## A GRAMIMAR OF AWTUW

by

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Unless otherwise acknowledged in the text, this thesis represents the original research of the author.
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The aim of this thesis is to describe the structure of the Awtuw language, spoken by about 400 people in the southern foothills of the Torricelli Mountains of northwestern Papua New Guinea.

A brief preface presents my theoretical assumptions and methodological orientation. Language is viewed as a cultural phenomenon which, while by no means discrete from other facets of culture, has a distinct central focus that may be described independently without severe distortion. Grammatical classes and categories are isolated on the basis of language-internal morphosyntactic criteria and correlated with semantic functions.

The introductory chapter places Awtuw in its geographical, cultural, and linguistic context, identifies the three dialects of Awtuw, and discusses the ubiquitous phenomenon of multilingualism in the Awtuw-speaking and surrounding area.

Chapter 2 presents a brief description of Awtuw's phonemes and formalizes the major morphophonological processes. Awtuw has eleven phonemic consonants and seven vowels isolated on the basis of minimal pairs. Morphophonemic rules simplify geminates and certain other consonant clusters, elide vowels, assimilate nasals to following stops, and insert epenthetic vowels. There are also a number of vowel harmony rules that assimilate affix vowels to stem vowels.

Chapters 3 through 6 present an analysis of various morphosyntactic phenomena. Chapter 3 devises a number of formal identifying criteria which are used as binary features to analyze Awtuw's parts-of-speech classes. Chapter 4 describes the structure of the verb complex and the categories represented by verbal affixes, and presents a
feature-based analysis of the Tense, Mood, and Aspect system. Chapter 5 begins with a discussion of grammatical relations, classifies verb roots on the basis of the case frames that they occur in, and correlates these classes with inherent aspect and other semantic categories. Chapter 6 describes the case-marking suffixes and their functions.

Chapters 7 through 10 focus on aspects of Awtuw syntactic structure. Chapter 7 describes the structure of the Noun Phrase. Chapter 8 presents a classification of verbless predication types. Chapter 9 discusses a variety of operations on the clause, including question-formation, negation, reflexivization, and focusing of constituents. And Chapter 10 analyzes interpredicate and interclausal relations. It includes discussion of various types of verb serialization, complementation, relative clauses, adverbial clauses, conditionals, and coordinate constructions.

Chapter 11 begins with an analysis of Awtuw kinship terminology and goes on to discuss color terminology, numeration and measurement, body part terminology, and the terms for major biological classes.

Finally, Chapter 12 presents a brief description of a variety of paralinguistic phenomena.

Abbreviations

| A | Adjective | NDB | Negative Debitive |
| :---: | :---: | :---: | :---: |
| $A B$ | Absent | NF | Nonfactive |
| AGN | Again | NG | Negative |
| AP | Adjective Phrase | NOM | Nominal |
| CDL | Conditional | NP | Noun Phrase |
| CMP | Comparative | NPR | Nonpresent |
| DB | Debitive | 0 | Object |
| DES | Desiderative | OBL | Obliviative |
| DET | Determiner | P | Past |
| DH | Downhill | PCL | Particle |
| DS | Downstream | PF | Perfect |
| DU | Dual | PL | Plural |
| f | Female | POS | Possessive NP |
| FA | Factive | PRH | Prohibitive |
| FU | Future | PR0 | Pronoun |
| HR | Hortative | PS | Possessive |
| I | Instrumental/Commitative | PT | Potential |
| I | Intensifier | Q | Quantifier |
| $\operatorname{IM}(\mathrm{P})$ | Imperative | RC | Reciprocal |
| INTER | Interrogative | S | Clause constituent |
| IP | Imperfective | S | Singular |
| L | Locative/Directional | SG | Singular |
| M T | Motion | TP | Tok Pisin |
| m | Non-Female | UH | Úphill |
| N | Noun | US | Upstream |
|  |  | V | Vocative |
| Other abbreviations are either |  | listed at the beginning of |  |
| relev | nt chapter or explained | the | t. |

## Notational conventions

```
// enclose phonemes
[] enclose phonetic transcriptions and feature specifications
() enclose optional elements
{} enclose optional specifications and expansions
<> enclose keyed feature specifications (see pp. 25-26)
'' enclose glosses
--> 'becomes' or 'is rewritten as'
/ 'in the environment of'
    (also used to separate allomorphs and options in examples)
> 'is higher on a hierarchy than'
- inflectional or derivational morpheme boundary
+ boundary between compounded elements
* unacceptable
? of marginal or dubious acceptibility
    precedes a stressed syllable or indicates an elided vowel
The canonical forms of verb roots are written in UPPER CASE
characters. Note that I use the following orthographic
conventions:
```

    \(g=\eta\)
    @ \(=\boldsymbol{\theta}\)
    ae $=\boldsymbol{\infty}$

The data upon which $I$ base the description presented here was collected in the course of a field trip of fifteen months' duration (November 1979 - February 1981) in the village of Kamnum, the largest of the five Awtuw-speaking villages.

Insofar as possible I have gleaned examples from a small corpus of narrative text. But $I$ have also used elicited examples to illustrate points where necessary.

The content and structure of this description rest on a number of assumptions which I will attempt to make explicit.
0.1. Language is only a facet, albeit the single most prominent one, of culture. Nevertheless, there are areas of linguistic structure that may be described conveniently and without significant distortion as discrete from other aspects of culture.

Within the domain that is nuclear to language, there are a number of structural components that mediate between meanings to be conveyed and the acoustic code through which they are transmitted. These components are the proper subject of linguistic description.
0.2. The physical properties of the acoustic code are marginal to linguistic description. Similarly, the nature of the relations between expressable meanings and cognitive processes on the one hand, and external reality on the other, are peripheral to the description of linguistic structure.
lithin this periphery are three main structural components. The honological component mediates between meaningful forms and the coustic code through which they are transmitted. The lexical component lediates between lexical forms and expressable meanings. And the rammatical component organizes the composition and combination of exical forms, mediating, as it were, between the other two components.
iewed in this way, the grammatical component is central to linguistic tructure. I intend here to present a comprehensive, even if not xhaustive, description of the morphology, syntax, and morphosyntax of wtuw. Because Awtuw is a previously undescribed language, I include nformation on aspects of the language peripheral to my main concerns. pecifically, Chapter 1 places the language in its social and دciolinguistic context, Chapter 2 provides an overview of Awtuw's rich nonological and morphophonological system, Chapter 11 examines the tructure of a few lexical fields of general interest, and Chapter 12 escribes some paralinguistic phenomena.
03. The aims and methodology of linguistic theory and of linguistic dscription are fundamentally different. The aim of theory is to dlimit and explain the functions of language in human society and hman cognition. Its methodology must therefore be to establish a sit of explanatory principles that will generate hypotheses about lnguistic functions and the ways that languages can express them. Tlese hypotheses can then be tested against empirical data about laguages.

The aim of linguistic description is to identify the formal classes, categories, and structures of a language on empirical, languageinternal evidence. Its methodology must therefore be to examine and analyze such evidence and to correlate the formal properties so isolated with their semantic functions. In other words, it must describe language from the addressee's perspective - translating; forms into meanings, rather than from the speaker's perspective - encoding meanings into forms.
0.4. The approach taken in this description is therefore essentially structuralist. I assume the utility of binary features and relative markedness in distinguishing categories at all levels of structure. I further assume that features used in a description should correspond to empirically identifiable categories. Whenever possible, I have attempted to establish a correspondence between formal categories and plausible semantic categories.

A feature-based analysis has two advantages. Features often crossclassify such that a small set of formal/functional properties can distinguish a large number of categories. It is also possible to make certain kinds of generalizations regarding the properties of marked and unmarked categories.

For example, in the analysis of tense marking in Chapter 4, the feature NCNPRESENT at the same time distinguishes Present forms from Past forms, Future from Desiderative, and Conditional from Frustrative. It also identifies the morphologically unmarked Present with the semantically unnarked category of non-NONPRESENT.

Throughout this description, I have aimed to express significant gereralizations intelligibly. When it seemed to further this aim, I have borrowed formalisms from Generative theory. I do not mean this to imply any credence in the claims of the theory. The formalisms merely reqresent a handy and familiar convention for schematizing certain types of generalizations.

When a language is described in accordance with these principles, the hypotheses generated by theory can be tested against the description. I have attempted therefore to present an analysis that is empirically-based and relatively theoretically neutral and that rellects the structure of the language accurately.

1. Introduction
1.1. Geography, genetic affiliation, history, and ethnography
1.1.1. Awtuw is spoken as the first language of about 400 people living in five villages between the longitudes of $142^{\circ} 29^{\prime}$ and $142^{\circ} 31^{\prime}$ East and the latitudes of $3^{\circ} 34^{\prime}$ and $3^{\circ} 36^{\prime}$ South in an area of about 30 square kilometers in the southern foothills of the Torricelli Range in northwestern Papua New Guinea (see Map 1). All five villages are administered as part of the Southwest Wapei Census Division of the Lumi District, Sandaun (West Sepik) Province of Papua New Guinea.

The five Awtuw-speaking villages are located at altitudes ranging from 320 to 400 meters above sea level. Rainfall in Kamlakwlape, recorded from May to December 1980, ranged from a low of 71.5 mm in June to a high of 237.7 mm in December. Temperatures range from $19.4^{\circ}$ to $32.2^{\circ}$ Celsius, with an average of $22.2^{\circ}$ at 0600 and $29.4^{\circ}$ at 1500 daily, with no appreciable seasonal variation.

Table 1.1 lists the five villages with their vernacular names, their names in Tok Pisin, their populations in 1980 , and the names of their component hamlets. (1980 Census data courtesy of the Lumi District Office.)

```
Table 1.1
Awtuw-speaking villages
Village Map name Population
Kamlakwlape (Kamnum) 125
    Meleylape
    Wititlape
    Kolaydenlape
    Tuwaltenlape
    Wiykatuwla pe
Wutlakwlape (Gutaiye) }11
    Makitlape
    Pelketenklape
    Alanowomweylape
Wiyuplape
                                    (Wiup)
                                    5 7
    Laepinlape
    Kalpelape
Tupumlape (Tubum) 51
    Keylamaklape
    Kilawtuwlape
Kalaktuwlape (Galgatu) 51
```

Map 1.1


Wiykatuwlápe is located about 45 minutes' walk northeast of Meleylape and, as of early 1981, its inhabitants were planning to abandon it. The other four hamlets of Kamlakwlape are clustered within five minutes' walk of each other. Wutlakwlape's three hamlets are closely clustered about 45 minutes' walk southeast of Meleylape. Laepinlape is about 25 minutes' walk south of Meleylape and Kalpelape is another 10 minutes' walk south. The two hamlets of Tupumlape, located about 2 hours' walk south of Kalpelape, are adjacent to each other and all the inhabitants of Kalaktuwlape, which is about 2 hours' walk south-southeast of Wutlakwlape, live in a single hamlet.
1.1.2. Laycock (1975) has classified Awtuw as a member of the Ram 'Stock-level' Family. He further classifies this family within the Upper Sepik Super-stock of the Sepik Sub-phylum of the Sepik-Ramu Phylum. While the postulated broader relationships are tentative, there is little doubt that the three Ram Family languages are closely related (cf. Laycock and Z'Graggen 1977, Wurm 1971). Karawa, with some 53 speakers, is spoken in the village of Bulawa, directly south of the Awtuw-speaking area, and Bouye, with some 642 speakers, is spoken in the villages of Giliato, Maurom, Wokien, and Yukilo to the southwest. (See Map 1.)
1.1.3. Most reports of patrols through the area prior to World War II were destroyed in air attacks on the administrative center of Aitape. Some of those that survive indicate that patrols were conducted near, but probably not through, the Awtuw-speaking region in the early- to mid-1930s (McCarthy 1931, 1936-37, Robinson 1931-34, cf. Marshall 1937,1938).

Prior to contact and the establishment of government control over the area, there was sporadic fighting among the villages in the area. The
most recent series of conflicts, which ended in a permanent armistice around 1950, involved the villages of Kamlakw and Wiyup on the one side, and Nalpetlape (Taute) and Wilkilape (Wilkili) on the other.

By the time of World War II, Awtuw speakers were regularly contracting to do plantation labor and some served in the armed forces during the war. The Japanese crossed the Torricellis in the course of the invasion and were certainly in the village of Seinim, but apparently failed to penetrate as far south as Kamlakwlape or Wutlakwlape.

In 1948, the Franciscan order established their mission at Lumi, the nearest airstrip to the Awtuw-speaking area, about three and a half hours' walk northeast of Kamlakwlape. The government established a patrol post there the following year and the Christian Missions in Many Lands (CMML), a Brethren mission, set up their mission at Lumi also in 1949. The two missions competed with each other for the souls of the people in the surrounding area, but eventually divided the area to their mutual satisfaction. Don and Aileen MacGregor, a CMML couple from New Zealand manned the Lumi mission, probably from its inception, until Don's death in 1965. During this time, Don wrote a number of papers on the culture of the Wapei people (MacGregor. 1969, 1972, 1974a, 1974b, 1975), and, in collaboration with Aileen, a sketch of 010 grammar and a glossary of 0lo, a Torricelli Phylum language (MacGregor and MacGregor 1982).

In 1957, Ken Knight, of the Sola Fide mission, established himself and his party of seven to nine people in what is now Meleylape. The hamlet was inhabited at the time, but since the Knights wanted to build their compound there, the Meley people moved to a nearby spot on the track to Wutlakw. The Knights compensated the people thus displaced with a payment of one pound. The Knights ran a school and a
clinic at Meley and left in 1961 for reasons which $I$ have not been able to determine. The Sola Fide Mission still exists, with headquarters in Goroka EHP.

After the Knights' party left, the CMML took over responsibility for Kamlakw and the surrounding area. Don MacGregor visited frequently to conduct services. In the mid-1960s, the CMML sent a school teacher to Kamlakw, but the hamlet decided to expel him after a year because they considered him excessively cruel to the children.

Since then, the CMML has sponsored several Awtuw-speaking men to attend their Bible school at Amanab, and several others have attended Bible classes in Lumi.

Bill Mitchell, an American anthropologist, spent eighteen months in 1970-71 in Taute doing fieldwork. His wife and two young children accompanied him on his fieldtrip and so the party had a significant impact on the people of the area. A number of articles and a monograph about Mitchell's field experiences have resulted from this fieldwork. They provide some background on the Wapei culture, which the Awtuw-speaking people participate in. (See Mitchell 1973, 1974, 1975, 1977, 1978a, 1978b, 1978c).

Dave Scorza, of the Summer Institute of Linguistics (PNG Branch), has been working in the village of Tumentonik, about 24 km due east of Kamnum, since 1968. He has published some material on the Au language, which, while unrelated to Awtuw, borders on it (see Scorza 1972, 1974). Awtuw speakers marry into at least two Au-speaking villages (see Map 1).

A couple of Peace Corps volunteers moved into Taute in 1981 or 1982 and are working on a project to improve the nutrition of the people in
the area.
1.1.4. The people of the region largely subsist in an economy dominated by sago production. Sago is at once the staple of their diet and their favorite food (cf. Wark and Malcolm 1969). Moreover, sago fronds taep are used for thatch and the stalks of these fronds, m@dow ( $\mathbb{T}$ moraita), are used in the construction of walls, doors, and beds.

The sago diet is supplemented by a small amount of garden produce mainly niyamel 'yam', talow 'taro', wom 'coconut', and @m@k 'pandanus' - and occasional game, fish, or domestic pig.

All gardening and hunting tasks fall to the men, while sago production is the exclusive domain of women. The men clear their gardens by burning them off and hunt with ripy'-alme 'bows and arrows' or shotguns.

Awtuw-speakers, like most of their countrymen, are inveterate chewers of aey 'betelnut' and smokers of tawkway 'tobacco'. The gardens of the Awtuw-speaking villages produce more betelnut, tobacco, and aepit 'daka pepper' than the people require, and the main source of cash income derives from the sale of these commodities at the weekly market in Lumi. In the two southernmost villages, Tupum and Kalaktuw, where game is more plentiful, meat and occasionally katiok+wate 'wildfowl eggs', or even aelaewye+wate 'crocodile eggs' are brought to market.

Throughout the area, settlement is in small villages, most of them consisting of a cluster of smaller hamlets, with populations of between five and fifty. Each hamlet generally consists of two parallel lines of houses, with more houses at either end, all facing into a cleared central area. In some cases, houses or small patches
of garden may intrude into the center of the hamlet. In hamlets occupied by more than one lineage, the members of each lineage will tend to live in adjacent houses.

Houses themselves are invariably built of m@dow and thatched with taep. Some are built on the ground and others are raised on stilts of yiyle kal 'kwila' wood. The floors of raised houses are made of wudpir (TP limbum) 'black palm'. More elaborate housing involves the use of plaim $(\mathrm{T})^{\prime}$ 'mats of woven, flattened bamboo' in walls and occasionally windows. The typical house is between five and eight meters square, with a door at either end and no windows. The area between the two doors is clear, and between two and three small 'rooms' flank this corridor on either side. The rooms are separated by walls of m@dow about 1.5 meters high and each contains two parallel benches of m@dow set perpendicular to the side walls of the house. The benches are about 50 cm high and wide and between 150 cm and 200 cm long. Between each pair of benches is a cleared area about one meter wide where a fire may be built.

Generally, a nuclear family, consisting of a married couple, their unmarried daughters and small sons, and sometimes the husband's widowed parent, will occupy each house. Boys move into a separate house with their agemates at about the age of 10 and remain in such a household until they marry, between the ages of about 25 and 30, when they build their own houses and establish their own households in the husband's hamlet.

The spouses share the housework and care of children. Men usually undertake such tasks as cutting grass, while the women sweep out the house and collect firewood and water. Men cook all meat and most garden crops, and the women take on responsibility for preparing most
of the sago.

The speakers of the majority dialect of Awtuw (see 1.2.) share most cultural traits with their Torricelli language speaking neighbors to the west, north, and east. The speakers of the southern dialect are much more closely affiliated with their neighbors to the south. The dialect boundary that segregates the people of Kamlakw, Wutlakw, and Wiyup from those of Kalaktuw and Tupum is also the southern limit of the gale wokaw 'Devilfish' ceremony.

On the other hand, the restriction on game consumption defines a cultural continuum stretching from the Sepik River along the Yellow and Wiytape 'Sibi' rivers up into the highest villages in the Torricellis. At the southern end of the continuum, the restriction on consuming the game one shoots extends to all members of the hunter's patriline and his wife. In the Awtuw-speaking area, only the hunter, his father, brothers, and sons may not eat his game. Further north, only the hunter himself is restricted from eating his game. Still further along, the hunter may eat his own game. This continuum corresponds, probably coincidentally, with the density of settlement and concomitant scarcity of game.

The three villages that speak the majority dialect of Awtuw are distinct from any of their neighbors with respect to certain cultural traits. For example, in this area, people do not eat dog meat, on which there is no restriction in the surrounding area. Women and children in these villages do not eat fish.

As I mentioned above, the Gale-wokaw ceremony, celebrated throughout the Wapei area, stretches only as far south as Wiup. The other two major ceremonies, the wokaw 'Malangan' and kepne 'Tumbuan', encompass the entire area. All of these ceremonies, as well as the minor
ceremonies that are restricted to a locality, are closely involved with therapeusis. Although these ceremonies have a variety of political, economic, artistic, musical, and religious functions, the explicit motivation for performing any ceremony is always disease. Performing the appropriate ceremony propitiates the spirit responsible for causing the disease, who then removes it.

### 1.2. Sociolinguistics

The Sepik region as a whole, and the Lumi District in particular, are linguistically very diverse (Laycock 1968, 1973). Of the roughly 30,000 inhabitants of the District, over 10,000 are speakers of 010, a Torricelli Phylum language with over 15,000 speakers, some of them in other administrative areas. The remaining 20,000 people speak 21 other languages. With 400 speakers, Awtuw is larger than many of the surrounding languages.

Such diversity, combined with a general rule of local exogamy, engenders a relatively astounding degree of multilingualism. Typically, an 010 speaker married to another 010 speaker will speak only 010 and Tok Pisin. But speakers of any of the smaller languages will usually speak 010 and Tok Pisin, in addition to their first language. If an individual's parents speak different languages, he or she is likely to speak at least four. Husbands who do not speak their wife's language usually learn it, and wives who do not speak their husband's language always do. People with relations or other contacts further afield commonly speak as many as seven or eight languages.

Children in the Awtuw-speaking area start to learn Awtuw and Tok Pisin at the same time. By the age of three or four they express themselves more comfortably in Awtuw, but they become genuinely fluent in Tok Pisin by the age of five, while it may take another three to five
years to master Awtuw entirely. By that time the child will have also learned a modicum of 010 and of other languages that he or she comes into contact with.

Because Awtuw-speaking women marry into villages that do not speak Awtuw, there are a number of Awtuw speakers outside the five villages. Naturally, such Awtuw-speaking women continue to speak Awtuw themselves and their children also speak Awtuw. What strikes one as interesting is that their husbands usually learn it as well. That adults continue to learn Awtuw as a second language indicates that the language remains vital and is likely to continue to thrive.

There are Awtuw-speaking populations in the following villages (see Map 1):

Table 1.2

Villages with Awtuw speakers

| Village | (Tok Pisin name) | Language |
| :--- | :--- | :--- |
| Taeypil | (Talbipi) | 010 |
| Nalpet | (Taute) | 010 |
| Wape | (Wabuf) | 010 |
| Wilkil | (Wilkili) | 010 |
| Yutuwiyt | (Yutabi) | Au |
| Tawlekuw | (Weteili) | Au |
| Tepalum | (Tebali) | Elkei |
| Kapol | (Parisko) | Yis |
| Worke | (Seinim) | Yau |
| Yiwklaw | (Yukilo) | Bouye |
| Puluwa | (Buluwa) | Karawa |

As I mentioned above, Awtuw, although it has so few speakers, has more than one dialect. In fact, there are three - the Southern dialect, the Witit dialect, and the majority dialect that $I$ describe in this grammar. The Southern dialect, spoken in the two southernmost villages, Kalaktuw and Tupum, has two very distinct phonological features. First, it has conpletely neutralized the distinction made in the majority dialect between $/ \mathrm{r} /$ and $/ 1 /$ in favor of the $/ 1 /$. And second, it has replaced the word-initial / / / of the majority dialect with /?/. Thus /rarere/ 'want to eat' in the majority dialect is /lalele/ in the Southern dialect, and /ךale/ 'fish' becomes /?ale/.

The Witit dialect is spoken by only one lineage in the hamlet of Wititlape in Kamlakw. It is distinguished from the majority dialect in replacing word-initial $/ \eta /$ with $/ n /$. Thus / $\eta$ ale/ 'fish' becomes /nale/, homophonous with/nale/ 'hole'.

Interestingly, the neutralization of $/ \mathrm{r} /$ and $/ I /$ and of $/ \eta /$ and $/ \mathrm{n} /$ are two features of child language as well as the main indicators of dialect differences.

## 2. Phonology and morphophonology

2.0. Awtuw is a language that displays variety and complexity at every level of structure. Its phonology and especially its morphophonology are enormously rich and fully deserve a thorough and comprehensive description. But as $I$ mentioned in 0.2., this thesis is a description of Awtuw grammatical structure and I have therefore constrained the chapter on phonology to a minimum. The aim of this chapter is to provide the reader with a brief overview of Awtuw segmental phonology and some of the major morphophonological rules.

### 2.1. Phonology

### 2.1.1. The analysis of diphthongs

The nucleus of a syllable in Awtuw frequently consists phonetically of a vowel and an offglide. The balance of the phonological analysis rests crucially upon whether such sequences are analyzed as unitary phonemes, as sequences of two vowels, or as vowels followed by consonantal glides. I will therefore open by presenting two arguments that motivate the VC analysis.

1. Awtuw's Locative/Directional suffix has two allomorphs, -e and -ke, whose allomorphy is straightforward and natural to describe for a VC analysis, but complex and artificial under a unitary phonemic or a $V V$ analysis. The -ke allomorph occurs after vowels, and the -e allomorph after consonants.
(1)
a. aewre-ke
b. yil-e
house-L
edge-L
c. $u y$-e
d. tepyiw
-e
hole-L
side of house-L

The allomorphy of the Location/Direction suffix treats the offglides in (lc-d) Iike the consonant in (lb) rather than the vowel in (la). AV or a VV analysis would require the addition of a very unnatural morphophonemic rule to delete the $/ k /$ from the suffix following two vowels.
2. Furthermore, although any vowel may be the first in a diphthong, all diphthongs end in either /w/ or /y/. The more general descriptive statement that a diphthong may begin with any vowel and end in any semivowel is preferable to the idiosyncratic statement that only high vowels function as syllabic coda. The VV and unitary vowel analyses would also require a rule to transform high vowels into glides between two other vowels; a rule that the VC analysis obviates entirely. No phenomena have come to my attention that a unitary phoneme or VV analysis explains but cause difficulties for the VC analysis.

### 2.1.2. Consonant phonemes and their allophones

Awtuw has eleven consonant phonemes, /p, $t, k, m, n, g, r, d, l, y, w /$, as displayed in Table 2.1.

Table 2.1.


The oral stops /p, $t, k / a r e f o r t i s, ~ v o i c e l e s s$ and usually aspirated, but they have unreleased allophones word-finally. Voiced allophones occur following a nasal preceded by a stressed vowel. They are distiguished by the following minimal pairs:

```
/pap/ 'just then' - /tap/ 'thatch'
/tiw/ 'foliage' - /kiw/ 'pitpit'
/pare/ 'will peel' - /kare/ 'will get'
```

The nasal stops are $/ \mathrm{m}, \mathrm{n}, \mathrm{g} /$. Note that I use the character $/ \mathrm{g} /$ to represent the velar nasal / $\eta /$. The alveolar nasal optionally assimilates to a following /p/ or $/ \mathrm{k} /$. The velar nasal is only phonemic word-initially, where it occurs in a small number of very high frequency lexemes. The velar nasal is only found in the majority dialect described in this grammar, the Southern dialect replaces it with a glottal stop and the Witit dialect with /n/. Children's speech also consistently substitutes $/ \mathrm{n} /$ for $/ \mathrm{g} /$. They are distinguished by the following minimal pairs:

```
make 'went and got' - gake 'beneath'
nale 'hole' - gale 'fish'
wan 'I' - wam 'blunt'
```

The following minimal pairs distinguish the nasal stops from the corresponding oral stops:

```
/paey/ 'let me go' - /maey/ 'sun'
/tiw/ 'foliage' - /niw/ 'ground'
/kowre/ 'will give' - /gowre/ 'tear (Object)'
```

The alveolar tap /r/ is in free variation with a trill at the same point of articulation. The other tap / / is slightly retroflexed. The alveolar tap occurs only in the majority dialect and the Witit dialect. The Southern dialect substitutes /I/, as is also the case in children's speech. They are distinguished by the following minimal pair:
/romke/ 'their' - /domke/ 'full'

The following minimal pairs distinguish the taps from the alveolar oral stop /t/:

$$
\begin{aligned}
& \text { /daeye/ 'went' }- \text { /taeye/ 'went (Dual)' } \\
& \text { /raw/ 'call' }-/ \text { taw/ 'tree' }
\end{aligned}
$$

The lateral /l/ is always a liquid lateral and does not surface as a tap. The following minimal pairs distinguish /l/ from the two taps and the other alveolar consonants:

```
/laewe/ 'baked' - /raewe/ 'them two'
/laeye/ 'came upstream' - /daeye/ 'went'
/lale/ 'tongue' - /nale/ 'hole'
/laeye/ 'came upstream' - /taeye/ 'went (Dual)'
```

The semivowels /w, y/ occur both as consonantal glides between vowels and after $/ \mathrm{p} /$ and $/ \mathrm{k} /$, and as offglides of diphthongs, as mentioned in 2.1.1. The following minimal pair motivates their distinction:
/wam/ 'blunt' - /yam/ 'bee'.

### 2.1.3. Vowel phonemes and their allophones

Awtuw distinguishes seven phonemic vowels, /i,e,ae,@,a,o,u/. For typographical convenience, I have adopted the character @ to represent schwa, and the digraph ae to represent the low front vowel. Note that the absence of $V V$ sequences makes this digraph unambiguous.

Table 2.2 displays the seven vowel phonemes.

Table 2.2.

FRONT CENTRAL BACK

| HIGH | i |  | u |
| :--- | :--- | :--- | :--- |
| MID | e | @ | o |
| LOW | ae |  | $a$ |

$[I],[\varepsilon],[\mho],[J]$, but the front vowels are closer and tenser in diphthongs ending in /y/ and the back vowels in diphthongs ending in /w/.

There is a variety of complex vowel harmony rules, described in 2.2., which blur the distinctions among vowels in certain environments. Moreover, vowel gradation and reduction contribute to a blurring of distinctions. The high and mid back vowels appear to be marginally phonemic.

The following minimal pair distinguishes the low vowels:
/yaem/ 'banana' - /yam/ 'bee'

The following minimal pair distinguishes the high vowels:
/diye/ 'shot' - /duye/ 'built'

There do not appear to be minimal pairs to distinguish the mid vowels from each other, but they do enter into contrasts with the other vowels.

The following minimal set distinguishes the front vowels:
/riw/ 'tally' - /rew/ 'vagina' - /raew/ 'they two'

The following minimal pairs distinguish the back vowels.

```
/wam/ 'blunt' - /wom/ 'coconut'
/kowm/ 'comb' - /kuwm/ 'boil (on skin)'
```

The following pairs distinguish schwa from /a/ and /o/:

```
/p@m/ 'slit gong' - /pam/ 'joint'
/r@k@/ 'has eaten' - /roko/ 'did'
```

Phonemic schwa is limited in distribution. It occurs in only a few words which I list exhaustively here.

| aew@nk | 'eel' | n@klay | 'cane' |
| :--- | :--- | :--- | :--- |
| aw@na | 'pcl' | p@m | 'slit gong' |
| @l@p | 'yesterday' | p@rkwo | 'soft' |
| @m@k | 'pandanus' | p@rp@r | 'sharp' |
| k@mkam | 'hard, stingy' | pramnenkel'kind of shell ring' |  |
| l@m | 'younger same sex sibling' | praw@n | 'kind of wasp' |
| m@nman | 'fun' | wawey | 'mother's brother' |
| mod@k | 'today' | wok@k | 'long, tall' |
| mok@l | 'laugh' |  |  |

It is worth noting that schwa does not occur in words that contain high vowels whether the schwa is phonemic or reduced from an underlying /e/ or /a/.

In the discussion that follows, I will make use of feature specifications for Awtuw phonemes, which I present here in Table 2.3. The abbreviation for each feature name is capitalized.
Table 2.3 Feature specifications of phonemes

2.1.4. Phonotactic constraints

Each of the seven vowels can occur word-initially and may take stress. Word-final vowels are never stressed. The low vowels are reduced to schwa word-finally. The high back vowel does not occur word-finally.

| /'im/ | 'night' | - | /daeli/ | 'bit' |
| :---: | :---: | :---: | :---: | :---: |
| /'etiy/ | 'pain' | - | /pare/ | 'will peel' |
| /'aem/ | ' lime' | - | -- |  |
| /'@1@p/ | 'yesterday' | - | /r@k@/ | 'has eaten' |
| /'an/ | 'you two' | - | -- |  |
| /'om/ | 'you all' | - | /dalowo/ | 'spoke' |
| /'upur/ | 'throat' | - | -- |  |

The following examples each illustrate that the front and back vowels occur word-medially both with and without stress.

```
/'kinik/ 'sit!'
/ken'etw@/ 'extinguish!'
/aep'aelre/ 'don't bite!'
/'kanakl@/ 'dig!'
/'konor/ 'copulate!'
/kun'puy@/ 'hit!'
```

The central vowel also occurs stressed and unstressed in word-medial position:
/'k@nwan/ 'listen' - /'@1@p/ 'yesterday'

Sequences of vowels do not occur in Awtuw. The elision rules described below delete one of any two vowels that come together across a morpheme boundary.
can occur word finally, as illustrated by the following examples:

| /pam/ | 'joint' | - | /tap/ | 'thatch' |
| :---: | :---: | :---: | :---: | :---: |
| /tam/ | 'cross cousin' | - | /pat/ | 'flat' |
| /kare/ | 'get!' | - | /pak/ | 'palm, sole' |
| /make/ | 'went and got' | - | /pam/ | 'joint' |
| /nale/ | 'hole' | - | /nan/ | 'we two' |
| /gale/ | 'fish' | - | -- |  |
| /rom/ | 'they' | - | /kenpar/ | 'peel!' |
| /dalowo/ | 'spoke' | - | /kud/ | 'bamboo species' |
| /lape/ | 'village' | - | /kinael/ | 'bite!' |
| /wan/ | 'I' | - | /naw/ | 'urine' |
| /yaem/ | 'banana' | - | /maey/ | 'sun' |

Consonant clusters occur word initially, word medially, and word finally. Geminates do not occur at all. An epenthetic vowel breaks up sequences of $/ \mathrm{k} / \mathrm{s}$ and a geminate reduction rule deletes the first of any other two adjacent identical consonants.

Word-initial consonant clusters are extremely rare and occur almost exclusively in biological terms. Most clusters have the form stop + $/ \mathrm{r} /$, although there is one example of $/ \mathrm{ky} /$ and one of $/ \mathrm{mw} /$.

| /praw@n/ | 'small wasp' |
| :--- | :--- |
| /pramnenkel/ | 'kind of shell ring' mweymoy 'worm' |
| /trank/ | 'barb' |
| /tramtrom/ | 'kind of small frog' |
| /kror/ | 'kind of bird' |
| /krekrek/ " 'kind of frog' |  |

Sequences of two or three consonants are also unusual word-finally. There is only one example of a word ending in three consonants /tiwnk/ 'fern'. A few other words end in /nk/, although there are no examples of word final /mp/ or /nt/ clusters. The cluster /rp/ occurs in /kinirp/ 'close (the door)!' and two other forms of IRP 'close'.

Aside from these, there are a few examples of words ending in a semjivowel and a stop or a nasal such as /tuwp/ 'straightaway', /kuwm/ 'boil (on the skin)', and /uyk/ 'odor'.

Word-medial clusters of two or three consonants are very common. Sequences of three stops are possible in this position, as in the following examples:

```
/apt'kare/ 'don't you two get it'
/diknaekp'taetiy/ 'is frightening'
```

It is interesting to note that the stop sequence in the first example crosses two morpheme boundaries, but the second example includes the unique root NAEKPTAET, which has a three stop cluster within the root. Other clusters that occur word-medially include sequences of two semivowels, and of semivowels and taps or laterals:

```
/wiyware/ 'will bathe' /wiwyare/ 'will incise'
/rokory@k@/ 'broken' /waeyrowre/ 'will float'
/malware/ 'will descend' /dotkolye/ 'killed'
```


### 2.1.5. Stress placement

By and large, main word stress, which entails a rise in pitch and a slight increase in loudness, tends to fall on the first syllable of an Awtuw word. There is also a tendency towards penultimate stress. Where the two tendencies coincide, on disyllabic words, the stress pattern is regular.

| /'kinik/ 'sit' /'tapwo/ 'village' | 'fire' |  |
| :--- | :--- | :--- |
| /'lape/ | 'eywo/ | 'thus' |

Where the two tendencies do not coincide, but the first and penultimate syllables are not adjacent, in polysyllabic words, primary stress will usually fall on the penult and secondary stress on the first syllable.

| /'orkwey"naywo/ | 'four' | /'owtiy"kayaen/ 'old' |
| :--- | :--- | :--- | :--- |
| /'ate"paye/ | 'far out!' /'periya"yawnow/ 'grass' |  |

There are, however, a number of exceptions to this generalization among words other than verbs, while verbs do not appear to follow it at all.
/ye'nankeyke/ 'grandchild'
/mo'nokene/ 'bad' /kay'puteriy/ 'dust'

On trisyllabic words other than verbs, where the two tendencies would place stress on adjacent syllables, some words follow one tendency and others the other.

| /'waruke/ | 'big' | /'yankeyke/ | 'small' |
| :--- | :--- | :--- | :--- |
| /'alworaw/ | 'mouth' | /'tipelyow/ | 'smoke' |
| /wiy'tape/ | 'river' | /yil'make/ | 'moon' |
| /wom'yaetne/ | 'some' | /tey'wake/ | 'near' |

The addition of a case marker or derivational suffix does not affect the position of stress on a word other than a verb.

```
/wiy'tape/ 'river' /wiy'tape-ke/ 'at the river'
/'tapwo/ 'fire' /'tapwo-re/ 'fire-0' /'tapwo-neney/ 'hot'
```

On the whole, verbs do not follow the same patterns as other words. One place where verbs are most susceptible to stress on the penult is in the future form of any a-final root. There are no exceptions to this pattern.

| /'kare/ | 'will get' | /rare/ | 'will eat' |
| :--- | :--- | :--- | :--- |
| /wow'nare/ | 'will sleep' | /rok'rare/ | 'will cook' |
| /ti'tamkur"yare/ 'will miss' | /'lamleak"nare/ | 'will fall' |  |

Affixation of a verb does affect the placement of stress.
/pu'yare/ 'will hit' /'dupuye/ 'hit'

Aside from this, verb roots appear to condition stress patterns idiosyncratically, independent of their phonological form.
/'dikiriy/ 'is sharpening' • /di'kiliy/ 'is twisting'

It is beyond the scope of this chapter to explore in detail the complexities of stress placement on verb forms.

### 2.2. Morphophonology

This section presents a number of rules which together produce most of the phonetic forms of Awtuw words from strings of morphemes.

On the whole, the rules apply to verb forms, but where other types of words meet the environmental criteria, these rules affect them as well. The only cases of such rules are one of the vowel harmony rules (2.2.10.), which changes the canonical /e/ of the past, future, and object suffixes to [i] or [o], and the pre-rhotic stop insertion rule in 2.2.18.

The rules are ordered and must be applied sequentially. This is particularly important in the case of the vowel harmony rules that affect the quality of the Imperfective and Past suffixes. Although nearly identical in form, one must apply before, and the other after, the elision rule.

With the exception of the vowel gradation rule, I have used the traditional formalisms of Generative Phonology to capture the rules concisely. But as I mentioned in Chapter O, I do not mean to imply any credence in the claims of the theory. The formalism merely represents a convention to schematize morphophonological rules.

Among the formalisms I have adopted is the labelled angle bracket notation (Chomsky and Halle 1968.394-395). This convention, suggested to me by Avery Andrews, permits parts of the environment for a rule to be keyed to the presence or absence of a feature. The benefit of this formalism is that a simple process with a complex environment can be represented as a single rule, in conformity with the intuitive judgement that the process is unitary in spite of the complexity of its environment.

Features enclosed in labelled angle brackets are interpreted as relevant parts of the environment if the label is [+], and are ignored when the label is [-]. Greek letter values are multiplied by any operator on them. Thus, an angle bracket labelled $[\alpha]$ has the same value as some feature specified $[\alpha]$. But an angle bracket labelled $[-\alpha]$ has the opposite value from the feature specified as $[\propto]$. In example (2a), the feature F2 is a relevant part of the environment when $F 1$ is specified as [+], and irrelevant when F 1 is specified as [-]. In example (2b), F2 is relevant when $F 1$ is [-], and irrelevant when $F 1$ is [+].

```
(2) a. [\alphaF1] b. [\alphaF1]
    <<[+F2]>}<<-\mp@subsup{\alpha}{}{[+F2]>
```

Thus, the environment in (2a) will be read as either [ $-\mathrm{F} 1]$, or $[+\mathrm{F} 1$,
$+F 2]$, and (2b) will be read as either $[+F 1]$, or $[-F 1,+F 2]$.

I present each rule in a separate subsection, so references to, e.g. Rule 3, refer to the rule presented in subsection 2.2.3. Note that this type of analysis produces intermediate forms that are neither phonemic nor phonetic (cf. Chomsky \& Halle 1968.65). I enclose all non-phonemic forms in square brackets ([...]).
2.2.1. /k/ deletion

$$
/ \mathrm{k} / \rightarrow \emptyset /\left\{\begin{array}{cc}
\mathrm{C}-\ldots & \mathrm{k} \# \neq 1 \\
\mathrm{VC}-\ldots & \mathrm{k}-
\end{array}\right\}
$$

The first rule serves to delete a/k/ after a consonant and a morpheme boundary and before another $/ \mathrm{k} /$ and a word boundary. This transforms the conditional suffix /kk/ into /k/ after a consonant-final stem when there is no desiderative suffix.

| /rokra-kk/ | [rokra-kk] 'would have cooked' |
| :--- | :--- | :--- |
| $/$ ti-tan-kk/ | [ti-tan-k] 'would have stunk' |

```
/rokra-kk-rere/[rokra-kk-rere] 'wanted to cook, but didn't'
```

The rule also deletes a $/ \mathrm{k}$ / after any unstressed vowel, any consonant, and a morpheme boundary and before another $/ \mathrm{k} /$, which simplifies the conditional suffix after a k-final stem.

```
/mak-kk/ [mak-k] 'would have said'
/mak-kk-rere/ [mak-k-rere] 'wanted to say, but didn't'
```

2.2.2. Homorganic nasal assimilation 1

$$
\left[\begin{array}{c}
+\mathrm{CONS} \\
+\mathrm{COR} \\
+\mathrm{ANT} \\
+\mathrm{NAS}
\end{array}\right] \rightarrow\left[\begin{array}{c}
-\mathrm{COR} \\
-\mathrm{ANT}
\end{array}\right] /-(-)\left[\begin{array}{c}
+\mathrm{CONS} \\
-\mathrm{NAS} \\
-\mathrm{ANT} \\
-\mathrm{COR}
\end{array}\right]
$$

This rule optionally assimilates an $/ \mathrm{n} /$ to a following velar stop either within a root or across a morpheme boundary.

$$
\begin{aligned}
& \text { /kan-ka/ [kay-ka] 'get' } \\
& \text { /wan-ke/ [way-ke] 'my' }
\end{aligned}
$$

2.2.3. Vowel harmony 1 - Imperative prefix


This rule assimilates the canonical /a/ of the Imperative prefix kanto a vowel in the following syllable in backness and height. It must follow the nasal assimilation rule to prevent it from applying to derive forms like *[konkow]. It must also precede $/ \mathrm{n} /$ deletion to allow it to derive forms like [konor] and [kurupukurya].

| $/$ kan-or/ | [konor] | 'copulate!' |
| :--- | :--- | :--- |
| $/$ kan-rupukurya/ | [kunrupukurya $]$ | 'belch!' |
| $/$ kan-imya/ | $[$ kinimya $]$ | 'run!' |
| $/$ kan-etwa/ | $[$ kenetwa $]$ | 'extinguish!' |

$$
/ \text { kaŋ-kow/ [kaŋ-kow }] \quad \text { 'give!' }
$$

It also changes the /a/ to /i/ before a/y/ initial verb root with a mid or high vowel.

$$
\begin{array}{ll}
\text { /kan-yel/ }[\text { kinyel }] \quad \text { 'cry!' } \\
\text { /kan-yakey/ [kan-yakey] 'go upstream!' }
\end{array}
$$

### 2.2.4. Post-nasal stop vocalization

$$
\left[\begin{array}{r}
+\mathrm{CONS}] \\
-\mathrm{SYL}
\end{array}\right]-->[+\mathrm{VOICED}] / \cdot \mathrm{V}\left[\begin{array}{c}
+\mathrm{CONS}] \\
-\mathrm{SYL} \\
+\mathrm{NAS}
\end{array}\right]-\mathrm{V}
$$

This rule vocalizes stops following a stressed vowel and a nasal and preceding another vowel.

```
/'ka -kuw/ ['ka guw] 'give!'
/'Kampo/ ['Kambo] 'Kampo' (man's name)
/d@-'wa -kay/ [d@'-wa gay] 'has heard'
```

2.2.5. /n/ deletion

$$
/ \mathrm{n} /->0 / \ldots-\left\{\begin{array}{l}
{[+\mathrm{CONS}]} \\
+\mathrm{COR}] \\
\underline{\mathrm{ma}-}
\end{array}\right\}
$$

This rule deletes the $/ \mathrm{n} /$ of the imperative and debitive prefixes before any coronal consonant or the motion prefix ma-.

```
/kan-naw/ [kanaw] 'wait!'
/kan-tinatow/ [katinatow] 'bark!'
/kan-lawey/ [kalawey] 'clear off!'
/kan-rokra/ [karokra] 'cook!'
/kan-dardow/ [kadardow] 'jump!'
```

Note that the second part of the rule applies only to the Motion prefix ma-, and not to other instances of $/ \mathrm{ma} /$.

```
    /kan-ma-ka/ [kamaka] 'go get!'
cf. /kan-maka/ [kanmaka] 'tell'
```


### 2.2.6. Homorganic nasal assimilation 2



This optional rule assimilates an $/ \mathrm{n} /$ to a following labial stop after an unstressed vowel. It must follow the rule determining prefix vowel quality which requires the $/ \mathrm{n} /$ as part of its environment.
/kun-'puya/ [kum'puya] 'hit!'

### 2.2.7. Vowel harmony 2 - Imperfective suffix



This rule raises the /e/ of the Imperfective suffix to [i] before a $/ y /$ and any other suffix, or word-finally under the following circumstances:

1. After at least one coronal consonant immediately preceded by a mid vowel and a $/ \mathrm{y} /$. When alpha is specified as [-], the two parts of the environment labelled $[-\alpha]$ are relevant, and the part labelled $[\alpha]$ is ignored. In this case, the rule expands as:

$$
\begin{aligned}
& {\left[\begin{array}{c}
-\mathrm{LOW} \\
-\mathrm{HIGH}
\end{array}\right]\left[\begin{array}{c}
{[-\mathrm{CONS}} \\
-\mathrm{SYL} \\
+\mathrm{HIGH}
\end{array}\right]\left[\begin{array}{c}
+\mathrm{CONS} \\
+\mathrm{COR}
\end{array}\right],-/ \mathrm{y} /-} \\
& \text { /d@-k-eyt-ey(-m-e)/ [d@-k-eyt-iy(me)] 'are/were sweeping' }
\end{aligned}
$$

2. After any sequence of consonants immediately preceded by a high
vowel. That is, when alpha is [+], and beta is [+], we read the part of the environment labelled $[\alpha]$, and ignore those labelled $[-\alpha]$ and $[-\beta]$.

$$
\begin{aligned}
& \left.\begin{array}{l}
{[-\mathrm{CONS}]} \\
+\mathrm{SYL} \\
+\mathrm{HIGH}
\end{array}\right] \quad \mathrm{C}_{0}-\ldots / \mathrm{y} /- \\
& \text { /du-k-uy-ey(-m-e)/ [du-k-uyiy(me)] 'are/were building' } \\
& \text { /di-k-il-ey(-m-e)/ [di-k-iliy(me)] 'are/were weaving' }
\end{aligned}
$$

3. After /ae/ and any sequence of consonants. When alpha is [+] and beta is [-], we read the part of the environment labelled [ $-\alpha$ ].

$$
\begin{aligned}
& {\left[\begin{array}{l}
{[- \text { CONS }} \\
+ \text { SYL } \\
+ \text { LOW } \\
- \text { LACK }
\end{array}\right] \quad C_{0} \quad-\quad / \mathrm{y} /-} \\
& \text { /di-k-iknaer-ey(-m-e)/ [di-k-iknaeriy(me)] 'are/were breaking' } \\
& \text { /di-k-ael-ey(-m-e)/ [di-k-aeliy(me)] 'are/were biting' } \\
& / \mathrm{k} \text {-laet-ey(-re)/ [k@-laetiy(re)] 'are/were pouring' } \\
& \text { /d@-k-waey-ey(-m-e)/ [d@-k-waeyey(me)] 'are/were scraping' }
\end{aligned}
$$

This rule must precede the vowel elision rule because the final vowel of vowel-final roots conditions the height of the suffix vowel.
/d@-k-iywa-ey/ [d@-k-iywa-ey] 'is bathing'
2.2.8. /y/ deletion

$$
/ \mathrm{y} /->0 /\left\{\begin{array}{ll}
\mathrm{V}-\mathrm{C} \# \# & (\mathrm{OBL}) \\
\mathrm{V} \_-(\mathrm{CV}(\mathrm{C})(\mathrm{V})) \# \# & (\mathrm{OPT})
\end{array}\right\}
$$

This rule must follow the preceding rule because the /y/ that it deletes is a necessary part of that rule's environment.

The first part of this rule deletes the final /y/ of the Perfect suffix -kay, or of the Imperfective suffix -ey before the plural
suffix $-\underline{m}$. The rule applies obligatorily when the $-\underline{m}$ immediately precedes the word boundary, and optionally when conditional or tense marking follows it.

```
\(/ \mathrm{d} @-\mathrm{k}-\mathrm{mak}-e y-m / \quad[\mathrm{d}-\mathrm{k}-\mathrm{mak}-\mathrm{em}] \quad\) 'are telling'
/di-k-ael-iy-m/ [di-k-ael-im] 'are biting'
/d@-k-ra-y-m/ [d@-k-ram] 'are eating'
/d-ael-kay-m/ [d-ael-kam] 'have bitten'
/d@-k-mak-ey-m-e/ [d@-k-mak-eyme]
    [d@-k-mak-eme] 'were telling'
/di-k-ael-iy-m-ik/ [di-k-ael-iymik]
    [di-k-ael-imik] 'would have been biting'
\(/ \mathrm{d} @-\mathrm{k}-\mathrm{ra}-\mathrm{y}-\mathrm{m}-\mathrm{e} / \quad[\mathrm{d} @-\mathrm{k}-\mathrm{rayme}]\)
    [d@-k-rame] 'were eating'
/d-ael-kay-m-e/ [d-ael-kayme]
    [d-ael-kame] 'had bitten'
\(/ \mathrm{d}\) @-k-ra-y/ [d@-k-ray]
    [d@-k-ra] 'is eating'
/w-ael-kay-re/ [w-ael-kayre]
[w-ael-kare] 'will have bitten'
```

2.2.9. Vowel elision 1

$$
V \rightarrow 0 /\left\{\begin{array}{l}
\mathrm{V}_{\mathrm{V}}-\quad \\
-\quad \mathrm{V}
\end{array}\right\}
$$

This rule simplifies sequences of vowels by deleting an unstressed vowel immediately following a stressed vowel or an unstressed vowel before any other vowel. It must follow rule 8 to allow the final /a/ of a-final roots to condition the imperfective suffix vowel before the /a/ is elided.

$$
\begin{array}{lll}
\text { /ma-ow'na-re/ } & \text { [mowna-re }] & \text { 'will go sleep' } \\
/ \text { ka-'ma-owna/ } & \text { [ka-'mawna }] \quad \text { 'go sleep!' } \\
\text { /ma-'owra-ow'ra-re/ } & \text { ['mowrow'rare] 'will go reignite' } \\
\text { /d-owna-e/ } & \text { [d-owne }] & \text { 'slept' }
\end{array}
$$

2.2.10. Vowel harmony 3-final vowels

This rule determines the quality of word-final vowels in the Past and Future suffixes as well as the Object suffix on nouns and pronouns.

The first part of the rule changes the canonical /e/ of these suffixes to [o] after /m/ or /w/ when the preceding vowel is a back vowel. Thus, the object forms of all plural personal pronouns, nom , om, and rom , end in /o/. Similarly, plural forms of nouns, with the suffix -wom, condition the - $\underline{O}$ allomorph of the object suffix. The final /w/ of the third person dual pronoun raew, and the final $/ \mathrm{m} /$ of the generic form of nouns, with the suffix -yaenim, do not condition the - 으 allomorph because the preceding vowels are not back.

Verb roots like ROKW 'do' and KOW 'give' condition the - - allomorph of the Past suffix. But those like WUN 'love' do not, because although the preceding vowel is back, the final /n/ of the root does not meet the rule's conditions.

| /rom-e/ | [romo] | 'them' |
| :--- | :--- | :--- |
| /piyren-yaenim-e/ | [piyren-yaenime] | 'dogs' |
| /rokw-e/ | [rokwo] | 'did' |
| $/$ d@-wun-e/ | [d@-wune] | 'loved' |

Note that this rule must follow the elision rule, as it applies to the output of that rule.
/d@-wanwa-e/ --> [d@-wanw-e] --> [d@-wanwo] 'washed'

The second part of the rule is virtually identical to the vowel harmony rule applying to the Imperfective suffix. The main difference is that where root-final vowels conditioned that rule, they must be elided before the application of this rule.

