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*"Thesis' includes 'treatise', dissertation' and other similar productions.
Anamuxra
A language of Madang Province, 
Papua New Guinea

Andrew Ingram

January 2001

A thesis submitted in fulfilment of the requirements of
the degree of Doctor of Philosophy
at the University of Sydney
Except where otherwise acknowledged, this thesis represents the original research of the author.

Andrew Ingram
Language is a wide field, and the grammar of a language is not only wide but intricate, and how many different, and even conflicting views may be entertained on the grammar of the same language is strikingly illustrated in the same number of English Grammars, and particularly modern ones that are to be met with ...

One moral lesson at any rate is taught by seeing so many learned and other writers differing on the same subject, viz. that each one should be modest of his own opinion as well as respect the opinion of others.

(Richard Lyth, letter to David Hazlewood, 19 August 1845 cited in Schütz 1972: 37).
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- Naypam dararamam nagnagdnn! -
Abstract

This thesis describes the grammar of Anamuxra, a Papuan language spoken in the Josepstaal area of Madang Province Papua New Guinea. Anamuxra belongs to the Josepstaal branch of the Southern Adelbert Range subgroup of the Madang group which is a major division of the Trans New Guinea Phylum.

The thesis is in four parts. Part I consists of chapters 1 to 3 which prepare the way for the grammatical description. Chapter 1 details the social and linguistic background of Anamuxra as well as the basis of the study. Chapter 2 treats phonology, describing the phonemes, allophonic variation, phonotactic constraints, general phonological processes and stress assignment. It also introduces the orthography used in the grammar. Chapter 3 provides an overview of the morphological, syntactic and semantic characteristics of word classes.

Part II, consisting of chapters 4 to 7, is concerned with morphology. Chapter 4 introduces the set of classifiers suffixes and describes their semantic characteristics. Chapter 5 treats the derivational and inflectional properties of nominal words. Chapter 6 deals with the form and function of both free and bound pronouns. Chapter 7 is about verb morphology. It describes the inflectional characteristics of verbs and derivational processes which use bound morphemes.

Part III, chapters 8-11, deals with complex verbs and syntax. Chapter 8 describes complex verbs including serial verbs, idiomatic compounds, auxiliary verb compounds, and non-verb plus verb compounds. Chapter 9 describes the structure of simple and complex nominal phrases. Chapter 10 details the basic structural features of both verbal and non-verbal clauses. It describes realisation of core arguments in each of these clause types as well as the realisation of adjunct constituents in the clause. Chapter 11 deals with aspects of syntax beyond the clause. It begins with a brief introduction to complex sentence structure. It goes
on to describe switch-reference constructions, as well as counterfactual constructions, complement clauses, relative clauses and tail-head linking.

The final part of the thesis consists of an appendix containing two Anamuxra texts with morpheme glosses and free translations.
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## Abbreviations and conventions

Abbreviations of grammatical terms are given in small caps. Abbreviations of other words are given in ordinary caps.

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<tr>
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<td>CFP</td>
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<td>F</td>
<td>final</td>
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<td>female</td>
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<td>FOC</td>
<td>focus</td>
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<tr>
<td>FP</td>
<td>far past tense</td>
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<td>FUT</td>
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<tr>
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<td>Goal/ beneficiary/ source semantic function</td>
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<td>res</td>
<td>residual</td>
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<td>S</td>
<td>Subject, single argument of intransitive verb</td>
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<td>classifier</td>
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<td>sm.am</td>
<td>small amount</td>
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<td>2</td>
<td>second person</td>
</tr>
<tr>
<td>3</td>
<td>third person</td>
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(Abbreviations of grammatical terms appear in small caps, while abbreviations of lexical content terms appear in lower case.)

In the morphemic analysis and gloss of examples, morpheme breaks are indicated by '−', while boundaries between clitics and their hosts are indicated by '='.
Map 1: Papua New Guinea

Map 2: Location of Anamuxra within Madang Province
Chapter 1

Introduction

1.1 The setting

1.1.1 Geography

Anamuxra is spoken to the north of Josephstaal, in foothills ranging from 80 metres to 300 metres above sea level on the southern side of the Adelbert Range in the north-west of Madang Province of Papua New Guinea. Josephstaal is a small government and mission station, comprising a Catholic mission, a school, a number of government offices, an aidpost, several small trade stores, an airstrip and a small settlement which houses most of the government and mission workers. To the west and south is the flood plain of the Ramu River; while, to the east are the Adelbert Range which rises to an altitude of 1680 metres above sea level. Some 40 kilometres to the north of Josephstaal, beyond the Adelbert Range, lie the coast and the town of Bogia.

Most of the area is covered by dense to medium low-range rainforest, though Josephstaal itself is situated on a flat stretch of grassland. The area in which Anamuxra is spoken is bounded by three rivers: the Guam to the North, the Anamam to the South-West; and the Seke to the south and east. Within these borders, there are a number of smaller rivers and creeks which provide the main sources of water and planting grounds for sago palms.
Josephstaal receives an average rainfall of 2639 mm per annum. There are two seasons: the wet season (sibi-) which lasts from November to May; and the dry season (inaxava-) which lasts from June until October.

During the early 1970s, a road was constructed from Josephstaal to Bogia where it connected with the North Coast road which runs to the town of Madang. However, lack of maintenance since the mid 1990s has left much of the section south of the Guam river unusable by motor vehicles. In past years, where traffic could get through, people regularly travelled to the markets at Bogia, and even those at Madang, to sell betelnut, tobacco and other crops. However, given that it can take anywhere between 6 to 10 hours of walking to reach transport, regular movement to and from the coast has virtually ceased.

There are regular flights between Josephstaal and Madang and other regional centres such Aiome, though most local people find the cost of flying prohibitive.

1.1.2 Social organisation and ecology

The Anamuxra speech community spans a number of distinct territorial groups, or units including: Apovd, Ikundun, Mindivi, Moie, Swanzambi, Tuamadapuar and Waiateng. Each of these territories is subdivided into subterritories claimed by smaller, less inclusive groups. Membership of such subgroups appears to play an important role in determining rights to land use.

---

1 This figure is taken from Short (1976).
2 These territorial groups are sometimes referred to as villages, (viles in Tok Pisin), though they contain a number of widely dispersed hamlets and small villages (see §1.1.2 for details on settlements).
3 Population figures are given in §1.2.4.1.
4 Evidence suggests that there are groupings with both patrilineal and matrilineal forms of affiliation. However, I prefer to reserve claims as to the relative importance of descent lines until a more extensive study has been conducted.
5 As far as I am aware, there have been no anthropological studies conducted of the Anamuxra speaking community. However, Burridge (1960, 1969) gives detailed account of the Tangu, a group who live approximately 20 kilometres to the north of Josephstaal beyond the Guam river. Burridge (1960) gives a detailed account of cargo cults in the Tangu area. While he makes no mention of Josephstaal, it is known that people from Josephstaal took part in cargo cults.
CHAPTER 1 - INTRODUCTION

Most speakers live in small, dispersed hamlets, with each hamlet comprised of a family or an extended family of between three and twenty people. Typically, one household in a hamlet houses a single nuclear family. The populations of these settlements can be quite fluid. It is not uncommon for one or more households to relocate, either joining another hamlet or establishing a new homestead in another part of the territory. More rarely, the entire population may abandon a hamlet to set up elsewhere. While these hamlets provide the main place of residence, it is extremely common for people to build a small shelter at a garden site in which they may stay for a day or two at a time during periods of intensive work, especially where the garden is located far from their hamlet. In exceptional cases, a family may choose to establish themselves at a garden site, in which case they build a more substantial house.

Interrmarriage between different territorial groups both within the Anamuxra speech community and outside of it is quite common. While the ancestry of a number of speakers indicates that such intermarriage is not a recent phenomenon, the increase in social contact between different territorial groups has widened the range of opportunities for the younger generation to find partners.6

cult meetings held on the coast. Although the Tangu speak a language which belongs to a different genetic stock to Anamuxra (Tangu belongs to the Ramu family, while Anamuxra is a member of the Madang subgroup of the Trans New Guinea family see §1.2.1 below), it is clear from Burridge’s description that Anamuxra speakers and Tangu people share a number cultural similarities.

6 A significant aspect of marriage amongst Anamuxra speakers is the principle of exchange, whereby a person’s marriage is ‘matched’ through the marriage of one of his/her siblings to one of her/his spouse’s siblings. This matching plays an important part in the economic responsibilities a person has to his/her in-laws. However, irrespective of whether a person’s marriage is reciprocated in this way, s/he has ongoing obligations to in-laws which can last for many years.
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Post-marriage residence tends to be virilocal, and is tied closely to the expectation that a man will take up membership in the same group as his father. Occasionally, however, a couple may choose to settle in his wife’s territory.7

Anamuxra speakers are, traditionally, subsistence agriculturalists, hunters and gatherers. There are several trade stores which sell rice, flour, tinned meat and fish and so on. However, given the limited sources for cash in the area, these tend to be infrequent additions to the daily diet. Most people continue to rely on traditional swidden gardening methods to provide their staple foods. The main crops include varieties of yams (*muN-, nabaN-*), bananas (*manN-*), sweet potato (*maurim-*), taro (*kunkun-, kudim-*), sugar cane (*axaN-*), beans (*xsi-*), pawpaw (*papaya-*), corn, pumpkin and cucumbers. Edible green leaves such as tulip (*vana-*) as well as wild varieties of yams (*muguN-*), mango (*irxidN-*) and Ton8 (*uruxwunN-*) breadfruit (*skwam-, kwa-*) are also collected from surrounding forest. Sago (*mawa-*) plays an important part of the diet during the wet season.9

Hunting remains an important activity for most Anamuxra speakers and represents the main source of meat-derived protein. The most commonly caught game includes bandicoots (*taiN-*), wallabies (*aiwara-*), possums (*iduaN-, mukr-*), flying-foxes (*marabuN-*), pigs (*sawuN-*), and monitor lizards (*irbaN-*). Cassowaries (*masuxN-*), once common in the area, are only found in the less densely populated dense forest areas to the east. Eels (*asawumi-*), small fish (*wagi-*), mussels (*ik-*) and freshwater shrimps (*siv-*) are taken from the rivers and creeks.

---

7 It is not presently clear as to the precise reasons why some couples take up residency in the wife’s territory, though it seems that access to garden land along with a man’s responsibility to his in-laws may be important determining factors.

8 The *Pometia pinnata* tree. ‘Ton’ is the Tok Pisin name and commonly used in English (see Allen et al (1994)).

9 Allen et al (1994) provides a detailed survey of agricultural system throughout Madang Province including those found in Josepstaal and neighbouring areas.
Anamuxra speakers keep three kinds of animals: dogs (*mrkN*-), pigs and less commonly, chickens (*akakara*-). Dogs are used primarily for hunting, though they are also valued for protection. Domestication of pigs is somewhat limited with the number of pigs held by a single household rarely exceeding three or four. In spite of the introduction of regulations requiring pigs to be secured, most people allow their animals to roam the forest.\(^{10}\) In addition to the offspring of domesticated animals, many pigs are procured from the wild population.\(^{11}\) People rarely use the pigs they raise for domestic consumption, instead using them in various transactions and communal feasts.

The sale of fruit, vegetables, betelnut, tobacco and less frequently, game, to government workers at Josephstaal currently provides a minor source of cash for most Anamuxra speakers. Many families have established coffee and cacao plantations and there are several fermentaries in the area to which people can sell their harvest. However, the deterioration of the road, combined with the prohibitive air freight rates, has led many people to abandon or substantially reduce their commitment to these crops. In the last couple of years, the Catholic mission has sought to alleviate the problem, with some success, by buying crops from growers and absorbing any losses incurred from freightage.

Most children attend grades one to six at Josephstaal. A few go on to grade 10 at one of the larger regional schools on the coast. Since the 1960s, a number of men have spent periods as indentured labourers on plantations in Madang, Rabaul and elsewhere. A few have trained and worked as catechists with the Catholic Church, or as medical officers both in Josephstaal and in other locations around the province.

\(^{10}\) These regulations were introduced to protect gardens, a favourite target of domesticated and wild pigs.

\(^{11}\) All domesticated pigs are marked by cutting the ears. The main purpose of this is to distinguish them from wild pigs, thus protecting them from being killed during hunting expeditions.
Outside contact has brought with it various changes to the material culture of Anamuxra speakers. Traditional materials such as bamboo, wood, clay and vine have been replaced in many contexts by steel, aluminium and rubber. Metal saucepans are now preferred over traditional clay pots. Plastic and metal bowls are used much more frequently than those carved from wood. The old cutting tools such as stone adzes (aixusam-) have been replaced by axes and machetes, while spear and arrow heads, once crafted from bamboo, are now fashioned from old machete and small knife blades or pieces of wire. And, rubber, when it can be acquired, is used to bind the spear heads to the shaft. Similarly, strings bags are now woven with wool, or synthetic fibres as commonly as they are with the fibre from the bark of the Gnetum Gnotum tree (vanaN-).12

There are, however, a number of cases where there are no alternatives to traditional tools and materials. For instance, no decent substitute has been found for the sakama-, a tool shaped like the number seven and fitted with a bamboo tip which is used to pound the pith of the sago palm.

1.2 The language

1.2.1 Linguistic affiliations of Anamuxra

Anamuxra is one of over 750 Papuan languages spoken on the mainland of New Guinea (i.e. Irian Jaya and Papua New Guinea), island Melanesia and eastern Indonesia.13

Anamuxra was first classified by Z’graggen (1971, 1975, 1980). Z’graggen tentatively proposed a genetic grouping consisting of almost one hundred

12 Unless otherwise specified all scientific names are taken from either Mihalic (1971) or Allen et al (1994).
13 The term ‘Papuan’ is used as a label for a negatively-defined areal grouping, namely those languages indigenous to Melanesia excluding the Austronesian languages which belong to a well-established genetic grouping. The term ‘non-Austronesian’ has been employed as an alternative to ‘Papuan’. While this term accurately reflects the basis of the grouping of Papuan languages, I will use ‘Papuan’.
languages from the central region of Madang Province which he labelled the Madang-Adelbert Range sub-phylum. Within this group, he recognised four main branches: namely, the Rai Coast, Mabuso, Northern Adelbert Range and Southern Adelbert Range subgroups. According to Z'graggen, Anamuxra is a member of the Pomoikan family of the Josephstaal stock, one of two stocks that make up the Southern Adelbert Range subgroup, the other being the Wanang stock. (For details of other languages in the Josephstaal stock see figure 1-1 below).


It should be noted that the Trans New Guinea hypothesis has been criticised by a number of authors, including Lang (1976), Haiman (1979) and Foley (1986). Foley (1986) argues that the main methods employed to establish genetic affiliations which characterise the Trans-New Guinea Phylum were flawed or problematic within the Papuan context. He preferred, on current evidence, to divide Papuan languages into about sixty different language families, along with a number of language isolates (Foley 1986:3, 214ff, see also Foley 1991:1). However, no specific mention is made by Foley of Anamuxra or the immediate groupings established by Z'graggen.

More recently, Pawley (1995, 1998) and Ross (1995, 2000) have argued that a modified version of the Trans New Guinea Phylum hypothesis is correct. Pawley (1998) has proposed several changes to Z'graggen’s classification of Madang-Adelbert languages, including Kalam and Kobon as members of a fifth subgroup of the Madang group alongside the Southern Adelbert Ranges.

14 For a summary of the development of the Trans-New Guinea Phylum as well as criticisms of this grouping see Pawley (1998).
15 Ross (2000) proposes quite a different grouping for the Madang group from that given by Pawley, based solely on pronouns.
In figure 1-1, I represent the place of Anamuxra within the groupings outlined above. Note that more work needs to be done before an adequate appraisal can be made of these groupings.

Figure 1-1: Anamuxra, the Madang-group and the Trans-Guinea phylum

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16 Mum (see Katiati in Z’graggen (1971, 1975, 1980)).
1.2.2 Typological sketch of Anamuxra

Anamuxra has sixteen consonant phonemes including the oral obstruents /p/, /t/, /k/ /l/ /b/, /d/ and /g/, the nasals /m/, /n/ and /ŋ/, a rhotic /r/ and two glides /y/ and /w/. The vowel system consists of five vowels /i/, /u/, /ə/, /ɛ/ and /ʊ/, though the last two are marginal phonemes found in only a handful of words. The syllable consists maximally of an onset, nucleus and a coda. Complex onsets consisting of up to three consonants occur, but are highly constrained. Likewise, coda-onset consonant clusters do occur but are restricted. Vowel epenthesis is widespread, used to syllabify phonemic consonant clusters that do not conform to the rules governing possible onset-coda clusters and complex onsets.

Anamuxra has two major word classes: verbs and nominals as well as several minor word classes including verbal adjuncts, adverbs, clitics, interjections and a number of miscellaneous closed single member classes. Most of these in turn can be further divided into a number of morphologically, functionally and/or semantically discrete subclasses. The class that displays the greatest range of subclassification is that of nominals which includes vocatives, independent pronouns, proper names, common nouns, qualifiers (adjectives, numerals, referentials), and question words. Like a number of other Papuan languages, the traditional numeral system of Anamuxra is based on a binary system and an overlapping quinary system which uses terms for hand and foot.

Nominals in Anamuxra display a high degree of morphological complexity. Many nominals take classifiers, as well as number and case marking. In addition, most inalienable nouns take a pronominal prefix indicating the person and number features of the possessor. Compounding is a common and productive process in Anamuxra. While compounds consisting of two nouns are the most common compound type, nouns, adjectives and the demonstrative can all be combined with one of the three deictics to form a complex deictic nominal stem.
Anamuxra possesses two main pronoun types: free forms and bound forms. The class of bound forms divides into a prefixing set and four suffixing sets. The set of pronominal prefixes is used to index a range of functions including subject, object, and possessor. The four suffix sets all index the person and number of subjects but are distinguished by their association with different categories of status, polarity and mood. A distinguishing feature of free pronouns and most bound forms in Anamuxra is the morphological segmentation of person and number features.

