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4. It should be noted that Dani questions including question words occur with sentence final falling intonation, usually to level /3// and do not occur with the clitic -s. Such question words include: nena 'what'; ky 'which'; sa 'who'; kons, ka 'where'; neta 'when'; na-helok 'why'; nykkiy interrogative verb root 'to do what'; akkane 'what kin, or what body part, of his, here'.

5. One revealing example occurs in a major leader's account of his disagreement with the government officer. A group of enemies were being escorted through the leader's area by the government; the weapons of the enemy group were being carried in large tied bundles under government approval. The local leader made a derogatory speech to the enemies and told them to throw their weapons away:

rep-sam-o. 'de(ward--now(pl))--to--them--decisive. Throw them away!' Then the leader ordered his own men to throw the enemies' weapons away; the government officer strongly protested this move and ordered the weapons returned to their owners. The local leader quotes the government officer's order as:

/w-2-3/ wok-ise-o. 'move--transfer-to--them--deferential, i.e. how please give them to them.'

Thus the leader pictures himself as firm and final in his orders to the enemies, but pictures the government officer as deferential to him, even though in fact he obviously lost face by having to obey the officer's order.

6. It does appear to be true that imperative verbs (as contrasted with hortatives) are not normally used in questions. No example occurs in the corpus, and my impression is that such a use would be regarded as anomalous, although my data (other than the data of my own speaking knowledge of the language) are not adequate to establish this. This point needs to be checked carefully. However it is also true that the hortative/imperative contrast is for Dani is some sense secondary and that hortative and imperative forms are parts of single paradigms, as described in Chapter 2.

7. It should be admitted that some quotations in narrative get handled similarly, with continuity marked between the quoted elements but not between the quotative verbs. But there are still important differences. Quotations which are part of the narrative are optionally followed by ylvk 'having said' preceding the quotative verb. This form has not been recorded occurring in the quasi-quotative formulas described here.
8. J.L. Austin observed similar asymmetry between the first person singular present indicative active forms and other forms of what he termed 'performative verbs' in English, including such forms as 'I promise', 'I declare', etc. (1962:63).

9. There are a few examples where yly'-lay (or yly'-ishy, a sub-dialectal difference) 'they say' and akkyky 'I believe' occur in that order in sequence in the same construction, but it appears that in these examples 'they say' is a normal quotation marker.

...wok-oileskatok-o. ylylax akkyky. 'Now--they normally transfer it to them--assertive, saying--they are I-believe, I.e. they give them to them, they say (as they sing--the quoted matter is from a funeral dirge you know.)

10. There is a pattern of answers both to questions of a 'yes/no' variety with both alternatives explicitly included and to question-word questions, which employs lek 'no' in ways quite different from English question and negation usage:

...hek-tek eleke-e7 hele-e7. hyte-han. isikhe-he. lek. neak-he. eleke tak-halok waky isikhe. 'pouring-woman's-child-topic-marker boy--invitation girl--invitation show-it six-said-long-ago--setting no my-woman's-child boy having-home I-name she-said-long-ago, i.e. 'Is your child a boy or a girl? Show me,' she said, and (the mother) said, 'No, I have a boy and have brought him.'

...ma-halok isikhe. lek. 1isa aty lyak-keh-hein. 'Why I-said-long-ago no son that upward--(2n) yes-now, i.e. 'Why is that?' I said (in protest to being narrowly missed by a stone). 'No, send that son (back up),' (he said).'

This pattern requires further investigation in the field.

11. The relative length of sentences in narrative and hortatory discourse is exactly the reverse of the pattern of New Testament Koind Greek, where narrative is typically in shorter sentences, while some hortatory discourse, e.g. the Pauline epistles, contains quite lengthy sentences. (Ellis DeLue has made the same observation, comparing sentence length in Gahuku, a language of highlands Australian New Guinea, with New Testament Greek.)

12. During the original typing of this dissertation in 1971 I was able to peruse Hankamer's excellent dissertation on deletion and note that he specifies the pre-verb position as the position of focus in the unmarked case (1971:176).
I have been aware of and stimulated by the work of others in this area, e.g. Bridgewater (1966), Wise (1968), Longacre and others (1968). Some major 'chapter' breaks are clear in several narrative texts and some other texts in the corpus, and some paragraph divisions seem clear. However, I am not satisfied with my current analysis based on the present corpus, and have omitted discussion of these problems until further study makes the analysis more convincing.
APPENDIX A
VERB PARADIGMS

The paradigms in this appendix represent the usage of informants from the Aso-Lokobal confederacy of the lower Grand Valley of the Balim. Although some, but certainly not all, alternate forms used by other informants in that area are included, the principal informant was Apaalek Aso, of the village of Nepuha.

The model verbs for conjugation classes are not the same throughout the paradigms. In particular, the verb na: = 'crawl' is cited in only a few places, partly because of its limited pattern of inflection, but partly also because of omissions in the checked data from the field. Also, the verb ikei: = 'see' is included in most categories in the first section of this appendix, although it was not included as a model verb in the data sheets especially checked in the field. Where other documentation is missing, some forms of that verb reflect my own learned dialect. Model verbs with vowel-final roots in some categories and consonant-final roots in others are displayed with verbs with vowel-final roots in all cases.

Glosses are omitted from the paradigms except for identifying glosses of verb roots and for labels of inflectional categories. For meanings of the forms, the reader is referred to the text. Forms in these paradigms are not underlined.
A. PRIMARY VERBS WITHOUT AUXILIARIES

1. Active Mode

Simple active: non-reflexive voice, consonant final roots

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>jep = 'fight'</th>
<th>wat = 'hit, kill'</th>
<th>jak = 'plant'</th>
<th>psl = 'never'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>japhi</td>
<td>wathi</td>
<td>jathi</td>
<td>pahi</td>
</tr>
<tr>
<td>5P</td>
<td>japhu</td>
<td>wathu</td>
<td>jathu</td>
<td>pahu</td>
</tr>
<tr>
<td>TOU(50)</td>
<td>japhin</td>
<td>wathin</td>
<td>jathin</td>
<td>pahin</td>
</tr>
<tr>
<td>TOU(PL)</td>
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<td>jathip</td>
<td>pahip</td>
</tr>
<tr>
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<td>japha</td>
<td>watha</td>
<td>jatha</td>
<td>paha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERB:</th>
<th>yak = 'make wet'</th>
<th>wak = 'opil'</th>
<th>kehl = 'hang up'</th>
<th>wulps = 'agite'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ithi</td>
<td>wuthi</td>
<td>kehl</td>
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<tr>
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<td>wuthu</td>
<td>kehlu</td>
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<td>wythe</td>
<td>kehla</td>
<td>wulpshe</td>
</tr>
</tbody>
</table>

OTHER COMMON MEMBERS OF THESE CONJUGATION CLASSES:

jep = 'fight'; the generalized personal objective auxiliary -ep-
wat = 'hit, kill'; hakat = 'treat'; hat = 'wipe, clean'; to = 'wipe off'; lat = 'close'; kat = 'mend';
ten = 'place under'; kot = 'take off (net)';
jak = 'plant'; mak = 'dig in water'; 'okuppan';'shake food'; tak = 'dig (sweet potatoes)'; 'procreate';
isek = 'steam cook'; wata = 'roast'; hetek = 'seek, find'; jak = 'make track'; 'make arm bands';
pal = 'squeal'; lese = 'strip off (fat)'; koe = 'come for (pigs, children)'; war = 'wake up'; sal = 'eat under'; kahek = 'spit'; katek = 'cross-road'; hol = 'hear'; setek = 'tear'; sal = 'cover'; lapel = 'hide';
hal = 'spit'; 'spill'; mokake = 'kettle'; and many others.
yak = 'make wet'; don = 'wak = 'opil'; 'eliminate'; wak = 'fall (tree)'; kve = 'out for distribution';
kve = 'open (door)';
kehl = 'hang up'; tell = 'save'; hol = 'sprinkle'; sol = 'burn up'; kokoi = 'slide'.

VERB PARADIGMS
### Simple factive: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
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<th></th>
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</thead>
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<tr>
<td>I</td>
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<td>watky</td>
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</tr>
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<table>
<thead>
<tr>
<th>VERB</th>
<th>LK: ‘make net’</th>
<th>WU: ‘shop’</th>
<th>KEL: ‘hang up’</th>
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</thead>
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### Simple factive: non-reflexive voice, vowel-final roots

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<td>aka</td>
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<td>likelka</td>
<td>wikelka</td>
<td>akelka</td>
</tr>
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</table>

*The verb wakve= ‘acetic’ does not occur in reflexive voice.*
### Simple factive: non-reflexive voice, vowel-final roots (cont.)

<table>
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<tr>
<th>VERB</th>
<th>SUBJECT</th>
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<th>econ.</th>
<th>DESCENT</th>
<th>AUTUMN</th>
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<tr>
<td>he= 'see'; hei= 'put'</td>
<td>he= 'travel'</td>
<td>lake= 'ascend'</td>
<td>i= 'say'</td>
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<td></td>
<td></td>
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<tr>
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### Simple factive: reflexive voice, vowel-final roots

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<th>SUBJECT</th>
<th>SUBJ</th>
<th>TO</th>
<th>econ.</th>
<th>DESCENT</th>
<th>AUTUMN</th>
</tr>
</thead>
<tbody>
<tr>
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<td>he= 'travel'</td>
<td>i= 'say'</td>
<td>a*, at= 'acquire'</td>
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<tr>
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<td>akhky</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WE</strong></td>
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<td>nekhoko</td>
<td>ilkcko</td>
<td>akhko</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>YOU(SG)</strong></td>
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<td><strong>YOU(PL)</strong></td>
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<td>nekhhekek</td>
<td>ilkhekek</td>
<td>akhekek</td>
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<td>hakhekee</td>
<td>nekhheke</td>
<td>ilkheke</td>
<td>akheke</td>
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<td></td>
</tr>
</tbody>
</table>

*This verb does not occur in simple factive as a single verb, only in constructions in which it is paired with itself or an echo form: nyky nyky or nyky nyky ‘I travelled all over’.

**Most minor class verbs are not inflected for the contrastive reflexive voice versus non-reflexive voice.

**OTHER MEMBERS OF THESE CONJUGATION CLASSES:**

- **he= 'see'; hei= reflexive stem of wan=, wakan= 'take'; ake= 'believe'; utut= 'cross (stream)'**
- **i= 'say'; p= 'descend'; ke= 'enter'**

***These verbs (or the stem heia=) of wan=, wakan= do not occur with marked reflexive forms like the pattern verbs listed for the same conjugation classes.
<table>
<thead>
<tr>
<th>Remote past: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VERB:</strong> jep = 'fight'</td>
</tr>
<tr>
<td><strong>SUBJECT</strong></td>
</tr>
<tr>
<td>I</td>
</tr>
<tr>
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<tr>
<th>Remote past: reflexive voice, consonant-final roots</th>
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<tbody>
<tr>
<td><strong>VERB:</strong> jep = 'fight'</td>
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<tr>
<td><strong>SUBJECT</strong></td>
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<tr>
<td>I</td>
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<tr>
<td>WE</td>
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<tr>
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<tr>
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<tr>
<td>I</td>
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<td>RB/SEE/IT</td>
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### Remote past: non-reflexive voice, vowel-final roots

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### Remote past: reflexive voice, vowel-final roots

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<td>akiphe</td>
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*The verb ene- 'transel' is inflected like ehe- 'put' in this category, but does not occur as a single verb, only in paired constructions.

**This verb does not occur as a single verb in this category, only in paired constructions.
### Normal aspect: non-reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERBS</th>
<th>SUBJECT</th>
<th>jap= 'fight'</th>
<th>wat= 'kés, kél!'</th>
<th>jak= 'plant'</th>
<th>pal= 'seev'</th>
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<tbody>
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<td>palhetek</td>
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<tr>
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### Normal aspect: reflexive voice, consonant-final roots

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<td>palhet</td>
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### VERBS:

- yap= 'make met'
- wap= 'ache'
- kap= 'hang up'
- uvap= 'gós'
- uvaphyet | watphyet | japhyet | palhittek | palhittek |
- uvaphusék | watphusék | japhusék | palhittek | palhittek |
- uvaphsép | watphsép | japhsép | palhittek | palhittek |
- uvaphétek | watphétek | japhétek | palhittek | palhittek |
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<tr>
<td>KP</td>
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Prior action: non-reflexive voice, consonant-final roots

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Prior action: reflexive voice, consonant-final roots

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<table>
<thead>
<tr>
<th>VERS:</th>
<th>subj: ‘make met’</th>
<th>wat: ‘hit, kill’</th>
</tr>
</thead>
<tbody>
<tr>
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</table>
### Prior action: non-reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>nge-, nas 'est'</th>
<th>la 'go'</th>
<th>ws-, wets 'come'</th>
<th>al-, ats 'acquire'</th>
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<tbody>
<tr>
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### Prior action: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>has 'see'; hel 'puz'</th>
<th>nel 'travel'</th>
<th>leke 'ascend'</th>
<th>i = 'say'</th>
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<tbody>
<tr>
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This verb occurs only in paired constructions in this category.
Normal aspect with prior action: non-reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>Subject</th>
<th>japa - 'fight'</th>
<th>wat - 'hate, kill'</th>
<th>jaka - 'plan'</th>
<th>pal - 'ever'</th>
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<tbody>
<tr>
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Normal aspect with prior action: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
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<td>nek', naw 'nuk'</td>
<td>lan 'go'</td>
<td>war, war 'some'</td>
<td>am, at 'acquire'</td>
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<table>
<thead>
<tr>
<th>VERB:</th>
<th>hal 'see'; hel 'pue'</th>
<th>nel 'ravol'</th>
<th>lel 'peng'</th>
<th>in 'say'</th>
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</tr>
<tr>
<td>NE/SHE/IT</td>
<td>hakettesik</td>
<td>nekatesik</td>
<td>lakettesik</td>
<td>ekettesik</td>
</tr>
<tr>
<td>THEY</td>
<td>hakettesik</td>
<td>nokesik</td>
<td>lakettesik</td>
<td>ekettesik</td>
</tr>
</tbody>
</table>

### Normal aspect with prior action: Non-reflexive voice, vowel-final roots

### Reflexive voice, vowel-final roots
Remote past with prior action: sample conjugations, non-reflexive voice

| VERS: | wat= 'hēs, ēlis' | yk= 'make net' | nek=, nē= 'eat' | wat=, wēt= 'come'
|-------|------------------|-----------------|-----------------|-----------------
| I     | wethkitesik      | ithikitesik     | nasikitesik     | wakakesik       |
| WE    | wathkutesik      | ithukutesik     | nasukutesik     | wakakutesik     |
| 100(2D) | wathkittetic    | ithukittetic    | nasukittetic    | wakakittetic    |
| 100(PL) | wathkitesip    | ithukitesip     | nasukitesip     | wakakitesip     |
| 3ER/3S/IT | wathkhesik     | ithukhesik      | nasukhesik      | wakukhesik      |
| 3ST   | wathukwhesik     | ithukwhesik     | nasukwhesik     | wakukwhesik     |

Remote past with prior action: sample conjugations, reflexive voice

| VERS: | wat= 'hēs, ēlis' | yk= 'make net' | ha= 'eat'; he= 'put' | i= 'say'
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>wawatikitesik</td>
<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
<tr>
<td>WE</td>
<td>wawathkitesik</td>
<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
<tr>
<td>100(2D)</td>
<td>wawathkitesip</td>
<td>ikhesikitesip</td>
<td>habahkitesip</td>
<td>iikakesip</td>
</tr>
<tr>
<td>100(PL)</td>
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<td>ikhesikitesip</td>
<td>habahkitesip</td>
<td>iikakesip</td>
</tr>
<tr>
<td>3ER/3S/IT</td>
<td>wawathkitesik</td>
<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
<tr>
<td>3ST</td>
<td>wawathukwhesik</td>
<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
</tbody>
</table>

Remote past with normal aspect and prior action: samples, non-reflexive voice

| VERS: | wat= 'hēs, ēlis' | yk= 'make net' | nek= 'eat' | wat=, wēt= 'come'
|-------|------------------|-----------------|----------|-----------------
| I     | wathkitesik      | ithikitesik     | nasikitesik     | wakakesik       |
| WE    | wathkutesik      | ithukutesik     | nasukutesik     | wakakutesik     |
| 100(2D) | wathkittetic    | ithukittetic    | nasukittetic    | wakakittetic    |
| 100(PL) | wathkitesip    | ithukitesip     | nasukitesip     | wakakitesip     |
| 3ER/3S/IT | wathkhesik     | ithukhesik      | nasukhesik      | wakukhesik      |
| 3ST   | wathukwhesik     | ithukwhesik     | nasukwhesik     | wakukwhesik     |

Remote past with normal aspect and prior action: samples, reflexive voice

| VERS: | wat= 'hēs, ēlis' | yk= 'make net' | ha= 'eat'; he= 'put' | i= 'say'
<table>
<thead>
<tr>
<th></th>
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<td>iikakesik</td>
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<td>wawathkitesik</td>
<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
<tr>
<td>100(2D)</td>
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<td>ikhesikitesip</td>
<td>habahkitesip</td>
<td>iikakesip</td>
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<tr>
<td>100(PL)</td>
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<td>ikhesikitesip</td>
<td>habahkitesip</td>
<td>iikakesip</td>
</tr>
<tr>
<td>3ER/3S/IT</td>
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<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
<tr>
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<td>ikhesikitesik</td>
<td>habahkitesik</td>
<td>iikakesik</td>
</tr>
</tbody>
</table>

*In the starred forms y is often heard replacing i in the middle syllable.*
### Setting: non-reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th>I</th>
<th>WE</th>
<th>YOU(SS)</th>
<th>YOU(IS)</th>
<th>NE/SRR/IT</th>
<th>THEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>VVBQ</td>
<td>japhimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
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</tr>
<tr>
<td>IE</td>
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</tr>
<tr>
<td>YOU(SS)</td>
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<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
</tr>
<tr>
<td>YOU(IS)</td>
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<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
</tr>
<tr>
<td>NE/SRR/IT</td>
<td>japhimo</td>
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<td>wathimo</td>
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<td>wathimo</td>
<td>wathimo</td>
</tr>
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<td>THEY</td>
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<td>wathimo</td>
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### Setting: reflexive voice, consonant-final roots