This part of the rule changes the canonical /e/ of the Past, Future, and Object suffixes to /i/ under the same conditions as described above.

$$
\begin{array}{lll}
/ \text { /w-ael-re/ } & \text { [w-aelri] } & \text { 'will bite' } \\
/ \text { /w-il-re/ } & {[\text { w-ilri }]} & \text { 'will weave' } \\
/ \text { /d-ael-e/ } & {[\text { d-aeli] }} & \text { 'bit' } \\
/ \text { /d-il-e/ } & {[\text { d-ili] }} & \text { 'wove' } \\
/ \text { w-eyt-re/ } & {[\text { w-eytri }]} & \text { 'will scrape' } \\
/ \text { d-eyt-e/ } & \text { [d-eyt-i] } & \text { 'scraped' } \\
\text { /waek-re/ } & \text { [waekri] } & \text { 'belly (object)' } \\
\text { /piyren-yaenim-e/ } & \text { [piyren-yaenimi] } & \text { 'dogs (object)' } \\
\text { /yaen-waew-e/ } & \text { [yaen-waewi] } & \text { 'two children (object)' } \\
& &
\end{array}
$$

2.2.11. Vowel harmony 4 - -owra-

$$
[+\mathrm{SYL}] \rightarrow[-\mathrm{BACK}] / \ldots \mathrm{C}_{0}\left[\begin{array}{l}
{[-\mathrm{CONS}} \\
+\mathrm{SYL} \\
-\mathrm{BACK}
\end{array}\right]
$$

This rule has the effect of assimilating the /o/ in the 'again' prefix -owra to /e/ before a root with a front vowel in its initial syllable. The rule only applies to this prefix.

| /w-owra-rokra-re/ | [w-owra-rokra-re] 'will cook again' |  |
| :--- | :--- | :--- |
| /w-owra-il-re/ | [w-ewr-il-ri] | 'will weave again' |
| /w-owra-ael-re/ | [w-ewr-ael-ri] | 'will bite again' |
| /w-owra-eytra-re/ | [w-ewr-eytra-re] | 'will sweep again' |

### 2.2.12. Epenthesis 1

$$
0 \rightarrow->[@] / k \_k
$$

This rule inserts a schwa between any two adjacent $/ \mathrm{k} / \mathrm{s}$. It serves to separate the two $/ \mathrm{k} / \mathrm{s}$ of the conditional suffix when one of these has not been deleted by the $/ k /$-deletion rule above as well as the $/ k$ / of the Imperfective prefix and a/k/-initial root.

$$
\begin{array}{lll}
\text { /rokra-kk(-rere)/ } & {[\text { rokrak@k(-rere)] }} & \text { 'would have cooked' } \\
& & \text { 'wanted to cook but didn't' } \\
/ \text { /d-k-kow-ey/ } & {[\text { d-k@kow-ey }]} & \text { 'is giving' }
\end{array}
$$

### 2.2.13. / d/-deletion

This rule deletes the /d/ of the Factive prefix when a consonant-initial root bears both the Negative prefix ka- and the Imperfective prefix k-. It must follow the first epenthesis rule to prevent it from applying to /k/-initial roots with these two prefixes.

$$
\begin{array}{lll}
/ \text { ka-d-k-law-ey/ [kak-law-ey] } & \text { 'isn't baking' } \\
/ \text { ka-d-k-mak-ey/ [kak-mak-ey] } & \text { 'isn't telling' } \\
/ \text { ka-d-k-yel-ey/ [kak-yeley] } & \text { 'isn't crying' } \\
/ \text { ka-d-k-aey-ey/ [kadk-aey-ey] } & \text { 'isn't going' }
\end{array}
$$

It also deletes the / // of the Factive prefix before any coronal consonant and before the Motion prefix ma-.

$$
\begin{array}{lll}
/ \text { d-naw-o/ } & {[\text { nawo }]} & \text { 'waited' } \\
/ \text { d-law-o/ } & {[\text { lawo }]} & \text { 'baked' } \\
/ \text { d-ti-tow-o/ } & {[\text { ti-towo }]} & \text { 'lashed' } \\
/ \text { d-rokw-o/ } & {[\text { rokwo }]} & \text { 'did' }
\end{array}
$$

It is interesting to compare the phonetically similar past forms of the root MAK 'say' and KA 'get' with the motion prefix ma-. The initial /ma/ of the former does not condition the deletion of the Factive prefix, just as it did not condition the deletion of the final /n/ of the Imperative prefix. But when the same segments belong to the Motion prefix, the /d/ must be deleted.

$$
\begin{array}{ll}
\text { /d-ma-ka-e/ } & \text { [make }] \quad \text { 'went and got' } \\
/ \text { d-mak-e/ } & {[\text { d-make }] \text { 'told' }}
\end{array}
$$

2.2.14. /w/ deletion

$$
/ \mathrm{w} /-->0 /\left\{\begin{array}{l}
\{\# \#\}_{-}^{-}-\mathrm{C} \\
\mathrm{p}-\ldots-
\end{array}\right\}
$$

The first part of this rule deletes the nonfactive prefix $w$ - before any consonant and after another prefix or at the beginning of the verb complex. The second part deletes it after the Prohibitive prefix.

$$
\begin{array}{lll}
/(\text { na- }) \text { w-rokra-re } & {[(\text { na- }) \text { rokra-re }]} & \text { 'can/will cook' } \\
/ \text { ap-w-owna-re } & {[\text { apowna-re }]} & \text { 'don't sleep' }
\end{array}
$$

### 2.2.15. Vowel epenthesis 2

○ --> [@] / \#\#C_-C

This rule inserts a schwa between a word-initial consonant, such as the Imperfective prefix $\underline{k}$ - in the future or the Factive prefix $\underline{\alpha}$-, before a consonant-initial root.

| $/ \mathrm{k}$-aey-ey-re/ | [kaey-ey-re] | 'will be going' |
| :--- | :--- | :--- |
| $/ \mathrm{k}$-rokra-y-re/ | [k@rokra-y-re] | 'will be cooking' |
| $/ \mathrm{w}-\mathrm{owna-kk} /$ | $[$ w-owna-k@k] | 'would have slept' |
| $/ \mathrm{d@-k-ka-ey/}$ | $[$ d@k@key] | 'is getting' |

2.2.16. Vowel harmony 5


This rule assimilates the epenthetic vowels inserted by the epenthesis rules to a /y/ or the vowel in the next syllable. It does not affect the vowel of the Motion prefixes or the Imperative prefix, even where the /n/ has been deleted, as only a schwa is susceptible. It applies only to the epenthetic vowels following a word-initial Factive or Imperfective prefix.

| /d@-puye/ | [dupuye] | 'hit' |
| :--- | :--- | :--- |
| /d@-yel-e/ | [diyele] | 'cried' |
| /d@-k-il-iy/ | [dikiliy] | 'is weaving' |
| /d@-k-yel-ey/ | [dikyeley] | 'is crying' |
| /d@-k-eyt-iy/ | [dikeytiy] | 'is scraping' |
| /d@-k-ael-iy/ | [dikaeliy] | 'is biting' |
| /d@-k-puy-ey/ | [dukpuyey] | 'is hitting' |

Note that a /w/ does not condition this type of vowel harmony.

$$
\begin{aligned}
& \text { /d@-wun-e/ [duwune] 'loved' } \\
& \text { /d@-wan-e/ [d@wane] 'heard' }
\end{aligned}
$$

### 2.2.17. Geminate reduction



Rule 17 reduces geminates by deleting the first of any two identical adjacent consonants. This rule must follow the epenthesis rules to prevent it from applying to the sequence /kk/.

```
/nenaen-neney/ [nenaeneney] 'think'
/w-par-re/ [pare] 'will peel'
```

2.2.18. Pre-rhotic stop insertion

$$
O \rightarrow\left[\begin{array}{l}
+\mathrm{CONS}] \\
+\mathrm{ANT} \\
-\mathrm{NAS} \\
+\mathrm{VCD} \\
\alpha \mathrm{COR}
\end{array}\right] / \mathrm{V}\left[\begin{array}{c}
{[+\mathrm{CONS}} \\
+\mathrm{ANT} \\
\alpha \mathrm{COR} \\
\beta \mathrm{NAS} \\
-\beta L A T
\end{array}\right]-\left[\begin{array}{l}
{[\text { CONS }]} \\
+\mathrm{SYL} \\
-\mathrm{LAT} \\
+\mathrm{COR}
\end{array}\right]
$$

This rule inserts a homorganic voiced stop, [d] or [b], after a stressed vowel and $/ \mathrm{m} /, / \mathrm{n} /$, or $/ \mathrm{l} /$, and before $/ \mathrm{r} /$.

$$
\begin{array}{lll}
\text { /'w-il-re/ } & \text { ['w-ildre }] & \text { 'will weave' } \\
/ \text { ti-'tan-re/ } & \text { [ti-'tandre }] & \text { 'will stink' } \\
\text { /yam-re/ } & {[\text { yambre }] \quad \text { 'bee-0' }}
\end{array}
$$

2.2.19. Unstressed vowel reduction

$$
\left[\begin{array}{l}
{[-\mathrm{CONS}]} \\
{[+ \text { SYL }]} \\
-\mathrm{HIGH} \\
{\left[\begin{array}{l}
\text { BACK } \\
\alpha \text { LOW }
\end{array}\right]}
\end{array} \rightarrow[+ \text { BACK }] /\right. \text { UNSTRESSED \#\# }
$$

This rule reduces unstressed /a/ and /e/ to schwa word-finally.

$$
\begin{array}{lll}
\text { /d@-kow-ka/ } & \text { [d@kowk@] 'has given' } \\
\text { /d@-ke/ } & {[d @ k @]} & \text { 'has got' }
\end{array}
$$

### 2.2.20. Vowel gradation

Certain low and mid root vowels raise to become mid and high vowels respectively when unstressed. It seems obvious that this is a single rule, but there doesn't appear to be any convenient way of formalizing it. Moreover, it eludes simple expression because it does not apply to low and mid vowels in all roots, nor even to all low and mid vowels in the same root. The following examples illustrate the application of the rule to the vowels of four susceptible roots.

```
'w-aey-re 'will go' - 'kan-ey 'go!'
'kow-re 'will give' - 'ka -guw 'give!'
d@-'k-alw-ey 'is descending' - 'w-olwa-re 'will descend'
'd-ey-e 'came' - w-i'ya-re 'will come'
```

3.1. Approach to parts-of-speech analysis

In accordance with the descriptive strategy adopted throughout this grammar, this section will endeavor to segregate on language-internal morphosyntactic grounds discrete classes of lexemes in Awtuw, to identify subclasses of the classes so segregated, and to relate the classes thus isolated to universal semantic categories.
> 'The most revealing way to view a part-of-speech system is as a few large stem classes...divided into successively smaller classes on the basis of additional criteria.' (Hockett 1958.221-228)

Following Hockett, we can impose a structure on our analysis of the Awtuw parts-of-speech system by dividing Awtuw lexemes into broad classes and refining these into more restricted classes corresponding to the parts of speech in Awtuw.

I refine Hockett's method by treating each identifying property as a privative feature, which can segregate two classes according to the presence or absence of the feature (Trubetzkoy 1969.74).

The structure of a parts-of-speech system thus takes on the shape of a bifurcating tree each of whose branchings represents the segregation of two classes based on the specification for a given feature. When no additional formal properties serve to segregate pairs of categories, the branch terminates in a named class. In some cases it is possible to name superordinate classes. Figure 3.A exemplifies the structure.

Figure 3.A (example):


To clarify the feature specifications, I have included a matrix with each tree. Once a class has been isolated at any level of structure, specification for features associated with other classes becomes irrelevant to its classification. Therefore, not all features used in this analysis cross-classify. For example, referring to Figure 3.A, the specification of Named Class 3 for feature B is irrelevant to its classification, and will therefore be enclosed in parentheses in the associated matrix, Table 3.A.

Table 3.A (example):

'While it is assumed here that the assignment of words to parts-of-speech classes is based on properties that are grammatical rather than semantic, and often language-particular rather than universal, it is also assumed that the name that is chosen for a particular parts-of-speech class in a language may appropriately reflect universal semantic considerations.' (Schachter to appear p. 2, cf. Lyons 1968.147, 317-319).

I will therefore refrain from assigning names to the classes isolated
in this analysis until they have been refined sufficiently to suggest
a correlation with a universal semantic type (cf. Dixon 1977.19-20, 24-30, Lyons 1966.214).

The diagnostic properties used to segregate the parts-of-speech classes here will identify all members of any class, including derived forms. But in assigning names to classes, it is necessary to identify a focal subclass whose members are necessarily monomorphemic.
3.2. Major classes

First we can segregate those lexemes that accept the Perfect aspect suffix -kay from those that do not and denominate the segregated class Class I.

Next, we can divide those lexemes that cannot bear aspect marking into two additional classes. We call those that can occur as the unique constituent of a noun phrase Class II and the residuum that cannot, Class III.

It may clarify this tripartite division to represent the identifying criteria by binary features and display the specifications for each class on a matrix. (Values for features that are irrelevant to the classification are enclosed in parentheses.)

Table 3.1


We can represent the bifurcating hierarchy of classes as a tree.

Figure 3.1 (Major classes)


The lexemes that fall into Class I include all of those that denote the semantic types (cf. Dixon 1977. 25-29) EVENT and ACTIVITY, which typify the part-of-speech traditionally labelled Verbs. A few examples will demonstrate the constituency of the class.
(1) a. -LAKNA- 'die' lakna-kay 'has died'
b. -RAREN- 'light up' raren-kay 'has lit up'
c. -NAW- 'wait' naw-kay 'has waited'
d. -ROKRA- 'cook' rokra-kay 'has cooked'

Aside from the ability to accept Perfect marking, affixation marking Tense, Modality, and a number of other categories characterizes verbs. Chapter 4 provides a detailed discussion of verbal morphosyntax, and Chapter 5 will present a discussion of the subclassification of Verbs.

### 3.3. Classification of substantives

Each of the two remaining classes can be subdivided further. Class II lexemes can again be divided into two classes. One subclass has the property of being able to occur following tader 'this' to form a single constituent. the other does not.
(2) a. tader yaw Altiy d -iy -e
this pig Altiy FA-shoot-P
'Altiy shot this pig'
b. *tader rey Altiy-re d -iy -e
this 3ms Altiy-0 FA-shoot-P
*'This he shot Altiy'
3.3.1. Each of the classes segregated by this criterion is subject to further division. To begin with, we will examine the distinctions among those lexemes that do occur in the specified environment.

One class of these lexemes accepts the Generic suffix -yaenim.
(3) a. *kokot-yaenim
all -GEN
b. Kamlakw-yaenim

Kamnum- GEN
'Kamnum people'
c. Takiy-yaenim

Takiy-GEN
'people named Takiy'
d. gaye -yaenim
father-GEN
'fathers'
e. tiyl -yaenim
stone-GEN
'stones'

Chapter 7 on the structure of the Noun Phrase will discuss other properties of the class of Quantifiers, including their peculiar ability to function either as a determiner or a modifier of an NP.

The lexemes that lack this property, as illustrated in example (3a),
have in common the semantic property of denoting QUANTITY and I therefore call them Quantifiers. These lexemes can also refer to a quantity. Section 11.3. contains a discussion of Quantifiers, but I include here a list of the most common.

```
kokot 'all'
womyaetne 'some'
liwke 'much, many'
daeni 'one, a, another, the other'
naydowo 'one'
yikiyr 'two'
urunk 'three'
orkweynaywo'four'
```

3.3.2. The other class, whose members do accept the suffix, as illustrated in examples ( $3 \mathrm{~b}-\mathrm{e}$ ), can be divided into two further classes. Some of them accept the Adjective-deriving suffix, -neney, the others do not.
(4) a. *Kamlakw-neney
Kamnum -ADJ
b. *Takiy-neney

Takiy-ADJ
c. gaye -neney father-ADJ
'having a father'
d. tiyl -neney stone-ADJ
'full of stones', metaphorically 'wealthy'

The lexemes that lack this property, as illustrated in examples (4a-b), share the semantic property of referring constantly to the same token of a type, or UNIQUE REFERENCE (Foley. to appear. 1). In accordance with tradition I will call these lexemes Proper Nouns.

The other class, whose members accept the suffix as shown in examples (4c-d), share the semantic property of constantly referring to tokens of the same type, or CONSTANT REFERENCE, and $I$ will accordingly denominate them Common Nouns.

A further feature, the ability to accept the Dual suffix, -waew, serves to divide each of these classes in two.

```
(5) a. *Kamlakw-waew
    Kamnum -DU
    *'two people from Kamnum',
        b. Takiy-waew
        Takiy-DU
    'Takiy and someone else with him'
```

(6) a. *tiyl -waew
stone-DU
*' two stones'
b. gaye -waew
father-DU
'father and someone else with him'
c. *tale -waew
woman-DU
*' two women'

Example (5) illustrates the distinction among proper nouns. The proper nouns that accept the suffix share the semantic property of referring uniquely to a person, while those that do not refer to places and I accordingly denominate them Personal Names and Place Names respectively.

Common nouns that accept -waew share the semantic property of referring to relatives and are called Kinship Terms. Example (6c) shows that the distinction is not between human and non-human common nouns or between animate and inanimate common nouns. While in most respects syntactically identical to other common nouns, it will become apparent in Chapter 7 that kinship terms need to be distinguished from the other common nouns here. Section 3.5. below presents a description of the other formal properties of nouns.

Table 3.2 displays the feature specifications for each of the subdivisions in this class and Figure 3.2 illustrates the structure of the classification.

Table 3.2


Figure 3.2

3.3.3. We can now turn our attention to the second subclass of class II lexemes, those that may not follow tader 'this' to form a single constituent. These lexemes share the semantic property of referring to tokens of different types, or SHIFTING REFERENCE. In accordance with the usual convention, I call them Pronouns.

Two additional features divide the pronouns into four distinct classes. Example (7) shows that some pronouns may agree with a following noun in number, while others do not.

```
(7) a. tey tale
                                    b. rom tale -m
                                    3PL woman-PL
    'the woman'
    'the women'
c. tade-t tale
                                    d. tadu-m tale -m
    this-fs woman
        this-PL woman-PL
    'this woman'
                            'these women'
e. menetey tale (-m)
    whatchamacallit woman -PL
    'What's her/their name(s)'
```

```
f. yeran tale (-m)
    who? woman -PL
    'What woman/women?'
```

For the nonce we may call the class of pronouns that may agree with a following noun in number Class A, and the class that does not, Class B.

Crosscutting this distinction is the ability of some pronouns to accept the Locative suffix -ke/-e.
(8) a. *rey-ke
b. *yeran-ke
$3 \mathrm{~ms}-\mathrm{L}$
who? -L

| c.tader-ke | d. menerey | -ke |
| :---: | :---: | :---: |
| this -L | whatchamacallit-L |  |
| 'at this one' | 'at whatchamacallit' |  |

There are thus four classes of pronouns:
a. Personal Pronouns like rey, which distinguish number but do not take Locative marking,
b. Demonstrative Pronouns like tader, which distinguish number and accept Locative marking,
c. Interrogative Pronouns like yeran, which neither distinguish number nor take Locative marking, and
d. Obliviative Pronouns like menerey, which do not distinguish number, but do take Locative marking.

Table 3.3 exhibits the feature specifications for the four classes of pronouns. Other pronominal properties are discussed below in section 3.6.

Table 3.3


We can now rename Class II lexemes, i.e. those that can be the unique constituent of a Noun Phrase, as Substantives. Figure 3.3 displays the structure of the subcategorization of the class, and Table 3.4 displays their feature specifications.
Figure 3.3

Table 3.4

| FEATURE | QUANT | PROPEP PERSON | NOUNS | COMMON KINTERM | OUNS OTHER | PERSONAL | DEM | INTER | OBLIV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tader | + |  |  |  |  |  |  |  |  |
| -yaenim | - | + |  |  |  |  |  |  |  |
| -neney | - | - |  | + |  | (-) |  |  |  |
| -waew | - | + | - | + | - | (-) |  |  |  |
| NUMBER | (-) | (-) | (-) | (-) | (-) | + |  | - |  |
| -ke | (+) | (-) | (+) | (-) | (+/-) | - | + | - |  |

### 3.4. Classification of nonsubstantives

The lexemes in Class III fall into several subclasses. First we can isolate the subclass whose members share the property of following a personal pronoun and a common noun to form a single constituent.

```
(9) a. tey tale owyaen
    3fs woman old
    'the old woman'
        b. rom aewre naek
        3pl house new
        'the new houses'
        c. rey wom aeyle
        3ms coconut dry
    'the dry coconut'
```

(10) a. *tey eypek tale
3fs thus woman
*'the thus woman'
b. *rom aewre @1@p
3pl house yesterday
*'the yesterday houses'
c. *rey wom yek@
3ms coconut immediately
*' the immediate(ly) coconut'

The lexemes that fall into this class belong to the semantic types AGE, DIMENSION, VALUE, SPEED, PHYSICAL PROPERTY, and HUMAN PROPENSITY. (cf. Dixon 1977.31). I will again venture to speculate that if a language has a grammatically identifiable class whose membership is
typified by the semantic types DIMENSION and VALUE, then that class may appropriately be denominated Adjectives.

A small subclass of Awtuw Adjectives is identifiable by the ability of its members to intervene between another adjective and a common noun to form a single constituent.

The Intensifiers, mede and yapor 'quite, very' and yankeyke 'a little' may modify Nouns, other Adjectives, or certain Adverbs (cf. 7.4.)
(11) a. waruke mede nemet
big very mother
'a very big mother'
b. *waruke monokene nemet
big bad mother
*'a badly(?) big mother'

The other Adjectives constitute an apparently closed class of about 36 members which can be categorized according to their semantic type. Note that one of the DIMENSION adjectives is also an intensifier and that two of the AGE adjectives, owyaen and owtiykayaen 'old' also function as nouns

The only SPEED adjective also functions as an adverb, a property I suspect of being common for SPEED adjectives. In English, for example, one SPEED adjective, fast, not only functions as an adverb, but may not even accept the productive adverb-deriving suffix -ly. Two other SPEED adjectives, slow and quick, which may accept -ly, regularly function adverbially without it. Those SPEED adjectives that take -ly obligatorily in adverbial function, like languid, dilatory, precipitate, rapid, and even swift may more appropriately be classified as MANNER adjectives. Like quick, kupkwap, may accept the
adverb-deriving suffix, but also functions adverbially without it.

$$
\begin{aligned}
& \text { (12) Rey maew-e kupkwap(-wo) d-ewr -ey -e } \\
& \text { Hms bush-I fast -ADV FA-back-come-P } \\
& \text { 'He returned from the bush quick (-1y)' }
\end{aligned}
$$

Table 3.5 classifies all monomorphemic Awtuw adjectives.


Table 3.5

| AGE |  |
| :--- | :--- |
| lop | 'old (-HU)' |
| naek | 'new' |
| owtiykayaen 'old $(+\mathrm{HU})$ ' [N] |  |
| owyaen | 'old $(+\mathrm{HU})$ ' [ N$]$ |

HUMAN PROPENSITY
yitam 'generous'
kolakw 'reticent'
kitokte 'strong'
(kemkam 'hard')'stingy'

DIMENSION

| waruke | 'big' | medaye | 'good' |
| :--- | :--- | :--- | :--- |
| yankeyke $\quad$ 'small' | monokeke 'bad' |  |  |
| ketket | 'small (PL/-AN)' |  |  |
| laklake | 'big (PL/-AN)' | SPEED |  |
| wokek | 'long, tall' |  |  |
| wukliwke | 'long, tall' |  |  |
| tukre | 'short, shallow' |  |  |

PHYSICAL PROPERTY

| aeyle | 'dry' | perkwo | 'soft' |
| :--- | :--- | :--- | :--- |
| nenel | 'unripe, raw, wet' | perper | 'sharp' |
| worne | 'light(weight)' | wam | 'blunt' |
| kemkam | 'hard' | yiylekolke 'heavy' |  |
| nelyaw | 'empty' |  |  |

Color terms, which are not monomorphemic Adjectives, receive further discussion in section 11.2.

Derived Adjectives, which compensate to a great extent for the paucity of monomorphemic adjectives, share their properties (cf. 3.8.1.)

On the basis of their acceptance of the suffix -kwo/-wo 'like, similar to, sort of' (cf. 3.8.2.), we can discriminate two further subclasses within Class III.

| (13) a. ade -kwo | b. *ap -kwo |
| :---: | :---: |
| here-like | soon-like |
|  | 'around here' |
|  | *'around soon' |

The subclass that accepts the suffix is difficult to characterize in terms of semantic type, but it does include tokens of TIME and MANNER. So without speculating on the universality of the category I will call this class Adverbs.

On semantic grounds, there are three types of Adverbs - Demonstrative Adverbs, Interrogative Adverbs, and 'Lexical' Adverbs. Table 3.6 displays all the members of the first and second types. Further discussion of the forms of these adverbs is to be found in section 3.8.2.

With the exception of kupkwap 'quickly', 'Lexical' adverbs all denote time or distance and I discuss them and list them in full in a later section on Numeration and Measurement in section 11.3. Table 3.6 therefore exhibits only a few examples.

Table 3.6
DEMONSTRATIVE INTERROGATIVE 'LEXICAL'

| ade 'here' yok? 'how?' reyek 'later' |  |
| :--- | :--- | :--- |
| tade 'here' yekak? 'when?' yarow 'tomorrow' |  |
| opo 'there' | antante 'always' |
| topo 'there' | apre 'not yet' |
| ey 'thus' | mowke 'a long time ago' |
| tey 'thus' | yaeltuwp'again' |
| eypek 'thus' | tomte 'far' |
| teypek 'thus' | im |

Note that one of the 'lexical' adverbs, im 'night', may be quantified by a numeral or other quantifier to indicate a length of time. But since it has none of the diagnostic properties of nouns, I classify it as an adverb.

```
(14) Wan im yikiyr rer-re-k d -ikiy-e
    1SG night two WH -0 -I FA-stay-P
    'I stayed at my brother-in-law's for two days'
```

We can divide the subclass that does not accept -wo/-kwo into two classes on the basis of their ability to occur in isolation. Those that may occur in isolation we denominate Interjections.

The Interjections, yiy(kay) 'wow', owo 'yes', and awtuw 'no', are discussed in sections 12.1 and 12.2 in the chapter on Paralanguage.

The remaining category constitutes a residuum and there is therefore little need to characterize it semantically. Since the lexemes it includes are not susceptible to affixation, I call them Particles.

Particles fall into four semantic subclasses. The alternative
particle, yokri 'perhaps' is discussed further in section 9.1 .2 on question-forming strategies. The Negative particle yene is discussed in section 9.2. on Negation strategies and the Focus particle po is discussed in section 9.4.1. on focusing strategies. Two of the remaining Particles, t@ and take, mean 'here'. The rest all mean roughly 'straightaway'. The particles tuwp and ap tend to gravitate to clause-initial position and yek@ and aw@na tend to gravitate to second position.

We can display the distinctions on a feature matrix and illustrate the structure of the classification as a tree.

Table 3.7 (Class III):


Figure 3.4


Table 3.8 and Figure 3.5 summarize the information in Tables $3.1-4$ and 3.7 and Figures 3.1-4.
Table 3.8

Figure 3.5


### 3.5. Formal properties of nouns

3.5.1. Awtuw optionally marks the number of nouns with three suffixes, -waew 'DUAL', -wom 'PLURAL, and -yaenim 'GENERIC'. The first two of these are restricted to occuring on nouns, proper or common, whose referents are human. The generic suffix occurs only on nouns whose referents are not human and on adjectives.

```
(15) a. Kewmaey-waew
    Kewmaey-DU
                                child-PL
    'Kewmaey and someone' 'children'
\(\begin{array}{cc}\text { c. *Wutlakw-wom } & \text { d. *piyren-waew } \\ \text { Gutaiye-PL } & \text { dog -DU } \\ \text { *'people from Gutaiye' } & \text { *'two dogs' }\end{array}\)
(16) a. Wutlakw-yaenim
Gutaiye-GEN
'people from Gutaiye' 'dogs'
\(\begin{array}{lc}\text { c. *Kewmaey-yaenim } & \text { d. *yaen -yaenim } \\ \text { Kewmaey-GEN } & \text { child-GEN } \\ \text { *'people named Kewmaey' *'children' }\end{array}\)
e. wok@k-yaenim
    tall -GEN
    'the tall'
```

These number-marked forms have some of the affixal properties of personal pronouns. They take -e as the object suffix, they accept possessive marking, and never take the locative suffix.

In addition to these productive number markers, there is a small class
of human nouns that take irregular plurals ending in $-m$.

Table 3.9

| tale | 'woman' | tale-m |
| :--- | :--- | :--- |
| yapor | 'man' | yapu-m |
| yantelale | 'young woman' | yantelale-m |
| yenankeyke | 'grandchild' | yenankeyke-m |
| eywe | 'grandparent' | owyi-m |
| l@m | 'younger same-sex |  |
|  | sibling' | limlaemi-m |

Like other number-marked nouns, these take the pronominal forms of the object suffix and accept possessive marking.
3.5.2. Aside from the various case markers to be discussed below in Chapter 6., Awtuw nominals accept two adverbial suffixes, -wo 'just, alone' and -ye 'again'. These follow the nominal immediately and precede any case marking. All nominals accept them with apparently equal felicity and they do not exhibit differences in form when they occur on personal pronouns. But only -wo, in the form -wa, may be followed by a case marker, and the only case marker that can follow it is the unmarked form of the object suffix -re. The following examples illustrate the uses of these morphemes.

```
(17) a. Kampo-wo rey-e r@ -k@
    Kampo-alone 3ms-0 eat-PF
    'Kampo has eaten it all by himself'
    b. Gamey aeye-wa -re rokra-k@, yiyay awtuw
    mother food-only-0 cook -PF game no
    'Mommy has only cooked greens, there's no game'
```

```
(18) Peyaw Yowm@n-re du-puy-e, Awtiy-ye rey-e du-puy-e. Peyaw Yowm@n-0 FA-hit-0 Awtiy-again 3ms-0 FA-hit-P
'Peyaw hit Yowm@n and then Awtiy hit him again'
```

3.6. Formal characteristics of pronouns
3.6.1. The Personal Pronouns comprise a small closed class which I exhibit in full in Table 3.10


They exhibit three categories of number and three of person with a female/non-female distinction in the third person singular.

While there is a degree of suppletion in the paradigm, we can make a few correlations between forms and the categories that they mark. The most striking regularity is that the plural forms consistently end in the segments /om/. A similar regularity occurs in the first and second person dual forms, which both end in /an/. The first person dual and plural forms both begin with $/ \mathrm{n} /$, while the corresponding second person forms begin in a vowel. Finally, the third person dual and plural forms, as well as the unmarked third person singular, have an initial /r/.

Wurm (1977a) has drawn attention to a remarkable consistency among the diverse languages of New Guinea in the forms of certain personal pronouns. Examining the singular forms in all three persons and the first and second person plurals, he finds that most of the pronouns
marking these categories throughout New Guinea fall into one of three basic sets and that a given language will often select most of its pronouns from the same set or in a predictable way from two or all three sets. Because the pronominal forms in a given set crop up over a geographically large area and in no way restrict themselves to single genetic groupings, Wurm concludes that personal pronouns are, contrary to popular opinion, commonly borrowed from language to language.

Awtuw's personal pronouns are quite consistent in their set membership. The second person plural form bears no resemblance to the pronouns in any of the sets Wurm has established. But the other four categories all display Set I features.

One of the postulated Set I forms for third person singular is /te/, which resembles the corresponding female form in Awtuw quite closely. There is also a predictable consonant alternation, characteristic of Set I pronouns signalling the gender distinction in the third person singular. A property of second person singular forms in Set IaX appears to be to end in a coronal consonant and begin with a/y/, as does the Awtuw form /yen/. Similarly, Set I first person forms typically contain an /n/, while Set $X$ forms add to this a/wV-/ in the singular, and an /- m/ in the plural, yielding the Awtuw forms /wan/ and /nom/ .

Personal pronouns have a somewhat different set of morphological properties from nouns, demonstratives, and interrogatives. With regard to the suffixes they may accept, nouns marked for number resemble personal pronouns. In other respects, however, personal pronouns are unique.

First of all, only personal pronouns may bear the Possessive suffix
-ke, described in 6.4, Second, the Object suffix on personal pronouns has the canonical form -e, subject to vowel harmony, and does not exhibit the sex gender agreement characteristic of the corresponding suffix on other nominal lexemes. And third, personal pronouns may never bear the Locative/Directional suffix -e/-ke, described in 6.5.
(19) a. yen-ke

2SG-PS
'your'
c. *piyren-ke
dog -PS
*'a dog's'
e. *tader-ke
this -PS
*'this one's'
b. *Kewmaey-ke

Kewmaey-PS
*'Kewmaey's'
d. *Kamlakw-ke

Kamnum -PS
*'Kamnum's'
f. *yeran-ke
who? -PS
*'whose?'
b. raew-e

3DU -0
'them two'
d. *raew-re

3DU -0
b. Kamlakw-o

Kamnum -L
'in Kamnum'
c. *an $-e$

2DU-L
*' on you two'
(21) a. wiytape-ke
river -L
'at the river'

In addition to the properties they share with number-marked nouns, personal pronouns have three additional distinctive morphosyntactic characteristics.

Personal pronouns take the suffix -yaen to form what we may call Emotive pronouns. These are used when the speaker wants to elicit sympathy for the referent of the suffixed pronoun.

```
(22) wan-yaen im kokot d -ik -al -e
    1SG-EMT night all FA-sit-until dawn-P
    'Poor me had to sit up all night'
```

In origin, this suffix is very probably a diminutive. It is
homophonous with the noun yaen 'child', which compounds fairly
productively with other nouns to denote the young of an animal or a
small token of the type denoted by the bare noun.


Second, personal pronouns may reduplicate in full to form what I call Emphatic pronouns. Such forms have two basic functions - to emphasize an argument, usually in contrastive situations, and to signal coreference with the preceding subject. In this latter case, emphatic pronouns bear the possessive suffix when the possessor is coreferential with the subject, bear the reflexive marker when the direct or indirect object is coreferential with the subject, and mark the subject of a succeeding clause, with or without the reflexive
marker, to mark it unambiguously as coreferential with the preceding subject. (cf. 5.1, 10.6.)
(24) a. An ki -t-ik, wan-wan aeye pa -rokra 2DU IMP-DU-sit 1SG-1SG food HRT-cook 'You two sit down. I'll cook the food.'
b. Nan d@-k -owna -y, raew-raew-e k@ -ma-puya 1DU FA-IP-sleep-IP 3DU -3DU -0 IMP-GO-hit
'We two are lying down, go hit THEM two!'
c. Wan waekyi ka-d -k -aey-ey. rey-rey-e aeye kag-kuw. 1SG hunger NG-FA-IP-go -IP $3 \mathrm{~ms}-3 \mathrm{~ms}-0$ food IMP-give 'I'm not hungry, give HIM the food!'
(25) Yowm@n rey-rey-ke nemet -te du-puy-e Yowm@n 3ms-3ms-0 mother-0 FA-hit-P
'Yowm@n hit his own mother'
(26) a. Kampo yiw -e rey-rey yimay-re d -upw-o.

Kampo water-L 3ms-3ms REFL -O FA-see-P
'Kampo saw himself in the water'
b. Altiy rey-rey yimay-re $d @-k$-alow-ey.

Altiy $3 \mathrm{~ms}-3 \mathrm{~ms}$ REFL -0 FA-IP-talk-IP
'Altiy is talking to himself'
(27) a. Yawur Altiy-re du-puy-e, rey-rey(-yimay) gow di-yel-e

Yawur Altiy-0 FA-hit-P $3 \mathrm{~ms}-3 \mathrm{~ms}(-$ REFL $)$ tear FA-cry-P
'Yawur hit Altiy and he, himself (Y), cried.'

Note that as the examples above illustrate, emphatic pronouns take the same suffixes as ordinary personal pronouns. But they differ in two respects - they may not take -yaen and they may not themselves reduplicate.
3.6.2. The Obliviative pronoun, menerey, shares the morphological characteristics of demonstratives. That is to say, like personal pronouns, it takes -e and its allomorphs as the Object suffix, but it may not accept the Possessive suffix, as illustrated in example (28).
(28) a. Rey menetey(*-ke) tey-ke yapor.

3ms OBLIV -PS 3fs-PS husband
'It was what's-her-name's husband'
b. Eywe Eliw menetey-e d@-k -@
ancestor Eliw OBLIV -0 FA-get-P
'Ancestor Eliw married what's-her-name'

The three forms of the Obliviative pronoun display the same female/nonfemale distinction as the personal pronouns from which they are probably derived.

## OBLIVIATIVE PRONOUNS

```
menerey 'what's his name [-FEM]'
meneney 'what's his name [-FEM]
menetey 'what's her name [+FEM]
```

3.6.3. There are a few generalizations to be made about the forms of demonstrative and interrogative pronouns in Awtuw. Since
demonstrative and interrogative adverbs share these features, I will deal with them here as well.

Table 3.11 - DEMONSTRATIVE AND INTERROGATIVE PRONOUNS

DEMONSTRATIVE INTERROGATIVE
(t)ader 'this [-FEM] yakum(oyaen) 'what?'
(t)adet 'this [+FEM]' yeran 'who?'
( $t$ )adum 'these' yeremaen 'who?'
( $t$ ) opor 'that $[-\mathrm{FEM}]$ '
(t)opot 'that [+FEM]'
(t)opum 'those'

Essentially there is one demonstrative adverb and two demonstrative pronouns, all of whose forms I list here.

Table 3.12


To begin with the pronouns, we notice immediately that there are two demonstrative roots, ( $t$ ) ade and ( $t$ ) opo, each of which codes a category of proximity, within reach and out of reach respectively. These are then marked for plurality with the suffix -m. Non-plural forms further distinguish female from non-female referents. The optional tin the pronouns and the manner adverb does not appear to correlate with any grammatical category and forms with and without the $t$ - are in free variation. The eight manner adverb forms also seem to be in free variation.

We may conveniently compress the demonstrative forms into the following constructs.
(t)ey(pek)(wo) 'thus'
( t$) \operatorname{ade}(\mathrm{r} / \mathrm{t} / \mathrm{m}) \quad$ 'here, this'
(t) opo(r/t/m) 'there, that'
3.6.4. Like the demonstratives, Awtuw interrogative pronouns and adverbs display formal similarities that suggest that they ought to be treated together. There are three basic interrogative adverbs and two pronouns, but the use of the derivational suffix -kwo allows Awtuw to express a full range of WH- questions.

Table 3.13

```
yakum 'what?'
yakumoyaen
yeran 'who?'
yeremaen
yok
yekak 'when?'
yipe 'where? (location)'
yipke 'where? (location/direction)'
yak-kwo 'how much/many/often?'
yakum-kwo 'what kind?, why?'
```

Yakum and yakumoyaen are in free variation, though only yakum accepts -kwo to derive the form glossed 'what kind?, why?'. Similarly, yeran and yeremaen are in free variation. But as the glosses indicate, yipe and yipke are not entirely interchangeable. While yipke has the full range of functions of a noun with the location/direction suffix (see 6.5. below) and only occurs in predications with verbs, yipe only occurs as the predicate in verbless predications and may only request the location of the subject.
(29) Gaye yipe (*d -ikiy)?
father where FA-stay
'Where's Daddy?'
(30) a. *Gaye yipke?
father where
*'Where's Daddy?'
b. Gaye yipke d -ikiy?
father where FA-stay
'Where's Daddy?'
c. Gaye yipke d -aey-ka/d -eya -ka
father where FA-go $-\mathrm{PF} / \mathrm{FA}-\mathrm{come}-\mathrm{PF}$
'Where has Daddy gone/come from?'

### 3.7. Compounding

Awtuw has three basic compounding strategies. Two of these compound two nouns to form a third noun. The other strategy, which compounds two verb roots to form a verb stem with the same inflectional possibilities as a monomorphemic root, may not be a compounding strategy at all. I have described the relevant phenomenon in sections 4.12. and 10.1., but feel that it deserves mention in this section.
3.7.1. There are two strategies for compounding nouns. Because of their similarity to compounding strategies in Sanskrit, I have used the Sanskrit names to distinguish them.

First, and least productive among the Awtuw compounding strategies, is the Dvandva compound. This strategy compounds two common nouns to form: a third common noun whose meaning is a coordination of the two components. Example (31) illustrates the two most common Dvandva compounds.

| (31) a.nemet + gawer b. | ripye+alme |  |
| :--- | :--- | :--- |
| mother+father | bow +arrow |  |
|  | mother and father, parents' | 'bow and arrow' |

3.7.2. In the second strategy for compounding two common nouns, the first modifies or somehow restricts the meaning of the second. Like the Tatpurusa, or 'determinative' compounds in Sanskrit or Classical Greek (cf. Whitney 1960.481, 490-491, Smyth 1920.252), it may be useful to conceive of the first component as standing in a dependent, or case, relation with the second.

$$
\begin{aligned}
& \text { (32) a. niw +aewre b. aepiyaen+aewre } \\
& \text { ground+house chicken +house } \\
& \text { 'house on the ground' 'house for chickens' } \\
& \begin{array}{rll}
\text { (33) a. yuwp +tapwo } & \text { b. tiyl +yekne } \\
\text { kunai+fire } & \text { stone+axe } \\
& \\
& \text { fire made of kunai' } & \text { 'axe made of stone' }
\end{array} \\
& \text { c. @m@k +tepe } \\
& \text { pandanus+sago 'pudding' } \\
& \text { 'sago "pudding" made with pandanus' }
\end{aligned}
$$

The examples in (33) illustrate situations where the name of a distinctive material restricts the meaning of a noun that may characteristically denote something made with other materials.

$$
\begin{aligned}
& \text { (34) a. ole +yaw b. Wutlakw+tale } \\
& \text { bush+pig } \text { Gutaiye+woman } \\
& \text { 'pig from the bush' 'woman from Gutaiye' }
\end{aligned}
$$

Example (34) illustrates compounds where the first component designates the source of the second. Example (35) shows a compound where the first component designates the characteristic inhabitants of the second.

```
(35) gale+yiw
    fish+water
    'waterhole full of fish'
```

Finally, the first component noun may denote a whole of which the second forms a part.

```
(36) a. aewr'+or
b. taw +tiw
    house+top tree+hair
    'roof' 'foliage'
c. wiytape+yil c. riwe+lake
    river +edge foot+bone
    'river bank' 'bone of the leg'
```

Further discussion of compounds like the one in (36a) is to be found in section 6.5 .

As mentioned above, this strategy is quite productive. The resulting compound nouns bear all the same properties as monomorphemic common nouns, including the ability to enter into similar compounds.

```
(37) a. [piyren+nale]+lukw
    b. [taw +tiw]+diyake
    dog +hole +middle treethairtunder
    'the middle of a doghole' 'the underside of the foliage'
```

3.7.3. The other strategy compounds two or more verb roots to form another verb stem which enters into the verb complex as if it were a single root. While any verb may be the first in such a compound, the second and subsequent roots are selected from a closed set of about thirty members. About a third of the members of this set may themselves function as independent verb roots in meanings reasonably closely related to the meanings they express in a compound. The
balance bear no phonological resemblance to any independent verb root, although they all have a phonological shape that would be plausible for one.

The morphemes that may occur as the second and subsequent components of such a compound range in meaning from KOW 'give', which marks verbs with a benefactive argument, through aspectual meanings like TAEWA 'begin' and WORKA 'completely', auxiliary-like meanings like (WEY)PA 'try', and adverbial meanings like NEWTA 'secretly', to meanings that more closely resemble a second predicate, like KAYNA '... and go away'.

There is no apparent correlation between the independence of the morpheme and the independence of its meaning from that of the matrix verb root. Thus, KOW the benefactive marker, which has the most clearly 'grammatical' meaning of the morphemes in this set, is among the commonest verbs in the language used independently. But KAYNA '...and go away', one of the morphemes with the most conspicuously independent meanings, bears no resemblance to any independent verb root.

These factors conspire to make the situation highly ambiguous. The membership in this class of verb roots that occur independently suggests that the structure is one of compounding, or of a very tight, partly crystalized, verb serialization, or both. But the generally 'grammatical' nature of the meanings expressed suggest an analysis of the morphemes concerned as verb affixes.

I have therefore included brief discussions of the phenomenon here in the section on compounding and in the section on verb serialization (cf. 10.1.1.), while presenting a full description, including a complete list of the morphemes in the class, in the discussion of verbal morphosyntax in section 4.12.

### 3.8. Derivation

Awtuw has three derivational strategies. The suffix -neney ' -y , full of, including, etc.', mentioned earlier in this chapter as a distinguishing property of Common Nouns, derives adjectives from common nouns. The suffix -wo/-kwo, also a defining criterion for parts-of-speech categories, is less transparently a derivational suffix, but has the effect of deriving adjectives from nouns and other adjectives, and adverbs from nouns, adjectives and other adverbs. In most contexts, -wo/-kwo corresponds reasonably neatly in meaning with the English suffixes -like and -ish. Finally, the number-marking suffixes -waew 'DUAL', -wom 'PLURAL', and -yaenim 'GENERIC', derive words with ${ }_{\wedge}$ the formal morphological characteristics of personal pronouns from nouns.
3.8.1. The suffix -neney is enormously productive and regularly forms apparently nonce expressions from any eligible noun, i.e. any common noun. Its basic meaning would appear to be to attribute the noun bearing the suffix as a property or possession of the noun that the derived adjective modifies. The examples in (38) illustrate these two meanings.

| (38) a. neknek -neney <br> knowledge-y <br> 'clever' | b. aewre-neney |
| :---: | :---: |
| house-y |  |
| 'having a house' |  |$\quad$| skin+hair-y |
| :--- |
| c. yaey+tiw-neney |
| 'hairy' |

Another important function of this suffix is to take up the slack left by Awtuw's closed class of adjectives. Unlike many other languages with closed adjective classes, many of the gaps in the inventory of basic adjectival meanings are filled not by nouns or verbs (cf. Schachter to appear p.18), but rather by derived adjectives with -neney.

```
(39) a. tapwo-neney
    fire - \(y\)
    'hot' 'cold'
c. yiw -neney cf. aeyle 'dry'
    water-y
    'wet, full of water'
```

3.8.2. As noted above, -kwo/-wo has a number of functions. The distribution of the two allomorphs appears to be lexically conditioned. Perhaps most important among these is the derivation of color terms. Chapter 11 on lexical fields contains further discussion of color terminology.
(40) a. tipray-kwo
soot -like
'black'

```
b. aeypiy-kwo
    blood -like
    unripe-like
    'red' 'green'
```

Examples (40a) and (40b) illustrate the derivation of adjectives from nouns and (40c) illustrates the derivation of an adjective from another adjective.

Another important function of this suffix is to derive an extremely common adjective.
(41) Ium-wo
fat-like
'slow, easy'

This suffix may be added to any adjective to fudge its meaning.
(42) a. p@rp@r-kwo
b. tukre-kwo
sharp -like
short-like
'kind of sharp' 'kind of short'

It has an important function in a type of comparative predication, discussed in chapter 8.
(43) Yen-ke aeymen wan-ke-kwo

2sg-PS knife 1sg-PS-like
'Your knife is like mine'

Finally, the same suffix productively derives adverbs from nouns, demonstratives, and other adverbs.
(44) a. piyren-kwo
dog -like
'like a dog'
(45) a. topor-kwo
that -like
'thus'
(46) a. yarow -kwo
tomorrow-like
'around tomorrow'.
b. Poliw-kwo

Poliw-kwo
'like Poliw'
b. ader-kwo
this-like
'thus'
b. taey-wo
near-like
'sort of near'
3.8.3. The number markers occur on human nouns in the case of -waew 'DUAL' and -wom 'PLURAL' and on Place names and most common nouns and adjectives in the case of -yaenim 'GENERIC'. All three of these have the peculiar property of deriving a form with some of the morphological characteristics of a personal pronoun from a noun. Both the distribution of the number markers and the morphological properties of personal pronouns receive fuller discussion in sections 3.5. and 3.6. above. But briefly, where nouns may not take the possessive suffix -ke, nouns bearing the number markers may. Where a subclass of nouns may take the locative suffix -@/-k@, nouns with number marking may not. And where nouns take one of the allomorphs of the object marker beginning with a consonant, number-marked nouns take the allomorphs consisting of a vowel alone.
4. Verbal Morphosyntax
4.1. Structure of the verb complex

Many of the affixes discussed in this chapter have already appeared in section 2.2. There $I$ was concerned with the changes phonemes undergo in the presence of other specified phonemes and boundaries in the verb complex and elsewhere. Here, I describe the formal morphological similarities and differences among verbs, the cooccurence of affixes, and the meanings and functions of the affixes. Illustrative paradigms are to be found at the end of this chapter.

We can begin by examining a few highly expanded forms of typical verbs to illustrate the overall structure of the verb complex and the order of the elements that it comprises. For the sake of intelligibility, I will first display a table of the slots in the verb complex and the affixes that may fill them, and then present the evidence for the analysis. With the exception of slot +1 , the lists of affixes for each slot are exhaustive. I discuss the affixes that occur in slot +1 fully in section 4.12. For the reader's convenience I repeat the expansions of the abbreviations used here.

Table 4.1 - ABBREVIATIONS FOUND IN GLOSSES:

AB absent

AGN again
BEN Benefactive
CDL Conditional
DB Debitive
DES Desiderative
DH downhill
DS downstream
DU Dual
FA Factive
FU Future
HT Hortative
IMP Imperative
IP Imperfective

MT unspecified motion
NDB Negative Debitive
NF Nonfactive
NG Negative
P Past
PF Perfect
PL Plural
PR Prohibitive
PT Potential
RC Reciprocal

UH uphill
US upstream
Table 4.2


Cooccurrence restrictions make three examples necessary to illustrate the relative order of affixes in all slots. I will discuss these in subsequent sections.

Example (1) shows the relative order of affixes in slots $-8,-7,-6$, $-5,-4,-3,0,+1,+2$, and +5.
(1) $-8 \quad-7 \quad-6$
ka-d -ma-taw-owra-t -akla-kow-kay-e
NG-FA-MT-YET-AGN -DU-dig -BEN-PF -P
'(two) hadn't gone and dug again for (someone) yet'

Example (2) shows the relative order of affixes in slots $-7,0,+3$, $+4,+5$, and +6
(2) $-7 \quad 0 \quad+3+4+5+6$
w -akla-m -ek -rere-m
NF-dig -PL-CDL-DES -PL
'(PL) wanted to dig, but didn't'

And example (3) shows the relative order of affixes in slots $-3,-2$, $-1,0$, and +2 .
(3) $-3-2-10+2$
t -k -ni-puya-ey
DU-IP-RC-hit -IP
'(two) are hitting each other'

Examples (4) and (5) illustrate that, again with the exception of slot +1 , only one affix may occur in any given slot.

```
(4) -8 -8-7 0 +5
    *ka-na-w -alow -re
    NG-PT-NF-speak-FU
*'Can't speak'
```

Example (4) provides the single most semantically plausible combination of affixes from the same slot available from the inventory. Nevertheless, it is entirely unacceptable, the form with this meaning being

$$
\begin{gathered}
\left(4^{\prime}\right)-8-7 \quad 0 \quad+5 \\
k a-w-a l o w-r e \\
N G-N F-\text { speak-FU } \\
\text { 'Can't/won't speak' }
\end{gathered}
$$

The combination of slot -6 affixes in example (5) is again ungrammatical in spite of its semantic plausibility.

```
(5) -8 -6-6 0 +5
    ap-ma-w -alow -re
    PR-MT-AB-speak-FU
*'Don't go and speak while [someone is] absent'
```

The semantic bizarreness of other concatenations of affixes from the same slot makes illustration of their unacceptability virtually unnecessary.

The examples below demonstrate that affixes from the various slots are not permutable. Each example shows a single permutation of affixes in an otherwise well-formed and minimal verb complex.

$$
\begin{gathered}
\text { (6) }-7-8-0 \quad-+5 \\
{ }^{*} d \text {-ka-puya-e } \\
\text { FA-NG-hit -P } \\
\text { *'didn't hit' }
\end{gathered}
$$

Example (6) shows that affixes from slots -8 and -7 are not permutable.
(7) $-6-7-0 \quad-+5$
*ma-d -puya-e
MT-FA-hit -P
*'went and hit'

Example (7) demonstrates that affixes from slots -7 and -6 are not permutable.

A very large number of additional examples, which $I$ hope the reader is willing to forego, would demonstrate the impermutability of affixes in other slots and of non-adjacent affixes.

### 4.2. Modality marking

### 4.2.1. The Debitive modalities

Awtuw codes debitive illocutionary force, i.e. commands, necessities, and strong suggestions, in a set of prefixes that occupy the very first slot in the verb complex along with the negative and potential prefixes. It is only in the debitive modalities that verb affixes are sensitive to the person of the subject.

1. The Hortative prefix $\mathrm{p}(\mathrm{a})$ - occurs only with first person subjects and is used in situations where that subject wishes to express a firm intention to do something in the immediate future with an implicit request for the addressee's permission or agreement. Semantically,
the Awtuw Hortative bears a very close resemblance to English 'let'-Hortatives.
(8) p -aey-nem!

HRT-go -PL
'Let's go!'
(9) gale waruke $\mathrm{p}^{@}$-t -nak!
fish big HRT-DU-hold
'Let's (two) grab some big fish!'
(10) Gamey-wo, wan po wom aeyle topor-re p@-ma-k@! mommy-V 1 sg PCL coconut dry that -0 HRT-M -get 'Mommy, let me go get that dry coconut!'

As these examples illustrate, a subject pronoun may or may not occur in Hortative clauses, the person, and usually the number, of the subject being recoverable from the verb affixation. A Hortative clause may consist of the verb complex alone or may have any number of arguments and adjuncts. While the tendency for clauses to be verb-final is somewhat stronger for debitive modality clauses, it is not unusual to find the verb in other positions.
(11) Wan p -apwo yakum-kwo wanklow! 1 sg HRT-see what-like turtle
'Let me see what kind of turtle it is!'