There are some 51 known classifier formatives in Anamuxra which occur as bound forms on most nominals. The set of classifiers encodes a range of semantic features which fall within general categories such as animacy, humanness, gender, general form, shape, size, function and arrangement. Three major types can be recognised according to the semantic structure of their domain; general classifiers, specific classifiers, and unique classifiers. A number of classifiers are plainly derived from nouns and a few of these function as repeaters (i.e. unique). The system of classification in Anamuxra is productive and flexible as shown by both its capacity to absorb new entities and its allowance of the multiple classification of entities.

Nominal phrases in Anamuxra can consist minimally of any one of the class of nominals. Indeed, noun-less NPs are quite common in Anamuxra discourse. NPs may be conjoined either by juxtaposition or by the presence of the conjunctive particle. There are two types of possessive NPs. In the first type, which accounts for most cases of inalienable possession, the possessor and possessed NPs are juxtaposed, with the possessed noun inflected by a pronominal prefix indexing the person and number of the possessor. In the second, which is typically associated with alienable possession, the possessor and possessed NPs are separated by possessive word which obligatorily takes a pronominal prefix indicating the possessor.
There are two main clause types in Anamuxra: verbal clauses, and non-verbal, or nominal clauses. Verbal clauses divide into intransitive, transitive and ditransitive types according to the valency of the verb. There are also a number of (non-basic) clause types such as impersonal condition clauses, reciprocal and reflexive clauses, and possessive clauses. In verbal clauses, the verb is usually the final constituent in the clause, though other constituents may occur clause-finally. The ordering of other constituents is relatively flexible, being determined by pragmatic rather than syntactic factors. Omission of NPs associated with core arguments in the clause (i.e. subject and object) is a highly salient feature of clause structure.

Verbs are the most morphologically complex words in Anamuxra. Verbs fall into three conjugation classes. An important division is between final verbs and medial verbs. A final verb heads a clause which can occur either as the sole constituent of a sentence base or terminate a clause chaining structure, known as a switch reference construction. A medial verb heads a clause that occurs only as the non-final clause in switch-reference constructions. Final verbs inflect for mood, while medial verbs do not. The former can also inflect for status, tense, polarity, and subject person-number details. Medial verbs, but not final verbs may be marked for switch reference (same-subject versus different subject) and relative tense (sequential, simultaneous). Same subject medial verbs do not inflect for tense or status and take their specification from the following final verb. Different subject medial verbs do take tense and status marking but only as a form of agreement with the specification on the final verb.

Anamuxra has several types of complex verbs, including serial verbs, lexical-auxiliary verbs and non-verb plus verb compounds.

Anamuxra, like many Papuan languages, makes extensive use of clause chaining to form larger units of discourse. A clause chain, also known as a switch-reference construction, consists of one, and typically many more medial clauses.
and a final clause. Central features of medial clause chaining structures in Anamuxra including the expression of relative tense (sequential versus simultaneous) and the presence of the system of reference tracking known as switch reference (same versus different subject). Finally, tail-head linkage is a commonly employed mechanism for creating cohesion at levels beyond the sentence in Anamuxra discourse.

1.2.3 Dialects of Anamuxra

1.2.3.1 INTRODUCTION

Although I have not conducted a detailed dialect survey of Anamuxra, I did collect word lists from several areas in which Anamuxra is spoken, including Waiateng, Midivi and Ikundun. I was also able to record less systematic samples of language use from areas not represented by these word lists. Despite the limitations of this set of data, it is clear that Anamuxra is not linguistically homogeneous, with distinct phonological and lexical characteristics found across the speech community. Significantly, the isoglosses do not form neat bundles that correspond to boundaries between individual territorial groups, or other social groupings. Rather, they represent overlapping isoglosses of the kind found in familiar dialect chaining.

In the sections that follow, I shall outline the major instances of variation for which I have adequate evidence.

1.2.3.2 PHONOLOGICAL VARIATION

There clearest variation is found in the alternation between alveolar fricatives and stops (/s/ ~ /t/; /z/ ~ /d/) which divides the speech community into roughly a 'northern' dialect consisting of Midivi, Ikundun and Tuamadapuar and a 'southern' dialect consisting of Apovd, Swazabi and Waiateng. Basically, where the south possesses a contrast between alveolar fricatives and stops (i.e. between /s/ and /t/ and also between /z/ and /d/), the north lacks this distinction, having just
the stop phonemes (/t/ and /d/). Examples illustrating the difference in
cognates forms from the two varieties are given in table 1-1.

<table>
<thead>
<tr>
<th>SOUTH</th>
<th>NORTH</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>aixusam-</td>
<td>aixutam-</td>
<td>‘stone adze’</td>
</tr>
<tr>
<td>ñ-</td>
<td>t-</td>
<td>‘be’</td>
</tr>
<tr>
<td>sibi-</td>
<td>tibi-</td>
<td>‘wet season’</td>
</tr>
<tr>
<td>skwar-</td>
<td>tkwar-</td>
<td>‘nose’</td>
</tr>
<tr>
<td>suwaN-</td>
<td>tuwaN-</td>
<td>‘lime’</td>
</tr>
<tr>
<td>už-</td>
<td>ud-</td>
<td>‘rafter’</td>
</tr>
<tr>
<td>wazrN-</td>
<td>wadrN-</td>
<td>‘snake’</td>
</tr>
<tr>
<td>wusu-</td>
<td>wułu-</td>
<td>‘new’</td>
</tr>
</tbody>
</table>

Table 1-1: North/South dialects: alternations between alveolar
stops and fricatives

There is also some evidence that the variety of Anamuxra spoken to the
extreme north characterised by a process of final vowel deletion that is absent
elsewhere. However, the exact boundaries for this change are currently unknown.

1.2.3.3 Lexical variation

The extent of lexical differences between the various communities is not well
established at this point. Despite the poverty of data, it is possible to observe that
variation in the lexicon does not parallel the phonological variation outlined
above. Where Midivi aligns with Ikundun and other northern varieties
phonologically, lexically, it appears closer to Waiateng. Two types of lexical
differences can be noted: non-cognate forms used for the same meaning, and
cognate forms which differ in form.
### Table 1-2: Lexical differences in varieties of Anamuxra

<table>
<thead>
<tr>
<th>Meaning</th>
<th>WAIATENG</th>
<th>MINDIVI</th>
<th>IKUNDUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘arrow’</td>
<td>ugu-</td>
<td>ugu-</td>
<td>ini-</td>
</tr>
<tr>
<td>‘dance’</td>
<td>xzxz-</td>
<td>xdxd-</td>
<td>tigriN-</td>
</tr>
<tr>
<td>‘dog’</td>
<td>mrkN-</td>
<td>mrkN-</td>
<td><del>mrkN</del> apN</td>
</tr>
<tr>
<td>‘dry’</td>
<td>-xruN-</td>
<td>-xruN-</td>
<td>-xruwi-</td>
</tr>
<tr>
<td>‘dry season’</td>
<td>inaxava-</td>
<td>inaxava-</td>
<td>inava-</td>
</tr>
<tr>
<td>‘game meat’</td>
<td>txat-</td>
<td>txat-</td>
<td>tkm</td>
</tr>
<tr>
<td>‘mat/flower sheath of palm(sp)’</td>
<td>vakra-</td>
<td>vakra-</td>
<td>varka-</td>
</tr>
<tr>
<td>‘moon’</td>
<td>tawkN-</td>
<td>tawkN-</td>
<td>tawkmuN-</td>
</tr>
<tr>
<td>‘pig’</td>
<td>sawuN-</td>
<td>tawuN-</td>
<td>tawuN~tawunuN-</td>
</tr>
<tr>
<td>‘roof frame’</td>
<td>uz-</td>
<td>uz-</td>
<td>timiN-</td>
</tr>
<tr>
<td>‘saliva’</td>
<td>ava-</td>
<td>ava-</td>
<td>avara-</td>
</tr>
<tr>
<td>‘tulip’</td>
<td>vanaN-</td>
<td>vanaN-</td>
<td>vadhnaN-</td>
</tr>
<tr>
<td>‘wallaby’</td>
<td>aiwara-</td>
<td>aiwara-</td>
<td>ipa-</td>
</tr>
</tbody>
</table>

1.2.4 Number of speakers and the language situation today

1.2.4.1 SIZE OF THE SPEECH COMMUNITY

The exact size of the Anamuxra speech community is difficult to determine. The 1990 census reported 1,256 speakers in the villages in which Anamuxra is spoken as the main language. A number of these villages, however, are bilingual and include speakers of other languages who do not necessarily know Anamuxra.
1.2.4.2 ANAMUXRA AND OTHER LANGUAGES

Most members of the Anamuxra speech community are bi- or multilingual. Those over the age of thirty are fluent in Tok Pisin, one of the three official languages of Papua New Guinea, and the main lingua franca of much of the country. As a result of intermarriage and general social contact, many people also know one or more of the other languages of the area. Generally speaking, speakers under about 30 years of age tend to be fluent in Tok Pisin but less competent in Anamuxra than older members of the community.

Tok Pisin is the lingua franca for almost all social activities above the village level which incorporate speakers of other languages in the area who do not know Anamuxra. \(^{17}\) For instance, it is the language used in the two churches (Catholic and Gospel Lighthouse), local council organisations, and the Josephstaal market. Radio broadcasts are conducted in either Tok Pisin or English.

The influence of Tok Pisin is not, however, restricted to interaction with non-native speakers of Anamuxra or to domains outside of those in which Anamuxra was traditionally spoken. This is most clearly seen with speakers under the age of twenty, who use Tok Pisin extensively in almost all social settings. However, even older generations use both Anamuxra and Tok Pisin when communicating with one another.

Apart from Tok Pisin, all children are taught English at school. However, during my time in Waiateng I never heard Anamuxra speakers using English with one another.

1.3 Previous studies of Anamuxra

Anamuxra was first mentioned by Z’graggen (1971, 1975) under the name of *Ikundun*. Both Z’graggen’s studies argue for the genetic affiliation of a number of

\(^{17}\) In this way Tok Pisin can be seen to be replacing the need to know other languages.
languages of the central Madang area, including Anamuxra (see above). However, while he makes note of the salient phonological and grammatical features of each group, he gives no specific data for Anamuxra apart from information about speaker numbers and villages in which it is spoken.

The first publication of Anamuxra language materials appears in Z'graggen (1980) which presents a list of words based on some 300 meanings for Anamuxra and other members of the Southern Adelbert Range language subgroup. As well as the word list, Z'graggen sketches a few morphosyntactic features of Anamuxra including the pronominal system, number marking on nominals, and basic verbal inflection including negation.

1.4 A note on the name Anamuxra

The name Ikundun, applied to Anamuxra by Z'graggen (see above), is the name of one of the territories in which Anamuxra is spoken. However, neither the inhabitants of this territory, nor speakers in other territories use just this name or any other territorial name as a means of referring to their language. Consequently, I have chosen not to use the name Ikundun here. Instead, I use Anamxura, which is derived from the question word 'what?' and is used by speakers when distinguishing their language from others in the region. It should be noted that Anamuxra speakers also refer to their language as agwu xyapa 'our talk'. This phrase can have two applications. First, it can be used to refer to all varieties of the language, or it can refer to the variety spoken in a particular area. I have also observed the use of the phrase Anamuxra xyapa. (lit. 'what talk?') However, this seems to be much rarer than either of the other two terms discussed above.

All current evidence indicates that the term Anamuxra is restricted to reference to the language and is never used to refer to the entire speech  

18 The use of the word meaning 'what' as a language, or dialect name is a common feature of the Josephstaal area. (Pawley (pers.comm) reports the same for Kalam dialect names.)
community as a single entity. Indeed, there is no known term by which the Anamuxra speech community refers to themselves as a single group. Rather, people identify themselves in terms of their membership of a territorial group, clan and so on.

1.5 This study

1.5.1 Fieldwork

During the course of my research on Anamuxra, I have made several trips to the field. The first lasted eight months from August 1994 until March 1995. For most of this period, I lived at Anabaxui, a small hamlet in Waiateng, with the family of Peter Swakai, the community leader of Waiateng. I also stayed in Ikundun for several weeks, as well as making a number of day trips to Mindivi.

My second field trip was much shorter, lasting a total of three and a half weeks from March until April 1997. I had originally planned to spend three months based in Waiateng. However, for political reasons I was forced to leave Waiateng after just nine days. From Waiateng, I relocated my research to Madang town, where I was accompanied by two Anamuxra speakers, Peter Swakai and Gabriel Waia. Based with my friends, Bob and Lillian, in the centre of Madang town we spent a torrid fortnight of elicitation before commitments at home on Peter and Gabby’s part and a waning of funds on mine forced an end to our work.

In 2000, I visited Waiateng again for three and half weeks. During this trip, I was able to check and extend a number of features of the analysis.

1.5.2 The description and the nature of data used

This study is a synchronic analysis of Anamuxra. Since it represents the first detailed account of the language, I have generally avoided the use of particular formal models in favour of what may be described as a basic descriptive framework in order to make the material presented transparent to as wide an audience as possible.
The language described in this thesis is the variety spoken in Waiateng. Most of my research in Waiateng was conducted with three main speakers: Gabriel Waia, now in his late thirties, and two brothers, Peter Swakai, who is in his forties and Anton Swakai, who is in his fifties. All three men were involved in early elicitation sessions. They are also responsible for all but one of the narrative texts in the corpus. There were a few other people that I worked with on an irregular basis, mostly members of Gabby, Peter and Anton’s families. Alice Swakai, the wife of Peter, provided the only narrative text not told by the three men. In addition, there were many people who happily contributed spontaneous mini-language lessons on the run, correcting and encouraging my efforts to speak their language.

Most of the data used for this description comes from some thirty six texts recorded during my visits. Of these, three are conversations involving two or more people, both males and females of a range of ages. The other thirty three texts are monologues spoken into a tape recorder and represent a range of genres including: procedural texts (4), recounts (12), traditional myths and legends (8) and explanations (9). All but one of these stories were told by male speakers. All texts were transcribed, translated and checked with the help of speakers in the field.

In addition to these recorded texts, I have made some use of elicited forms as well as random utterances overhead in conversation. While ‘modern’ approaches to language documentation and description strongly favour the use of non-elicited data (i.e spontaneously produced material) over elicited materials, there are obvious limitations that accompany such an approach. One would need many more hours of recorded textual material to uncover all structures of the language and paradigmatic forms than is possible to collect in the time that I had. Nonetheless, where possible, I have restricted my use of elicited material as a means of supporting data from natural speech.
Chapter 2

Phonology

2.1 Introduction

In this chapter, I outline the main features of Anamuxra phonology. §2.2 presents the inventory of consonant and vowel phonemes and outline the allophonic variants of each. §2.3 outlines the properties of word and syllable structure and discusses the role of vowel epenthesis. §2.4 outlines the various segmental phonological processes that account for the surface realisation of phonemes. §2.5 examines the patterns of word level stress. Finally, in §2.6, I introduce the orthographic system adopted for the present study.

There are three boundaries that are of significance in the allophonic variation of different phonemes and the various phonological rules: phrase boundary, which I represented as ‘##’; word boundary, represented as ‘#’; and morpheme boundary, represented as ‘-’.

Throughout this thesis, I use the following method of representation:

i) phonetic forms are represented in square brackets, e.g. [anu\j\j]
ii) phonemic forms are represented by slashes, e.g. /anu\j\j/
iii) orthographic forms are represented in italic form, e.g. anuy

1 In interlinear glosses in other chapters I have omitted the slashes.
2.2 Phonemes

In this section I introduce the segmental phonemes found in Anamuxra. I §2.2.1 begin with consonants and then discuss vowels in §2.2.2.

2.2.1 Consonants

2.2.1.1 Inventory of Consonantal Segments

The consonantal system of Anamuxra consists of sixteen underlying phonemes which are built around four points of articulation: bilabial, alveolar, velar and palatal.

<table>
<thead>
<tr>
<th>Obstruents</th>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>p, β</td>
<td>t, s</td>
<td>k, y</td>
<td></td>
</tr>
<tr>
<td>Prenasal</td>
<td>b</td>
<td>d, z</td>
<td></td>
<td>g</td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>Liquid</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glides</td>
<td></td>
<td>y</td>
<td>w</td>
<td></td>
</tr>
</tbody>
</table>

Chart 2-1: Consonant phonemes
2.2.1.2 MINIMAL PAIRS FOR CONSONANTS

The phonemic analysis of consonants presented in chart 2-1 can be justified in terms of the minimal and near minimal contrasts between the segments illustrated below:

\[ /p/ - /β/ - /b/ - /w/- /m/ \]

\[- /sabap/ \]
\[- [sapá]\] 'high'
\[- /aβaβ/ \]
\[- [aβá]\] 'nothing'
\[- /sabαN-pa/ \]
\[- [sambámba] \] 'kind of (k.o) insect-CLres'
\[- /awaN-pa/ \]
\[- [awamba] \] 'custom-CLres'
\[- /amaN-pa/ \]
\[- [amamba] \] 'breast-CLres'

\[- /t/ - /s/ - /d/ - /l/ - /r/ - /n/ \]
\[- /maita-pa/ \]
\[- [maítapa] \] 'knife-CLres'
\[- /waša-pa/ \]
\[- [wasápa] \] 'k.o cane-CLres'
\[- /wanda-pa/ \]
\[- [wandápa] \] 'centipede-CLres'
\[- /aza-pa/ \]
\[- [anza\p] \] 'k.o frog-CLres'
\[- /warα-pa/ \]
\[- [warápa] \] 'k.o ant-CLres'
\[- /βanaN-pa/ \]
\[- [βanamba] \] 'tulip-CLres'

\[- /k/ - /γ/ - /w/ - /g/ - /ŋ/ \]
\[- /akaN-pa/ \]
\[- [akάmba] \] 'bone-CLres'
\[- /aga-pa/ \]
\[- [angápa] \] 'bush fowl-CLres'
\[- /ayaN-pa/ \]
\[- [ayám\p] \] 'sugar-CLres'
\[- /awaN-pa/ \]
\[- [awamba] \] 'custom-CLres'
\[- /agIN-pa/ \]
\[- [angímba] \] 'k.o tree-CLres'
\[- /άnj-i-ba/ \]
\[- [anjímba] \] 'cry out-NEG'

\[- /m/ - /n/ - /ŋ/ \]
\[- /sa-m/ \]
\[- [sam] \] 'eat-1SGS'
\[- /sa-ŋ-n/ \]
\[- [san] \] 'eat-NT-1SGS'
\[- /sa-ŋ-ŋ/ \]
\[- [saŋ] \] 'eat-NT-3PLS'
2.2.1.3 DISTINCTIVE FEATURES OF CONSONANTS

The distinctive features of Anamuxra consonants are presented in table 2-1. Note that the phonemes /b/, /d/, /g/ and /z/ are treated as complex unit phonemes consisting of an initial nasal phase followed by an oral phase which is voiced throughout (see §2.2.1.4.2).