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<tr>
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<th>YOU(IS)</th>
<th>NE/SRR/IT</th>
<th>THEY</th>
</tr>
</thead>
<tbody>
<tr>
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<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
</tr>
<tr>
<td>IE</td>
<td>japhimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
</tr>
<tr>
<td>YOU(SS)</td>
<td>japhimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
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<tr>
<td>NE/SRR/IT</td>
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<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
</tr>
<tr>
<td>THEY</td>
<td>japhimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
<td>wathimo</td>
</tr>
</tbody>
</table>
Setting: non-reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>nek, na~ 'eat'</th>
<th>la= 'go'</th>
<th>wa~(l) 'come'</th>
<th>ae, at= 'ascend'</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT</td>
<td>nykyma</td>
<td>lakyma</td>
<td>wakyma</td>
<td>ykyma</td>
</tr>
<tr>
<td>I</td>
<td>nokkona</td>
<td>lakona</td>
<td>wakona</td>
<td>akoma</td>
</tr>
<tr>
<td>ZO/SG</td>
<td>nekkona</td>
<td>lakenna</td>
<td>wakenna</td>
<td>akenna</td>
</tr>
<tr>
<td>ZO/PL</td>
<td>nekkepma</td>
<td>lakema</td>
<td>wakema</td>
<td>akepma</td>
</tr>
<tr>
<td>BE/SE/IT</td>
<td>nekkenama</td>
<td>lakelhama</td>
<td>wakelhama</td>
<td>akelhama</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERB:</th>
<th>ha~ 'see'; hel= 'travel'</th>
<th>sake= 'ascend'</th>
<th>la= 'any'</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>hykyma</td>
<td>nykyma*</td>
<td>lahykyma</td>
</tr>
<tr>
<td>ZO/SG</td>
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<td>nokoma</td>
<td>lakokoma</td>
</tr>
<tr>
<td>ZO/PL</td>
<td>hokepma</td>
<td>nakepma</td>
<td>lahekema</td>
</tr>
<tr>
<td>BE/SE/IT</td>
<td>helkhoma</td>
<td>nelhkhoma</td>
<td>lahelkoma</td>
</tr>
<tr>
<td>THEY</td>
<td>helkama</td>
<td>nelkama</td>
<td>lahelkama</td>
</tr>
</tbody>
</table>

Setting: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>ha~ 'see'; hel= 'put'</th>
<th>la= 'any'</th>
<th>ae, at= 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>hashykyma</td>
<td>nelhhykyma*</td>
<td>ashykyma</td>
</tr>
<tr>
<td>ZO/SG</td>
<td>hashokoma</td>
<td>nelshokoma</td>
<td>ashokoma</td>
</tr>
<tr>
<td>ZO/PL</td>
<td>hashkepma</td>
<td>nelshkepma</td>
<td>ashepekma</td>
</tr>
<tr>
<td>BE/SE/IT</td>
<td>hashelkhoma</td>
<td>nelshelkhoma</td>
<td>ashelekoma</td>
</tr>
<tr>
<td>THEY</td>
<td>hashelkama</td>
<td>nelshelkama</td>
<td>ashelekama</td>
</tr>
</tbody>
</table>

*This verb occurs only in paired constructions in this category.*
Remote past with setting: sample conjugations

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>wa- 'hē, kē' non-reflexive</th>
<th>yk- 'makē ne' non-reflexive</th>
<th>wa-, we- 'gome' (non-reflexive)</th>
<th>ha- 'ave'; hei- 'put' reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT</td>
<td>wa-thikîno</td>
<td>tiktikîno</td>
<td>wa-kikîmo</td>
<td>hakkasikîmo</td>
</tr>
<tr>
<td>I</td>
<td>wa-thikico</td>
<td>tikikico</td>
<td>wakikico</td>
<td>hakkasikico</td>
</tr>
<tr>
<td>FG</td>
<td>wa-thikíkomo</td>
<td>tikikíkono</td>
<td>wakikíkono</td>
<td>hakkasikíkono</td>
</tr>
<tr>
<td>TOG(SS)</td>
<td>wa-thikíkômo</td>
<td>tikikíkômo</td>
<td>wakikíkômo</td>
<td>hakkasikíkono</td>
</tr>
<tr>
<td>TOG(PL)</td>
<td>wa-thikíkômo</td>
<td>tikikíkômo</td>
<td>wakikíkômo</td>
<td>hakkasikíkono</td>
</tr>
<tr>
<td>RE/SOE/IT</td>
<td>wa-thikíkômo</td>
<td>tikikíkômo</td>
<td>wakikíkômo</td>
<td>hakkasikíkono</td>
</tr>
<tr>
<td>TREP</td>
<td>wa-thukwhana</td>
<td>tikukwhana</td>
<td>wakukwhana</td>
<td>hakkukwhana</td>
</tr>
</tbody>
</table>

Normal aspect with setting: sample conjugations

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>wa- 'hē, kē' non-reflexive</th>
<th>yk- 'makē ne' non-reflexive</th>
<th>wa-, we- 'gome' (non-reflexive)</th>
<th>ha- 'ave'; hei- 'put' reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>wa-thète'ma</td>
<td>yhity'ma</td>
<td>wakyte'ma</td>
<td>hakkhyte'ma</td>
</tr>
<tr>
<td>FG</td>
<td>wa-thètes'ma</td>
<td>yhitytes'ma</td>
<td>wakite'ma</td>
<td>hakkhekette'ma</td>
</tr>
<tr>
<td>TOG(SS)</td>
<td>wa-thètes'ma</td>
<td>yhitytes'ma</td>
<td>wakates'ma</td>
<td>hakkhekètes'ma</td>
</tr>
<tr>
<td>TOG(PL)</td>
<td>wa-thètes'ma</td>
<td>yhitytes'ma</td>
<td>wakates'ma</td>
<td>hakkhekètes'ma</td>
</tr>
<tr>
<td>RE/SOE/IT</td>
<td>wa-thètes'ma</td>
<td>yhitytes'ma</td>
<td>wakites'ma</td>
<td>hakhèkètes'ma</td>
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<tr>
<td>TREP</td>
<td>wa-thètes'ma</td>
<td>yhitytes'ma</td>
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<td>hakhèkètes'ma</td>
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Prior action with setting: sample conjugations

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>wa- 'hē, kē' non-reflexive</th>
<th>yk- 'makē ne' non-reflexive</th>
<th>wa-, we- 'gome' (non-reflexive)</th>
<th>ha- 'ave'; hei- 'put' reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>wa-thy'ty'mo</td>
<td>yhity'ty'mo</td>
<td>wakyty'ty'mo</td>
<td>hakkhyty'ty'mo</td>
</tr>
<tr>
<td>FG</td>
<td>wa-thos'i'mo</td>
<td>yhos'i'mo</td>
<td>wakos'i'mo</td>
<td>hakhokos'i'mo</td>
</tr>
<tr>
<td>TOG(SS)</td>
<td>wa-thetcy'i'mo</td>
<td>yktes'i'mo</td>
<td>wakattcy'i'mo</td>
<td>hakkaketcy'i'mo</td>
</tr>
<tr>
<td>TOG(PL)</td>
<td>wa-thètes'im'om</td>
<td>yhites'im'omo</td>
<td>wakatis'im'omo</td>
<td>hakkhekètes'im'omo</td>
</tr>
<tr>
<td>RE/SOE/IT</td>
<td>wa-thètes'im'om</td>
<td>yhites'im'omo</td>
<td>wakès'im'omo</td>
<td>hakhèkès'im'omo</td>
</tr>
<tr>
<td>TREP</td>
<td>wa-thas'i'mo</td>
<td>yhas'i'mo</td>
<td>wakèhès'im'omo</td>
<td>hakhèhès'im'omo</td>
</tr>
</tbody>
</table>

This verb does not occur with marked reflexive voice forms. Although 'gome', like almost all other minor class verbs, is interpreted in the text to be implicitly reflexive, it is included with non-reflexive forms, as are other minor class verbs with no marked reflexive forms.
<table>
<thead>
<tr>
<th>Prohibitive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VERB</strong>: jav == 'fight'</td>
</tr>
<tr>
<td><strong>SUBJ</strong>: javk</td>
</tr>
<tr>
<td><strong>YOU(SG)</strong>: javkvp</td>
</tr>
<tr>
<td><strong>YOU(OBJ)</strong>: jatv</td>
</tr>
<tr>
<td><strong>YOU(INF)</strong>: jatvvp</td>
</tr>
</tbody>
</table>

<table>
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<tr>
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<tbody>
<tr>
<td><strong>VERB</strong>: jav == 'fight'</td>
</tr>
<tr>
<td><strong>SUBJ</strong>: jakhavk</td>
</tr>
<tr>
<td><strong>YOU(SG)</strong>: jakhavkvp</td>
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<tr>
<td><strong>YOU(OBJ)</strong>: jahavk</td>
</tr>
<tr>
<td><strong>YOU(INF)</strong>: jahavkvp</td>
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</tbody>
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<tr>
<th>Prohibitive: non-reflexive voice, vowel-final roots</th>
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</thead>
<tbody>
<tr>
<td><strong>VERB</strong>: nek == 'eat'</td>
</tr>
<tr>
<td><strong>SUBJ</strong>: nekvk</td>
</tr>
<tr>
<td><strong>YOU(SG)</strong>: nekvkvp</td>
</tr>
<tr>
<td><strong>YOU(OBJ)</strong>: hakv</td>
</tr>
<tr>
<td><strong>YOU(INF)</strong>: hakvk</td>
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</tbody>
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<td><strong>SUBJ</strong>: nekvk</td>
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<td><strong>YOU(OBJ)</strong>: hakvk</td>
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<td><strong>YOU(INF)</strong>: hakvk</td>
</tr>
<tr>
<td>Subject</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>wat= 'hês, këll'</td>
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<tr>
<td>watvtekk</td>
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<tr>
<td>wathvsep</td>
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<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb 1</th>
<th>Verb 2</th>
<th>Verb 3</th>
<th>Verb 4</th>
</tr>
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<tbody>
<tr>
<td>wat= 'hês, këll'</td>
<td>yk= 'make met'</td>
<td>hâ= 'see', hei= 'put'</td>
<td>ar, at= 'acquire'</td>
<td></td>
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<td>watakvtekk</td>
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<td>likhakvtekk</td>
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<td>hakhkvsep</td>
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<thead>
<tr>
<th>Subject</th>
<th>Verb 1</th>
<th>Verb 2</th>
<th>Verb 3</th>
<th>Verb 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>jape= 'fly by'</td>
<td>wat= 'hês, këll'</td>
<td>jake= 'plant'</td>
<td>pai= 'see'</td>
<td></td>
</tr>
<tr>
<td>japhë hvk</td>
<td>watë hvk</td>
<td>jathe hvk</td>
<td>paihe hvk</td>
<td></td>
</tr>
<tr>
<td>yk= 'make met'</td>
<td>vvhe hvk</td>
<td>kelë= 'hang up'</td>
<td>wvlpë= 'see', wvlphe hvk</td>
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<td>vvthe hvk</td>
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<tr>
<th>Subject</th>
<th>Verb 1</th>
<th>Verb 2</th>
<th>Verb 3</th>
<th>Verb 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>jape= 'fly by'</td>
<td>wat= 'hês, këll'</td>
<td>jake= 'plant'</td>
<td>pai= 'see'</td>
<td></td>
</tr>
<tr>
<td>jakhëlhe hvk</td>
<td>watë hvk</td>
<td>jakheikhe hvk</td>
<td>paihe hvk</td>
<td></td>
</tr>
<tr>
<td>yk= 'make met'</td>
<td>vvkh hvk</td>
<td>kelë= 'hang up'</td>
<td>palikhe hvk</td>
<td></td>
</tr>
<tr>
<td>likhë hvk</td>
<td>vvkhv hvk</td>
<td>kelikhe hvk</td>
<td>palikhe hvk</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb 1</th>
<th>Verb 2</th>
<th>Verb 3</th>
<th>Verb 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>nek, na= 'eat'</td>
<td>lâ= 'go'</td>
<td>war, wet= 'ome'</td>
<td>ar, at= 'acquire'</td>
<td></td>
</tr>
<tr>
<td>nikhë hvk</td>
<td>lâhv hvk</td>
<td>wâhv hvk</td>
<td>aka hvk</td>
<td></td>
</tr>
<tr>
<td>hâ= 'see'</td>
<td>hel= 'put'</td>
<td>lâkel= 'see and pull'</td>
<td>ikhe hvk</td>
<td></td>
</tr>
<tr>
<td>helikhe hvk</td>
<td>helikhe hvk</td>
<td>lakelikhe hvk</td>
<td>ikhe hvk</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb 1</th>
<th>Verb 2</th>
<th>Verb 3</th>
<th>Verb 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>hâ= 'see'</td>
<td>hel= 'put'</td>
<td>ila= 'see'</td>
<td>ar, at= 'acquire'</td>
<td></td>
</tr>
<tr>
<td>hakhelikhe hvk</td>
<td>hakhelikhe hvk</td>
<td>likhelikhe hvk</td>
<td>akhelikhe hvk</td>
<td></td>
</tr>
</tbody>
</table>
Abnormal continuous aspect: non-reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>jape 'f'yght'</th>
<th>wat= 'hit, kill'</th>
<th>jak= 'plant'</th>
<th>pal= 'secur'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>jashe</td>
<td>wastro</td>
<td>jatho</td>
<td>palho</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>yk= 'make net'</th>
<th>wak= 'chop'</th>
<th>kel= 'hang up'</th>
<th>weld= 'eat'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ytho</td>
<td>wtho</td>
<td>kelho</td>
<td>wvlpho</td>
</tr>
</tbody>
</table>

Abnormal continuous aspect: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>jape 'f'yght'</th>
<th>wat= 'hit, kill'</th>
<th>jak= 'plant'</th>
<th>pal= 'secur'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg.</td>
<td>jakhiko</td>
<td>wakiko, wakvy</td>
<td>jakheiko</td>
<td>paliko, palvky</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>yk= 'make net'</th>
<th>wak= 'chop'</th>
<th>kel= 'hang up'</th>
<th>weld= 'eat'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ikhiko, ikhvyk</td>
<td>wikhiko, wikhvyk</td>
<td>kelikho, kelikvyk</td>
<td>wvlpho</td>
</tr>
</tbody>
</table>

Abnormal continuous aspect: non-reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>nake, n= 'eat'</th>
<th>lak= 'go'</th>
<th>wak= 'come'</th>
<th>ak= 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing.</td>
<td>nickel</td>
<td>lako</td>
<td>wako</td>
<td>ako</td>
</tr>
<tr>
<td>Fl.</td>
<td>nickel, avkyk</td>
<td>lako</td>
<td>wako</td>
<td>ako</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>hae= 'see'; hel= 'put'</th>
<th>nel= 'travel'</th>
<th>lelx= 'send'</th>
<th>i= 'say'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing.</td>
<td>helko</td>
<td>niko</td>
<td>lelxko</td>
<td>ilke</td>
</tr>
<tr>
<td>Fl.</td>
<td>helko, hvkyk</td>
<td>niko, hvkyk</td>
<td>lelxko, hvkyk</td>
<td>ilko, hvky</td>
</tr>
</tbody>
</table>

Abnormal continuous aspect: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERBS:</th>
<th>hae= 'see'; hel= 'put'</th>
<th>nel= 'travel'</th>
<th>i= 'say'</th>
<th>ak= 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fl.</td>
<td>hakheliko, hakhvkyk**</td>
<td>nelheliko, nelhvkyk</td>
<td>heliko, hvkyk**</td>
<td>hakheliko, akhvkyk**</td>
</tr>
</tbody>
</table>

*The plural forms are special marked forms. The 'singular' forms are unmarked which occur with both singular and plural subjects.