Unlike the second- and third-person debitive modalities, the Hortative has no negative portmanteau counterpart so there is no exact Awtuw equivalent for an English 'Let's not...' construction. In such circumstances, an Awtuw speaker would either use a lexical antonym, e.g. 'Let's go!' for 'Let's not stay!', or a Negative Desiderative, e.g. Nom kae-w-ikiy-rere'We don't want to stay'
2. Imperatives are marked by the prefix kan- and its many allomorphs, whose distribution is described in section 2.2. As with Hortatives, the person of an Imperative verb is always recoverable, and the second person pronoun may or may not occur.

```
(12) an ka -t -lawey!
    2DU IMP-DU-clear
    'You two clear off!'
(13) wan-e yiyte ka -lopa-kow -nem!
    \(1 \mathrm{sg}-0\) gate IMP-open-give-PL
    'Open the gate for me!'
```

Again, like Hortative clauses, Imperative clauses are not always
verb-final.
(14) Po ke-t-ey@ wan-ke lape -ke

PCL IMP-DU-come 1 sg-PS village-L
' (you two) Come to my village!'

Although it is uncommon for verbs in other debitive modalities to enter into serializations, Imperative verbs often do so.
(15) kan-k@ k@r-eya -mem, uy reypapwo!

IMP-get IMP-come-PL hole finished
'Bring (the corpse), the hole is finished!'
(16) am kin-iwya -m kin-itpaer-n@m k@ -ra -mem

2PL IMP-slice-PL IMP-steam -PL IMP-eat-PL
'You slice (the pig), cook it, and eat it!'
3. Prohibitives with the prefix ap-/aep- are the negative counterpart of imperatives and, like imperatives, always have second-person subjects. Clauses with Prohibitive verbs share most of the properties
of other debitive clauses, but are even more likely to be verb-final.
(17) ap -t -@ytir-re!

PRH-DU-fear -FU
' (you two) Don't be afraid!'
(18) Wawey, pek ap -rokw-re!

MB thus PRH-do -FU
'Uncle, don't do that!'
(19) Wan-ke wiye -ke topor-kwo ap -t -rokw-re!

1sg-PS garden-L that -like PRH-DU-do -FU
'(you two) Don't do that in my garden!'
4. Debitives with the prefix wan- express necessity or obligation for a third-person subject. The most common single Debitive form is wan-owkey 'it must stay', discussed in section 7.3.1.
(20) Ap -ma-ka -re! Wan-owkey! (reply to (10))

PRH-M -get-FU DB -exist
'Don't go get it! Leave it alone!' ('It must stay where it is!')
(21) Wan-owkey aewre-ke!

DB -exist house-L
'Leave it in the house!'
(22) Wariykom war-eye!

Wariykom DB meome
'Wariykom has to come!'
5. Negative Debitives have the prefix nil- and generally express impossibility. They are not therefore a direct opposite of a debitive, that is, they do not mean 'unnecessary'. Rather, if we visulize a scale of possibility with necessity at one pole and impossibility at the
other, the negative debitive form expresses the polar opposite of the debitive, as illustrated in the following diagram.
OBLIGATION/ PERMISSION/
NECESSITY

POSSIBILITY | PROHIBITION/ |
| :---: |

(23) nil-t -owkaneyaw-p' -e, wiyum raew-e d -ael -i

NDB-DU-climb -try-P wasp 3DU -0 FA-bite-P
'They two couldn't try to climb, wasps bit them.'
4.2.2. Verbs expressing possibility or permission take the Potential prefix na-/nae-. There are no constraints on the person of the subject of a Potential verb and the subject must therefore be overt unless it is otherwise recoverable from context.
(24) Awtiy yarow Liwmiy-e nae-w -aey-re

Awtiy tomorrory Lumi -L PT -NF-go -FU
'Awtiy might go to Lumi tomorrow'
(25) Yen na-w -owna-re te

2sg PT-NF-lie -FU here
'You may lie down here'

Lest-type constructions also use a Potential form.
(26) Ey ap -rokw-re, yen na-lamlekna-re!
thus PRH-do -FU 2sg PT-fall -FU
'Don't do that lest you fall!'

Ability is expressed not by a Potential verb, but by a construction with yirin 'enough' and the Future.
(27) Topor yaen yirin yek@ taw w -uwk -re
that child enough pcl tree IP-fell-FU
'That child can fell a tree'
4.2.3. Morphological negation with ka-/kae- is the usual strategy for negating any clause with a verbal predicate.
(28) Awtiy kae-w -aey-re

Awtiy ${ }^{\prime}$ NG -NF-go -FU
'Awtiy isn't going'
(29) Awtiy-re wan ka-d -uwpo-ka

Awtiy-0 1SG NG-FA-see -PF
'I haven't seen Awtiy'

This strategy may contrast verbs, verb phrases, or subjects, although it is more common to find the particle yene negating constituents (see 9.2.2.).
(30) Numoy Altiy-re ka-d -puy-e, rey po wan-e d -ir -e Numoy Altiy-0 NG-FA-hit-P 3ms pcl 1SG-0 FA-feed-P
'Numoy didn't hit Altiy, he fed me'
Morphological negation cannot contrast objects or other full constituents, but, oddly, it can contrast adjectival constituents of the object.
(31) Wan Yawmen-re ka-d -puy-e, wan (po) Naytow-re du-puy-e

1SG Yawmen-0. NG-FA-hit-P iSG pel Naytow-O FA-hit-P
*'I didn't hit Yawmen, I hit Naytow'
(32) *Rey Liwmiy-e kae-d -eya -ka, rey (po) Taeypil-e d -eya -ka

3ms Lumi -L NG -FA-come-PF 3ms pcl Talbipi-L FA-come-PF
(33) Wan aewre naek-re ka-d -uwp-o, wan (po) aewre lop-re d -uwp-o 1SG house new -0 NG-FA-see-P 1SG PCL house old-0 FA-see-P
'I didn't see a new house, I saw an old house'

### 4.3. Factivity marking

The categories that the Factive and Nonfactive prefixes mark are semantically otiose. Tense and Modality, as well as the morphophonological factors decribed in Chapter 2, condition their presence. If the verb bears one of the three non-Negative debitive modality markers, then it may not bear either Factivity prefix.
a. yen kan-ey
b. *yen kan-w -ey
2SG IM -go
2SG IM -NF-go
'Go!'

If the verb bears the Conditional, the Future, or the Desiderative suffix, then it must also have the Nonfactive prefix.
(35) a. yile w -it -ik
b. *yile (d -)it -ik rain NF-rain-CDL rain $F A-$ rain-CDL 'if it had rained...'
(36) a. tey w -aey-re
b. *tey (d -)aey-re
3fs NF-go -FU
3fs FA-go -FU
'She'll go'
(37) a. wan w-aey-rere
b. *wan (d -)aey-rere
1SG NF-go -DES 1SG FA- go -DES
'I want to go'

The Modalities that require Future marking bear Nonfactive marking as well. Verbs that have Past tense marking or are unmarked for tense must take a Factive stem.
(38) a. rey d -aey-e
3ms FA-go -P
'He went'
(39) a. rey d@-k -aey-ey
3ms FA-IP-go -IP
'he's going'
b. *rey (w -) aey-e
3ms NF- go -P
(40) a. rey d -aey-kay

3ms FA-go -PF
'He's gone'
b. *rey [w - $]$ k -aey-ey

3ms [NF-]IP-go -IP
b. *rey (w - )aey-kay

3ms NF- go -PF
4.4. Conditional marking

Verbs with Conditional marking must take the Nonfactive prefix. They occur in two constructions. If the Conditional stem has no desiderative marking, then the verb must occur in either the protasis or the apodosis of a contrary-to-fact conditional sentence (see 10.4.).
(41) yen w -eya -k@k, wan w -aey-@k

2SG NF-come-CDL 1SG NF-go -CDL
'If you had come, I would have gone'

If the verb takes Desiderative suffixation as well as Conditional marking, the result is a Frustrative form meaning 'wanted to..., but didn't'. No other marking from slot +5 may occur on $a$ Conditional stem.

### 4.5. Tense marking

Verbs with Past or Desiderative marking are constrained from occurring on a verb marked for any Modality save Negative. Verbs with Potential, Prohibitive, or Negative Debitive Modality prefixes require
the Future suffix.

```
(42) a. ap-aey-re b. *ap-aey-e/-rere
    PR-go -FU PR-go -P/-DES
    'Don't go!'
```

The labels $I$ have assigned to the three suffixes that occur in slot +5 are entirely transparent. Verbs marked with the Past tense suffix depict situations which occurred prior to the speech event. Verbs with Future marking depict situations that are expected to occur after the speech event. And verbs with Desiderative marking depict situations that the speaker desires to come about.

Awtuw tense marking does not distinguish grades of temporal proximity - simply before or after the speech event, or neither.

Section 10.2.5،will discuss the matter of sequence of tenses in sentences with more than one clause.

### 4.6. Aspect marking

The Awtuw verb displays marking for two aspects - Perfect and Imperfective. The Perfect is marked by a suffix in slot +2 , and the Imperfective by a circumfix, the suffixal component of which appears in slot +2. The prefixal component appears in slot -2. Except when the verb is in a truncated verb serialization, both components of the Imperfective circumfix must cooccur (see 10.1.2.).

The Imperfective marker appears on verbs depicting a situation that is durative, continuous, progressive, or iterative in nature.

$$
\begin{array}{r}
\text { (43) a. } \\
\text { rey di-k -ik -iy } \\
\text { 3ms FA-IP-sit-IP } \\
\text { 'He's sitting' }
\end{array}
$$

```
b. nom Kamlakw-o di-k -ikiy-i -m
    1PL Kamnum -L FA-IP-live-IP-PL
    'We live in Kamnum'
c. nom Taeypil-e d@-k -aey-e -m
    1PL Talbipi-L FA-IP-go -IP-PL
    'We're going to Talbipi'
d. rey yamo antante d@-k -ra -y
    3ms sago always FA-IP-eat-IP
    'He always eats sago'
```

Verbs with Imperfective marking may bear tense marking as well.
(44) a. rey di-k -ik -iy-e
3ms FA-IP-sit-IP-P
'He was sitting/used to sit'
b. rey k -ik -iy-re
3ms IP-sit-IP-FU
'He will be sitting'

The Perfect suffix expresses both the category of Perfect, i.e. present relevance, as in example (45b), and Perfective, i.e. a situation viewed as complete, as in example (45a).
(45) a. Yawur d -eya -kay

Yawur FA-come-PF
'Yawur has come'
b. aewre d -irp -kay
house FA-close-PF
'The door is closed'

Again, verbs with Perfect marking may bear tense suffixes.
(46) a. Yawur d -eya -kay-e wan d -ukl'-e

Yawur FA-come-PF -P 1SG FA-wake-P
'Yawur had come when I woke up'

> b. Rey w -eya -kay-re yen w -aey-re
> 3ms NF-come-PF -FU 2SG NF-go -FU
> 'He'll have come when you go'

With the exception of verbs in a debitive modality, any verb that is unmarked for tense makes an obligatory aspect distinction.
(47) a. *wan w -eya

1SG NF-come

$$
\begin{gathered}
\text { b. *tey d -aey } \\
\text { 3fs FA-go }
\end{gathered}
$$

4.7. Feature analysis of modality, tense, and aspect categories

The preceding sections have mentioned a variety of cooccurrence restrictions among the affixes that may appear in the Awtuw verb complex. A simple statement of positional restrictions can account for some of these. A verb may not be specified, for example, as both Negative and Potential because once the Negative prefix has occupied slot -8 , the Potential prefix cannot do so, and vice versa.

But a number of cooccurrence restrictions apply to affixes that fill different slots. The purpose of this section is to submit the relevant morphemes to an analysis that assigns a set of feature
specifications to each and stipulates their cooccurrence possibilities in terms of a set of redundancy rules.

We will be primarily concerned with the categories of tense, aspect, and mood, represented in verbal affixes in slots $-8,-7,-2,+2,+4$, and +5 . There will also be reason to touch on the category of person, which is represented in Awtuw only as a portmanteau of the Debitive modality prefixes, and number. Since no cooccurrence restrictions apply to the other categories marked by verb morphology, it will be unnecessary to analyze them in this way.

Three features distinguish the categories of modality marked in slot -8. The feature Debitive distinguishes forms marked with pa-, kan-, wan-, ap-, and nil- from those marked with na-, ka-, or 0 . Potential distinguishes those marked with na- from those marked with ka- or 0 . And Negative distinguishes those marked with ka- from unmarked forms on the one hand, and those marked with pa-, kan-, and wan- from those marked with ap- and nil- on the other.

The feature Nonfactive distinguishes forms marked with $\underset{W}{ }-\quad$ in slot -7 from those that do not bear the Nonfactive prefix. As I mentioned in the discussion above, Factive and Nonfactive marking is conditioned by tense. This makes the Nonfactive feature useful in the specification of the tense suffixes as well as the Factive and Nonfactive prefixes. Specifically, the feature distinguishes Future and Desiderative forms from Past and unmarked forms.

The purpose of this analysis is to describe cooccurrence restrictions on overt morphemes. The features therefore correspond directly with morphological categories. Ideally, a feature mediates between a morphologically marked category and a corresponding semantic category.

Since the morphological category of Nonfactivity in Awtuw is semantically redundant, specifications of forms for this feature may at times seem arbitrary.

The feature Nonpresent distinguishes Past and Future forms, which are overtly marked and have non-present time reference from Desiderative forms and forms unmarked for tense, which have present time reference.

Finally, the features Conditional, Perfect, Imperfective, Second Person, Third Person, Plural, and Dual are morphologically and semantically transparent. Since the categories of aspect, person, and number in Awtuw all make three-way distinctions, a pair of features is required for each.
4.7.1. The first distinction we need to make is between forms marked as Debitive in illocutionary force and those that are not. Verbs of this kind depict commands, exhortations, and expressions of necessity, which do not make tense distinctions. Forms bearing the prefixes pa-, kan-, wan-, ap-, and nil- in slot -8 are marked positively for the feature Debitive, while those with ka-, na-, or no prefix are marked negatively. The variety of contexts in which non-Debitive forms occur and the constraints on tense marking of Debitive forms justify identifying Debitive rather than, say, Declarative, as the marked category.
4.7.2. Next we must isolate +Potential forms marked by the prefix nafrom -Potential forms. Note that Debitive and Potential are mutually exclusive categories because both are marked by slot -8 prefixes.
4.7.3. The next step is to distinguish forms specified as Negative from those specified as non-Negative, for both Debitive and non-Debitive categories. This feature distinguishes Negative Debitive
forms with the prefixes ap- and nil- from non-Negative Debitive forms with the prefixes pa-, kan-, and wan-. It also distinguishes among non-Debitive, non-Potential forms. Again, the position of the prefixes that mark the categories make Potential and Negative mutually exclusive.

This leaves a three-way distinction among Potential forms with the prefix na-, +Negative non-Potential forms with the prefix ka-, and non-Negative non-Potential forms with no prefix in slot -8. The morphological and semantic unmarkedness of the non-Negative non-Potential provides some justification for naming the feature Negative rather than Affirmative.

An illustrative diagram at this point may serve to clarify the distinctions proposed thus far.

Figure 4.1

4.7.4. These three features, in conjunction with the positionally motivated restrictions on their cooccurrence, distinguish all the prefixes in slot -8 , with the exception of person marking of Debitive forms.

At this stage, it will be most convenient to focus on further specifications to the left-most, non- Potential, non-Debitive branch
of the diagram and return to the +Potential and the +Debitive branches later.

Forms on this branch distinguish Nonfactivity as marked in slot -7. Although the Nonfactive prefix $\underline{w}$ - and the Factive prefix d- both make $^{-}$ more than one tense distinction, it is preferable to identify Nonfactive as the marked form for the purposes of this analysis.

Since non-Debitive, non-Potential forms make precisely the same distinctions regardless of their specification for Negativity, further discussion will be neutral with respect to Negativity.

Nonfactive and non-Nonfactive forms distinguish tense through the feature Nonpresent. Nonfactive forms specified Nonpresent bear the Future suffix and those specified non-Nonpresent bear the Desiderative suffix. Non-Nonfactive forms specified Nonpresent have Past tense marking, while those specified non-Nonpresent are unmarked for tense. The feature Conditional distinguishes forms with the Conditional suffix in slot +4 from those that lack it. Conditional forms are redundantly specified as Nonfactive. Thus non-Nonfactive forms will automatically be specified as non-Conditional, while Nonfactive forms distinguish Conditional and non-Conditional.

This analysis conveniently specifies Conditional forms, which occur in past contrafactual conditions, as Nonfactive, Nonpresent, and Conditional, and Frustratives, which depict frustrated desires, as Nonfactive, non-Nonpresent, and Conditional. Note that the only marker from slot +5 that may cooccur with the Conditional suffix is the Desiderative suffix.

It is now appropriate to display another diagram to clarify the feature specifications made thus far and their correspondence with
verb suffixes. (Note: NPR = Nonpresent, CDL = Conditional.)

Figure 4.2

4.7.5. Now we can turn our attention to forms specified as Potential. Potential forms require Nonfactive marking and may bear either the Future or the Conditional suffix. Redundancy rule 1 yields all possible forms under this node.
(48) Redundancy rule 1.

$$
[+ \text { Potential }] \rightarrow\left[\begin{array}{l}
+ \text { Nonfactive }] \\
+ \text { Nonpresent }
\end{array}\right]
$$

Note that Potential forms must also be non-Debitive and non-Negative, but because all three categories, Potential, Debitive, and Negative are expressed by affixes in the same slot, the redundancy rule need not specify it.

Potential forms may still be specified for Conditionality. Potential Conditionals take the Conditional suffix and Potential non-Conditionals take the Future suffix, as was the case with non-Potential forms specified as Nonfactive and Nonpresent.
4.7.6. Two additional redundancy rules will specify the mood and tense values for Debitive forms. The first of these stipulates that Negative Debitives will also be Nonfactive and Nonpresent, and so have Future marking, and non-Negative Debitives will be neither.
(49) Redundancy rule 2.

$$
\left[\begin{array}{l}
+ \text { Debitive } \\
\alpha \text { Negative }
\end{array}\right]-->\left[\begin{array}{l}
\alpha \text { Nonfactive } \\
{[\alpha \text { Nonpresent }}
\end{array}\right]
$$

The second stipulates that any form specified as either Debitive or non-Nonfactive will also be specified as non-Conditional.
(50) Redundancy rule 3.

$$
\left\{\begin{array}{l}
{[+ \text { Debitive }]} \\
{[\text {-Nonfactive }]}
\end{array}\right\}->[\text {-Conditional }]
$$

Figure 4.3 displays the feature specifications for Debitive and Potential forms. (Note numerals below each terminal node refer to forms in Tables 4.4-7.)
4.7.7. A further redundancy rule specifies the permissible aspect distinctions for each tense/mood category isolated above.
(51) Redundancy rule 4.


This rule stipulates that any form specified as +Perfect will also be -Imperfective regardless of the specifications for the other three features and that -Perfect forms that are also non-Debitive, nonNonfactive, and non-Nonpresent must be specified as +Imperfective. In other words, forms with any Debitive or tense marking may bear either


Perfect or Imperfective marking, or be unmarked for aspect, while non-Debitive forms unmarked for tense must bear either the Perfect or the Imperfective suffix.

It therefore suspends the structure illustrated in Figure 4.4 a to each terminal node in Figure 4.3 except those negatively specified for all features besides Negative and the structure illustrated in Figure 4.4 b to the remaining two nodes. (Note: IPF = Imperfective)

Figure 4.4


4.7.8. Redundancy rule 5a stipulates that Debitive forms marked as second person must be non-third person. And Rule 5 b stipulates that Negative Debitives marked as third person must be non-second person. In other words, Negative Debitives may be either second or third person, while non-Negative Debitives may be second or third person or neither, i.e. first person.
(52) Redundancy rule 5.
a. $\left[\begin{array}{l}+ \text { Debitive } \\ + \text { II }\end{array}\right] \rightarrow->[-I I I]$
b. $\left[\begin{array}{l}+ \text { Debitive } \\ + \text { Negative } \\ + \text { III }\end{array}\right] \rightarrow->[-I I]$

This rule appends the structure illustrated in Figure 4.5 a to each non-Negative Debitive node and the structure in 4.5 b to each Negative Debitive node.

Figure 4.5.

4.7.9. Finally, with the exception of Reciprocal verbs, noted below, the Dual and Plural affixes may not cooccur, and this too may be expressed in the form of a redundancy rule.
(53) Redundancy rule 6
[+Plural] $-->$ [-Dual]

This rule has the effect of suspending the structure illustrated in Figure 4.6 to each terminal node.

Figure 4.6.

4.7.10. There is one further cooccurrence restriction that requires explication. On any verb with the Reciprocal prefix in slot -1 , the Dual prefix must also occur in slot -3 regardless of the number of the subject. As this morphological restriction does not correspond to any comparable semantic restriction, I will not submit it to a feature-based analysis.
4.7.11. Table 4.3 expands each relevant affix as a cluster of features. In each case, the cluster includes only the essential specifications. Specifications for other features are either
specified by a positional rule or a redundancy rule, or irrelevant.

Table 4.3

```
pa- \(-->[+D E B,-N E G,-I I,-I I I]\) (Hortative)
kan- \(-->[+D E B,-N E G,+I I,-I I I]\) (Imperative)
wan- \(-->[+\mathrm{DEB},-\mathrm{NEG},-\mathrm{II},+\mathrm{III}]\) (Debitive)
ap- \(->[+D E B,+N E G,+I I,-I I I]\) (Prohibitive)
nil- \(-->[+D E B,+N E G,-I I,+I I I]\) (Negative Debitive)
na- \(-->[+\mathrm{POT}]\) (Potential)
ka- \(\quad \rightarrow\) [-DEB, +NEG] (Negative)
d- \(\quad-->[-\mathrm{DEB},-\mathrm{NFA}]\) (Factive)
w- \(\quad->[+N F A]\) (Nonfactive)
\(-@ k \quad-\quad[+C D L]\) (Conditional)
-re \(-->[+N F A,+N P R]\) (Future)
-rere \(->[+N F A,-N P R]\) (Desiderative)
-e \(\quad->[-N F A,+N P R]\) (Past)
\(-0 \quad-->[-N F A,-N P R]\) (Unmarked tense)
-kay - -> \([+P F]\) (Perfect)
-k-ey \(->[-P F,+I P F]\) (Imperfective)
```

4.7.12. Table 4.4 displays the tense, mood, and aspect feature specifications for all non-Negative, non-Debitive forms of the root ALOW 'speak', Table 4.5, the specifications for Negative forms, Table 4.6, the specifications for Potential forms, and Table 4.7 the tense, mood, aspect, and person specifications for all Debitive forms.
4.8. Reciprocal marking

Any verb that denotes an action that people can do to each other may bear the Reciprocal prefix. Verbs with Reciprocal marking always have a prefix in the Dual slot, -3 , as well as the Reciprocal prefix in
Table 4.4

| \# | $\begin{array}{lllll} \text { FORM } \\ -7-2 & 0 & +2 & +4 & +5 \end{array}$ | DEB | POT | NEG | IRL | NPR | CDL | PF | IPF | GLOSS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | d -alow-kay | - | - | - | - | - | - | + | - | 'has spoken' |
|  | d@-k-alow-ey | - | - | - | - | - | - | - | + | 'is speaking' |
| 2 | d -alow -o | - | - | - | - | + | - | - | - | 'spoke' |
|  | d -alow-kay -e | - | - | - | - | + | - | + | - | 'had spoken' |
|  | d@-k-alow-ey -e | - | - | - | - | + | - | - | + | 'was speaking, used to speak' |
| 3 | w -alow -rere | - | - | - | + | - | - | - | - | 'wants to speak' |
|  | w -alow-kay -rere | - | - | - | + | - | - | + | - | ', wants to have spoken', |
|  | k-alow-ey -rere | - | - | - | + | - | - | - | + | ',wants to be speaking' ${ }^{\text {, }}$, |
| 4 | w -alow -@k-rere | - | - | - | + | - | + | - | - | 'wanted to speak, but didn't' |
|  | w -alow-kay-@k-rere | - | - | - | + | - | + | + | - | 'wanted to have spoken, but didn' ${ }^{\text {' }}$ ' |
|  | k-alow-ey -@k-rere | - | - | - | + | - | + | - | + | 'wanted to be speaking, but didn't' |
| 5 | w -alow -re | - | - | - | + | + | - | - | - | 'will speak'. |
|  | w -alow-kay -re | - | - | - | + | + | - | + | - | 'will have spoken', |
|  | k-alow-ey -re | - | - | - | + | + | - |  | + | 'will be speaking', |
| 6 | w -alow -@k | - | - | - | + | + | $+$ | - | - | 'would have spoken' |
|  | w -alow-kay-@k | - | - | - | + | + | + | + | + | 'would have had spoken' <br> 'would have been speaking' |
|  | k-alow-ey -@k | - | - | - | + |  |  | - |  |  |


| \# | $\begin{array}{lllll} \text { FORM } \\ -8-7-2 & 0 & +2 & +4 & +5 \end{array}$ | DEB | POT | NEG | IRL | NPR | CDL | PF | IPF | GLOSS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | ka-d -alow-kay | - | - | + | - | - | - | + | - | 'hasn't spoken' |
|  | ka-d-k-alow-ey | - | - | + | - | - | - | - | + | 'isn't speaking' |
| 8 | ka-d -alow -o | - | - | + | - | + | - | - | - | 'didn't speak' |
|  | ka-d -alow-kay -e | - | - | + | - | + | - | + | - | 'hadn't spoken' |
|  | ka-d-k-alow-ey -e | - | - | + | - | + | - | - | + | 'wasn't speaking' |
| 9 | ka-w -alow -rere | - | - | + | + | - | - | - | - | 'doesn't want to speak' |
|  | ka-w -alow-kay -rere | - | - | + | + | - | - | + | - | 'doesn't want to have spoken' |
|  | ka -k-alow-ey -rere | - | - | + | + | - | - | - | + | 'doesn't want to be speaking' |
| 10 | ka-w -alow -@k-rere | - | - | + | + | - | + | - | - | 'didn't want to speak, but did' |
|  | ka-w -alow-kay -@k-rere | - | - | + | + | - | + | + | - | 'didn't want to have spoken, but did' |
|  | ka -k-alow-ey -@k-rere | - | - | + | + | - | + | - | + | 'didn't want to be speaking, but did' |
| 11 | ka-w -alow -re | - | - | + | + | + | - | - | - | 'won't speak' |
|  | ka-w -alow-kay -re | - | - | + | + | + | - | + | - | 'won't have spoken' |
|  | ka -k-alow-ey -re | - | - | + | + | + | - | - | + | 'won't be speaking' |
| 12 | ka-w -alow -@k | - | - | + | + | + | + | - | - | 'wouldn't have spoken' |
|  | ka-w -alow-kay -@k | - | - | + | + | + | + | + | - | 'wouldn't have had spoken' |
|  | ka -k-alow-ey -@k | - | - | + | + | + | + | - | + | 'wouldn't have been speaking' |

Table 4.6

| \＃ | $\begin{aligned} & \text { FORM } \\ & -8-7-2 \quad 0 \quad+2+4+5 \end{aligned}$ | DEB | POT | NEG | IRL | NPR | CDL | PF | IPF | GLOSS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | na－w－alow－re |  |  | － | ＋ | ＋ | － | － | － | ＇can speak＇ |
|  | na－w－alow－kay－re | － | ＋ | － | ＋ | ＋ | － | ＋ | － | ＇can have spoken＇ |
|  | na－k－alow－ey－re | － | ＋ | － | ＋ | ＋ | － | － | ＋ | ＇can be speaking＇ |
| 14 | na－w－alow－＠k | － | ＋ | － | ＋ | ＋ | ＋ | － | － | ＇could have spoken＇ |
|  | na－w－alow－kay－＠k | － | ＋ | － | ＋ | ＋ | ＋ | ＋ | － | ＇could have had spoken＇ |
|  | na－k－alow－ey－＠k | － | ＋ | － | ＋ | ＋ | ＋ | － | ＋ | ＇could have been speaking＇ |

Table 4.7

|  |  |
| :---: | :---: |
| 畐 | 1 1 1 1 1 1＋＋＋1 1 1＋＋＋ |
| H | 1 1 1＋＋＋1 1 1＋＋＋ |
| $\underset{\sim}{\text { 思 }}$ | $11+11+11+11111+$ |
| 知 | $1+11+11+11+1$ |
| 旨 | 1 1 1 1 1 1 1 1 1 1 1 1 |
|  | 1 1 1 1 1 1 1 1＋＋＋ |
| 罟 | 1 1 1 1 1 1 1 1＋＋＋＋＋ |
| 䍖 | 1 1 1 1 1 1 1＋＋＋ |
| 䂞 | 1 1 1 1 1 1 1 1 1 1 1 1 |
| 䁌 | ＋＋＋＋＋＋＋＋＋＋＋＋＋＋＋ |
|  |  |
| ＊ | $\cdots$ |

slot -2. If the subject is Plural rather than Dual, the Dual marking remains obligatory. In the absence of Reciprocal marking, Dual and Plural marking are mutually exclusive.
(54) a. Nalpet Kamlakw yakruk ti-n -iy -m -e

Taute Kamnum once DU-RC-shoot-PL-P
'Taute and Kamnum once had a war (ie. shot each other)'

$$
\begin{gathered}
\text { b. *rey ti-ni-puy-e } \\
\text { 3ms DU-RC-hit-P } \\
\text { *'He shot each other' }
\end{gathered}
$$

### 4.9. Number marking

4.9.1. As mentioned above in section 4.8., all Reciprocal stems take Dual marking. Aside from this, Hortative, Imperative, and Debitive verbs must agree with their subjects in number.

```
(55) a. nan pa-t-ey/*p-aey(*-nem)
    1 DU HR-DU-go
    'Let's (two) go!'
    b. wan \(p-\operatorname{aey}\left({ }^{*}-\right.\) nem \() /{ }^{*}\) pa-t \(-e y\)
        1SG HR-go -PL HR-DU-go
    'Let me go!'
        c. nom p-aey-nem/*p-aey/*pa-t -ey
        1 PL HR-go -PL HR-go \(H R-D U-g o\)
        'Let's go!'
```

        4.9.2. When the subject of any other verb is singular in number, then
        the verb must be unmarked for number. If the subject is dual or
    plural, the verb may agree with it or be unmarked for number.

Three suffixes mark a stem as plural. One of these, $-\underline{m}$ in slot +3 , may occur on any type of verb with one exception. If the verb bears Future or Desiderative marking and no aspect marking, or if the Conditional suffix occurs word-finally, then $-\underline{m}$ may not fill this slot. The homophonous Plural marker in slot +6 , if any, will appear.

```
(56) a. rom d -aey-(ka-)m -e
    3PL FA-go - PF- PL-P
    'They had gone'
c. *rom w -aey-m -re (re)
    3PL NF-go -PL-FU/DES
    b. rom w -aey-ka-m -re
    3PL NF-go -PF-PL-FU
    'They will have gone'
d. rom w -aey-re(re)-m
    3PL NF-go -FU/DES-PL
    'They will/want to go'
```

When the verb bears Past tense marking, this slot may be filled, regardless of the aspect. And when the verb is marked for aspect, then it may again be filled, regardless of the tense as illustrated in (56ab).

The other two allomorphs, -mem and -nem, occur only on verbs in the Debitive modalities. These two suffixes are in free variation with each other on any stem that ends in a consonant. And they are in free variation with each other and with $-\underline{m}$ on any stem ending in /a/.
(57) a. wan-e yiyte ka-lopwa-kow-mem/-nem

1SG-0 fence IM-open -BEN-PL /-PL
'Open the gate for me!'
b. yiyse ka-lopwa-m /-nem/-mem
fence IM-open -PL/-PL /-PL
'Open the gate!'

The other plural slot, +6 , may be filled on any verb that has tense, but not Conditional, marking. The presence or absence of Plural marking in slot +3 has no effect on the ability of verbs with tense marking to have slot +6 full.

$$
\begin{aligned}
& \text { (58) a. nom w-aey-re-m b. nom w-aey-ka-(m -)re-m } \\
& 1 \mathrm{PL} N F-\text { go -FU-PL } \quad 1 \mathrm{PL} \text { NF-go -PF- PL- FU-PL } \\
& \text { 'We'll go' 'We'll have gone' } \\
& \text { c. rom w -aey-(m -)@k -rere-m } \\
& \text { 3PL NF-go PL-CDL-DES -PL } \\
& \text { 'They wanted to go but didn't' }
\end{aligned}
$$

In other words, plural subjects may trigger number agreement in slot +3 if the verb has aspect marking or if it doesn't have Future or Desiderative marking. And they may trigger number agreement in slot +6 if the verb has tense marking. If the verb has both aspect and tense marking, then either or both slots may be filled. The option always remains for the verb to display no number marking.
4.9.3. Where there is both a subject and a comitative, the following principles determine the number agreement on the verb and the interpretation of the number of actors.

1. Number marking on the verb is optional in any comitative construction.
2. Where the verb is marked for number, it may agree either with the actual number of actors, including both the subject and the comitative, or with the NP whose referent is the more numerous.
3. If the subject is not first person dual, then the subject does not include the comitative and the number of actors must be interpreted as
the total of the number of the subject plus the number of the comitative.
4. If the subject is first person dual and the comitative is singular, then number agreement on the verb may disambiguate the number of actors.
a. If the verb bears dual marking, then the dual subject includes the singular comitative.
b. If the verb is marked with a plural suffix, then the dual subject does not include the singular comitative and there is a total of three actors.
c. If the verb is unmarked for number, then the sentence will remain ambiguous as to whether there are two or three actors.
5. If either the subject or the comitative is plural, then the verb will either have plural marking or be unmarked.
(59) a. Kapoy rom-e-k w-aey-re (-m)

Kapoy 3PL-O-I NF-go -FU(-PL)
'Kapoy will go with them'
b. Kapoy-wom tey-e-k w-aey-re(-m)

Kapoy-PL 3fs-O-I NF-go -FU(-PL)
'Kapoymob will go with her'
c. Rom Yowmen-waew-e-k w -aey-re (-m)

3PL Yowmen-DU -O-I NF-go $-\mathrm{FU}(-\mathrm{PL})$
'They will go with Yowmen and someone'

These principles acount for the following facts concerning the interaction of number marking and a comitative construction.

If both the subject and the comitative are dual, then there are four actors and the verb may be marked as either dual, plural, or unmarked.
(60) Raew Yowmen-waew-e-k w -aey-re(-m) /t -aey-re

3DU Yowmen-DU -O-I NF-go -FU(-PL)/DU-go -FU
'They two will go with Yowmen and someone'

If both the subject and the comitative are singular, then there are two actors and the verb may bear dual marking or be unmarked for number.

> (61) Tey wan-e-k w -aey-re/t -aey-re 3fs 1 SG-0-I NF-go -FU/DU-go -FU 'She'll go with me'

If the subject is singular and the comitative is dual, then the number of actors is three and the verb may take dual, plural, or no marking.
(62) Tey nan-e-k w -aey-re (-m)/t -aey-re 3fs 1du-0-I NF-go -FU(-PL)/DU-go -FU 'She'll go with us two'

If the comitative is singular, then:

1. If the subject is second or third person dual, then there are three actors and the verb may bear any number marking.
(63) An Yawur-re-k w -aey-re(-m) /t -aey-re

2du Yawur-0 -I NF-go -FU(-PL)/DU-go -FU
'You two will go with Yawur'
2. If the subject is first person dual, then:
a. If the verb has dual marking, the number of actors is two, the first person dual subject including the singular comitative.
(64) Nan Yawur-re-k t -aey-re

1du Yawur-O -I DU-go -FU
'I'll go with Yawur' *'We two will go with Yawur'
b. If the verb has plural marking, the number of actors is three, the first person dual subject excluding the singular comitative.
(65) Nan Yawur-re-k w -aey-re-m 1du Yawur-0 -I NF-go -FU-PL
'We two will go with Yawur'
*'I'll go with Yawur'
c. If the verb is unmarked for number, then the number of actors is ambiguous, either two or three.
(66) Nan Yawur-re-k w -aey-re 1du Yawur-O -I NF-go -FU
'I/we two will go with Yawur'
4.10. Adverbial prefixes

Because they can cooccur in a fixed order, I have placed the two 'adverbial' prefixes taw- 'yet, still' and owra- 'again' in separate slots, -5 and -4 . Both of these prefixes are very productive. Frequently owra- occurs attached to the root EYA 'come' to derive a form meaning 'return'.
(67) a. rey yarow w -ewr'-eya -re

3ms tomorrow NF-AGN -come-FU
'He'll come back tomorrow'

```
b. rey yaepaer d -owr'-upw'-o
    3ms kangaroo FA-AGN -see -P
    'He saw the kangaroo again'
```

The other prefix, taw-, often occurs in Temporal clauses (cf. 10.3.). Like several of the 'compound' suffixes, this prefix, along with regular tense and aspect marking, and the nominal suffix -wo 'just' which can occur on verb forms in certain syntactic environments, helps Awtuw to compensate for its lack of conjunctions. Among them, these strategies can produce a wide range of temporal clause types.

```
    (68) Nom d -ewr'-eye -m -e, rey taw-k -owna -y -e
    1PL FA-AGN -come-PL-P 3ms YET-IP-sleep-IP-P
    'We returned while he was still sleeping'
(69) Awtiy-wom Liwmiy-e ka-taw-ewr'-eya -ka-m
    Awtiy-PL Lumi -L NG-YET-AGN -come-PF-PL
    'Awtiy and his family haven't come back from Lumi yet'
```

4.11. Location and Direction prefixes

Awtuw codes grammatically, through verb affixation, a number of
concepts that in other languages might require an additional verb. In particular, the suffix -kayna 'and go' is used to indicate that the subject goes away after performing the action depicted by the verb root.

Most of the prefixes in the Location/Direction slot -6 can have much the same function. Ma- 'go and' specifically, has virtually the opposite effect from -kayna - the subject moves and then performs the action depicted by the root. Ma- does not specify the direction of motion, whether it is from a source or to a goal, or whether it is up or down with relation to slope or stream.

```
(70) a. tey yilmaet d -il -kayn'-e
    3fs string FA-twist__GO -P
    'She twisted string and went away'
        b. tey yilmaet mae-'l -i
        3fs string MT -twist-P
            'She went/came and twisted string'
```

The four Location/Direction prefixes can have much the same effect as ma-, but do grammaticize the direction as either up or down with relation to slope or stream.
(71) a. Rey tapwo lam-k' -e 3ms fire DS -get-P
'He went downstream and got fire'
b. Rey tapwo lim-k' -e

3ms fire DH -get-P
'He went downhill and got fire'

```
c. Rey tapwo yam-k' -e
    3ms fire US -get-P
    'He went upstream and got fire'
d. Rey tapwo wam-k' -e
    3ms fire UH -get-P
    'He went uphill and got fire'
```

These four prefixes can also indicate the location with respect to the location of the speech event where the action depicted by the root takes place.
(72) rey lam-own' -e

3ms DS -sleep-P
'He slept downstream'/
'He went downstream and slept'

The last prefix that can occupy slot -6 , wa- 'absent' is very peculiar semantically. It grammaticizes the absence of someone or something whose referent is recoverable from context.
(73) Tey lamu-t lak -e. Nemane-t po d@-wae-'k -newta-kay-e. 3fs Y//S-f go DS-P $0 / / S$-f FC FA-AB -sit-HIDE -PF -P
'The younger sister went downstream and the elder sister had sat and hid'
4.12. Compound roots

Slot +1 is unlike any other slot in three major respects. First, there are at least 30 morphemes, listed below, that can fill it. Second, as many as three of the eligible morphemes can cooccur in the same verb complex. I have chosen to place the entire class of morphemes in the same slot, rather than three separate slots, because
any of the eligible morphemes would be able to occupy any of the slots, as long as no single morpheme occurs more than once. And finally, seven of the morphemes are identical or nearly identical in form to a verb root that occurs independently. It is for this reason that I have designated the slot a Compound slot. Another factor that has contributed to this decision is the semantic diversity that the morphemes in this class display. They range from the Benefactive suffix - kow, which increases the valence of the verb it is attached to, through the aspectual-like Inchoative suffix -taewa, to such apparently lexical and adverbial meanings as -ata 'in order to detain someone'.

Every member of this class of morphemes is of a phonological shape plausible for a verb root, i.e. they end in a consonant or $/ \mathrm{a} /$, and it is likely that this construction has arisen diachronically from a very tightly-bound verb serialization. As the serialization crystallized into suffixation, some of the verbs which could participate in the serialization have ceased to occur as independent verbs, and a few have not yet done so.

The suffixes that can fill this slot may conveniently be divided into semantic classes which I label Grammatical, 'pretend' Auxiliary, Aspectual, Quantitative, Adverbial, Consecutive, and Obstructive.

In Table 4.8, I list the morphemes that can occur in this position, and have come to my attention. Each entry includes a gloss for the suffix, and, where relevant, for the morpheme when it occurs independently. I have flagged the most common morphemes with an asterisk.

Table 4.8 ('Compound' morphemes)


```
Table 4.8 continued
'CONSECUTIVE' SUFFIXES
-kayna 'and go away'
-ukla 'and get up' ('arise')
-lakna* 'down, and put down' ('die')
-prik 'and throw away' (IPRIK 'throw')
-newta 'and hide, secretly'
'OBSTRUCTIVE' SUFFIXES
\begin{tabular}{ll}
-ata & 'to detain someone' \\
-morey & 'to cover something' \\
-tiy & 'to block something'
\end{tabular}
```

4.12.1. There is only one 'Grammatical' suffix, - kow 'Benefactive'. I have classified it separately from the others because it has the distinctive property of increasing the number of Object NPs that can cooccur with the verb by one, specifically, a Benefactive NP. Benefactive NPs are syntactic Indirect Objects and receive further discussion in sections 5.1. and 6.2.

> (74) a. yiyte ka-lopwa
> fence IM-open
> 'Open the gate!'

> b. wan-e yiyte ka-lopwa-kow-mem
> 1 SG-0 fence IM-open -BEN-PL
> 'Open (PL) the gate for me!'
4.12.2. I have designated the second category of suffixes "pretend" Auxiliary' because they all depict situations that do not come to fruition.

The morpheme -weypa 'try', or more commonly -pa 'try', is among the members of this class that occurs most frequently. The far rarer -la is apparently synonomous.

```
(75) a. wan tader wom -re w -owkaney-(wey) pa-re.
    1SG this coconut-0 NF-climb -TRY -FU
    'I'11 try to climb this coconut tree'
b. rey taw d -uwk -l -e
    3ms tree FA-fell-TRY-P
    'He tried to fell a tree'
```

The third 'pretend' Auxiliary suffix is -panya 'pretend', which also occurs independently with the same meaning.

```
(76) a. rey aeye rokra-pany -e
    3ms food cook -PRETEND-P
    'He pretended to cook food'
b. rey aeye rokr'-e?
    3ms food cook -P
    'Did he cook food?'
b'. awtuw, rey d@-k -pany' -ey-e
    no , 3ms FA-IP-pretend-IP-P
    'No, he was just pretending'
```

4.12.3. The aspectual morphemes -taewa 'begin' and -tay 'finish' are important in temporal clauses.

```
(77) nom aeye rokra-tay -ka-wa -re rey ra -taew -e
    1PL food cook -FINISH-PF-JUST-O 3ms eat-BEGIN-P
    'He started to eat just as soon as we had finished cooking'
```

The suffix -ney 'first' means 'just before something else',
contrasting with -paeyk 'for the first time ever'.
(78) Nom apre p-aey-nem. Wan naw p@-mae-'w -ney.

1PL not yet HR-go -PL 1 SG piss HR-MT -excrete-FIRST
'Let's not go yet. Let me go piss first.'
(79) Nam-k@ owyim d@-k@ -paeyk-@ tapwo

1PL-get ancestors FA-get-FIRST-P fire
'Our ancestors got fire for the very first time'

The other two Aspectual suffixes are -imya 'quickly', which also occurs independently in the meaning 'run', and -omkur 'for a long time', which also occurs independently in the meaning 'spend a long time'.

```
(80) a. rey aeye rokr'-imy' -e
    3ms food cook -QUICKLY-P
    'He cooked the food quickly'
b. rey aeye rokr'-omkur -e
    3ms food cook -LONG TIME-P
    'He cooked the food for a long time'
```

4.12.4. Three of the Quantitative suffixes have the property of quantifying any subject or direct object NP.

The suffix -worka can refer to either the subject or the direct object of the verb to which it is attached, but does not appear to quantify indirect objects, even when there is no overt direct object.

```
(81) a. rom d -owra-ukla -worka-m -e
    3PL FA-AGN -arise-ALL -PL-P
    'They all got back up'
```

    b. d@-k@ -pama -worka-m -e
    FA-get-TOGETHER-ALL -PL-P
    'They got them all together'
    c. nam-o d@-kow -worka-re-m
    1PL-0 FA-give-ALL -FU-PL
    'They'll give all of it to us.'
    Note that example (81) also illustrates the use of UKLA, to be
discussed below in its role as a suffix, as an independent verb root.
This suffix can also be adverbial, especially with intransitive verbs.
(82) wan w -aey-worka-re, ka-w -ewr-eya -re

1SG NF-go -COMPL-FU NG-NF-AGN-come-FU
'I'Il go altogether and won't come back'

One of the four suffixes in this class, -tawa 'incompletely', can only quantify the object.
(83) rom aeye rokra-taw' -e

3PL food cook -INCOMPLETE-P
'They cooked the food incompletely'/
'They cooked part of the food'/
*'They didn't all cook the food'

The other two, -okrey 'a lot', and -wana 'half', may, as I said, quantify either the subject or the object.

```
(84) a. rom aeye rokr'-okrey-re
    3PL food cook -A LOT-FU
    'They will cook a lot of food'/
    'A lot of them will cook food'
        b. rom aeye rokra-wana-re
        3PL food cook -HALF-FU
        'They'll cook half of the food'/
        'Half of them will cook food'
```

4.12.5. Two of the suffixes in the Adverbial class have a property similar to the Quantitative suffixes - they may modify the subject or the object of the verb. The English glosses for example (85) reflect the ambiguity of the Awtuw sentences they gloss.
(85) a. rom aey aepit d@-k -ra-pam' -ey

3PL betelnut pepper FA-IP-eat-TOGETHER-IP
'They are chewing betelnut and pepper together'
b. rom aey aepit d@-k -ra -prana -ey

3PL betelnut pepper FA-IP-eat-SEPARATE-IP
'They are chewing betelnut and pepper separately'

Three other suffixes in this class seem to group themselves, together semantically - -porya 'properly', -iypap 'wrong', and -wuley 'badly'. Example (86) illustrates the distinction between the second and the third of these.
(86) a. rey d@-k -aey-iypap-ey

3ms FA-IP-go -WRONG-IP
'He's going astray'
b. rey d@-k -aey-wuley-ey

3ms FA-IP-go -BADLY-IP
'He's limping.'
The first of the three, -porya, contrasts with both
-iypap and -wuley.
(87) rey d2-k -aey-pory' -ey

3ms FA-IP-go -PROPERLY-IP
'He's walking properly/going the right way'

Three other suffixes fall into this class.

$$
\begin{aligned}
& \text { (88) a. rey w -aey-klak } \quad \text {-re } \\
& \text { 3ms NF-go -BACK \& FORTH-FU } \\
& \text { 'He'll go here and there/walk back and forth' }
\end{aligned}
$$

```
b. rey aeye rokra-twaw -re
    3ms food cook - SEE-FU
```

    'He'll cook the food and see how it turns out'
    (i.e. without attachment to result)
    ```
c. rey aeye rokr'-alw -o
    3ms food cook -UNTIL DAWN-P
    'He cooked food until dawn'
```

4.12.6. The suffixes $I$ am calling Consecutive all/depict an action performed after the action depicted by the root.

Note that the same subject must perform both actions with -ukla and -kayna, but that with -lakna, -prik, and -newta, the object of both actions must be the same.

```
(89) a. tey yilmaet d -il -lakn'-e
    3fs string FA-twist-DOWN -P
    'She twisted string and put it down'
    b. tey yilmaet d -il -prik -e
    3fs string FA-twist-THROW-P
    'She twisted string and threw it away'
        c. tey yilmaet d -il -newt'-e
        3fs string FA-twist-HIDE -P
    'She twisted string and hid it'/
    'She twisted string secretly'
        d. tey yilmaet d -il -ukl'-e
        3fs string FA-twist-UP -P
        'She twisted string and got up'
```

```
e. tey yilmaet d -il -kayn'-e
    3fs string FA-twist-GO -P
    'She twisted string and went away'
```

4.12.7. The final three suffixes attribute an obstructive purpose to the situation depicted by the root.

```
(90) a. wan tey-e kil w -alow -ata -re
    1SG 3fs-0 speech NF-speak-DETAIN-FU
    'I'll talk to her to detain her'
```

    b. wan n@1@mak-e w -ik -tiy -re
    1SG door -I NF-sit-BLOCK-FU
    'I'll sit at the door to block it'
    c. wan tak@ w -ik -morey -re
    1SG here NF-sit-CONCEAL-FU
    'I'll sit here to conceal [something]'
    This last suffix also acts as a Consecutive suffix.
(91) wan w -aey-morey -re

1SG NF-go -CONCEAL-FU
'I'll go and conceal [something]'/
4.13. Conjugation classes

Aside from the six irregular verbs discussed in the next section, all Awtuw verb roots fall into one of four conjugation classes. One of these classes has five members with slightly aberrant Imperfective suffixes. The second class, with fourteen members, has a prefix identical in form to the Dual prefix through most of its conjugation regardless of the number of the subject. The third is somewhat irregular in the way that it accepts the Imperfective prefix. And the
fourth class includes all other verbs.
4.13.1. The five members of the first class differ from other verbs in that the regular elision rule does not delete the final /a/ of the root (see section 2.2. ) after having conditioned the /e/ of the Imperfective suffix. Rather, the /e/ of the Imperfective suffix is deleted after the final /a/. The distinction is conveniently illustrated by contrasting the Imperfective forms of the homophonous roots $R A$ 'consume' and RA 'weave'.

$$
\begin{array}{cc}
\text { (92) a. ra }- \text { re } & \text { b. ra } \\
\text { consume-FU } & \text { weave-FU } \\
\text { 'will consume' } & \text { 'will weave' } \\
\text { c. d@-k -ra }-y & \text { d. d@-k-r -ey } \\
\text { FA-IP-consume-IP } & \text { FA-IP-weave-IP } \\
\text { 'is consuming' } & \text { 'is weaving' }
\end{array}
$$

The final /y/ in the Imperfective of these roots may delete after the /a/ just as the /y/ of the Perfect suffix may delete word-finally after /a/.
(93) a. r@
$-k @$
b. $\mathrm{d} @-\mathrm{k}-\mathrm{r} @$
consume-PF
FA-IP-consume
'has consumed' 'is consuming' (cf. (92c))

A fuller paradigm of the root ROKRA is to be found in the verb paradigms at the end of this chapter.

Table 4.9

| RA | 'consume' |
| :--- | :---: |
| ROKRA | 'cook' |
| IRA | 'feed' |
| OWNA | 'sleep' |
| ALWA | 'descend' |

4.13.2. The roots in the second class all begin with /t/ save one, TI-NATOW 'bark', which begins in $/ \mathrm{n} /$. The class includes all those that begin with / $t$ /. Throughout the conjugation of the roots in this class, a prefix identical to the Dual prefix occurs just as it does with Reciprocal stems. As the geminate reduction rule (see 2.2.) obliterates the prefix in many of the forms of the t-initial roots, I will illustrate with the paradigm of TI-NATOW as well as TI-TAN 'stink'.

Table 4.10 (Paradigms of TI-class verbs)
FORM
TI-TAN 'stink'
TI-NATOW 'bark'

| HORTATIVE | p@-'tan | 'pa-t-natow |
| :--- | :--- | :---: |
| IMPERATIVE | 'k@-tan | 'ka-t-natow |
| DEBITIVE | 'wa-tan | 'wa-t-natow |
| PROHIBITIVE | ap-'tan-re | 'ap-t-natow-re |
| NEG DEBITIVE | nil-'tan-re | nil-t-'natow-re |
| POTENTIAL | na-'tan-re | na-t-'natow-re |
| FUTURE |  |  |
| NEG FUTURE | 'ka-tan-re | ti-'natow-re |
| FUTURE PERFECT | ti-tan-'kay-re | 'ka-t-natow-re |
| FUTURE IMPERFECTIVE ti-k-'tan-ey-re | ti-natow-'kay-re |  |


| PERFECT | ti-'tan-kay | ti-'natow-kay |
| :--- | :--- | :--- |
| NEG PERFECT | 'ka-tan-kay | 'ka-t-natow-kay |
| IMPERFECTIVE | ti-k-'tan-ey | ti-k-'natow-ey |
| NEG IMPERFECTIVE | ka-k-'tan-ey | ka-k-'natow-ey |
| PAST | ti-'tan-e |  |
| NEG PAST | 'ka-tan-e | ti-'natow-o |
| PAST PERFECT | ti-tan-'kay-e | ka-t-'natow-o |
| PAST IMPERFECTIVE | ti-k-'tan-ey-e | ti-katow-'kay-e |


| CONDITIONAL | ti-'tan-@k | ti-'natow-@k |
| :--- | :--- | :--- |
| POT CONDITIONAL | 'na-tan-@k | 'na-t-natow-@k |
| FRUSTRATIVE | ti-'tan-@k-'rere | ti-'natow-@k-'rere |

Most of the roots in this class are listed in Table 4.11.

Table 4.11

| TI-NATOW | 'bark' | TI-TOWLEYAKW | 'flow' |
| :--- | :---: | :--- | :--- |
| TI-TA | 'plant' | TI-TAWLIL | 'pick up' |
| TI-TALILWA | 'leap' | TI-TOWLIL | 'lure' |
| TI-TAMKURYA | 'miss' | TI-TOWPRET | 'limp' |
| TI-TAN | 'stink' | TI-TOWUK | 'squat' |
| TI-TAREY | 'shoot' | TI-TOWPAEWA | 'recline' |
| TI-TOW | 'lash' |  |  |

The TI- class of verb roots is so semantically diverse that there is little point in attempting to conjure a unitary semantic characteristic that would apply to the entire group.
4.13.3. The members of the third conjugation class differ from other verb roots in the way that they accept Imperfective prefixation. These four roots infix the Imperfective prefix $k$ - within the root as well as prefixing the usual Factive and Imperfective markers.
(94) a. rey aewre-ke yey' -e

3 ms house-L come in/out-P
'He came into/out of the house'
b. rey aewre-ke d@-k -ye-k-ey'-ey

3 ms house-L FA-IP-come i/o-IP
'He's coming into/going out of the house'

The verbs in this class are listed in Table 4.12, along with their glosses and Imperfective forms.

Table 4.12

| WAEYA 'follow' | di-k -waekey'-ey |
| :--- | :--- |
| LAEYA 'come upstream' | di-k -laekey'-ey |
| WUYA 'come down' | di-k -wukey'-ey |
| YEYA 'come in/out' | d@-k -yekey'-ey |
| EYA $\quad$ come' | de-k -ey'-ey |

The last four of these are easy to characterize semantically as 'come' verbs, but the class does not include other 'come' verbs (see 5.4.). Moreover, WAEYA 'follow' takes a direct object rather than a direction NP as its complement. All the verbs in this class share the phonological property of ending in /Vya/.
4.13.4. All other roots except those discussed below fall into the same conjugation class. Such differences as exist among them are accounted for by the morphophonological rules presented in section 2.2. The paradigms for three such regular roots appear in Table 4.13 at the end of the chapter. Each of the three, along with ROKRA from the first conjugation class, illustrates different morphophonological properties.

The members of this, the largest, and residual, conjugation class, are again impossible to characterize as semantically unified.

Chapter 5, on the classification of predicate types, will provide a much more detailed classification of verb roots on morphosyntactic grounds.

### 4.14. Irregular verbs

Awtuw has six verb roots that are irregular or defective in their conjugation.
4.14.1. The most regular among these the common root EYA 'come'. EYA is regular in all respects but one - in the Imperative and Debitive, it takes the prefixes k@r- and war- respectively rather than the expected k@n- and wan-. It is tempting to analyze the /r/ as the first segment of the root itself, as this would condition deletion of the final /n/ of the two prefixes (see 2.2.) yielding the forms we actually find. But there is no evidence for this analysis in the rest of the conjugation. A root-initial/r/ would necessarily condition the deletion of the Factive prefix $\underset{-}{d}$ and the Nonfactive prefix $\underline{w-}$, and this does not occur with EYA as shown in example (95).