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>t</th>
<th>k</th>
<th>b</th>
<th>d</th>
<th>g</th>
<th>m</th>
<th>n</th>
<th>s</th>
<th>z</th>
<th>β</th>
<th>y</th>
<th>r</th>
<th>w</th>
<th>y</th>
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</thead>
<tbody>
<tr>
<td>continuant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>+</td>
<td>+</td>
</tr>
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<td>sonorant</td>
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<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
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<td>+</td>
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</tr>
<tr>
<td>anterior</td>
<td>+</td>
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<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
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<tr>
<td>coronal</td>
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<td>+</td>
<td>+</td>
<td>+</td>
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<tr>
<td>voice</td>
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<tr>
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</tr>
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<td>strident</td>
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</tr>
<tr>
<td>high</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 2-1: Distinctive features for consonants

2.2.1.4 REALISATION OF CONSONANTS

All consonants display some degree of allophonic variation in Anamuxra. In a few cases, this variation involves free alternation between two sounds. For the most part, however, the variation is context dependent; the result of phonological/morphological conditioning. Here, I list the consonant phonemes along with their allophonic variants and examples of their occurrence in actual words. In a number of cases, the various allophones can be interpreted as the output of more general phonological rules given in §2.4. Despite the redundancy involved in having both general phonological rules and more specific allophonic realisation, for the sake of clarity at different points in the grammar it is useful to have both points of view.
2.2.1.4.1 Oral obstruents

The series of oral obstruents consists of /p/, /t/, /k/ and /s/, as well as the two voiced fricatives /ʃ/ and /χ/.

(i) /p/, /t/, /k/ and /s/

/p/, /t/, /k/ and /s/ are all voiced after the underspecified nasal (see §2.4.4). /p/, /t/ and /k/ are optionally unreleased when occurring in coda position before a stop or /s/, or phrase finally. All four segments are realised as voiceless segments word medially and finally. The peripheral, or non-coronal segments /p/ and /k/ are subject to allophonic rules of lenition word initially. /p/ occurs as [w] before /u/ and [β] before a consonant or any [-round] vowel. /k/, on the other hand, is typically realised as [w] before /u/, and as [γ] before an underlying consonant and deleted before /w/. There are, however, six known lexemes in which an initial /k/ fails to follow the above pattern /ki-/ ‘you’, /ka/ ‘car’, /kudim(-)/ ‘singapore taro’, /kunkun-/ ‘taro’, /kwa-/ ‘cocoa’ and /kwara-/ ‘cane’.

• /p/ voiceless bilabial stop

\[ \begin{align*}
\rightarrow & \quad [w] \quad / #_u \\
[β] & \quad / #_\text{(elsewhere)} \\
[b] & \quad / N+_
\end{align*} \]

\[ \begin{align*}
[p], [p'] & \quad / ___## \\
\text{-cont} & \quad [-C] \\
\text{-s} & \quad \text{elsewhere}
\end{align*} \]

Examples are:

(2-1) a. /puxr-i-n/ [wərˈɪn] ‘find-NT-1SGS’

b. /par-i-n/ [ˈaɾɨn] ‘say-NT-1SGS’

c. /ariN-pa/ [ˈaɾimba] ‘betelnut-CL res’

d. /sapap/ [sapáp] ~ [sapáp’] ‘high up/above’

e. /na-par-i-n/ [naparɨn] ‘2SGO-say-NT-1SGS’

f. /apapura-pa/ [apapurápa] ‘butterfly-CL res’
• /t/  voiceless alveolar stop
  \[ \begin{array}{ccc}
  \rightarrow & [d] & /\text{N+} \ldots \\
  & [t], [t'] & /\ldots \ldots \\
  & \ldots & /\ldots \ldots \\
  & \ldots & /\ldots \\
  & \ldots & /\ldots \\
  \end{array} \]

Examples are:

(2-2)  a. /a\�ɪN-t-i-a/  [a\�ɪndiya]  ‘good-do-NT-3SGS’
  b. /na\�-t-nad/  [natn\�nt\~nar\�nt]  ‘old-CLfem’
  c. /pa-t/  [t\�\~t]  ‘think-3SGS’
  d. /t-i-a/  [t\~iya]  ‘do-NT-3SGS’
  e. /a\�t\~ya-pa/  [at\~aya\~pa]  ‘fish (k.o) -CLres’

• /k/  voiceless velar stop
  \[ \begin{array}{ccc}
  \rightarrow & \emptyset & /\ldots \ldots \\
  & [w] & /\ldots \ldots \\
  & [\y\~] & /\ldots \ldots \\
  & [g] & /\text{N+} \ldots \\
  & [k], [k'] & /\ldots \ldots \\
  & \ldots & /\ldots \ldots \\
  & \ldots & /\ldots \\
  \end{array} \]

Examples are:

(2-3)  a. /k\~war-i-n/  [war\~n]  ‘finish-NT-1SGS’
  b. /kuz-i-a/  [w\~nz\~iya]  ‘dry.up-NT-3SGS’
  c. /kr-i-a/  [yr\~ia]  ‘cook-NT-3SGS’
  d. /avaN-ka/  [a\~pa\~ga]  ‘dry-CLres’
  e. /ya-k\~tm-ka/  [yak\~tp\~ika\~yak\~tp\~ika]  ‘1SGPOS-chest-CLres’
  f. /na-kwar-i-n/  [nakwar\~n]  ‘2sgO-finish-NT-1SGS’
  g. /ya-kuz-i-a/  [yak\~nz\~iya]  ‘1SGO-dry.up-NT-3SGS’
  h. /na-k\~r-i-a/  [nakr\~iya]  ‘2SGO-cook-NT-3SGS’
  i. /ak\~naN-pa/  [ak\~amba\~]  ‘bone/post-CLres’
/s/ voiceless alveolar sibilant

→ [z] /N+_
  [ʃ], [s] /__t (the latter is uncommon)
  [ts], [s] /#_
  \[\_V\_V\]
  [s] elsewhere

Examples are:

(2-4) a. /aβiN-sβ/ [aβinzβ] ‘good-Cl_bag’
    b. /i-g-ta/ [ɪsta]~[ɪʃta] ‘pull tight-2SGS’
    c. /sawuN-pa/ [tsawúmba]~[sawúmba] ‘pig-Cl_res’
    d. /asaraN-pa/ [atsarámba]~[asarámba] ‘tobacco-Cl_res’
    e. /yas/ [yas] ‘grandchild’

(ii) /β/ and /χ/

The oral obstruents /β/ and /χ/ both undergo fortition when they follow the underspecified nasal, or a fully specified homorganic nasal. Both are subject to various forms of lenition where they precede /u/.

• /β/ Voiced bilabial fricative

→ [β], [β] /#__t
  [w], [β] /[-nasal]__u
  [b] / N+_
  \[m+__\text{(optional)}\]
  [β] elsewhere

Examples are:

(2-5) a. /βtagu-i-n/ [βtangwín]~[βɔtangwín] ‘walk-NT-1SGS’
    b. /tak-βuk/ [takawuk]~[takòβuk] ‘strong-CL_sphere’
    c. /ad-a-βuk/ [andáwuk]~[andáβuk] ‘DEM-ND-CL_sphere’
    d. /aβiN-βuk/ [aβímbuk] ‘good-CL_sphere’
    e. /βina-pa/ [βínápa] ‘floor-Cl_res’
    f. /aβaβ/ [aβáβ] ‘mother’s brother’
• /y/ voiced velar fricative

\[ \varphi, [w] /\#_u \]
\[ \varphi /\#_V \text{ (elsewhere)} \]
\[ \varphi, [y] /V_w \]
\[ [w] /u_V \]
\[ [g] /N+\_ \]
\[ [y] +\_ \]
\[ \text{elsewhere} \]

Examples are:

(2-6) a. /\text{txubaN-ka}/ [\text{wumbaiJga}] 'hole-CLres'
   b. /\text{txiswar-i-n}/ [\text{iswarin}] 'tell-NT-1SGS'
   c. /\text{an-ywu-ka}/ [\text{angwoka}] '1PLPOSS-PW-CLres'
   d. /\text{na-ywu-ka}/ [\text{nawoka} ~ [\text{naywoka}]] '1PLPOSS-PW-CLres'
   e. /\text{aBiN-yida}/ [\text{aBninja}da] 'good-CLtree'
   f. /\text{aku-yida}/ [\text{akwinda}] 'FD-CLtree'
   g. /\text{na-yiswar-i-n}/ [\text{nayiswarin}] '2SGO-tell-NT-1SGS'
   h. /\text{ayaN-pa}/ [\text{ayamba}] 'sugar.cane-CLres'
   i. /\text{ydat-pa}/ [\text{yndatopa}] 'post-CLres'
   j. /\text{ya-y}/ [\text{yay}] '1SGPRO-ACC.SG'

2.2.1.4.2 Prenasalised obstruents

At the surface, within morphemes, four kinds of sequences of homorganic nasal + obstruent occur: [mb], [nd], [ng] and [nz]. In phonetic terms, these sequences consist of a single articulatory gesture of closure at the lips, alveolar ridge, or velum, with an initial nasal phase followed by an oral phase. Such sequences occurring in a number of other Papuan languages are commonly regarded as prenasalised segments, and are represented orthographically with voiced stop symbols. In Anamuxra, the situation is not so clear cut. One piece of evidence for a unit phoneme analysis is the fact that speakers tend to use single graphemes such as {b}, {d}, and {g} to represent such sequences in writing. However, other details about these sequences such as their distribution within the word and their transparency to phonological processes are at the very least ambiguous between a
unit phoneme analysis and one which posits a sequence of two underlying phonemes.

In final syllables, /b/, /d/, /g/ and /z/ occur in coda position of syllables (see §2.3). Elsewhere, syllable codas maximally consist of a single segment. If prenasalised stops were a sequence of two segments, they would prove an exception to the general constraint on the constituency of codas in the language.

In the remainder of this grammar, I shall treat such sequences as unit phonemes and write them accordingly, while acknowledging the possibility of the underlying sequence analysis.

All four are found in word medial and final position but only /d/ is attested in word initial position. /d/ occurs initially in only three words: /d/: d- ‘wander’, dar- ‘hear’, davaran- ‘wander’. In this position, the prenasals tend to be realised as simple stops, following a pause or a word final consonant. There is a tendency for the nasal phase of prenasals to delete when preceded within a morpheme by another prenasalised stop, though examples of this have only been found for /d/ and /g/. Phrase finally, the oral phase is subject to a general devoicing rule.

• /b/ prenasalised bilabial stop

→ [mp] / __##
   [mb] elsewhere

Examples are:
(2-7) a. /kiyr-b/ [iyrimp] ‘look-OPT’
   b. /nabaN-pa/ [nambamba] ‘yam-Cl_res’

• /d/ prenasalised alveolar stop

→ [nd], [d] / ##__
   [nt] / __##
   [d] / N_C__
   [d], [nd] / m__
   [nd] elsewhere

Examples are:
(2-8)  a. /dɔɾ-i-na/ [ndarina] ~ [darîna] ‘hear-NT-2SGS’
   c. /adbìm-pa/ [ambədîmpa] ‘noise-CLres’
   b. /aβiN-nad/ [aβinánt] ‘good-CLrem’
   d. /a-mdìŋ/ [ämndìŋ] ~ [ämìŋ] ‘ND-PL.HUM’
   e. /ad-a-ka/ [andákâ] ‘DEM-ND-CLres’
   f. /dikam-pa/ [indəkámpa] ‘yam-CLres’

• /ɡ/ prenasalised velar stop

[ŋk] /___##

[ɡ] — /NC __

[ŋɡ] elsewhere

Examples are:
(2-9)  a. /ya-siaɡ/ [yasiyāŋk] 1SGPOSS-mother’s father’
   b. /na–yziŋvŋna/ [yaŋzəŋjŋŋəna] ‘1SGPOO-pro-ear-CLres’
   c. /aga-pa/ [angápa] ‘bush fowl-CLres’

/lz/ prenasalised (voiced) alveolar sibilant

[ŋs] /___##

[ŋz] elsewhere

Examples are:
(2-10) a. /mə-ɡaŋkz/ [mərayŋzəkïns] ‘garden-close’
   b. /aza-pa/ [anzəápa] ‘k.o frog-CLres’

2.2.1.4.3 Nasals

All three nasals /m/, /n/ and /ŋ/ occur word medially and word finally, only /m/ and /n/ occur word initially. /n/ is syllabic in initial position before a homorganic consonant. It is also optionally syllabic in final position after a homorganic stop (see §2.3). See also the underspecified nasal segment N discussed in §2.4.1.

• /m/ bilabial nasal

[ŋm] everywhere

Examples are:
(2-11) a. /mi-ta/ [mìta] ‘leave-2SGS’
   b. /amaN-pa/ [amámbA] ‘breast-CLres’
   c. /yaŋm/ [yəm] ‘mother’
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*/n/* alveolar nasal

→ [ŋ] / # _ # C
   [ŋ],[n] / C _ # #
   [n] elsewhere

Examples are:

(2-12) a. /n-skwar-pa/ [ŋskwárpa] '3SGPOSS-nose-CLres'
b. /yaβas-ŋ/ [yaβásŋ~[yaβásn̥]] 'chop-NT-1SGS'
c. /ina-pa/ [inápa] 'sun-CLres'

*/ŋ/* velar nasal

→ [ŋ] everywhere

Examples are:

(2-13) a. /ŋi-i-a/ [ŋi̯]ya] 'cry.out-NT-3SGS'
b. /ŋaŋ/ [ŋaŋ] '1DURO'
c. /ŋŋ/ [ŋŋ] '3SGPO/3PLPO'

2.2.1.4.4 Liquid

The liquid */r/* is restricted to medial and final position. Like */n/*, it can be syllabic in final position at phrase boundary. It can also be syllabic before two consonants when the first is a possible coda (see §2.3). Elsewhere */r/* is realised as a non-syllabic. Intervocalically, it occurs as an alveolar tap [r] which tends to be palatalised when the following vowel is high front vowel /i/. As the second consonant in complex onsets and in coda in non-final position, */r/* tends towards a trill [r].

/r/ Alveolar liquid

→ [r] / (C #); (C Cσ)
   [ry] / V _ V
      [ + hi ]
   [r] / V _ V
      [- hi ]
   [r]~[r] elsewhere

Examples are:


(2-14) a. /t-

b. /m-
c. /t-
d. /war-

2.2.1.4.5 Glides

There are two glides in Anamuxra: /y/ and /w/. Both can occur in the onset position of syllables in all positions of the word. /w/ , but not /y/, can occur as the final consonant in complex onsets (see §2.3).

/y/ palatal glide/semi-vowel

\[
\rightarrow [y] \quad \text{everywhere}
\]

Examples are:

(2-15) a. /y-

b. /yi

c. /yam/
d. /na-

e. /aya/

/w/ labio-velar glide/semi-vowel

\[
\rightarrow [u], [w] / _ _ u
\]

[w] elsewhere

Examples are:

(2-16) a. /saw-

b. /war-
c. /awa-
d. /aw-

The relationship between the semi-vowels /y/ and /w/ and the high vowels /i/ and /u/ requires some comment. In the case of /y/ and /i/, evidence that they are separate phonemes is found in the contrast between the following pair of verbs.
Further evidence of the phonemic status of /y/ is found in the following word:

(2-18) /yya-pa/ [yiyapa] ‘talk-CLres’

As we saw in §2.2.1.4.1 above, /y/ is deleted in word initial position before a vowel. The underlying form of [yiyapa] therefore cannot be /yia-pa/ since this would incorrectly predict the deletion of the initial /y/. The consonantal quality of /y/ however correctly predicts the occurrence of /y/ in surface realisation.

The following pair also illustrates the distinction between /w/ and /u/.

(2-19) a. /auβ-pa/ [auβpa] ‘light-CLres’
    b. /awud-pa/ [awundopa] ‘female-CLres’

If there were no underlying contrast between (surface) sequences [au] and [awu] we would expect variation in both words. There is no other conditioning factor which could explain the fact that /auβ-pa/ is always [auβpa] but /awud-pa/ is always [awundopa]. The contrast between the two forms is underlined by the stress contrast. That is, if /auβ-pa/ surfaces as [auβpa] then /awud-pa/ should come out as [awundopa], (or [awundopa]).
2.2.2 Vowels

2.2.2.1 Inventory of Vowel Phonemes

Anamuxra has five vowel phonemes as shown in Chart 2-2 below. Two of these, /e/ and /o/, are marginal phonemes. There is no contrastive length.