**These forms are not documented in the data sheets, by accidental omission.
<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
<th>Singular</th>
<th>Plural</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factive subordinate: conditional, non-reflexive voice, consonant-final roots</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Verb:</strong></td>
<td>jape 'fēghe'</td>
<td>wath 'kēt, kēlI'</td>
<td>jake 'płeg'</td>
<td>pal '喹er'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>japeh-halok</td>
<td>watheh-halok</td>
<td>jateh-halok</td>
<td>palhe-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>japh-salok</td>
<td>wath-salok</td>
<td>jath-salok</td>
<td>pal-salok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Verb:</strong></td>
<td>yke 'māke met'</td>
<td>wark 'chup'</td>
<td>kel- 'hong v'I</td>
<td>wvlpv 'kaws'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>ythe-halok</td>
<td>wthhe-halok</td>
<td>kelleh-halok</td>
<td>wvlphhe-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>ythv-salok</td>
<td>wthv-salok</td>
<td>kelhv-salok</td>
<td>wvlphv-salok</td>
<td></td>
<td></td>
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<td>Factive subordinate: conditional, reflexive voice, consonant-final roots</td>
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</tr>
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<td><strong>Verb:</strong></td>
<td>jape 'fēghe'</td>
<td>wath 'kēt, kēlI'</td>
<td>jake 'płeg'</td>
<td>pal '喹er'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>jahkv-salok</td>
<td>wathkv-salok</td>
<td>jahkv-salok</td>
<td>pal-salok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>jahkv-salok</td>
<td>wathkv-salok</td>
<td>jahkv-salok</td>
<td>pal-salok</td>
<td></td>
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</tr>
<tr>
<td><strong>Verb:</strong></td>
<td>yke 'māke met'</td>
<td>wark 'chup'</td>
<td>kel- 'hong v'I</td>
<td>wvlpv 'kaws'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>ikhkhe-halok</td>
<td>wthikhhe-halok</td>
<td>ikkhkhe-halok</td>
<td>ikkhe-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>ikhkv-salok</td>
<td>wthkhv-salok</td>
<td>ikkhkv-salok</td>
<td>ikkkv-salok</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Verb:</strong></td>
<td>nake, nce 'see'</td>
<td>la 'go'</td>
<td>wack, wet 'come'</td>
<td>am, ate 'goquire'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>nikkhe-halok</td>
<td>lakhe-halok</td>
<td>wake-halok</td>
<td>ake-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>nikkv-salok</td>
<td>lakv-salok</td>
<td>wakev-salok</td>
<td>akev-salok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Verb:</strong></td>
<td>la 'see'</td>
<td>hel 'put'</td>
<td>lakel 'goon'</td>
<td>ikke-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>heikhhe-halok</td>
<td>heikhhe-halok</td>
<td>lakedeh-halok</td>
<td>ikkkhe-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>heikhv-salok</td>
<td>heikhv-salok</td>
<td>lakedeh-salok</td>
<td>ikkkv-salok</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Verb:</strong></td>
<td>hae 'see'</td>
<td>hel 'put'</td>
<td>la 'say'</td>
<td>am, ate 'goquire'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singular</strong></td>
<td>hakheikhhe-halok</td>
<td>hakheikhhe-halok</td>
<td>lakheikhhe-halok</td>
<td>akheikhhe-halok</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>hakheikhv-salok</td>
<td>hakheikhv-salok</td>
<td>lakheikhv-salok</td>
<td>akheikhv-salok</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*These forms were thus recorded. They appear irregular and may be alternate forms.*
<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Positive Subordinate</th>
<th>Subject Pronoun</th>
<th>Active</th>
<th>Conjugation Type</th>
<th>Stem</th>
<th>Infinitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGULAR</td>
<td>1st person singular</td>
<td>I</td>
<td>Active</td>
<td>Infinitive</td>
<td>was</td>
<td>'go'</td>
</tr>
<tr>
<td>PLURAL</td>
<td>1st person singular</td>
<td>We</td>
<td>Active</td>
<td>Infinitive</td>
<td>were</td>
<td>'go'</td>
</tr>
<tr>
<td>SINGULAR</td>
<td>2nd person singular</td>
<td>You</td>
<td>Active</td>
<td>Infinitive</td>
<td>was</td>
<td>'go'</td>
</tr>
<tr>
<td>PLURAL</td>
<td>2nd person singular</td>
<td>You</td>
<td>Active</td>
<td>Infinitive</td>
<td>were</td>
<td>'go'</td>
</tr>
<tr>
<td>SINGULAR</td>
<td>3rd person singular</td>
<td>He/She/It</td>
<td>Active</td>
<td>Infinitive</td>
<td>was</td>
<td>'go'</td>
</tr>
<tr>
<td>PLURAL</td>
<td>3rd person singular</td>
<td>They</td>
<td>Active</td>
<td>Infinitive</td>
<td>were</td>
<td>'go'</td>
</tr>
</tbody>
</table>

Note: These forms were thus recorded. They appear irregular and may be alternate forms.
| Factive subordinate: coincident progressive, non-reflexive, consonant-final |
|---|---|---|---|---|---|
| **VERB:** | jape 'fight' | wat= 'hit, kill' | jake 'plant' | pæ= 'say' |
| **Singular** | japh-v-kolek | watv-w-kolek | jathe-kolek | pæh-v-kolek |
| **Plural** | japh-v-kolek | watv-w-kolek | jathe-kolek | pæh-v-kolek |
| **VERB:** | yk= 'make net' | wkw= 'chop' | keil= 'hang up' | wowlake 'eat' |
| **Singular** | ythe-kolek | wthv-w-kolek | keilhe-kolek | wowlvhe-kolek |
| **Plural** | ythv-kolek | wthv-w-kolek | keilhe-kolek | wowlvhe-kolek |

| Factive subordinate: coincident progressive, reflexive, consonant-final roots |
|---|---|---|---|---|---|
| **VERB:** | jape 'fight' | wat= 'hit, kill' | jake 'plant' | pæ= 'say' |
| **Singular** | jakelhe-kolek | watikhe-kolek | jakelhe-kolek | pælhe-kolek |
| **Plural** | jakv-kolek | watv-k-kolek | jakv-k-kolek | pælv-k-kolek |
| **VERB:** | yk= 'make net' | wkw= 'chop' | keil= 'hang up' | wowlake 'eat' |
| **Singular** | ikelhe-kolek | wkhv-k-kolek | kelhe-k-kolek | wowlake-k-kolek |
| **Plural** | ikhv-v-kolek | wkhv-k-kolek | kelhe-k-kolek | wowlake-k-kolek |

| Factive subordinate: coincident progressive, non-reflexive, vowel-final roots |
|---|---|---|---|---|---|
| **VERB:** | næk, na= 'eat' | la =~'go' | war, wet= 'some' | æ, æt= 'acquire' |
| **Singular** | nikelhe-kolek | laar-flakhe-kolek | warr-waka-kolek | æar-akhe-kolek |
| **Plural** | nkv-k-kolek | laar-flakhe-kolek | warr-wakv-k-kolek | æar-akv-k-kolek |
| **VERB:** | hæ= 'see' | hel= 'put' | lakel= 'acquire' | æ, æt= 'acquire' |
| **Singular** | helikhe-kolek | helike-kolek | lakelhe-k-kolek | æhelhe-k-kolek |
| **Plural** | hvkv-k-kolek | helike-kolek | lakelhe-k-kolek | æhelhe-k-kolek |

| Factive subordinate: coincident progressive, reflexive, vowel-final roots |
|---|---|---|---|---|---|
| **VERB:** | hæ= 'see' | hel= 'put' | i= 'say' | æ, æt= 'acquire' |
| **Singular** | hakelhe-kolek | hakelhe-kolek | ikeihe-k-kolek | æhelhe-k-kolek |
| **Plural** | hakv-k-kolek | hakelhe-kolek | ikeihe-k-kolek | æhelhe-k-kolek |

*These forms also occur with a final e in the stem, e.g. japho-kolek.*

**These forms were thus recorded. They appear irregular and may be alternate forms.*

+ The stem forms separated by slant lines are alternate forms.
Pactive gerund: non-reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>jeq</td>
<td>'fish'</td>
<td>wat</td>
<td>'fish, kill'</td>
<td>jake</td>
<td>'plant'</td>
<td>pal</td>
</tr>
<tr>
<td>jahv</td>
<td>watv</td>
<td>jahv</td>
<td>watv</td>
<td>jahv</td>
<td>watv</td>
<td>jahv</td>
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<thead>
<tr>
<th>VERB</th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yeq</td>
<td>'make net'</td>
<td>wkhv</td>
<td>'catch'</td>
<td>kel'</td>
<td>'hang up'</td>
<td>wlvvp</td>
</tr>
<tr>
<td>ythv</td>
<td>wkhv</td>
<td>ythv</td>
<td>wkhv</td>
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<td>wkhv</td>
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</tr>
</tbody>
</table>

Pactive gerund: reflexive voice, consonant-final roots**

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</tr>
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<tbody>
<tr>
<td>jeq</td>
<td>'fish'</td>
<td>wat</td>
<td>'fish, kill'</td>
<td>jake</td>
<td>'plant'</td>
<td>pal</td>
</tr>
<tr>
<td>jahvky, jakhvkv(-)</td>
<td>watvky, watvkv(-)</td>
<td>jahvky, jakhvkv(-)</td>
<td>watvky, watvkv(-)</td>
<td>jahvky, jakhvkv(-)</td>
<td>watvky, watvkv(-)</td>
<td>jahvky, jakhvkv(-)</td>
</tr>
</tbody>
</table>

Pactive gerund: non-reflexive voice, vowel-final roots**

<table>
<thead>
<tr>
<th>VERB</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>nkek, nek'</td>
<td>'eat'</td>
<td>wlrk(-), lrkvy</td>
<td>we-, ne-, 'song'</td>
<td>ak(-), akvy</td>
<td>'say'</td>
<td>wkr(-), akvy</td>
</tr>
<tr>
<td>nikk', nikk'</td>
<td>nikk', nikk'</td>
<td>nikk', nikk'</td>
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<td>nikk', nikk'</td>
<td>nikk', nikk'</td>
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</tbody>
</table>

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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>hae</td>
<td>'see'</td>
<td>hel</td>
<td>'put'</td>
<td>lakel'</td>
<td>'send'</td>
<td>i = 'say'</td>
</tr>
<tr>
<td>hvky, hvk', hvkv-</td>
<td>hvky, hvk(-)</td>
<td>hvky, hvk(-)</td>
<td>hvky, hvk(-)</td>
<td>hvky, hvk(-)</td>
<td>hvky, hvk(-)</td>
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Pactive gerund: reflexive voice, vowel-final roots**

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</thead>
<tbody>
<tr>
<td>hae</td>
<td>'see'</td>
<td>hel</td>
<td>'put'</td>
<td>i = 'say'</td>
<td>ak(-), akvy</td>
<td>'say'</td>
</tr>
<tr>
<td>hakhvky</td>
<td>hakhvky</td>
<td>hakhvky</td>
<td>hakhvky</td>
<td>hakhvky</td>
<td>hakhvky</td>
<td>hakhvky</td>
</tr>
</tbody>
</table>

*Recorded thus. This may be an alternate form.

**There is much variation in these rather rare forms, and the best informant often hesitated and was uncertain about the reflexive voice and vowel-final root forms. He did not make any singular/plural contrast, although the resemblance of these forms to abnormal continuative forms suggests this. Forms with hophons or optional hophons (parenthesized) occur with -kkv. See text.

† There was particular hesitation here.

‡ Missing from the data sheets.
Iterative participle: non-reflexive, consonant-final roots

<table>
<thead>
<tr>
<th>VERS</th>
<th>( j'ak) = 'fight'</th>
<th>( \text{wat} ) = 'kiss, kill'</th>
<th>( j'ak) = 'plant'</th>
<th>( \text{pah} ) = 'sever'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>jophyk</td>
<td>watbyk</td>
<td>jophyk</td>
<td>pahbyk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERS</th>
<th>( ym) = 'make met'</th>
<th>( \text{wkk} ) = 'chop'</th>
<th>( kej) = 'hang up'</th>
<th>( wvlyp) = 'kiss'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ytyhk</td>
<td>wrrbyk</td>
<td>kejbyk</td>
<td>wvlybyk</td>
</tr>
</tbody>
</table>

Iterative participle: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERS</th>
<th>( j'ak) = 'fight'</th>
<th>( \text{wat} ) = 'kiss, kill'</th>
<th>( j'ak) = 'plant'</th>
<th>( \text{pah} ) = 'sever'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>jakhyk</td>
<td>wattyk</td>
<td>jakhyk</td>
<td>pallyk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERS</th>
<th>( yk) = 'make met'</th>
<th>( \text{wkk} ) = 'chop'</th>
<th>( kej) = 'hang up'</th>
<th>( wvlyp) = 'kiss'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ikhyk</td>
<td>wukhyk</td>
<td>kejlyk</td>
<td>wvlybyk</td>
</tr>
</tbody>
</table>

Iterative participle: non-reflexive, vowel-final roots

<table>
<thead>
<tr>
<th>VERS</th>
<th>( nek), ( na) = 'eat'</th>
<th>( \text{lar} ) = 'go'</th>
<th>( \text{wak}, \text{wet} ) = 'come'</th>
<th>( \text{ayk} ) = 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nykhyk</td>
<td>laxk</td>
<td>wakbyk</td>
<td>aykbyk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VERS</th>
<th>( hej) = 'see'</th>
<th>( \text{lak} ) = 'go'</th>
<th>( \text{lakbyk} ) = 'acquired'</th>
<th>( \text{yuk} ) = 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hyyk</td>
<td>hyyk</td>
<td>lakhyk</td>
<td>yyk</td>
</tr>
</tbody>
</table>

Iterative participle: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERS</th>
<th>( hej) = 'see'; ( \text{hel} ) = 'put'</th>
<th>( \text{lak} ) = 'tease'</th>
<th>( \text{lakbyk} ) = 'acquire'</th>
<th>( \text{akhbyk} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hakhyk</td>
<td>nekbyk</td>
<td>ikbyk</td>
<td>akbyk</td>
</tr>
</tbody>
</table>

*Recorded thus; this may be an alternate form.*
### 2. Hypothetical Mode

**Simple hypothetical: non-reflexive voice, consonant-final roots**

<table>
<thead>
<tr>
<th>VERB</th>
<th>Subject</th>
<th>John</th>
<th>Vowel</th>
<th>John+</th>
<th>Vowel+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jap= 'fight'</td>
<td>japa, jappil</td>
<td>war= 'hit, kick'</td>
<td>Jap= 'plan'</td>
<td>pal= 'sever'</td>
<td></td>
</tr>
<tr>
<td>Pal= 'speak'</td>
<td>palle</td>
<td>palle</td>
<td>palle</td>
<td>palle</td>
<td></td>
</tr>
<tr>
<td>Pal= 'call'</td>
<td>pallo</td>
<td>pallo</td>
<td>pallo</td>
<td>pallo</td>
<td></td>
</tr>
</tbody>
</table>

**Simple hypothetical: reflexive voice, consonant-final roots**

<table>
<thead>
<tr>
<th>VERB</th>
<th>Subject</th>
<th>John</th>
<th>Vowel</th>
<th>John+</th>
<th>Vowel+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jap= 'fight'</td>
<td>jakhale</td>
<td>watele</td>
<td>jakhale</td>
<td>pal= 'sever'</td>
<td></td>
</tr>
<tr>
<td>Pak= 'call'</td>
<td>jakhalen</td>
<td>watele</td>
<td>jakhalen</td>
<td>pal= 'sever'</td>
<td></td>
</tr>
<tr>
<td>Pak= 'speak'</td>
<td>jakhale</td>
<td>watele</td>
<td>jakhalen</td>
<td>pal= 'sever'</td>
<td></td>
</tr>
</tbody>
</table>

---

**Subject**

- J: japa, jappil
- PAL: pallo, pallo
- pal: palle, palle
- Vowel: war, watele
- John: japa, jakhale
- John+: jakhale, jakhalen
- Vowel+: watele, watele
### Simple: hypothetical: non-reflective voice, vowel-final roots

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>neke, na = 'eat'</th>
<th>la = 'go'</th>
<th>we = 'see'</th>
<th>wete = 'come'</th>
<th>sa, as = 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>nele</td>
<td>lele</td>
<td>wele</td>
<td>wele</td>
<td>a'le</td>
</tr>
<tr>
<td>NE</td>
<td>melo</td>
<td>lelen</td>
<td>welen</td>
<td>welen</td>
<td>a'len</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>nele</td>
<td>lele</td>
<td>wele</td>
<td>wele</td>
<td>a'le</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>melo</td>
<td>lelen</td>
<td>welen</td>
<td>welen</td>
<td>a'len</td>
</tr>
<tr>
<td>BE/SH/iT/</td>
<td>nele</td>
<td>lele</td>
<td>wele</td>
<td>wele</td>
<td>a'le</td>
</tr>
</tbody>
</table>

### Simple: hypothetical: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>I</th>
<th>ha = 'see'</th>
<th>he = 'put'</th>
<th>i = 'say'</th>
<th>sa, as = 'acquire'</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE</td>
<td>hakale</td>
<td>hakale</td>
<td>ikhelo</td>
<td>akhele</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>hakale</td>
<td>hakale</td>
<td>ikhelo</td>
<td>akhele</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>hakalen</td>
<td>hakalen</td>
<td>ikhelen</td>
<td>akhen</td>
</tr>
<tr>
<td>BE/SHT/</td>
<td>hakalelep</td>
<td>hakalelep</td>
<td>ikhelo</td>
<td>akhelep</td>
</tr>
</tbody>
</table>

### Hypothetical with setting: simple conjugation

<table>
<thead>
<tr>
<th>I</th>
<th>wae = 'hit, kill'</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE</td>
<td>waliena</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>waliena</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>walienna</td>
</tr>
<tr>
<td>BE/SH/iT/</td>
<td>waliempa</td>
</tr>
</tbody>
</table>
### Potential Mode

<table>
<thead>
<tr>
<th>Verb</th>
<th>Subject-Modal Category*</th>
</tr>
</thead>
<tbody>
<tr>
<td>japed</td>
<td>'fight'</td>
</tr>
<tr>
<td>jepu</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japek</td>
<td>'plant'</td>
</tr>
<tr>
<td>jepik</td>
<td>'save'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Subject-Modal Category*</th>
</tr>
</thead>
<tbody>
<tr>
<td>japek</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japu</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japwok</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japmok, japmuk</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japuki, japunk</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japuk</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japek</td>
<td>'hit, kill'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Subject-Modal Category*</th>
</tr>
</thead>
<tbody>
<tr>
<td>japek</td>
<td>'hit, kill'</td>
</tr>
<tr>
<td>japek</td>
<td>'hit, kill'</td>
</tr>
</tbody>
</table>

### Abbreviations
- **DEF** - deferred; **HORT** - hortative; **IMP** - imperative; **NOW** - immediate.
Hortative Imperative: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VEND:</th>
<th>jap: 'fight'</th>
<th>wat: 'hit, kill'</th>
<th>jak: 'plan'</th>
<th>pal: 'never'</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT-MODAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATEGORIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>KE-NOM-HORT</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>KE-DEF-HORT</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>YOD (SO) NOM-IMP</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>YOD (SO) DEF-HORT</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>YOD (PL) NOM-IMP</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>YOD (PL) DEF-HORT</td>
<td>jakvak</td>
<td>watvak</td>
<td>jakvak</td>
<td>palvak</td>
</tr>
<tr>
<td>HH/BBZ/17/</td>
<td>jakhanek</td>
<td>watanka</td>
<td>jakhanek</td>
<td>palaneck</td>
</tr>
<tr>
<td>TRST-NOM-HORT</td>
<td>jakhanek</td>
<td>watanka</td>
<td>jakhanek</td>
<td>palaneck</td>
</tr>
<tr>
<td>TRST-DEF-HORT</td>
<td>jakhanek</td>
<td>watanka</td>
<td>jakhanek</td>
<td>palaneck</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VEND:</th>
<th>yke: 'make net'</th>
<th>wwek: 'shop'</th>
<th>kel: 'hang up'</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT-MODAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATEGORIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>KE-NOM-HORT</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>KE-DEF-HORT</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>YOD (SO) NOM-IMP</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>YOD (SO) DEF-HORT</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>YOD (PL) NOM-IMP</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>YOD (PL) DEF-HORT</td>
<td>khvak</td>
<td>wkvak</td>
<td>kellak</td>
<td></td>
</tr>
<tr>
<td>HH/BBZ/17/</td>
<td>khanek</td>
<td>wkhanek</td>
<td>kellaneck</td>
<td></td>
</tr>
<tr>
<td>TRST-NOM-HORT</td>
<td>khanek</td>
<td>wkhanek</td>
<td>kellaneck</td>
<td></td>
</tr>
<tr>
<td>TRST-DEF-HORT</td>
<td>khanek</td>
<td>wkhanek</td>
<td>kellaneck</td>
<td></td>
</tr>
</tbody>
</table>