```
(95) a. rey war-eya
                                    b. k@r-eya
    3ms DB -come IM -come
    'He must come!' 'Come!'
```

c. wan pae-ya

1SG HR -come
'Let me come!
d. rey w -eya -re
$3 \mathrm{~ms} \mathrm{NF}-\mathrm{come}-\mathrm{FU}$
'He'll come'

```
e. rey d -eya -kay
3ms FA-come-PF
'He's come'
```

4.14.2. Next is the root (L)IWKENA 'ascend', whose initial segment /I/ vanishes when the Motion prefix ma- precedes the root, as indeed it frequently does.

$$
\begin{array}{cc}
\text { (96) a. liwkena-re } & \text { b. mae-wkena -re } \\
\text { ascend-FU } & \text { MT -ascend-FU } \\
\text { 'will ascend' } & \text { 'will go and ascend' } \\
\text { c. *mae-liwkena-re } \\
\text { MT -ascend-FU }
\end{array}
$$

4.14.3. Another slightly irregular verb is MA-WEY 'arrive', which is irregular only insofar as it requires the Motion prefix ma- and never occurs without it.
(97) a. ma-wey -kay b. *d@-wey -kay

MT-arrive-PF FA-arrive-PF
'has arrived'
4.14.4. WUTMAK 'arrive here' is defective in having only Past and Future forms. The Past form does not have the expected Factive prefix.

| (98) a. wutmak-e | b. ${ }^{*}$ d@-wutmak-e |
| ---: | ---: |
| arrive-P | FA-arrive-P |
| 'arrived here' |  |


| c. wutmak-re | d. ${ }^{*}$ d@-k -wutmak-ey |
| :--- | ---: |
| arrive-FU | FA-IP-arrive-IP |
| 'will arrive here' | $*$ 'is arriving here' |

4.14.5. AWKEY 'exist' does not occur in as full a range of forms as a regular verb. In fact, the form that I cite as the root, AWKEY is probably a crystalized imperfective stem formed from a root W and the imperfective circumfix -k--ey. If this conjecture is correct, then the initial vowel would have arisen from an epenthetic vowel regularly inserted between the factive prefix $\underline{d}$ - and the prefix component of the imperfective circumfix - $\underline{k}$ - and a regular w-metathesis rule would have reversed the order of the $-\underline{k}$ - and the - $\underline{w}-$. The future form, w-owkey-re, which occurs only rarely, demonstrates that the form is indeed crystalized because the regular future imperfective of a root W would have to be *k@-w-ey-re. There would be no factive prefix, the nonfactive prefix $\underline{w}$ - would be deleted before the $-\underline{k}-$, and there would
be no epenthetic vowel before the -k- to accept stress and condition w-metathesis. The past tense form, d-awkey-e, is much more common. The root appears very often in the Debitive wan-owkey. All three of these are formally regular for a root AWKEY. But the root occurs most frequently in an imperfective form unmarked for tense, d-awkey, sometimes with the Absentive prefix wa-, yielding d@-w-awkey.
4.14.6. Like AWKEY, IKIY 'stay, live, be alive' resembles an imperfective stem. But here if we were to assign the -k- and the -iy to the imperfective circumfix, the verb would most likely have to be derived from a root with the canonical form $O$, and it is difficult to see how a 0 root could condition the -iy allomorph of the imperfective suffix. It seems more probable that IKIY derives from the imperfective of IK 'sit'.

$$
\begin{array}{rr}
\text { (99) a. di-k -ik -iy } & \text { b. di-k -ikiy-iy } \\
\text { FA-IP-sit-IP } & \text { FA-IP-stay-IP } \\
\text { 'is sitting' } & \text { 'is staying' }
\end{array}
$$

Again like AWKEY, IKIY most frequently occurs in a form with Factive marking but no tense or aspect marking.

$$
\begin{array}{rr}
\text { (100) a. d-awkey } & \text { b. } \\
\text { FA-exist -ikiy } \\
\text { 'exists' } & \text { FA-stay } \\
\text { 'stays' }
\end{array}
$$

Table 4.13 VERB PARADIGMS

| FORM | -IK- | -KOW- | -PUYA- | -ROKRA- |
| :---: | :---: | :---: | :---: | :---: |
| HORTATIVE | 'pae-k | 'pa-kuw | pa-puy@ | 'pa-rokr@ |
| IMPERATIVE | ' kin-ik | ' kag-kuw | k@n-'puy@ | ' ka-rokra |
| PROHIBITIVE | ap-'ik-r@ | ap-'kow-r@ | a-pu'ya-r@ | ap-rok'ra-r@ |
| DEBITIVE | 'wan-ik | 'wag-kuw | wan-'puy@ | 'wa-rokr@ |
| NEG DEBIT | nil-'ik-r@ | nil-'kow-r@ | nil-pu'ya-r@ | nil-rok'ra-r@ |
| POTENTIAL | 'nae-w-ik-r@ | 'na-kow-r@ | na-pu'ya-r@ | na-rok'ra-r@ |
| FUTURE | 'w-ik-r@ | 'kow-r@ | pu'ya-r@ | rok'ra-r@ |
| NEG FUTURE | 'ka-w-ik-r@ | 'ka-kow-r@ | ka-pu'ya-r@ | ka-rok'ra-r@ |
| FUT PERFECT | w-ik-i'ka-r@ | kow-'ka-r@ | puy@-'ka-r@ | rokr@-'ka-r@ |
| FU IMPERFECT | ka-k-ik-'iy-r@ | k@-'kow-ey-r@ | k@-'puy-ey-r@ | k@-rokra-y-r@ |
| PERFECT | 'w-ik-ikay | d@-'kow-kay | du-'puy@-kay | rokr@-kay |
| NEG PERFECT | ka-'w-ik-ikay | 'ka-d-kow-kay | ka-d-'puy@-kay | ka-'rokr@-kay |
| IMPERFECT | 'di-k-ik-iy | d@-k@-'kow-ey | du-k-'puy-ey | d@-k'rokra-y |
| NEG IMPERF | 'ka-d-k-ik-i | ka-d-k@-'kow-ey | ka-k-'puy-ey | 'ka-k-rokra-y |
| PAST | 'd-ik-i | d@-'kow-o | 'du-puy-e | rokr-e |
| NEG PAST | 'ka-d-ik-i | ' ka-d-kow-o | ' ka-d-puy-e | ' ka-rokr-e |
| PAST PERF | d-ik-i'kay-e | d@-kow-'kay-e | du-puy@-'kay-e | rokr@-'kay-e |
| PAST IMPERF | d@-k-'ik-iy-e | d@-k@-'kow-ey-e | du-k-'puy-ey-e | d@-k-rok'ra-y-e |
| CONDITIONAL | 'w-ik-ik | 'kow-@k | pu'ya-k@k | rok'ra-k@k |
| POTL CONDTL | 'nae-w-ik-ik | 'na-kow-@k | na-pu'ya-k@k | na-rok'ra-k@k |
| FRUSTRATIVE | w-ik-ikik-'rer@ | kow-@k@k-' rer@ | puya-k@k-rer@ | rokra-k@k-rer@ |

5. Grammatical relations and verb classes
5.1. Grammatical relations

By and large, Awtuw is a language that depends heavily on pragmatic real-world considerations in recovering the role and reference of NPs in a sentence. As a result, the identification of grammatical relations is not entirely transparent.

Case marking alone does not constitute a reliable diagnostic for the identification of grammatical relations for three reasons:

1. Although subjects never bear case marking, there are other nouns that may occur in the clause that never bear case marking either (cf. 6.1. and 5.4.).
2. Object marking is obligatory on some direct objects and optional on others (cf. 6.2.).
3. Although indirect objects always bear object marking, certain direct objects do so too (cf.6.2.).

Furthermore, although Awtuw's basic word order is readily identifiable as verb-final, indeed as SOV, OS order and other permutations are far too common to allow word order to be of any value.in identifying grammatical relations.

It is possible, nevertheless, to isolate the three relations on the basis of a more complicated statement of their case marking properties in combination with other criteria.
5.1.1. The subject of a clause has a number of properties that distinguish it from other grammatical relations.

1. First, as I mentioned above, the subject never bears case marking. But the complementary nouns that cooccur obligatorily with the idiomtic composite verbs discussed in 5.4. never do so either. Note that in clauses whose subject is a pronoun, a personal name, or an NP with any determiner or modifier, this problem does not arise.

A simple substitution test can distinguish the subject in any clause where there is a doubt as to its identification. The complementary noun in an idiomatic composite construction is lexically specified. So if we substitute an appropriate pronoun coreferential with the noun in question, and the clause remains acceptable, we can be certain that that noun is the subject of the clause. If such a substitution results in an unacceptable clause, then we can identify the noun as a complementary noun.
(1) a. yaen yiw di-k -iyw' -ey
child water FA-IP-bathe-IP
'A child is bathing'
b. rey yiw di-k -iyw' -ey

3ms water FA-IP-bathe-IP
'He is bathing'
c. \#yaen rey di-k -iyw' -ey
child 3 ms FA-IP-bathe-IP
*'Child he is bathing'
2. Second, only the subject of the clause can trigger person agreement in those verb forms - Hortative, Imperative, and Debitive - that are marked for person. As first- and second-person subjects, where overt, are always pronominal, and therefore readily identifiable as subjects by their lack of case marking, I will illustrate with the third person form.
(2) a. yen-e yapor wan-ire

2SG-0 man DB -feed
'The man has to feed you'
b. *yen-e wan wan-ire

2SG-0 1SG DB -feed
*'I have to feed you'
3. Third, only subjects trigger number agreement on the verb. As number agreement is obligatory with these same three verb forms, I will again illustrate with debitive forms.
(3) a. yaen -wom tale wan-puye
child-PL woman DB -hit
'The woman must hit the children'
*'The children must hit the woman'
b. yaen tale -m wan-puya-mem
child woman-PL DB -hit -PL
'The women must hit the child'
*'The child must hit the women'
c. yaen -wom tale-waew wa-t -puye child-PL woman-DU DB-DU-hit
'The two women must hit the children'
*'The children must hit the two women'
4. Fourth, Awtuw has a variety of available strategies for indicating reference to an antecedent (cf.10.6.). Among these are zero anaphora, an ordinary personal pronoun, an emphatic pronoun, or an emphatic pronoun in combination with a reflexive marker. Where the pragmatics of the verb of a second clause are such that the subject of the preceding clause is at least as likely to have performed the action coded in the second verb as the object, then it will be interpreted as the antecedent for any of these strategies.
(4) Yawur Altiy-re du-puy-e, (rey(rey(yimay))) d -upow-ka

Yawur Altiy-0 FA-hit-P 3 ms 3 ms REFL FA-flee-PF
'Yawur hit Altiy and (Yawur) has run away'

But where the pragmatics of the second verb are such that the object of the first clause is more likely to have performed it the subject, then that object will be interpreted as the antecedent of a zero or ordinary personal pronoun subject in the second clause.
(5) Yawur Altiy-re du-puy-e, (rey) gow di-yel-e

Yawur Altiy-0 FA-hit-P 3 ms tear FA-cry-P
'Yawur hit Altiy and he (Altiy) cried'
(6) Yawm@n Awtiy-re tawkway de-kow -o, (rey) d -iypud-ka

Yawmen Awtiy-0 tobacco FA-give-P 3 ms FA-roll-PF
'Yawmen gave Awtiy tobacco and he (Awtiy)has rolled it'

This provides yet another example of the importance in Awtuw grammar of real-world considerations in comparison to grammatical relations. But the other two anaphoric strategies do provide firm evidence for a category of subject. When the subject of the second clause is an emphatic pronoun, with or without an accompanying reflexive marker, the antecedent is invariably interpreted as the subject of the preceding clause, regardless of what pragmatic considerations may seem to dictate.
(7) Yawur Altiy-re du-puy-e, rey-rey (yimay) gow di-yel-e Yawur Altiy-0 FA-hit-P 3ms-3ms REFL tear FA-cry-P 'Yawur hit Altiy and he, himself, cried.
(8) Yawm@n Awtiy-re tawkway de-kow -o, rey-rey (yimay) d -iypud-ka Yawmen Awtiy-0 tobacco FA-give-P 3ms-3ms REFL FA-roll -PF 'Yawmen gave Awtiy tobacco and he, himself, has rolled it'
5. Finally, in direct perception complements, the covert subject of the complement may appear as the direct object of the matrix clause. The object of the complement may not do so (cf. 10.2.3.).
(9) a. Wan Numoy aeye de-k -rokra-y -re d -ayn' -e 1SG Numoy food FA-IP-cook -IP-0 FA-smell-P ' I smelled Numoy cooking food'
b. Wan Numoy-re aeye de-k -rokra-y -re d -ayn' -e 1SG Numoy-0 food FA-IP-cook -IP-0 FA-smell-?
'I smelled Numoy cooking food'
c. Wan aeye-re Numoy de-k -rokra-y -re d -ayn' -e 1SG food-0 Numoy FA-IP-cook -IP-0 FA-smell-P
*'I smelled food being cooked by Numoy'
'I smelled the food that Numoy was cooking'
5.1.2. When the direct object is a pronoun or a personal name, where it is equal in empathy to the subject, or where the referents of the subject and the object are equally likely to have performed the action depicted in the clause (see 6.1.), it obligatorily takes object marking (cf. 6.2.). An indirect object takes object marking under all circumstances. So we can identify the common noun or quantifier direct object of a clause with a pronominal subject, because the clause will be acceptable whether it has the object suffix or not.

> (10) tey rame(-re) du-puy'-e
> 3fs man -0 FA-hit -P
> 'A woman hit a man'

By the same token, we can identify a common noun indirect object because the clause will be unacceptable if we remove its object suffix.

```
(11) a. tale rame-re tawkway d@-kow -o
        woman man -0 tobacco FA-give-P
        'A woman gave a man tobacco'
        b. *tale rame tawkway de-kow -o
        woman man tobacco FA-give-P
        *'A woman gave a man tobacco'
```

But we will need to apply another substitution test to distinguish pronominal or personal name direct objects and indirect objects. If we substitute a common noun coreferential with the object-marked personal name or pronoun, and it still requires object marking, then it is an indirect object. If the clause remains grammatical after the substitution and the deletion of the object marker, then it is a direct object.

```
            c. tale rey-e tawkway de-kow -o
        woman 3ms-0 tobacco FA-give-P
        'A woman gave him tobacco'
            d. tale rame-re tawkway de-kow -o
        woman man -0 tobacco FA-give-P
            'A woman gave a man tobacco'
            c. *tale rame tawkway de-kow -o
            woman man tobacco FA-give-P
        *'A woman gave a man tobacco'
            (12) a. tale rey-e du-puy'-e
    woman 3ms-0 FA-hit -P
        'A woman hit him'
            b. tale rame(-re) du-puy'-@
        woman man -0 FA-hit -P
        'A woman hit a man'
```

5.1.3. In summary, then, I define the three identifiable grammatical relations as follows:

1. The subject is that NP that never takes object marking, even when pronominal, that triggers person and number agreement on the verb, that is the obligatory antecedent of an emphatic pronoun, and that may occur as the direct object of the matrix clause in direct perception constructions.
2. The direct object is the NP that takes optional object marking when it is a common noun and when its referent is lower in empathy than, or less likely to have performed the action than, the subject.
3. The indirect object is that NP that takes obligatory object marking under all circumstances.
5.3. Major classes of verb roots

A number of factors conspire to complicate the classification of Awtuw verb roots on strictly formal grounds. First, all verbs, with a few exceptions discussed in section 4.14., have precisely the same properties with regard to the affixes they may bear. Second, the four conjugation classes described in the previous chapter do not correlate with any other grammatical or semantic categories. And third, many contexts permit, or even require, the deletion of NPs.

The analysis I present here will rest heavily on the number of NPs that cooccur with various verb roots and what their grammatical relation is to the verb.

The first thing to notice is that no verb root in Awtuw always occurs without an accompanying NP. NPs may be deleted in elliptical contexts to leave a verb form alone in a clause, but in unmarked, out-of-the-blue contexts, all Awtuw verbs have at least one accompanying NP.

Before embarking on the analysis it is important to point out that the Benefactive marker -kow- may be suffixed to a wide variety of verb roots. This suffix increases the valency of the verb so that it may cooccur with a beneficiary NP in addition to any NPs that they otherwise cooccur with. In establishing the basic classification of verbs, therefore, $I$ will be considering only those that do not bear this suffix.

[^0](13) a. rey(*-e) taw(-re) d-uwk -o.

3ms -0 tree-0 FA-fell-P
'The man felled the tree'

$$
\begin{aligned}
& \text { b. } \operatorname{Rey}(*-e)(* l a p e(-r e)) \text { d-imy'-e } \\
& 3 \mathrm{~ms}-0 \text { village-0 FA-run -P } \\
& \text { 'He ran (*a village)' }
\end{aligned}
$$

Note that the first NP in (13a), and the only possible NP in (13b), may not take the Object suffix although it is pronominal. It is therefore identifiable as a subject under the criteria described in the previous section.

In accordance with traditional usage, I call verbs that occur with direct objects, exemplified in (13a), transitive verbs, and verbs that do not, exemplified in (13b), intransitive verbs.
5.3.2. To complete the basic classification, we may further distinguish two types of transitive verbs - those that occur with an indirect object, and those that may only do so when marked with the Benefactive suffix.

$$
\begin{aligned}
& \text { (14) a. Awtiy rey yaen -re aepiyaen(-re) d@-kow -o } \\
& \text { Awtiy } 3 \mathrm{~ms} \text { child-0 chicken -0 FA-give-P } \\
& \text { 'Awtiy gave the child a chicken' } \\
& \text { b. Awtiy (*rey yaen(-re)) taw(-re) d-uwk -o } \\
& \text { Awtiy } 3 \mathrm{~ms} \text { child-0 tree-0 FA-fell-P } \\
& \text { 'Awtiy felled (*the child) a tree' } \\
& \text { c. Awtiy rey yaen -re taw(-re) d-uwk@-kow-o } \\
& \text { Awtiy } 3 \mathrm{~ms} \text { child-0 tree-0 FA-fell-BEN-P } \\
& \text { 'Awtiy felled a tree for the child' }
\end{aligned}
$$

In the interests of etymological consistency, I prefer the term bitransitive to the somewhat commoner ditransitive for verbs that take indirect objects.
5.3.3. Table 5.1 provides a few examples of verbs in each major class.

Table 5.1

## INTRANSITIVE

TRANSITIVE
BITRANSITIVE

| IK | 'sit' | AYTIR | 'fear' | KOW | 'give' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| IMYA | 'run' | UPWA | 'see' | MAK | 'tell' |
| AEY | 'go' | PUYA | 'hit' | IKRIY | 'name' |
| KAREY | 'spit' | ILYA | 'boil' |  |  |
| AKRA | 'crow' | KAY | 'put' |  |  |
| TI-TAN | 'stink' | YAWA | 'dislike' |  |  |

Following the pattern established in the classification of parts of speech, I represent the properties of the three major classes of verbs as binary features and display them on a matrix.

Table 5.2 (Major verb classes)


We can again exhibit the bifurcating structure of the classification as a tree.

Figure 5.1


### 5.4. Classification of intransitive verbs

5.4.1. The intransitive verbs are subject to further classification. When an NP marked with the Locative/Directional suffix (L) -ke (cf. 6.5.) cooccurs with some intransitive verbs, it is interpreted as a source or goal of motion. With other verbs, it may only denote a location.

$$
\begin{aligned}
& \text { (15) a. rey yaen (lape -ke) d@-k -aey-ey. } \\
& \text { 3ms child village-L FA-IP-go -IP } \\
& \text { 'The child is going (to the village)' } \\
& \text { b. rey yaen (lape -ke) di-k -imy-ey } \\
& \text { 3ms child village-I FA-IP-run-IP } \\
& \text { 'The child is running (in the village)' } \\
& \text { c. tey tale (aewre-ke) di-k -ik -iy } \\
& \text { 3fs woman house-L FA-IP-sit-IP } \\
& \text { 'The woman is sitting (in the house)' } \\
& \text { d. tey tale (aewre-ke) di-k -iywatn-ey } \\
& \text { 3fs woman house-L FA-IP-sneeze-IP } \\
& \text { 'The woman is sneezing (in the house)' }
\end{aligned}
$$

I call those verbs that can cooccur with a Direction $\mathbb{N P}$, as in (15a), Direction verbs.

These fall into two sets which form an interesting pattern. In one set, the Direction verb depicts a motion towards the speaker. In the other, it depicts a motion away from the speaker. The Direction NP may therefore refer to either a source or a goal, depending upon the point of view of the speaker. If the speaker adopts the perspective of being at the source of motion, he or she will select an appropriate verb from the first set. If the speaker is at the goal of motion, a verb from the second set will be chosen.

Within each set, there is a generic member, a member depicting motion with relation to a three - dimensional object, a member depicting arrival, and up/down pairs with relation to both slope and stream.

Table 5.3 (Direction verbs)

## SPEAKER $=$ SOURCE $\quad$ SPEAKER $=$ GOAL

| AEY | 'go' | EYA | 'come' |
| :--- | :--- | :--- | :--- |
| WANWA $\quad$ 'go in/out' | YEYA | 'come in/out' |  |
| ALWA $\quad$ 'go up(hill)' WUTKA | 'come up(hill)' |  |  |
| L-IWKENA $\quad$ 'go down(hill)' WUYA | 'come down(hill)' |  |  |
| YAKEY 'go upstream' LAEYA | 'come upstream' |  |  |
| LAK | 'go downstream' YAEKYA | 'come downstream' |  |
| MA-WEY $\quad$ 'arrive there' WUTMAK | 'arrive here' |  |  |

5.4.2. Other criteria distinguish further classes of intransitive verbs. First, certain verbs may occur as the first in a truncated verb serialization with any Direction verb. Such verbs may cooccur with a Direction NP in this construction (cf. 10.1.2.).

```
(16) a. rey lape -ke d -imya-d -lak -e
    3ms village-L FA-run -FA-go DS-P
    'He ran downstream to the village' (cf. (15b))
```

```
b. *rey (lape -ke) d -ik -d -lak -e
    3ms village-L FA-sit-FA-go DS-P
    *'He sat downstream to the village'
```

I call the verbs that may occur in this construction Motion verbs and list them in Table 5.4.

Table 5.4 Motion verbs

| APTA | 'fly' |
| :--- | :--- |
| IMYA | 'run' |
| LAWEY | 'get out of the way' |
| OWKANEY | 'climb' |
| PAKRA | 'creep' |
| TI-TALILWA | 'leap' |
| TI-TOWPRET | 'limp' |
| UPOKA | 'flee' |
| WA | 'swim' |
| WAEYROW | 'float' |

5.4.3. We can further distinguish those intransitive verbs that may cooccur with a Location NP in a verb phrase serialization and those that may not. The example given in (17b) is actually acceptable, but not with the intonation characteristic of this type of serialization (cf. 10.1.5.).
(17) a. Tey aewre-ke d -ik -i, yilmaet d -il -i 3fs house-L FA-sit-P string FA-twist-P
'She sat in the house and twisted string'

```
b. *Tey aewre-ke d@-karey-e, yilmaet d -il -i
    3fs house-L FA-spit -P string FA-twist-P
    *'She spat in the house and twisted string'
```

The verbs that may occur in such serializations have an interesting semantic property. They may depict either the posture or the action of adopting that posture. |' t

Table 5.5 (Posture verbs)

| IK | 'sit' |
| :--- | :--- |
| IWREK | 'stand' |
| OWNA | 'lie' |
| TI-TOWUK | 'squat' |
| TI-TOWPAEWA | 'recline' |

5.4.4. Other intransitive verbs do not lend themselves to further classification on the basis of formal properties. Nevertheless, it is worth distinguishing some of the semantic distinctions among them, even though they do not correlate with morphosyntactic classes.

We have already isolated Direction, Motion, and Posture verbs. Other intransitive verbs fall into the semantic categories Weather, Bodily function, Act, Event, Physical state, and Location.

The unique Weather verb, IT 'rain', has the lexically specified subject yele 'rain'.

Bodily function verbs include verbs like IWTOW 'vomit', IYWATNA 'sneeze', IYWENA 'hiccup', RATOW 'nod off', and UKLA 'awaken'. I would include in this class $\backslash$ verbs like newtiy 0 ONA 'sleep',
and piy LANYA 'smile', as well as animal noise verbs like TI-NATOW 'bark'.

There are a few intransitive Act verbs, like TAREY 'shoot'.
There is also a small number of $\quad$ Event predicates like IAMLAKNA 'fall'.

Physical state verbs include OKW 'be burning', RAREN 'be alight', and REYAKW 'be bald'.

Finally, there are a few verbs that predicate location or existence. These include AKLEY 'hang', WAEYROW 'float', PAMA 'live together in a place', IKIY 'stay', and AWKEY 'exist'. Note that IKIY is also a physical state verb meaning 'be alive'.

Two of the verbs in this class, AWKEY and IKIY, are interesting in themselves and $I$ will discuss them further in section 5.8 .

Figure 5.2 illustrates the classification of intransitive verbs.

Figure 5.2.


### 5.5. Classification of transitive verbs

Transitive verbs fall into three main classes according to whether they derive intransitive verbs or not and whether it is the subject or the object of the transitive verb that becomes the subject of the intransitive verb.

Verb morphology does not reflect these derivations. It is only through the argument structure of the predications the verb participates in that the derivation becomes apparent.

Some transitive verbs do not derive corresponding intransitive verbs at all. A deleted subject or object can only be interpreted as anaphoric or irrelevant. Because these verbs are always transitive, I call them cardinal transitive verbs.

```
(18) a. Rey aeye rokra-kay
    3ms food cook -PF
    'He has cooked food'
b. Aeye rokra-kay
    food sook -PF
    *'The food has been cooked'
    'Someone has cooked food'
c. *Rey rokra-kay
        3ms cook -PF
        'He has cooked'
```

Another class derives intransitive verbs whose subject corresponds to the direct object of the transitive form. This class of verbs bears a formal resemblance to the class of English verbs that Lyons
(1963.359-360) calls 'causative' verbs. I am therefore adopting his term for the corresponding class of Awtuw verbs.

On the whole, causative verbs do not permit the deletion of their objects.
(19) a. Peyaw yaw d@-k -law -ey

Peyaw pig FA-IP-bake-IP
'Peyaw is baking a pig'
b. *Peyaw d@-k -law -ey

Peyaw FA-IP-bake-IP
*'Peyaw is baking (something)'
c. Yaw de-k -law -ey
pig FA-IP-bake-IP
'A pig is baking'
d. Yaw-re d@-k -law -ey
pig-re FA-IP-bake-IP
(Someone) is baking a pig'

The third class of transitive verbs derives an intransitive verb whose subject corresponds to the subject of the transitive form. I again follow Lyons's (1968.360-361) terminology in calling verbs in this class 'object deletion' verbs.
(20) a. Poytin wan-e d@-k -aytir-iy

Poytin 1SG-0 FA-IP-fear -IP
'Poytin is afraid of me'

```
b. Poytin d@-k -aytir-iy
    Poytin FA-IP-fear -IP
    'Poytin is afraid'
```

c. wan-e dG-k -aytir-iy
1SG-0 FA-IP-fear -IP
' (Someone) is afraid of me'

Treating these derivational possibilities as features, we can display the basic distinctions among transitive verbs on a tree.

Figure 5.3


### 5.5.1. Cardinal transitive verbs

The cardinal transitive verbs fall into four subclasses. First, we can identify those verbs that can cooccur with arguments bearing Locative case marking (cf. 6.5.). Most of the cardinal transitive verbs may cooccur with such NPs, but only three take such NPs as arguments. These NPs are identifiable as arguments because they must be interpreted as either a source or a goal. Locative NPs occurring with other cardinal transitive verbs are interpreted as locations.
(21) a. Rey yekne-re aewre-ke di-kay-kay 3ms axe -0 house-L FA-put-PF
'He has put the axe into the house'

> b. Rey yekne-re aewre-ke d-iknaer-kay
> 3 ms axe -0 house-L FA-break -PF
> 'He has broken the axe in the house'
> *'He has broken the axe (in) to the house'

```
The three roots in the Directional classare KAY (1) 'put', KAY (2)
'remove', and LAET 'pour'.!
```

Next, we can isolate the single verb that can cooccur with an argument in the Instrumental case (cf. 6.3.) which is interpreted as a source.
(22) a. Wan topor tawkway Nimpiy-tek d@-k' -@

1SG that tobacco Nimpiy-I FA-get-P
'I got that tobacco from Nimpiy'
b. Wan topor tawkway Nimpiy-tek $r^{\prime}$-e

1SG that tobacco Nimpiy-I consume-P
'I smoked that tobacco with Nimpiy'
*'I smoked that tobacco from Nimpiy'
c. Wan rey yaw-re alme -rek d -iy -i 1SG 3ms pig-0 arrow-I PA-shoot-P
'I shot the pig with an arrow'
*'I shot the pig from an arrow'

The root KA ,
is, as I said, the unique member of the Source class.

Then we can segregate those verbs that can take a predication as their complement (cf. 10.2.). As example (23b) illustrates, while other cardinal transitive verbs may cooccur with similar constructions, they must be interpreted as purpose or result clauses (cf. 10.2.3. and 10.2.6.).
(23) a. Wan Yawur w -aey-re-re nenaen $d @-k$-lay -ey 1SG Yawur NF-go -FU-O thought FA-IP-bear-IP
'I think that Yawur will go'
b. Wan Yawur w -aey-re-re kil d -alow -o

1SG Yawur NF-go -FU-0 speech FA-speak-P
*'I spoke that Yawur would go'
'I spoke so that Yawur would go'

Table 5.6

| ROOT | GLOSS |
| :--- | :--- |
| UPWA | 'see' |
| WAN | 'hear' |
| AYNA | 'smell' |
| LAY (1) | 'like' |
| YAWA | 'dislike' |
| LAY (2) | 'think' |
| ARNEY | 'forget' |
| NAK | 'remember |

The balance of the cardinal transitive verbs are all actions with the exception of the one remaining static verb WUN 'love'. They do not fall into further subclasses on formal criteria.

I list most of
them in Table 5.7.

Table 5.7

5.4.2. Causative verbs

Causative verbs do not lend themselves to subclassification on formal morphosyntactic grounds. Each of them, when transitive, depicts an action with a more or less clearly defined end point, and typically resulting in a state. When intransitive, they depict a situation where the subject undergoes a process with a definable end point.

Many causative verbs have lexically specified objects, or a very small class of permissible objects. Table 5.8 lists a number of the verbs in this class, along with examples of their specified objects.

Table 5.8

| ROOT | GLOSS | SPECIFIED OBJECT |
| :---: | :---: | :---: |
| OKW (2) | 'singsing' | riwtow 'ceremony' |
| TI-TOW (2) | 'strike' | pom 'slit gong' |
| ADEN | 'sew' |  |
| AKLA | 'dig' | uy 'hole' |
| ALWA (3) | ' bear' | Wate 'seed', etc. |
| ETWA | 'extinguish' | tapwo 'fire' |
| EYTRA | 'sweep' | e.g. aewre 'house', |
| IL | 'net' |  |
| ILYA | 'boil' |  |
| IR | 'sharpen' |  |
| IRP | 'close ${ }^{\text {' }}$ | e.g. aewre 'house' |
| IYPUD | 'roll,fold' |  |
| LAELNA | 'paint' |  |
| LAW | 'bake' |  |
| LAY (3) | 'bear' | yaen 'child' |
| LOPWA | 'open' | aewre 'house' |
| RA (2) | 'braid' | e.g. take 'ring' |
| TI-TA | 'plant' | wiye 'garden' |
| TI-TOW (3) | 'lacerate' |  |
| UD | 'tie' |  |
| UWK | 'cut' |  |
| UY | 'build' | aewre 'house' |
| WAEY | 'scrape' | yamo 'sago' |
| WORYA | 'wash ' |  |

5.4.3. Object deletion verbs

The object deletion verbs comprise a small class and are not susceptible to further subclassification. Table 5.9 lists the six object deletion verbs that have come to my attention.

Table 5.9

| ROOT | GLOSS | ARGUMENTS |
| :--- | :--- | :--- |
| AEL (2) | 'bite' | A(0) |
| IWREY | 'call' | A(0) |
| AYTIR | 'fear' | A(0) |
| LWA | 'angry' | A(0) |
| OR | 'copulate' | A(0) |
| RANK | 'scratch' | A (0) |

5.§. Bitransitive verbs

There are only seven underived bitransitive verbs in Awtuw. These are subject to subclassification on much the same basis as were the transitive verbs. Some of them derive transitive verbs whose direct object is the same as the direct object of the bitransitive clause. Others derive transitive verbs whose direct object is the same as the indirect object of the bitransitive form. One verb does not derive a transitive verb at all. I call these classes indirect object (IO) deletion, object deletion, and cardinal bitransitive verbs, respectively.
5.6.1. One verb, KOW 'give', does not derive an ordinary transitive verb. If either the direct or the indirect object is missing from a clause, it is either recoverable from context or irrelevant.
(24) a. Yawur yen-e aeymen-re kow -re

Yawur 2SG-0 knife -0 give-FU
'Yawur will give you the knife'
b. Yawur aeymen-re kow -re

Yawur knife -0 give-FU
*'Yawur will give the knife'
'Yawar will give someone the knife'
c. Yawur yen-e kow -re

Yawur 2SG-0 -0 give-FU
'Yawur will give you something'
*'Yawur will give you'

```
5.6.2. Three bitransitive verbs derive transitive verbs whose direct object corresponds to the direct object of the bitransitive verb. These are MAK 'say,tell', YARNA 'ask', and IRKAY 'apportion'.
(25) a. Ruwmay Yawur w-aey-re-re wan-e d@-mak -e
Ruwmay Yawur NF-go -FU-0 1SG-0 FA-tell-P
'Ruwnay told me that Yawur would go'
b. Ruwmay Yawur w-aey-re-re d@-mak -e
Ruwmay Yawur NF-go -FU-0 FA-tell-P
'Ruwmay said/told someone that Yawur would go'
c. Ruwmay wan-e d@-mak -e
Ruwmay 1SG-0 FA-tell-P
'Ruwnay told me something'
```

Two of these verbs, MAK 'say, tell' and YARNA 'ask' may take complement clauses, as in example (25) (cf. 10.2.2. and 10.2.5.). The second of these may also occur with an ordinary direct object NP
in the sense 'ask about', if the object is human, or 'ask for', if not. Example (26) illustrates that when there are two human NPs, the clause is systematically ambiguous as to which $N P$ is the direct, and which the indirect object. But when a single human NP occurs as the object, it is obligatorily interpreted as the direct object unless another direct object is recoverable from context.

```
(26) a. Ruwmay Yawur-re wan-e di-yaern'-e
    Ruwmay Yawur-0 1SG-0 FA-ask -P
    'Ruwmay asked me about Yawur/Yawur about me'
b. Ruwmay Yawur-re di-yaern'-e
    Ruwnay Yawur-0 FA-ask -P
    'Ruwmay asked about Yawur'
    'Ruwmay asked Yawur for it/about him/her'
c. Ruwmay tawkway-re wan-e di-yaern'-e
    Ruwmay tobacco-0 1SG-0 FA-ask -P
    'Ruwmay asked me for the tobacco'
```

The third verb in this class takes only non-sentential NPs as direct object.
(27) Rom aeye (nam-o) w -irkay -re

3PL food $1 \mathrm{PL}-0$ NF-apportion-FU
'They'll apportion the food (to us)'
5.6.3. The object deletion verbs are IKRIY 'name', IRA 'feed', and IYMALEY 'teach'. The last of these takes an imperfective nominal construction as its complement (cf. 10.2.3.).
(28) Tey wan-e (yilmaet d@-k -nak -ey-re) w -iymaley-re 3fs 1SG-0 string FA-IP-hold-IP-0 NF-teach -FU 'She'll teach me (to make string figures)'

The first, IKRIY 'name', takes a personal name as direct object. This verb has the unusual property that the direct object may not bear object case marking.
(29) Raew riwtale yaen -re (Kampo(*-re) d -ikriy-e 3DU couple child-0 (Kampo -0 FA-name -P 'The couple named the child (Kampo)'

Finally, IRA 'feed', typically takes a direct object that is edible, although mythical characters sometimes give each other inedible substances to eat.
(30) Rey yamo(-re) nemet tey-ke yaen di-k -ir -iy

3ms sago -0 mother 3fs-PS child FA-IP-feed-IP
'The mother is feeding her child the sago'

### 5.7. Classification of verbs

We can now represent the structure of the classification of all verbs as a tree.
Figure 5.4


### 5.8. Benefactive verbs

The Benefactive marker -kow-, transparently derived from the root KOW 'give' (cf. 3.7., 4.12., and 10.1.), has the property of increasing the number of objects a verb may cooccur with by one. An intransitive verb so marked would be able to cooccur with one object, a transitive verb with two, and a bitransitive verb with three. As in English and many other languages, the Benefactive NP may refer to an entity on whose behalf or for whose benefit the action is performed.

```
(31) Tapwo an -e d@-k -okwo-kow-ey
    fire 2DU-0 FA-IP-burn-BEN-IP
    'The fire is burning for you two (for your benefit)'
(32) Wawpey yen-e yaw d@-k@ -kow-o
    Wawpey 2SG-0 pig FA-get-BEN-P
    'Wawpey got a pig for you (behalf/benefit)'
(33) Kukrown yen-e wan-e yilmaet d@-k -nak -ey-re w-iymaley-kow-re Kukrown 2SG-0 1SG-0 string FA-IP-hold-IP-0 NF-teach -BEN-O 'Kukrown will teach you to make string figures for me'
```

5.9. Idiomatic composite constructions

A small number of Awtuw verb roots occur in idiomatic composite constructions with an obligatory, lexically specified noun which may not accept object marking. Some roots only occur in such constructions, others occur in other constructions in different meanings. As I mentioned earlier, this class of verbs intersects the categories of transitivity. Most of the verbs in this class denote intransitive bodily processes. Often the complementary noun resembles an 'internal accusative' in that its meaning does not contribute to the meaning of the composite because the verb root alone conveys the
whole meaning and there is no apparent derivational relationship between the noun and the verb.

```
(34) Tey ewkit(*-re) d@-k -owk -ey?
    3fs cough -0 FA-IP-cough-IP
    'Is she coughing?/Does she have a cough?'
```

The complementary noun in these composite constructions is restricted in the modification it may accept. Only an Intensifier may cooccur with it.
(35) a. Awkay mok@l(*-re) (yapor) d@-wun -@

Awkay laugh -0 very FA-love-P
'Awkay laughed (a great laugh)/(really laughed)'
b. Awkay (*daeni) mok@l (*waruke) (*urunk) d@-wun -@

Awkay other laugh big three FA-love-P
'Awkay laughed (*another/*a big/*three laugh(s))'

One of the verbs in this class IW 'excrete', conditions one of two complementary nouns - riy 'faeces' and naw 'urine'

```
(36) Wan riy /naw(*-re) p@-mae-'w -ney
    1SG faeces/urine-0 HRT-GO -excrete-FIRST
    'Let me go shit/piss first!'
```

Table 5.10 presents a full list of the bodily process verbs that fall into this class:

Table 5.10

ROOT
GLOSS

| IW | 'excrete' | riy 'faeces', naw 'urine' |
| :--- | :--- | :--- |
| IYWA | 'bathe' | yiw 'water' |
| LANYA | 'smile' | piy 'point, tooth' |
| OWKA | 'cough' | ewkit 'cough' |
| PUD ('hug') 'blink' | new 'eye' |  |
| WUN ('love') 'laugh' | mok@l 'laugh' |  |
| YEL | 'cry' | gow 'tear' |

One of the other verbs that participates in an idiomatic composite construction is an intransitive verb.

```
(37) Karpen ram(*-re) d -omw-ka
    basket full?-0 FA-full-PF
    'The basket is full'
```

The complementary noun, am, that cooccurs with OMW 'full' does not occur in any other context, which makes it difficult to gloss.

Three members of the class, awaey LAY 'like, want', mane ('ear') ARNEY 'forget', and nenaen-e NAK ('hold in thought') 'remember', are cognition verbs and may take nominal objects or complement constructions (cf. 10.2.).
(38) a. Yen tader yamo(-re) awaey (*-re) d@-k -lay -ey? 2SG this sago -0 like? -0 FA-IP-bear-IP
'Do you like this sago?'

```
b. Rey tawkway d@-k -ra -y -re awaey(*-re) lay -ka
    3ms tobacco FA-IP-consume-IP-0 like? -0 bear-PF
    'He likes to smoke'
```

```
(39) Wan yen-e/w -aey-re-re mane(*-re) d -arney -kay
    1SG 2SG-0/NF-go -FU-0 ear -0 FA-forget-PF
    'I've forgotten you/to go'
```

The third of these is unlike any of the others in the class in requiring its complement to bear Locative marking - nenaen-e 'thought-L'.
(40) Wan yen-e/w -aey-re-re nenaen -e nak -@kay

1SG 2SG-0/NF-go -FU-0 thought-L hold-PF
'I remember you/to go'
$\Lambda$ fourth cognition verb, nenaen LAY ('bear thought') 'think', may take complements only.
(41) Rey d -aey-ka-re wan nenaen lay -e

3 ms FA-go -PF-0 1 SG thought bear-P
'I thought he had gone'
5.10. Existence and possession

The most ubiquitous state verb is the irregular verb AWKEY, whose morphological peculiarities are described in 4.14. When AWKEY acts as an intransitive verb, what it predicates is the existence of a non-human entity in a place.
(42) wanklow aewre-ke d -awkey
turtle house-L FA-exist
'The turtle is in the house'
(43) yaw d -awkey tade
pig FA-exist here
'Here is some pig'
(44) rey kelaklow yankeyke d -awkey-e

3 ms bell small FA-exist-P
'The little bell was [still] around'

Examples (42) and (43), which are quoted from narratives, illustrate that the category AWKEY is sensitive to is humanness and not animacy, because the pig in (42) is dead, but the turtle in (43) is alive. Under certain circumstances - when a non - human NP refers metaphorically to a human - the subject of AWKEY may be human.
(45) wan-e piyren-yaen rey wan-owkey

1sg-0 dog -child there DB -exist
'The puppy has to stay there for me'

Here piyren-yaen is a metaphor for a promised bride.

More commonly, posture verbs absorb the functions of AWKEY for human subjects. In other words, in expressing the location of a human being, the additional category of posture is obligatory.
(46) Yawm@n aewre-ke d@-k -owna-y

Yawn@ house-I FA-IP-lie -IP
'Yawm@n is lying down in the house'
(47) Takiy taw -wey -e di-k -iwrek-ey

Takiy tree-base-L FA-IP-stand-IP
'Takiy is standing at the base of the tree'
(48) mod@k Altiy di-k -ik -iy rey now Altiy FA-IP-sit-IP there
'Altiy is sitting there now'

There is one verb that constitutes an exception to the general rule stated above, unless we construe the category of posture very broadly.

This is IKIY 'live in a place, stay'.
(49) mod@k Wutpey d -ikiy ade
now Wutpey FA-live here
'Now Wutpey lives here'
(50) Wawpey kae-d -aey-ka, rey d -ikiy t@

Wawpey NG -FA-go -PF 3ms FA-stay here
'Wawpey hasn't gone, he's staying here'

Finally, the root PAMA 'live together' occurs with plural subjects only.

> (51) rey lape -ke yaen -wom-wo d@-pama-kay-e 3ms village-L child-PL -only FA-live-PF -P
> 'Only children had lived in the village'

From the meaning of AWKEY illustrated above i.e. the existence of a non-human entity in a place, one would expect it to participate in a possessive construction with the human possessor in the Object case. And this does, indeed, happen.
(52) wan-e tawkway a -awkey

1sg-0 tobacco FA-exist
'I have (some) tobacco'

But this is not the usual possessive construction. It is far more common to find AWKEY acting precisely as if it meant 'have', with the possessor unmarked for case. Where AWKEY displays number agreement, as it usually does not, it agrees in number with the possessor.
(53) wan tawkway d -awkey

1 sg tobacco FA-exist/have
'I have (some) tobacco'
(54) nom aey d -awkey/d -awke-m

1 pl betelnut FA-have/FA-have-PL
'We have (some) betelnut'
(55) rey yekne urunk d -awkey/*d -awke-m

3 ms axe three FA-have / FA-have-PL
'He has three axes'

In such constructions, the possessed NP never has object marking. But one would not expect object marking on an indefinite low-empathy object in a clause with a high-empathy subject (cf. 6.1. and 6.2.). Possession of a definite NP is expressed in a verbless predication with a possessive NP acting as the predicate of a definite subject referring to the possession.
(56) a. wan-ke piyren d-awkey

1SG-PS dog FA-exist
'I have a dog'
b. rey piyren wan-wan-ke

3ms dog 1SG-1SG-PS
'The dog is mine'

## 6. Case marking

Case marking in Awtuw distinguishes two classes of nominals. Personal pronouns and nouns marked for number may take possessive, but not locative marking (see 3.6.2.). Nouns unmarked for number, Demonstratives, Quantifiers, Obliviatives, and Interrogatives may take locative marking but not possessive marking. A third person personal pronoun must follow such nominals and bear possessive marking for them. (See 7.6.) The pronoun agrees with the possessor in number and, if singular, optionally in sex gender.

This section considers primarily the functions of the case markers, which I list here, for convenience, together with their allomorphs. Further discussion of the morphophonological alternations affecting these suffixes is to be found in Chapter 2, and there is a discussion of the formal properties of nouns and pronouns in chapter 3.

| 1. Unmarked | 0 |
| :--- | :--- |
| 2. Object (O) | -re/-te/-e |
| 3. Instrumental/Comitative (I) | $-\underline{k}$ |
| 4. Possessive (P) | $-\underline{k e}$ |
| 5. Locative/Directional (L) | $-\underline{e} /-\mathrm{ke}$ |
| 6. Vocative (V) | $-\underline{e} /-\mathrm{wo}$ |

This analysis assumes that functions are to be assigned to forms - the formal case markers delimit the cases and each case has one or more syntactic or semantic functions,

Whitehead (1981) has developed a typology for case marking in Papuan languages based on the distribution of case markers in nouns and pronouns and their functions in marking Agents(=transitive subjects $=$ A(Dixon 1979), Actors $(=S)$, Patients $(=0)$, Recipients and

Benefactives. Awtuw's NP marking, as well as its pronoun marking, falls into his class IIb, which includes those languages, $19 \%$ of his sample of 35 , that have zero marking on $A s$ and $S$ and a case marker on Os. Like $13 \%$ of the sample, Awtuw marks Benefactives, Recipients, and Patients in the same way. (See Feldman and Seiler 1983)
6.1. Unmarked case

The Subject of the clause, as identified above in section 5.1., is always unmarked.
(1) Rey d -ey -e.
(2) Eywe m-alw -o
3SG FA-come-P
ancestor GO-descend-P
'He came' 'The ancestor descended'

Predicate NPs are also unmarked.
(3) Miytiy yene tukre rame, rey wok@k rame yapor. Miytiy NEG short man 3 ms tall man very 'Miytiy isn't a short man, he's a very tall man.'

As we saw in Chapter 5, any Object, including the recipient of a bitransitive verb or the beneficiary of a verb with benefactive marking, may accept Object marking. This section will examine under what circumstances Object marking is obligatory, and under what circumstances it is optional.

In order to describe the relative tendencies of $N P$ s to bear Object marking, we must first develop an Empathy hierarchy. NPs conforming to the types to the left are higher in empathy than those to the right. Object NPs of the highest empathy always take Object marking. Those of the lowest empathy rarely take Object marking, and those in between have a greater or lesser propensity to take it. This depends
particularly upon whether or not the object NP is definite, and the relative empathy of the object and the subject. The conditions under which object NPs take Object marking are discussed in detail below in section 6.2.

Figure 6.1
$[\mathrm{PRO}]>[\mathrm{PrN}]>[+\mathrm{HUMAN}]>[+$ ANIMATE $]>[$-ANIMATE $]$

The Object of a clause is optionally marked when it is lower in empathy than the Subject (cf. 6.2.). Consequently, low-empathy Common noun Objects are frequently unmarked.
(4) Yaw rom d -ir -m -e
pig 3PL FA-chase-PL-P
'They hunted pig.'
(5) Waypawiy kelaklow dQ -ka -@

Waypawiy bell FA-get-P
'Waypawiy got a bell'

### 6.2. Object case

The Object suffix (0) has two forms:

On Nouns unmarked for number, including personal and place names, on demonstratives, on interrogatives, and on forms of the verb, it appears as -re [-FEMALE]/-te [+FEMALE]. The [+FEMALE] form occurs optionally where the referent is female, the [-FEMALE] form elsewhere. (See Chapter 2 for a discussion of the factors conditioning the quality of the suffix vowell.

```
(6) a. yaw-re b. opor-re c. Peyaw-re d. Napeyre-te
    pig-0 that-0 Peyaw-0 Napeyre-0(F)
e. tey dow-k -l -ey-re rame
    3sf FA -IP--angry-IP-0 man
    'She was an irritable person.'
```

On personal pronouns, nouns marked as [+DUAL] -waew or [+PLURAL] -wom, and nouns or adjectives marked as [+GENERIC] -yaenim, the form is -e/-i/-o/-@, again determined by morphophonemic considerations.

```
(7)
a. nan-@
            b. am -o
                                    c. Witit-yaenim-e
                                    d. Mc wke-waew-e
            1DU-0 2PL-0
                        Witit-GEN -0
                                    Mowke-DU -0
    'us two' 'you' 'Witit people' 'Mowke and someone'
e. yaen -wom-c
        child-PL -0
        'children'
```

All Object NPs consisting of a Pronoun of any type, Demonstrative, Interrogative, Obliviative, or Personal, take Object marking obligatorily. Example (8b) illustrates that the obligatory interpretation of an unmarked pronoun is as the Subject.

```
(8) a. rey yapor an -e/ram-o/tader-re/yeran-re du-puy-e
    3ms man 2DU-0/3PL-0/this -0 /who? -0 FA-hit-P
    'The man hit you two/them/this one/who?'
        b. rey yapor an /rom/tader/yeran du-puy-e
        3ms man 2DU/3PL/this/who? FA-hit-P
        'You two/they/this one/who? hit the man'
    cf. *'He hit you two/them/this one/who?'
```

A clause with two unmarked pronouns is ungrammatical, as in (9b).
(9) a. Wan rey-e du-k -puy-ey
1SG 3ms-0 FA-IP-hit-IP
'I'm hitting him'
b. *Wan rey du-k -puy-ey
1SG 3ms FA-IP-hit-IP
*'I'm hitting him/*He's hitting me'

All Object NPs that include a Personal Name also take obligatory Object marking. An unmarked Personal name can only be interpreted as the Subject.