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td>(e)</td>
<td>(o)</td>
</tr>
<tr>
<td>Low</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

Chart 2-2: Vowel phonemes

2.2.2.2 Minimal Pairs for Vowels

The following examples provide evidence of the set of contrasts that define the system of vowels presented above.

/i/ - /a/ - /u/

/i-tav/ [iťáβ] 'PROX-CLshell'
/a-tav/ [atáβ] 'ND-CLshell'
/u-tav/ [utáβ] 'IA-CLshell'

/e/ - /i/ - /a/

#_
/ɛrmu-i-a/ [ɛrmwiya] 'laugh-NT-3SGS'
/ɪrbaN-pa/ [irmbámba] 'monitor lizard-CLres'
/ar-makaN-pa/ [armakánga] 'tree-branch-CLres'

C_C
/tigi-pa/ [tunğɪpa] 'pandanas-CLres'
/waiatęŋ/ [wáyaten] 'Place name'
/a-tag/ [atāŋk] 'ND-CLcubed'
2.2.2.3 DISTINCTIVE FEATURES OF VOWELS

Distinctive features of vowels are given in table 2-2:

<table>
<thead>
<tr>
<th></th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>u</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>low</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>back</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>round</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 2-2: Distinctive features of vowels

2.2.2.4 REALISATION OF VOWELS

2.2.2.4.1 /i/ and /u/

Both /i/ and /u/ may be realised as non-syllabic [y] and [w], respectively following constraints of syllabification (§2.3.4).

/ɪ/  →  [y]  /Cũ_ a
       [ɪ]  / _Cʊ];
       V_
       [ɪ], [ɪ]  #_ (unstressed)
       [ɪ]  elsewhere

Examples are:

(2-20) a. /mugu-ɪ-a  /mʊŋgʊya]  ‘go.down-NT-3SGS’
       b. /arɪN-pa/  [ʌrɪmbʌ]  ‘betelnut-CLres’
       c. /sɪmsɪm-pa/  [sɪmsɪmpʌ]  ‘small.flying.fox-CLres’
       d. /ina-ɪ/  [ɪnáɪ]  ‘sun-OBL’
       e. /ɪna-pa/  [ɪnápʌ] ~ [ɪnápa]  ‘sun-CLres’
       f. /smɪsmɪ-pa/  [smɪsmɪpʌ]  ‘small.catfish-CLres’
       g. /yɪ/  [yi]  ‘1SGPRO’
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/\u/ → [w], [] / C __ i ##
[\o] / __ i (elsewhere)
[-ant,-cor] ___ [+ant,-son,-cor]
___ r o
___##
[\o], [u] / __r
__k
[u] / elsewhere

Examples are:

(2-21) a. /mu\gu\i/ [muŋgô\i] ~ [muŋgwí] ‘house-OBL’
b. /mu\r-pa/ [môrpa] ‘sweat-CLres’
c. /inapaw\u/ [inápawô] ‘sun-CLres-OBL’
d. /ya-\ywoplast-ka/ [ya\uoptïmakA] ‘LSGPRO-neck-CLres’
e. /mu\ra-pa/ [môrâpa] ~ [muråpa] ‘garden-CLres’
f. /u\r-a-pa-ri/ [tôrapar’yı] ~ [túrapar’yı] ‘hold-FP-3SGS’
g. /urk-r-pa/ [urkôråpa] ~ [urkûrpa] ‘hornbill-CLres’
h. /mu\du-pa-ri/ [mundôpar’yı]~[mundôpar’yı] ‘go.up-FP-3SGS’
i. /u-taÿ/ [utáÿ] ‘IA-CLshelt’
j. /u\z-pa/ [ûnzarA] ‘rafter-CLres’

2.2.2.4.2 /a/

/a/ low unrounded central vowel

→ [e], [a] / i __ i
[\u], [a] / [+cor] ___ [+ant] (especially where +cor = y)
___C\u’a
[A]~[a] / #__ (especially unstressed syllables)
[a] elsewhere

Examples are:

(2-22) a. /mu\g-i-\a-\i/ [muŋgûyey]~[muŋgûyay] ‘go.down-NT-3SGS-DS.SEQ’
b. /ygm/ [yâm] ‘Mother’
c. /nå-ø-n/ [nåan]~[nan] ‘eat-NT-1SGS’
d. /akakara-pa/ [Akakarâpa]~[akakâpa] ‘chicken-CLres’
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2.2.2.4.3 /e/

/e/ is known from my corpus of data to occur in just four words. It is found initially, finally and between consonants and is realised as [ɛ] in all environments. In the two examples where /e/ occurs initially it is followed by [ɾ]. Note, however, that as the near-minimal pairs show, [ɛ] contrasts in this environment with [i] (see §2.2.2.2).

/e/

→ [ɛ] everywhere

Examples are:

(2-23) a. /wayatəŋ/ [wayatəŋ] ‘Place name’
b. /sarwe/ [sárwe] ‘quickly’
c. /ermu-pa-n/ [ermúpan] ‘laugh-FP-1SGS’
d. /er-t-i-a/ [értiya] ‘dirty-do-NT-3SGS’

2.2.2.4.4 /ɔ/

/ɔ/ is the rarest of the five vowels in Anamuxra. Most cases of [ɔ] can be accounted for as conditioned variants of /u/. There is however, one word in which [ɔ] can not be explained. Consider the following examples:

(2-24) a. [wɔtikə] ‘big-CLres’
b. [wutikə] ‘leaf-CLres’

Given that these two forms display a minimal contrast between [u] and [ɔ] and there is no apparent motivation for the variation in the vowel form, it is necessary to afford [ɔ] phonemic status.²

² One could argue that [ɔ] is simply an unexplained allophonic variant of /u/. However, the argument for adding [ɔ] to the inventory of phonemes is strengthened by the presence of /e/ on the grounds of symmetry. A possible explanation may rest with the phonemic status of the [w] of the two forms. For instance, if [w] in [wɔtikə] was underlyingly /y/ or /ɪ/ and the [w] in [wutikə] underlyingly /β/ or /p/ then the difference in vowel qualities would fall out of the conditioning of /u/, which is realised as [ɔ] after velar, but as [u] after non-velars. However, we currently lack evidence to determine whether the [w] in [wɔtikə] is anything other than /w/.
2.3 Syllabification, consonant clusters and vowel sequences

2.3.1 The syllable

Syllables in Anamuxra can consist maximally of an onset, a nucleus and a coda. The nucleus is the only obligatory constituent of the syllable and may consist of either up to two vowels, /i/ or /u/. The onset of a syllable may be associated with a maximum of three consonants. The coda of a syllable may be associated with at most one consonant. The following syllable types are attested:

(i) \( V \)
(ii) \( VV \)
(iii) \( CV \)
(iv) \( CVV \)
(v) \( VC \)
(vi) \( VVC \)
(vii) \( CVC \)
(viii) \( CVVC \)
(ix) \( CCV \)
(x) \( CCVV \)
(xi) \( CCVC \)
(xii) \( CCCVC \)

Of these types only (iii)-(v), (vii) and (ix) are attested in monosyllabic words. V-initial syllables, i.e. types (i), (ii), (v) and (vi), are found only initially in polysyllabic words occurring in phrase-initial position. Other syllable types, i.e. (iii), (iv), (vii-xii) can occur in both phrase-initial and non-initial position.

In addition to the constraints on word position of the different syllable types, there are a number of constraints on onsets. While any consonant can occur in a simple onset of a syllable following an open syllable (e.g. C(C)V(V).CV...), simple onsets in phrase initial position (##CV(V)...), are restricted to twelve of the sixteen consonants, with /y/, /l/, /h/, and /g/ unable to occur in this position.

---

The situation found in Anamuxra is similar to that found in Apal, another Southern Adelbert Range language. Wade reports that in addition to /u/, /u/, /l/ and /l/, there are two mid vowels /e/ and /o/ which are rare and most of whose occurrences are predictable by (regular) phonological processes (Wade 1989: 2).
Similarly, a simple syllable onset following closed syllables (e.g. (CV(V)C.CV...) is also restricted in terms of the consonant that can occur. Positions in complex onsets are even more constrained.

There are also restrictions on codas. While, as indicated in §2.3.1, all but the two glide consonants can fill the coda position in phrase final position, the realisation of medial codas are constrained by the following consonant (i.e onset of the following syllable). An explicit account of complex onsets and medial coda + onset clusters is given §2.3.3.

Examples of the various syllable types summarised above are as follows:

V:  /inapa/ [i.na.pA] 'sun-Cl_res'
     /ntamin/ [n.ta.min] '3SGPRO-put-NT-1SGS'

VV: /aiN-aba/ [ai.nj'am.ba] 'sun-Cl_res'
     /ina-i/ [i.na'i] 'sun-OBL'

CV: /nama/ [na.ma] '2SGS-NEG'
     /akakarapa/ [a.ka.ka.ra.pa] 'chicken-Cl_res'

CVV: /mai/ [ma'i] 'hey'
      /ai-ya'i/ [ai.ya'i] two-DU'

VC: /aŋ/ [aŋ] '1PLPRO'
     /ar-pa/ [aŋ.pa] 'tree-Cl_res'

VVC: /aikvara-t/ [aik.va.rat] 'descend-3SGS'

CCV: /bra/ [bra] 'sickness'
      /tra-pa/ [tra.pa] 'rain-Cl_res'

CCVV: /tra-i/ [tra'i] 'rain-OBL'

CVC: /nap/ [nap] '2PLPRO'
      /tutya.mkipa/ [tu.ta.yam.ki.pa] 'VOC-PL'
      /mrkN-aba/ [mrk.na.m.ba] 'dog-Cl_res'
      /uvi-t/ [u.ru't] 'twist.off-2SGS'

CVVC: /taukN-abá/ [tau.k.na.m.ba] 'sickness-Cl_res'

CCVC: /braN-pa/ [bra.m.ba] 'sickness-Cl_res'
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CCCV:/skwam-pa/ [skwámpa] ‘k.o tree-CL_res’
/nar-skwar-pa/ [nar.skwar.pa] ‘2DUPOSS-nose-CL_res’

2.3.2 Consonant clusters

Underlyingly, Anamuxra allows a range of consonant sequence types including, /kn-/ ‘sleep’; /yz-/ ‘ant’; /tva-/ ‘fence’; /matk-/ ‘crocodile’; /-mivgna/ ‘ear’; At the phonetic level, however, consonant clusters are highly constrained. As we shall see, the structure of syllables and their distribution within the word reflect the fact that Anamuxra has both tautosyllabic and heterosyllabic clusters, but tautosyllabic clusters are permitted in the onset to syllables. Complex codas are not permitted.

2.3.2.1 Complex Onsets

Although Anamuxra allows a maximum of three consonants in the onset, such complexes are extremely rare and all consist of the sequence [skw]. For example,

(2-25) a. /skwam-pa/ [skwám.pA] ‘k.o tree-CL_res’
    b. /skwiskwi/ [skwiskwi] ‘continuously’
    c. /nar-skwar-pa/ [narskwárpa] ‘2DUPOSS-nose-CL_res’

Two member complex onsets show greater possibilities, summarised in table 2-3. (C^1 =first consonant of the cluster; C^2 = second consonant):
In other words, there are basically three kinds of onset clusters: Cr (where C = [-son]), Cw (where C = [-son,-ant,-nas]) and {sm, sk}.

2.3.2.2 CODA + ONSET CLUSTERS

Single intervocalic consonants are always syllabified as the onset of the following syllable. Consequently, word medial codas are only ever found in pre-consonantal position; that is, as the C1 in biconsonantal sequences (..VC1C2V..), triconsonantal sequences (..VC1C2C3V...) or tetrasyllabic sequences (..VC1C2C3C4V..). However, C1 of such clusters will only be syllabified as a coda if a) the cluster does not meet the conditions of acceptable complex onsets (§2.3.3.1); and, b) if the cluster falls within the set of allowable coda + onset clusters listed here.

The types of possible two member coda + onset clusters are:

**Type 1**: C1C2 where C1 = nasal and

C2 = homorganic C:

\[/\text{maurim-pa}/ \quad [\text{mau}.\text{rim}.\text{pa}] \quad \text{‘sweet potato-CLres’}; \quad \text{or,}\]

C2 = liquid:

\[/\text{uŋruN-pa}/ \quad [\text{uŋ}.\text{rum}.\text{bA}] \quad \text{‘salt-CLres’} \]
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Type 2: C₁C₂ where C₁ = (unreleased) stop and

- C₂ = nasal (except ɡ and bm):
  - /nat-nad/  [nat*.nánt]  ‘old woman’
  - /wot-maka/ [wót'.maka]  ‘large-CL-branch’
  - /sipmag/  [sip*.manːk]  ‘PN’

- C₂ = voiceless stop (except p, and kp):

- C₂ = /β/:
  - /aikβara-t/  [aikβa.rat]  ‘descend-3sgs’

Type 3: C₁C₂ where C₁ = liquid and

- C₂ = all consonants except b, z and y:
  - /arpa/  [ár.pa]  ‘tree’

Type 4: C₁C₂ where C₁ = β and

- C₂ = /p/:
  - /siβ-pa/  [siβ.pə]  ‘crayfish’

Medial clusters of three and four consonants are much more restricted. In three member clusters C₁ = r, C₂ = s and C₃ = k; while in four member clusters C₁ = r, C₂ = s, C₃ = k and C₄ = w.

Examples of each type are:

(2-26) a. /ar-skíN-pa/  [ar.skím.ba]  ‘tree-stick-CL-res’
    b. /ar-skwar-pa/  [ar.skwar.pa]  ‘2sgPoss-nose-CL-res’
2.3.3 Vowel sequences

2.3.3.1 Sequences of two vowels

The [low] + [high] voicoids [aɪ] and [aʊ] are treated as phoneme sequences /ai/ and /au/, respectively, which form complex syllable nuclei represented as VV. As indicated in the discussion of syllable structure, these diphthongs can occur in open or closed syllables (i.e. VV, CVV, CCVV, CVVC, CCVVC). /ai/ can occur in all positions in the word, while /au/ is found initially and medially.

Initial

(2-27) a. /aiN-aba/  [aɪ.nýma]  ‘knife-CL-res’
b. /auβ-pa/  [aʊβ.pa]  ‘light-CL-res’

Medial

(2-28) a. /maɪtapa/  [máɪtapa]  ‘machete-CL-res’
b. /maurim-pa/  [maurímpa]  ‘sweet-potato-CL-res’

Final

(2-29) a. /mura-i/  [mʊ.rái]  ‘garden-OBL’
b. /ai-xai/  [ái.yái]  ‘two-DU’

Underlying sequences of [high] + [low] vowels, i.e. /ia/ and /iu/ also occur. /ia/ is not found word initially, but does occur word medially and finally. /iu/ on the other hand is found in initial and medial positions, but not finally. These [high] + [low] sequences show somewhat different properties to the corresponding reverse sequences discussed above in that they are realised as the syllable peaks, or nuclei of separate syllables. In both cases, a transitional glide ([y] or [w]) corresponding to the high vowel is inserted forming an onset for the syllable containing /a/.
Examples of /ia/ and /ua/ in different positions are:

**Initial**

(2-30) /uagzr/ \[uwanginzir] ‘evening’

**Medial**

(2-31) a. /siapa/ \[siyapa] ‘k.o bird-CLres’

b. /suaN-pa/ \[suwamba] ‘lime-CLres’

**Final**

(2-32) /β-ia/ \[βiya] ‘get-NT-3SGS’

2.3.3.2 **SEQUENCES OF THREE AND FOUR VOWELS**

Underlying trivocalic sequences are restricted to /iai/ and /uia/ which are realised as [iya1] and [uya] respectively.

(2-33) a. /mudu-i-a/ \[mundoya] ‘go.up-NT-3SGS’

b. /βiai/ \[βiyar] get-NT-3SGS-DS.SEQ’

There is only one known underlying sequence of four vowels; that being, /uiai/ which is found in context of /u/ final verb roots marked for contemporaneous tense, third person singular subject, and different subject sequential. In these cases, the first /i/ is realised as a glide onset.

(2-34) /mugu-i-a-i/ \[munguyai] ‘go.down-NT-3SGS-DS.SEQ’
2.3.4 Epenthetic V and *CCs

Epenthesis is regular and obligatory for unpermitted consonant clusters. It also applies sporadically to consonant clusters that are otherwise permitted. Examples of words containing CCs which are obligatorily separated by an epenthetic vowel are:

\[(2-35)\]

a. /tva-pa/ [t̪ápa] 'fence-CLres'
b. /matk-pa/ [mátkapa] 'fence-CLres'
c. /t-ø-n/ [tun] 'do-NT-1SGS'
d. /β-pa-na/ [βapána] 'get-FP-2SGS'
e. /manN-pa/ [nâmambA] 'louse-CLres'
f. /n-ø-n/ [nymín] 'sleep-NT-3SGS'
g. mg-pa [mngapA] 'k.o insect-CLres'
h. aßen-pa [aßénpa] 'coconut-CLres'

Non-homorganic nasal-stop coda + onset consonant clusters may alternate with a ...C[V]C... sequence, where [V] corresponds to an epenthetic vowel.

For example:

\[(2-36)\]

a. /mnasku-pa/ [mnsákupa] ~ [mnsáskupa] 'sand bank-CLres'
b. /ya-mir-ka/ [yamírka] ~ [yamírkA] '1SGPOSS-tongue'
c. /awud-mumuN-ka/ [Awund'mumúŋga] ~ [Awund'mumúŋga] 'female-child-CLres'

This alternation reflects the tension between the operation of epenthesis, which in its most general application applies to CC sequences and the acceptability of certain clusters either as complex onsets or as coda+onsets. In these terms, the first form can be seen as epenthesis prevailing over stipulated allowable consonant clusters; while the second, as a victory for the latter. However, the alternation is not quite an alternation between epenthetic vowel and
'ø'. Rather, in the above example, when epentheses does not occur the first consonant in the sequence is realised as unreleased\(^3\).