*Abbreviations: see page 354.
<table>
<thead>
<tr>
<th>VERS:</th>
<th>tense/voice</th>
<th>vowel-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJ/MODAL</td>
<td>asv</td>
<td>'acquire'</td>
</tr>
<tr>
<td>CATEGORY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>hakhak</td>
<td></td>
</tr>
<tr>
<td>WE-KNOW-HOSP</td>
<td>hakhv</td>
<td></td>
</tr>
<tr>
<td>WE-KEEP-HOSP</td>
<td>hakhvok</td>
<td></td>
</tr>
<tr>
<td>TONY(SG)</td>
<td>hankanok</td>
<td></td>
</tr>
<tr>
<td>TONY(F)</td>
<td>hankan</td>
<td></td>
</tr>
<tr>
<td>TONY(PL)</td>
<td>hankanek</td>
<td></td>
</tr>
<tr>
<td>RE/GER/IT</td>
<td>hakoak</td>
<td></td>
</tr>
</tbody>
</table>

**Hortative/imperative with intentional:** sample conjugations

<table>
<thead>
<tr>
<th>VERS:</th>
<th>tense/voice</th>
<th>vowel-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>wat = 'hās, kēlī'</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>Plural</td>
<td>wasik-ylvk</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>FOR YOU(SG) TO</td>
<td>watok-olvk</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>FOR YOU(PL) TO</td>
<td>wasukolkek-olvk</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>THEN TO</td>
<td>wasowak-olvk</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
</tbody>
</table>

**Hortative/imperative with facilitative:** sample conjugations

<table>
<thead>
<tr>
<th>VERS:</th>
<th>tense/voice</th>
<th>vowel-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>wasik-en</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>WE</td>
<td>wasowak-en</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>TONY(SG)</td>
<td>wa'nom-en</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>TONY(PL)</td>
<td>wasukolkek-en</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
<tr>
<td>RE/GER/IT/TNEI</td>
<td>wasowak-en</td>
<td>&quot;hē'pūr&quot;</td>
</tr>
</tbody>
</table>

**notes:** special forms are indicated in lowercase.
### Future: non-reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th>SUBJECT</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>jap</td>
<td>junkin</td>
<td>japukan</td>
<td>isukun</td>
</tr>
<tr>
<td>wat</td>
<td>waskin</td>
<td>wasukun</td>
<td>wusukun</td>
</tr>
</tbody>
</table>

### Future: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th>SUBJECT</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>jap</td>
<td>jakhekein</td>
<td>jakhekein</td>
<td>ikhekein</td>
</tr>
<tr>
<td>wat</td>
<td>watekein</td>
<td>watekein</td>
<td>wukhekein</td>
</tr>
</tbody>
</table>

### Future: non-reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th>SUBJECT</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>nek</td>
<td>nekein</td>
<td>nekein</td>
<td>nekein</td>
</tr>
<tr>
<td>l= 'go'</td>
<td>lekein</td>
<td>lekein</td>
<td>lekein</td>
</tr>
</tbody>
</table>

### Future: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th>SUBJECT</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>hak</td>
<td>hakhekein</td>
<td>hakhekein</td>
<td>ikhekein</td>
</tr>
<tr>
<td>l= 'say'</td>
<td>lekein</td>
<td>lekein</td>
<td>lekein</td>
</tr>
</tbody>
</table>

### Future: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>VERB</th>
<th>SUBJECT</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>hak</td>
<td>hakhekein</td>
<td>hakhekein</td>
<td>ikhekein</td>
</tr>
<tr>
<td>l= 'say'</td>
<td>lekein</td>
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### Future with setting: sample conjugations

<table>
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<tr>
<th>VERS:</th>
<th>Singular</th>
<th>Plural</th>
</tr>
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<tbody>
<tr>
<td>VERS:</td>
<td>wat = 'hot, kill'</td>
<td>wat = 'hot, kill'</td>
</tr>
<tr>
<td>Non-reflexive</td>
<td>wasikime</td>
<td>wasakimo</td>
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<tr>
<td>Reflexive</td>
<td>wasukumo</td>
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<tr>
<td>Remote future: consonant-final roots</td>
<td></td>
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<tr>
<td>VERS:</td>
<td>jaj = 'fight'</td>
<td>jaj = 'fight'</td>
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<tr>
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<td>jahvhp</td>
<td>jathvhp</td>
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<td>Reflexive</td>
<td>jakhvhp</td>
<td>jakhvhp</td>
</tr>
<tr>
<td>VERS:</td>
<td>jya = 'make net'</td>
<td>jya = 'make net'</td>
</tr>
<tr>
<td>Non-reflexive</td>
<td>jyathvhp</td>
<td>jyathvhp</td>
</tr>
<tr>
<td>Reflexive</td>
<td>jyakhvhp</td>
<td>jyakhvhp</td>
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<tr>
<td>Remote future: vowel-final roots</td>
<td></td>
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<tr>
<td>VERS:</td>
<td>nek =, nas = 'eat'</td>
<td>nek =, nas = 'eat'</td>
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<td>Potential gerund: consonant-final roots</td>
<td></td>
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<tr>
<td>VERS:</td>
<td>jak = 'make'</td>
<td>jak = 'make'</td>
</tr>
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<td>jaka</td>
<td>jaka</td>
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<tr>
<td>Reflexive</td>
<td>jaka</td>
<td>jaka</td>
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### Potential gerund: vowel-final roots

| VERS: | wat = 'hot, kill' | wat = 'hot, kill' |
| Non-reflexive | wat | wat |
| Reflexive | wat | wat |
| VERS: | jja = 'hang up' | jja = 'hang up' |
| Non-reflexive | jajha | jajha |
| Reflexive | jajha | jajha |
| VERS: | jya = 'make net' | jya = 'make net' |
| Non-reflexive | jyaa | jyaa |
| Reflexive | jyaa | jyaa |

### Potential gerund: vowel-final roots

| VERS: | wat = 'hot, kill' | wat = 'hot, kill' |
| Non-reflexive | wat | wat |
| Reflexive | wat | wat |
| VERS: | jja = 'hang up' | jja = 'hang up' |
| Non-reflexive | jajha | jajha |
| Reflexive | jajha | jajha |
| VERS: | jya = 'make net' | jya = 'make net' |
| Non-reflexive | jyaa | jyaa |
| Reflexive | jyaa | jyaa |

### Potential gerund: vowel-final roots

| VERS: | wat = 'hot, kill' | wat = 'hot, kill' |
| Non-reflexive | wat | wat |
| Reflexive | wat | wat |
| VERS: | jja = 'hang up' | jja = 'hang up' |
| Non-reflexive | jajha | jajha |
| Reflexive | jajha | jajha |
| VERS: | jya = 'make net' | jya = 'make net' |
| Non-reflexive | jyaa | jyaa |
| Reflexive | jyaa | jyaa |

### Potential gerund: vowel-final roots

<p>| VERS: | wat = 'hot, kill' | wat = 'hot, kill' |
| Non-reflexive | wat | wat |
| Reflexive | wat | wat |
| VERS: | jja = 'hang up' | jja = 'hang up' |
| Non-reflexive | jajha | jajha |
| Reflexive | jajha | jajha |
| VERS: | jya = 'make net' | jya = 'make net' |
| Non-reflexive | jyaa | jyaa |
| Reflexive | jyaa | jyaa |</p>
<table>
<thead>
<tr>
<th>Potential gerund: vowel-final roots</th>
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</thead>
<tbody>
<tr>
<td>VERB:</td>
</tr>
<tr>
<td>nek = ‘eat’</td>
</tr>
<tr>
<td>na = ‘go’</td>
</tr>
<tr>
<td>wa = ‘come’</td>
</tr>
<tr>
<td>laka = ‘ascend’</td>
</tr>
<tr>
<td>Non-Reflex</td>
</tr>
<tr>
<td>he = ‘see’</td>
</tr>
<tr>
<td>Reflexive</td>
</tr>
<tr>
<td>he = ‘put’</td>
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<tr>
<td>hou = ‘say’</td>
</tr>
<tr>
<td>ikha = ‘acquire’</td>
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<td>Potential gerund with setting:</td>
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<tr>
<td>sample conjugations</td>
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<tr>
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</tr>
<tr>
<td>was = ‘hit, kill’</td>
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<td>Predictive (based on potential gerund): consonant-final roots</td>
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<td>VERB:</td>
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<td>jep = ‘fight’</td>
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<td>was = ‘hit, kill’</td>
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<td>Predictive: vowel-final roots</td>
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<td>VERB:</td>
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<td>nas = ‘eat’</td>
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<td>las = ‘go’</td>
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<tr>
<td><strong>VERB:</strong></td>
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<tr>
<td>jap = 'fight'</td>
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<tr>
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<tr>
<td>japhvbk, japhvkhk</td>
</tr>
<tr>
<td>wat = 'hit, kill'</td>
</tr>
<tr>
<td>watshvbk</td>
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<td>watshvk</td>
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<tr>
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</tr>
<tr>
<td>palshvkhk</td>
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<td>kei = 'hang up'</td>
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<td>wvlvp = 'desire'</td>
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</tr>
<tr>
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<td>Verb Type</td>
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Portentive (based on potential stem): consonant-final roots

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<tbody>
<tr>
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<td>jaw-noko</td>
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<tr>
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<td>wasi-noko</td>
<td>wak-noko</td>
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<tr>
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<td>kai-noko</td>
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Portentive (based on potential stem): vowel-final roots

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Basic participle (potential): consonant-final roots

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</table>

Basic participle (potential): vowel-final roots

<table>
<thead>
<tr>
<th>Verb Type</th>
<th>Base Stem</th>
<th>Non-reflexive</th>
<th>Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>jaw, na</td>
<td>jaw-noko</td>
<td>jaw-noko</td>
</tr>
<tr>
<td>Reflexive</td>
<td>jaw-noko</td>
<td>wasi-noko</td>
<td>wak-noko</td>
</tr>
<tr>
<td>Past</td>
<td>kai-noko</td>
<td>kai-noko</td>
<td>kai-noko</td>
</tr>
<tr>
<td>Perfect</td>
<td>nge-noko</td>
<td>wak-noko</td>
<td>wak-noko</td>
</tr>
<tr>
<td>Basic part.</td>
<td>jaw-noko</td>
<td>jaw-noko</td>
<td>jaw-noko</td>
</tr>
<tr>
<td>Present</td>
<td>jaw, na</td>
<td>jaw-noko</td>
<td>jaw-noko</td>
</tr>
<tr>
<td>Reflexive</td>
<td>jaw-noko</td>
<td>wasi-noko</td>
<td>wak-noko</td>
</tr>
<tr>
<td>Past</td>
<td>kai-noko</td>
<td>kai-noko</td>
<td>kai-noko</td>
</tr>
<tr>
<td>Perfect</td>
<td>nge-noko</td>
<td>wak-noko</td>
<td>wak-noko</td>
</tr>
<tr>
<td>Basic part.</td>
<td>jaw-noko</td>
<td>jaw-noko</td>
<td>jaw-noko</td>
</tr>
</tbody>
</table>
Perfect participle (potential): consonant-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>jao 'fight'</th>
<th>wat 'kick, kick'</th>
<th>jaco 'plant'</th>
<th>pal 'spear'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflexive</td>
<td>jaojok, jaojok</td>
<td>watok</td>
<td>jacojok</td>
<td>paljok</td>
</tr>
<tr>
<td>VERS:</td>
<td>yao 'make net'</td>
<td>wako 'spit'</td>
<td>kei 'hang up'</td>
<td>wuwo 'eat'</td>
</tr>
<tr>
<td>Reflexive</td>
<td>yaojok</td>
<td>wakok</td>
<td>keijok</td>
<td>wuwojok</td>
</tr>
</tbody>
</table>

Perfect participle (potential): vowel-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>nek 'eat'</th>
<th>la 'go'</th>
<th>wek 'come'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflexive</td>
<td>neklok</td>
<td>lakel</td>
<td>enrol</td>
</tr>
<tr>
<td>VERS:</td>
<td>ha 'see'</td>
<td>hel 'put'</td>
<td>au 'ate'</td>
</tr>
<tr>
<td>Reflexive</td>
<td>halok</td>
<td>helok, helok</td>
<td>eluk, yel</td>
</tr>
</tbody>
</table>

Nammar participle (potential): consonant-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>jao 'fight'</th>
<th>wat 'kick, kick'</th>
<th>jaco 'plant'</th>
<th>pal 'spear'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflexive</td>
<td>jaojok</td>
<td>watok</td>
<td>jacojok</td>
<td>paljok</td>
</tr>
<tr>
<td>VERS:</td>
<td>yao 'make net'</td>
<td>wako 'spit'</td>
<td>kei 'hang up'</td>
<td>wuwo 'eat'</td>
</tr>
<tr>
<td>Reflexive</td>
<td>yaojok</td>
<td>wakok</td>
<td>keijok</td>
<td>wuwojok</td>
</tr>
</tbody>
</table>

Past participle (potential) consonant-final roots

<table>
<thead>
<tr>
<th>VERB:</th>
<th>jao 'fight'</th>
<th>wat 'kick, kick'</th>
<th>jaco 'plant'</th>
<th>pal 'spear'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflexive</td>
<td>jaojok</td>
<td>watok</td>
<td>jacojok</td>
<td>paljok</td>
</tr>
<tr>
<td>VERS:</td>
<td>yao 'make net'</td>
<td>wako 'spit'</td>
<td>kei 'hang up'</td>
<td>wuwo 'eat'</td>
</tr>
<tr>
<td>Reflexive</td>
<td>yaojok</td>
<td>wakok</td>
<td>keijok</td>
<td>wuwojok</td>
</tr>
</tbody>
</table>

*Rarely used; the basic participle is commonly substituted.
**Not recorded.
***These participles do not occur with contrastive reflexive voice forms, nor do they occur for minor class verbs, including the verbs with vowel-final roots.
****The manner participle form is used instead of a distinctive past participle form for all verbs of this conjugation class: watoko 'steamed'; istako 'steamed'; tako 'born'; 'dug'.
B. FORMS OF VERB: -laky= 'continue' AND CONSTRUCTIONS WITH THAT VERB AS THE AUXILIARY MAKING PROGRESSIVE ASPECT

1. Factive Mode

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Present/Past Progressive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
</table>
| **I**     | japhy-laky
| **YOU(SS)** | japhy-laken
| **WE**     | japhy-lako
| **YOU(PL)** | japhy-lakep |

**Present only**

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Present/Past Progressive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MR/HER/IT</strong></td>
<td>japhy-lako</td>
</tr>
<tr>
<td><strong>THEY</strong></td>
<td>japhy-lay*</td>
</tr>
</tbody>
</table>

**Past only**

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Present/Past Progressive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MR/HER/IT</strong></td>
<td>japhy-lakekha</td>
</tr>
</tbody>
</table>

**VERB:** yk= 'make net'

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Present/Past Progressive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
</table>
| **I**     | ythy-laky
| **YOU(SS)** | ythy-laken
| **WE**     | ythy-lako
| **YOU(PL)** | ythy-lakep |

**Present only**

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Present/Past Progressive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MR/HER/IT</strong></td>
<td>ythy-lako</td>
</tr>
<tr>
<td><strong>THEY</strong></td>
<td>ythy-lay*</td>
</tr>
</tbody>
</table>

**Past only**

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Present/Past Progressive: non-reflexive voice, consonant-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MR/HER/IT</strong></td>
<td>ythy-lakekha</td>
</tr>
</tbody>
</table>

*Alternate forms with the auxiliary in the form -laky also occur."
Present/past progressive: reflexive voice, consonant-final roots

<table>
<thead>
<tr>
<th>Verb</th>
<th>Present/past</th>
<th>Present only</th>
<th>Past only</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>jekh 'fright'</td>
<td>watkyk 'hit, kill'</td>
<td>jekh 'pluck'</td>
</tr>
<tr>
<td>T00(SG)</td>
<td>jekhkhy 'laky'</td>
<td>watykhy 'laky'</td>
<td>jekhkhy 'laky'</td>
</tr>
<tr>
<td>T00(PL)</td>
<td>jekhkvc 'lakap'</td>
<td>watykv 'lakap'</td>
<td>jekhkvc 'laky'</td>
</tr>
<tr>
<td></td>
<td>Present only</td>
<td></td>
<td>Past only</td>
</tr>
<tr>
<td>ke/seg/IT</td>
<td>jekhaly 'lako'</td>
<td>watly 'lako'</td>
<td>jekhaly 'lako'</td>
</tr>
<tr>
<td>T398</td>
<td>jekhaly 'lay'</td>
<td>watly 'lay'</td>
<td>jekhaly 'lay'</td>
</tr>
<tr>
<td>T00(SG)</td>
<td>jekhkhy 'lakha'</td>
<td>watkykhy 'lakha'</td>
<td>jekhkhy 'lakha'</td>
</tr>
<tr>
<td>T00(PL)</td>
<td>jekhkvc 'lakap'</td>
<td>watykv 'lakap'</td>
<td>jekhkvc 'lakap'</td>
</tr>
<tr>
<td></td>
<td>Present/past</td>
<td></td>
<td>Past only</td>
</tr>
<tr>
<td>1</td>
<td>wak 'make not'</td>
<td>wak 'shop'</td>
<td>kei 'hang up'</td>
</tr>
<tr>
<td>T00(SG)</td>
<td>jekhky 'laky'</td>
<td>wukhykky 'laky'</td>
<td>jekhky 'laky'</td>
</tr>
<tr>
<td>T00(PL)</td>
<td>jekhkyv 'lakap'</td>
<td>wukhykv 'lakap'</td>
<td>jekhkyv 'laky'</td>
</tr>
<tr>
<td></td>
<td>Present only</td>
<td></td>
<td>Past only</td>
</tr>
<tr>
<td>ke/seg/IT</td>
<td>jekhyly 'lako'</td>
<td>wukkyly 'lako'</td>
<td>jekhyly 'lako'</td>
</tr>
<tr>
<td>T398</td>
<td>jekhyly 'lay'</td>
<td>wukkyly 'lay'</td>
<td>jekhyly 'lay'</td>
</tr>
<tr>
<td>T00(SG)</td>
<td>jekhy 'lakha'</td>
<td>wukhykhy 'lakha'</td>
<td>jekhy 'lakha'</td>
</tr>
<tr>
<td>T00(PL)</td>
<td>jekhkyv 'lakap'</td>
<td>wukhykv 'lakap'</td>
<td>jekhkyv 'lakap'</td>
</tr>
</tbody>
</table>