```
(10) a. rey piyren Kampo-re d -ael -i
        3ms dog Kampo-0 FA-bite-P
        'The dog bit Kampo'
        b. rey piyren Kampo d -ael -i
        3ms dog Kampo FA-bite-P
            'Kampo bit the dog'
    cf. *'The dog bit Kampo'
```

Two unmarked Personal Names in a clause can only be interpreted as
conjoined Subject NPs.

```
(11) a. Yowm@n-re Yawur du-k -puy-ey
    Yowm@n-0 Yawur FA-IP-hit-IP
    'Yawur is hitting Yowm@n'
        b. Yowm@n Yawur du-k -puy-ey
        Yowm@n Yawur FA-IP-hit-IP
    'Yowm@n and Yawur are hitting [someone]'
    'Yowm@n and Yawur hit [customarily]'
    cf. *'Yawur is hitting Yowm@n/*Yown@n is hitting Yawur'
```

When the Object is equal to or higher than the Subject in empathy, it must take the Object suffix. (cf. examples (8) and (10)). When two unmarked NPs cooccur in a clause, the one that is higher on the empathy hierarchy is again obligatorily interpreted as the Subject.

```
        a. Tey tale -re yaw d -ael -i
            3fs woman-0 pig FA-bite-P
            'The pig bit the woman'
```

            b. Tey tale yaw(-re) d -ael -i
            3fs woman pig -0 FA-bite-P
            'The woman bit the pig'
        cf. *'The pig bit the woman'
    When two unmarked NPs equal in empathy cooccur in a clause, they are interpreted as conjoined Subjects.
(13) a. piyren-re yaw di-k -ael -iy
dog -0 pig FA-IP-bite-IP
'The pig is biting the dog'

```
    b. Piyren yaw di-k -ael -iy
        dog pig FA-IP-bite-IP
        'The dog and the pig bite'
cf. *'The dog is biting the pig'/
    *'The pig is biting the dog'
```

Common Noun Objects whose referents are either human or definite tend to bear case marking.
(14) a. Waw@y nam-o yaw ma-kow -ka... Gawer yaw-re d@-kay-e. MB ipl-O pig GO-give-PF father pig-0 FA-put-P
'Uncle has given us a pig...Father put the pig away.'
b. Lamu -r lamu -te d@-k -@

Y//S15m Y//Sb -0 FA-get-P
'The younger brother took the younger sister'

When an Object is overtly marked as definite by a demonstrative, a personal pronoun, or a possessive in the Determiner slot (cf. 7.3.), it is especially likely to bear case marking, even if the intrinsic empathy of the noun is low.
(15) Nemet rey tapwo-uyk -re d -ayn -e
mother 3ms fire -smell-0 FA-smell-p
'[His] mother smelled the odor of fire.'

But if the Subject is higher on the empathy hierarchy than the object and the Object is a common noun, Object marking is optional even where the referent of the $N P$ is both human and overtly definite.
(16) Yen topor tale yikiyr yipke d@-k -ब
$2 s g$ this woman two where FA-get-P
'Where did you get those two women?'

In bitransitive clauses, the Indirect Object takes Object marking obligatorily. Indirect Objects are almost invariably Pronouns or Personal Names. But Common noun Indirect Objects do not have the same freedom to occur unmarked as do Direct Objects and it was for this reason that $I$ recognized the category in 5.1 .

It follows that pronominal Indirect Objects will invariably take Object marking.
(17) Nam-o yaw ma-kow -ka rey

1PL-0 pig GO-give-PF 3ms
'He has come and given us some pig'

Similarly, Indirect Objects that are Personal Names always bear Object marking.
(18) Kampo-re wan tawkway do-kow -o

Kampo-0 1SG tobacco FA-give-P
'I gave Kampo tobacco'

What makes it necessary to recognize Indirect Objects as a category is that they must be marked even when they are Common Nouns.
(19) Yaen -wom- e rom yaw-re d@-kow -o.
child-PL -0 3PL pig-0 PA-give-P
'They gave the pig to the/some children.'

Indeed, the Indirect Object must be marked even if it is lower in empathy than the Direct Object.

As example (20a) illustrates, both the Direct and the Indirect Object may bear Object marking.

```
(20) a. yapor-re wan Kaempiy-te d@-kow -o
    man -0 1SG Kaempiy-0 FA-give-P
    'I gave Kaempiy to a man'
b. ?Rey yapor wan Kaempiy-te d@-kow -o
    3ms man 1SG Kaempiy-0 FA-give-P
?'I gave the man to Kaempiy'
```

Included in the category of Indirect Objects are both the Recipient NP that cooccurs with a bitransitive verb and the Benefactive NP that cooccurs with a verb marked as Benefactive with KOW.
(21) Meytow-re Kapol -tale -re d -irka-kow -o

Meytow-0 Parisko-woman-0 FA-get -give-P
'He bought a Parisko woman for Meytow'

In those rare situations where a bitransitive verb bears the Benefactive suffix, all three Object NPs may be marked. The verb KOW 'give' may not bear the homophonous Benefactive suffix.
(22) Wan Yawur-re Awtiy-re tawkway(-re) di-yaern@-kow-o 1SG Yawur-0 Awtiy-0 tobacco -0 FA-ask -BEN-P
'I asked Yawur for tobacco for Antiy' /
'I asked Awtiy for tobacco for Yawur'

This suffix also occurs optionally on the verb of a subordinate clause, including relative clauses, complements, and, oddly, subject complements (cf. 10.2.4.).
(23) Rey Yowmen-re d -upw-o rey-ke aeye d@ -k -ra -y -re

3sg Yowmen-0 FA-see-P 3SG-PS food FA-IP-eat-IP-0
'He saw Yowmen eating'

The Instrumental suffix $-\underline{k}$ is always attached to a form with the

Object suffix as mentioned below in section 6.4.

### 6.3. Possessive

The Possessive suffix (P) -ke/-k@ occurs only on the same set of nominals as does the vowel-initial allomorph of the Object suffix, i.e. pronouns and nouns with number marking.
(24) a $\quad$ rom-k@
b. Yawur-waew-ke
c. Kamlakw-yaenim-ke
3PL-P
Yawur-DU -P
Kamnum -GEN -P
'their' 'Yawur and someone's' 'the Kamnum people's'

The Possessive suffix marks NPs bearing a range of semantic relations, such as:

1. Alienable possession, i.e. possession of animals, land, things, etc.

$$
\begin{aligned}
& \text { (25) a. Karowpe-yaenim-ke niw } \quad \text { b. wan-ke piyren-yaen } \\
& \text { Karowpe-GEN -P ground } 1 \mathrm{sg-p} \text { dog -child } \\
& \text { 'The Karowpes' land' } \\
& \text { 'my puppy' }
\end{aligned}
$$

2. Inalienable possession, i.e. possession of body parts or kin.

| (26) a. wan-ke maklake | b. Mowke-waew-ke nemet |
| :---: | :---: |
| 1 sg-p head | Mowke-DU -P mother |
| 'my head' | 'the mother of Mowke and someone |
|  | (ie. his brother)' |

3. The place of origin.

| (27) a. wiye rey-ke maen | b. maew rey-ke yiyay |
| ---: | :--- |
| garden 3ms-P tulip | bush $3 \mathrm{~ms}-\mathrm{P}$ game |
| 'tulip from the garden' | 'game from the bush' |

```
c. Taeypil rey-ke rame
    Talbipi 3ms-P man
    'man from Talbipi'
```

4. The subject of a nominalized verb also may occur with possessive marking. (cf. Chapter 10.2-3.).

### 6.4. Instrumental/Comitative

The Instrumental/Comitative (I) marker - $\underline{k}$ is always attached to a form with Object marking. The form of this suffix does not vary.

$$
\begin{array}{cc}
\text { (28) a. Kewmaey-r@-k } & \text { b. yekne-re-k } \\
\text { Kewnaey -O-I } & \text { axe -0 -I } \\
\text { 'with Kewmaey' } & \text { 'with an axe' } \\
\text { c. wan-e-k } & \text { d. Mokael-te-k } \\
\text { 1sg-0-I } & \text { Mokael-0-I } \\
\text { 'with me' } & \text { 'with Mokael' }
\end{array}
$$

1. This suffix marks all Instruments.
(29) rey taw yekne-re-k d -ukw -o

3sg tree axe -0 -I FA-fell-P
'He felled the tree with an axe'
2. It also marks all Comitatives. Section 4.9. contains a discussion of the effects of comitative NPs on number marking on the verb.
(30) Yawepiy-re-k aeye de-k -ra -y -e

Yawopiy-0 -I food FA-IP-eat-IP-P
'He used to eat food with Yawepiy'
3. The personal source of getting with the verb KA 'ge.t' bears the

Instrumental/Comitative suffix.(cf. 5.6.)
(31) Siypik-yaenim-e-k tapwo d:@-k' -@

Sepik -GEN -O-I fire FA-get-P
' [We] got fire from the people of the Sepik.'
4. Finally, the verb in temporal clauses is marked as Instrumental/comitative (cf. 10.3.).

```
(z2) rey d -ey -e nom aeye d@-k -ra - faew-ey -wa -re-k
    3sg FA-come-P we food FA-IP-eat-start-IP-just-0 -I
    'He came just as we were starting to eat'
```

6.5. Location/Direction

The Location/Direction suffix (L), has the form -ke/-ko/-k@ after vowels and -e/-o/-@ after consonants. The vowel quality of the suffix is determined by a vowel harmony rule described in Chapter 2. It occurs on NPs referring to places, including Demonstratives, but never personal pronouns. It may occur on an adjective or an intensifier if it is the last word in such a noun phrase, as in (33d) and (33e).
(33) a. Kamlakw-o b. Witit-i c. aewre-ke

Kamnum -L Witit-L house-L

| d. wiytape yapo-ke | e. kapem waruke-ke |
| :---: | :---: |
| river very-L | pond big $-L$ |
| 'to/from/at a real big river' | 'to/from/at a big pond' |

The Location/Direction suffix marks the source or the goal of motion, if it is a place, i.e. a place name, a direction, or denotes some physical locality, e.g. a house, a road, a river, a part of a house or a tree, etc. It also mariks the location of a state, process, or
action, again provided that the NP denotes a place. The meaning of the associated verb determines the interpretation of Locative NP as either location or direction, and if direction, whether from or to. Thus, unless the clause contains a Direction verb, the Locative NP will denote a location. If the clause contains the verb AEY 'go', one of the other Goal verbs (cf. 5.2.) or a serialization with AEY, then the Locative NP will denote a goal. And if the clause contains the verb EYA 'come', one of the other Source verbs (cf. 5.2.), or a serialization ending in EYA, then the Locative will be a source. There are a number of 'location' nouns that commonly compound with other nouns to make the reference of the Locative more explicit (cf. 3.7.2.). The following list includes all such nouns that have come to my attention:

Table 6.1

| or | 'top' | or-e | 'above, on top of' |
| :---: | :---: | :---: | :---: |
| diyake | 'under' | diyake-ke | 'under, beneath, below' |
| gake | 'under' | gake-ke | 'far under' |
| taeytaey | 'near' | taeytaey-e | ' near(touching)' |
| teywake | 'near' | teywake-ke | 'near' |
| lukw | 'middle ${ }^{\text {c }}$ | lukw-o | 'inside, between, among' |
| niw | 'ground' | niw-e | 'outside' |
| wurne | 'heart' | wurne-ke | 'in front of' |
| yekmak | 'back' | yekmak-e | 'behind ${ }^{\text {' }}$ |
| amole | 'side ${ }^{\prime}$ | amole-ke | 'beside' |
| yil | 'edge ${ }^{\prime}$ | yil-e | 'aiongside' |
| tepyiw | 'side (house)' | tepyiw-e | 'next to a house' |
| talten | 'end " | talten-e | 'in front/back of a house' |
| kodank | 'corner " ' | kodank-e | 'at corner of a house' |

```
(34) a. aewr'+or
    b. aewre rey--k' or(-e)
    house+top house 3ms-PS top-I
    'roof' '(on) top of a house'
c. aewr'tor -e
    house+top-L
    'on top of a house/on a roof'
(35) Piyren yikiyr aewre+diyake-ke d@-k -owna -y
    dog two house+under -L FA-IP-sleep-IP
    'Two dogs are sleeping under the house'
```

Locative NPs are almost exclusively adverbial in nature. Awtuw speakers will occasionally accept a Locative NP as a nominal modifier, but with noticeable reluctance. Such constructions are therefore clearly not felicitous, and almost certainly not grammatical.

```
(36) a. *rey tiwle -ke taw
    b. *rey taw tiwle -ke
    3ms mountain-L tree 3ms tree mountain-L
    *'the tree on the mountain' *'the tree on the mountain'
```

A restrictive relative clause, as in (37a), or a non-restrictive relative clause, as in (37b), are the only structures available to express such notions.
(37) a. rey tiwle -ke di-k -iwrek-ey-re taw

3ms mountain-L FA-IP-stand-IP-0 tree
'the tree that is standing on the mountain'
b. rey taw, tiwle -ke di-k -iwrek-ey

3ms tree mountain-L FA-IP-stand-IP
'the tree, which is standing on the mountain'

### 6.6. Vocative

The Vocative suffix (V) occurs only when the speaker wishes to attract the attention of the addressee (cf 12.3.). It does not mark nouns in the course of conversation. The only nouns that accept this suffix are personal names and kinship terms that bear no number marking.
(38) gaye -wo, yen k@r-ey@!
father-V 2sg IMP-come
'Daddy, come here!'
(39) Yowmen-@, yen tawkway kan-k@ ker-eya

Yowmen-V 2sg tobacco IMP-get IMP-come
'Yowmen, bring some tobacco!'

## 7. Structure of the Noun Phrase

Awtuw word order is, on the whole, very free. Where the constraints are most rigid is within the Noun Phrase. This section describes the constituents of the NP, their possibilities of cooccurrence, their order, and the permissible permutations of canonical order.

### 7.1. Schematic of NP structure

We can begin with a simple presentation of a few rules that describe the structure of the Awtuw NP. These expansion rules do not represent a commitment to generative theory, but rather a convenient schematic representation of the basic structure of the Awtuw NP.

1. NP $-\rightarrow$ NP ( $N P$ * ) (CASE MARKER)
2. NP $-->$ (DETERMINER) (NOM*) (QUANTIFIER)
3. DET $\rightarrow\left\{\begin{array}{l}\text { KINSHIP TERM } \\ \text { QUANTIFIER } \\ \text { POSSESSIVE NP } \\ \text { PRONOUN }\end{array}\right\}$
4. POS $\rightarrow\left\{\begin{array}{l}(\text { NP ) PERSONAL PRONOUN } \\ \text { N-NUMBER MARKER } \\ \text { A-yaenim }\end{array}\right\}$-ke
5. NOM $\rightarrow\left\{\begin{array}{l}(S)(C N(N M)(A P)) \\ A-\underline{\text { yaenim }} \\ \operatorname{PIN}(-\underline{\text { yaenim }}) \\ \operatorname{PrN}(N M)\end{array}\right\}$
6. AP ---> (ADJECTIVE) (INTENSIFIER)

Note the following abbreviations:

| A $=$ Adjective | NP $=$ Noun Phrase |
| :--- | :--- |
| AP $=$ Adjective phrase | P1N $=$ Place name |
| $\mathrm{CN}=$ Common Noun | POS $=$ Possessive NP |
| DET $=$ Determiner | PPR $=$ Personal Pronoun |
| $\mathrm{I}=$ Intensifier | PrN $=$ Personal name |
| $\mathrm{N}=$ Noun | PRO $=$ Pronoun |
| NM $=$ Number marker | $\mathrm{Q}=$ Quantifier |
| NOM $=$ Nominal constituent | $\mathrm{S}=$ Clause |

I will defer discussion of rule 1 and begin with the expansion of the simple NP. As I mentioned, there are a number of constraints on the cooccurrence of various constituents within the $N P$, and $I$ will describe these as they become relevant in the course of the ensuing discussion.

### 7.2. The minimal NP

In Chapter 3 we saw that a large and internally complex class of lexemes, which we denominated Substantives, can be identified by precisely this criterion - the ability to occur as the unique constituent of an NP. This class includes all Quantifiers, all Nouns - Common nouns, Kinship terms, Personal Names, and Place Names - and all Pronouns - Personal Pronouns, Demonstrative Pronouns, Interrogative Pronouns, and Obliviative Pronouns.

We can begin by illustrating simple NPs and examine the more complicated structures later. Rule 2 stipulates that an NP may consist of either a Determiner, a Quantifier, or a constituent $I$ have designated Nominal.
7.2.1. Example (1) illustrates Quantifiers in the role of sole
constituent of an NP.
(1) a. Kokot d-aey-ka b. Yikiyr ma-wey-e
all RL-go-PF two arrive-P
'Everyone has gone' .'Two arrived'
7.2.2. Next we can look at the expansions of the Determiner as the sole constituent of the NP. At this point it is relevant to mention that there is a constraint that prevents a Kinterm from occurring as the Determiner of any NP that does not have a Personal name in the Nominal constituent. Furthermore, since an NP with a Quantifier as the sole constituent in the Determiner slot is indistinguishable from one with a Quantifier as the sole constituent in the Quantifier slot, examples (2) and (3) illustrate only Pronouns and Possessives as expansions of the Determiner.


Examples (2) and. (3) display the following structures:

7.2.3. We can now turn to the expansions of the NOM given in rule 5. To begin with, the NOM may consist of an Adjective marked with the Generic suffix - yaenim. Bare adjectives may not occur as the only constituent of NOM, as was pointed out in 3.3.
(4) a. wok@k-yaenim
b. yitam -yaenim
tall -GEN generous-GEN
'tall people' 'generous people'

Next, the NOM may expand to a Place name, as shown in example (5).
(5) Taeypil waruke

Talbipi big
'Talbipi is big'

A Place name may carry the Generic suffix.
(6) Worke -yaenim d -aey-ka

Seinim-GEN RL-go -PF
'The people from Seinim have gone'

A Personal name, with or without number marking, can also fill the NOM slot.
(7) a. Awkay d -aey-e

> b. Altiy-wom d -aey-m-e
> Altiy-PL RL-go -PL-P
> 'Altiy-mob went'

The NOM can also expand to $S$ (cf. 10.2.), which may be any clause,
although there are constraints on its complexity. Example (8) illustrates this structure.
(8) a. Tey wan-e [Yawur d -aey-ka-re] d@-mak-@ 3fs 1SG-0 Yawur RL-go -PF-0 RL-say-P
'She told me that Yawur had gone'
b. Yen rom-o [w -aey-re-re] de-yaern@-ka?

2SG 3PL-0 RL-go -FU-0 RL-ask -PF
'Have you asked them to go?'

It can also expand to a Common noun, with or without number marking or an Adjective phrase, as illustrated in example (9).

(9') a/e.




7.2.4. Finally, NOM may expand to an $S$ and any of the structures involving a Common noun displayed above.
(10) d -aey-ka-m -re tale -m medaye waruke RL-go -PF-PL-O woman-PL good big
'The good women who have gone are big'

Example (10') displays the structure of the NOM in (10).
(10')


While I exemplify the functions of an $S$ in the structure of the $\mathbb{N P}$ in this chapter, as in examples (8) and (10), I defer detailed discussion of such Ss to Chapter 10.

### 7.3. Constraints on the Determiner

As Rule 3 shows, there are four potential candidates for inclusion in the Determiner slot, a Kinterm, a Quantifier, a Pronoun, and a Possessive NP.
7.3.1. As I mentioned above, there is a constraint pertaining to Kinship terms - if a KT occurs as the DET, then there must be an unmodified Personal Name in the NOM slot. The members of the class of Kinship terms are isolated formally in 3.3. and listed exhaustively, with some discussion, in 11.1. Example (11) illustrates this
constraint and (11') displays the structure of (11a).


While example (12a) might be interpreted as a case of a Kinterm determining a Quantifier as displayed in (12a'), (12b) illustrates that (12a") is a more plausible analysis.
(12)
a. eywe yikiyr
b. raew eywe yikiyr ancestor two 3DU ancestor two 'two grandparents' 'the two grandparents'
(12) a'.


$b^{\prime}$.

7.3.2. There are four formally distinguishable classes of Pronouns, any of which may occur as the Determiner of an NP. Any Pronoun may
determine any Quantifier or a NOM that expands to one of the following:
a. (S) $(C N(N M)(A P))$
b. PlN -yaenim
c. A -yaenim

Example (13) illustrates each type of pronoun determining a Quantifier and (14-16) illustrate each of the four classes of Pronoun determining each of the three relevant expansions of NOM.
(13) a. rom kokot
b. tadu-m orkweynaywo

3 pl all this-PL four
'all them' 'these four'
c. yeran yikiyr? d. menerey urunk
who? two OBL three
'Who two?' 'What's their three names'
(14) a. rom d -aey-ka-m -re yaen -wom waruke 3pl RL-go -PF-PL-0 child-PL big
'the big kids who have gone'

```
b. topo-m d -aey-ka-m -re yaen -wom waruke
        that-PL RL-go -PF-PL-0 child-PL big
    'those big kids who have gone'
        c. yeran d -aey-ka-m -re yaen -wom waruke
        who? RL-go -PF-PL-0 child-PL big
        'which big kids who have gone'
```

```
    d. menerey d -aey-ka-m -re yaen -wom waruke
    OBL RL-go -PF-PL-0 child-PL big
    'what's-their-name big kids who have gone'
(15) a. rom Meley-yaenim
    3pl Meley-GEN
    'the people from Meley'
    b. tadu-m Meley-yaenim
    this-PL Meley-GEN
    'these people from Meley'
        c. yeran Meley-yaenim?
        who? Meley-GEN
        'which people from Meley'
        d. menerey Meley-yaenim
        OBL Meley-GEN
    'what's-their-name from Meley'
(16) a. rom wok@k-yaenim
        3pl tall -GEN
    'the tall'
        b. tadu-m wok@k-yaenim
        this-PL tall -GEN
        'these tall people.'
        c. yeran wok@k-yaenim
        who? tall -GEN
        'which tall people?'
```

```
d. menerey wok@k-yaenim
    OBL tall -GEN
    'what's-their-name tall people'
```

Two classes of Pronoun are more restricted in their ability to determine NOMs. Interrogative and Obliviative pronouns may not determine either Place Names or Personal Names. For our purposes, number marking on Personal Names is irrelevant.
(17) a. *yeran?/menerey Yawur
who? /OBLIV Yawur
*' Who?/what's-his-name Yawur'
b. *yakum?/menerey Wutlakw
what? /OBLIV Gutaiye
*'What?/whatchamacallit Gutaiye'

Personal and Demonstrative Pronouns may determine Personal names and Place names without number marking, as shown in example (18).
(18) a. rey/tader Awtiy $3 \mathrm{~ms} /$ this Awtiy '(this) Awtiy'
b. rom/tadu-m Wutlakw
$3 \mathrm{pl} /$ this-PL Gutaiye
'the/these people from Gutaiye'
c. rey/topor Wutlakw
$3 \mathrm{~ms} /$ that Gutaiye
'(that) Gutaiye (over there)'

Personal Pronouns and Demonstrative Pronouns, which are freer to determine a variety of NOM structures, bear number marking. The

Demonstratives exhibit a plural/non-plural distinction and may agree with their referent in number. If the referent of the $N O M$ is singular or dual, the Demonstrative must be unmarked for number. And if the referent of the NOM is plural, the Demonstrative may bear plural marking.

> (19) a. tader/*tadum tale naydowo this / these woman one
> 'This one woman'
> b. tader/*tadum tale yikiyr
> this / these woman two
> 'These two women'
> c. tader/tadum tale -m liwke
> this / these woman-PL, many
> 'These many women'

The Personal Pronouns make an obligatory three-way distinction in number. A plural NOM conditions a plural Personal pronoun in its DET, a dual NOM, a dual DET, and a singular NOM, a singular DET.
(20) a. rey/* raew/* rom yaen naydowo

3ms/ 3DU / 3PL child one
'the one child'
b. *rey/raew/*rom yaen -waew yikiyr
$3 \mathrm{~ms} / 3 \mathrm{DU} / 3 \mathrm{PL}$ child-DU two
'The two children'
c. *rey/* raew/rom yaen -wom

3ms/ 3DU /3PL child-PL
'The children'

Furthermore, non-plural Demonstratives, third person singular Personal Pronouns, and the Obliviatives exhibit a female/non-female distinction. If the referent of the NOM is either animate and male, or inanimate, then the DET must be in the non-female form. But if the referent of the NOM is female, the DET may be either female or non-female.

```
(21) a. Rey/tey tale
        3ms/3fs woman
        'the woman' 'this woman'
            c. menerey/menetey tale
        OBLIV-m/OBLIV-f woman
            'What's-her-name'
(22) *tey/*ade-t/*menetey tiyl /yompurkay
    3fs/ DEM-f/ OBLIV-f stone/youth
*'the/this/what's-her-name stone/youth'
```

The last point I want to make here with regard to the Pronouns is the function of the third person Personal Pronouns. These are by far the most common determiners in any discourse. Their function is to mark an NP as definite, which accounts for their ubiquitousness. While definite NPs need not be determined by such a pronoun, all NPs determined by rey, tey, raew, or rom are definite.
7.3.3. Quantifiers are more constrained than Pronouns in the range of NOMs they may determine. A $Q$ may not determine any NOM that is otherwise quantified in any way, either by $a \quad Q$ in the Quantifier constituent or by number marking on the Noun. Furthermore, a Q may not determine any Proper Noun or S. Quantifiers may only determine otherwise unquantified Common nouns.

```
(23) a. *kokot Yawur/Taeypil(-yaenim)/uy d -akl@-ka-m -re
    all Yawur/Talbipi -GEN hole RL-dig -PF-PL-0
    *'all Yawur(s)/Talbipi(people)/who have dug a hole'
b. *kokot yaen -waew/yaen -wom/yaen urunk
    all child-DU /child-PL /child three
    *'both/all(three) children'
```

There is one Quantifier nevertheless worthy of special discussion. Like the other Quantifiers, daeni may occur in either the Determiner or the Quantifier component.

When daeni determines an NP, it means 'one, another, the other'.

| (24) a. daeni rame monokene | b. daeniyaen <br> another man bad |
| :---: | :---: |
| 'another bad man' | 'another child' |

When it appears in the NOM constituent of an otherwise determined $N P$, it retains this meaning.
(25) opo -m aewre daeni
that-PL house other
'those other houses'

But if it occurs as the Quantifier of an undetermined NOM, then it marks the NP as indefinite.

| (26) a. tale owyaen daeni | b. wom aeyle daeni |
| :---: | :---: |
| woman old a | coconut dry a |
| 'an old woman' | 'a dry coconut' |

It is conceivable that the basic meaning of an NP with daeni in any position is that the referent of that $N P$ is not the most salient
instance of the type that the NP denotes (Avery Andrews, pc).

What is odd is that when daeni seems to be most determiner-like semantically, when it signals indefiniteness, it must occur in the Quantifier slot, where we would expect it to be less determiner-like. And when it occurs as a DET, it has the less determiner-like meaning. It may be possible to explain this in terms of daeni's predeliction to mean precisely 'one', in this position. Daeni substitutes for the numeral naydowo 'one' in many contexts. Indeed, naydowdowo 'only one, alone' appears to occur much more frequently than the bare numeral, probably because daeni is the unmarked form for 'one'.

Once we have established that daeni as a Quantifier is very much like the numeral 'one', it requires no great leap to see how it has come to mean 'a', as the numeral 'one' has in many other languages.

For example, in Tongan, despite a three-way distinction of referentiality - the article ha 'non-referential' contrasting with the article e/he 'referential' which in turn contrasts with the article e/he with an accompanying shift in stress to the last vowel in the NP 'definite' - the commonest way of marking an NP as referential and indefinite is to use a construction with the numeral:
(27) mai fo'i suluka e taha give-me $N$ CL cigarette NUM CL one 'Give me a cigarette'

Awtuw has a construction precisely parallel to the Tongan.
(28) wan-e tawkway daeni kag-kuw 1SG-0 tobacco one IMP-give 'Give me a cigarette'
7.3.4. Possessive NPs may determine any NOM or Quantifier without restriction.

```
(29) a. nom-ke Altiy
    1PL-PS Altiy
    'Our Altiy'
                                'Our Kamnum '
c. nom-ke yaw
                                    d. nom-ke gaye
    1PL-PS pig
                            1PL-PS father
    'Our pig'
    'Our father'
e. nom-ke urunk
                                    f. nom-ke d -aey-ka-m -re
    1PL-PS three
        1PL-PS RL-go -PF-PL-0
    'Our three' 'Our having gone'
```

Three types of lexemes may take Possessive marking. Any noun with the plural suffix $-\underline{m}$ may take Possessive marking. Forms with the dual, plural, and generic suffixes also accept the Possessive suffix. And all Personal Pronouns are eligible to take -ke.

Nouns unmarked for number, including Proper and Place names, demonstratives and interrogatives are followed by the possessive form of a third person personal pronoun. The pronoun carrying possessive marking agrees in number and gender with the referent of the $N P$ in accordance with the principles discussed above.
(30) Menyew rey-ke yar

PrN he -PS ancestor
'Menyew's ancestor'
(31) Taeypil rey-ke trewel

PIN he -PS trouble
'Talbipi's trouble'
(32) nemane-t tey-ke wom
o//sib-F 3fs-PS coconut
'[her] elder sister's coconut'

Examples (30-32) illustrate the following structure:


A Possessive NP may embed another Possessive NP.
(33) Wiykatuw-yaenim-ke owyim -ke kil

PIN -GEN -PS ancestors-PS story
'the story of the ancestors of the people of Wiykatuw'

Example (33') displays the structure of (33).


### 7.4. Structure of the Adjective phrase

As indicated in rule 5 above, only an NP with a Common noun in the NOM constituent may cooccur with an Adjective phrase. Example (34) illustrates the ungrammaticality of cooccurrences of APs with Personal names, Place names, and Adjectives with the generic suffix. Note that I defer discussion of multiple Nominal constituents to section 7.6.
(34) a. *Kewmaey (waruke) (yapor)

$$
\begin{aligned}
& \text { Kewmaey big very } \\
& \text { *'a (very) big/quite the Kewmaey' } \\
& \text { b. *Kamlakw (waruke) (yapor) } \\
& \text { Kamnum big very } \\
& \text { *'a (very) big/quite the Kamnum' } \\
& \text { c. *yitam-yaenim (waruke) (yapor) } \\
& \text { generous-GEN big very } \\
& \text { *'(very) big/quite the generous people' }
\end{aligned}
$$

Note that these constructions are only ungrammatical in the
interpretation of the $A P$ as attributive. Identical utterances in which the AP is a predicate are perfectly acceptable.

Any lexical item identifiable as an Adjective by the criteria described in Chapter 3, except the Intensifiers, may fill the Adjective slot. Intensifiers have a slot of their own.

Rule 6 stipulates that an AP may consist of either an Adjective or an Intensifier, or both. Example (35) illustrates all three possibilities and (35') displays their structure.
(35) a. yompurkay waruke
young man big
'a big young man'
b. yompurkay yapor
young man very
'quite the young man'
c. yompurkay waruke yapor young man big very
'a very big young man'

(35') a. | NP |
| :---: |
|  |
|  |
| NOM |


yompurkay waruke yompurkay yapor


Note that one of the three Intensifiers, yankeyke 'a little, slightly' is also a DIMENSION Adjective meaning 'small', and a Quantifier meaning 'a little (quantity)', and may occur in either the $A$ or the $I$
slot.
(36) a. tiyl yankeyke
stone small
'a small stone'
b. tiyl worne yankeyke
stone light little
'a rather light stone'

Yankeyke may double as an Intensifier in tongue-in-cheek contexts if the Adjective is not yankeyke.
(37) a. ulwun waruke yankeyke yankeyke, tenk-tapem-kwo
python big slightly slightly tank-trunk-CMP
'a very slightly big python, like a rain tank'
b. tale yankeyke mede/yapor/yankeyke woman small very/very /slightly
'a very/slightly small woman'
c. *tale yankeyke yankeyke yankeyke woman small slightly slightly
*'a very slightly small woman'

### 7.5. Word order permutations

When a Common noun is high in empathy, Adjectives often, and more complex APs sometimes, precede it. Examples like (38) and (39) motivate the abbreviated Empathy hierarchy in (40).
(38) a. waruke tale b. *waruke piyren *waruke taw big woman big dog big tree 'big woman'
(39) a. wuwkliwke tale b. wuwkliwke piyren *wuwkliwke taw
long woman long log long tree
'tall woman' 'long dog'
(40) Abbreviated Empathy Hierarchy
$[+$ HUMAN $]>[$ +ANIMATE $]>[$-ANIMATE $]$

In fact, certain classes of adjectives have a strong tendency to precede high empathy nouns. VALUE adjectives, e.g. monokene 'bad', AGE adjectives, e.g. owyaen 'old', and HUMAN PROPENSITY adjectives, e.g. yitam 'generous' are most likely to precede the nouns they modify, other classes of adjectives, as in (41d) and (41e), do so too.

```
(41) a. yitam rame b. mede rame
        generous man good man
    'generous man' 'good man'
        c. owtiykayaen tale d. yankeyke tale
        old woman smail woman
    'old woman' 'small woman'
        e. kupkwap tale
        fast woman
        'fast woman'
```

Most PHYSICAL PROPERTY adjectives either may not cooccur with human nouns, as in (41f), or become HUMAN PROPENSITY adjectives in such constructions, as in (41h). When a PHYSICAL PROPERTY adjective, as such, modifies a human noun, it tends to depersonify that noun, reducing it in empathy. So these are more likely to follow the noun, as in (41j).

```
f.*tale wam
    woman blunt
    *'blunt woman'
```

g. melpeyaw k@mkam pawpaw hard
'hard pawpaw' 'stingy woman'

Occasionally, a full Adjective Phrase will precede the noun, as in (42a). But it is more common for the Intensifier to follow the Noun, as in (42b).
(42) a. yanyankeyke mede nemet tiny real mother 'real tiny mother'
b. waruke rame yapor big man very 'very big man'
(43) ulwun waruke yapor/mede/yankeyke python big very/very/slightly 'a very/slightly big python'

### 7.6. Nominal serialization

The Awtuw Noun Phrase as I have analyzed it here is constrained as to the amount of information it can accommodate. In particular, no AP contains more than one adjective. The question inevitably arises as to how a speaker modifies a noun when it is necessary to attribute
more than one property to that noun.

The answer to this question resides in an explanation of the multiple NPs that Rule 1 permits, and the multiple nominal constituents that Rule 2 permits. I have coined the term nominal serialization to describe this phenomenon.
7.6.1. Where an NP enters into a construction of this sort, it most frequently serializes a nominal constituent consisting of a noun and an adjective.
(44)
a. rey tukre rame, kalakw rame, yitam rame

3ms short man quiet man generous man
'the short, quiet, generous man'

Example (44a') displays the structure of (44a).


The Determiner in this NP prevents any ambiguity from arising with regard to coreferentiality. If the three NPs were not coreferential, the most idiomatic construction would concatenate equative predications (cf. 8.4.), as in (44b).
b. (urunk rame,) daeni rame tukre rame, daeni rame ... three man one man short man one man '(three men,) one man is short, one man is...'

Example (44c) illustrates the consequences of concatenating NPs quantified with a numeral.

```
c. (yiyle daeni mak orkweynaywo rame,) tukre rame urunk,
    three a plus four man short man three
    '(nine men), three short men, three quiet men,
    kalakw rame urunk, yitam rame urunk
    quiet man three generous man three
    and three generous men'
```

7.6.2. The second NP may also consist of a more fully expanded NOM constituent, including an $S(c f .10 .2 .8$.$) .$
(45) owyim -ke kil [ [Wiykatuw+owyim rokw-paeyk-e-re] kil] ancestors-PS story Wiykatuw+ancestors do -first-P-0 story
'a traditional story that the ancestors of Wiykatuw originally told'

The structure of this NP is displayed in (45').

7.6.3. The second NP may also consist of an unadorned $S$ functioning as a non-restrictive Relative clause, as in (46). Example (46 ) displays their structure.
(46) [ [ rev gawer ] [ wive -taw du-k -uwk -iy-re ] ]

Oms father garden-tree RL-IP-fell-IP-0
'the father, who was felling a garden tree'
(46')


Appositional relative clauses may also be verbless predication as in example (47).
(47) [ [ daeni frame ] [ yaey tiling -neney] ]
another man skin ringworm-y
'another man, who had ringwormy skin'

Where the subject of the relative clause is deleted by coreference with the head noun, a predicated Adjective Phrase must be fully expanded to [Adjective Intensifier], as in example (48).
(48) a. [wiytape yapor] waruke yapor river very big very 'real big river'
b. *[wiytape yapor] waruke
river very big
c. *[wiytape waruke] yapor
river big very
7.6.4. The second $\mathbb{N}$ in a serialization may also include a Determiner
in such non-restrictive constructions as (49).
(49) [ [ rom ny d -akla-ka-m -re ramen] [ Trunk ramen] ]

3PL hole RL-dig -PF-PL-0 man three man
'the three men who had dug the hole'
(49')

7.6.5. Probably the single most pervasive form of $N P$ serialization places an NP consisting of a DET in serial with a more fully expanded NP.
(50) [ [ worm aeyle] [ topor] -re]
coconut dry that -0
'that dry coconut'
(51) [ [ tapwo ] [rey-rey ] -ked ]
fire $3 \mathrm{~ms}-3 \mathrm{~ms} \quad-\mathrm{PS}$
'his very own fire'
(50')


This non-restrictive strategy is used to permit NBs other than Personal Pronouns and number-marked nouns to accept possessive marking.

```
(52) [ [ wive ] [ rey ] -ike ]
    garden 3ms -PS
    'garden's'
(53) [ [ Yawur ] [ rey ] -ke ]
    Yawur 3ms -PS
    'Yawur's'
(54) [ [ tadet owtiykayaen tale ] [ thy ] -kef ]
        this old woman 3fs -PS
    'this old woman's'
```


### 7.7. Case Marking

7.7.1. Under ordinary circumstances, any case marking will occur on the last word in the $N P$, as stipulated in rule 1. Quantifiers, Intensifiers, and Adjectives, as well as nouns and pronouns, may all carry the case marking for the NP .
(55) a. wutyaen daeni-ke
basket a -L
'into a basket'
b. wiytape yapo-ke
river very-L
'to the really big river'
c. nam-ke ole waruke-re

1PL-PS bush big -0
'our big bush'
7.7.2. There are two peculiar constructions that bear discussion in this context. Both have low functional loads and are probably arcane
literary devices. In one case, two full NPs in a coordinate construction take a single case marker on the end of the second, as in example (56).
(56) Waypawiy d -iwrek-e gaye Takiy

Waypawiy RL-stand-P father Takiy
'Waypawiy begot [my] father, Takiy,
eywe Wiltiw-re new naw -o
ancestor Wiltiw-0 eye wait-P
and his elder brother, Wiltiw'

In the other, we find two NPs coordinated, with separate case marking on each, where the semantic relation between them is possessive, as in examples (57) and (58).
(57) tapwo-re uyk -re rey d -ayn -e
fire -0 odor-0 3 ms RL-smell-P.
'He smelled the fire and the odor.'
(58) piylake-re alworaw-re k@n-uwpa-m
tooth -0 mouth -0 IMP-look-PL
'Examine the teeth and mouth'

A more idiomatic way of expressing (57) would involve an overtly possessive construction, as in (59), or a tatpurusa compound, as in (59b).
(59) a. tapwo rey-ke uyk -re rey d -ayn -e
fire $3 \mathrm{~ms}-\mathrm{P}$ odor-0 3 ms RL-smell-P
'He smelled the odor of the fire'
b. tapwo-uyk -re rey d -ayn -e
fire +odor-0 3 ms RL -smell-P
'He smelled the odor of fire'
8. Verbless predications

By identifying diagnostic criteria and applying them sequentially as we have done elsewhere, we can segregate verbless predications into types.

Several of the distinctions I make in this classification rely heavily on the analysis of the structure of the Noun Phrase which I have presented in detail in Chapter 7.

### 8.1. Locative predications

First, we can separate out those predicates that consist of a locational particle. There is only a small set of items that can occur in this position and I list them exhaustively here.
t@ 'here'
( $t$ ) ade 'here'
rey 'there'
( t ) opo 'there'
yipe 'where?'
(1) a. Gamey yipe?
b. *Gamey yipke?
mother where? mother where?
'Where's Mommy?' *'Where's Mommy?'

| c. Tey po tade | d. *Tey po aewre-ke |
| :---: | :---: |
| 3fs PCL here | 3fs PCL house-L |
| 'She's here' | *'She's in the house' |

Note that Locative NPs and the Interrogative yipke 'where' are not eligible candidates for Locative predicates. Other types of locational predications require a verb, as mentioned above in the discussion of AWKEY and IKIY, and will be discussed further below.

### 8.2. Nonlocative predications

Next, we can distinguish between those verbless predications which do not have one of the five locational adverbs and particles as predicate. Some of these have a full $N P$ as their predicate, as in example (2), while others do not, as in example (3).
(2) Tader wok@k rame po wan-ke gaye
this tall man PCL 1SG-PS father
'This tall man is my father'
(3) Miytiy po wok@k

Miytiy PCL tall
'Miytiy is tall'

### 8.3. Ascriptive, possessive. and comparative predications

We can distinguish among predicates that do not consist of a full NP between those whose only constituent is an Adjective Phrase on the one hand, and those that have either a possessive or a comparative, on the other.
8.3.1. I call the subclass that has only a bare Adjective Phrase as its predicate Ascriptive predications because its semantic function is to ascribe a property to its subject.
(4) Miytiy po wok@k (yapor)

Miytiy PCL tall very
'Miytiy is (very) tall'
(5) wan-wan-ke yaen mede

1sg-1sg-PS child good
'My own child is good'

A common type of ascriptive predicate has a possessed or unpossessed body part as its subject.
(6) (nan-ke) yaey nampet-neney

1 DU-PS skin cold -ADJ
'Our (two) skin is cold'

A more complex embellishment of the Ascriptive predication has the unusual feature of the possessor of the body part appearing as an Object. As example (7) shows, such constructions may also have peripheral NPs, in this case, a Locative NP. The object NP in this construction is reminiscent of the Greek 'Accusative of respect', where the object-marked NP is in some way affected by the predication.

```
(7) Wiytape-ke po nan-e yaey nampet-neney
    river -L PCL 1du-0 skin cold -ADJ
    'We two were cold in the river'
```

A semantically similar type of predication has the possessor of the body part unmarked for case. This makes analysis ambiguous. We could analyze the unmarked possessor as the subject and the noun and adjective as constituents of a single NP in a classificatory predication (cf. 8.4.1.). But I believe that it is preferable to analyze the adjective alone as an ascriptive predication whose subject is the body part. This leaves the syntactic function of the unmarked possessor in some doubt, but unmarked possessors are common in constructions with ANKEY (cf. 5.10.). Moreover, the structural and semantic parallel between this construction and those exemplified in (6) and (7) is too strong to ignore. The semantic parallel with a classificatory predicate, on the other hand, is nonexistent.
(8) nan yaey nampet-neney

1 DU skin cold -ADJ
'We have cold skin/feel cold'
8.3.2. Possessive predications have a possessive NP as their predicate. These predications have the formal property of bearing Possessive marker - ke and the semantic property of identifying the possessor of the subject.
(9) a. Tader piyren wan-wan-ke
this dog 1SG-1SG-PS
'This dog is mine'
b. Topor piyren Miytiy rey-ke
that dog Miytiy 3ms-PS
'That dog is Miytiy's'
8.3.3. Comparative predications have a comparative NP as their predicate. They share the formal property of bearing the Comparative marker -kwo and the semantic property of comparing their subject to a standard of comparison.
(10) a. Yawur po Kewmaey-kwo

Yawur PCL Kewmaey-CMP
'Yawur is like Kewmaey'
b. Yen-ke aeymen wan-ke-kwo

2SG-PS knife 1SG-PS-CMP
'Your knife is like mine'

In another comparative construction the predicate consists of an NP marked with -kwo as the standard of comparison in apposition to an ascriptive predicate denoting the parameter of comparison.
(11)

```
yen-ke aeymen p@rp@r, rey-ke-kwo
    2sg-PS knife sharp 3ms-PS-CMP
    'Your knife is as sharp as his'
```

(12) topor yaw kupkwap piyren-kwo
that pig fast dog -CMP
'That pig is as fast as a dog'
8.4. NP predications

We can distinguish those predicates that consist of an NP that includes a Quantifier from those that consist of an unquantified NP.
8.4.1. Predicates that consist of a quantified $N P$ have two functions. Those that occur without a subject predicate the existence of that NP and those that occur with a subject denote possession of the predicate by the subject. In either case, this type of predication appears to arise from the deletion of a verb. Where the quantifier is awtuw 'none', the deleted verb is ROKW 'do', and if the quantifier is not awtuw, then the deleted verb is AWKEY 'exist' (cf. 5.10.).
(13) a. mod@k tapwo liwke
now fire much
'Now there is a lot of fire'
b. aeye awtuw
food none
'There are/were no vegetables'
(14) a. wanklow kanel liwke
turtle fat much
'A turtle has a lot of fat'
b. Nom-ke owyim mowk@ tapwo awtuw
1PL-PS ancestors before fire none
'Once, our ancestors had no fire'
8.4.2. Unquantified NP predicates fall into two further subclasses depending upon whether the NP is definite or not.

The former class equates the subject with the predicate and $I$ call such predicates Equative predicates.
(15) a. Tader wok@k rame po wan-ke gaye this tall man PCL 1SG-PS father 'This tall man is my father'
b. Wan-ke gaye po tader wok@k rame 1SG-PS father PCL this tall man
'My father is this tall man'
(16) Tey tale po Napeyre

3fs woman PCL Napeyre
'The woman is Napeyre'

Because of the semantic nature of this type of predication, the roles of subject and predicate are interchangeable, as illustrated in (15a) and (15b).

The other subclass, whose predicate consists of an indefinite NP, has the semantic property of assigning its subject to a class, so I label these Classificatory predications.
(17) Wan po rameyaen

1 sg pcl human being
'I'm a human being'

```
(18) Wiykatuw-lape lape waruke
    Wiykatuw-village village big
    'Wiykatuw is a big village'
(19) Miytiy po wok@k rame
    Miytiy PCL tall man
    'Miytiy is a tall man'
```

8.5. Classification of verbless predications

We can represent the classification of verbless predication types as a tree structure.

Figure 8.1


Table 8.1


### 8.6. Word order in verbless predications

The word order in verbless clauses is far more rigid than in other types of predications. Most types of verbless predications do not permit variation of word order, as shown in examples (20a-e).

```
(20) a. *yipe gamey?
                                    (cf. (1))
    where mother
    *'Where's Mommy?'
b. *mod@k liwke tapwo (cf. (4))
        now much fire
    *'Now there is a lot of fire'
c. *kanel liwke wanklow (cf.(6))
    fat much turtle
    *'A turtle has a lot of fat'
    d. *Wok@k (yapor) po Miytiy (cf. (8))
    tall very PCL Miytiy
    *'Tall is Miytiy'
e. *Wok@k rame po Miytiy (cf. (12))
    tall man PCL Miytiy
    *'A tall man is Miytiy'
```

Because of the nature of the equative relation, the subject and predicate of an Equative clause are interchangeable. Possessive and Comparative predicates may precede their subjects with a change in intonation, as in examples (20f) and (20g).
f. wan-wan-ke tader piyren (cf. (15))

1SG-1SG-PS this dog
'This dog is mine'

> g. Kewmaey-kwo po Yawur (cf. (16))
> Kewmaey-CMP PCL Yawur
> 'Yawur is like Kewmaey'

### 8.7. Complement-taking verbless predications

There is one final predication type that bears some resemblance to some of the Idiomatic Composite constructions described above (cf. 5.9.), on the one hand, and to the verbless body part constructions (cf. 8.3.1.), on the other. All such predicates denote Cognitive states.
8.7.1. Two of the four predicates may be regarded as participating in more or less stralghtforward Ascriptive predications that happen to take complements (see 10.2.5.).
(21) Tey Yawur d -aey-ka(-re) nenaen -neney 3fs Yawur FA-go -PF -0 thought-ADJ
'She thinks that Yawur has gone'
(22) a. Tey Yawur d -aey-ka(-re) neknek-neney 3fs Yawur FA-go -PF -0 know -ADJ
'She knows that Yawur has gone'
b. Tey apwo di-k -il -iy (-re) neknek-neney $3 f s$ bag $F A-I P-n e t-I P-0$ know -ADJ
'She knows how to net bags'
c. Tey yen-e neknek-neney 3fs 2SG-0 know -ADJ
'She knows you'
8.7.2. We saw in the discussion of idiomatic composite predicates (5.9.) that nenaen 'thought' occupies the same position in the nenaen

LAY construction as do nouns in other predicates of the same type. Its ability to take -neney here provides further evidence for believing nenaen to be a noun. The adjective-deriving suffix on neknek in example (22) suggests that it may be a noun denoting 'knowledge'. But as the next example illustrates, neknek can occur as the predicate without derivation or any verb with which to participate in a composite construction, making the gloss 'knowledge' appear most improbable and casting doubt upon its part-of-speech affiliation.
(23) a. Tey Yawur d -aey-ka(-re) neknek. 3fs Yawur FA-go -PF -0 know
'She knows that Yawur has gone'
b. Tey apwo di-k -il -iy (-re) neknek 3fs bag FA-IP-net-IP -0 know
'She knows how to net bags'
c. Tey yen-e neknek

3fs 2SG-0 know
'She knows you'
8.7.3. Finally, there is a predicate that I am inclined to regard as a defective verb. Arene takes none of the verb morphology described in Chapter 4, but neither does it accept any other affixation. It cannot even take -neney, as neknek and nenaen can, nor can it modify a noun attributively. I will not speculate further upon its part-of-speech membership, but simply exemplify its use.
(24) a. Rom/Tey Yawur d -aey-ka(-re) arene

3PL/3fs Yawur FA-go -PF -0 not know
'They don't/she doesn't know Yawur has gone'
b. Rom/Tey apwo di-k -il -iy(-re) arene

3PL/3fs bag FA-IP-net-IP -0 not know
'They don't/she doesn't know how to net bags'
c. Rom/Tey yen-e arene

3PL/3fs 2SG-0 not know
'They don't/she doesn't know you'

## 9. Clause types

### 9.1. Questions

Awtuw has three basic strategies for forming questions. Yes-no questions are distinguished from declarative clauses by a change in intonation contour. Alternative questions are formed by postposing the particle yokri 'perhaps' to each alternative. WH-questions are formed by substituting one of the set of interrogatives, which begin with /y/ in Awtuw, for a constituent.
9.1.1. While each word stress in a declarative sentence is uttered at approximately the same pitch, in a yes-no question, the last word stress in the clause is appreciably higher in pitch than the others and the pitch of any syllables following that stressed syllable falls markedly as a result. Constituents in a yes-no question have the same freedom of order as in a declarative sentence.