The alternation between non-release and release is also found with geminate sequences:\(^4\)

\[(2-37) \quad /\text{tak}\text{-ka}/ \rightarrow [\text{ták}'\text{a}]-[\text{táκ}'\text{ka}] \quad \text{‘large-CL-shelf’}\]

Finally, /\text{n}/ and /\text{nt}/ also alternate between syllabic realisations, and consonant realisations supported by an epenthetic nucleus.

\[(2-38) \begin{align*}
\text{a.} & /\text{sa-pr}/ & & [\text{sápr}]-[\text{ápær}] & & \text{‘be-NT-1DS’} \\
\text{b.} & /\text{mrgN-abal}/ & & [\text{mrgn̥abla}]-[\text{mrgn̥abla}] & & \text{‘dog-CL-res’} \\
\text{c.} & /\text{yaβas-ø-n}/ & & [\text{yaβasø}]-[\text{yaβasø}] & & \text{‘chop-NT-3SGS’}
\end{align*}\]

In these cases the alternation exists because the language has two plausible means of providing a syllable peak. However, the alternation is not allowed in the case of with word initial /\text{n}/ followed by which must be syllabified.

\[(2-39) \quad /\text{n-tama-pa-ri}/ ~ [\text{n̥tamapi}]~ *\text{nVtamapi} \quad \text{‘3SGO-put-FP-3SGS’}\]

The epenthetic vowel varies between a high central vocoid [i] and a mid central vocoid [ø]. At this point it is not clear what the conditioning factors are for this alternation.

An epenthetic vowel is also subject to vowel harmony. For example, where an adjacent syllable contains /u/ the epenthetic vowel is realised as [u]. Examples are given in (2-40).

---

\(^3\) For the obstruent series that can occur as part of a coda+onset cluster, the alternation could be alternatively defined as a choice between ‘release versus non-release’ where release equates to ‘epentheses’.

\(^4\) This is interesting given various beliefs about the inseparability of geminates by epenthetic vowels. Note, however, that because the gemination occurs at a morpheme boundary, there is a break between the two segments that may be optionally exploited by epentheses.
(2-40) a. /n-ku-pa-na/ [núkupana] ‘3SGO-give-FP-2SGS’  
b. /mugu-ýzkz/ [mónguwnyzukûns] ‘house-close’

We can account for this by the following rule:

(R-1) **Roundness spreading (A)**

\[
\begin{aligned}
[V] & \rightarrow V / \_C(C)(C)\_ V \\
[+hi] \quad [+\text{ro}] & \quad [+\text{ro}] \quad [+\text{ro}]
\end{aligned}
\]

### 2.4 Phonological processes

In this section I present the set of major phonological processes which account for the surface realisation of phonemes in Anamuxra.

#### 2.4.1 Nasal place assimilation

All class III nominals possess a stem which consists of a root plus the nasal augment /N/ (see §5). This augment is specified as [+nasal] but not for place of articulation. When it is followed by a consonant it assimilates to the place of articulation of that consonant.

(R-2) **Nasal place assimilation**

\[
N \rightarrow [\alpha\text{place}] / \_\_\_ C
\quad [\alpha\text{place}]
\]
Examples are:

(2-41) a. /aviN-Buk/ [aβimbuk] ‘good-CL-spher.’
   b. /aviN-ski/ [aβinzaki] ‘good-CLthin.rigid’
   c. /aviN-tug/ [aβimdunŋ] ‘good-CL-plate’
   d. /aviN-vida/ [aβínginda] ‘good-CL-tree’
   e. /aviN-kura/ [aβíŋgurA] ‘good-CL-male’

2.4.2 Nasal deletion

The nasal stem augment, N, deletes when followed by a fully specified nasal.

(R-3) Nasal deletion
\[
N \rightarrow \emptyset \quad / \_+ \quad m \\
/ n \\
/ \eta
\]

Examples are:

(2-42) a. /wataN+maka/ [watamaka /*watammaka] ‘good-CL-branch’
   c. /mumuN+ŋ/ [mumunŋ] /*[mumunŋ] ‘child-PL’

2.4.3 Nasal velarisation

Where the nasal is followed by vowel initial affix it is realised as a velar nasal.

(R-4) Nasal velarisation
\[
N \rightarrow \eta \quad / \_+ \quad V \text{ (where } V \text{ is the initial vowel of an affix)}^5
\]

---

^5 Note however, that elsewhere /ŋ/ does not assimilate the place feature of the following consonant. For example /ŋ-tama-pa-ri/ > [aŋtámapi] ‘1SGPRO-put-FP-3SGS’.
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For example:

(2-43) a. /aiN-aba/ [aiŋāmba] 'knife-CLres'
    b. /darN-ag/ [darinąŋa] 'hear-CLres'

2.4.4 Post-nasal voicing

All voiceless consonants are voiced when preceded by the underspecified nasal stem augment, N.

(R-5) Post-nasal voicing

\[ C \rightarrow [+voice] / N + \_

For example:

(2-44) a. /asaraN-pa/ [asarámba] 'tobacco - CLres'
    b. /wataN-ki/ [afínzoki] 'good + CL-thin-rigid'
    c. /afIN-tug/ [afíndůŋk] 'good + CL-plate'
    d. /xubaN-ka/ [umbáŋga] 'good + CLres'
    e. /afIN-ka/ [afíŋur] 'good + CL-male'

Voicing assimilation generally does not occur among homorganic nasal consonant clusters, where the nasal is fully specified.

(2-45) a. /maurim-pa/ [maurímpa]/*[maurímba] 'sweet potato-CLres'
    b. /idkam-pa/ [ındokámpa]/*[ındokāmba] 'k.o yam-CLres'
    c. /samsam-pa/ [samsámpa]/*[samsámba] 'k.o insect-CLres'
    d. /n-tam-i-n/ [ntaxmin]/*[ntaxmin] '3SG0-put-NT-1SGS'
    e. /aŋ-ka-ka/ [aŋkaka]/*[aŋgaka] '1PLPRO-PW-CLres'

The only known example of voice assimilation between an underlyingly fully specified nasal and homorganic stop involves the sequence of bilabial nasal/stop at the morpheme boundary found in the verb between the first person singular morpheme /-m/, and the suffix, /-pu/ ‘first’. However, the application of the rule is only an option alongside the possibility of non-assimilation. Consider the examples in (2-46).
2.4.5 Post-nasal consonant hardening

When /β/ and /γ/ are preceded by either a homorganic nasal or the nasal augment they undergo hardening i.e. closure. That is:

\[ \text{Post-nasal consonant hardening} \]

\[ C \rightarrow [-\text{cont}] / C + \_ \]

\[ -\text{cor} \]
\[ -\text{son} \]
\[ \text{+nasal} \]
\[ \text{αplace} \]

For example:

(2-47) a. \[ /\text{ŋ-ywu/} \quad [\text{άγwu}] \quad \text{‘1SGPOSS-PW’} \]

The specification limiting the rule to [-coronal] segments correctly predicts the following:

(2-48) a. \[ /\text{avn-skN-agal} \quad [\text{άβιςικάŋα}] \quad /*[\text{άβιςικάŋα}] \quad \text{‘coconut-unripe-CLres’} \]

2.4.6 Roundness spreading (B)

We have already seen that the feature [+round] feature of the high back rounded vowel spreads to epenthetic vowels. There is another instance of [+round] spreading in which the [+round] feature of /u/ spreads to a following consonant. The result of this spreading is a co-articulated segment \( C^w \).

\[ \text{Roundness spreading (B)} \]

\[ Cu + C \rightarrow CuC^w \]

:where + is a morpheme break
For example:

(2-49) a. /apu-ka/ [ápunk\textsuperscript{wA}] 'bad-\textit{Cl}_{res}'  
    b. /apu-t-i-a/ [áput\textsuperscript{i}y\textsuperscript{A}] 'bad-do-NT-3SGS'  
    c. /marabuN-aba/ [marambun\textsuperscript{w\textsuperscript{\text{\#\#}}}amba] 'flying fox-\textit{Cl}_{res}'  
    d. /anuN-yan/ [\textsuperscript{\text{\#\#}}anu\textsuperscript{w}an] 'day.before.yesterday=FOC'  
    e. /ya-kamu-ba/ [yakam\textsuperscript{b\textsuperscript{wA}}] '2SGO-help-NEG'

There are a number of forms which fail to display the effects of the rule. First, the -\textit{pa} allomorph of the residual classifier is always opaque to the rule. Thus,

(2-50) a. /muN-pa/ [mùmb\textsuperscript{w}a][mumb\textsuperscript{wA}] 'yam-\textit{Cl}_{res}'  
    b. /su-pa/ [súpa]/*[supwa] 'faeces-\textit{Cl}_{res}'

Other exceptions involve forms that are affected elsewhere:

(2-51) a. /aru-ka/ [arúka] 'alot-\textit{Cl}_{res}'  
    b. /nunu-ka/ [núnu\textsuperscript{ka}] 'old-\textit{Cl}_{res}'  
    c. /sibuN-aba/ [símbu\textsuperscript{g\textsuperscript{\text{\#\#}}}amba] 'slit.drum-\textit{Cl}_{res}'

Unfortunately, the non-occurrence of the [+round] spreading in examples such as (2-51a-c) cannot be accounted for on the basis of available data and therefore remains a topic for future investigation.

2.4.7 Consonant devoicing

When either the alveolar liquid continuant /r/ or one of the prenasalised consonants /b/, /d/, /g/ or /z/ occurs in phrase final position it is subject to devoicing.

(R-8) Phrase final consonant devoicing

\[ C \rightarrow [-\text{voice}] / \_\_\#\# \]
For example:

(2-52) a. /wagig/ [waŋqĩŋk] ‘PN’
    b. /wur-b/ [wɔrĩmp] ‘defecate-OPT’
    c. /mugu-d/ [muŋguŋt] ‘go.down-NEC.3SGS’
    d. /mugu-i-r/ [muŋgwĩr] ‘go.down-NT-1DUS’

Note that, in the case of the prenasalised segments, as in (2-52a-c), only the oral constituent is devoiced.

2.4.8 Vowel deletion

There are several environments in which the first vowel in a two vowel sequence deletes. First, when two vowels occur in sequence across a word boundary the first vowel is typically deleted. That is,

(R-9) Vowel deletion

\[ V \rightarrow \emptyset \]

For example:

(2-53) a. /yi-ma#um-ba/ [yimũmba] ‘1SGPRO-NEG#drink-NEG’
    b. /na-ma#iyr-ba/ [námiyɔrɔnba] ‘2SGPRO-NEG#see-NEG’

Second, the vowel /u/ deletes when preceded by a /w/ and followed by another vowel. For example:

(2-54) a. /tuwu-i-n/ [tuwĩn] ‘hit-NT-1SGS’
    b. /kwua-m/ [wam] ‘go-1SGS’

2.4.9 /γ/ and /β/ and the indefinite article

A number of classifiers have either an initial voiced velar fricative /γ/ or voiced bilabial fricative /β/ (see §4). In most environments, the fricative displays the allophonic variation outlined in previous sections. However, when the classifier attaches to the indefinite article /u-/ the fricative is realised as a voiceless stop
with the same place of articulation i.e. /γ/ is realised as [k], while /β/ is realised as [p]. We can account for the realisation of both fricatives as:

\[(R-10) \quad C \rightarrow C /\text{Indefinite article} + _{-\text{strid}}\quad -\text{cont} -\text{voice}\]

Examples are:

\[(2-55) \quad a. /u-vuk/ \quad [upúk] \quad 'IA-CL_{aph}'
\]
\[b. /u-xida/ \quad [ókínda] \quad 'IA-CL_{tree}'\]

2.5 Stress

The rules of stress assignment that account for many phonological words in Anamuxra may be summarised as follows:

\[(R-11) \quad \text{assign stress to a final heavy syllable where heavy syllable equals VV or VC; if there no final heavy syllable, assign stress to the penultimate syllable}^6.\]

Examples of words displaying final stress include:

\[(2-56) \quad a. /aβaβ/ \quad [aβáβ] \quad 'mother's brother'
\]
\[b. /u-taβ/ \quad [utáβ] \quad 'IA-CL_{shelt}'
\]
\[c. /ar-i-n/ \quad [arín] \quad 'scrape-NT-1SGS'
\]
\[d. /muN-pa-ŋ/ \quad [mumbán] \quad 'k.o yam-CL_{res}'
\]
\[e. /apuŋar/ \quad [apuŋár] \quad 'three days hence'
\]
\[f. /arabagín/ \quad [arambaŋín] \quad 'four days hence'\]

Examples of words bearing penultimate stress include:

Disyllabic Forms

\[\text{In other words, "stress syllable containing penultimate mora".}\]
(2-57) a. /ar-pa/ [árpΛ] ‘tree-CLres’
    b. /i-na/ [ína] ‘PROX-CLres’
    c. /tra-pa/ [trápΛ] ‘rain-CLres’

Trisyllabic Forms

(2-58) a. /βi-mu-ra/ [βimúrΛ] ‘come-2DUS.NEC’
    b. /ina-pa/ [ínápΛ] ‘sun-CLres’
    c. /aβiN-ka/ [αβιŋgΛ] ‘good-CLres’
    d. /urkur-pa/ [orkórpa] ‘hornbill-CLres’
    e. /ati-ka/ [αtιkΛ] ‘green-CLres’
    f. /ugaN-ka/ [υγαNkΛ] ‘yellow-CLres’
    g. /ad-a-ka/ [αdαkΛ] ‘DEM-ND-CLres’

Tetrasyllabic Forms

(2-59) a. manN-aba [manŋámbΛ] ‘banana-CL’
    b. βuyasir-pa [βuyasírpΛ] ‘spider-CLres’
    c. wamN-aba [wamŋámbΛ] ‘clay.pot-CLres’

Pentasyllabic Forms

(2-60) a. apapura-pa [αpapurápΛ] ‘butterfly-CLres’
    b. wazirN-aba [wanzirŋámbΛ] ‘snake-CLres’

Stress associates with underlying vowels wherever possible. Thus, ‘target’ syllables (i.e. penultimate and final heavy syllables) which contain an epenthetic vowel at surface level are not immediately available to the rules of stress assignment. Rather, stress is assigned to the nearest syllable to the left containing an underlying vowel. In words where there is no underlying vowel to the left of the target syllable then the closest syllable to the right is selected.
(2-61) a. /jǐjǐ-t-ba/  [jǐjǐtṁba]  ‘little-CLpart’
b. /id-pa/  [ǐnd̪a]  ‘fishing spear-CLres’
c. /i-γna/  [iγna]  ‘PROX-CL’
d. /matk-pa/  [mātik̪a]  ‘crocodile-CLres’
e. /sya/  [sɔya]  ‘again’
f. /tat-pa/  [tāt̪a]  ‘insect-CLres’
g. /t-∅-na/  [tIN̪a]  ‘do-NT-2SGS’

There are cases of discrepancies between the surface realisation of stress and the stress rules outlined above. One such case are verbs inflected for third person singular subject and near tense take antepenultimate stress. Examples are:

(2-62) a. /dar-i-a/  [dāriya]  ‘hear-NT-3SGS’
b. /tam-i-a/  [tāmiya]  ‘put-NT-3SGS’
c. /tur-i-a/  [tōr̪iya]  ‘hold-NT-3SGS’

This contrasts with the predictable assignment of stress in other near tense forms of the same verbs with different subject person-number marking.

(2-63) a. /dar-i-na/  [darīna]  ‘hear-NT-2SGS’
b. /tam-i-∅/  [tamīna]  ‘put-NT-3SGS’
c. /tur-i-n/  [tōr̪in]  ‘hold-NT-1SGS’

The stress assignment found in third person singular subject forms of verbs marked for near tense is clearly morphologically driven.

2.6 Orthographic conventions

The orthographic system adopted for the subsequent chapters (and chapter 1) is a mix of phonemic representations and surface realisations. Voiceless stops /p/ and /k/ and voiced fricatives /β/ and /γ/ which are realised as [w] will be represented in the orthography as ‘w’. Cases of /p/ and /k/ realised as voiced fricatives [β] and [γ] are represented as ‘v’ and ‘x’. Instances of deleted /k/ are not written. Prenasal phonemes are written as ‘b’, ‘d’, ‘g’ and ‘z’. The underlying sequences /N+p/, /N+t/, /N+k/ and /N+s/ are also represented as ‘b’, ‘d’, ‘g’ and ‘z’ respectively.
CHAPTER 2 - PHONOLOGY

Where the underspecified N is realised as [ŋ] it is written as ‘ŋ’. Epenthetic vowels are not written. In all other cases, the orthography reflects the underlying phonemic representations.7

Below, I list all phonemes and the ways in which they are written. Where the grapheme symbol differs from that used for the corresponding phoneme, the grapheme is marked in bold and underlined.