*Alternate forms with the auxiliary in the form -laky also occur.*
<table>
<thead>
<tr>
<th>Verb</th>
<th>VBB:</th>
<th>Present/past progressive</th>
<th>non-reflexive voice, vowel-final roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBB:</td>
<td>vela=, lako=</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present/past</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>velaky</td>
<td>nykky-laky</td>
<td>laka-laky</td>
</tr>
<tr>
<td>TOW(SG)</td>
<td>velaken</td>
<td>nykky-lakno</td>
<td>laka-lakno</td>
</tr>
<tr>
<td>TOV</td>
<td>velako</td>
<td>nykky-lako</td>
<td>laka-lakep</td>
</tr>
<tr>
<td>TOV(PL)</td>
<td>velakep</td>
<td>nykky-lakep</td>
<td>laka-lakep</td>
</tr>
<tr>
<td>Present only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K1/SER/IT</td>
<td>vetek</td>
<td>nylu'-lako</td>
<td>lyly'-lako</td>
</tr>
<tr>
<td>TERT</td>
<td>vetek</td>
<td>nylu'-lay'</td>
<td>lyly'-lay'</td>
</tr>
<tr>
<td>Past only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K1/SER/IT</td>
<td>velake</td>
<td>nykky-lake</td>
<td>laka-lake</td>
</tr>
<tr>
<td>TERT</td>
<td>velakekhla</td>
<td>nykky-lakekhla</td>
<td>laka-lakekhla</td>
</tr>
<tr>
<td>Past only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VBB:</td>
<td>baa- 'go'; baa 'put'</td>
<td>laka- 'goend'</td>
<td>l = 'say'</td>
</tr>
<tr>
<td>Present/past</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>hykhy-laky</td>
<td>lakekhly-laky</td>
<td>ykkhy-laky</td>
</tr>
<tr>
<td>TOW(SG)</td>
<td>hykhy-lakno</td>
<td>lakekhly-lakno</td>
<td>ykkhy-lakno</td>
</tr>
<tr>
<td>TOV</td>
<td>hykhy-lako</td>
<td>lakekhly-lakep</td>
<td>ykkhy-lakep</td>
</tr>
<tr>
<td>TOV(PL)</td>
<td>hykhy-lakep</td>
<td>lakekhly-lakep</td>
<td>ykkhy-lakep</td>
</tr>
<tr>
<td>Present only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K1/SER/IT</td>
<td>hyly'-lako</td>
<td>lakely'-lako</td>
<td>yly'-lako</td>
</tr>
<tr>
<td>TERT</td>
<td>hyly'-lay'</td>
<td>lakely'-lay'</td>
<td>yly'-lay'</td>
</tr>
<tr>
<td>Past only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K1/SER/IT</td>
<td>hykhy-lake</td>
<td>lakekhly-lake</td>
<td>ykkhy-lake</td>
</tr>
<tr>
<td>TERT</td>
<td>hykhy-lakekhla</td>
<td>lakekhly-lakekhla</td>
<td>ykkhy-lakekhla</td>
</tr>
</tbody>
</table>

*Alternate forms with the auxiliary in the form -laky also occur.
**Forms like lakkyv-lake are not in the checked data sheets, but may indeed occur.
Present/past progressive: reflexive voice, vowel-final roots

<table>
<thead>
<tr>
<th>Verb</th>
<th>Present/Tense</th>
<th>Present/Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>have, take</td>
<td>have, take</td>
</tr>
<tr>
<td>3SG</td>
<td>hakyky-haky</td>
<td>hakyky-haken</td>
</tr>
<tr>
<td>3PL</td>
<td>hakyky-hakep</td>
<td>hakyky-hakep</td>
</tr>
</tbody>
</table>

Present only

<table>
<thead>
<tr>
<th>NE/SNE/IT</th>
<th>TSE</th>
<th>Present only</th>
</tr>
</thead>
<tbody>
<tr>
<td>have, take</td>
<td>have, take</td>
<td>have, take</td>
</tr>
<tr>
<td>3SG</td>
<td>hakyky-lako</td>
<td>hakyky-lako</td>
</tr>
<tr>
<td>3PL</td>
<td>hakyky-lakekha</td>
<td>hakyky-lakekha</td>
</tr>
</tbody>
</table>

Progressive with setting, ex. conjugations

<table>
<thead>
<tr>
<th>Verb</th>
<th>Present/Past (usually understood as past)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>welakoma</td>
</tr>
<tr>
<td>3SG</td>
<td>welakoma</td>
</tr>
<tr>
<td>3PL</td>
<td>welakoma</td>
</tr>
</tbody>
</table>

Present (or with modal meaning determined by superordinate verb), most common is spatial sense. This is the only suffixation occurring with these.

<table>
<thead>
<tr>
<th>NE/SNE/IT</th>
<th>TSE</th>
<th>Present only</th>
</tr>
</thead>
<tbody>
<tr>
<td>write</td>
<td>write</td>
<td>write</td>
</tr>
<tr>
<td>3SG</td>
<td>welakoma</td>
<td>welakoma</td>
</tr>
<tr>
<td>3PL</td>
<td>welakoma</td>
<td>welakoma</td>
</tr>
</tbody>
</table>

*Alternate forms with the auxiliary in the form -laky also occur.*
**Progressive aspect with other factive categories: sample conjugations**

Progressive aspect forms occur for all finite factive categories except normal aspect. Normal aspect forms occur for the primary verb *wele* = 'continue' but for no periphrastic progressive aspect forms except prohibitive.

**Progressive with prior action, sample conjugations**

<table>
<thead>
<tr>
<th>VERS:</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-reflexive</td>
<td>reflexive</td>
<td>non-reflexive</td>
<td>reflexive</td>
</tr>
<tr>
<td>1</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>VE</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>TO[V]</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>NN/GR/IT</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>THET</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
</tbody>
</table>

**Progressive, remote past**

<table>
<thead>
<tr>
<th>VERS:</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-reflexive</td>
<td>reflexive</td>
<td>non-reflexive</td>
</tr>
<tr>
<td>1</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>VE</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>TO[V]</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>NN/GR/IT</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>THET</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
</tbody>
</table>

**Progressive, remote past, prior**

<table>
<thead>
<tr>
<th>VERS:</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-reflexive</td>
<td>reflexive</td>
<td>non-reflexive</td>
<td>reflexive</td>
</tr>
<tr>
<td>1</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>VE</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>TO[V]</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>NN/GR/IT</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>THET</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
</tbody>
</table>

**Progressive, remote past, setting**

<table>
<thead>
<tr>
<th>VERS:</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-reflexive</td>
<td>reflexive</td>
<td>non-reflexive</td>
</tr>
<tr>
<td>1</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>VE</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>TO[V]</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>NN/GR/IT</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
<tr>
<td>THET</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
<td>wele- husik</td>
</tr>
</tbody>
</table>

**Progressive, prior, setting**

<table>
<thead>
<tr>
<th>VERS:</th>
<th>verb = 'his, kei'</th>
<th>verb = 'his, kei'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-reflexive</td>
<td>reflexive</td>
</tr>
<tr>
<td>1</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
</tr>
<tr>
<td>VE</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
</tr>
<tr>
<td>TO[V]</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
</tr>
<tr>
<td>NN/GR/IT</td>
<td>wele- laxaky</td>
<td>wele- lakosik</td>
</tr>
<tr>
<td>THET</td>
<td>wele- lakosik</td>
<td>wele- husik</td>
</tr>
</tbody>
</table>
### Progressive, Remote past, prior action with setting: sample conjugations

<table>
<thead>
<tr>
<th>VERS:</th>
<th>welae, lokoi= 'continue'</th>
<th>wat= 'hik, kill' (non-reflexive voice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>welakalis=fno</td>
<td>wathy-lakakisi=fno</td>
</tr>
<tr>
<td>WE</td>
<td>welakakus1='mo</td>
<td>wathy-lakakus1='mo</td>
</tr>
<tr>
<td>YDO(3S)</td>
<td>welakakiti='mo</td>
<td>wathy-lakakiti='mo</td>
</tr>
<tr>
<td>YDO(PL)</td>
<td>welakakisfipno</td>
<td>wathy-lakakisi=fno</td>
</tr>
<tr>
<td>RER/SS/IR</td>
<td>welakelkhesi='mo</td>
<td>wathy-lakelkhesi='mo</td>
</tr>
<tr>
<td>TET</td>
<td>welakokwhasi='mo</td>
<td>wathy-lakokwhasi='mo</td>
</tr>
</tbody>
</table>

### Normal aspect forms of welae, lokoi= 'continue'

<table>
<thead>
<tr>
<th>VERS:</th>
<th>welakylesi=</th>
<th>remote past, normal, prior setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>welakylesi=</td>
<td>welakylesi=</td>
</tr>
<tr>
<td>WE</td>
<td>welakylesi=</td>
<td>welakylesi=</td>
</tr>
<tr>
<td>YDO(3S)</td>
<td>welakylesi=</td>
<td>welakylesi=</td>
</tr>
<tr>
<td>YDO(PL)</td>
<td>welakylesi=</td>
<td>welakylesi=</td>
</tr>
<tr>
<td>RER/SS/IR</td>
<td>welakylesi=</td>
<td>welakylesi=</td>
</tr>
<tr>
<td>TET</td>
<td>welakylesi=</td>
<td>welakylesi=</td>
</tr>
</tbody>
</table>

### Progressive prohibitive: sample conjugations

<table>
<thead>
<tr>
<th>VERS:</th>
<th>welae, lokoi= 'continue'</th>
<th>wat= 'hik, kill'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>lokokvn</td>
<td>wathy-lokokvn</td>
</tr>
<tr>
<td>YDO(3S)</td>
<td>lokokvn</td>
<td>wathy-lokokvn</td>
</tr>
<tr>
<td>YDO(PL)</td>
<td>lokokvnp</td>
<td>wathy-lokokvp</td>
</tr>
</tbody>
</table>

### Progressive prohibitive, normal aspect: sample conjugations

<table>
<thead>
<tr>
<th>VERS:</th>
<th>welae, lokoi= 'continue'</th>
<th>wat= 'hik, kill'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>lokokvteke</td>
<td>wathy-lokokvteke</td>
</tr>
<tr>
<td>YDO(3S)</td>
<td>lokokvteke</td>
<td>wathy-lokokvteke</td>
</tr>
<tr>
<td>YDO(PL)</td>
<td>lokokvme</td>
<td>wathy-lokokyme</td>
</tr>
</tbody>
</table>
Other factive categories of *wele=*, *lokol= 'continue' not observed with periphrastic constructions marking progressive aspect of other verbs:

<table>
<thead>
<tr>
<th>Administrative</th>
<th>Abnormal continuative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>weleka hvk</em></td>
<td><em>weleka</em></td>
</tr>
<tr>
<td>Conditional</td>
<td>Coincident progressive</td>
</tr>
<tr>
<td><em>welek hlok</em></td>
<td><em>welek-klok</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>welekan</em>**</td>
<td><em>welekan</em>**</td>
</tr>
<tr>
<td>*loko<strong>vnen</strong></td>
<td>*loko<strong>vnen</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Passive gerund</th>
<th>Iterative participle</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>welekv</em></td>
<td><em>welekv</em></td>
</tr>
</tbody>
</table>

2. Hypothetical Mode

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Progressive, hypothetical</th>
<th>Progressive, hypothetical with setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wele=</em>, <em>lokol=</em></td>
<td><em>wele=</em>, <em>lokol=</em></td>
<td><em>wele=</em>, <em>lokol=</em></td>
</tr>
<tr>
<td><em>lokole</em></td>
<td><em>lokole</em></td>
<td><em>lokole</em></td>
</tr>
<tr>
<td><em>lokola</em></td>
<td><em>lokola</em></td>
<td><em>lokola</em></td>
</tr>
<tr>
<td><em>lokolen</em></td>
<td><em>lokolen</em></td>
<td><em>lokolen</em></td>
</tr>
<tr>
<td><em>lokolep</em></td>
<td><em>lokolep</em></td>
<td><em>lokolep</em></td>
</tr>
<tr>
<td><em>wathy-lokola</em></td>
<td><em>wathy-lokola</em></td>
<td><em>wathy-lokola</em></td>
</tr>
<tr>
<td><em>wathy-lokolen</em></td>
<td><em>wathy-lokolen</em></td>
<td><em>wathy-lokolen</em></td>
</tr>
<tr>
<td><em>wathy-lokolep</em></td>
<td><em>wathy-lokolep</em></td>
<td><em>wathy-lokolep</em></td>
</tr>
</tbody>
</table>

*Note that these forms are irregular.*

*These forms occur only in a prohibitive sense with this verb; *wete'ma* the present progressive form in third person is used with all person and number categories to refer to simultaneous events.
3. Potential Mode

Progressive hortative/imperative: sample conjugations

<table>
<thead>
<tr>
<th>VERB:</th>
<th>veka, lokol</th>
<th>'continue'</th>
<th>wat= 'híe, kill'</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>non-reflexive</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-veka</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
</tbody>
</table>

Progressive intentional: sample conjugations

<table>
<thead>
<tr>
<th>VERB:</th>
<th>veka, lokol</th>
<th>'continue'</th>
<th>wat= 'híe, kill'</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>non-reflexive</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-veka</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
</tbody>
</table>

Progressive facilitative: sample conjugations

<table>
<thead>
<tr>
<th>VERB:</th>
<th>veka, lokol</th>
<th>'continue'</th>
<th>wat= 'híe, kill'</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>non-reflexive</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-veka</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
<tr>
<td>J</td>
<td>vek-a-HORT</td>
<td>vek-a-HORT</td>
<td>vathy-lokouk</td>
</tr>
</tbody>
</table>

381
### Progressive future: sample conjugations

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokok</em></td>
<td><em>lakux</em></td>
<td><em>wathy-lokok</em></td>
</tr>
</tbody>
</table>

### Progressive future with setting

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokoi</em></td>
<td><em>lakux</em></td>
<td><em>wathy-lokok</em></td>
</tr>
</tbody>
</table>

### Progressive remote future: sample conjugations

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokok</em></td>
<td><em>lakux</em></td>
<td><em>wathy-lokok</em></td>
</tr>
</tbody>
</table>

### Progressive potential gerund

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokou</em></td>
<td><em>lakou</em></td>
<td><em>wathy-lokou</em></td>
</tr>
</tbody>
</table>

### Progressive predictive

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokou</em></td>
<td><em>lakou</em></td>
<td><em>wathy-lokou</em></td>
</tr>
</tbody>
</table>

### Progressive portentive

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokoi</em></td>
<td><em>lakok</em></td>
<td><em>wathy-lokoi</em></td>
</tr>
</tbody>
</table>

### Progressive prior (occurs only with *'continue'* and progressive forms)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>wela</em></td>
<td><em>lokoi</em></td>
<td><em>'continue'</em></td>
</tr>
<tr>
<td><em>lokoi</em></td>
<td><em>lakok</em></td>
<td><em>wathy-lokoi</em></td>
</tr>
</tbody>
</table>

---

"This form of *wela*, *lokoi* = *'continue'* and these periphrastic constructions with other verbs function importantly in expressions of action simultaneous with another action by the same subject. See Chapter 5."
C. INNER LAYER AUXILIARIES AND OTHER FORMS AND CONSTRUCTIONS MARKING PERSONAL OBJECTS

1. Personal object prefixes with the verb was = ‘has, has’

Simple factitive: See Table 5, p.100.

<table>
<thead>
<tr>
<th>Remote past</th>
<th>SUBJECTS</th>
<th>NS</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>HIM/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>hathiki</td>
<td>hathuku</td>
<td>wathiki</td>
<td>inathiki</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>nathikin</td>
<td>nathikin</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>nathikin</td>
<td>nathikin</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>NP/GIE/IT</td>
<td>nathikin</td>
<td>nathikin</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>TARE</td>
<td>nathukwa</td>
<td>nathukwa</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
</tbody>
</table>

Potential mode: hurtative/impertative

<table>
<thead>
<tr>
<th>Remote past</th>
<th>SUBJECTS</th>
<th>NS</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>HIM/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>haseik</td>
<td>haseik</td>
<td>waseik</td>
<td>inseik</td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>naseik</td>
<td>naseik</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>naseik</td>
<td>naseik</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>NP/GIE/IT</td>
<td>naseik</td>
<td>naseik</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>TARE</td>
<td>naseik</td>
<td>naseik</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
</tbody>
</table>

All other categories of this verb in all event modes and in unmarked aspect forms are similarly inflected. Following the pattern displayed for this verb with unmarked third person singular object in sections A and B of this appendix, except that manner participles marked for personal objects have been only rarely observed, and past participles and reflexive voice forms do not occur marked for personal objects.
2. Personal Object Affixes with the Verb hei = 'put'

Simple past: See Table 6, p.102.