```
(1) a. Tey Taeypil-e d -eya -ka
                                    b. Taeypil-e d-eya-ka tey
            3fs Talbipi-L FA-come-PF
            'She's come from Talbipi'
        or 'Has she come from Talbipi?'
        c. D-eya-ka tey Taeypil-e d. Tey d-eya-ka Taeypil-e
        e. Taeypil-e tey d-eya-ka
                            f. D-eya-ka Taeypil-e tey
```

```
(2) a. Wawpey Yawm@n-re du-puy-e Wawpey Yawn@n-0 FA-hit-P
'Wawpey hit Yawm@n'
or 'Did Wawpey hit Yawm@n?'
c. Yawm@n-re Wawpey du-puy-e d. Yawm@n-re du-puy-e Wawpey e. Du-puy-e Wawpey Yawm@n-re f. Du-puy-e Yawm@n-re Wawpey Yes-no questions frequently include the particle yokri 'perhaps'. This particle may not occur clause initially and most commonly occurs clause finally. When it occurs clause medially, yokri has the effect of focusing the constituent it follows.
```

(3) Wawpey Yawm@n-re du-puy-e yokri?

Wawpey Yawm@n-0 FA-hit-P perhaps
'Did Wawpey hit Yawm@n by any chance?'
(4) Wawpey yokri Yawm@n-re du-puy-e?

Wawpey perhaps Yawm@n-0 FA-hit-P
'Was it Wawpey who hit Yawm@n?'
(5) Wawpey Yawm@n-re yokri du-puy-e

Wawpey Yawm@n-0 perhaps FA-hit-P
'Was it Yawm@n Wawpey hit?'

Yes-no questions also have the same focusing strategies available to them as do declarative sentences as described below in section 9.5 .

In answering an affirmative question, owo means 'yes' - it acknowledges the accuracy of the proposition presupposed by the question.

In answering affirmative yes/no questions, awtuw 'no' denies the
accuracy of the proposition presupposed by the question. Awtuw also functions as a predicate meaning 'lack, be absent'.
(6) a. Taeypil-yaenim ma-taw-wey -ka-m?

Talbipi-GEN GO-YET-arrive-PF-PL
'Have the Talbipi people arrived yet?'
b. Owo (ma-wey -ka-m).
yes GO-arrive-PF-PL
'Yes, they've arrived.'
c. Awtuw (ka-ma-taw-wey -ka-m)
no $\quad \mathrm{NG}-\mathrm{GO}-\mathrm{YET}$-arrive-PF-PL
'No, they haven't arrived yet.'

Awtuw and owo in answers to negative questions are completely ambiguous and must be accompanied by a clause, usually consisting of a single verb without arguments expressing the real-world situation.
(7) a. Taeypil-yaenim ka-ma-taw-wey -ka-m?

Talbipi-GEN NG-GO-YET-arrive-PF-PL
'Haven't the people from Talbipi arrived yet?'
b. Awtuw/owo ka-ma-taw-wey $-k a-m$
no /yes NG-GO-YET-arrive-PF-PL
'No/Yes, they haven't arrived yet.'
c. Awtur/owo yakruk ma-wey -tay -ka-m
no /yes long time GO-arrive-finish-PF-PL
'No/Yes they arrived a long time ago'


#### Abstract

9.1.2. Alternative questions are formed by concatenating yokri with the alternatives, yokri following each alternative. Any constituent may enter into such constructions, including a verb phrase. The alternatives need not be adjacent, as shown in example (8b).


(8) a. Altiy yokri Yawur yokri Takiy-re du-puy'-e?

Altiy PCL Yawur PCL Takiy-0 FA-hit-P
'Was it Altiy or Yawur who hit Takiy?'
b. Altiy yokri Takiy-re du-puy'-e, Yawur yokri?

Altiy PCL Takiy-0 FA-hit -P Yawur PCL
'Was it Altiy who hit Takiy, or Yawur?'
(9) Altiy Yawur-re yokri Takiy-re yokri du-puy-e?

Altiy Yawur-0 PCL Takiy-0 PCL FA-hit-P
'Was it Yawur or Takiy who Altiy hit?'
(10) Yen Wutlakw-o yokri Taeypil-e yokri w -aey-re?

2SG Gutaiye-L PCL Talbipi-L PCL NF-go -FU
'Are you going to Gutaiye or to Talbipi?'
(11) Awtiy Yawur-re aey yokri tawkway yokri dQ-kow -o?

Awtiy Yawur-0 betel PCL tobacco PCL FA-give-P
'Was it betelnut or tobacco that Awtiy gave to Yawur?'
(12) Awtiy Yawur-re yokri yen-e yokri tawkway d@-kow -o?

Awtiy Yawur-0 PCL 2SG-0 PCL tobacco FA-give-P
'Did Awtiy give tobacco to Yawur or to you?'
(13) Yen rey-e tawkway d巴-kow -o yokri Takiy-re du-puy-e yokri?

2SG 3ms-0 tobacco FA-give-P PCL Takiy-0 FA-hit-P PCL
'Did you give tobacco to him or did you hit Takiy?'

The answer to an alternative question will ordinarily consist of an
echo of the correct alternative preceded by the focus particle po. Thus the answer to the question in examples (10) and (12) might be

```
(10') (wan) po Wutlakw-o (w -aey-re)
    1SG PCL Gutaiye-L NF-go -FU
    'I'm going to Gutaiye'
(12') (rey) po Yawur-re ((tawkway) d@-kow -0)
    3ms PCL Yawur-0 tobacco FA-give-P
    'He gave it to Yawur'
```

9.1.3. WH-questions are formed using the set of interrogative adverbs and pronouns described in chapter 3. and tabulated here for convenience.

Table 9.1

ADVERBS

| yok | 'how?', 'when?' |
| :--- | :--- |
| yekak | 'when?' |
| yakwo | 'how much/many/long/often?' |
| yakumkwo | 'why?', 'what kind?' |
| yipe | 'where?' (Location) |
| yipke/yiperke | 'where?' (Location/Direction) |

PRONOUNS

```
    yeran/yeremaen 'who?'
    yakum(oyaen) 'what?'
```

The adverb yipe 'where?' occurs only as the predicate in a verbless question and as such is constrained to occur clause finally (see 8.2.).
(14) a. Gamey yipe?
mommy where?
'Where's Mommy?'
b. *Yipe gamey

Otherwise, constituents in a WH-question have the same freedom of order as they do in other types of clauses. In particular, there is no requirement, though there may be a slight tendency, for the interrogative to occur clause initially.
(15) a. Yen yekak w -aey-rere?

2SG when NF-go -DES
'When do you want to go?'
b. Yekak yen w-aey-rere?
c. W -aey-rere yen yekak?

The interrogative pronouns take nominal case marking and may replace a nominal constituent in any role.
(16) Yeran Awtiy-re du-puya-ka?
who? Awtiy-0 FA-hit -PF
'Who has hit Awtiy?'
(17) Keriy yeremaen-re du-puya-ka?

Keriy who? -O FA-hit -PF
'Who has Keriy hit?'
(18) Yen yeran-re aeye d®-kow -o?

2SG who? -0 food FA-give-P
'Who did you give food to?'
(19) Naytow maew-e d -aey-ka yeran-te-k?

Naytow bush-L FA-go -PF who? -Of-I
'Who(f) has Naytow gone to the bush with?'

Interrogatives may replace more than one constituent in such a question.
(20) Yeran yekak yakumoyaen rok-re?
who? when? what? do -FU
'When will who do what?'

The answer to a WH-question will ordinarily consist of the word that will most suitably replace the interrogative in the question. When the interrogative bears case marking, the answer too will usually have it, even if the answer consists of only a single word. It is common, though not quite as common as in answers to alternative questions, for the particle po to focus the answer.

```
(18') (wan) (po) Yawur-re ((aeye) d@-kow -o)
    1SG pcl Yawur-0 food FA-give-P
    'I gave food to Yawur'
```


### 9.2. Negation

Awtuw has two basic negation strategies. The negative prefix ka-/kaemay fill the first slot in the verb complex to negate any verbal predicate. And the negative particle yene may negate any constituent, including a predicate nominal or adjective, a verb, or even a negative verb, that it precedes. There are also two special portmanteau morphemes that code the negatives of the second and third person debitive modalities, the Prohibitive prefix (PR) ap- and the Negative Debitive (NDB) prefix nil-, respectively. These are discussed in 4.2.
9.2.1. Morphological negation with ka-/kae- is the usual strategy for negating any clause with a verbal predicate.
(21) Awtiy kae-w -aey-re

Awtiy NG -NF-go -FU
'Awtiy isn't going'
(22) Awtiy-re wan ka-d -uwpo-ka

Awtiy-0 1SG NG-FA-see -PF
'I haven't seen Awtiy'

This strategy may be used to contrast verbs, verb phrases, or subjects, although it is more common to find yene negating constiturents.
(23) Numoy kae-d -k -aey-ey, rey po d -ikiy

Numoy NG -FA-IP-go -IP 3 ms pcl FA-stay
'Numoy isn't going, he's staying'
(24) Numoy kae-d -k -aey-ey, po wan d@-k -aey-ey

Numoy NG -FA-IP-go -IP pcl 1 SG FA-IP-go -IP
'Numoy isn't going, I am'
(25) Numoy Altiy-re ka-d -puy-e, rey po wan-e d -ir -e Numoy Altiy-0 NG-FA-hit-P 3ms pcl 1 SG-0 FA-feed-P
'Numoy didn't hit Altiy, he fed me'

Morphological negation cannot contrast objects or other full constituents, but, oddly, it can contrast adjectival constituents of the object.
(26) *Wan Yawm@n-re ka-d -puy-e, wan (po) Naytow-re du-puy-e

1SG Yawm@n-0 NG-FA-hit-P 1SG pcl Naytow-0 FA-hit-P *'I didn't hit Yawm@n, I hit Naytow'
(27) *Rey Liwmiy-e kae-d -eya -ka, rey (po) Taeypil-e d -eya -ka 3ms Lumi -I NG -FA-come-PF 3 ms pcl Talbipi-L FA-come-PF *'He hasn't come from Lumi, he's come from Talbipi'
(28) Wan aewre naek-re ka-d -uwp-o, wan (po) aewre lop-re d-uwp-o 1SG house new -0 NG-FA-see-P 1SG pcl house old-0 FA-see-P
'I didn't see a new house, I saw an old house'
9.2.2. The negative particle yene may negate any constituent of the clause that it precedes, including the verb. Because yene is associated with a particular constituent, it frequently has somewhat more of a contrastive force than a negation of the entire clause using the morphological strategy. Compare, for example, example (29) with example (26) above.
(29) Wan yene Yawm@n-re du-puy-e, wan Naytow-re du-puy-e 1SG NG Yawm@n-0 FA-hit-P 1 SG Naytow-0 FA-hit-P 'I didn't hit Yawm@n, I hit Naytow' There is a similar contrast between examples (30) and (27).
(30) Rey yene Liwmiy-e d -eya -ka, rey Taeypil-e d -eya -ka

3ms NG Lumi -L FA-come-PF 3ms Talbipi-L FA-come-PF
'He hasn't come from Lumi, he's come from Talbipi'
9.2.3. When yene negates a morphologically negative verb, the meaning of the resulting double negation includes both negatives. The morphological negative is in the scope of yene, which cancels rather than emphasizes its meaning.
(31) Yawur yene kae-d -k -aey-ey...

Yawur NEG NG -FA-IP-go -IP
'Yawur isn't not going...
(31') a. *...rey d -ikiy.
3ms FA-stay
...he's staying'
b. ...rey d@-k -aey-ey

3 ms FA-IP-go -IP
...he's going'

### 9.3. Reflexives

Certain verbs allow reflexivization to take place. Only patients, recipients, and benefactives may reflexivize. Possessors and commitatives may not. The two reflexivizers yimay and yelow, must always follow the reduplicated form of a pronoun coreferential with the subject. They take Object marking optionally. The word order in reflexive clauses is rigidly $S$ REFL (0) V.
(32). a. Osiy rey-rey yimay(-re) d -upow-ka Osiy 3ms-3ms REFL -0 FA-see -PF
'Osiy has seen himself'
b. Osiy rey-rey yelow(-re) d -upow-ka

Osiy $3 \mathrm{~ms}-3 \mathrm{~ms}$ REFL $-0 \quad$ FA-see -PF
'Osiy has seen himself'
(33) a. Wan wan-wan yimay(-re) aeye d@-kow -ka $1 \mathrm{sg} 1 \mathrm{sg}-1 \mathrm{sg}$ REFL -0 food FA-give-PF
'I have given myself some food'
b. Wan wan-wan yelow(-re) aeye d@-kow -ka $1 \mathrm{sg} 1 \mathrm{sg}-1 \mathrm{sg}$ REFL -0 food FA-give-PF
'I have given myself some food'
(34) a. Numoy rey-rey yimay(-re) tawkway d -iypud-kow -ka Numoy 3ms-3ms REFL -0 tobacco FA-roll -give-PF
'Numoy has rolled himself a cigarette'
b. Numoy rey-rey yelow(-re) tawkway d -iypud-kow -ka Numoy 3ms-3ms REFL -0 tobacco FA-roll -give-PF
'Numoy has rolled himself a cigarette'

```
(35) *Numoy rey-rey yimay-ke nemet -te du-puya-ka
    Numoy 3ms-3ms REFL -PS mother-0 FA-hit -PF
    'Numoy hit his own mother'
```

The yelow/yimay reflexive construction has a very low functional load - there are no examples whatsoever in the corpus of narrative I have collected. This is in part because in many of the cases where one might expect frequent reflexivization, for example with a verb like WORYA ' wash', the reflexive is lexicalized, in this instance by yiw IYWA 'water bathe'.
(36) a. *Wayekaw tey-tey yimay(-re) d -warya-ka

Wayakaw 3fs-3fs REFL -0 FA-wash -PF
'Wayakaw has washed herself'
b. Wayakaw yiw d -iywa -ka

Wayakaw water FA-bathe-PF
'Wayakaw has bathed'

Another factor contributing to the low frequency of such reflexives is that in benefactive constructions where one could conceivably occur, the benefactive NP is more likely to surface as a possessive.
(34') Numoy rey-rey-ke tawkway d -iypud-ka
Numoy 3ms-3ms-PS tobacco FA-roll -PS
'Numoy has rolled his own cigarette'

### 9.4. Focusing

Although constituent order within a clause carries no information about the case roles of the nominal constituents, neither does it appear to bear information about the relative focus of the various constituents. The two most common methods of focusing a constituent are sentence stress and the particle po, usually used in concert with each other.
9.4.1. The ubiquitous particle po occurs in virtually every other sentence in Awtuw. In most cases the focused constituent, whose stressed syllable receives sentence stress, follows po.
(37) a. Yen lape -ke w-ikiy-re?

2sg village-L NF-stay-FU
'Are you staying in the village?'
b. Awtuw, wan po 'w -aey-rere.
no $\quad 1 \mathrm{sg} \mathrm{pcl}$ NF-go -DES
'No, I want to go.'

But there are two main classes of exceptions to this generalization. This particle has a slight tendency to gravitate to second position, or at least to avoid occuring clause-initially, and will therefore sometimes focus a preceding clause-initial constituent.

```
(38) a. Yen w -aey-rere?
    2sg NF-go -DES
    'Do you want to go?'
    b. Awtuw, 'Napeyre po w -aey-rere.
        no Napeyre pcl NF-go -DES
            'No, Napeyre wants togo.'
```

It may also occur clause finally with the effect of focusing the entire clause, often to express astonishment or vehemence.
(39) a. Yen w-aey-rere?
b. Owo, wan w -aey-rere po! yes 1sg NF-go -DES pcl 'Yes, of course I'm going!'
(40) Rey maew-e eywaek -rame d -upw-o, rey-e d -iy -e po!

3ms bush-L sorcery-man NF-see-P 3ms-O FA-shoot-P pcl
'He saw a sorceror in the bush and he shot him!'

It is possible to focus more than one constituent in a clause using po.
(41) a. Yen lape -ke w -ikiy-re?

2sg village-L NF-stay-FU
'Are you staying in the village?'
b. Awtuw po, wan po 'Liwmiy-e po 'w -aey-re po! no pcl 1sg pcl Lumi -L pcl NF-go -FU pcl 'Absolutely not, I'm going to Lumi of course!'
9.4.2. Awtuw uses four other focusing strategies, all of them much rarer than po. The simplest of these is topicalization which entails extracting the focused constituent with a pause between the extracted constituent and the rest of the clause.
(42) a. Takiy, tader aewre d -uy -kay

Takiy this house FA-build-PF
'Takiy, he's built this house'

The topicalized constituent may appear either to the right or to the left of the clause.
b. Tader aewre d-uy-kay, Takiy.

Topicalizations may focus direct objects, recipients, instruments, or any other nominal constituent.
(43)
a. Yekne-re-k, Keriy rey taw d -uwk -o
axe -0 -I Keriy 3ms tree FA-fell-P
'With an axe, Keriy felled the tree'
b. Keriy rey taw d-uwk-o, yekne-re-k.
(44) a. Kampo-re, wan aewre d -uy -kow -o.

Kampo-0 1sg house FA-build-give-P
'Kampo. I built a house for'
b. Wan aewre d-uy-kow-o, Kampo-re.

Note that appositional intonation over the extracted constituent and the associated pause, represented here by a comma, are necessary components of this construction. Without them, the resulting permutation of word order would have no particular focusing effect.
9.4.3. Dislocation differs from topicalization only in that a pronominal copy of the focused constituent remains behind in the body of the clause.
(45) a. Peyaw, rey yaw-re d -iy -e.

Peyaw, 3ms pig-0 FA-shoot-P
'Peyaw, he shot a pig.'

The dislocated element may appear to the right or to the left of the clause from which it was extracted.
b. Rey yaw-re d-iy-e, Peyaw.

The dislocation strategy may be used to focus any nominal constituent, but not pronominal, adverbial, or verbal constituents.
(46) a. Rey yaw, Altiy rey-e d -iy -e.

3ms pig Altiy 3ms-0 FA-shoot-P
'The pig, Altiy shot him'
b. Altiy rey-e d-iy-e, rey yaw.
(47)
a. Tuwaltin-lape, Mimpel rey d -ikiy. Tuwaltin-village Mimpel there FA-stay 'Tuwaltin, Mimpel lives there'
b. Mimpel rey d-ikiy, Tuwaltin-lape.
(48) a. *Yapun-wo, wan eywo Liwmiy-e d -aey-e alone-ADV 1 sg thus Lumi -L FA-go -P
'Alone, I went to Lumi that way'
b. *Wan Liwmiy-e eywo d-aey-e, yapun-wo.
9.4.4. Awtuw forms clefts by extracting a nominal constituent for focusing from a clause, predicating that constituent to a third-person pronoun agreeing with it in sex and number, and modifying it with a restrictive relative clause formed from the balance of the original clause.
a. Altiy yaw waruke d -iy -e

Altiy pig big FA-shoot-P
'Altiy shot a big pig'
b. Rey Altiy [yaw waruke d -iy -e-re] 3ms Altiy pig big FA-shoot-P-0
'It's Altiy who shot a big pig'

The clefted constituent may appear to the right or to the left of the relative clause.
c. [Yaw waruke d-iy-e-re] rey Altiy.

This strategy may also focus any nominal constituent.
(50) a. Rey tader yaw [Yawm@n d -iy -e-re]

3ms this pig Yawm@n FA-shoot-P-0
'It's this pig that Yawm@n shot'
b. [Yawm@n d-iy-e-re] rey tader yaw.
(51) a. Rey Taeypil [Piynane d -ey, -e-re]

3ms Talbipi Piynane FA-come-P-0
'It's Talbipi that Piynane came from'
b. [Piynane d-ey-e-re] rey Taeypil.
9.4.5. Finally, Awtuw can focus constituents by pseudoclefting. In this construction, a nominal constituent is extracted from the clause, a generic noun is predicated to it, and that noun heads a relative clause formed from the rest of the original clause.
(52) Liwmiy rey lape [Kewmaey d -aey-ka-re]

Lumi 3ms village Kewmaey FA-go -PF-O
'Lumi is the village Kewmaey has gone to'

Pseudoclefts with the focused constituent to the left do not focus subjects. In pseudoclefts to the right, which may focus any nominal constituent, the focused element appears alone to the right of the clause after a pause, while the inserted head noun remains on the left.
(53) Rey lape [Kewmaey d -aey-ka-re], Liwmiy. 3ms village Kewmaey FA-go -PF-O Liwmiy
'The village Kewmaey has gone to is Lumi'
(54) Tey tale [tader apwo d -il -i-re], Kukron. 3fs woman this bag FA-net-P-0 Kukron
'The woman who netted this bag is Kukron'
10. Interpredicate and interclausal relations

Awtuw displays a wide variety of constructions for relating predicates. These range from the strategy described in sections 3.7.3. and 4.14., which fuses roots within a single verb complex, to strategies that conjoin clauses with separate sets of NPs and completely independent specification for verbal categories.

This chapter describes the formal properties of each construction and relates them to their semantic functions.

The constructions fall into five distinct categories. Serialization constructions concatenate verb roots, verb forms, or verb phrases whose subjects are obligatorily coreferential to code diverse semantic functions ranging from an increase in valency to a sequence of actions.

Nominal constructions subordinate a verb phrase or a full clause as a constituent of an NP performing a nominal or adjectival function. In these constructions, the tense of the subordinate verb is either determined by the construction or interpreted as relative to the tense of the matrix verb. Nominal constructions code a variety of relations ranging from so-called psych-action complements, such as 'remember to...', to cause clauses, including relative clauses.

Adverbial constructions code actions contemporaneous or sequential to the action coded by the matrix verb. They are formally similar to nominal constructions in some respects. But where a nominal clause is marked as subordinate with the suffix - re, an adverbial clause bears the suffix - rek. Moreover, the subject of an adverbial clause may not occur as the object of the matrix clause, as is possible in certain nominal constructions. And an adverbial clause functions
adverbially rather than nominally or adjectivally.

Conditional constructions juxtapose two interdependent clauses which must bear identical future or conditional marking.

Coordination constructions juxtapose two or more entirely independent clauses to code simultaneous, consecutive, and unspecified relations among predicates.

### 10.1. Serializations

Awtuw has five serialization strategies. The first and most tightly-knit construction concatenates verb roots within a single verb complex. The second appends a form of a direction verb to a truncated, suffixless form of another verb. The third concatenates repetitions of the same verb form. The fourth concatenates full verb forms, and the fifth concatenates verb phrases.
10.1.1. Root compounds have received ample discussion and exemplification in section 4.12. Because of their position in the structure of the verb complex, no affixation can intervene between compounded roots, so it is inconceivable that compounded roots should differ in their specification for any category marked by verbal morphology. And since such compounded roots function syntactically as a single predicate, they must share all arguments and adjuncts.
10.1.2. The second strategy involves the serialization of a truncated verb form with a direction verb. There are two types of truncated verb serialization.

In the first type the first verb consists of a full set of prefixes and any verb root, but no suffixation whatsoever. The second verb consists of a full verb complex whose root must be AEY 'go'. Speakers often reiterate the form of AEY as many as five times or more, but only the last verb bears suffixation. The semantic function of this strategy is to denote prolonged continuous or habitual aspect.
(1) a. ram-o yaey d -ael +d -aey-e

3PL-0 skin FA-bite+FA-go -P
'Their skin kept itching'
b. teypekwo d@-k -rokw+d@-k -aey-ey
thus FA-IP-do +FA-IP-go -IP
'He goes on doing the same thing'
c. raew nenaen t@-lay $+t-a e y+t-a e y+t-a e y-e$

3DU thought DU-bear+DU-go +DU-go +DU-go -P
'They two thought and thought'
d. wan-ke wanklow-re yakumkwo k@-ma-t-rokw+k@-t -aey-kow-kay

1SG-PS turtle -O what? NG-GO-DU-do +NG-DU-go -BEN-PF
'What haven't you two kept going and doing to my turtle?'

Nothing may intervene within this type of serialization. The single tense marker, if any, has scope over the entire serialization, as does any directional prefix or root compound, as illustrated in (1d). Example (1b) shows that if the first verb has the Imperfective prefix, then the final verb must be an Imperfective form. Similarly, any Negative prefix must occur on both verbs, as shown in (1d).

One variation on this strategy involves the repetition of full forms of AEY after a truncated verb, with the same semantic function, as shown in example (2).
(2) d-ewrae-1 -i d-il +d -aey-e daeye daeye

FA-again-twist-P FA-twist+FA-go -P went went
'She twisted [string] again and kept twisting'

The second type is formally very similar to the first. But there are three major differences. First, in this strategy only two verbs may enter into the serialization. Second, the first verb must be either KA 'get', LAY 'bear', WAY 'carry', one of the other verbs of carrying, or one of the manner of motion verbs, e.g. IMYA 'run', TOWKANEY
'climb' (cf. 5.4.2.). And third, the second verb may be any of the Direction verbs.

When the first verb is KA 'get', the second verb depicts a sequential action deriving a form meaning 'take' or 'bring'.
(3) a. kan-k@ +k@r-ey@

IMP-get+IMP-come
'Bring [it]!'
b. rey tapwo d@-k@ +lak -e

3ms fire FA-get+go DS $-P$
'He brought the firel downstream'

Where the first verb is a verb of carrying or a manner of motion verb, the construction specifies direction and allows an accompanying source or goal NP.
(4) a. rom rey-e d@-way + d -aey-m -e

3PL 3ms-O FA-carry+FA-go -PL-P
'They carried him away'
b. rom rey-e d@-way + d -eya -m -e

3PL 3ms-0 FA-carry+FA-come-PL-P
'They carried him here'

Example (5) illustrates the distinction between a manner of motion verb alone and such a verb in this construction, when there is a Locative $\mathbb{N P}$ in the clause.

The interpretation of the Locative NP as source or goal depends upon the point of view of the speaker and the class of the directional verb. Thus, the NP in (5b) gets goal interpretation if the narrator adopts the perspective of being outside the village and source
interpretation if the narrator adopts the point of view of someone within the village.
(5) a. rey lape -ke d -imy'-e

3ms village-L FA-run -P
'He ran in the village'
b. rey lape -ke d -imya+d -aey-e

3ms village-L FA-run +FA-go -P
'He ran to/from the village'

Similarly, the Locative NP in (6) will be a goal if the speaker adopts inside perspective, and a source if the narrator views the situation from outside.
(6) tey aewre-ke d -upok@+d -ey' -e

3fs house-I FA-flee + FA-come-P
'She fled to/from the house'
10.1.3. The third strategy repeats identical full forms of a single 'lexical' verb form, with the same semantic function as the first type of truncated verb serialization - to denote continuous or habitual aspect.
(7) yilmaet d -il -i dili dili dili
string FA-twist-P twisted twisted twisted
'She kept on twisting string'

This construction has a characteristic intonation where each repetition of the verb is pronounced with a low pitch, and the final syllable of the last repetition is protracted and has a rising pitch.
10.1.4. The next strategy concatenates between two and five full verb forms. Nothing may intervene between the verbs in this type of
serialization.

Although each verb is fully inflected, they do not select categories independently. Every verb must bear the same tense marking. Typically, each verb will bear the same aspect marking as well. But since one or more of the verbs may be serializations of a truncated verb with AEY, which is itself a mark of aspect, there does not appear to be a constraint that a single aspect must have scope over the entire serialization.

As nothing may interrupt the serialization, the same argument or set of arguments will apply to every verb.
(8) rey yaw-re ti-na-kow +d -aey-m -e re -m -e

3ms pig-0 DU-RC-give+FA-go -PL-P eat-PL-P
'They kept sharing the pig and ate'
(9) rey yaw-re rom d@-way $-\mathrm{m}-\mathrm{e}$, d @-k@ +d-aey-m -e mae-wye $-\mathrm{m}-\mathrm{e}$ 3 ms pig-0 3PL FA-carry-PL-P FA-get+FA-go -PL-P G0 -slice-PL-P 'They carried the pig, took it, and sliced it'
(10) yakum-re-k w -itwa-re ra -re what?-O -I NF-boil-FU eat-FU
'What would they boil and eat it with?'

The intonation characteristic of this serialization strategy involves a high pitch on the penultimate syllable of each serialized verb falling over the ultimate, with no pause between verbs, as shown in example (10').
(10') yakumrek witware rare
10.1.5. The last serialization strategy concatenates verbs and their
objects. A single subject has scope over the entire serialization, and as in the preceding strategy, all the verbs must be marked for the same tense.
(11) a. [raew] kiw t-iwy'-e nal@k t -em -e

3DU pitpit DU-cut -P abika DU-pick-P
'They two cut pitpit and picked abika'
b. [raew] kiw $t$-iwya-re nal@k $t$-em -re

3DU pitpit DU-cut -FU abika DU-pick-FU
'They two will cut pitpit and pick abika'
(12) rey maew-e d -aey-e, yaw+taek d -ir +d -aey-e,

3ms bush-L FA-go -P pig+track FA-follow+FA-go -P
'He went to the bush, went on following pig tracks,

```
yaw d -iy -e d@-way +d -aey-e, lape -ke wutmak-e.
pig FA-shoot-P FA-carry+FA-go -P village-L arrive-P
shot and carried away a pig, and arrived in the village'
```

There is an intonation characteristic of this strategy that clearly distinguishes it from the preceding construction on the one hand, and from other strategies with either a reiterated subject, a change of subject, or a change of tense on the other.

In this case, the intonation rises over the penultimate syllable of each verb in the serialization, except the last, and remains high over the lengthened ultimate syllable, followed by a brief pause. When the subject changes or is repeated, the intonation falls from a high pitch over the penultimate syllable to a low pitch over the last. Example (11') illustrates the intonation contour over example (11) and example (13) shows the intonation contours over two similar sentences.
(11')

(13) a. $\overline{\text { raew kiw }}$ tiwye, $\overline{\text { raew nal } \overline{@ k} \text { teme }}$
$\rightarrow \wedge$ __ $\Gamma \longrightarrow \Gamma$
'They cut pitpit, and you picked abika'
10.1.6. The next strategy resembles a participial construction in certain respects. Although there is no actual participial form in Awtuw, an Imperfective form unmarked for tense functions like one in this construction. The situations depicted by the two verbs are interpreted as simultaneous. The tense of the second verb has scope over the unmarked first verb.

The ability of a subject to occur with the second, tense-marked, verb distinguishes this construction from the one described in 10.1.5.

The verbs accept independent aspect and directional marking, as shown in example (14a). Examples (14b) and (14c) illustrate that Adverbs and Location/Direction NPs have scope over only one of the verbs.

```
(14) a. eypek d@-k -rokw+d@-k -aey-ey, (rey) yuwp -tapwo lam-k' -e
        thus FA-IP-do +FA-IP-go -IP (3ms) kunai-fire DS -get-P
        'Continuing in this way, he got the kunai fire downstream'
        b. eypek yiw +yil -e d@-k-rokw+d@-k-aey-ey, (rey) yuwp-tapwo lam-k' -e
            river+edge-L
    'Continuing along the river in this way,...'
    c. eypek d@-k-rokw+d@-k-aey-ey, (rey) yuwp+tapwo kupkwap lam-k' -e
                                    quickly
            'Continuing..., he quickly got the kunai fire downstream'
```

10.2. Nominal constructions

There are six types of nominal constructions in Awtuw, all of which involve a predication as a constituent of an NP.

### 10.2.1. Reanalysis of case markers

The constructions to be discussed in this section all share two formal properties, a suffix homophonous with the Object marker on the embedded verb and permutability of the embedded predication with relation to the matrix clause, and a number of them share a third, the ability of the subject of the embedded predicate to take possessive marking.

1. The subordinate verb in any nominal construction may optionally bear the suffix -re. As I will discuss in section 10.3., verbs in adverbial constructions may bear the suffix -re-k. These two suffixes are homophonous with the object and instrumental/comitative case markers, respectively (see Chapter 6).

While a number of the constructions discussed in this section are, in fact, direct object complements, it is interesting that subject complements, although marginal, may take -re, as shown in section 10.2.4. Relative clauses may also take this suffix. It would appear therefore that this case marker has been at least partially reanalyzed as a subordination marker. But since - re retains its object-marking function in many cases, I will continue to gloss it as such. There is no convincing evidence that the Instrumental/Commitative suffix has undergone a similar reanalysis.
2. The embedded predications discussed in the subsequent sections may, like most constituents of an Awtuw clause, occur clause initially or finally, as well as clause medially. For the most part, I will
exemplify only the clause medial construction, but $I$ will insert illustrative examples of these constituents in other positions from time to time.
3. Many of these constructions allow the expression of the subject of the embedded predicate with possessive marking. Wherever this is possible, I mention it explicitly and exemplify the phenomenon.

### 10.2.2. Future complement constructions

The first three constructions we will be examining require a verb with future marking in the nominal clause. These constructions express desire or lack of desire to do something, remembering or forgetting to do something, asking or telling someone to do something, and purpose. In each case, the future-marked verb depicts an action that must take place after the situation depicted by the matrix verb. This makes the future marking seem semantically natural.

1. In one of these, the covert subject of the nominal clause must be coreferential with the subject of the matrix clause. Although Awtuw lacks an infinitive form, this bears a close resemblance to an infinitive construction.

In this construction, the future verb functions as the complement of the other verb, as signalled by the Object suffix. The Object-marked verb may have an object of its own, but it has no overt subject as it is necessarily coreferential with the subject of the other verb.

There is a limited class of roots that can occur as the matrix verb in this construction, specifically, a subset of the cognition verbs. This class includes the two preference verbs, aewaey LAY 'like' and YAWA 'don't like, don't want' when they mean 'like/want to' and 'not like/want to'.

$$
\begin{aligned}
& \text { (15) Kaempiy lape -ke w -ikiy-re-re de-yaw' -o } \\
& \text { Kaempiy village--L NF-stay-F -0 FA-not want-P } \\
& \text { 'Kaempiy doesn't want/like to stay in the village' }
\end{aligned}
$$

The two memory verbs mane ARNEY '(ear) forget' and nenaen-e NAK '(hold in thought) remember' enter into this construction when they mean 'remember/forget to'.
(16) a. wan aeye ra -re-re mane d -arney -kay 1SG food eat-FU-0 ear FA-forget-PF 'I've forgotten to eat'
b. wan mane d -arney -kay aeye ra -re(-re) 1SG ear FA-forget-PF food eat-FU -0
'I've forgotten to eat'

Awtuw uses the same construction to express purpose when the embedded subject is coreferential with the matrix subject. In this construction, the matrix verb may be any root and the embedded verb bears future marking and the object suffix.
(17) Altiy Kukrown-t@ kil w -alow -kow-re-re Wutlakw-o d -aey-e Altiy Kukrown-0 speech NF-speak-BEN-FU-0 Gutaiye-L FA-go -P 'Altiy went to Gutaiye to speak to Kukrown'

A variant of this construction allows aewaey LAY 'like, want' to take an object-marked future complement whose subject is a possessive NP coreferential with the matrix subject.
(18) Ruwmay rey-rey-ke w -aey-re-re aewaey lay-kay

Ruwmay 3ms-3ms-PS NF-go -FU-O like -PF
'Ruwmay likes to go'
2. In the second construction, the covert subject of the object-marked future verb is obligatorily coreferential with the indirect object of the matrix verb.

Again, only a limited class of predicates may take this construction. This class includes the two speech verbs YARNA 'ask' and MAK 'tell' when they mean 'ask to' and 'tell to'.

```
(19) a. Yawur rey-e Liwmiy-e w -aey-re-re d@-mak'-e
    Yawur 3ms-0 Lumi -L NF-go -FU-0 FA-tell-P
    'Yawur told him to go to Lumi'
```

b. Yawur rey-e d@-mak'-e Liwmiy-e w-aey-re(-re)
Yawur 3ms-0 FA-tell-P Lumi -L NF-go -FU -0
'Yawur told him to go to Lumi'

Note that the indirect object of the matrix clause can not intervene between Liwmiye and waeyrere.

```
(19') *Yawur Liwmiy-e rey-e w -aey-re-re d@-mak'-e
    Yawur Lumi -L 3ms-0 NF-go -FU-0 FA-tell-P
    'Yawur told him to go to Lumi'
```

The preference verbs can also participate in this construction.
(20) Awtiy Numoy-re aewaey lay-kay Liwmiy-e w -aey-re-re Awtiy Numoy-0 want bear-PF Lumi -L NF-go -FU-O 'Awtiy wants Numoy to go to Lumi'
3. Finally, purpose clauses, like the purpose structures described above, always have a verb in the future. In this construction, however, there are no coreference restrictions.
(21) Wan Malay m@nman ka -re-re yen-e yukuwt d@-kow -kay 1SG Malay fun get-FU-0 2SG-0 paper FA-give-PF
'I have given you paper for Malay to play with'

The subject of such a purpose clause may bear possessive marking.
(22) Wan Malay rey-ke m@nman ka -re-re yen-e yukuwt d@-kow -o 1SG Malay 3ms-PS fun get-FU-0 2SG-0 paper FA-give-P
'I gave you paper for Malay to play with'

### 10.2.3. Imperfective complement constructions

Two types of complements require an imperfective form. In one case, the imperfective verb depicts a skill that is known, not known, or taught. In the other, it depicts a situation that is perceived directly while it is going on. The imperfective form is semantically well-suited to such imperfective situations.

1. The first type allows the two knowledge quasi-verbs NEKNEK 'know' and ARENE 'don't know' to occur in the meaning '(not) know how to'.
(23) a. Altiy-wo take d@-k -r' -ey-re neknek

Altiy-only bow stop FA-IP-plait-IP-0 know 'Only Altiy knows how to plait bow stops'

```
b. Altiy-wo neknek take d@-k -r' -ey(-re)
    Altiy-only know bow stop FA-IP-plait-IP -0
    'Only Altiy knows how to plait bow stops'
```

The verb IYMALEY 'teach, show' also takes this construction.
(24) Kukrown wan-e yilmaet d@-k -nak -ey-re d -iymaley-e

Kukrown 1SG-0 string FA-IP-hold-IP-0 FA-teach -P
'Kukrown taught me to make string figures'
2. Direct perception complements have their verbs in the imperfective with object marking and their covert subjects are coreferential with the matrix direct object. The perception verbs that take such complements are WAN 'hear', AYNA 'smell', and OWPA 'see'.
(25) Wan Numoy-re aeye d@-k -rokra-y -re d -ayn' -e

1SG Numoy-0 food FA-IP-cook -IP-0 FA-smell-P
'I smelled Numoy cooking food'

It is not possible for the matrix object to refer to the object of the embedded verb in this construction. Example (26a), while grammatical, is not a direct perception complement, but a relative clause. Note that it is possible to insert a perfect verb form, which is not a feature of this construction, in (26b). Example (26c) shows that an unambiguous relative clause construction is synonymous with (26a).

```
(26) a. Wan aeye-re Numoy d@-k -rokra-y -re d -ayn' -e
    1SG food-0 Numoy FA-IP-cook -IP-0 FA-smell-P
    'I smelled the food that Numoy was cooking'
```

    b. Wan aeye-re Numoy rokra-kay-re d-ayn' -e
        1SG food-0 Numoy cook-PF -0 FA-smell-P
        'I smelled the food that Numoy had cooked'
        c. Wan Numoy d@-k -rokra-y -re aeye-re d -ayn' -e
        1SG Numoy FA-IP-cook -IP-0 food-0 FA-smell-P
        'I smelled the food that Numoy was cooking'
    When the complement subject is overt, it occurs as a possessive pronoun coreferential with the matrix direct object.

```
(27) Osiy Takiy-re d -uwp-o rey-ke aeye d@-k -rokra-y -re
    Osiy Takiy-0 FA-see-P 3ms-PS food FA-IP-cook -IP-0
    'Osiy saw Takiy cooking food'
```

Perception verbs can also take direct perception complements whose subject is marked as possessive. In this case, the complement itself serves as the unique direct object of the matrix clause.
(28) a. Osiy Takiy rey-ke aeye d@-k -rokra-y -re d -uwp-o

Osiy Takiy $3 \mathrm{~ms}-\mathrm{PS}$ food FA-IP-cook -IP-0 FA-see-P
'Osiy saw Takiy's cooking food.

```
b. Osiy Takiy d -uwp-o rey-ke aeye d@-k -rokra-y(-re)
    Osiy Takiy FA-see-P 3ms-PS food FA-IP-cook -IP-0
    'Osiy saw Takiy's cooking food.
```

10.2.4. Subject complements

Subject complements, which are unusual in Awtuw, and whose predicate may only be a predicate $N P$ or adjective phrase, also have an imperfective verb form that may be marked with -re.

A nominal construction with an imperfective verb form may function as the subject of certain types of verbless predication. This construction occurs very infrequently.
(29) a. Poytin antante gow di-k -yel-ey(-re) monokene yapor
Poytin always tear FA-IP-cry-IP -0 bad very
'It's very bad that Poytin always cries'
b. aey d@-k -ra -y (-re) wan-ke lake betelnut FA-IP-eat-IP -0 1SG-PS bone 'Chewing betelnut is my thing'

It is surprising that the only available strategy for forming subject complements can accept object marking. It would appear that -re has become partly generalized as a marker of subordination and that on those rare occasions when called upon to produce a subject complement, Awtuw speakers are therefore inclined to mark the clause with the subordination marker.
10.2.5. Indirect discourse, inferential perception, and cognition

In this construction, the verb marked with -re may bear any tense marker and may carry a full set of arguments and adjuncts. This strategy has three major functions. It is used for inferential perception complements, for indirect discourse complements, and for indirect cognition complements.

Whatever the semantic function, clauses of this sort have in common the feature that the tense of the complement is relative to the tense of the matrix verb.

Thus, if the matrix verb is present, i.e.. unmarked, then an unmarked complement verb refers to an event contemporaneous with the speech event, a past complement verb to an event prior to it, and a future complement verb to an event subsequent to it.

> (30) a. rey rom yaw di-k -itwar-e -m -re d@-k -mak-ey
> 3ms 3PL pig FA-IP-bake -IP-PL-0 FA-IP-say-IP
> 'He says that they are baking a pig'
> b. rey rom yaw di-k -itwar-e- m- e-re d@-k -mak-ey
> 3ms 3PL pig FA-IP-bake -IP-PL-P-O FA-IP-say-IP
> 'He says that they were baking a pig'
c. rey rom yaw di-k -itwar-e -m -re-m -re d@-k -mak-ey

3ms 3PL pig FA-IP-bake -IP-PL-FU-PL-0. FA-IP-say-IP
'He says that they will be baking a pig'

Similarly, if the matrix verb is past, then an unmarked complement verb refers to an contemporaneous event, a past complement verb to a prior event, and a future complement verb to a subsequent event.
(31)

```
a. rey rom yaw di-k -itwar-e -m -re d@-mak-e
    3ms 3PL pig FA-IP-bake -IP-PL-0 FA-say-P
    'He said that they were baking a pig (while he said it)'
b. rey rom yaw di-k -itwar-e -m -e-re d@-mak-e
    3ms 3PL pig FA-IP-bake -IP-PL-P- 0 FA-say-P
    'He said that they had been baking a pig'
c. rey rom yaw di-k -itwar-ey-re-m -re d@-mak-e
    3ms 3PL pig FA-IP-bake -IP-FU-PL -0 FA-say-P
    'He said that they would be baking a pig'
```

And if the matrix verb is future, then the tense marking of the complement verb again refers to time with relation to the time of the matrix verb.
(32) a. rey rom yaw di-k -itwar-e -m -re mak-re 3ms 3PL pig FA-IP-bake -IP-PL -0 say-FU
'He will say that they are baking a pig (while he says it)'
b. rey rom yaw di-k -itwar-e -m -e-re mak-re

3ms 3PL pig FA-IP-bake -IP-PL-P-0 say-FU
'He will say that they had been baking a pig (before he says it)'
c. rey rom yaw di-k -itwar-ey-re-m -re mak-re

3ms 3PL pig FA-IP-bake -IP-FU-PL -0 say-FU
'He will say that they will be baking a pig (after he says it)'

A perfect form in the complement has much the same semantic effect as a perfect form in an independent clause. In the latter case it may refer to an event completed prior to the speech event, in the former, to an event completed prior to the time indicated by the tense of the complement verb, which is determined in turn by the tense of the matrix verb.

In example (34) each perfect complement verb indicates that the baking is complete at the time referred to by the tense. So in (34a), the unmarked tense of the complement verb refers to a time contemporaneous with the time of MAK 'say'. In ( $34 b$ ), the past tense of the ITWAR 'bake' refers to a time prior to the time of the matrix verb, and the perfect indicates that the baking was completed at that time. And in example (34c), the perfect of the complement verb indicates that the baking will be complete at the time referred to by the future.

```
(33) rom yaw d -itwar-ka-m
    3PL pig FA-bake -PF-PL
    'They have baked a pig'
```

(34) a. rey rom yaw d -itwar-ka-m -re d@-k -mak-ey
3ms 3PL pig FA-bake -PF-PL-0 FA-IP-say-IP
'He says that they have baked a pig'
b. rey rom yaw d -itwar-ka-m -e-re d@-k -mak-ey
3ms 3PL pig FA-bake -PF-PL-P-0 FA-IP-say-IP
'He says that they had baked a pig'
c. rey rom yaw d -itwar-ka-m -re-re d@-k -mak-ey
3ms 3PL pig FA-bake -PF-PL-FU-0 FA-IP-say-IP
'He says that they will have baked a pig'

The same kinds of interpretation apply to complements of matrix verbs in other tenses. The glosses in example (35) are not precisely equivalent to the Awtuw they gloss. Example (35a) means that they will have finished baking the pig at a time subsequent to the time he said it, which is of course prior to the time of the speech event. Example (35b) means that at some time before he says it, they will have finished baking the pig.
(35) a. rey rom yaw d -itwar-ka-m -re-re d@-mak-e

3ms 3PL pig FA-bake -PF-PL-FU-0 FA-say-P
'He said that they would have baked a pig'

```
b. rey rom yaw d -itwar-kay-e-m -re mak-re
    3ms 3PL pig FA-bake -PF -P-PL-0 say-FU
    'He will say that they had baked a pig'
```

As is common in comparable constructions in other languages, there is also a relativity of person in the complement, because the narrator relates the act of perception, speech, or cognition from his or her own point of view. So, for example, if Takiy utters the sentence in example (36) to Yawur, Yawur would report the speech to Napeyre as in example ( $36^{\prime} \mathrm{a}$ ) and to Takiy as in example (36'b).

```
(36) 'Wan Napeyre-te tawkway kow -re'
    1SG Napeyre-0 tobacco give-FU
    'I'll give Napeyre some tobacco'
```

(36') a. Takiy wan-e yen-e tawkway kow -re-re d@-mak-e
i k j
Takiy 1SG-0 2SG-0 tobacco give-FU-0 FA-say-P
'Takiy told me that he would give you some tobacco'
b. Yen wan-e tey-e tawkway kow -re-re d@-mak-e i k j 2SG 1SG-0 3ms-0 tobacco give-FU-0 FA-say-P 'You told me that you would give her some tobacco'

1. Perception verbs take this type of complement in the sense that the perception enables the subject to infer the situation depicted by the complement. Thus Kampo in example (37) did not actually observe his father going, but his observations enabled him to surmise that his father had gone.

> (37) Kampo rey-rey-ke gaw@r d -aey-kay-e-re d -uwp-o
> Kampo 3ms-3ms-PS father FA-go -PF -P-0 FA-see-P
> 'Kampo saw that his father had gone'
2. The two speech verbs also take this construction, as illustrated in the preceding examples and here in (38).
(38) Wan (Naytow-re) Yawur maew-e d -aey-e-re d@-mak-e

1SG (Naytow-re) Yawur bush-L FA-go -P-0 FA-say-P
' I told (Naytow) whether Yawur went to the bush'

The interpretation of the complement is as indirect speech - the speaker merely reports the narrated speech event, and does not attempt to reproduce it.
3. All the cognition verbs, including the preference verbs, can enter into this construction.
(39) Tey Awtiy Taeypil-e w -ewr'-eya -re-re nenaen di-k -lay -ey-e 3fs Awtiy Talbipi-L NF-AGN -come-FU-O thought FA-IP-bear-IP-P
'She was thinking that Awtiy would return from Talbipi'

Complements of this type often occur sentence finally with their subjects appearing as the direct object of the matrix verb. Perception and cognition verbs can take this construction, preference and speech verbs do not.
(40) a. Wan Osiy-re d@-wan -e taw d -uwk -o-re 1SG Osiy-0 FA-hear-P tree FA-fell-P-0
'I heard that Osiy felled a tree'
b. Rey Numoy-re neknek Liwniy-e w -aey-re-re 3ms Numoy-0 know Lumi -L NF-go -FU-O
'He knows that Numoy will go to Lumi'
c. *Rey Numoy-re de-yaw' -o Liwmiy-e d -aey-e-re

3ms Numoy-0 FA-not want-P Lumi -L FA-go -P-0
*'He doesn't want that Numoy went to Lumi'
d. Rey Numoy-re d@-mak-e Liwmiy-e d -aey-e-re 3ms Numoy-0 FA-say-P Lumi -L FA-go -P-0
'He told Numoy that someone went to Lumi'
*'He said that Numoy went to Lumi'

This construction does not permit the complement subject to occur as a possessive pronoun.
(41) a. *Rey Numoy-re neknek rey-ke Liwmiy-e d -aey-e-re3ms Numoy-0 know 3ms-PS Lumi -L FA-go -P-0 *'He knows that Numoy went to Lumi'
10.2.6. Cause and result clauses

Awtuw uses a superficially similar strategy to form cause and result clauses. These clauses may also have object marking on the verb and possessive marking on the embedded subject. But their subjects never occur as the direct object of the matrix verb and the tense of the embedded clause is not relative to the tense of the matrix clause.

```
(42) a. Yawur Peyaw awtuw rowko-ka-re rey-e tawkway d@-kow -o
    Yawur Peyaw none do -PF-0 3ms-0 tobacco FA-give-P
    'Yawur gave Peyaw tobacco because he had run out'
```

b. Peyaw rey-ke awtuw rowko-ka(-re) Yawur rey-e tawkway d@-kow -o
Peyaw 3ms-PS none do -PF -0 Yawur 3ms-0 tobacco FA-give-P
'Yawur gave Peyaw tobacco because he had run out'
c. Yawur Peyaw awtuw rokw-re-re rey-e tawkway d@-kow -o Yawur Peyaw none do -FU-O 3ms-0 tobacco FA-give-P
'Yawur gave Peyaw tobacco because he will run out'
d. Yawur Peyaw rey-ke awtuw rowko-ka-re rey-e tawkway d@-kow -o
Yawur Peyaw 3ms-PS none do -PF-0 3ms-0 tobacco FA-give-P
'Yawur gave Peyaw tobacco because he had run out'
(43) a. Yawur Peyaw-re tawkway d@-kow -o-re rey awtuw rowk-o

Yawur Peyaw-O tobacco FA-give-P-O 3ms none do -P
'Peyaw ran out of tobacco so Yawur gave him some'
b. Yawur Peyaw-re tawkway d@-kow -o-re rey awtuw rowk-re

Yawur Peyaw-0 tobacco FA-give-P-0 3ms none do -FU
'Peyaw will run out of tobacco so Yawur gave him some'
c. Yawur Peyaw-re tawkway d@-kow -o-re rey awtuw rowk-re Yawur Peyaw-0 tobacco FA-give-P-0 3 ms none do -FU 'Peyaw will run out of tobacco so Yawur gave him some'

### 10.2.7. Relative clauses

Relative clauses have much the same structure as the complements discussed in the preceding paragraphs. Relative clauses typically occur between a determiner and a noun, and while there is no restriction on their tense, the most common relative clauses are those with an imperfective verb unmarked for tense as in example (44a).

> (44) a. rey kil d@-k -alow -ey-re rame lakn@-kay.
> 3ms speech FA-IP-speak-IP-0 man die -PF
> 'The talkative man has died'
b. rey yen tawkway d@-k' -@-re rame(-re-k) lakn@-kay

3ms 2SG tobacco FA-get-P-0 man -0 -I die -PF
'The man you got tobacco from has died'
c. rey [yaepaer] d -uwpo-kay-re rame lumwo-wo d -aey-e

3ms kangaroo FA-see -PF -0 man slow -ADV FA-go -P
'The man who had seen the kangaroo walked slowly'

This same strategy is used to relativize all positions on the NP Accessibility Hierarchy except possessives (Keenan and Comrie 1977, 1979). Example (44a) and (44c) illustrate relativization on a subject, and (44b), on a source of getting with instrumental marking. Example (45a) illustrates relativization on a direct object, (45b) on an indirect object, (45c) on a beneficiary, (45d) on a comitative, (45e) on an instrument, and (45f) on a locative.
(45) a. Tey wan d -uwp-o-re tale Wutlakw-o d -ikiy

3fs 1SG FA-see-P-0 woman Gutaiye-L FA-stay
'The woman I saw lives in Gutaiye'

```
b. Rey wan tawkway d@-k@--kow -ey-e-re rame lakna-kay
    3ms 1SG tobacco FA-IP-give-IP-P-0 man die -PF
    'The man I used to give tobacco to has died'
c. Tey Yawur aewre d -uy -kow-kay-re tale w -eya -re
    3fs Yawur house-FA-build-BEN-PF -0 woman NF-come-FU
    'The woman Yawur has built a house for will come'
d. Rey wan d -ey' -e-re rame aeye d@-k -ra -y
    3ms 1SG FA-come-P-0 man food FA-IP-eat-IP
    'The man I came with is eating'
e. Rey wan taw d -uwk -o-re yekne perper mede
    3ms 1SG tree FA-fell-P-0 axe sharp very
    'The axe I felled the tree with is very sharp'
f. Rey yaen -wom d@-k -owna -y -e-re aewre lamlakn@-kay
        3ms child-PL FA-IP-sleep-IP-P-0 house fall -PF
        'The house the boys used to sleep in has fallen down'
```

Another strategy leaves a resumptive pronoun in the relative clause. This strategy relativizes all positions on the Hierarchy including possessives, as shown in example (46).
(46) Rey rey-ke piyren wan-e d -ael -i-re rame lakna-kay 3ms 3ms-PS dog 1 SG-0 FA-bite-P-0 man die. -PF
'The man whose dog bit me has died'

In yet another strategy, the head noun takes case marking appropriate to its role in the relative clause. This construction can also relativize all positions except possessives.