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Written as</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/</td>
<td>p, y, w</td>
</tr>
<tr>
<td>/t/</td>
<td>t</td>
</tr>
<tr>
<td>/k/</td>
<td>k, x, w</td>
</tr>
<tr>
<td>/β/</td>
<td>v, w</td>
</tr>
<tr>
<td>/γ/</td>
<td>x, w</td>
</tr>
<tr>
<td>/s/</td>
<td>s</td>
</tr>
<tr>
<td>/h/</td>
<td>b</td>
</tr>
<tr>
<td>/d/</td>
<td>d</td>
</tr>
<tr>
<td>/g/</td>
<td>g</td>
</tr>
<tr>
<td>/z/</td>
<td>z</td>
</tr>
<tr>
<td>/m/</td>
<td>m</td>
</tr>
<tr>
<td>/n/</td>
<td>n</td>
</tr>
<tr>
<td>/ŋ/</td>
<td>ŋ</td>
</tr>
<tr>
<td>/r/</td>
<td>r</td>
</tr>
<tr>
<td>/y/</td>
<td>y</td>
</tr>
<tr>
<td>/w/</td>
<td>w</td>
</tr>
<tr>
<td>/i/</td>
<td>i</td>
</tr>
<tr>
<td>/a/</td>
<td>a</td>
</tr>
<tr>
<td>/u/</td>
<td>u</td>
</tr>
<tr>
<td>/e/</td>
<td>e</td>
</tr>
<tr>
<td>/o/</td>
<td>o</td>
</tr>
</tbody>
</table>

7 The non-phonemic representations reflect general tendencies I have observed in the choices speakers of Anamuxra make when writing their language.
Chapter 3

Word classes

3.1 Introduction

Word classes are determined on the basis of morphological, distributional and, in some cases, semantic and functional criteria. In all, ten word classes are posited for the description of Anamuxra. There are two main, open classes: verbs and nominals. All others are closed. A number of classes divide further into subclasses, while several words stand alone.

- Verbs
- Nominals
- Verbal adjuncts
- Adverbs
- Negatives -ma and -mazxa
- Negative irrealis amu
- Reciprocal aba
- Reflexive -xabi ‘self’
- Discourse particle nxa
- Interjections

The aim of this chapter is to justify the classification of the classes listed above. In the case of nominal and verb classes, further information about their...
morphological and syntactic behaviour is provided in following chapters. However, for some of the smaller classes that are not accounted for elsewhere in the grammar, I provide a more detailed description of their semantic and functional characteristics in this chapter. In addition to discussing the word classes listed above, I also discuss in this chapter the set of clitics found in the language.

3.2 Word classes and multiple-classification

While most words can be assigned to a particular class on formal grounds, there are cases where a word displaying the morphological properties of one class can function like words of another class without derivational morphology. For example, the adjective *aru-ka* 'a lot/many/important-CLres' is classed as a (quantifier) adjective on the grounds that it shares the inflectional properties with other adjectives (§3.4.5.1) and can occur in an NP as a modifier of a noun. However, it can also function as an adverb modifying the verb or clause. Similarly, the form *savi* 'middle, centre, in between' appears as an ordinal adjective which takes a classifier, number marking and so on, or it can occur as a spatial dimension noun.

In addition to such non-derived multi-functionality, Anamuxra allows words to be derived from different classes through overt derivational affixes. For instance, the suffix *-vi* can be added to many adjectives to derive manner adverbs (§3.6.3.1).

3.3 Verbs

Verbs in Anamuxra are distinguished from all other word classes on the basis that they (a) take tense and aspect marking; (b) can be coded for switch reference and (c) can take pronominal prefixes which index the person and number details of the
CHAPTER 3 - WORD CLASSES

object of the clause; and (d) take pronominal suffixes which indicate the person and number of the subject of the clause.¹

Four classes of verb may be recognised on the basis of their valency (i.e. the number of arguments they subcategorise for):

(i) intransitive only
(ii) transitive only
(iii) ditransitive only
(iv) ambitransitive²

Intransitive predicates select one core argument (subject); transitive verbs select two (subject and object); while ditransitive verbs take three arguments (subject and two objects). Ambitransitive verbs are those verbs that show alternation in their valency without the use of valency-changing morphology. There are a dozen or so ambitransitive verbs in Anamuxra. Within this set, four main types can be distinguished.

The most common type of ambitransitive verb is that which can function intransitively or transitively. This set can be further divided into two groups: verbs in which the subject of the intransitive form typically corresponds to the subject of the transitive form; and those in which the subject of the intransitive form corresponds to the object of the transitive form. Examples of each type are listed below. In the following discussion I shall distinguish the different subject and object arguments according to their syntactic function type: that is, subject of intransitive verb = 'S'; subject of transitive and ditransitive verbs = ‘A’; the object of transitive constructions = ‘P’; objects of ditransitive verbs which denote the theme argument = T; and, objects of ditransitive verbs which denote the goal,

¹ A detailed discussion of these and other morphological properties of the verb is presented in §7.
² Anamuxra possesses no verbs with zero valency of the likes of ‘rain’, ‘thunder’ etc.

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beneficiary, or source = 'G'. For a full discussion of these syntactic functions see §10.2.2).

**AMBITRANSITIVE: INTRANSITIVE–TRANSITIVE (S=A TYPE)**

- *isr-* hide
  - hide (something)
- *mur-* be angry
  - chastise (someone)
- *sivx-* lie
  - lie to, or trick (someone)
- *taguaram-* stand
  - stand (someone/something)
- *tugu-* count
  - count (something)
- *par-* say
  - say to (someone)
- *kuz-* go out (of fire), dry (of sore)
  - go out on, dry on (someone)
- *yix-* cry
  - cry out to

**AMBITRANSITIVE: INTRANSITIVE–TRANSITIVE (S=P)**

- *abu-* come out
  - pull (something) out
- *prat-* not be, be finished
  - not have
- *waz-* be tight
  - tighten (something)

The second type of ambitransitive verb is represented by *maiv-* ‘buy (something)’, buy (something) from (someone)’. *Maiv-* can either function transitively or ditransitively. As a transitive predicate it takes two arguments: a subject (A) which corresponds to the buyer and an object (P) which corresponds to the (the thing bought). As a ditransitive, it takes three predicates; subject, and two objects, one of which corresponds to the Theme; and one which corresponds to the source (i.e. the person or store from which the Theme is bought). Compare the following examples:

(3-1) **Asaraba**

[asaraN-pa]$_T$ maiv-pa-n

*Asaraba* tobacco-Cl res buy-FP-1SGS

'I bought tobacco.'
The final type of ambitransitive verb is represented by \( \text{mig-} \) ‘spill’. In contrast with the other ambitransitive verbs, \( \text{mig-} \) has three functional possibilities. It can function as an intransitive verb with the meaning ‘(something) spill’ as in (3-3); it can function as a transitive verb with the meaning ‘(someone) spill (something)’ as in (3-4); or it can function as a ditransitive verb as in (3-5) where it means ‘(something) spill (something) on (someone)’. The S of the intransitive form corresponds to the ‘P’ object of the transitive form and the T object of the ditransitive form (\( S = P = T \)).

\[
\begin{align*}
(3-3) & \quad \text{Axsaka} & \quad \text{migpari.} \\
[\text{axs-a-ka}]_S & \quad \text{mig-pa-ri} & \quad \text{spill-FP-3SGS} \\
\text{soup-ND-CL}_{\text{res}} & \quad \text{spill-FP-3SGS} \\
\text{The soup spilled.}
\end{align*}
\]

\[
\begin{align*}
(3-4) & \quad \text{AnNaba} & \quad \text{migpan.} \\
[\text{anN-aba}]_T & \quad \text{mig-pa-n} & \quad \text{spill-FP-1SGS} \\
\text{water-CL}_{\text{res}} & \quad \text{spill-FP-1SGS} \\
\text{I spilled the water.}
\end{align*}
\]

\[
\begin{align*}
(3-5) & \quad \text{Anyaba} & \quad \text{yamigpana.} \\
[\text{anN-aba}]_T & \quad \text{ya-mig-pa-na} & \quad \text{ISGO-spill-FP-2SGS} \\
\text{water-CL}_{\text{res}} & \quad \text{ISGO-spill-FP-2SGS} \\
\text{You spilled the water on me.}
\end{align*}
\]
We can represent the correspondence between the three functions of \textit{mig}-
in terms of syntactic functions and grammatical relations as follows:

\begin{figure}[h]
\centering
\begin{tabular}{ccc}
\textbf{intransitive} & Subject & \textbf{Subject} \\
\textbf{maiv-'spill':} & <(Agent) Theme/Patient (Goal)> & \\
\textbf{transitive} & Subject & Object \\
\textbf{ditransitive} & Subject & Object & Object
\end{tabular}
\caption{\textit{mig}- ‘spill’ and correspondence between arguments}
\end{figure}

\section{Nominals}

The class of nominals is a large, open class of words that minimally share the
feature of being able to occur as the sole constituent of a simple nominal phrase
(NP) (for definition of NPs see §9).\footnote{The only exceptions to number marking
are the small set of non-possessed kin terms, and several locational nouns.} Six main subclasses of nominals may be
recognised in Anamuxra: vocatives, free pronouns, proper names, common nouns,
qualifiers, and question words. In turn, a number of these can be divided into
formally and semantically discrete subclasses. The categorisation of nominals is
summarised in table 3-1:
### Table 3-1: Nominal subclasses

The various nominal subclasses identified above are distinguished on the basis of the following criteria:

- **distribution**
  - co-occurrence with other nominals in a simple NP
  - positioning in the expanded simple NP
- **syntactic function**
  - the function of the NP they can occur in (core versus oblique versus other)
• morphology
  - specification for person
  - ability to take the pronominal prefixes
  - ability to take number marking, and if so, what form of the plural they can take
  - ability to take accusative case marking
  - ability to take direct oblique marking
  - ability to take classifiers
  - whether they take the long or short forms of the male and female classifiers

In the sections that follow, I describe the semantic content and morphosyntactic basis of each of the nominal classes.

3.4.1 Vocatives

The class of vocatives consists of nominals used as a form of address. Vocatives are distinguished from other nominal classes on the grounds that they can never occur as a constituent of an NP which functions as either a core or oblique argument in a verbal clause. As such, they take neither oblique nor accusative marking. Nor are they cross-referenced on predicates in the way true argument NPs are. Finally, vocatives are never modified by a nominal qualifier.

There is only one form that functions solely as a vocative: ki- ‘you’. Ki- takes the short forms of the male or female classifier in the singular depending on the gender of the addressee and number marking for dual and plural addressees (§5.4).
CHAPTER 3 - WORD CLASSES

<table>
<thead>
<tr>
<th>Vocative ki-</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ki-m</td>
<td>VOC-CL_{male}</td>
</tr>
<tr>
<td>ki-na</td>
<td>VOC-CL_{fem}</td>
</tr>
<tr>
<td>ki-xai</td>
<td>VOC-DU.HUM</td>
</tr>
<tr>
<td>ki-mdiN</td>
<td>VOC-PL.HUM</td>
</tr>
</tbody>
</table>

Table 3-2: Forms of the vocative ki-

An example of ki- is given in (3-6):

(3-6) Varapaga "kim! Akun aŋkwaria."
para-pa-ŋa   ki-m  aku-m  aŋ-kwar-i-a
say-FP-3PLS  VOC-HUM.ML FD-CL_{male}  IPLO-finish-NT-3SGS

varapaga.
para-pa-ŋa
say-FP-3PLS

"They said "You! That (male) has finished us", they said."

Personal names (§3.4.3.2), and non-possessed kin terms (§3.4.4.3.2) may also be used as vocatives, as can the adjective mux- ‘other/next’. Note that when mux- is used as a vocative, it typically combines with the near distal deictic and takes the same pattern of inflection as ki- . That is

<table>
<thead>
<tr>
<th>Vocative mux-</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>mux-a-ŋa</td>
<td>VOC-ND-CL_{male}</td>
</tr>
<tr>
<td>mux-a-na</td>
<td>VOC-ND-CL_{fem}</td>
</tr>
<tr>
<td>mux-a-xai</td>
<td>VOC-ND-DU.HUM</td>
</tr>
<tr>
<td>mux-a-mdiN</td>
<td>VOC-ND-PL.HUM</td>
</tr>
</tbody>
</table>

Table 3-3: Forms of the vocative mux-
3.4.2 Free pronouns

Anamuxra possesses a range of pronominal forms, including one set of free pronouns, and four sets of bound pronominal forms. In this section, I am concerned only with the position of class of free pronouns in the overall set of nominals. A full discussion of both independent and bound pronominals including a consideration of the formal relationships between the various sets is given in §6.

Free pronouns (see table 3-4 below), which constitute a closed class, behave like proper names in that they can only occur as the sole constituent of a simple NP. However, they are distinguished from proper names, and all other nominals through their explicit specification for person. Three person categories are differentiated: first, second and third person; along with three numbers, single, dual and plural.

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>DUAL</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>yi/ia</td>
<td>ar</td>
<td>anj</td>
</tr>
<tr>
<td>Second</td>
<td>na</td>
<td>nar</td>
<td>naj</td>
</tr>
<tr>
<td>Third</td>
<td>nj</td>
<td>nr</td>
<td>nj</td>
</tr>
</tbody>
</table>

Table 3-4: Free pronouns

In addition to the free pronouns, all referential qualifiers can function as pro-forms (§3.4.5.3).

3.4.3 Proper names

Proper names are those nominals which name specific beings, places or topographical entities. Syntactically, proper names behave like free pronouns in not allowing modification by a qualifier (i.e. occurring as the sole constituent of an NP). Proper names fall into two main subclasses: location names and personal names.
3.4.3.1 Location Names

The set of location names includes names given to settlements, land areas, rivers and other significant topographical points of reference. As we shall see below, there is a close correspondence between location names and personal names in that many personal names are based on, or derived from location names. However, location names are distinguished semantically from personal names, as well as most other nominals, by the fact that they have a strong inherent locative component. This semantic characteristic underlies their distinct functional and morphosyntactic behaviour. Functionally, location names most commonly head an NP bearing a locative adjunct relation in a verbal clause (§10.2) though they can head NPs with other roles such as Object NPs or an NP realising the Subject or predicate in non-verbal clauses (§10.3). Formally, location names are distinguished by the fact that when functioning as a locative adjunct, they are never marked for oblique case (i.e. they never occur in an oblique marked NP).

In addition to the features just mentioned, location names are also distinguished by the ability to take the plural marker to derive a collective proper noun with the meaning ‘people of/from X’. For example,

(3-7)  \textit{MindiviN}  
Mindivi-N  
PN-PL  
‘people of Midivi’

(3-8)  \textit{AustraliaN}  
Australia-N  
PN-PL  
‘Australians’

Many local location names are unanalyzable, or monomorphemic forms. For instance,
**CHAPTER 3 - WORD CLASSES**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ikudun</td>
<td>name of village</td>
</tr>
<tr>
<td>Irxnim</td>
<td>n.o. settlement</td>
</tr>
<tr>
<td>Midi</td>
<td>n.o. village</td>
</tr>
<tr>
<td>Swazambi</td>
<td>n.o. village</td>
</tr>
<tr>
<td>Tiku</td>
<td>n.o. water hole</td>
</tr>
<tr>
<td>Uipi</td>
<td>n.o. gully</td>
</tr>
</tbody>
</table>

However, other location names display evidence of earlier derivation. For instance, a number of names associated with creeks or sections of streams end in the classifier associated with rivers, namely -maka 'lateral extension e.g. river, branch, arm, leg', while a number of names of ridges or spurs end in the classifier associated with ridges and spurs, -wada 'protrusion'. For example,

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uipimaka</td>
<td>n.o. creek</td>
</tr>
<tr>
<td>Ubrizawada</td>
<td>n.o. ridge</td>
</tr>
<tr>
<td>Anabariwada</td>
<td>n.o. ridge</td>
</tr>
<tr>
<td>Vadabuwada</td>
<td>n.o. ridge</td>
</tr>
</tbody>
</table>

Similarly, some river names such as Anmam and Angb suggest an earlier derivation from the generic term for river, anN-.

### 3.4.3.2 PERSONAL NAMES

Personal names constitute an open class of words used to name specific people, ancestor spirits and certain animals such as pigs, dogs and pet birds. Personal names are distinguished from location names in that they (personal names) can take accusative marking when functioning as the object in transitive clauses. Only animate entities take accusative marking (see §5.4.2.3). Like common nouns with animate referents, personal names occur in the possessive oblique construction when functioning as locational adjuncts (cf. location names above).

Traditionally, Anamuxra speakers acquire a number of names through the course of their lives. At birth, a person is given two names; one by the father and
one by the mother. Furthermore, on marriage s/he will be given a third and occasionally a fourth name, by the spouse and her/his family. These naming practices reflect the strong taboo on the use of names which prohibits a person’s spouse and in-laws from using the name given to that person by his/her parents as well as the names s/he gives to her/his children.

There are four main sources for birth names: names of topographical features such as plots of land (boks graun in Tok Pisin) which a person has claim over, rivers and settlements; names of ancestor spirits; names of clans; and names of totems. While some names can be used for both women and men, others are associated with a particular sex (i.e. they distinguish gender). In these cases, it is possible to derive a more suitable name for the opposite sex by modifying the name. For instance, names given to men can be derived through the affixation of the classifiers -takr and -kura; while women’s names can be derived through the addition of the classifier -maka or the formative -gar.5

Since the arrival of the Catholic Mission at Josephstaal in the 1950s, Anamuxra speakers have adopted the practice of taking a European name in addition to their traditional, non-European names.6

Another naming practice which, from all accounts, has followed from European contact is the use of surnames. People who were children at the time of the establishment of this practice typically took their father’s name as their surname. These first surnames have become the family name of subsequent generations usually following the patrilineal line.

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4 Further study of the sources of in-law names is required.
5 While the link between -kura and male names is clear, further work is needed to determine what, if any, the relationship is between the other forms and the gender they are associated with.
6 Unlike other borrowings from English and other languages, European names tend not to be Tok Pisin-ised or Anamuxra-ised when written. Examples of some of the more common European names in use include Alice, Anton, Boniface, Felicity, Gertrude, Joseph, Maria, Peter, Stanis, Thomas, Vinantrus, William and so on.
Nicknames or epithets also provide a common basis of reference to people. One man, was widely known as *bunman* (i.e. skinny (man) in Tok Pisin). Another man, who was the standing local member of the Madang Provincial government at the time of my arrival on my first trip, was simply referred to as *memba*. On losing his seat in parliament, this nickname was appropriately changed to *eks-memba*.