Remote past

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>NE</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>HIM/HER/IT</th>
<th>THEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE</td>
<td>xx</td>
<td>xx</td>
<td>hakeilik</td>
<td>hinesikli</td>
<td>hesiki</td>
<td>haisiki</td>
</tr>
<tr>
<td>(newer form)</td>
<td>hnikikin,</td>
<td></td>
<td>hnikikin,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>xx</td>
<td>xx</td>
<td>hakesuku</td>
<td>hinesuket</td>
<td>hesuku</td>
<td>haisuku</td>
</tr>
<tr>
<td>(newer form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>xx</td>
<td>xx</td>
<td>hakeilik,</td>
<td>hinesikli</td>
<td>hesiki</td>
<td>haisiki</td>
</tr>
<tr>
<td>(newer form)</td>
<td>hnikikin,</td>
<td></td>
<td>hnikikin,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE/HER/IT</td>
<td>xx</td>
<td>xx</td>
<td>hakeilik</td>
<td>hinesikli</td>
<td>hesiki</td>
<td>haisiki</td>
</tr>
<tr>
<td>(newer form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>YOU</td>
<td>xx</td>
<td>xx</td>
<td>hakesuku</td>
<td>hinesuket</td>
<td>hesuku</td>
<td>haisuku</td>
</tr>
<tr>
<td>(newer form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Normal aspect

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>NE</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>HIM/HER/IT</th>
<th>THEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE</td>
<td>xx</td>
<td>xx</td>
<td>hakekytek</td>
<td>hinesiktekk</td>
<td>hyktek</td>
<td>hakesiktekk</td>
</tr>
<tr>
<td>(newer form)</td>
<td>hnikitak,</td>
<td></td>
<td>hnikitak,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOU(SG)</td>
<td>xx</td>
<td>xx</td>
<td>hakokytak</td>
<td>hinesiktekk</td>
<td>hokytak</td>
<td>hakesiktekk</td>
</tr>
<tr>
<td>(newer form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOU(PL)</td>
<td>xx</td>
<td>xx</td>
<td>hakekytek,</td>
<td>hinesiktekk</td>
<td>hyktek</td>
<td>hakesiktekk</td>
</tr>
<tr>
<td>(newer form)</td>
<td>hnikitak,</td>
<td></td>
<td>hnikitak,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE/HER/IT</td>
<td>xx</td>
<td>xx</td>
<td>hakekytek,</td>
<td>hinesiktekk</td>
<td>hyktek</td>
<td>hakesiktekk</td>
</tr>
<tr>
<td>(newer form)</td>
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<td></td>
<td>nakalhettek,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOU</td>
<td>xx</td>
<td>xx</td>
<td>hakekytek</td>
<td>hinesiktekk</td>
<td>hyktek</td>
<td>hakesiktekk</td>
</tr>
<tr>
<td>(newer form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Forms of hei = 'put' marked for personal objects with stems ending in -n (in the older first person object forms) are inflected regularly like verbs with discontinuous roots, like pae = 'save' in the paradigms in sections 4 and B of this appendix. The third person plural object forms are inflected like nem = 'go'.

The second person object forms and the newer first person object forms are inflected, in general, like hei = 'put' with implicit third person singular object.
## Passive Ground Forms of hele 'put'

### Objects

<table>
<thead>
<tr>
<th>Form</th>
<th>XX</th>
<th>SS</th>
<th>SSU</th>
<th>SSU(PL)</th>
<th>HUN/HER/IT</th>
<th>THNM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handv</td>
<td>hanhv</td>
<td>hinhanhv</td>
<td>hakerkv</td>
<td>hina(ake)kv</td>
<td>hikv</td>
<td>hinykv</td>
</tr>
<tr>
<td>Naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
</tr>
</tbody>
</table>

### Iterative Participle Forms of hele 'put'

<table>
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<tr>
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<th>SS</th>
<th>SSU</th>
<th>SSU(PL)</th>
<th>HUN/HER/IT</th>
<th>THNM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handv</td>
<td>hanhv</td>
<td>hinhanhv</td>
<td>hakerkv</td>
<td>hina(ake)kv</td>
<td>hikv</td>
<td>hinykv</td>
</tr>
<tr>
<td>Naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
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<td>naka</td>
</tr>
</tbody>
</table>

### Hypothetical mode forms of hele 'put'

### Potential mode, nortative/imperative forms of hele 'put'

<table>
<thead>
<tr>
<th>Form</th>
<th>XX</th>
<th>SS</th>
<th>SSU</th>
<th>SSU(PL)</th>
<th>HUN/HER/IT</th>
<th>THNM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handv</td>
<td>hanhv</td>
<td>hinhanhv</td>
<td>hakerkv</td>
<td>hina(ake)kv</td>
<td>hikv</td>
<td>hinykv</td>
</tr>
<tr>
<td>Naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
<td>naka</td>
</tr>
</tbody>
</table>
Potential mode, future forms of hai = 'put'  

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>NE</th>
<th>SU</th>
<th>YOU(2S)</th>
<th>YOU(PL)</th>
<th>HIN/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGULAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(never form)</td>
<td>hanakin, hisanakin, heken</td>
<td>hakakin, hisakakin, heken</td>
<td>km</td>
<td>km</td>
<td>km</td>
<td>km</td>
</tr>
<tr>
<td>(never form)</td>
<td>nakakin, ninakakin, hisakakin</td>
<td>nakakun, ninakakun, hisakakun</td>
<td>km</td>
<td>km</td>
<td>km</td>
<td>km</td>
</tr>
<tr>
<td>FLORAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(never form)</td>
<td>hanakun, ninakun, hisakun</td>
<td>hakakun, hisakakun, hisakun</td>
<td>km</td>
<td>km</td>
<td>km</td>
<td>km</td>
</tr>
</tbody>
</table>

Potential mode, remote future forms of hai = 'put'  

| (never form) | hanhvp, hinahkvp, ninkaekvp | hakakvp, hisakakvp, hikvp, hisakvp |
| (never form) | hanu, hinau, hinkou, hinkouk | hakuou, hinkouk, hou, houk, hisa |

Potential gerund forms of hai = 'put'  

| (never form) | hanusk, hinausk, hinkousak | hakuusk, hinkousak, housak, hisasak |

Potential predictive forms of hai = 'put'  

| (never form) | hanhvk, hinahkvk, hinkhvkv, hinkhvkv | hakhvkv, hiskhvk, hvkv, hishvkv |

Potential preclusive forms of hai = 'put'  

| (never form) | hansei, hinasei, hinesei | haksei, hinesei, hai, hisai |

Potential stem forms of hai = 'put'  

| (never form) | han, hina, hinesei, hinesei | hak, hinesei, hai, hisai |

Potential basic participle forms of hai = 'put'  

<p>| (never form) | han, hina, hinesei, hinesei | hak, hinesei, hai, hisai |</p>
<table>
<thead>
<tr>
<th>Subjects:</th>
<th>Me</th>
<th>Us</th>
<th>You (sg)</th>
<th>You (pl)</th>
<th>Him/Her/It</th>
<th>They</th>
</tr>
</thead>
<tbody>
<tr>
<td>(New form)</td>
<td>baniāk</td>
<td>binaaniāk</td>
<td>bakenāk</td>
<td>binaakenāk</td>
<td>helenāk</td>
<td>hisēlāk</td>
</tr>
<tr>
<td>Present/past progressive forms of heī = 'put'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(New form)</td>
<td>baniāk</td>
<td>binaaniāk</td>
<td>bakenāk</td>
<td>binaakenāk</td>
<td>helenāk</td>
<td>hisēlāk</td>
</tr>
<tr>
<td>SE/She/Id</td>
<td>baniā'loko</td>
<td>binaaniā'loko</td>
<td>bakenā'loko</td>
<td>binaakenē'loko</td>
<td>helenā'loko</td>
<td>hisēlā'loko</td>
</tr>
<tr>
<td>(New form)</td>
<td>baniā'loko</td>
<td>binaaniā'loko</td>
<td>bakenā'loko</td>
<td>binaakenē'loko</td>
<td>helenā'loko</td>
<td>hisēlā'loko</td>
</tr>
<tr>
<td>They</td>
<td>baniā'lay</td>
<td>binaaniā'lay</td>
<td>bakenā'lay</td>
<td>binaakenē'lay</td>
<td>helenā'lay</td>
<td>hisēlā'lay</td>
</tr>
<tr>
<td>(New form)</td>
<td>baniā'lay</td>
<td>binaaniā'lay</td>
<td>bakenā'lay</td>
<td>binaakenē'lay</td>
<td>helenā'lay</td>
<td>hisēlā'lay</td>
</tr>
<tr>
<td>Past only</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(New form)</td>
<td>baniāk</td>
<td>binaaniāk</td>
<td>bakenāk</td>
<td>binaakenāk</td>
<td>helenāk</td>
<td>hisēlāk</td>
</tr>
<tr>
<td>They</td>
<td>baniāk</td>
<td>binaaniāk</td>
<td>bakenāk</td>
<td>binaakenāk</td>
<td>helenāk</td>
<td>hisēlāk</td>
</tr>
</tbody>
</table>
3. Personal {object} Prefixes with the Verb ha = 'see''

Simple factive: See Table 7, p.106.

<table>
<thead>
<tr>
<th>Remote past</th>
<th>ME</th>
<th>US</th>
<th>IOU(SG)</th>
<th>IOU(FPL)</th>
<th>SIM/SER/IT</th>
<th>THEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECTS</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KE</td>
<td>xx</td>
<td>xx</td>
<td>hasasiki</td>
<td>hasasiki</td>
<td>hasaiki</td>
<td>laasiki</td>
</tr>
<tr>
<td>IOU(SG)</td>
<td>nxasikin</td>
<td>nisasikin</td>
<td>hasasukun</td>
<td>hasasukun</td>
<td>hasukun</td>
<td>laxasikun</td>
</tr>
<tr>
<td>IOU(FPL)</td>
<td>nisasikip</td>
<td>nisasikip</td>
<td>hasasukun</td>
<td>hasasukun</td>
<td>hasukun</td>
<td>laxasikun</td>
</tr>
<tr>
<td>SER/SER/IT</td>
<td>nisasikhe</td>
<td>nisasikhe</td>
<td>hasasukun</td>
<td>hasasukun</td>
<td>hasukun</td>
<td>laxasikun</td>
</tr>
<tr>
<td>THET</td>
<td>nisasukunha</td>
<td>nisasukunha</td>
<td>hasasukun</td>
<td>hasasukun</td>
<td>hasukun</td>
<td>laxasikun</td>
</tr>
</tbody>
</table>

Normal aspect

| I           |     |     |         |          |            |      |
| KE          | xx  | xx  | hekytkek| hlykhytkek | hykytkek  | lhykytkek|
| IOU(SG)     | neeketek| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| IOU(FPL)    | neeketek| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| SER/SER/IT  | neeketek| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| THET        | neeketek| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|

Prior action

| I           |     |     |         |          |            |      |
| KE          | xx  | xx  | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| IOU(SG)     | neeketik| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| IOU(FPL)    | neeketik| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| SER/SER/IT  | neeketik| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|
| THET        | neeketik| nisekettek | hekytkek | hlykhytkek | hykytkek  | lhykytkek|

Prohibitive

| IOU(SG)     | neekven| nisekven | xx      | xx       | hkvven | lsvkven|
| IOU(FPL)    | neekven| nisekven | xx      | xx       | hvkven | lsvkven|
Abnormal continuative forms of ha ‘see’

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>ME</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>UN/HER/IT</th>
<th>THEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>neelikho</td>
<td>nishikho</td>
<td>neelikho</td>
<td>hisiliko</td>
<td>hisivky</td>
<td>heiko</td>
</tr>
<tr>
<td>Plural</td>
<td>nevky</td>
<td>nisyvky</td>
<td>nevky</td>
<td>hisivky</td>
<td>hvky</td>
<td>išivy</td>
</tr>
</tbody>
</table>

Passive subordinate conditional

| Singular | neelkhe-halok | nishikhe-halok | neelkhe-halok | hisilkhe-halok | hisivk halok | heiko | išitho | išivy |
| Plural   | nevky-salok | nisyvky-salok | nevky-salok | hisivky-salok | hvky-salok | išivy-salok |

Passive gerund

| nevky, neakv, nisyvky, nisakv | nevky, neakv, nisyvky, nisakv | nevky, neakv, nisyvky, nisakv | nevky, neakv, nisyvky, nisakv | nevky, neakv, nisyvky, nisakv |

Iterative participle (passive)

| nisyyk | nisyvyk | hyyyk | hisyyk | hyyk | išyyk |

Hypothetical mode

<table>
<thead>
<tr>
<th>I</th>
<th>xk</th>
<th>xx</th>
<th>heeły</th>
<th>hisên</th>
<th>hele</th>
<th>išelén</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE</td>
<td>xk</td>
<td>xx</td>
<td>heeło</td>
<td>hiselo</td>
<td>helo</td>
<td>išelo</td>
</tr>
<tr>
<td>YOU(PL)/eyes/IR/there</td>
<td>neselep</td>
<td>niselep</td>
<td>heelep</td>
<td>hiselep</td>
<td>helup</td>
<td>išelep</td>
</tr>
</tbody>
</table>

Potential mode, future (for hortative/imperative see next page)

| Singular | nekelein | nisekelein | nekelein | hisokelein | hekein | isekein |
| Plural   | nisekoln | nisekoln | nekeoln | hisokeoln | hoekoln | isokoln |

Potential mode, remote future

| neakvp | nisakvp | heakvp | hisakvp | hvkvp | išakvp |
Potential mode, hortative/imperative forms of haa 'see'

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>N</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>HIM/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>xx</td>
<td>xx</td>
<td>heeak</td>
<td>hisak</td>
<td>hak</td>
<td>lsak</td>
</tr>
<tr>
<td>HK-NOM-NORTH</td>
<td>xx</td>
<td>xx</td>
<td>heev, hyv</td>
<td>hisv</td>
<td>hv</td>
<td>lsv</td>
</tr>
<tr>
<td>HK-DIR-NORTH</td>
<td>xx</td>
<td>xx</td>
<td>heevok</td>
<td>hisvok</td>
<td>hvok</td>
<td>lsvoM</td>
</tr>
<tr>
<td>YOU(SG)NOM-IMP</td>
<td>hanok</td>
<td>lsanok</td>
<td>xx</td>
<td>xx</td>
<td>han</td>
<td>lsanok</td>
</tr>
<tr>
<td>YOU(PL)NOM-IMP</td>
<td>hanl</td>
<td>lsanl</td>
<td>xx</td>
<td>xx</td>
<td>hanl</td>
<td>lsanl</td>
</tr>
<tr>
<td>LOT(INF)-NOM-ING</td>
<td>hanokek</td>
<td>lsookeik</td>
<td>xx</td>
<td>xx</td>
<td>hano</td>
<td>lsoan</td>
</tr>
<tr>
<td>YOU(SEP)-IMP</td>
<td>hanokek</td>
<td>lsookeik</td>
<td>xx</td>
<td>xx</td>
<td>hanl</td>
<td>lsoan</td>
</tr>
<tr>
<td>REVERSE/IT/GET-NOM-NORTH</td>
<td>hanokek</td>
<td>lsookeik</td>
<td>xx</td>
<td>xx</td>
<td>hanl</td>
<td>lsoan</td>
</tr>
<tr>
<td>REVERSE/IT/GET-NOM-NORTH</td>
<td>hanokek</td>
<td>lsookeik</td>
<td>xx</td>
<td>xx</td>
<td>hanl</td>
<td>lsoan</td>
</tr>
</tbody>
</table>

Potential gerund, also Potential stem (identical in this verb)

<table>
<thead>
<tr>
<th>nea</th>
<th>nisa</th>
<th>hea</th>
<th>hisa</th>
<th>ha</th>
<th>lsa</th>
</tr>
</thead>
</table>

Potential gerund with setting

<table>
<thead>
<tr>
<th>nemo</th>
<th>lisano</th>
<th>heamo</th>
<th>hisano</th>
<th>hamo</th>
<th>lsoan</th>
</tr>
</thead>
</table>

Potential mode, predictive

<table>
<thead>
<tr>
<th>nesak</th>
<th>nisak</th>
<th>hesak</th>
<th>hisak</th>
<th>hesak</th>
<th>lsaak</th>
</tr>
</thead>
</table>

Potential mode, preclusive

<table>
<thead>
<tr>
<th>neslavk</th>
<th>lislavk</th>
<th>heslavk</th>
<th>hislavk</th>
<th>heslavk</th>
<th>lslaavk</th>
</tr>
</thead>
</table>

Potential mode, portentive

<table>
<thead>
<tr>
<th>nes-noko</th>
<th>lis-noko</th>
<th>hes-noko</th>
<th>his-noko</th>
<th>hes-noko</th>
<th>las-noko</th>
</tr>
</thead>
</table>

Potential mode, basic participle

| nyylyk | nisylyk | hyylyk | hisylyk | hylyk | lsylyk |
Potential mode, perfect participle forms of he- 'see'

<table>
<thead>
<tr>
<th>OBJECTS</th>
<th>NE</th>
<th>US</th>
<th>TUG(SQ)</th>
<th>TUG(PL)</th>
<th>HIM/HEN/IP</th>
<th>THER</th>
</tr>
</thead>
<tbody>
<tr>
<td>healok</td>
<td>nisalok</td>
<td>healok</td>
<td>hiselok</td>
<td>nolok</td>
<td>isalok</td>
<td></td>
</tr>
</tbody>
</table>

Manner participles do not occur. Past participle forms of the auxiliary -ha occur with certain secondary verb stems with specialised meaning. They do not occur for the primary verb he- 'see'.