```
(47) a. Tey Yawur aewre d -uy -kow-kay-re tale -re w -eya -re
    3fs Yawur house-FA-build-BEN-PF -0 woman-0 NF-come-FU
    'The woman Yawur has built a house for will come'
b. Rey wan taw d -uwk -o-re yekne-re-k perper mede
    3ms 1SG tree FA-fell-P-0 axe -0 -I sharp very
    'The axe I felled the tree with is very sharp'
```

It is possible to summarize the attributes of the three constructions in terms of two principles:

1. A resumptive pronoun must carry possessive marking when relativizing on a possessive NP.
2. The head noun may bear the case marking of the position from which it was relativized when there is no resumptive pronoun.

The head noun of any relative clause may occupy any position in the matrix clause, as illustrated in example (48).
(48) a. rey aeye d@-k -ra -y -re rame-re wan d -uwp-o 3ms food FA-IP-eat-IP-0 man -0 1SG FA-see-P
'I saw the man who is eating'
b. rey aeye d@-k -ra -y -re rame-re wan tawkway d@-kow -kay 3ms food FA-IP-eat-IP-0 man -0 1SG tobacco FA-give-PF
'I gave tobacco to the man who is eating'
c. rey aeye d@-k -ra -y -re rame-re wan aewre d -uy -kow -kay 3ms food FA-IP-eat-IP-0 man -0 1SG house FA-build-BEN-PF
'I have built a house for the man who is eating'
d. rey aeye $d @-\mathrm{k}-\mathrm{ra}-\mathrm{y}$-re rame-re-k wan d -eya -kay 3ms food FA-IP-eat-IP-0 man -0 -I 1SG FA-come-PF
'I came with the man who is eating'
e. rey yen d@-k@ -kay-re yekne-re-k wan taw d -uwk -o 3ms 2SG FA-get-PF -0 axe -0 -I 1SG tree FA-fell-P
'I felled a tree with the axe that you have taken'
f. rey yen d -uy -e-re aewre-ke yaen -wom d@-k -owna -m 3ms 2SG FA-build-P-0 house-L child-PL FA-IP-sleep-PL 'The boys sleep in the house that you built.

A relative clause can follow the head noun with appositional intonation and non-restrictive sense, a matter $I$ have discussed in 7.6.
(49) rey rame (-re-k) (rey) aeye d@-k -ra -y -re wan d-eya -kay 3 ms man $-0-\mathrm{I} \quad 3 \mathrm{~ms}$ food FA-IP-eat-IP-0 1 SG FA-come-PF 'I came with the man, who is eating'

### 10.3. Adverbial constructions

An adverbial construction marks the verb of the embedded clause with the instrumental/comitative suffix -re-k. The verb in such a clause selects all verbal categories but tense and illocutionary force independently of the matrix clause and has its own set of arguments and adjuncts. Its tense is relative to the tense of the matrix verb. The subject of a verb marked as instrumental may appear with possessive marking.

```
(50) nom yen-ke ma-wey -e-wa -re-k kil d@-alow+d -aey-ka-m
    1PL 2SG-PS go-arrive-P-just-0 -I speech FA-talk+FA-go -PF-PL
    'We have gone on talking since you arrived'
```

Sequence of tenses in this construction is quite different from the sequence of tenses described above in section 10.2.5. Here an embedded verb must either bear the same tense marker as the matrix verb, or no tense marking at all.

A matrix verb of any tense may embed a verb unmarked for tense.
(51) a. Rey wan d@-k -aey-ey-re-k di-ik -i

3ms 1SG FA-IP-go -IP-0 -I FA-sit-P
'He sat down when I was going'
b. Rey wan $d @-k-a e y-e y-r e-k$ di-k -ik -iy

3ms 1SG FA-IP-go -IP-0 -I FA-IP-sit-IP
'He is sitting down while I am going'
c. Rey wan $d @-k$-aey-ey-re-k w -ik -re

3ms 1SG FA-IP-go -IP-0 -I NF-sit-FU
'He will sit down when I am going'

A future matrix verb may also embed a future form, and a past matrix verb can embed a past form.
(52) a. *Rey wan d-aey-e-re-k w-ik -re

3ms 1SG FA-go -P-O -I NF-sit-FU *'He'll sit down when I went'
b. Rey wan w -aey-re-re-k w -ik -re

3ms 1SG NF-go -FU-O -I NF-sit-FU
'He'll sit down when I go'
(53) a. Rey wan d -aey-e-re-k di-ik -i

3ms 1SG FA-go -P-0 -I FA-sit-P
'He sat down when I went'

```
b. *Rey wan w -aey-re-re-k di-ik -i
    3ms 1SG NF-go -FU-0 -I FA-sit-P
    *'He sat down when I will go'
```

But an unmarked matrix verb can only embed another verb unmarked for tense.

$$
\begin{aligned}
& \text { (54) a. *Rey wan d -aey-e-re-k di-k -ik -iy } \\
& \text { 3ms 1SG FA-go -P-o -I FA-IP-sit-IP } \\
& \text { *'He's sitting down when I went' } \\
& \text { b. *Rey wan w -aey-re-re-k di-k -ik -iy } \\
& \text { 3ms 1SG NF-go -FU-0 -I NF-IP-sit-IP } \\
& \text { *'He's sitting down when I'll go' }
\end{aligned}
$$

```
c. Rey wan d@-k -aey-ey-re-k di-k -ik -iy
    3ms 1SG FA-IP-go -IP-0 -I NF-IP-sit-IP
    'He's sitting down while I go'
d. Rey wan d@-aey-ka-re-k di-k -ik -iy
    3ms 1SG FA-go -PF-0 -I NF-IP-sit-IP
    'He's sitting down when I've gone'
```

As I mentioned in section 4.12., Awtuw's ability to code a variety of aspectual and adverbial categories in compounding roots and elsewhere in the verb complex compensates for its lack of conjunctions. These categories, along with regular aspect marking and the adverbial prefixes in slots -5 and -4 , make it possible to form a wide variety of temporal clauses.

An embedded clause with imperfective marking is typically interpreted as a while-clause. The adverbial prefix taw- 'still' can reinforce this interpretation.
(55) yen nom aeye taw -k -rokra-y -m -e-re-k lape -ke ma-wey -e 2SG 1PL food still-IP-cook -IP-PL-P-0 -I village-L GO-arrive-P 'You arrived in the village while we were still cooking food'

An imperfective matrix verb and an embedded perfect verb result in a structure analogous to an until-clause. This interpretation is strengthened by the addition of the compounding root taewa- 'begin' to the matrix verb.
(56) nom yen w -eya -kay-re-re-k kil ka-k -alow-taew'-ey-re-m 1 PL 2SG NF-come-PF -FU-0 -I speech NG-IP-speak-begin-IP-FU-PL 'We won't start talking until you have arrived'

And an embedded past verb combines with an AEY serialization (see 10.1.2.) with perfect marking to form a since-clause.

> (57) nom yen ma-wey -e-wa -re-k kil d@-alow+d-aey-ka-m 1PL 2SG go-arrive-P-just-0-I speech FA-talk+FA-go-PF-PL 'We have gone on talking since you arrived'

Clauses with Instrumental marking may occur in any position in the matrix clause - either medially, as in examples (50) and (52), or initially as in (58), or finally, as in (59).
(58) yen-ke ma-wey -e-wa -re-k nom kil d@-alow+d -aey-ka-m 2SG-PS go-arrive-P-just-0 -I 1PL speech FA-talk+FA-go -PF-PL 'We have gone on talking since you arrived'
(59) nom kil d@-alow+d -aey-ka-m yen-ke ma-wey -e-wa -re-k 1 PL speech FA-talk+FA-go -PF-PL 2SG-PS go-arrive-P-just-0 -I 'We have gone on talking since you arrived'

### 10.4. Conditional constructions

Awtuw has two types of conditional sentences. Future conditionals have verbs marked for future in both the protasis and the apodosis, as in (61), and contrafactual conditionals have verbs marked as conditional in both clauses, as in (60) and (62). In either case, there is a strict constraint that the two interdependent clauses bear the same marking for tense and modality, although each verb selects aspect, direction, and negative marking independently. Moreover, each verb carries an independent set of arguments and adjuncts.
(60) yele w -it -ik, wan ka-w -aey-@k rain NF-rain-CDL 1 SG NG-NF-go -CDL 'If it had rained, I wouldn't have gone'
(61) yele w -it -re, wan ka-w -aey-re rain NF-rain-FU 1 SG NG-NF-go -FU 'If it rains, I won't go'
(62) yen topor rame-re ka-w -owpa-k@k, wan maew-e w -aey-kay-@k 2SG that man -0 NG-NF-see -CDL 1 SG bush-L NF-fo -PF -CDL 'If you hadn't seen that man, I would have gone to the bush'

The protasis always precedes the apodosis in such constructions, as in (63).

```
(63) Wan ka-w -aey-@k, yele ka-w -it -ik
    1SG NG-NF-go -CDL rain \(N G-N F-r a i n-C D L\)
    'If I hadn't gone, it wouldn't have rained'
*'If it hadn't rained, I wouldn't have gone'
```

10.5. Coordinated clauses

In addition to the various serialization and subordination strategies described in the preceding sections, Awtuw can concatenate fully independent clauses. One such clause is never embedded in the other, nor may either clause bear case marking. Each clause is always entirely acceptable on its own.

Unlike the previously described strategies, where the tense of the verb in one clause was dependent upon the tense of the other - either determined by the construction, or relative to the time of the matrix verb, the tense of each clause in coordinate constructions is independent of the other. The tense of every verb has absolute time reference.

Furthermore, the clauses in these constructions are independent with respect to illocutionary force. One clause may be in a debitive or potential modality, or be a question, while the other is not.
(64) Wan Liwmiy-e d -eya -kay, yen po yipke w -aey-re? 1SG Lumi -L FA-come-PF 2SG PCL where FA-go -FU 'I've come from Lumi, and where are you going?'
(65) an ki-t-ik t@, wan po aeye ma-rokra-kow-re

2DU IM-DU-sit here 1SG PCL food GO-cook -BEN-FU
'You two sit here and I'll go cook you some food'
(66) yen ey ap-rokw-re, yen na-lamlakna-re

2SG thus PR-do -FU 2SG PT-fall -FU
'Don't do that, you could (lest you) fall'
(67) yen yaw w -iy -re, yen-yen ap-ra -re

2SG pig NF-shoot-FU 2SG-2SG PR-eat-FU
'If you shoot a pig, don't eat it'
10.5.1. When two or more coordinated clauses have the same verb as their predicate, the verb of the second and subsequent clauses may be deleted.
(68) Awtiy yaw-re d -iy -e, Mimpel komkoran-re, Yawur kewyaene -re Awtiy pig-0 FA-shoot-P Mimpel bat -0 Yawur cassowary-0 'Awtiy shot a pig, Mimpel a bat, and Yawur a cassowary'

Indeed, when the verb is recoverable from context, it may be deleted altogether.
(69) a. Om yipke w -aey-re-m?

2PL where NF-go -FU-PL
'Where are you all going?'
b. Wan Liwmiy-e, Yawur Taeypil-e, Altiy Wutlakw-o

1SG Lumi -L Yawur Talbipi-L Altiy Gutaiye-L
'I'm going to Lumi, Yawur to Talbipi, and Altiy to Gutaiye'
10.5.2. There are three types of coordinate construction that deserve special discussion.

Comparative clauses involve the verb ERYER 'surpass' in the second clause.
(70) a. rey laelal d@-k -rokw-ey, yaw d -eryer -kay

3ms noise FA-IP-do -IP pig FA-surpass-PF
'He makes more noise than a pịg'
b. rey laelal d@-k -rokw-ey, yaw rey-e d -eryer -kay

3ms noise FA-IP-do -IP pig 3ms-0 FA-surpass-PF
'He makes less noise than a pig'

Direct discourse clauses follow a speech verb and one of the ((t)ey)(pek)(wo) adverbs 'thus'. Unlike indirect discourse complements, they never take case marking or occur clause medially. Tense and person are not relative to the tense and person in the matrix clause.
(71) raew ey d@-yarn'-e, 'yen po wokrampe yokri?'

3DU thus FA-ask -P 2SG PCL troll PCL
'They two asked, "Are you a troll?"'

Manner and degree clauses involve' a special construction with the expression yen eywo makre 'you would say' with a direct discourse complement in the imperfective.
(72) rey laelal d@-k -rokw-ey yen eywo mak-re yaw d@-k -ra -y -re

3ms noise FA-IP-do -IP 2SG thus say-FU pig.rl-IP-eat-IP-0
'He makes noise like a pig eating'
'He makes as much noise as a pig eating'

In most cases, it would be far more idiomatic to use a construction with an NP bearing the comparative suffix -kwo (cf. 8.3.3.).
(73) rey laelal d@-k -rokw-ey yaw-kwo

3ms noise FA-IP-do -IP pig-like
'He makes noise like a pig'
'He makes as much noise as a pig'

### 10.6. Coreferential NPs

In any of the constructions discussed above that do not entail specific coreference constraints, the possibility of confusion arises. Awtuw compensates for this in large measure pragmatically by interpreting the antecedent of a deleted NP as the most plausible NP available.
(74) Kampo Poytin-te du-puy'-e, gow di-yel-e.

Kampo Poytin-0 FA-hit -P tear FA-cry-P
'Kampo hit Poytin and she cried'

In this case the antecedent of the missing NP in the second clause is interpreted as the object of the first - Poytin got hit, so she must be the one who cried.

When two or more NPs are equally likely candidates for the role of antecedent of a deleted NP, the default interpretation is that it is the subject of the preceding clause.
(75) Kampo Poytin-te du-puy'-e, d -upoka+d -aey-e.

Kampo Poytin-0 FA-hit -P FA-flee +FA-go -P
'Kampo hit Poytin and fled'

When the antecedent is the subject of the preceding clause, but it is not the most plausible candidate, an emphatic pronoun must occur in the second clause.

> (76) Kampo Poytin-te du-puy'-e, rey-rey gow di-yel-e.
> Kampo Poytin-0 FA-hit $-\mathrm{P} \quad 3 \mathrm{~ms}-3 \mathrm{~ms}$ tear FA-cry-P
> 'Kampo hit Poytin and he, himself, cried'
10.7. Correlation of forms and functions

Table 10.1 correlates the various constructions relating predicates and clauses in Awtuw with their semantic functions.

Table 10.1

11. Lexical fields
11.1. Terminology of kinship and affinity
11.1.1. We can begin the discussion of kinship and affinity terms by listing them in full along with a gloss, the plural form, and the form used for relations to other than the speaker, if any. Figure 11.1 illustrates the denotation of most of these terms for the most direct link to a male ego. Note that a triangle in Figures 11.1-6 represents a male and a circle, a female. A circle within a triangle represents a person of either sex and a triangle within a circle, a person of the opposite sex to the person represented by a circle within a triangle. An affine to whom the name taboo (see below) applies is represented by a shaded circle or triangle.

Table 11.1

Foci of kinship and affinity terms

| TERM | GLOSS PLURAL |  | NON-FIRST PERSON |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | MALE | FEMALE |
| 1. gaye | 'father' | gaye-wom | gaw@r | -- |
| 2. gamey | 'mother' | gamey-wom | -- | nemet |
| 3. lam | 'younger /' | limlaemim | lamur | lamut |
| 4. yaye | 'older /' | yaye-wom | nemaner | nemanet |
| 5. napre | 'opposite sex sibling' napre-wom |  | naprer | napret |
| 6. eywe | 'ancestor' | (owyim) | yar | --? |
| 7. yaen | 'child' | yaen-wom | yaener | -- |
| 8. yenankeyke | 'grandchild' | yenankeykim | -- | -- |
| 9. waw@y | 'mother's brother' | waw@y-wom | yaner | -- |
| 10. mame | 'father's sister' | mame-wom | -- | mamet |
| 11. elne | 'Parents' /'s son' | elne-wom | -- | -- |
| 12. ene | 'Parents' y/' | ene-wom | -- | -- |
| 13. tamyaen | 'MB child' | tamyaen-yaenim | tamor | tamot |
| 14. yawyaen | 'sister's child' | yawyaen-yaenim | -- | -- |
| 15. yapor | 'husband ' | yapum | -- | -- |
| 16. talet | 'wife' | talem | -- | -- |
| 17. rer | 'WB, $\mathrm{ZH}^{\prime}$ (ms) | ewrerim | ewrerya | -- |
| 18. yaetkaelne | 'BW, HZ' (fs) | yaetkaelne-yaen | nim -- | -- |
| 19. taepiyne | ' MBDH ${ }^{\text {' }}$ | taepiyne-yaenim | m -- | -- |
| 20. yenan | 'child's spouse' | yenan-wom | yenaner | yenanet |
| 21. ayram | 'xSpx' | ayram-yaenim | -- | -- |
| 22. walne | 'xSpP, CSpx' | walne-yaenim | -- | -- |

Figure 11.1
SIMPL IFIED DIAGRAM OF KIN AND AFFINES
11.1.2. We can identify the focus of a kin term as the kinsman a speaker refers to as $[\mathrm{KT}]$ mede 'real $[\mathrm{KT}]$ ' and represent the meanings of the foci componentially in terms of the following semantic features.
a. Marriage - specified + if the relative is related to Ego through a marriage link.
b. Female - specified + if the relative is female.
c. 1 Generation - specified + if the relative is one generation removed from Ego's generation.
d. 2 Generations - specified + if the relative is two generations removed from Ego's generation.
e. Generation Above - specified + if the relative's generation is prior to Ego's.
f. Cross - specified + if the relation involves any link between brother and sister.
g. Prior Birth - specified + if the named relative is older than the same sex sibling through whom he or she is related to Ego. The reievant same sex sibling may be Ego.
Table 11.2
Feature specifications for foci of kin terms

| Feature | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  |  |  |  |  |  |  |  |  |  | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. MARRIAGE | - | - | - | - | - | - | - | - | - |  |  |  |  |  |  | + | + | + | + | + | + |  |
| b. FEMALE | - | + | 0 | 0 | 0 | 0 | 0 | 0 | - | + | 0 | 0 | 0 | 0 | - | + | - | + | - | 0 | 0 |  |
| c. 1 GEN | + | + | - | - | - | - | + | - | + | + | - | + | - | + | - | - | - | - | - | + | - | + |
| d. 2 GEN | - | - | - | - | - | + | - | + | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| e. GEN ABOVE | + | + | - | - | - | + | - | - | + | + | - | + | - | - | - | - | - | - | - | - | - |  |
| f. CROSS | - | - | - | - | + | - | - | - | + | + | - | - | + | + | - | - | + | + | + | - | + |  |
| g. PRIOR | - | - | - | + | 0 | + | - | - |  | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |

11.1.3. Next, referring to Figures 11.1-6, we can examine the extensions of these terms to other kin and affines. Figures 11.2 and 11.3 illustrate kinship and affinity through members of Ego's generation for male and female egos respectively. Figure 11.4 shows kinship through members of the first ascending generation for a male ego. And Figures 11.5 and 11.6 illustrate the relations through the parents of Ego's mother and father respectively, also for a male ego. Note that all members of the second and higher ascending generations are eywe, and, with the exception of Ego's mother's and Ego's parents' mothers' patrilines, all members of the second and higher descending generations are yenankeyke.

Table 11.3 Extensions of kinship and affinity terms (male Ego) Abbreviations

| B brother | H | husband | Sb sibling | / | same sex sibling |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C child | M | mother | Sp spouse | x | opposite sex sibling |  |
| D daughter | P | parent | W | wife | o older |  |
| F father | S | son | Z | sister | Y | younger |

1. gaye $\mathrm{F}, \mathrm{FyB}, \mathrm{FPy} / \mathrm{S}, \mathrm{FMBDS}, \mathrm{WF}, \mathrm{MyZH}$
2. gamey $M, M y Z, M P / D, M B D, M M B D D, M B S D, M B S S D, W M, F y B W$
3. lam y/, Py/S, MBDS, MPy/DS, FPy/SS, y/Sp, Spy/, Spy/Sp
4. yaye o/, Po/S, MFZS, MPo/DS, FPo/SS, o/Sp, Spo/, Spo/Sp
5. napre $x, M B D D, P / D, M F Z D, M B D D, M P / D D, F P / S D, S p x S p$
6. eywe PP, PPSb, FPo/S, PMBC, PMBSC, PMBSCC..., PPP, etc.
7. yaen $C, \circ / C, S P o / C, P o / C, \operatorname{MFZSC}, \operatorname{WBC}(\mathrm{~ms}), \mathrm{BC}(\mathrm{fs})$
8. yenankeyke CC, y/C, o/CC, xCC, FZCC, FFZCC, SpxCC, Spo/CC, Spy/C
9. waw@y MB, MBSS, MBSSSS, FZH, MMBDS, MP/S
10. mame $F Z, \mathrm{MBW}, \mathrm{FP} / \mathrm{D}, \mathrm{FMBDD}$,
11. elne $P / S$
12. ene Py/, Py/Sp
13. tamyaen MBS, FZS, MBSSS, MMBDSS..., MBSW, FZSW
14. yawyaen ZC, FFZC, MFZDC, P/DC, WBC
15. yapor $H$ (female ego)
16. talet $W$ (male ego)
17. rer $\quad Z H, W B, P / D H$ (male ego)
18. yaetkaelne BW, HZ, (female ego)
19. taepiyne MBDH, WFZS
20. yenan CSp, SbCSp
21. ayram ZHZ (male ego), BWB (female ego)
22. walne ZHP (male ego), BWP (female ego), CSpx
Figure 11.2
KIN AND AFFINES THROUGH EGO'S GENERATION (Male Ego)

Figure 11.3

yenankeyke
Figure 11.4
Kin and affines through first ascending generation (Male Ego)

Figure 11.5
KIN THROUGH MOTHER'S PARENTS (MALE EGO)

Figure 11.6

23. taepiyne
24. yenan
25. ayram
26. walne
27. tamyaen
28. yawyaen
29. yapor
30. talet
31. rer
32. yaetkaelne

$$
\begin{aligned}
& \text { 7. yaen } \\
& 8 . \text { yenankeyke } \\
& 9 . \text { waw@y } \\
& \text { 10. mame } \\
& \text { 11. elne } \\
& \text { 12. ene }
\end{aligned}
$$


11.1.4. There are several interesting features of this system. First, and most conspicuous, is that the term for mother's brother, waw@y, is not the same as that for mother's brother's son, tamyaen. Second, these two terms alternate in subsequent generations. Thus mother's brother's son's son is again waw@y, his son is tamyaen, his son waw@y again, and so forth.

Next, parents' mother's brother's son's descendants are all eywe 'grandparent' regardless of generation. Thus, Ego's mother's mother's brother's son's son's son's son, who is of the same generation as Ego's grandchildren, is still 'grandparent' to Ego. A male ego may marry his eywe, who is the only relative he may marry. Conversely, a female ego may marry her yenankeyke 'grandchild' who is the only relation she may marry.

Fourth, there are three special terms for affines, to all of whom the name taboo applies. Taepiyne is mother's brother's daughter's husband or wife's father's sister's son. Ayram is Ego's opposite sex sibling's spouse's opposite sex sibling. And walne is Ego's opposite sex sibling's spouse's parent or child's spouse's opposite sex sibling. Note that these are not the only affines whose names Ego may not pronounce.

Fifth, Ego's parents' older same sex siblings are addressed and referred to by the same term as grandparents.

Finally, there are two sets of terms for parents' younger same sex siblings. Mother's younger sister may be either gamey 'mother' or ene 'parent's younger same sex sibling' while father's younger brother may be either gaye 'father' or ene. In neither system, however, is father's brother the same as mother's brother.

This makes classification of the system in terms of the first ascending generation terms problematical. Leaving aside the problem of identifying parents' older same sex siblings with parents' parents, the two coexisting sets of terms for parents' siblings remain problematical. In one case, the terms for father and father's (younger) brother are the same, gaye, and contrast with the term for mother's brother, waw@y - a bifurcate merging system. In the other, the term for father, gaye, contrasts with both the term for father's (younger) brother, ene, and that for mother's brother - a bifurcate collateral system (Lowie 1968). Either of these classifications ignores two apparently significant facts - the problem of parents' older same sex siblings remains, and, in the second system, the term for father's younger brother identifies him with mother's younger sister.

There is less difficulty in classifying the Awtuw system according to cousin terms (Murdock 1949.223). This system is unambiguously an Iroquois type. The terms for parallel cousins identify them with siblings and contrast with the terms for cross cousins. Father's older brother's son, mother's older sister's son, and (male) Ego's older brother are all yaye, father's younger brother's son, mother's younger sister's son and Ego's younger brother are all lam, while mother's brother's son and father's sister's son are both tamyaen.
11.1.5. Next we can look at what various kin and affines call ego. Several of the terms are reciprocal, others are in a one-to-one relation, and a few are in a one-to-many relation.

Table 11.4
Reciprocity of kinship and affinity terms
If Ego calls $X: \quad$ then $X$ calls EGO：

| 1. | gaye | ＜－－－＞ | yaen |
| :---: | :---: | :---: | :---: |
| 2. | gamey | $\langle---\rangle$ | yaen |
| 3. | lam | $\langle-->\rangle$ | yaye |
| 4. | yaye | $\langle---\rangle$ | lam |
| 5. | napre | ＜－－－＞ | napre |
| 6. | eywe | 〈－－－＞ | yenankeyke |
| 7. | yaen | 〈－－－＞ | gamey，gaye，mame，ene |
| 8. | yenankeyke | ＜－－－＞ | eywe |
| 9. | waw＠y | $\langle-\cdots\rangle$ | yawyaen |
| 11. | mame | $\langle---\rangle$ | yaen |
| 11. | elne | 〈－－－＞ | elne |
| 12. | ene | ＜－－－＞ | yaen |
| 13. | tamyaen | ＜－－－＞ | tamyaen |
| 14. | yawyaen | $\langle-->\rangle$ | waw＠y |
| 15. | yapor | $\langle---\rangle$ | talet |
| 16. | talet | ＜－－－＞ | yapor |
| 17. |  | $\langle---\rangle$ | rer |
| 18. | yaetkaelne | ＜－－－＞ | yaetkaelne |
| 19. | taepiyne | ＜－－－＞ | taepiyne |
| 20. | yenan | $\langle-->\rangle$ | gaye，gamey |
| 21. | ayram | ＜－－－＞ | ayram |
| 22. | walne | ＜－－－＞ | walne |

11.1.6. The birth order of children can be specified by four compounds with yaen. These are not, strictly speaking, part of the system of kinship terminology. They are only used in enumerating one's children or in specifying the birth order of a particular group of siblings.

| watik+yaen (sprout+child) | 'first child' |
| :--- | :--- |
| takle+yaen  <br> luwk+yaen (middle+child) 'middle child' <br> $\underline{\text { palmo+yaen }}$ 'last child'. |  |

11.1.7. There is a name taboo associated with various affinal relations. The form this taboo takes is that ego may not pronounce the personal names of anyone standing in the appropriate relation to him or her - Awtuw speakers typically have from three to six personal names - either in reference or in address.

All name taboos are reciprocal, whether the terms by which Ego and the specified affine address each other are recipriocal or not. Thus, Ego and his sister's husband's sister call each other ayram and may not pronounce each other's names. But although Ego calls his wife's mother gamey and she calls him yenan, they still may not pronounce each other's names.

Moreover, Ego may not address or refer to any namesake of the relevant affines by the tabooed name. Generally, anyone who is not in a name taboo relation with Ego will have at least one personal name that does not overlap with the personal names of those who are in such a relation to Ego. Note that the namesake of someone in a name taboo relation with Ego may pronounce Ego's name, provided Ego is not a namesake of someone in a name taboo relation with that person.

Finally, where an affine in a name taboo relation to Ego has a personal name that is also a common noun, or one that resembles a common noun closely, Ego may not use that common noun. Affines in a name taboo relation to Ego are represented by filled triangles and circles in Figures 11.1-7.

We can illustrate this with reference to the data in Figure 11.7.

Figure 11.7

Illustration of application of name taboo


In the case that Figure 11.7 illustrates, Ego's mother's brother's wife, who stands in the relation mame to Ego, is named Rose. Ego's mame is not in a name taboo relation. Ego's wife's mother, who is in a name taboo relation, is also named Rose. Therefore, when Ego marries Tanya, he may no longer address or refer to his mother's brother's wife by the name Rose. Furthermore, he may no longer use the common noun rose, but must use a paraphrase. Fortunately, most Awtuw speakers and members of the groups with whom they intermarry have, as I mentioned above, several names. And personal names that resemble common nouns are comparatively rare. Note that Ego's mother's brother's wife, Rose, may still pronounce Ego's name, provided Ego is not the namesake of someone in a name taboo relation to her.

The affines whose names Ego may not pronounce include walne 'xSpP'. ayram 'xSpx', taepiyne 'MBDH', and yenan 'CSp'. In addition, the name taboo applies to specific individuals who Ego calls lam 'y/', yaye 'o/', gaye 'F', and gamey 'M'. Specifically, a male Ego may not pronounce the name of his wife's mother, gamey, his wife's father, gaye, his younger brother's wife, lam, or his wife's older sister, yaye. A female Ego may not pronounce the names of her husband's parents, gamey and gaye, her younger sister's husband, lam, or her husband's older brother, yaye.

It is worth stressing that the taboo on pronouncing the names of specific affines does not entail any other speech taboos. Ego may speak to or about those in a name taboo relation to him or her freely. Indeed, the virilocal residence pattern typical in the Awtuw-speaking area ensures that any male Ego is normally in frequent, if not constant contact with his younger brother's wife. And any female Ego is in contact with her husband's parents and older brothers.
11.1.8. In addition to other kin relations, two agemates of the same sex may enter into one of two special fictive kin relations voluntarily. These are called marap and milwane and pairs of agemates who have elected to enter into such a relation address and refer to each other by the name of the relation. To enter into a milwane relation, the agemates involved will share a galip nut that has two kernels. There is no comparable ceremony associated with the marap relation, although in other respects they are similar.
11.2. Color terminology

Awtuw has eight color terms which $I$ list below along with their glosses.

Table 11.5

Awtuw color terminology

| 1. kiywo-kwo | 'white' |  |
| :--- | :--- | :--- |
| 2. tipray-kwo | 'black' | (soot-like) |
| 3. aeypiy-kwo | 'red' | (blood-like) |
| 4. kowlaw-kwo | 'yellow' |  |
| 5. nenel-wo | 'green' | (unripe-like) |
| 6. apotaw-kwo | 'blue' | (like a kind of blue dye) |
| 7. aeyle-kwo | 'grey' | (dry-like) |
| 8. tuwp-kwo | 'purple' | (like a kind of berry) |

As is apparent from the data in Table 11.5 , each of the terms ends in the productive suffix -wo/-kwo 'like'. All save two, kiywo-kwo 'white' and kowlaw-kwo 'yellow' are transparently derived from other lexemes.

Berlin and Kay (1969) have developed and defended a hypothesis that the foci of color terms do not vary significantly from language to language, and that languages select their basic color terms from a limited inventory in a predictable manner.

They define the concept of a basic color term (p. 6) as a term that is
a. monolexemic - the meaning is not predictable from the meanings of its components,
b. autonomous - it is not included within the meaning of another color term,
c. generally applicable - not restricted to a small class of entities, and
d. psychologically salient -
i. occurs early in elicitation of color terms
ii. has stable reference
iii. occurs in all idiolects.

Using these criteria, all of Awtuw's color terms except kiywo-kwo 'white' and kowlaw-kwo 'yellow' are immediately identifiable as non-basic under criterion a, although they do, in fact, meet the other criteria.

We can identify those two terms as basic color terms because, although they bear a productive suffix, or at least something formally indistinguishable from one, their meaning is not predictable.

The data on Awtuw color terminology were elicited using the same color chart that Berlin and Kay used in their study. As they suggest, there is remarkable consistency among speakers as to the foci of the various color terms and an even more remarkable inconsistency regarding the extensions of the terms.

The foci of Awtuw's eight terms are all within the ranges Berlin and Kay predict on the basis of the sample they examined. But Awtuw appears to violate their proposed universal ordering of color terms.

If we restrict our attention for the present to the two terms that fit the definition of basic color terms most closely, the terms for white
and yellow, we find that they violate Berlin and Kay's first 'distributional restriction': 'All languages contain terms for black and white.' (p. 2)

Turning to the other color terms, although they are not basic under Berlin and Kay's definition, we find that for the most part they conform to Berlin and Kay's predictions, which are summarized in Figure 11.8 .

Figure 11.8

Berlin and Kay's rule for the distribution of color terms
$\left[\begin{array}{l}\text { white } \\ \text { black }]\end{array}<[\right.$ red $]<\left[\begin{array}{l}\text { green } \\ \text { yellow }\end{array}\right]<[$ blue $]<[$ brown $]<\left[\begin{array}{l}\text { purple }] \\ \text { pink } \\ \text { orange } \\ \text { grey }\end{array}\right]$
Awtuw does, in fact, have terms for the first four positions on the hierarchy. The presence of terms from the last slot on the hierarchy would constitute a serious violation if it did not have such terms. But there is one additional violation - Berlin and Kay predict that a language with a seventh term will have a term for 'brown' and that languages with any of 'purple', 'pink', 'orange', or 'grey' will add those terms after 'brown'. Awtuw's violation, whose import is in some question because the terms involved are polymorphemic, is in having terms from the last category without having a term for 'brown'. The terms aeypiykwo 'red' and nenelwo 'green' are used by Awtuw speakers in referring to the brown segment of the color chart. Figure 11.9 exhibits the foci of Awtuw's eight color terms on a representation of Berlin and Kay's color chart. The strip at the left consists of a range of greys without hue. The colors on the body of the chart range from red on the left to purple on the right and from light at the top to dark at the bottom. All Awtuw speakers consulted unhesitatingly
selected the border of the chart, which is whiter than any of the individual chips on the body of the chart proper, as the focus of kiywokwo 'white'.

11.3. Numeration and measurement

### 11.3.1. Numerals

Awtuw has four basic counting numerals. These combine productively with yiyle 'hand', riwe 'foot', and rame 'man' to form numerals as high as 419. But in practice, Awtuw speakers seldom use vernacular numerals in excess of 20 .

There are several reasons for this. First, for most purposes, Awtuw speakers do not concern themselves with precision of numeration liwke 'a lot' and yankeyke 'a little, few' are ordinarily sufficiently accurate. Second, in counting cash, Awtuw speakers and their neighbors use a variety of denominations so as to obviate the need for large numerals (see below 11.3.3.). And finally, all Awtuw speakers are fluent in Tok Pisin and use Tok Pisin numerals freely in all contexts.

Table 11.6 lists the numerals from one to twenty and examples of higher numerals.

## Table 11.6 Awtuw numerals

1 naydowo
yikiyr
3 urunk

4 orkweynaywo
5 yiyle daeni 'one hand'
6 yiyle daeni yiyle mak (nay) dowo
7 yiyle daeni yiyle mak yikiyr
8 yiyle daeni yiyle mak urunk
9 yiyle daeni yiyle mak orkweynaywo
10 yiyle yikiyr
11 yiyle yikiyr riwe mak (nay) dowo
12 yiyle yikiyr riwe mak yikiyr

13 yiyle yikiyr riwe mak urunk
14 yiyle yikiyr riwe mak orkweynaywo
15 yiyle yikiyr riwe daeni
16 yiyle yikiyr riwe daeni riwe mak (nay) dowo
17 yiyle yikiyr riwe daeni riwe mak yikiyr
18 yiyle yikiyr riwe daeni riwe mak urunk
yiyle yikiyr riwe daeni riwe mak orkweynaywo
yiyle yikiyr riwe yikiyr (or rame+taw naydowo 'one man+tree')
yiyle yikiyr riwe yikiyr, rame daeni, yiyle yikiyr riwe daeni,
riwe mak yikiyr or
rame+taw naydowo, rame daeni, yiyle yikiyr, riwe daeni,
riwe mak yikiyr

43 rame+taw yikiyr, rame daeni, yiyle mak urunk
?419 rame+taw yiyle yikiyr riweyikiyr, rame daeni, yiyle yikiyr, riwe daeni, riwe mak orkweynaywo

There are no ordinal numerals in Awtuw. Any numeral may derive a distributive adverb by reduplicating.
(1) Stua tawkway urunk-urunk d@-k@-kow -ey
shop tobacco three-three FA-IP-give-IP
'The shop sells cigarettes in threes/three at a time'

### 11.3.2. Counting gestures

Awtuw speakers count on their fingers and toes beginning with the right hand open and closing each finger in turn, beginning with the little finger. If counting above five, the process is repeated on the left hand. If counting above ten, one then begins pointing at the toes of either foot, again beginning with the little toe, and continuing in the same way on the other foot. When the occasion arises to count beyond twenty, the speaker elicits the assistance of the addressee.

It is interesting to note that orkweynaywo 'four' is clearly derived from orkwey 'little finger' although the little finger is in fact the first finger used in counting.
11.3.3. Counting money

The basic unit of currency is the siliyn (shilling) or mak (mark) 'ten-toea piece'. Since almost all transactions involve multiples of ten toea, it is common to omit any specification of the denomination. The nature of a transaction provides enough information for speaker and addressee to be able to recover the appropriate denomination.
(2) a. Tader yilmaet yakwo?
this string how much?
'How much is this string?'
b. (mak) urunk
mark three
'Three (marks)' (=30 toea)
(3) a. Tader yekne yakwo?
this axe how much?
'How much is this axe?'
b. (pawn) urunk
pound three
'Three (pounds)' (=6 kina)
(4) a. yen-ke talet-te yakwo d@-kow -ka?

2SG-PS wife -0 how much? FA-give-PF
'How much have you paid for your wife?'
b. (tawap) rame+taw yikiyr, rame daeni, yiyle yikiyr
stick man+tree two man one hand two
'Fifty (sticks)' (=500 kina)

Using these three denominations - siliyn or mak '10 toea', pawn '2 kina', and tawap or piws ' 10 kina', there is little occasion to use large numerals in describing cash transactions. Fractions of a siliyn, when they arise, are expressed either as a number of toea, or as sikispeniy 'five toea'.

### 11.3.4. Time

Awtuw makes an eight-way distinction among days counting from the present, as shown in Table 11.7.

Table 11.7 Days

| nikirmey | 'days before yesterday' |
| :--- | :--- |
| @1@p | 'yesterday' |
| mod@k | 'today' |
| yarow | 'tomorrow' |
| yay | 'day after tomorrow' |
| eyk | 'two days after tomorrow' |
| muk | 'three days after tomorrow' |
| par@k | 'four days after tomorrow' |

Table 11.8 lists the times of day.

Table 11.8 Times of day

| maey | 'daylight' |
| :--- | :--- |
| umkurkw@ | 'dark' |
| maey dikliwkeney | 'sunrise' (sun is ascending) |
| imik | 'morning' |
| piyren dupuyaka | 'noon' (dog has been hit) |
| paeytey+maey | 'afternoon' (evening sun) |
| paeytey | 'early evening' |
| maey mak@lwey | 'sunset' (sun is descending) |
| imim | 'evening' |
| imlukw | 'midnight' |

Periods of time are expressed in terms of im 'night(s)', wiyk 'week(s)', yilmake 'moon, month(s)', or yia 'year(s)'.

Days of the week and months of the year are all borrowed from Tok Pisin.

Other temporal adverbs are shown in Table 11.9.

Table 11.9 Temporal adverbs
mowk@ 'long ago'
mok@ 'before'
iw 'later'
reyek 'afterwards'
antante 'always'
emtemte 'always'
mod@k-yarow 'daily' (today-tomorrow)

### 11.4. Body part terminology

Awtuw constructs body part terms by compounding the name of the area of the body, eg. riwe 'foot', with the name of a component type, eg. limkew 'digit'. These two terms compound to form riwe+limkew 'toe'. As with other tatpurusa compounds (cf. 3.7.2.), these compounds may enter into further compounds, eg. [riwe+limkew]+poke 'toenail'.

Table 11.10 lists the major divisions of the body, Table 11.11, the names of component types, and Table 11.12, bodily substances.

Table 11.10 Divisions of the body
yaey 'body'
mak(lake) 'head'
kolaey 'neck'
tapem 'trunk'
waek 'abdomen'
yiyle 'hand, arm (to shoulder)'
riwe 'foot, leg (to hip)'

Table 11.11

Component types
(mow)yaey 'skin' (cf. yaey 'body')
lake 'bone'
lum 'muscle, fat'
tenlay 'tendon, blood vessel'
pam(puy) 'joint'
tiw 'hair'
poke 'eyelid, nail'
nale 'hole'
piy 'point'
pak 'underside'
or 'top'
yekmak 'back'
limkew 'digit'

Table 11.12

Bodily substances

| aeypiy | 'blood' |
| :--- | :--- |
| owyiw | 'pus' |
| wuryiw | 'mucous' |
| wutil+yiw | 'snot' ('nose+water') |
| naw | 'urine' |
| riy | 'faeces, vomit' |
| wole+yiw | 'semen' |
| rew+kanel | 'vaginal secretion' ('vagina+grease') |
| yake | 'sweat' |
| yiyk | 'breath' |
| gow | 'tear' |
| new+yiw | 'tear' ('eye+water') |
| laelkwey | 'saliva' |
| tapley | 'spit' |

Note that Awtuw distinguishes mucous within the body, wuryiw, from wutil+yiw snot that has dripped or been sneezed out. A similar distinction applies between laelkwey 'saliva in the mouth' and tapley 'saliva spat out'.
11.5. Biological terminology

Awtuw divides the plant and animal kingdoms into several classes. Some of these are large, subdivided classes, while others include only a variety of species all of which are denoted by the single superordinate term. While this is not an appropriate place to list biological terms at length, it is worth mentioning the major classes of plants and animals. Where speakers have identified a particular species as focal to a class, I mention that as well.

### 11.5.1. Botanical terminology

The major classes of plants are:

1. maet 'vine' - includes all climbing plants. The focal species is talkey, a species $I$ have not been able to identify. This class subsumes n@klay 'cane', which in turn subsumes at least seven named species, of which pamnuw is focal.
2. keyt 'bamboo' - includes twelve bamboo species, of which kud is focal.
3. tiwnk 'fern' - includes a large variety of species, all referred to only as tiwnk.
4. tuluk 'fungus' - includes at least eight species of ground and tree fungi. All named fungi are edible.
5. taw 'tree' - includes a wide variety of mostly useful plants which are subdivided further. The term includes both large and small plants with both ligneous and non-ligneous stems. The focal species is yelaw (TP ton) 'Pometia pinnata'.
6. yawnow 'weed' - includes a large variety of mostly useless plants. The focal species is uluwpt (TP kunai) 'Imperata arundinacea'.

### 11.5.2. Zoological terminology

Awtuw divides the animal kingdom into ten large classes. Several species do not appear to be included in a more comprehensive class. In other cases, all species share the generic name and have no specific names.

1. yi - includes all birds, including kewyaene 'cassowary', and komkoran 'bat'. The focal species of bird is the komon 'eagle'.
2. wulaek - includes all snakes, including water snakes, but not eels. There are at least seventeen named species, of which ulwun 'python' is focal.
3. aepiy - includes all lizards, geckos, and skinks, including legless species. The class subsumes at least nineteen named species, of which wunkir, a species of monitor, is focal.
4. gale - includes at least ten named species of fish, including aew@nk 'eel', but not other aquatic animals, i.e. snakes, frogs, crustaceans, and mollusks.
5. yiyay - includes all mammals except bats, but including kaewletken, a gliding marsupial. The class subsumes at least three subclasses, tawyekyaw 'tree marsupials', tekel or taelpaewye 'ground marsupial', and mokael 'rat'.
6. yowkey - includes at least twelve named species of frogs.
7. wuwp - includes several named species and a number of unnamed species of beetle.
8. menaetiyum - includes at least fourteen named species of ants and termites.
9. ilkil - includes several species of flies.
10. Wiyum - includes many named species of wasps, bees, and hornets.

A number of animals are apparently not subsumed under any of the listed classes. Among these are:

1. kapow 'grub'
2. yumnil 'millipede'
3. poprow 'caterpillar'
4. pedak 'cockroach'
5. yiwelkey 'mosquito'
6. yeketwaeyt 'butterfly, moth'
7. wakum 'snail'
8. kolkoy 'crab'
9. modyer 'crayfish'
10. mweymoy 'worm'
11. wanklow 'turtle'
12.1. Greetings and farewells

Traditionally, Awtuw has no formulaic greetings. The arrival of a person is acknowledged by calling his or her name, kinship term, or quasi-kinship term. One does not of course address by name those affines who are in a name taboo relationship with Ego (cf. 11.1.). Nowadays Awtuw speakers will typically use greetings borrowed from Tok Pisin and often even substitute Tok Pisin for vernacular kin terms.
(1) Gut moning nau, Osiy/waw@y! good morning now Osiy/MB 'Good morning, Osiy/Mother's brother!'
(2) Apinun tru, poroman/yenankeyke! afternoon real agemate/grandchild
'Good afternoon, agemate/grandchild!'
(3) Gutnait nau, yiytay/wannem!
goodnight now namesake
'Goodnight, namesake!'

The vernacular formula for parting is reypapwo 'finished' accompanied by the addressee's name and optionally by an imperative appropriate to what the addressee is about to do. Tok Pisin greetings are in common use in this context, but because there is a satisfying vernacular alternative, they have not become as ubiquitous as they have as greetings. Generally when a group of people leaves, or remains, one says reypapwo to each of them individually.
(4) Reypapwo! Powkil, reypapwo. Kan-ey! goodbye Powkil goodbye IMP-go
'Gcodbye, Powkil, go!'
(5) a. Reypapwo! K@-m -owna -m!
goodbye IM-GO-sleep-PL
'Goodnight!' (addressee leaving)
b. Owo. Reypapwo, Peyaw! Kan-w -owna!
yes goodbye Peyaw IMP-ABS-sleep
'Goodnight, Peyaw!' (addressee remaining)

Note that (5a) and (5b) are the usual formulas for saying 'goodnight' and are reciprocal. (See 4.10. for the ma- and wa- prefixes. The response to a greeting or a farewell always begins with owo 'yes', also illustrated in example (5b).

Owo 'yes' is a general acknowledgement. As mentioned above, it is always used in response to a greeting or farewell. It is also used to acknowledge other commands, including summonses. Awtuw 'no' is a general denial. See section 9.1.1. for a discussion of owo and awtuw in response to yes-no questions.

### 12.2. Interjections

12.2.1. The main interjections of surprise are yiykay and yiy. The former expresses a milder degree of surprise usually at something someone has said. That latter is a reaction to a more startling experience, the sudden appearance of a snake, for example. The second syllable of yiykay is quite long and with rising pitch. The final segment of yiy is usually long and partially devoiced, ending in a lamino-alveolar fricative.
12.2.2. A lenis bilabial trill with egressive velar air is a common interjection of dislike or distaste.
12.2.3. Awtuw has borrowed a number of interjections from Tok Pisin, including claman 'far out!' and tarangu 'what a shame!'.
12.3.1. In Awtuw-speaking communities, each person has several names, a practice that overcomes two problems. First, on the birth of a child, a number of his relations will want the child to bear his or her name. By giving the child the names of all those who request the honor, the parents avoid conflicts that would arise out of the slight offered to those whose requests they denied. And second, ego may not pronounce the names of people who bear one of a number of affinal relations (cf. 11.1.). Having a variety of names makes it possible for all who do not themselves stand in a name-taboo relation to ego to address or to call ego by name, even if ego should be the namesake of someone who does bear such a relation.
12.3.2. Nicknames are formed from the first one or two syllables of the full name. Similar shortening can apply to the kin terms gamey 'mother' and gaye 'father' - gam and gay, respectively.

```
Wariy - Wariykom Yaw - Yawur
```

12.3.3. One calls individuals from a distance by shouting their name with the last syllable protracted and in a falsetto pitch. If the addressee is within the same hamlet, one calls the Vocative form of their name, kin term, or quasi-kin term with a rising pitch on the suffix - Wo or -@.

```
12.3.4. Signals on the p@m (TP garamut 'slit gong') have three main.
functions - to summon specific groups of people (by lineage), to
announce specific events, e.g. a satu game, and to control nature, e.g..
to stop the rain.
```

12.3.5. A protracted note on the tawur 'conch' or keyt+tawur 'bamboo transverse flute' is a general summons.

### 12.4. Calling animals

12.4.1. All dogs in an Awtuw-speaking community have individual names. There are separate sets of names for male and for female dogs. The syllable $[? @ \mathrm{~s}]$ or $[? @ \mathrm{~S} @]$ is used, concatenated with the dog's name, to call the dog.
12.4.2. Each pig in an Awtuw-speaking community has an individual name. Females have a different set of names from males. Awtuw speakers call their pigs by interspersing their name with a prenasalized, lax, voiced, protracted bilabial trill followed by a nasalized low front vowel. A syllable consisting of a glottal stop and a nasalized low front vowel may intervene between sequences of name $+[$ migaé $]$.
12.4.3. Chickens are called with a protracted voiced, apical-alveolar trill uttered with a high pitch followed by a series of very tense bilabial fricatives with egressive velar air.
12.5. Gestures, nods, and shrugs
12.5.1. Awtuw speakers typically point with pouted lips, sometimes accompanied by a fortis bilabial trill with egressive velar air. One occasionally points with the index finger.
12.5.2. Shrugging, wulaey d@k@kramkey, indicates 'I don't know', 'I don't have any', or disagreement. It involves raising one shoulder and simultaneously incling the head to the side of the raised shoulder.
12.5.3. Holding the hand in a fist with the thumb extended upwards is derogatory or insulting.
12.5.4. Shaking the head from side to side, rotating on the neck vigorously indicates disagreement. When performed slowly, the same gesture expresses sympathy.
12.5.5. Raising the eyebrows and holding them raised momentarily indicates agreement.
12.5.6. Raising the eyebrows and simultaneously tilting the head back slightly indicates incomprehension.
12.5.7. Ignorance is signalled by pressing the lips together while turning down the corners of the mouth and lowering the head as if to pull it down to the shoulders.
12.5.8. Nodding the head forwards indicates a continued interest in a narrative addressed to the gesturer.
12.6. Clicks and grunts
12.6.1. Awtuw speakers indicate the complete unacceptability of an utterance or an action by the grunt [?mm'?m:] (preglottalized syllabic $[\mathrm{m}]$, voiceless $[\mathrm{m}]$, preglottalized long syllabic $\left[\frac{m}{9}\right]$ with high pitch on the first syllable and low pitch and stress on the second).
12.6.2. [ (Preglottalized, nasalized [@], [h], stressed, nasalized [ $\mathbb{@}]$ with rising pitch).
12.6.3. Sympathy can be signalled by [?ai'ya] with the second syllable stressed and rising in pitch.
12.6.4. Any low or mid vowel or syllabic nasal with rising pitch indicates incomprehension.
12.6.5. Ignorance can be signalled by [?aey] pronounced with a falling. pitch.
12.6.6. Agreement is indicated by ['?V?V?] where the first syllable is stressed and has high pitch and the second has low pitch. $V$ may be any mid or low vowel or syllabic nasal, as long as the two vowels are the
same. The vowels may or may not be nasalized.
12.6.7. Disagreement is indicated by ['? $\overline{\mathrm{mm}}$ ? $\overline{\mathrm{m}:]}$ or ['? $\overline{\mathrm{ah}}$ ? $\overline{\mathrm{a}}:]$ with a mid pitch over both syllables.
12.6.8. An apical-alveolar click or a fortis bilabial trill also indicate disagreement.
12.6.9. A sharp intake of breath through rounded lips either indicates agreement or acknowledges some difficulty, typically a difficulty that the addressee has just pointed out.

Yawkil
'The story of the pig'
by Napeyre
(recorded 5.1.81)

```
yaw rom d -ir d -aey-m -e mur +waruke-re rom d -iy -m -e
pig 3PL FA-follow FA-go -PL-P tusk+big -D 3PL FA-shoot-PL-P
They were hunting a pig and they shot a big one.
```

d-iy $-m-e d @-k @ d$-eya-m -e rom $d$-kay-kay-m -e
FA-shoot-PL-P FA-get FA-come-PL-P 3PL FA-put-PF -PL-P
When they had shot it they took it and brought it home and put it away.