In addition to the above possibilities, a final form of name giving that is quite common amongst Anamuxra speakers is that whereby a person is referred to as the parent of one of his/her children. For example, one of my language teachers and his wife regularly referred to each other as *Donald nmgina* 'Donald 3sgPoss-mother' (Donald's mother) and *Donald nvgina* 'Donald 3sgPoss-father (Donald's father)'.

### 3.4.4 Common nouns

#### 3.4.4.1 Introduction

Common nouns form a class of words which share the distinction of occurring in initial position in full expansions of the simple NP (see §9.2). Beyond this, we are faced with considerable complexity in their subclassification. Formally, a number of subclasses can be recognised. While these subclasses correlate to some extent with certain semantic categories (e.g. animate versus inanimate; alienable versus inalienable), such correspondences are either compromised by significant numbers of exceptions or limited by the fact that they are shared by other semantic classes making them non-distinctive.

I begin by subcategorising common nouns in terms of morpho-syntactic parameters. I then present a more informal account of semantic groupings.

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7 A similar phenomenon is found in Hua (Haiman 1980: 216).
8 Where someone has more than one child, the choice of which child's name to bestow on a parent can vary according to which child is present in a specific situation, though the eldest child seems to be the default option.
including a consideration of the correspondence between the semantics and grammatical features of each class.

3.4.4.2 MORPHO-SYNTACTIC CLASSES

There are several morphological criteria by which we can subclassify nouns. As these criteria are examined in detail in §5, the following discussion will be cursory.

3.4.4.2.1 Bound versus free forms

Common nouns can be divided into two subtypes, free forms and bound forms, on the basis of the type of construction they occur in when functioning as the head of a possessed NP (§9.3.1). Before we go on to describe the formal characteristics of the two classes, however, it will be useful to consider the semantic notion of alienability.

Following Crowley (1979), we can characterise the difference between ‘alienable’ and ‘inalienable’ nouns as follows:

An alienable noun is one whose referent has an existence independent of anything else. Such a noun, when it enters into a possessive relationship with another noun, is always semantically related to the possessor in that its referent is in some sense in an active, controlling, owning or using relationship to it. The possessor is able to exercise some choice in the matter of the relationship, and the thing possessed can exist independently of the possessor. ....An inalienable noun [on the other hand] is one whose referent has no independent existence of its own, and can only be conceived of in relation to something else, either as a part, a product or a particular type or abstraction of that thing. For example, it is inconceivable to think of a daughter except as somebody’s daughter, or to think of a flame except as the flame produced by something. (emphasis mine (Crowley 1982: 64-65)).

3.4.4.2.1.1 Free common nouns

Free common nouns are those which never form a single noun constituent with a morpheme which denotes the possessor of its referent. Rather, they occur in the
CHAPTER 3 - WORD CLASSES

overt possessive construction (§9.3.1). Semantically, this class corresponds to the class of alienable nouns, though it does include the subclass of invariant, or non-possessed kin terms as well as a few body-part terms (§3.4.4.3).

3.4.4.2.1.2 Bound common nouns

Bound common nouns are those which can be phonologically and morphologically linked to a morpheme, which can either be another noun in a whole-part compound construction (§5.3.3) or a pronominal prefix (§5.4.1, §6.4.1), which indexes the person and number features of the entity with which it is in a subordinate possessive relationship. In noun-noun compounds, the possessor noun occurs as the first constituent (while the possessed occurs as the second).

Within the class of bound nouns we can make a number of further distinctions based on several related parameters.

(a) Obligatory versus optional boundedness

First, bound forms fall into two subtypes according to whether they obligatorily (+) or optionally (±) occur as bound forms. With only minor exceptions, this subclassification of bound nouns corresponds to the semantic distinction between animate inalienable nouns (i.e. possessed kin terms), on the one hand, and inanimate inalienable nouns (i.e. part terms) on the other, as shown here in Figure 3-2. (Examples of kin terms and part terms are given in §3.4.4.3.2).
(b) Noun (Possessor/Whole)-Noun (Possessed/Part) Compounds

Second, bound nouns which can occur in compounding constructions (+) can be distinguished from those which cannot (-). Semantically, this distinction parallels the distinction found in ‘a’ above, with kin terms and the noun -nbi- ‘name’ grouped in contrast with part terms.

\[
\begin{align*}
\text{Whole-part compounds} & \quad \begin{array}{c}
+ \text{ (part terms)} \\
- \text{ (possessed kin terms, -nbi- ‘name’)}
\end{array}
\end{align*}
\]

Figure 3-3: Compounding versus non-compounding bound common nouns

(c) Pronominal prefixation

Finally, bound common nouns can be divided into three subtypes according to their capacity to take a pronominal prefix: those which must take one (+), those which cannot take one (-); and those for which the presence of a pronominal prefix is optional (±). These three subclasses relate as follows to semantic categories:

\[\text{Boundedness} \quad \begin{array}{c}
+ \text{ (Possessed kin terms, -nbi- ‘name’)} \\
\pm \text{ (part terms, i.e. body and plant part terms, spatial dimension terms)}
\end{array}\]

Figure 3-2: Obligatory versus optionally bound common nouns

---

9 Spatial dimension nouns are also known as ‘relator nouns’ (Blake 1994:16), or ‘relational nouns’ (Curnow 1997:87).
Across these three subclasses it is possible to observe several overlapping, but distinct semantic divisions which we can summarise as follows:

- possessed kin terms and -nbi- 'name' are distinguished as a group contrasting with part terms by the fact that only the former obligatorily take pronominal prefixing.

- bound terms with inanimate possessors are distinguished from other bound forms by the fact that they never take pronominal prefixation. Or, from the opposite perspective, we can say that only bound forms with animate possessors can occur with pronominal prefixes.

I now consider a number of other morphological categories.

3.4.4.2.2 Residual classifier

Common nouns divide into three subtypes on the basis of their ability to take the residual classifier (§5): those which must take it (+), those which cannot take it (-) and those for which it is optional (±). These three types relate as follows to semantic categories:
3.4.4.2.3 Accusative marking

The accusative (§5.4.2.3.1) marks certain NPs bearing the object grammatical relation in transitive and ditransitive clauses (§10.2). Common nouns fall into two subtypes according to their capacity to occur in an accusatively marked NP: those which can (+) and those which cannot (-). The former are those which denote animate beings, while the latter denote inanimate objects.

3.4.4.2.4 Cross-referencing on the verb

The subclassification of common nouns according to the capacity to take accusative is identical to that found with regard to cross-referencing of subjects and objects on the verb (this is not surprising given the functional properties of the two phenomena).
a) **Objects** - only nouns with animate referents occur in NPs that are cross-referenced by the pronominal object prefix (§6.4.1, §10.2.2.3).

b) **Subjects** - nouns with animate referents occur in NPs that are fully cross-referenced on the verb, inanimate subjects are indexed by the invariant third person singular suffix, irrespective of their number.

### 3.4.4.2.5 Oblique marking

Common nouns fall into two groups according to which of two mutually exclusively oblique marking strategies they are associated with: those which take the oblique marking suffix, and those which occur in the possessive oblique marking construction (§9.3.1.2). The former corresponds to all common nouns with inanimate referents, while the latter corresponds to all common nouns with animate referents (as well as personal names, pronouns, and all nominals bearing a classifier with animate reference (§4.3)).

### 3.4.4.2.6 Affixation of the oblique suffix to the stem

Within the class of inanimate nouns, we can recognise two subtypes: those which allow the oblique suffix to attach directly to the stem and those which require the oblique marker to co-occur with a classifier. Those which allow direct stem affixation include all (inanimate) inalienable nouns, most body-part terms (i.e. part terms), some spatial dimension terms and some (inanimate) alienable common nouns.
+ (Inanimate nouns (incl. most part terms some inanimate
alienable nouns))

Direct oblique

- (all animate nouns and some inanimate alienable nouns)

Figure 3-7: Direct oblique marking

3.4.4.2.7 Plural number marking

Kin terms are distinguished from all other common nouns by the fact that they
take the distinct plural allomorph, -xuyamdiŋ, while all other common nouns take
-ŋŋ.

3.4.4.2.8 Number marking on the stem

Common nouns fall into two subgroups according to whether they allow dual and
plural affixes directly on the stem (stem + NUM) or whether they require the
presence of a classifier (stem + CL + NUM). Note that those which can allow
direct number marking can also take the stem + CL + NUM form.

stem + NUM: (All kin terms, some part terms, some
alienable nouns)

Direct number

stem + CL + NUM: (some part terms, some alienable
nouns)

Figure 3-8: Direct number marking
3.4.4.3 SEMANTIC CLASSES

The subclasses discussed above were defined in terms of certain structural features. While many of the subclasses correlate with specific semantic features, it is clear that semantic and grammatical classes do not match exactly. In this section we make an explicit account of the extent of grammatical cohesion found within particular individual semantic groupings.

3.4.4.3.1 Animate versus inanimate

Animate nouns correlate closely with certain grammatical features:

- can head object NPs which take accusative marking
- can occur in subject and object NPs which are fully cross-referenced on the verb
- cannot take direct oblique marking
- occur in oblique possessive constructions

However, not all animate common nouns behave alike with regard to number marking.

Inanimate nouns are more diverse, grammatically. Not all inanimate nouns behave alike to direct oblique and number marking possibilities.

3.4.4.3.2 Inalienable versus alienable nouns

Neither inalienable nouns nor alienable nouns constitute a single, coherent grammatical group. Rather, each is composed of a number of subclasses which show varying degrees of correspondence across a range of morpho-syntactic categories.

3.4.4.3.2.1 Alienable nouns

While most alienable nouns occur as free, non-bound forms, they display idiosyncratic behaviour regarding direct oblique and number marking.
CHAPTER 3 - WORD CLASSES

3.4.4.3.2 Inalienable nouns

Two major semantic subtypes can be distinguished amongst inalienable common nouns: kin terms and part terms. Part terms themselves divide into body-part and product, plant-part and spatial dimension nouns.

Kin terms

Kin terms are distinguished from other ‘inalienable’ nouns (as well as most alienable nouns) by the fact that they (i) take a distinct plural allomorph, -xuyamdiŋ (see §5.4.2.2.3) and (ii) never take classifiers. However, in terms of pronominal prefixation, kin terms fall into two discrete classes.

(i) Possessed kin terms

Possessed kin terms are distinguished by the fact that they obligatorily take a pronominal prefix which indicates the person-number features of the possessor to the stem (see §5.4.1). Possessed kin terms include the following:

MARITAL TERMS

-xubyi ‘other participant/s in an exchange marriage’
-xam ‘husband’
-nabi ‘wife’

IN-LAW TERMS

-mida male’s sister’s husband/female’s older sister’s husband
-mug female’s younger sister’s husband
-mkwaxa ‘spouse’s father; spouse’s older sister
-vkwaxa ‘spouse’s mother’

OTHERS

-mgina ‘mother’ -mukat ‘older sister’
-vgina ‘father’ -ramga ‘younger brother’
-vyraru ‘father’s older brother’ -smga ‘older brother’
-xun ‘father’s older sister’ -md ‘son’
-bava ‘mother’s (older) brother’ -naxu ‘daughter’
-mNaru ‘mother’s older sister’ -s ‘grandchild’
(ii) Non-possessed kin terms

In addition to the main class of possessed kin terms, Anamuxra also possesses a small set of kin terms that do not take pronominal possessive prefixing. These invariant, or unpossessable forms are typically used with first or second person possessor in mind. They have two functions: they occur as vocatives as well as the head of core argument NPs of a clause. Each unpossessable kin term has a possessable counterpart which is formally distinct. Examples of non-possessed kin terms and their corresponding possessed equivalents are given in table 3-5:

<table>
<thead>
<tr>
<th>Non-possessed form</th>
<th>Gloss</th>
<th>Equivalent possessed form/s</th>
<th>(see above for semantics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>yam</td>
<td>'Mum'</td>
<td>-mgina, -mNaru, mkwaxa, mgag.</td>
<td></td>
</tr>
<tr>
<td>yiv</td>
<td>'Dad'</td>
<td>-vgina, vNaru, vkwaxa, mgag</td>
<td></td>
</tr>
<tr>
<td>isuva</td>
<td>'mother’s brother’s offspring'</td>
<td>-isuva</td>
<td></td>
</tr>
<tr>
<td>avav</td>
<td>'mother’s brother'</td>
<td>-bava</td>
<td></td>
</tr>
<tr>
<td>midak</td>
<td>'sister’s husband'</td>
<td>-mida</td>
<td></td>
</tr>
<tr>
<td>apayi</td>
<td>'grandparent' (Grandma/Granddad)</td>
<td>-payi</td>
<td></td>
</tr>
</tbody>
</table>

Table 3-5: Non-possessed kin terms

Two of the non-possessed forms, yiv and yam, correspond to the base forms, -v and -m, mentioned above. Not surprisingly, these two forms can be used in reference to any kin relation who can be referred to by possessed kin terms derived from the respective bases.

Other non-possessed kin terms are synonymous with non-derived possessed kin terms. Most such synonymous pairs show some difference in form. For instance, isuva and apayi differ in terms of the presence of word initial vowel, while midak and avav contrast with the possessed equivalents in the presence of word final consonant.
Part terms

Part terms, or inanimate inalienable common nouns, include body-part and product nouns, plant-part terms, and spatial dimension nouns (i.e. nouns which specify some spatial dimension of an entity). As a class, part terms are distinguished by the fact that they do not obligatorily occur as bound forms. However, in other respects there is considerable variation in the grammatical properties displayed by members of this class.

Most part terms take a classifier and oblique marking. These include:

**BODY-PART AND PRODUCT TERMS**

- **-gumr-** ‘eye’
- **-igr-** ‘leg’
- **-kwanN-** ‘stomach’
- **-mir-** ‘tongue’
- **-nk-** ‘hair’
- **sk-** ‘mucus’

**PLANT-PART TERMS**

- **-makaN-** ‘branch’
- **-miv-** ‘shoot/sapling’
- **-skiN-** ‘stick’

**SPATIAL DIMENSION TERMS**

- **sar-** ‘perimeter (of garden, settlement)’
- **sib-** ‘surface, top of’
- **tabuN-** ‘front (of house)’
- **taka-** ‘rear, behind (of house)’
- **(x)akatuxu-** ‘underneath’
- **xiguN-** ‘corner, bend (of road, river, house)’
- **xuyu-** ‘inside’

However, there is a small set of spatial dimension terms which take neither oblique marking nor classifier. These include:

- **savi** ‘middle, centre, in between’
- **simsim** ‘above’
- **xzrkz** ‘near, next to’
Qualifiers are nominals which qualify, or modify the noun of an NP. They are distinguished from nouns and other nominals primarily in that, in expanded versions of the simple NP, they assume post-noun position. There are three main subclasses of qualifiers: adjectives, numerals and referential qualifiers, each of which show distinct morphological and distributional properties.

3.4.5.1 ADJECTIVES
Adjectives are distinguished from other qualifiers by the fact that they occur in the post noun/ pre-numeral position in maximal expansions of the simple NP (§9.2). Furthermore, a number of adjectives can be reduplicated in order to strengthen or weaken their meaning (§5.3.5.1). All adjectives are bound roots and require some inflection for class, and/or number and or/case case (§5.3). There are about fifty adjectives in Anamuxra which can be divided into a number of semantic categories.10

**PHYSICAL PROPERTY**
Adjectives which specify some physical property of an entity constitute the largest of the semantic classes of adjectives. As with other semantic classes of adjectives, most physical property adjectives fall into pairs of opposites. In addition, there are a number of adjectives which appear to be reduplicated but which have no corresponding unreduplicated form.

<table>
<thead>
<tr>
<th>tbu-</th>
<th>‘blunt’</th>
<th>mmimN-</th>
<th>‘crumbly’</th>
</tr>
</thead>
<tbody>
<tr>
<td>ikan-</td>
<td>‘sharp’</td>
<td>tak-</td>
<td>‘strong’</td>
</tr>
<tr>
<td>vi-</td>
<td>‘heavy’</td>
<td>savaN-</td>
<td>‘empty’</td>
</tr>
<tr>
<td>niN-</td>
<td>‘light’</td>
<td>tk-</td>
<td>‘full’</td>
</tr>
<tr>
<td>yivi-</td>
<td>‘dark’</td>
<td>vxapxa-</td>
<td>‘rough’</td>
</tr>
<tr>
<td>manaN-</td>
<td>‘light’</td>
<td>xinakina-</td>
<td>‘crooked’</td>
</tr>
<tr>
<td>xbN-</td>
<td>‘hot’</td>
<td>tt-</td>
<td>‘straight’</td>
</tr>
<tr>
<td>xmN-</td>
<td>‘cold’</td>
<td>msiN-</td>
<td>‘tasty (flavoursome)’</td>
</tr>
</tbody>
</table>

10 These categories are based on those discussed in Dixon 1982.
CHAPTER 3 - WORD CLASSES

vx- ‘dirty’ awud- ‘female’
er- ‘clean’ md- ‘male’
xaar- ‘clean (of water)’

COLOUR

Anamuxra distinguishes five basic colours. A number of these colour terms share the same root form as the nouns which denote entities whose colouring corresponds to the colour identified by the adjective.