(Potential mode, past participle forms of the auxiliary -ha)

- natek
- nisek
- hisek
- xx
- isek

Present/past progressive aspect forms of he- 'see'

**SUBJECTS**

Present/past

<table>
<thead>
<tr>
<th>TUG(SQ)</th>
<th>US</th>
<th>TUG(PL)</th>
<th>PRESENT ONLY</th>
<th>RE/SHE/IP</th>
<th>SHE/THEY</th>
<th>Past only</th>
</tr>
</thead>
<tbody>
<tr>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>nisly'-lako lisy'-lako</td>
<td>nisly'-lay** lisy'-lay**</td>
<td>nisly'-lako lisy'-lako</td>
</tr>
<tr>
<td>nisly'-laken</td>
<td>nisly'-laken</td>
<td>nisly'-lay**</td>
<td>nisly'-lay**</td>
<td>nisly'-lako lisy'-lako</td>
<td>nisly'-lako lisy'-lako</td>
<td></td>
</tr>
<tr>
<td>nisly'-laken</td>
<td>nisly'-laken</td>
<td>nisly'-lay**</td>
<td>nisly'-lay**</td>
<td>nisly'-lako lisy'-lako</td>
<td>nisly'-lako lisy'-lako</td>
<td></td>
</tr>
<tr>
<td>hykhy'-laky</td>
<td>hykhy'-laky</td>
<td>hykhy'-laky</td>
<td>hykhy'-laky</td>
<td>hykhy'-laky lisy'-lako</td>
<td>hykhy'-laky lisy'-lako</td>
<td></td>
</tr>
<tr>
<td>hykhy'-laky</td>
<td>hykhy'-laky</td>
<td>hykhy'-laky</td>
<td>hykhy'-laky</td>
<td>hykhy'-laky lisy'-lako</td>
<td>hykhy'-laky lisy'-lako</td>
<td></td>
</tr>
<tr>
<td>isyky'-laky</td>
<td>isyky'-laky</td>
<td>isyky'-laky</td>
<td>isyky'-laky</td>
<td>isyky'-laky lisy'-lako</td>
<td>isyky'-laky lisy'-lako</td>
<td></td>
</tr>
<tr>
<td>isyky'-laky</td>
<td>isyky'-laky</td>
<td>isyky'-laky</td>
<td>isyky'-laky</td>
<td>isyky'-laky lisy'-lako</td>
<td>isyky'-laky lisy'-lako</td>
<td></td>
</tr>
</tbody>
</table>

Alternate forms with progressive stems as shown for the first and second person singular subject forms also occur: hisvky-lake, hislky-lake 'we are seeing you(pl)'.

**Alternate forms with the auxiliary in the form -laky also occur.**
4. Personal Object Prefixes with the Dative Auxiliary -eta

This auxiliary with prefixes marking singular objects is in almost (but not quite) all forms inflected regularly as a verb with a root ending in *a*, like *wat* 'his, all' in the paradigms in sections A and B of this appendix, except that manner participles and past participles do not occur. With prefixes marking plural objects, the forms are homophonic with the analogous forms of *ka* 'see' and the locative auxiliary *ha*. Since the dative auxiliary also occurs, although rather rarely, with reflexive voice forms with implicit third person singular personal (or animate) object reference, the paradigms include an extra column for these forms and identify subjects by person and number only, to save space, e.g., 1s for 'I', 3p for 'THEM'. Sample categories only are included.

<table>
<thead>
<tr>
<th>ME</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>HIM/HER/IT</th>
<th>HIM/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reflexive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Simple active (see also Table 8, p.113)

| 1s xx | xx | -hethi | (-hisiky) | -eth | -etyk | (-isiky) |
| 1p xx | xx | -eth | (-hismok) | -ethu | -etk | (-isok) |
| 2s -nethin | (-nisken) | xx | xx | -ethin | -etken | (-isken) |
| 2p -nethik | (-nisakp) | xx | xx | -ethik | -etk | (-isikp) |
| 3s -nethihe | (-nisikhe) | -hethhe | (-hisikhe) | -etkhe | -etike | (-isikhe) |
| 3p -nethka | (-nisaka) | -hethka | (-hisaka) | -etka | -eteka | (-isaka) |

Remote past

| 1s xx | xx | -hethiki | (-hissaki) | -ethki | -etassiki | (-issaki) |
| 1p xx | xx | -ethuk | (-hisaku) | -ethuk | -etassuk | (-isak) |
| 2s -nethikip | (-nisasikin) | xx | xx | -ethikip | -etassikin | (-sisakin) |
| 2p -nethik | (-nisakip) | xx | xx | -ethik | -etassikip | (-sisakip) |
| 3s -nethikhe | (-nisasikhe) | -hethikhe | (-hissakhe) | -etassikhe | -etassikhe | (-sisakhe) |
| 3p -nethukhe | (-nisasukhe) | -hethukhe | (-hissukhe) | -etassukhe | -etassukhe | (-sisukhe) |

Potential mode, future (for hortative/imperative, see next page)

| s -nesekin | (-niskein) | -heskin | (-hisekein) | -eskin | -etekin | (-iskein) |
| p -hesukun | (-nisokon) | -hesukun | (-hisonok) | -esukun | -etokun | (-isokon) |

Potential gerund

-nessu | (-iska) | -hesu | (-hiss) | -esu | -eta | (-ista) |
Potential mode, hortative/imperative forms of the dative auxiliary -ei-

To conserve space, subject categories and modal sub-categories are coded here as follows:

<table>
<thead>
<tr>
<th>ME</th>
<th>1s</th>
<th>1p(PL)</th>
<th>SIM/HER/IT</th>
<th>SIM/HER/IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>-xx</td>
<td>-xx (&lt;hesik)</td>
<td>-esik</td>
<td>-etak</td>
</tr>
<tr>
<td>1p</td>
<td>-xx</td>
<td>-xx (&lt;hesu)</td>
<td>-esu</td>
<td>-etv</td>
</tr>
<tr>
<td>2s</td>
<td>-moo, -masin (&lt;nisak)</td>
<td>xx</td>
<td>-o'm, -esin</td>
<td>-etan</td>
</tr>
<tr>
<td>2p</td>
<td>-m'ani</td>
<td>-xx (&lt;hisok)</td>
<td>-eswak</td>
<td>-etoka</td>
</tr>
<tr>
<td>3s</td>
<td>-m'sako (&lt;nisam)</td>
<td>xx</td>
<td>-en'ki</td>
<td>-etanok</td>
</tr>
<tr>
<td>3p</td>
<td>-m'sako (&lt;nisamok)</td>
<td>xx</td>
<td>-en'kik</td>
<td>-etokak</td>
</tr>
<tr>
<td>1d</td>
<td>-xx</td>
<td>-xx (&lt;heswak)</td>
<td>-eswak</td>
<td>-ezok</td>
</tr>
</tbody>
</table>

Potential mode, basic participle

-nytk (<nislyk) | -hetyk (<hislyk) | -styk | -etylyk | (<islyk)

Potential mode, perfect participle

-m'la'uk (<nislak) | -he'luk (<hislak) | -el'uk | -ezlak | (-islak)

Sample conjugations of verb roots with the dative auxiliary -ei-

Following roots with final a and ø the initial vowel of the second and third person singular object forms is assimilated to the final root vowel, and in the second and third person plural object forms, the initial vowel is frequently diphthongised to ø.
The dative auxiliary -et with the verb wak- 'take, move', meaning 'give'  

<table>
<thead>
<tr>
<th>Me</th>
<th>Us</th>
<th>You(SG)</th>
<th>You(Pl)</th>
<th>Him/Her/It</th>
<th>Him/Her/It</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>xx</td>
<td>xx</td>
<td>wok-hothi</td>
<td>wok-holsky</td>
<td>wok-othi</td>
<td>wok-otky</td>
</tr>
<tr>
<td>1p</td>
<td>xx</td>
<td>xx</td>
<td>wok-hothu</td>
<td>wok-holsoko</td>
<td>wok-othu</td>
<td>wok-otko</td>
</tr>
<tr>
<td>2a</td>
<td>wok-nethin</td>
<td>wok-niseken</td>
<td>xx</td>
<td>xx</td>
<td>wok-othn</td>
<td>wok-otken</td>
</tr>
<tr>
<td>2p</td>
<td>wok-nethip</td>
<td>wok-nisekep</td>
<td>xx</td>
<td>xx</td>
<td>wok-othip</td>
<td>wok-otkep</td>
</tr>
<tr>
<td>3a</td>
<td>wok-netha</td>
<td>wok-nisikhe</td>
<td>wok-hotha</td>
<td>wok-holsikhe</td>
<td>wok-otha</td>
<td>wok-otcika</td>
</tr>
<tr>
<td>3p</td>
<td>wok-netha</td>
<td>wok-nisikhe</td>
<td>wok-hotha</td>
<td>wok-holsikhe</td>
<td>wok-otha</td>
<td>wok-otcika</td>
</tr>
</tbody>
</table>

The dative auxiliary -et with the verb mak- 'sharpen', meaning 'sharpen is for the personal object and give it to him'.  

### Simple factive

<table>
<thead>
<tr>
<th>Me</th>
<th>Us</th>
<th>You(SG)</th>
<th>You(Pl)</th>
<th>Him/Her/It</th>
<th>Him/Her/It</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>xx</td>
<td>xx</td>
<td>mak-hathi</td>
<td>mak-holsky</td>
<td>mak-athl</td>
<td>nak-styk</td>
</tr>
<tr>
<td>1p</td>
<td>xx</td>
<td>xx</td>
<td>mak-hathi</td>
<td>mak-holsko</td>
<td>mak-athu</td>
<td>nak-stoko</td>
</tr>
<tr>
<td>2a</td>
<td>ma-nethin</td>
<td>ma-niseken</td>
<td>xx</td>
<td>xx</td>
<td>mak-athn</td>
<td>nak-steen</td>
</tr>
<tr>
<td>2p</td>
<td>ma-nethip</td>
<td>ma-nisekep</td>
<td>xx</td>
<td>xx</td>
<td>mak-athip</td>
<td>nak-steen</td>
</tr>
<tr>
<td>3a</td>
<td>ma-netha</td>
<td>ma-nisikhe</td>
<td>mak-hathe</td>
<td>mak-holsikhe</td>
<td>mak-atha</td>
<td>nak-atihe</td>
</tr>
<tr>
<td>3p</td>
<td>ma-netha</td>
<td>ma-nisikhe</td>
<td>mak-hathe</td>
<td>mak-holsikhe</td>
<td>mak-atha</td>
<td>nak-atihe</td>
</tr>
</tbody>
</table>

5. Personal Object Prefixes with the Generalised Personal Objective Auxiliary -ep 

### Simple factive: See Table 9, p.116. 

**Remote past:**

**OBJECTS:**

<table>
<thead>
<tr>
<th>Me</th>
<th>Us</th>
<th>You(SG)</th>
<th>You(Pl)</th>
<th>Him/Her/It</th>
<th>Him/Her/It</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>xx</td>
<td>xx</td>
<td>-naphiki</td>
<td>-hinaphiki</td>
<td>xx</td>
<td>-naphiki</td>
</tr>
<tr>
<td>1p</td>
<td>xx</td>
<td>xx</td>
<td>-naphuki</td>
<td>-hinaphuki</td>
<td>xx</td>
<td>-naphuki</td>
</tr>
<tr>
<td>2a</td>
<td>-naphikin</td>
<td>-naphikin</td>
<td>xx</td>
<td>xx</td>
<td>-naphuki</td>
<td>-naphuki</td>
</tr>
<tr>
<td>2p</td>
<td>-naphikip</td>
<td>-naphikip</td>
<td>xx</td>
<td>xx</td>
<td>-naphikip</td>
<td>-naphikip</td>
</tr>
<tr>
<td>3a</td>
<td>-naphikhe</td>
<td>-naphikhe</td>
<td>-hinaphikhe</td>
<td>-hinaphikhe</td>
<td>xx</td>
<td>-naphikhe</td>
</tr>
<tr>
<td>3p</td>
<td>-naphikhe</td>
<td>-naphikhe</td>
<td>-hinaphikhe</td>
<td>-hinaphikhe</td>
<td>xx</td>
<td>-naphikhe</td>
</tr>
<tr>
<td>TRLT</td>
<td>-naphukwa</td>
<td>-naphukwa</td>
<td>-hinaphukwa</td>
<td>-hinaphukwa</td>
<td>xx</td>
<td>-naphukwa</td>
</tr>
</tbody>
</table>
(The generalised personal objective auxiliary -ap, continued)

All other categories in all event nodes are similarly inflected, following the pattern for a verb with a root ending in a, like jame 'light', in the paradigms in sections a and b of this appendix. This auxiliary does not occur with third person singular objects (see text, Chapter 3), and manner participles, past participles and reflexive voice forms do not occur.

Sample conjugations of wam, wok- 'take' with -ap, meaning 'receive the personal object' or 'keep the personal object by carrying his load for him'.

In some informants' speech, following roots with final ak and ek the initial vowel of the third person plural object forms is diphthongised. Non-diphthongised forms are cited here.

For subject and modal category code symbols, see the section on the dative auxiliary -et two pages preceding.

<table>
<thead>
<tr>
<th>ME</th>
<th>US</th>
<th>YOU(SG)</th>
<th>YOU(PL)</th>
<th>BHN/BHN/25</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential mode, hortative/imperative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1s</td>
<td>xx</td>
<td>xx</td>
<td>wok-hapik</td>
<td>wok-hinapik</td>
<td>(wanik)</td>
</tr>
<tr>
<td>1s</td>
<td>xx</td>
<td>xx</td>
<td>wok-hapu</td>
<td>wok-hinapu</td>
<td>(wanu)</td>
</tr>
<tr>
<td>1d</td>
<td>xx</td>
<td>xx</td>
<td>wok-hapwok</td>
<td>wok-hinapwok</td>
<td>(wanuwok)</td>
</tr>
<tr>
<td>2s</td>
<td>wo-napin</td>
<td>wo-ninapin</td>
<td>xx</td>
<td>xx</td>
<td>(wanin)</td>
</tr>
<tr>
<td>2d</td>
<td>wo-napink</td>
<td>wo-ninapink</td>
<td>xx</td>
<td>xx</td>
<td>(wanink)</td>
</tr>
<tr>
<td>2p</td>
<td>wo-napinl</td>
<td>wo-ninapinl</td>
<td>xx</td>
<td>xx</td>
<td>(waninl)</td>
</tr>
<tr>
<td>2h</td>
<td>wo-napakeik</td>
<td>wo-ninapakeik</td>
<td>xx</td>
<td>xx</td>
<td>(wanapakeik)</td>
</tr>
<tr>
<td>2l</td>
<td>wo-napino</td>
<td>wo-ninapino</td>
<td>xx</td>
<td>xx</td>
<td>(wanino)</td>
</tr>
<tr>
<td>3s</td>
<td>wo-napinek</td>
<td>wo-ninapinek</td>
<td>wok-hapinek</td>
<td>wok-hinapinek</td>
<td>(waninek)</td>
</tr>
<tr>
<td>3d</td>
<td>wo-napinek</td>
<td>wo-ninapinek</td>
<td>wok-hapinek</td>
<td>wok-hinapinek</td>
<td>(waninek)</td>
</tr>
</tbody>
</table>

The verb wam- 'take' occurs with no auxiliary to refer to third person singular personal objects in the sense 'receive the personal object'. However, in the sense 'keep the personal object by carrying his load for him', the third person plural object forms with the auxiliary -ap occur with reference to third person singular personal objects also.
6. The Auxiliaries of Incurved Process and Resulting State: -Ian, -Ian, -Ian

The auxiliary -Ian, -Ian, 'cause a process and the resulting state' occurs with major class primary verb roots and stems and also a few secondary verb roots and stems; this auxiliary is inflected like -an, -ian 'acquire' as displayed in the paradigms in sections A and B of this appendix. Following verb roots with final a or a, this auxiliary occurs without the initial i.

The auxiliary -Ian, -Ian, 'cause a process and the resulting state' occurs with secondary verbs of incurred process and is inflected like I, 'say' in the paradigms in sections A and B of this appendix.

Some sample conjugations of verbs with auxiliaries of incurred process

<table>
<thead>
<tr>
<th>Simple active, non-reflexive voice</th>
<th>Simple active, reflexive voice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VERB:</strong></td>
<td><strong>VERB:</strong></td>
</tr>
<tr>
<td>With -Ian, -Ian</td>
<td>With -Ian=</td>
</tr>
<tr>
<td>wat= 'hid'n, hid'd'</td>
<td>lapo= 'hide'</td>
</tr>
<tr>
<td>meaning 'hid'</td>
<td>tek= 'become severed'**</td>
</tr>
<tr>
<td>'become severed'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>lapo-ky</td>
</tr>
<tr>
<td>wa'-lak</td>
<td>lapo-oko</td>
</tr>
<tr>
<td>ke</td>
<td>lapo-eeken</td>
</tr>
<tr>
<td>ZOD(SG)</td>
<td>lapo-ekep</td>
</tr>
<tr>
<td>wa'-laken</td>
<td>lapo-ekep</td>
</tr>
<tr>
<td>ZOD(PL)</td>
<td>lapo-aka**</td>
</tr>
<tr>
<td>wa'-lak*/</td>
<td>lapo-aka**</td>
</tr>
<tr>
<td>BE/SEE/IT</td>
<td></td>
</tr>
<tr>
<td>wa'-lak/*</td>
<td></td>
</tr>
<tr>
<td>TDET</td>
<td></td>
</tr>
<tr>
<td>wa'-lakentsha</td>
<td></td>
</tr>
</tbody>
</table>

*The restriction of these verbs in this category to third person singular subjects is discussed in the text. Further checking is necessary, but the restrictions on occurrence of voice and subject categories shown above are genuine and general.

**The subjects of wat- and lapo- here may be personal; the other verbs have '3s' as subject.
### D. SECONDARY VERB ROOTS

Secondary verb roots and constructions occurring inflexionally as participles.