```
yaen -wom d -ewrae-'k -m -e d -aey-m -e rom wurit+opyaekay d@-k@ -m -e
child -PL FA-AGN -sit-PL-P FA-go -PL-P 3PL frond+spine FA-get-PL-P
``` The children, who were sitting again, went and got some coconut-frond-spines.
new-re ti-taw -m -e tader po eywe rey-ke new-kwo eye-0 DU-stab-PL-P this PCL ancestor 3ms-PS eye-CMP They stabbed him in the eye so he would be half-blind.
eywe rey-ke new-kwo rey-rey yaw d@-paelkwa-e d \(Q\)-moyna -e ancestor \(3 \mathrm{~ms}-\mathrm{PS}\) eye-adv \(3 \mathrm{~ms}-3 \mathrm{~ms}\) pig FA-arise -P FA-search-P Half-blind, the pig got up and searched.
```

"wan-ke maklake yipe? yiyle yipe? riwe-yak yipe?"
1SG-PS head where? hand where foot-? where?
"Where's my head? Where's my hands? Where's my feet?"

```
```

d@-k@ -pama -work-e
FA-get-TOGETHER-ALL -P

```
They got all his parts together.
rey \(t\)-ot-e \(d\)-aey-e
3ms FA-join-P FA-go -P
He put himself back together and went.
rom \(d-o k w-m-e\) tarepe \(d @-k @-m-e\), rom \(d-o k w-m-e\)
3PL FA-dance-PL-P drum FA-get-PL-P 3PL FA-dance-PL-P
They danced. They got a drum and danced.
d -okw -m -e d -aey-m -e kapem waruke-ke ma-alwa -worka-m -e
FA-dance-PL-P FA-go -PL-P pond big -L MT-descend-ALL -PL-P
They all danced down to a big pond.
ma-alwa -worka-m -e rom.
MT-descend-ALL -PL-P 3PL
They all went down.
owyim d -eya -m -e d -uwpo-m -e yaw awtuw.
ancestors FA-come-PL-P FA-see -PL-P pig no
The ancestors came and saw that there was no pig.
```

rey rom-0 d@-wa-'wp'-e d@-mak-e tapu-m "yaw rey."
3ms 3PL-D FA-AB-see -P FA-say-P this-PL pi.g there
He saw them, and they said, "There's the pig!"
dowo d@-k -okw -ey-m -e rey.
together FA-IP-dance-IP-PL-P there
They were dancing together there.

```
yaw awtuw, ti-nota-kay rom d -okwo \(-k a-m\) d -aey-ka rey yaw.
pig no \(\quad F A-j o i n-P F \quad 3 P L F A-d a n c e-P F-P L F A-g o-P F ~ 3 m s ~ p i g ~\)
There was no pig. He had been put back together and gone off and danced.
kapem waruke \(m\)-alwa \(-m\)-e rey yaw yawo ti-not -e d -aey-ka-re
pond big go-descend-PL-P 3ms pig immediately FA-join-P FA-go -PF
They went down to the big pond. The pig that had gone was put together.
d -aey-kay-m -e rom yantelalem kokot.
FA-go -PF -PL-P 3PL young women all
All the young women had gone.
rom ma-alwa -worka-m -e

3PL go-descend -ALL -PL-P
They all went down.
d -eya -m -e rom yawo d -wa-moyna -m -e awtuw, d -aey-ka
FA-come-PL-P 3PL immediately FA-AB-search-PL-P none FA-go -PF
They came and looked for them, but they had gone.
rom ka-rokra-m. wan-ke kil reypapw, awtuw.
3PL NG-cook -PL 1SG-PS story finished no
They couldn't cook. And that's the end of my story.

Tapwokil
'The story of fire'
by Kewmaey
(recorded 24.11.80)
orait wan kil w-alow-rere, tapwo+kil -re.
ok 1 SG story NF-talk-DES fire +story-0
Ok, I want to tell a story, the story of fire.
nom-ke owyim mowke tapwo awtuw
1PL-PS ancestors before fire none
Once upon a time, our ancestors had no fire.
orait nom-ke Wiykatuw+owyim Menyew rey-ke yar, ok 1PL-PS Wiykatuw+ancestors Menyew 3ms-PS grandfather Okay, our Wiykatuw ancestors, Menyew's grandfather.
(Wudpey-re kan-yerna-weypa-m), e:, Wawriy.
Wudpey-0 IMP-ask -TRY -PL oh Wawriy
(Try and ask Wudpey!), oh, Wawriy.

Menyew rey-ke yar, Wawriy, nenaen ey de-k -lay -ey
Menyew 3ms-PS grandfather Wawriy thought thus FA-IP-bear-IP
Menyew's grandfather, Wawriy, that's what I'm thinking.
nom mowke tapwo awtuw. Wiykatuw-yaenim tapwo awtuw.
1PL before fire none Wiykatuw-GEN fire none
Once upon a time we had no fire. The people of Wiykatuw had no fire.
nom Kamlakw kokot, Laepin, Wutlakw, nom tapwo awtuw 1PL Kamlakw all Wiup Gutaiye 1 PL fire none All us Kamnum people, and Wiup, and Gutaiye, we had no fire.

Menyew rey-ke yar rey-ke nemet yilmaet d-il -lakn'-e
Menyew 3ms-PS ancestor 3ms-PS mother string FA-twist-DONN -P

Menyew's grandfather's mother twisted string.
kampawo yiyle daeni eypek d -iwrek-e
dish hand one thus FA-stand-P

Five dishes stood like this.
orait tey lak -e yuwp +tapwo-ke, rey tapwo lam-k' -e.
ok thus go DS-P kunaitfire -L \(3 m s\) fire \(D S\)-get-P
Ok, he went downstream to the kunai fire like this, and he got fire.
yilmaet d -il -i dili dili dili m -alw' -o kampawo daeni-ke
string FA-twist-P MT-descend-P dish one -L
She went on twisting string into one dish.
d -ewrae-'l -i d -il \(+d\)-aey-e daeye daeye kampawo daeni ram \(d\)-am -o
FA-AGN -twist-P FA-twist+FA-go -P dish one full FA-fill-P
She kept on and on twisting string - one dish was full.
orait Wiytape-re bihainim rokw-o. d -aey-e daeye rey d -own' -e
ok Wiytape-0 follow do -P FA-go -P 3ms FA-sleep-P
Ok, he followed the Sibi river. He walked and walked, then slept.
nemet yilmaet-re d@-wa-nak - \(\mathrm{p}^{\prime}\)-e tader-kwo tQ
mother string -0 FA-AB-hold-TRY-P this -CMP here
His mother tried to hold the string in his absence like this.
```

orait imik rey d -owr'-ukl' -e yilmaet d@-k' -@
ok morning 3ms FA -AGN-arise-P string FA-get-P
Ok, in the morning, he got up again and got the string.
yilmaet d@-k' -@ rey daeye daeye daeye daeni-ke ma-'wn' -e
string FA-get-P 3ms went went went other-L MT-sleep-P
He got the string and walked and walked and slept in another place.
teypekwo d@-k -rokw+d@-k -aey+d@kaey+dekaey-ey yuwp+tapwo lam-k' -e
thus FA-IP-do +FA-IP-go + go + go -IP kunai+fire DS -get-P

```
Continuing in this way, he got the kunai fire downstream.
mowke nom-ke owyim tey d@-k -mak-ey-e 'yuwptapwo'
before \(1 P L-P S\) ancestors thus FA-IP-say-IP-P "kunai+fire"'
That's what our ancestors used to say, "kunai fire".
d -aey-e tapwo-re uyk -re rey d -ayn' -e rey lamlakn'-e
FA-go -P fire -0 odor-0 3ms FA-smell-P 3ms fall -P
He went, and when he smelled the odor and the fire, he fell down.
rey lamlakne. a: tapwo waruke yapor
3ms fell oh fire big very
He fell down. Oh the fire was very big.
yuwp+tapwo yapor d@-k -okw -ey-e
kunai+fire very FA-IP-burn-IP-P
Quite a kunai fire was burning.
rey tapwo reyke d@-k' -@, maen + tapwo-re d@-ka +lak -@
3ms fire there FA-get-P tulip+fire -0 FA-get+go DS-P
He got the fire there, he got the tulip fire and went downstream.
```

nemet d -uwp-o yilmaet yaeltuwp laeya +laey' -e
mother FA-see-P string again come US+come US-P
His mother saw that the string came back upstream.

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yilmaet laeya +laey' -e m -alw' -o kampawo-ke

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yilmaet laeya +laey' -e m -alw' -o kampawo-ke
string come US+come US-P MT-descend-P dish -L
string come US+come US-P MT-descend-P dish -L
The string came and came and descended in the dish.
kampawo daeye daeye daeye daeye daeni ram d -omw -o
dish went went went went other full FA-full-P
It went on like that and another dish was full.
```

daeye daeye daeye kampawo daeni ram d -omw -o
went went went dish other full FA-full-P
It went on and another dish was full.
d@-mak-e, "wan-ke yaen reypapwo de-k -ey' -ey, taeytaey ma-wey -e"
FA-say-P 1SG-PS child finish FA-IP-come-IP nearly MT-arrive-P
She said, "My son is already coming, he's almost arrived.
nemet rey tapw'tuyk -wa -re d -ayn' -e lamlekn'-e
mother 3ms fire +odor-just-0 FA-smell-P fall -P
His mother just smelled the odor of fire and fell down.
a: rey d -uwp'-o opo -m aewre uyk d -ayna -kay-e,
oh 3ms FA-see -P that-PL house odor FA-smell-PF -P
Oh, he saw that those houses had smelled the odor,
d -imy@+d -eya -kay-e, ma-lamlakna-kay-e
FA-run +FA-come-PF -P MT-fall -PF -P
had come running, and had fallen down.

```
opo -m aewre daeni d -uwpo-kay-e tapwo+uyk -re ma-lamlakna-kay
that-PL house other FA-see -PF -P fire +odor-0 MT-fall -PF
```

Those other houses had seen it and fallen down from the smell of fire.
d -uwp'-o kokot aewre rom ma-lamlakna-worka-m -e
FA-see -P all house 3PL MT-fall -ALL -PL-P
He saw that every house, they all fell down.
rom d -owra-'kla -worka-m -e
3PL FA-AGN -arise-ALL -PL-P
Then they all got back up.
rom d -ukla -worka-m -e rey tapwo d@-ka +d -aey-m -e
3PL FA-arise-ALL -PL-P 3 ms fire FA-get+FA-go -PL-P
They all got up and brought the fire.
"yiy! mede tapwo! atepaye!"
wow! real fire far out!
"Wow! Real fire! Far out!"
orait yaw ram de-ka -m -e tapwo-ke law -o rom ra -pa -m -e
ok pig 3PL FA-get-PL-P fire -L bake-P 3PL eat-TRY-PL-P
Ok, they got a pig and baked it on the fire and tried eating it.
"o: t@! medaye $t @!"$ mowke nom nenel aeye de-k-ra-m-e
oh here good here before 1 PL raw food FA-IP-eat-PL-P
"Oh yes! That's nice!" Once we used to eat food raw.
mowke nom nenel aeye de-k -ra -m -e
before 1 PL raw food FA-IP-eat-PL-P
Once we used to eat food raw.

```
yaw nom d -iy -m -e tiyle d@-waey -kay-m -e
pig 1PL FA-shoot-PL-P stone FA-carry-PF -PL-P
We shot pigs, having carried stones.
maey du-puy'-e nom aeypiy-neney d@-k-ra -y -m -e
sun FA-hit -P 1PL blood -ADJ FA-IP-eat-IP-PL-P
The sun hit it; and we used to eat it bloody.
```

tapwo d -okw -o, rom aeye reyke d -ilya-m -e, dilyame ra -pa $-\mathrm{m}-\mathrm{e}$
fire FA-burn-P 3PL food there FA-boil-PL-P, boiled eat-TRY-PL-P
Once there was fire burning, they boiled greens there. They boiled and ate.
kewlake-re rom du-puya-m -e tur tur tur
chest -0 3PL FA-hit -PI-P thump thump thump
They beat their chests - thump, thump, thump.
nom mowke owyim arene, nom eywo d@-k -mak-ey-e "yuwp+tapwo"
1 PL before ancestors not know 1PL thus FA-IP-say-IP-P "kunai+fire"
Before, our ancestors didn't know, we used to say "kunai fire".
siypik-yaenim-ik tapwo d@-k' -@
Sepik -GEN -I fire FA-get-P
He got fire from the Sepik people.
nom-ke Wiykatuw d@-ka -paeyk-e tapwo
1PL-PS Wiykatuw FA-get-FIRST-P fire
Our Wiykatuw ancestors originally got fire.
modek tapwo liwke rok'-work-e ade
today fire much do -ALL -P here
Now we all made a lot of fire here.
nom tapwo-neney, mowke nom tapwo awtuw
1PL fire -ADJ before 1PL fire none
We have fire, but once we had no fire.
orait nom yenankeyke modek de-wa-pama-k@ t@
ok $1 P L$ grandchild today $F A-A B-l i v e-P F$ here
Ok, today we grandchildren live together here, the ancestors are gone.
mowke nom Kamlakw tapwo awtuw,
before 1 PL Kamnum fire none

Once, we Kamnum people had no fire.
nom nelyaw d@-pama-kay-m -e
1PL nothing FA-live-PF -PL-P
We had lived with nothing.
kil yankeyke, tapwo rey-ke stori eypekwo
story little fire 3ms-PS story thus
And that's the way the little story of fire goes.

Yantelale

> 'Young women' by Yawur (recorded 30.12 .80 )

Raew gawer -re-k d -aey-m -e wiye -ke.
3DU father-0 -I FA-go -PL-P garden-L
They went to the garden with their father.

Raew yaen +nay -neney yikiyr gawer dowo.
3DU child+skirt-ADJ two father with
The two girls with their father.

Rom d -aey-m -e wiye -ke yew aeyle ma-kay -m -e. 3PL FA-go -PL-P garden-L yam dry MT-remove-PL-P They went to the garden and removed dry weeds.

Gawer wiye -ke yew aeyle d@-wa-k@-kay -ey-e,
father garden-L yam dry FA-AB-IP-remove-IP-P
The father was removing dry weeds in the garden.
raew yaen -waew yikiyr, naynen+yaen -waew yikiyr,
3DU child-DU two female+child-DU two

The two children, the two girls,
raew waruke, muy -neney yikiyr.
3DU big breast-ADJ two

They were already grown, both had breasts.

Raew d -iwrek-e gawe -re de-mak-e,
3DU FA-stand-P father-0 FA-say-P

They stood up and said to their father,
'Gaye, nan-e yekne kan-kuw.' Raew yekne d@-k' -e.
Dad 1DU-0 axe IM -give 3DU axe FA-get-P
'Dad, give us an axe.' They got an axe.

Dispela taw kapow, rey gawer wiye +taw du-k -uwk-iy-re
this tree bug 3 ms father garden+tree FA-IP-cut-IP-0

This tree-bug, which the father was cutting a garden tree for,

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    kapow-re d@-k -par -klak-ey-e.
    bug -0 FA-IP-peel-H&T -IP-P
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    he was peeling [bark] for tree bugs here and there.
    D@-k -par -klak-ey-e, rey wiye +luwk -o.
FA-IP-peel-H\&T:-IP-P 3ms garden+heart-L
He was peeling around : in the middle of the garden.
Taw +mowyay+meraetkey lamlekn-e talow+uy -e m -alw -o.
tree+skin +rubbish fall -P taro +hole-L MT-descend-P
Pieces of bark fell into the taro hole.
Gawer rey mokre l' -0 , 'Ay ay wan-ke wiye -ke
father 3 ms cause angry-P 'Hey hey 1 SG-PS garden-L
The father got mad because of this, 'Hey, don't do that
topor-kwo ap-t-rokw-re talow+uy. An ka-t-lawiy!'
that-CMP PR-DU-do -FU taro +hole $2 D U$ IM-DU-clear
to the taro hole in my garden! You two clear off!'
Raew-e l' -o+d -aey-e. Raew d -iwrek-e d -uwpok-e.
3DU angry-P+FA-go -P 3DU FA-stand-P FA-flee -P
He was angry at them. They stood up and fled.

Rey tawdow waruke taeytaey-wa -ke. Raew mo-t -elw' -o rey yiw -e, 3ms brook big near -just-L 3DU MT-DU-descend-P 3ms water-L There was a big brook nearby. They went down to that water.

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Gale raew te-nak +te-lak -e. Gale te-nak +t -aey+taey+taey+taey-e.
fish 3DU DU-hold+DU-go DS-P fish DU-hold+DU-go +go +go +go -P
They grabbed fish going downstream. They went on grabbing fish.
```

Rey taw +riwe-ke yiluk-wo le-k-iwken'-ey-e.
3ms tree+foot-L mud -CMP IP-ascend-IP-P
They were climbing the root in the mud.

Raew t@-mak-e, 'Uw! Rom gale waruke yokri? Pe-t -nak.' 3DU DU-say-P oh 3PL fish big PCL HR-DU-hold They said, 'Oh, aren't these fish big? Let's grab!'

Raew t@-nak -le tenakle tenakle, awtuw.
3DU DU-hold-TRY hold hold none.
They tried and tried to grab one, but didn't get any.

Raew $t$-ewrae-t -lak -e riwe-ke t@-nak laem-t -iwrek-e.

3DU DU-AGN -DU-go DS-P foot-L DU-hold DS -DU-stand-P
They went downstream again and grabbed a root and stood there.
'P -ewrae-t -yakey, topor gale waruke-re pe-yam-t -uwpo
HR-AGN -DU-go US that fish big -0 HR-US -DU-see
'Let's go back upstream and look at that big fish
yiluk ti-k-taw -ey.'
mud FA-IP-stick-IP
sticking in the mud'
rey po yiluk teywo te-k -rokw-ey-e.
3 ms PCL mud thus DU-IP-do -IP-P
He was doing this to the mud.
rey taw +riwe-re raew yaeltuwp yiyle m -owra-t -alw -o
3ms tree+foot-0 3DU again hand MT-AGN -DU-descend-P
They went back down the root by hand.
t@-nak -p@ -klak-e. T@-nak -l@ t@-nak +lak -@, awtuw.
DU-hold-TRY-H\&Y -P DU-hold-TRY DU-hold+go DS-P none
They tried to grab for fish around again. They tried

Ka-t -nak -pe.
NG-DU-hold-TRY
to grab it going downstream, but couldn't. They failed to grab it.

Orait, nemanet d -iwrek-e lamut -e de-mak-e,
ok elder FA-stand-P younger-0 FA-say-P
Okay, the elder sister stood up and said to the younger,
'Yen kalakw, k@-t -ewra-lak...k@n-ewra-lak.
2SG quiet IM-DU-AGN -go DS IM -AGN -go DS
'You be quiet and go back downstream.

Wan p@-wae-'k -newte-k@ t@ newpen pae-'y yakumyaen.'
1 SG HR-AB -sit-HIDE -PF here eye $H R$-shoot what
Let me see what it is, having sat here and hid while you're away'

Lamut lak -e. Tey nemanet po de-wae-'k -newte-kay-e
younger go DS-P 3fs elder PCL FA-AB -sit-HIDE -PF -P
The younger sister went downstream, the elder having sat and hid

```
    rey yiw +yil -e. D -uwp'-o dispela owtiykayaen.
    3ms water+edge-L FA-see -P this old
    on the river bank. She saw this old woman.
'Wuwoy! Rameyaen owtikayaen talerame!'
wow person old woman
'Wow! There's an old woman!'
```

Lamut d -ey' -e -re raew t -ewra-te-nak -panya -klak-e,
younger FA-come-P-O 3DU DU-AGN -DU-hold-PRETEND-H\&T .-P
When the younger sister came, they pretended to grab fish again.
Nemanet d -alow -kow-o,
elder FA-speak-BEN-P
The elder sister said,
'Iy! Rameyaen. Tale owyaen daeni rey yiluk rey ti-k-tow -ey.'
oh person woman old other 3ms mud there IP-thrash-IP
'Oh! A person! Some old woman is thrashing up the mud over there.'
Tuwp tey raew-e de-mak-e,
straightaway 3fs 3du -0 FA-say-P
Straightaway, she said to them,
'A: an yakumoye te-k@'-kay? Gale te-k -nak -ey?'
ah $2 D U$ what $D U-g e t-P F$ fish DU-IP-hold-IP
'Ah! What have you two been doing? Catching fish?
De-mak-e, 'Nan gale te-k -nak -ey po.'
FA-say-P 1 DU fish DU-IP-hold-IP PCL
She said, 'We've been catching fish.'

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'An yok t -ey' -e?'
    2DU how DU-come-P
    'How did you come here?'
```

'Ey nan-e gaye lo +d -aey-e, nan rey -ke ti-yaeky' -e.'
thus 1DU-0 father angry $+\mathrm{FA}-\mathrm{go}-\mathrm{P} \quad 1 \mathrm{DU}$ there-I DU-come DS-P
'Our father was angry at us, so we came downstream from there'
'A: ke-taw-t -eye -pe.'
ah IM-YET-DU-come-TRY
'Ah! Try coming further!'
Raew t-ey' -e kil $\quad \mathrm{t}$-alow -ney -m -e raew te-yarn'-e,
3DU DU-come-P speech DU-speak-FIRST-PL-P 3DU DU-ask -P
They came after they spoke and asked,
'Yen yakumoyaen, rameyaen 0: 0: wokrampe ?'
2SG what person or or troll*
'What are you? A human being, or...or a troll?'
De-mak-e, 'Iy, wan po rameyaen!'
FA-say-P iy 1 SG PCI person
She said, 'Iy! I'm a human being!'
Raew-e de-yarn'-e, 'An?' t@-mak-e, 'Iy, nan po rameyaen!'
3DU -0 FA-ask -P 2DU DU-say-P iy $1 D U$ PCL person
She asked them, 'And you?' 'Iy, we two are human!'

[^1]```
Rom kil ti-n'-alow -ney -m -e raew te-mak-e,
3PL speech DU-RC-speak-FIRST-PL-P 3DU DU-say-P
First they spoke to each other and they said,
'Nan t -ewrae-t -k -yakey-ey.'
1 \text { 1DU DU-AGN -DU-IP-go US-IP}
'We're going back upstream.'
```

Tey de-mak-e, 'Po rey, kin-ewrae-t -yakey!'
3fs FA-say-P PCL 3ms IM -AGN -DU-go US
She said, 'Ok, go back upstream!'
Raew ti-yakey-e ti-yam-t -uwp'-o, dispela yiw +tawdow po awtuw.
3DU DU-go US-P DU-US -DU-see -P this water+brook PCL none
They went upstream and saw that there was no brook.
Kenken-wo rokw+d -aey-kay.
constricted do +FA-go -PF
It had become constricted.

Raew di-yam-t -moyn@ +lak -e. nuwp po awtuw.
3DU FA-US -DU-search+go DS-P road PCL none
They searched upstream and went downstream. But there was no road.

Krekrow kop +daeni, kop +daeni tiwle waruke. precipice side+one side+other mountain big There was a precipice on one side and a big mountain on the other.
Yiw +tawdow rey yiw +nuwp ti-k -yaeky' -ey-re awtuw.
water+brook 3 ms water+road DU-IP-come DS-IP-0 none
The brook and the path that they were coming downstream on were gone.

Raew nil-towkaney-pa -re, wiyum raew-e d -ael -i.
3DU NDB-climb -TRY-FU wasp 3DU -0 FA-bite-P
They couldn't try and climb, wasps bit them.

Raew $t$-ewrae-t -yaekye -kay-e, tey owyaen tale taw-k -iwrek-ey-e
3DU DU-AGN -DU-come DS-PF -P 3fs old woman YET-IP-stand-IP-P
When they came back downstream, the old woman was still there.

Tey raew-e di-yarn'-e,'An nuwp yok $t$-aey-e, mede po?' 'Awtuw.'

3fs 3DU -0 FA-ask -P $2 D U$ road how DU-go -P well PCL no
She asked them, 'How did you go on the road? Well?' 'No'

Raew nenaen te-lay +t -aey+taey+taey-e,

3DU thought DU-bear+DU-go + go +go -P
They kept on thinking that

```
tadet owtiykayaen tey-ke nuwp yankeyke po d -awkey-e.
this old 3fs-PS road small PCL FA-exist-P
this old woman had a little road.
```

Raew $t$-iwrek-e te-yarn'-e, 'Yen-ke nuwp d -awkey?'
3DU DU-stand-P DU-ask -P 2SG-PS road FA-exist
They stood up and asked, 'Do you have a road?'
'A: wan-ke nuwp po d -awkey.'
ah 1 SG-PS road PCL FA-exist
'Ah! Sure I have a road.'

Raew dowowo t-aey-e rey owtiykayaen tale -re-k,
$3 D U$ with $D U-g o-P 3 m s$ old woman-0 -I
They went with the old woman.

```
'Po ke-t-eye wan-ke lape -ke. P -aey-nem.'
PCL IM-DU-come 1SG-PS village-L HR-go -PL
'You two come to my village! Let's go!'
```

Raew $t$-ir -e $t$-aey-e taeye taeye, tey-ke lape -ke wutmak-e.
3DU DU-follow-P DU-go -P went went $3 f s-P S$ village-I arrive-P
They followed on and on until they arrived in her village.
Tey-ke yaener yikiyr, yompurkay yikiyr t-ikiy-e.
3fs-PS son two young man two DU-live-P
Her two sons were young men.
Raew yaener yikiyr $t$-uwp'-o te-mak-e,
$3 D U$ son two DU-see -P DU-say-P
The two sons saw them and said,
'Uw, gamey, yen topor tale yikiyr yipke de-k' -e?'
oh mom 2SG that woman two where FA-get-P
'Oh, Mom, where did you get those two women?'
'Wan yiw -e de-k' -e'
1SG water-L FA-get-P
'I got them at the river'
Lamur lamu -te de-k' -e, nemaner nemane-te de-k' -e.
younger younger-0 FA-get-P elder elder -0 FA-get-P
The younger brother married the younger sister and the elder the elder.
Raew waek -neney rokw-o, yaen new naw -o.
$3 D U$ belly-ADJ do $-P$ child eye wait-P
When they became pregnant, they begot children.

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Yaeley+mak raew te-k' -e te-kow -o raew-e.
ring +tally 3DU DU-get-P DU-give-P 3DU -0
```

The two brothers got the brideprice and gave it to the two sisters.

Raew te-k' -e $t$-aey-e raew-raew-ke lape -ke yaeltuwp $t$-ewrae-t -ey' -e. 3DU DU-get-P DU-go -P 3DU -3DU -PS village-L again DU-AGN -DU-come-P They took it and went to their own village and came back again.

```
gawer +nemet raew-e wom -re t -uwpo-kay-e.
father+mother 3DU -0 coconut-0 DU-see -PF -P
Their parents had looked after a coconut tree for them.
```

Rom yene d@-k -ra -y -m -e, new-e de-k -aey-ey-e.
3PL not $F A-I P-e a t-I P-P L-P$ eye-L FA-IP-go -IP-P
They didn't eat the coconuts, they just looked after the tree.
Wom aeyle daeni lamlekn-e, yaen yankeyke daeni d@-mak-e,
coconut dry one fall $-P$ child small other FA-say-P
When a dry coconut fell, the other little child said,
'Gamey-wo, wan po wom aeyle topo-re p@-ma-ke?'
mom -V 1SG PCL coconut dry that-0 HR-MT-get
'Mommy, let me go get that dry coconut!'
Nemet de-mak-e, 'Ap-ma-ka -re! wan-owkey!
mother FA-say-P PR-MT-get-FU DB -exist
His mother said, 'Don't go get it! Leave it alone!

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yaye -waew-e d -uwpo-kay-e wom.'
elder-DU -P FA-see -PF -P coconut
It.'s the coconut that we look after for your two big sisters.'
```

Raew waruke yikiyr po mi-t -iwrek-ey-e, raew nemanet yikiyr.
3DU big two PCL MT-DU-stand-IP-P 3DU elder two
The two big ones were going and standing up, the two elder sisters.

Neme-te m -alow -kow-o,
mother-0 MT-speak-BEN-P
He said to his mother,
'Gamey-wo, d -uwp'-o tale yikiyr ti-k -iwrek-ey!'
mom -V FA-see $-P$ woman two DU-IP-stand-IP
'Mom, I saw two women standing there!'
'Yakumyaenre yokri?' Nemet d -imya+d -aey-e.
what $P C L$ mother FA-run +FA-go -P
'What on earth could that be?' The mother went running.
'Yaye -waew yikiyr po rey!' Tey gow di-yel-kow-o. elder-DU two PCL there 3 fs tear FA-cry-BEN-P
'That's your two elder sisters!' She cried for them.

Raew-e de-yarne+d -aey-e, 'An yipeke mae-t -ikiy, 3DU -0 FA-ask +FA-go -P 2DU where MT -DU-live

She went on asking them, 'Where did you two live,

```
wan-ke yaen -waew yikiyr?'
1SG-PS child-DU two
my two children?'
```

'Yiy, nan po t -aey-ka laem-t -ikiy. ee 1DU PCL DU-go -PF DS -DU-live
'Ee, we have gone and live downstream.

```
    Owtiykayaen tale nan-e paulim rokw-o. Nan yenkay -neney.
    old
    woman 1DU-0 foul do -P 1DU husband-ADJ
    An old woman led us astray. We're married.
    Nan yaeley ti-kir+t -eye -ka tade am -o.
    1DU ring DU-get+DU-come-PF here 2PL-0
    We've brought rings for you.
    Am -o ram-o ma-t -kow -o yaeley+mak.'
    2PL-0 3PL-0 MT-DU-give-P ring +tally
    We came to give you the brideprice for them.'
Nemet +gawer -e ma-t -kow -o raew.
mother+father-0 MT-DU-give-P 3DU
They gave it their parents.
T -ewrae-t -ey' -e raew-raew-ke lape -ke.
DU-AGN -DU-come-P 3DU -3DU -PS village-L
They came back to their own village.
Reypapw tader yantelale +kil reypapwo.
finished this young woman+story finished
And that's the end of the story of the young women.
```


## Appendix B: List of verb roots

ABBREVIATIONS:

Arguments

A = Transitive subject
So = Source

0 = Direct Object
$L=$ Locative
$\mathrm{R}=$ Recipient/Addressee
$S=$ Intransitive subject

Class

ACT = object deletion (transitive)
BF $\quad=$ bodily function (intransitive)
CAUS $=$ causative (transitive)
CoinP = complement-taking (transitive)
DIR = direction (intransitive)
DIR2 = direction (transitive)
DO DEL = direct object deletion (bitransitive)
INTR = unclassified (intransitive)
IO DEL = indirect object deletion (bitransitive)
MOT = motion (intransitive)
0 DEL = object deletion (transitive)
POS = posture
SOURCE = source (transitive)

GLOSS
ROOT
ARG
CLASS REMARKS

| 'alive,stay' | IKIY | $S(L)$ | POS |  |
| :---: | :---: | :---: | :---: | :---: |
| 'angry' | LWA | A(0) | 0 DEL |  |
| 'apportion' | IRKAY | AOR | IO DEL |  |
| 'arrive' | MA-WEY | $S(\mathrm{~L})$ | DIR |  |
| 'arrive' | WUTMAK | SL | DIR |  |
| 'ascend' | L-IWKENA | S(L) | DIR |  |
| 'ask' | YAERNA | AOR | COMP |  |
| 'awaken' | MARYOW | AO | ACT |  |
| 'awaken' | UKLA | S | BF |  |
| 'bake' | LAW | O(A) | CAUS |  |
| 'bald' | REYAKW | S | INTR |  |
| ' bark' | TI-NA ON | S | BF |  |
| 'bathe' | IYWA | S | BF | yiw 'water' |
| 'be crazy' | APTOWA | S | INTR |  |
| 'bear' | ALWA (3) | O(A) | CAUS | wate 'seed', etc |
| 'bear' | LAY (3) | O(A) | CAUS | $\underline{\text { yaen }}{ }^{\prime}$ child' |
| 'belch' | RUPUKURYA | S | BF |  |
| 'bite' | AEL (2) | A(0) | 0 DEL |  |
| 'blink' | PUD (1) | S | BF | new 'eye' |
| 'blow' | ILYAEMNA | S(L) | INTR |  |
| 'boil' | ILYA | 0 (A) | CAUS |  |
| 'boil' | IPREK (1) | O(A) | CAUS | yiw 'water' |
| 'break' | IKNAER | AO | ACT |  |
| 'broken' | ROKORYA | S | INTR |  |
| 'build' | UY | O(A) | CAUS | aewre 'house' |
| 'burn' | OKW (1) | S | INTR | tapwo 'fire' |
| 'call' | IWREY | A(0) | 0 DEL |  |


| 'carry' | WAY | AO | ACT |  |
| :---: | :---: | :---: | :---: | :---: |
| 'clear off' | LAWEY | S | мот |  |
| 'close' | IRP | O(A) | CAUS | e.g. aewre 'house' |
| 'come DS' | YAEKYA | S(L) | DIR |  |
| 'come US' | LAEYA | S(L) | DIR |  |
| 'come down' | WUYA | S(L) | DIR |  |
| 'come i/o' | YEYA | S(L) | DIR |  |
| 'come up' | WUTKA | S(L) | DIR |  |
| 'come' | EYA | S(L) | DIR |  |
| 'consume' | RA (1) | A0 | ACT |  |
| 'cook' | ROKRA | AO | ACT |  |
| 'copulate' | OR | A $(0)$ | 0 DEL |  |
| 'cough' | OWKA | S | BF | ewkit 'cough' |
| 'creep' | PAKRA | S | мот |  |
| 'crow' | AKRA | S | BF |  |
| 'cut' | UwK | O(A) | caus |  |
| 'descend' | ALWA (4) | S(L) | DIR |  |
| 'die' | LAKNA | S | INTR |  |
| 'dig' | AKLA | O(A) | CAUS | $\underline{\text { uy }}$ 'hole' |
| 'dislike' | YAWA | AO | COMP |  |
| 'do' | ROKW |  |  |  |
| 'drip' | DANEY | S | INTR |  |
| 'extinguish | ' ETWA | O(A) | caus | tapwo 'fire' |
| 'fall' | LAMLAKNA | S(L) | MOT |  |
| 'fear' | AY'IR | A $(0)$ | 0 DEL |  |
| 'feed' | IRA | AR(0) | DO DEL |  |
| 'flee' | UPOKA | S | MOT |  |
| 'float' | WAEYROW | S(L) | INTR |  |
| 'flow' | TI-TOWLEY | W S | INTR |  |


| 'fly' | APTA | S | MOT |  |
| :---: | :---: | :---: | :---: | :---: |
| 'follow' | WAEYA | AO | ACT |  |
| ' forget' | ARNEY | A0 | COMP | mane 'ear' |
| 'frighten' | NAEKPTAET | AO | ACT |  |
| 'full' | OMW | S | INTR | ram '?' |
| 'get' | KA | AO(So) | SOURCE | So=Instrumental |
| 'give' | KOW | AOR | CARD |  |
| 'go DS' | LAK | S(L) | DIR |  |
| 'go US' | YAKEY | S(L) | DIR |  |
| 'go i/o' | WANWA | $S(L)$ | DIR |  |
| ' go' | AEY | S(L) | DIR |  |
| 'hang' | IYLAKNA | AO | ACT | reflexive |
| 'hang' | AKLEY | S | INTR |  |
| 'hear' | WAN | AO | COMP |  |
| 'heat' | ALWA (1) | O(A) | CAUS | tepe 'sago "pudding"' |
| 'hiccup' | IYWENA | S | BF |  |
| 'nit' | PUYA | AO | ACT |  |
| 'hold' | NAK | AO | ACT |  |
| 'hot' | ALWA (2) | S | BF | yaey-won 'hot-skin' |
| 'nowl' | IWREYIWK | S | BF |  |
| 'hug' | PUD (2) | A0 | ACT |  |
| 'ignite ${ }^{\text {c }}$ | OWRA | AO | ACT |  |
| 'jump' | DARDOW | S | INTR |  |
| 'kill' | OTKOLYA | AO | ACT |  |
| 'knot' | DAY | O(A) | CAUS | mak 'knot?' |
| 'lacerate' | TI-TOW (3) | O(A) | CAUS |  |
| 'lash' | TI-TOW (1) | O(A) | CAUS |  |
| 'laugh' | WUN (1) | S | BF | mok@1 'laugh' |
| 'leap' | TI-TALILWA | S | MOT |  |


| 'lie' 0 | OWNA | S(L) | POS |  |
| :---: | :---: | :---: | :---: | :---: |
| 'Iight ${ }^{\text {a }}$ | RAREN | S | INTR |  |
| 'like' | LAY (1) | AO | COMP | awaey |
| ' $1 \mathrm{imp}{ }^{\prime}$ | TI-TOWPRET | S | MOT |  |
| 'live' | Pama | S(L) | INTR | $S=P L$ |
| 'lop' | MARPAENKA | A0 | ACT | taw 'tree' |
| 'love' | WUN (2) | A0 | EMOT |  |
| 'lure' | TI-TOWLIL | A0 | ACT |  |
| 'miss' | TI-TAMKURYA | AO | ACT |  |
| 'mount' | TEWA | AO | ACT |  |
| ' name' | IKRIY | AR(0) | DO DEL |  |
| 'net' | IL | O(A) | CAUS |  |
| 'nod off' | Raton | S | BF |  |
| 'open' | IPLAEL | O(A) | CAUS |  |
| 'open' | LOPWA | 0 ( A ) | CAUS | aewre 'house' |
| 'paint' | laelina | 0 ( A ) | caus |  |
| 'pass' | IRYAR | AO | ACT |  |
| 'pick up' | TI-TAWLIL | AO | ACT |  |
| 'plant' | TI-TA | O(A) | caus | wiye 'garden' |
| 'pour' | LAET | AO(L) | DIR2 |  |
| 'pull' | ILIN | AO | ACT |  |
| 'put' | KAY (1) | AO(L) | DIR2 |  |
| 'recline' | TOWPAEWA | S(L) | POS |  |
| 'remember' | NAK (2) | AO | COMP | nenaen-e 'in mind' |
| 'remove' | KAY (2) | AO(L) | DIR2 |  |
| 'roast' | LAWYER | O(A) | CAUS |  |
| 'roll,fold' | ' IYPUD | 0 (A) | CAUS |  |
| 'run' | IMYA | S | MOT |  |
| 'say' | MAK | A0 (R) | IO DEL |  |


| 'scrape' | EYT | O(A) | caus | talow 'taro' |
| :---: | :---: | :---: | :---: | :---: |
| 'scrape' | WAEY | O(A) | caus | yamo 'sago' |
| 'scratch' | Rank | $\mathrm{A}(0)$ | 0 DEL |  |
| 'search' | MOYNA | AO | ACT |  |
| 'see' | UPWA | A0 | COMP |  |
| 'sew' | ADEN | O(A) | caus |  |
| 'sharpen' | IR | O(A) | caus |  |
| 'shave' | NOW | AO | ACT |  |
| 'shoot' | IY | AO | ACT |  |
| 'shoot' | TAREY | S(L) | INTR |  |
| 'singsing' | OKW (2) | O(A) | CAUS | riwtow 'ceremony' |
| 'sit' | IK | S(L) | POS |  |
| 'sleep' | OWNA | S | BF | newtiy 'eye' |
| 'slip' | WURERAY | S | INTR |  |
| 'smell' | AYNA | AO | COMP |  |
| 'smile ${ }^{\text {a }}$ | LANYA | S | BF | $\underline{\text { piy }}$ 'teeth' |
| 'sneeze' | IYWA NA | S | BF |  |
| 'speak' | ALOW | AO | ACT | kil 'speech' |
| 'spit' | KAREY | S | BF |  |
| 'squat' | TI-TOWUK | S(L) | POS |  |
| 'stalk' | yaeley | A0 | ACT |  |
| 'stand' | IWREK | S(L) | POS |  |
| 'steam' | IDWAER | O(A) | CAUS |  |
| 'stink' | TI-TAN | S | INTR |  |
| 'strike' | TI-TOW (2) | O(A) | CAUS | p@m 'slit gong' |
| 'sweep' | EYTRA | O(A) | CAUS | aewre 'house', niw |
| 'swim' | WA | S | мот |  |
| 'think' | LAY (2) | AO | COMP | nenaen 'thought' |
| 'throw' | IPREK (1) | AO | ACT |  |


| 'tie' | UD | O(A) | CAUS |
| :--- | :--- | :--- | :--- |
| 'track' | NIR | AO | ACT |
| 'vomit' | IWTOW | S | BF |
| 'wait' | NAW | AO | ACT |
| 'wash' | WORYA | O(A) | CAUS |
| 'weave' | RA (2) | O(A) | CAUS e.g. karpen 'basket' |

```
Appendix C:
Basic Vocabulary - English-Awtuw
(Based on Comrie and Smith 1977.66-71.)
1. all kokot
2. and (TP na)
3. animal (yiyay 'game' cf. 11.5.)
4. ashes kaypiw
5. at (-e/-ke 'Locative/Directional' (cf. 6.5.)
6. back yekmak (cf. 6.5., 11.4.)
7. bad monokene
8. bark taw+mowyaey 'tree+skin'
TI-NATON 'bark'
9. because (TP olsem)
10. belly waek (cf. 11.4.)
11. big waruke
12. bird yi (cf. 11.5.)
13..bite AEL
14. black tipray-kwo 'soot-like' (cf. 11.2.)
15.blood aeypiy (cf.11.4.)
16. blow ILYAEMNA
17. bone lake (cf. 11.4.)
18. breast muy (cf. 11.4.)
19. breathe yiyk LIWKENA/M-ALWA 'wind ascend/descend'
20. burn OKW (S=tapwo fire')
    ALNA 'be hot'
21. child yaen (cf 11.1.)
22. claw limkew-poke ('fingernail' cf. 11.4.)
```

| 23. cloud | aewktil |
| :---: | :---: |
| 24. cold | nampet(-neney) (cf. 8.7.) |
| 25. come | EYA (cf. 4.14.,5.4.) |
| 26. count | riw MAK 'tally' (cf. 11.3.) |
| 27. cut | IWYA |
| 28. day | maey 'sun' (cf. 11.3.) |
|  | im yikiyr ('two nights') |
| 29. die | LAKNA |
| 30. dig | AKLA |
| 31. dirty | wune neney |
| 32. dog | piyren |
| 33. drink | yiw RA ('consume water') |
| 34. dry | aeyle |
| 35. dull | wam ('blunt') |
| 36. dust | kayputeriy |
| 37. ear | mane (cf. 11.4.) |
| 38. earth | niw 'ground, soil' |
| 39. eat | aeye RA. ('consume food') |
| 40. egg | yi+wate ('bird+egg') |
| 41. eye | new (cf. 11.4.) |
| 42. fall | LAMLAKNA |
| 43. far | tomte |
| 44. fat | kanel, lum |
| 45. father | gaye/gaw@r (cf. 11.1.) |
| 46. fear | AYTIR |
| 47. feather | yi+tiw ('bird+hair') |
| 48. few | urunk-kwo ('three-like') |

```
49. fight TI-NI-PUYA ('hit each other')
TI-N-IY ('shoot each other')
50. fire tapwo
51. fish gale (cf. 11.5.)
52. five yiyle daeni ('one hand cf. 11.3.)
53. float WAYROW
54. flow TI-TOWLEYAKW
55. flower wale
56. fly APTA
57. fog aewktil ('cloud')
53. foot riwe(-yak) (cf. 11.4.)
59. four orkweynaywo (cf. 11.3.)
60. freeze ---
61. fruit taw+wate('tree+egg')
62. full ram OMW
63.give KOW
64. good medaye
65.grass periyayawnow
65. green nenel-wo ('unripe-like' cf. 11.2.)
67.guts ripat (cf. 11.4.)
63. hair tiw (cf. 11.4.)
69. hand yiyle (cf. 11.4.)
70. he rey (cf. 3.6.)
71. head maklake (cf. 11.4.)
72. hear WAN
73. heart wurne (cf. 11.4.)
74. heavy yiylekolke
75. here tak@, t@, ade, tade
```

| 76. hit | PUYA |
| :---: | :---: |
| 77. hold | NAK |
| take | KA |
| 78. horn | (TP kowm) |
| 79. how | yok (cf. 9.1.) |
| 80. hunt | yiyay MOYNA/IR ('look for/follow game') |
| 81. husband | yapor, yenkay (cf. 11.1.) |
| 82. I | wan (cf. 3.6.) |
| 83. ice | --- |
| 84. if | (TP sapos) |
| 85. in | (-e/-ke 'locative' cf. 6.5.) |
| 86. kill | OTKOLYA |
| 87. knee | pampwey (cf. 11.4.) |
| 83. know | neknek(-neney) (cf. 10.2.) |
| 89. lake | kapem |
| 90. laugh | mok@1 (WUM) |
| 91. leaf | taw+tiw ('tree+hair') |
| 92. leftside | atkwak |
| 93. leg | riwe (cf. 11.4.) |
| 94. lie | OWNA |
| 95. live | IKIY, PAMA |
| 96. liver | wurne+waew (cf. 11.4.) |
| 97. long | wok@k, wukliwke |
| 98. louse | nin |
| 99. man/male | yapor, yenkay, rame |
| male X | X-rokwo |
| 100. many | liwke |

```
101. meat Ium ('fat')
102. moon yilmake
103. mother gamey/nemet (cf. 11.1.)
104. mountain tiwle
105. mouth alworaw, raw+nale ('call+hole' cf. 11.4.)
106. name yenyiy
107. narrow kenken
108. near teywake
109. neck kolaey (cf. 11.4.)
110. new naek
111. night im (cf. 11.3.)
112. nose wutil (cf. 11.4.)
113. not yene(cf. 9.2.), ka-(cf.4.2.3.)
114. old owtiykayaen, owyaen [+HUMAN]
lop [-HUMAN]
115. one naydowo(cf.11.3.)
116. other daeni (cf.7.)
117. person rameyaen
118. play m@nman KA
119. pull ILIN
120. push IKRITIT'
121. rain yele(IT)
122. red aeypiy-kwo ('blood-like' cf. 11.2.)
123. right medemede 'true'
    yirin yek@ 'correct',
    ap rey 'just so'
124. rightside yiylc+mede ('real hand')
125. river wiytape
```

| 126. road | nuwp |
| :---: | :---: |
| 127. root | taw ten ('tree+tendon') |
| 128. rope | maet ('vine' cf. 11.5.) |
| 129. rotten | pumpum ROKW, Ti-TAN ('stink') |
| 130. round | pomkewe |
| 131. rub | IYTWEY |
| 132. salt | wow ('coconut shell ash') |
| 133. sand | telman |
| 134. sxy | MAK (cf. 10.2.) |
| 135. scratch | RANK |
| 136. sea | (TP solwara) |
| 137. see | OWPA (cf. 10.2.) |
| 138. seed | wate |
| 139. sew | ADEN |
| 140. sharp | p@rp@r |
| 141. short | tukre |
| 142. sing | riwtow OKW ('perform a cermony') |
| 143. sit | IK |
| 144. skin | yaey (cf. 11.4.) |
| 145. sky | maey ('sun') (cf. 11.3.) |
| 146. sleep | OWNA |
| 147. small | yankeyke |
| 148. smell | AYNA, uyk ('odor') |
| 149. smoke | tipelyow |
| 150. smooth | wereye |
| 151. snake | wulaek (cf. 11.5.) |
| 152. snow | --- |
| 153. some | womyaetne (cf. 11.3.) |

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154. spit taepley (cf. 11.4.), KAREY
155. split UWKDYER
156. squeeze NAKMANEY
157. stab TI-TOW
158. stand IWREK
159. star wuwp, towlow
160. stick tawap
161. stone tiyl
162. straight peteyta-kwo
153. suck AMTIRNA
164. sun maey
165. swell LAWA
166. swim WA
167. tail uwn
168. that opor, topor
163. there rey, opo, topo
170. they rom(cf. 3.6.)
171. thick waw@r-neney
172. thin periyaw-kwo
173. think nenaen LAY, nenaen-neney (cf. 8.8., 10.2.)
174. this ader, tader (cf.3.6.)
175. thou yen (cf. 3.6.)
176. three urunk (cf. 11.3.)
177. throw IPRIK
178. tie DAY
179. tongue lale (cf. 11.4.)
130. tooth piylake (cf. 11.4.)
181. tree tэw (cf. 11.5.)
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182. turn PORYA
183. two yikiyr (cf. 11.3.)
184. vomit IWTOW
185. walk AEY ('go')
136. warm tapwo-neney ('fire-y')
187. wash WORYA
188. water yiw
189. we nom (cf. 3.6.)
190. wet yiw-neney ('water-y')
191. what yakum(oyaen) (cf. 9.1.)
192. when yekak(cf. 9.1.)
19%. where yipe, yipke (cf. 9.1.)
194. white kiywo-kwo (cf.11.2.)
195. who yeran, yeremaen (cf. 9.1.)
195. wide wawerneney
197. wife talet(cf. 11.1.)
193. wind yiyk
199. wing laet
200. wipe NAKLALNA
201. with -k 'Instrumental/Comitative' (cf. 6.3.)
    dowo ('together')
    pokneney ('mixed with')
202. woman tale
203. woods maew, ole
204. worm mweymoy (cf. 11.5.)
205. ye om(cf. 9.1.)
205. year (TP yia)
207. yellow kowlaw-kwo (cf. 11.2.)
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Allied Geographical Section, Southwest Pacific Area. 1943. Terrain Study No. 65: Area study of the Sepik District.

Berlin, Brent, and Paul Kay. 1969. Basic color terms: their universality and evolution. Berkeley: University of California Press.

Chomsky, Noam, and M. Halle. 1968. The sound pattern of English. New York: Harper and Row.

Chung, Sandra, and Alan Timberlake. to appear. 'Tense, mood, and aspect'. in T. Shopen et al. eds.

Comrie, Bernard. 1976. Aspect. Cambridge: CUP.

Comrie, Bernard, and Norval Smith. 1977. Lingua Descriptive Series: Questionnaire. Lingua 42.1-72.

Dixon, R.M.W. 1977. 'Where have all the adjectives gone?'. Studies in Language 1.19-80.

Dixon, R.M.W. 1979. 'Ergativity'. Language 55.59-138.

Feldman, Harry and Walter Seiler. 1983. 'On the foundations of a typology and the nature of case marking'. Language and Linguistics in Melanesia.

Foley, W A. to appear. Papuan languages. Cambridge: CUP.

Hockett, Charles F. 1958. A course in modern linguistics. New York: MacMillan.

Hopper, Paul J. and Sandra A. Thompson. 1980. 'Transitivity in grammar and discourse'. Language 56.251-299.

Keenan, Edward L. and Bernard Comrie. 1977. 'Noun phrase accessibility and universal grammar'. LI 8.63-100.

Keenan, Edward L. and Bernard Comrie. 1979. 'Data on the noun phrase accessibility hierarchy'. Language 55.333-351.

Laycock, Donald C. 1968. 'Languages of the Lumi Subdistrict (West Sepik District) New Guinea'. OL 7.36-66.

Laycock, Donald C. 1973. Sepik languages: checklist and preliminary classification. PL B. 25 .

Laycock, Donald C. and J. Z'graggen. 1977. 'The Sepik-Ramu Phylum'. in S. A. Wurm, ed. pp. 731-763.

Lowie, Robert H. 1968. 'Relationship terms'. in P. Bohannan and J. Middleton, eds. Kinship and social organization. Garden City, NY: Natural History Press. pp. 39-59.

Lyons, John. 1966. 'Towards a "notional" theory of the "parts of speech'' ${ }^{\prime}$ JL 2.209-236.

Lyons, John. 1968. Introduction to theoretical linguistics. London: CUP.

Lyons, John. 1977. Semantics. Cambridge: CUP.

McCarthy, J. K. 1931, 1936-37. Patrol reports.

MacGregor, Donald E. 1969. 'Learning from Wape mythology'. Practical Anthropology. 16.201-215.

MacGregor, Donald E. 1972. 'The villager's world'. Catalyst Magazine.

MacGregor, Donald E. 1974a. 'Communicating the Christian message to the Wape people of Papua New Guinea'. International Review of Mission. 63.530-538.

MacGregor, Donald E. 1974b. 'New Guinea myths and scriptural similarites'. Missiology. 2.35-46.

MacGregor, Donald E. 1975. The fish and the cross: a description and interpretation of the fish sing-sing festival held at Teloute village, Papua New Guinea. Hamilton, NZ.

MacGregor, Donald E. and Aileen MacGregor. 1982. Olo language materials. PL D42.

Marshall, A.J. 1938. The men and birds of paradise. London: Heinemann.

Marshall, A. J. 1937. 'Northern New Guinea'. Geographical Journal 89.489-506.

Mitchell, William E. 1973. 'A new weapon stirs up old ghosts'. Natural History 82.74-84.

Mitchell, William E. 1974. 'Medical care for a New Guinea tribal population: administrative strategies and the human response'. Paper presented at the 73rd Annual Meeting of the American Anthropolgical Association, Mexico City.

Mitchell, William E. 1975. 'Culturally contrasting therapeutic systems of the West Sepik: the Lujere'. in Thomas R.Williams, ed. Psychological Anthropology. The Hague: Mouton. pp. 409-439.

Mitchell, William E. 1977. 'Changing others: the anthropological study of therapeutic systems'. Medical Anthropology Newsletter 8.15-20.

Mitchell, William E. 1978a. 'Sorcellerie chamanique: "sanguma" chez les Lujere du cours superieur de Sépik'. Journal de la Société des Oceanistes.33.179-189.

Mitchell, William E. 1978b. 'On keeping equal: polity and reciprocity among the New Guinea Wape'. Anthropological Quarterly 51.5-15.

Mitchell, William E. 1978c. The bamboo fire: an anthropologist in New Guinea. New York: Norton.

Murdock, George P. 1949. Social structure. New York: MacMillan.

Robinson, E. D. 1931-1934. Patrol reports.

Schachter, Paul. to appear. 'Parts-of-speech systems'. in T. Shopen et al., eds.

Scorza, David P. 1972. 'Classification of Au myths'. PA 19.214-218.

Scorza, David P. 1974. 'Au social relations...and please behave' in Shaw, ed. pp. 187-209.

Shaw, R. Daniel, ed. 1974. Kinship studies in Papua New Guinea. Ukarumpa:SIL.

Shopen, Timothy et al., eds. to appear. Syntactic typology and linguistic fieldwork. Cambridge: CUP.

Smyth, Herbert W. 1920. Greek Grammar. Cambridge MA: Harvard UP.

Trubetzkoy, N. 1969. Principles of phonology. tr. Christianne A. M. Baltaxe. Berkeley: Univrsity of California Press.

Vendler, Zeno. 1967. 'Verbs and times'. in Linguistics and philosophy. Ithaca: Cornell University Press. pp. 97-121.

Wark, Lynette, and L.A. Malcolm. 1969. 'Growth and development of the Lumi child in the Sepik District of New Guinea'. Medical Journal of Australia 2.129-136.

Whitehead, Carl R. 1981. 'Subject, object, and indirect object: towards a typology of Papuan languages'. Language and Linguistics in Melanesia 13.1.32-63.

Whitney, William D. 1960. Sanskrit Grammar. Cambridge MA: Harvard UP.

Wurm, S.A. 1971. 'The Papuan linguistic situation'. in T.A. Sebeok, ed. Current trends in linguistics. 8.1.591-94.

Wurm, S.A. 1977. 'Personal pronouns'. in S.A.Wurm, ed. 191-217.

Wurm, S.A. ed. 1977. New Guinea area languages and language study vol. 1. PL C. 38 .

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[^0]:    5.3.1. The first distinction we can make is between those verbs that may cooccur with a direct object $N P$ and those that may not.

[^1]:    * A wokrampe is a fabulous creature made of stone that lives near water and devours passersby. Under the circumstances, I feel that 'troll' is an appropriate gloss.