<table>
<thead>
<tr>
<th>OBJECTS: ME</th>
<th>US</th>
<th>TOO(SG)</th>
<th>TOO(PL)</th>
<th>BIN/HER/IT</th>
<th>THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>From hyt-hae 'examine'</td>
<td><em>hy'-nisek</em></td>
<td>hyt-hatek</td>
<td>hyt-hisek</td>
<td>hytoko</td>
<td>hit-isek</td>
</tr>
<tr>
<td>From set-hae 'wait for, guard'</td>
<td>se'-natek</td>
<td>se'-nisek</td>
<td>set-hatek</td>
<td>set-hisek</td>
<td>set-isek</td>
</tr>
<tr>
<td>From lak-hae 'look from a distance'</td>
<td><em>la'-natek</em></td>
<td><em>la'-nisek</em></td>
<td>lak-hatek</td>
<td>lak-hisek</td>
<td>lak-isek</td>
</tr>
<tr>
<td>From lyak-hae 'look up at'</td>
<td><em>ly'-natek</em></td>
<td><em>ly'-nisek</em></td>
<td>lyak-hatek</td>
<td>lyak-hisek</td>
<td>lyakek</td>
</tr>
<tr>
<td>From palek-hae 'look down at'</td>
<td><em>pale'-natek</em></td>
<td><em>pale'-nisek</em></td>
<td>palek-hatek</td>
<td>palek-hisek</td>
<td>palek-isek</td>
</tr>
<tr>
<td>From wula-hae 'look out at'</td>
<td><em>wula'-natek</em></td>
<td><em>wula'-nisek</em></td>
<td>wula-hatek</td>
<td>wula-hisek</td>
<td>wula-isek</td>
</tr>
<tr>
<td>From kalek-hae 'look in at'</td>
<td><em>kale'-natek</em></td>
<td><em>kale'-nisek</em></td>
<td>kalek-hatek</td>
<td>kalek-hisek</td>
<td>kalek-isek</td>
</tr>
<tr>
<td>From hak-hae 'group'</td>
<td><em>ha'-natek</em></td>
<td><em>ha'-nisek</em></td>
<td>hak-hatek</td>
<td>hak-hisek</td>
<td>hak-isek</td>
</tr>
<tr>
<td>From muk-hae 'choose out'</td>
<td>mu'-natek</td>
<td>mu'-nisek</td>
<td>muk-hatek</td>
<td>muk-hisek</td>
<td>musok</td>
</tr>
<tr>
<td>From lak-hae 'like'</td>
<td>le'-natek</td>
<td>le'-nisek</td>
<td>lek-hatek</td>
<td>lek-hisek</td>
<td>lek-isek</td>
</tr>
<tr>
<td>From sepet-hae 'push down'</td>
<td><em>sepet'-natek</em></td>
<td><em>sepet'-nisek</em></td>
<td>sepet-hatek</td>
<td>sepet-hisek</td>
<td>sepet-isek</td>
</tr>
<tr>
<td>From lit-hae 'pull'</td>
<td><em>li'-natek</em></td>
<td><em>li'-nisek</em></td>
<td>lit-hatek</td>
<td>lit-hisek</td>
<td>lit-isek</td>
</tr>
<tr>
<td>From hokkot-hae 'shake'</td>
<td>hokko'-natek</td>
<td>hokko'-nisek</td>
<td>hokkot-hatek</td>
<td>hokkot-hisek</td>
<td>xx</td>
</tr>
<tr>
<td>From wok- in the sense elsewhere signalled by the construction including the generalised person auxiliary <em>-e</em> and not in the sense commonly signalled by the construction <em>wok-hae</em> 'fuke away', these forms mean 'escorting'</td>
<td><em>wo'-natek</em></td>
<td><em>wo'-nisek</em></td>
<td>wok-hatek</td>
<td>wok-hisek</td>
<td>wok-isek</td>
</tr>
</tbody>
</table>

*These forms do not occur as attributives to nouns but in verb constructions.*
APPENDIX B
A LOWER GRAND VALLEY DANI NARRATIVE TEXT

Speaker: Apealek Aso
Addressee: Jameke Aso
Recorded at Metigima in 1959

The Dani text as transcribed is displayed in the left column, a running gloss is given in the right column, and a free translation follows. Numbers on the text line identify sentences and key them to the free translation. Above the line are symbols identifying participants referred to in pronouns or pronominal affixes or affixes which imply but do not contrastively mark a personal referent, and also symbols indicating for each verb form whether that verb is marked to anticipate a following verb with the same subject or a different subject.

Below the line a parsing code is provided for each verb form, identifying it in terms of the categories described in Chapter 2 and 3. Since the codes provide this information, the gloss does not include any equivalent for the remote past category or for the markers of anticipated same or different subjects except where this is corrected on, as in the case of self-correction or revision by the speaker.

Keys to the codes are provided on the following page.
<table>
<thead>
<tr>
<th>KEY TO PARTICIPANT CODE</th>
<th>(Symbols above text)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Asu'lek</td>
</tr>
<tr>
<td>Aw</td>
<td>Asu'lek's wife Ruage</td>
</tr>
<tr>
<td>AS</td>
<td>Asalek, speaker</td>
</tr>
<tr>
<td>B</td>
<td>Boleet</td>
</tr>
<tr>
<td>H</td>
<td>Hemusok</td>
</tr>
<tr>
<td>He</td>
<td>Hemusok's son</td>
</tr>
<tr>
<td>I</td>
<td>Inekiamulin</td>
</tr>
<tr>
<td>Iv</td>
<td>Inekiamuline's wife</td>
</tr>
<tr>
<td>J</td>
<td>Jameke, addresssee</td>
</tr>
<tr>
<td>K</td>
<td>Kepalis, a Welesi man</td>
</tr>
<tr>
<td>Ks</td>
<td>Kepalis' son</td>
</tr>
<tr>
<td>L</td>
<td>Local group as unit</td>
</tr>
<tr>
<td>Ls</td>
<td>Men of local group</td>
</tr>
<tr>
<td>o</td>
<td>Oregge</td>
</tr>
<tr>
<td>ow</td>
<td>Oregge's wife</td>
</tr>
<tr>
<td>O2</td>
<td>Oregge's young men</td>
</tr>
<tr>
<td>P</td>
<td>Fililo, a Welesi man</td>
</tr>
<tr>
<td>P2</td>
<td>Fililo's associates</td>
</tr>
<tr>
<td>st</td>
<td>A stone</td>
</tr>
<tr>
<td>V0</td>
<td>Welesi people</td>
</tr>
<tr>
<td>W0</td>
<td>Welesi woman</td>
</tr>
<tr>
<td>Wwa</td>
<td>Another Welesi woman</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KEY TO PARSE CODE</th>
<th>(Symbols under verbs in text)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>F-p</td>
</tr>
<tr>
<td>Aw</td>
<td>F-p-tn</td>
</tr>
<tr>
<td>AS</td>
<td>F-p-opn</td>
</tr>
<tr>
<td>B</td>
<td>F-gmd</td>
</tr>
<tr>
<td>H</td>
<td>F-liptp</td>
</tr>
<tr>
<td>He</td>
<td>F-pptb</td>
</tr>
<tr>
<td>I</td>
<td>F-pw</td>
</tr>
</tbody>
</table>

### AUXILIARY CODE
- dat: Deative
- dep: Depositional
- gen: Generalized personal objective
- inc: Incurred process
- loc: Locative
- prog: Progressive aspect
- v: Secondary verb
- 2vp: Secondary verb of incurred process
- F: Pactive event mode
- H: Hypothetical event mode
- P: Potential event mode
- R: Reflexive voice; otherwise non-reflexive

### GENERAL CATEGORIES
- N: Remote past, normal
- P: Future
- B: Progressive
- N: Progressive past

### PACTIVE CATEGORIES
- F: Remote future
- P: Potential event
- R: Perfect participle
- F: Progressive

### EXAMPLE:
- stathkwa 'they killed a swa': (3pF-s)/y/3p/. Third person plural personal object, factive node, remote past, third person plural subject.
1. Ally-te, Oteke akwe 'noko taq-kok-te, [3IP-v-mnpt]
   Owe AS
   Welaisi lakeikke akkyky.  
   [F[+r/-3p/][P/-/16/]]
   Owe AS
   2. Weleisi lakeikke-i-te, Oteke,  
   [F[+r/-3p/-e/]]
   (0)  
   0.02 = akotyyny pyte ino-hoko, lakoukhasi-l-he,  
   [F[+r/-3p/-p/]]
   0.02 =
   wan mel-mekke, Pililo-mekke welok  
   [F[+prpt]]
   0.02 AS  
   0.02 = 0.02  
   wakoukha akkyky. 3. Welok wakwe-n-he,  
   [F[+prpt/][F[+3p/]][P/-16/][F[+prpt/][P[+copu]]]
   (0.02)(0.02)(0.02)
   It inoppolik ineso khyang hlyang hlyang
   P,P2  
   P,P2
   wakoukha-i-te, L-e-pa wak-la-xoukaha.  
   [F[+r/3p/]]
   [Prog-P[+r/3p/]]
   0.02 = 0.02  
   4. Welok wakoukhasi-lo-eme-he,  
   [F[+prpt/][F[+3p/][P[+b/]]]
   (0.02)  
   0.02  
   It wakoukha-neke, Pililo-la-ke-he,  
   [F[+r/3p/]]
   P,P2 =
   P,P2
   wae hakky-lyk-he, Oteke seke turn-hoko.  
   [evl[+3p-dep][P[+baap]]] [2IP-v-mnpt]
   (0) P,P2  
   P,P2 =
   AS
   wethukha akkyky. 5. Seke turn-hoko  
   [(3p[+r/3p/][P/-16/][P/-16/]] [2IP-v-mnpt]

that-after-context-tope Orega his-wife that-we-know separatep-manner-topic
Welaisi(place) she-went I-believe
Welais after-she-went-topic, Orega his-younger-siblings two they-together-manner, after-they-went-topic
gig what's-his-name-'s, Pililo--'s carrying
they-name I-believe, carrying when-plural-subject-name-topic,
then behind-them their-feet tracking tracking tracking
they-name-topic, in--on coming--they-continued

carrying after-they-had-name--source-topic (verb marked for 'change subject' but next verb is revision, same event)
they-they-name-but Pililo--and-associates--source-topic
gig grab--having-done-ti-topic, Orega spear thrust--manner
they-hit-him I-believe, spear thrust--manner
(O) P,P2 =

wathukhasik-he, wathukhasik-te,
[(3p)P-r/3p/p] [(3p)P-r/3p/a]

(0) (O)02 =

seke watek Wolok-he, uma pl-sakokuwa.
[P-paspt] [P-prpt] [P-r/3p/p]

02 =
6. pl-sakokuwasik-he, - 7. Jameke
[P-r/3p/p]

JA (AS)
ty-mekke a'moko usa-mekke nayte-

[AS] (AS) [S] P,P2 =
def

AS [P,P2]

8. an name kolo hyky. 9. tum-hoko
[P1/a/] [P-r/3p/a]

[(O) P,P2x] 0 =

vathukhasik-he, uma pl-steiksik-en,
[(3p)P-r/3p/a] [P-r/3p/a]

O AS 0 =

va'lakeikhhe akkyky. 10. va'lakeikhho-e,
[[(3p)P-r/3p/a] [P-r/3p/a]]

[(O) P,P2x] K =

lt'en-he, Keppalik ok الاسaka palik ke'lt'ylk
[[(P-r/3p/a)] [(P-r/3p/a)]

Kx W2 =

vakama y'luk-he, Welesi-nen jokko
[P-r/3p/a] [P-prpt]

W2 x

L2 =

vakokhasik-he, lakokhasik-he, Keppalik
[P-r/3p/a] [P-r/3p/p]

(K) 0 =

L2 =

akot kemusuk asut a'moko, seke tum-hoko
[2lpv-manpt]

[Ha] L2 AS 0 =

L2 =

wakokhasik akkyky. 11. a'moko tum-hoko
[(3p)P-r/3p/p] [P1/a/]

[2lpv-manpt]

after-their-kill-he same-subject--topic, after-their-

hit-him(different-subject)--topic (revised reference to same event)

spear wounded carrying--topic home descend-they-same.

descend--after-their-name--topic [Here tone and volume

change.] Jameke (name)

that-abstact--sort that-we-know subject-ought-to-say--

sort my-dislike--deferential.

I my-talk crooked I-see, [Here tone and volume change

basic.] thrust--manner

after-their-hit-him--topic, home descend--after-their-name--

source
die--he-become I-believe, die--after-he-become--topic

then--by-topic Keopalik(man's name) trees-leaves-

setting(i.e. forest) forest-animal preparing-to-kill-it

he-has-some having-said--topic Welesi--from message

after-their-name--topic, after-they-went-up--topic

Keopalik(name)

his-younger-sibling kemusok(name) his-son that-we-know,

spear thrust--manner

they-killed-him I-believe, that-we-know thrust--

manner
(Hs) L2 = [pause] (Hs)

vathy=lahlyah-he, ....Kappaly=-noko hoe
([^np="basap"])

(K) K = K

nepetah=lahlyah yik yik pok wululika a'ma-te,
[^np="basap"] [^p="fr/ah/"

(seke pakry-tsak-hoko-te, pilu wuk=hoko
[^2pvp=napnt] [^2pvp=napnt]

(K) L2

L2 x

[=3p-dep]=3p/f, [^p=3p/n]

(lak-ta-taun akakukhathe, helap-en-he
[^3p-dep]=3p/f, [^p=3p/n]

(S2) x

S2 = S2

[=3p-dep]=3p/f, [^p=3p/n]

(vkiv=oaak pak-hoko-te, tak=hoko kisikahe,
[^2pvp=napnt] [^2pvp=napnt]

(A) AS

x akkyky. 12. helap a'moko tek-hoko
[^p=3p/]

[^2pvp=napnt]

(S2) x

(S2) x

[=3p-dep]=3p/f, [^p=3p/n]

(we'=lahka kisikahe akkyky. 13. we'=lahka
[^inc]=nc-stem, [^p=3p/f, [^p=3p/n]

(S2) x

[=3p-dep]=3p/f, [^p=3p/n]

(kibhenem-en-he, wap=solok pi-akouwhane-te,
[^copun=6/]

(W2)

(Hs,K) W2 = W2

AS

it ohealek=hoko valek jeta akouwha akkyky.
[^3p=prtp][[^inc]]=nc-stem, [^p=3p/f, [^p=3p/n]

(W2)

(He,K) W2 = W2

14. jatol kakashua, 15. it=en-he,
[^3a]=nc-prtp, [^p=3p/f, [^p=3p/n]

(W2)

(W2)

a'moko welakouwhahsi-he, it=en-he, Kuaka
[^p=3p/f, [^p=3p/n]

[pause][3c] [pause] (A)

... mel akwe ... Aku'=akwe=noko he,

killing-him-while-subject-continued-topic Kapsik-
that-we-know your(kg)-older-sibling

with-we saying saying jumping singular-subject-will-
go-of (asv)=topic

spare one thrust--manner--topic precise hear--
manner

propel-over-distance--to-put-them-plural-subject-will-
none they-believed-topic, stone--by--topic

his-head--bone split--manner--topic break-off--manner

is-entered

I-believe. stone that-we-know break-off--manner

move--it-itself-to-inour is-entered I-believe. move--
it-itself-to-inour

when-is-entered-source--topic defend--having-put-
them descend--after-they-come--topic

they tomorrow--manner killed ones to-ding-on-pole-
for-themselves they-same I-believe.

having-along-him-on-a-pole they-sent they--source--
topic

that-we-know they-continued-prior--topic they--
source--topic, Buage(name)

what's his-name his-wife Aukule(name) his-wife--and--
topic
Ineshaman (name) his-wife--and thrust coming--coming (?) they-killed-them I-believe, women two.
two after-they-killed-them-topic, they here-source--topic
Aso-tape Aso-Lokobel, Aso-tape (confederacies) after-he-marshalled--topic, military-company three
marshalled--having-pot-topic front-line-topic, Esiest (name) his-home--from
up-valley--direction that-abstract front-line after-they-pot-is--topic
Itagel-streamed they-went-up I-believe
after-they-went-up-topic, village-saves--direction
closing-closing--predicator putting-while-subject-wass-topic women two
woman one-of-set pandanana-atq-rosts refuse when-she-struck thrust--sanner
they-killed-her, woman one-of-set sweet-potato-leaves-at (i.e., in the garden)
The text appears to be in a language that is not easily readable. It seems to be a mix of different linguistic structures, possibly reflecting a conversation or narrative in a particular dialect or language. The text is not clearly translatable into English without a more detailed understanding of the language context.
FREE TRANSLATION:

1. 'About that, Ogege's wife—you know her—left her husband and went to Welese, you know (translating 'I believe' as 'you know' in terms of discourse function). 2. After she went to Welese, Ogege together with two of his young men went and brought back a pig that belonged to what's-his-name—to Pillilo, you know. 3. When they brought it, they of the other group came behind them, tracking their footprints, and came on the hill named Lu. 4. After the locals had brought it—they had come, but Pillilo and his men grabbed the pig and wounded Ogege with a spear thrust, you know. 5. After they wounded him with a spear thrust, they—after they wounded him, the locals carried the spear-wounded casualty down home here. 6. After they had come down here—(7. Same, you ought to be telling that story. I don't like this. 8. I see my talk is crooked.) 9. After they wounded him with a spear-thrust, he came down home and died, you know. 10. After he died, they of the other side brought a message from Welese that Kepalík had come into the forest to kill forest animals, and the locals went up there and wounded Kepalík's younger relative, Remukí's son—you know him—with a spear thrust, you know. 11. As they were thrusting a spear onto him, Kepalík—you know him—kept saying, 'I'm your older brother and I'm with you!' As he said that and was about to jump out, they thrust him with one spear and intended to throw him down this way over the precipice, when a stone cracked his skull open and broke off inside, you know. 12. That stone went right in and broke off of itself, you know. 13. When it went in of itself, the locals, having elobbered them (with a connotation of carelessness and superiority), came down here, and then the next day they of the other group came there to get the bodies themselves and carry them off on poles, you know. 14. They slung them on poles and carried them off themselves. 15. After that development you know about now they stayed there some time, and they (some) and killed Kuage, who is what's-his-name's wife, Sukikíle's wife, and also Inékaumíle's wife, with repeated spear thrusts. 16. Two women. 17. After they had killed two, then the locals of the Nae-tapi and Naa-tókal and Naa-tóko confederacies arranged themselves for battle, and after they marshalled three fighting companies and arranged the front-line men up the valley from Eseste's home there, they went up the Etagei streambed, you know. 18. After they went up there, as they were surrounding the village cutting off all exits, right around the gutters under the house eaves, (there were) two women—they
killed one of them with a spear thrust as she was pounding pandanus air-roots. 19. They also killed another woman as she was digging sweet potatoes in the garden, you know. 20. After they killed her and said, “She’s finished, she has already died”, they said, “Now, killio there, you make the ceremonial wealth payment of stones.” 21. After they said that, he did make the payment. 22. Then after the locals had made ceremonial wealth payment of stones, they said, “It’s finished. Come drink from the Ilisengek salt pool”, and that was the end of it; they came to drink from the Ilisengek and are coming and going. 23. Janeke, you told it crooked before, so there I’ve told it again.’

NOTE:

The reader will note that many references to participants in this free translation reflect not noun phrases in the Dani text but markers of anticipation of the same subject or a different subject, as indicated in the code above the text. The phrases ‘they of the other group’ and ‘the locals’ in the translation are in every case English devices to represent the information carried in the Dani markers of anticipation of the same or a different subject.
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