<table>
<thead>
<tr>
<th>Term</th>
<th>Gloss</th>
<th>Gloss for corresponding noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>aixi-</td>
<td>‘black/blue’</td>
<td>‘charcoal’</td>
</tr>
<tr>
<td>ati-</td>
<td>‘green’</td>
<td>‘green-leafed plant’</td>
</tr>
<tr>
<td>naguN-</td>
<td>‘red’</td>
<td>‘blood’</td>
</tr>
<tr>
<td>ugaN-</td>
<td>‘yellow’</td>
<td>--</td>
</tr>
<tr>
<td>xya-</td>
<td>‘white’</td>
<td>--</td>
</tr>
</tbody>
</table>

IDENTITY

There are four adjectives which identify the referent of the NP in terms of some other entity. These are:

manaN- ‘same’
mux- ‘other’
su- ‘same’
xtN- ‘different’

ORDINALS

Ordinals are adjectival qualifiers that identify an entity in terms of its position in a series. In many languages, ordinals are derived from numerals. In Anamuxra, however, the set of ordinals do not correlate formally with numerals though some do correspond to other words (see below). The basic set of ordinals in Anamuxra consists of the following monomorphemic forms:
nibuN- ‘first’ (nibuN- ‘head, top’)
savi- ‘middle’ (savi- ‘middle, centre of’)
ag- ‘last’
mux- ‘next’ (mux- ‘other’)

The first three terms are adequate for dealing with series of two or three items. For series consisting of more than three positions, Anamuxra employs the following compounds:

nibuzavi- nibuN-savi second (lit. first middle...)
agsavi- ag-savi- penultimate (lit. last middle....)
savisavi savi-savi middle in odd-numbered series greater than seven

The following chart illustrates the application of the above ordinals to series of three, four, five, six and seven miscellaneous items:

<table>
<thead>
<tr>
<th></th>
<th>nibuN-</th>
<th></th>
<th>nibuN-</th>
<th></th>
<th>nibuN-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>savi-</td>
<td></td>
<td>2</td>
<td>savi-</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>ag-</td>
<td></td>
<td>3</td>
<td>agsavi-</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>ag-</td>
<td></td>
<td>4</td>
<td>agsavi-</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>ag-</td>
<td></td>
<td>5</td>
<td>agsavi-</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>ag-</td>
<td></td>
<td>6</td>
<td>agsavi-</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>ag-</td>
<td></td>
<td>7</td>
<td>ag-</td>
<td></td>
</tr>
</tbody>
</table>

Chart 3-1: Ordinals in series of 3 to 7

11 These series were elicited in relation to birth order.
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**AGE**

- nat- ‘old (of animates)’
- nunu- ‘old (of inanimates)/from time before (of humans)’
- wusu- ‘new, unseen, unknown’
- sibuN- ‘young (of animates)’

**DIMENSION, SIZE AND QUANTITY**

- wot- ‘large, wide’
- wataN- ‘tall, long’
- niNiN- ‘small, narrow’
- vru- ‘short’
- aru- ‘many, a lot of, important (of human)’
- vivi- ‘a few, a little’

**VALUE AND HUMAN PROPENSITY**

- apu- ‘bad’
- aviN- ‘good’
- nagnagN- ‘happy’
- umauma- ‘crazy, stupid’

3.4.5.2 **Numerals**

Numerals are distinguished from other nominal qualifiers by the fact that they can occur in the numeral phrase. The numeral phrase is composed of a combination of binary numerals, body part terms and oblique marked NPs and has the same distribution as single numerals, occurring as the sole constituent in NPs or filling the numeral slot in expanded NPs.

The traditional numeral ~ number system in Anamuxra consists of an extended binary system along with an overlapping base five system which uses the terms for arm/hand, xubugr and leg/foot, aigr. 12

There are distinct monomorphemic numeral forms for ‘one’ miza- and ‘two’ ai-. The base for ‘two’ ai- requires a suffixed dual marker (-rai--xai--maxai)13.

---

12 Binary, or modified binary systems are well attested in Papuan languages, e.g., Alamblak (Bruce 1984), Hua (Haiman 1980), Imonda (Seiler 1985). See Laycock (1975) for discussion of number system types in Papuan languages.

13 See §5.4.2.2.2 for details on the distribution of allomorphs of the dual suffix.
That the dual marker is a separate morpheme is indicated by the fact that it can be preceded by non-residual classifiers. For example,

- **aivukrai** ai-vuk-rai two-CL_{sph-DU} 'two (spherical)'
- **aikuramaxai** ai-kura-maxai two-CL_{male-DU} 'two (males)'
- **aidxai** ai-xd-xai two-root-DU 'two (roots)'

In the residual, or citation form the residual classifier is obligatorily absent (see §5.4.2 for constraints on the co-occurrence of number and classifiers).

The number ‘three’ is usually realised by the phrasal ‘compound’ ai-(xai) maxi-. While ai- clearly denotes ‘two’, maxi- is not attested as an isolable form in other combinations. While this suggests that from an inflectional perspective the ai(xai) maxi- should be regarded as an unanalysable whole the constituents still behave as separate morphological words in other respects. That is, both ai-(xai) and maxi- take classifiers, while ai-xai obligatorily takes the dual suffix.

The number ‘four’ is realised by the repetition of ai-(xai) ‘two’; that is, ai-(xai) ai-(xai). Again, each ‘two’ inflects as a distinct morphological word.

All numbers beyond four are based on xubgr ‘lit. arm/hand’ and aigr ‘lit. leg/foot’. ‘Five’ is expressed by xubugr. There are two means of forming the numbers ‘six’ to ‘nine’, though both are built on xubugr. First, xubugr can simply be followed by numbers ‘one’ to ‘four’.

---

14 aigr is slightly different form to the base form -igr. Note also that neither xubugr nor aigr take the residual classifier when functioning as numerals.
Second, *xubugr* can be followed by *upri* (i.e. *u-* ‘indefinite article’ + *vru* ‘side’ + *i* ‘OBL’), which in turn is followed by numbers ‘one’ to ‘four’.

*xubugr upri mza-* ‘six’ (lit. hand (five) on one side one)
*xubugr upri ai-(xai) ‘seven’
*xubugr upri ai-(xai) maxi- ‘eight’
*xubugr upri ai-(xai) ai-(xai) ‘nine’

‘Ten’ is realised by the reduplication of *xubugr*; that is, *xubugr xubugr*. Numbers ‘eleven’ to ‘fourteen’ can either be formed by simply adding numbers ‘one’ through ‘four’ to *ubugr xubugr*, or with ‘ten’ followed by *aigri* ‘arm/hand-OBL’ plus numbers ‘one’ through ‘four’.

*xubugr xubugr (aigri) mza-* ‘eleven’ (lit. hand hand on leg one)
*xubugr xubugr (aigri) ai-(xai) ‘twelve’
*xubugr xubugr (aigri) ai-(xai) maxi- ‘thirteen’
*xubugr xubugr (aigri) ai-(xai) ai-(xai) ‘fourteen’

‘Fifteen’ is formed with *xubugr xubugr* plus *aigr*. Numbers from ‘sixteen’ to ‘nineteen’ are formed in a similar manner to numbers ‘six’ to ‘nine’. That is, numbers ‘one’ to ‘four’ can either simply follow the base for ‘fifteen’, or can be preceded by *upri* (*u-vru-i* ‘IA-CLside-OBL’).
CHAPTER 3 - WORD CLASSES

xubugr xubugr aigr (upri) mza- hand leg  
’sixteen’ (lit. hand on one side one)

xubugr xubugr aigr (upri) ai-(xai)  
‘seventeen’

xubugr xubugr aigr (upri) ai-(-xai) maxi-  
‘eighteen’

xubugr xubugr aigr (upri) ai-(xai) ai-(xai)  
‘nineteen’

‘Twenty’ is formed by compounding the reduplicated forms xubugr xubugr ‘ten’ and aigr aigr. Numbers greater than ‘twenty’ are simply ‘twenty’ plus ‘one’ and so on. However, two features must be noted of these higher numbers. First, numbers ‘twenty one’ to ‘twenty four’ can alternatively be expressed by ‘twenty’ plus xubugri ‘arm/hand-OBL’ plus numbers one to four. Second, owing to the fact that numbers are closely related to body-part terms and that the body-part terms can provide distinctive numbering up to twenty only, speakers sometimes distinguish different series of twenty by adding pronominal prefixes to xubugr and aigr to specify whose limbs are being referenced. For example,

(3-9) yaxubugr yaxubugr yaigr yaigr
    ya-xubugr ya-xubugr ya-igr ya-igr
    1SGPRO-arm 1SGPRO-arm 1SGPRO-leg 1SGPRO-leg

naxubugri mza-
na-xubugr-i mza-
2SGPRO-arm-OBL one-
‘twenty one (lit. my arm, my arm, my leg, my leg, on your arm, one)’
Finally, it should be noted that post-European contact the traditional number/counting system has been replaced in many domains such as money, time and distances by Tok Pisin numbers.15

### 3.4.5.3 Referential Qualifiers

Referential qualifiers are distinguished from other nominals by their occurrence in phrase-final position of the expanded simple NP. All referential qualifiers take classifiers, number and case. As well as acting as modifiers in expanded NPs, all referential nominals can function as proforms when occurring as the sole constituent of the NP (see below).

Three types of referential qualifier may be distinguished: deictics, the demonstrative and the indefinite pronoun.

#### 3.4.5.3.1 Deictics

Deictics consists of three terms, listed below, each of which serves to locate the position of an object or entity in space or time.

---

15 The substitution of traditional counting systems by the Tok Pisin numeral system is a widespread feature of language contact across Papuan languages (see Apali (Wade 1989), Hua (Haiman 1980), Yimas (Foley 1991)).
3.4.5.3.2 Demonstrative

The demonstrative is a monosyllabic root *ad*- which has no inherent spatial/temporal co-ordinates. Like body-part terms, alienable nouns, and adjectives, the demonstrative may form a complex unit which incorporates one of the deictic stems listed above (see §5.3.3.3 for details).

- *ad-i-* \(\text{DEM-PROX}\) ‘this/here’
- *ad-a-* \(\text{DEM-ND}\) ‘that/there’
- *ad-aku-* \(\text{DEM-FD}\) ‘that/there’

These demonstrative-deictic forms have the same possibilities regarding physical and temporal co-ordinates as do basic deictic forms.
In addition to the deictic form, the demonstrative may be used without an incorporated deictic in reference to a particular entity whose location is unknown. This lack of deictic specification is highlighted by the fact that only the non-deictic demonstrative may be used in questions relating to the whereabouts of some entity. For example,

(3-11)  
\[ \text{Adka} \quad \text{abki} \quad \text{sia} ? \]
\[ \text{ad-ka} \quad \text{ab-ki} \quad \text{s-i-a} \]
\[ \text{DEM-CL} \quad \text{GQW-OBL} \quad \text{be-NT-3SGS} \]

‘Where is it?’

(3-12)  
* \[ \text{Adika} \quad \text{abki} \quad \text{sia}? \]
\[ \text{ad-i-ka} \quad \text{ab-ki} \quad \text{s-i-a} \]
\[ \text{DEM-PROX-CL} \quad \text{GQW-OBL} \quad \text{be-NT-3SGS} \]

3.4.5.3.3 Indefinite article

The indefinite article *u-* ~ *uvaN-* modifies a noun whose referent lacks specific identification and can be translated variously as ‘some’, ‘one’ or ‘a’. For instance,

(3-13)  
\[ \text{mugupa} \quad \text{utavi} \quad \text{nmzapari.} \]
\[ \text{mugu-pa} \quad \text{u-tav-i} \quad \text{nmza-pa-ri} \]
\[ \text{house-CL} \quad \text{IA-CL, obl-OBL} \quad \text{enter-FP-3SGS} \]

‘He entered one house.’

3.4.5.3.4 Referentials as proforms

All three types of referential qualifiers can function as third person pronominal forms when occurring as the sole constituent of the NP. For example,

(3-14)  
\[ \text{“Im} \quad \text{nbia.”} \quad \text{varapaña.} \]
\[ \text{i-m} \quad \text{nb-i-a} \quad \text{para-pa-Na} \]
\[ \text{PROX-CL, male} \quad \text{die-NT-3SGS} \quad \text{say-FP-3PLS} \]

‘“This (male) died.” they said.’
(3-15)  

\[ \text{Ukura} \quad \text{mavakurpa} \quad \text{xraparimana}, \]

\[ \text{u-kura} \quad \text{mava-kur-pa} \quad \text{kra-pa-ri} \]

\[ \text{IA-CL} \quad \text{sago-roasted.in.fire-CL}, \quad \text{cook-FP-3SGS-DS.SIM} \]

\[ \text{ukura} \quad \text{xrapari}. \]

\[ \text{u-kura} \quad \text{kra-pa-ri} \]

\[ \text{IA-CL} \quad \text{cook-FP-3SGS} \]

‘One (man) cooked roasted sago, while one (man) cooked (it).’

This pronominal use of deictics and demonstratives is extremely common in Anamuxra and perhaps explains the dearth of third person pronouns in naturally occurring texts.

Besides their use as pronominals, referentials can also function as proforms with the appropriate affixes for various adverbs including temporals (§3.6.1), locationals (§3.6.2), manner (§3.6.3) and frequency adverbs (§3.6.4).

3.4.6 Question-words

Question words constitute a small closed class of words used to ask content questions. They are classified as nominals on the basis of the syntactic and morphological similarities they share with nominals of other classes. However, they differ from all other nominals in their association with interrogative mood.

There are five basic question words in Anamuxra, from which a number of other common question words or expressions are derived. These are:

- **ab-**  
  ‘general question word (GQW) - ‘which?’

- **abxi**  
  ‘what (action)/ (how)’

- **anamuxra**  
  ‘what?’

- **anamN-**  
  ‘what kind (of)?’

- **nan**  
  ‘who, whom, what (of name)?’

Each of these will be discussed in the sections that follow.
CHAPTER 3 - WORD CLASSES

3.4.6.1  **AB- ‘GENERAL QUESTION WORD (GQW)’**

3.4.6.1.1 Introduction

The general question word *ab*- ‘which’ is distinguished from other question words on the basis that it must take a classifier and/or direct oblique marking and by the fact that it can be used for humans, animals and inanimate objects. Formally and functionally, *ab*- is closely associated with the class of nominal referential qualifiers. Like deictic and demonstrative referentials it takes the short form of the male and female classifiers (-*m* ‘male’, -*na* female’) in contrast with most other nominals which take the long forms (-*kura* ‘male’, -*nad* ‘female’).

<table>
<thead>
<tr>
<th>GQW + CL</th>
<th>ND + CL</th>
</tr>
</thead>
<tbody>
<tr>
<td>abka ? GQW-CLres</td>
<td>aka ND-CLres</td>
</tr>
<tr>
<td>abm ? GQW-CLmale</td>
<td>am ND-CLmale</td>
</tr>
<tr>
<td>abmka ? GQW-CLnh,anim</td>
<td>amka ND-CLnh,anim</td>
</tr>
<tr>
<td>abna ? GQW-CLfem</td>
<td>ana ND-CLfem</td>
</tr>
<tr>
<td>abvwa ? GQW-CLsettlement</td>
<td>avwa ND-CLsettlement</td>
</tr>
</tbody>
</table>

*Ab*- cannot take the residual classifier when inflected either for oblique case (§5.4.2.3) or dual or plural number (§5.4.2.2).

Distributionally, *ab*- occurs in the same position as referentials in expanded simple NPs (§9.2). Note, though, that this use of *ab*- is rare and *ab*- usually occurs as a pro-interrogative in the same way that referentials also function as proforms.

The similarities *ab*- shares with adjectives and referentials are reflected by the fact that the information that *ab*- requests can be provided by definite referentials. For instance the question in (3-16) could be answered with the response in (3-17).

(3-16)  

*Mugupa*  
*mugu-pa*  
*house-CLres*  
‘Which house?’

(3-17)  

*abtav ?*  
*ab-tav*  
*GQW-CLshelt*
CHAPTER 3 - WORD CLASSES

(3-17) \textit{adakutav}
\begin{itemize}
  \item ad-aku-tav
  \item DEM-FD-CL\textsubscript{shel}.
\end{itemize}
‘that (house)’

3.4.6.1.2 Questions about location, time and instrument

When \textit{ab-} is inflected by an oblique marker, it can function as a nominal adjunct to query the temporal or spatial setting of an event, or the instrument used to perform an action. Importantly, we can distinguish two types of such oblique questions: those which presuppose a set of possible locations, temporal settings or instruments used, which I shall call the ‘marked’ type; and, those in which there is no presupposed set identified, which I shall call the ‘unmarked’ type.

Marked oblique questions are typically formed from \textit{ab-} by adding a classifier, which indicates the presupposed set plus the oblique suffix. (Recall that direct oblique marking is only possible in the case of inanimate referents.) For example,

\textbf{TEMPORAL}

(3-18)
\begin{itemize}
  \item \textit{Abxvi vibata ?}
  \item \textit{ab-xv-i vi-ba-ta}
  \item GQW-CL\textsubscript{day-OBL} come-FUT-2SGS
\end{itemize}
‘On which day (when) will you come?’

\textbf{LOCATIONAL}

(3-19)
\begin{itemize}
  \item \textit{Abtavi tamia ?}
  \item \textit{ab-tav-i tam-i-a}
  \item GQW-CL\textsubscript{shel-OBL} put-NT-3SGS
\end{itemize}
‘In which house did she put (it)?’

\textbf{LOCATIONAL}

(3-20)
\begin{itemize}
  \item \textit{Abvwai sapaNa ?}
  \item \textit{ab-vwa-i sa-pa-Na}
  \item GQW-CL\textsubscript{set-OBL} be-NT-3PLS
\end{itemize}
‘At which village were they?’
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INSTRUMENTAL

(3-21) 
Abvuki
ntuwuina?

\textbf{ab-vuk-i} n-tuwu-i-na

DEM-\text{CL}_{nbo}-OBL 3SGO-hit-NT-2SGS

'Which (stone) did you hit it with?'

Note, however, when \textit{ab-} is marked by the classifier \textit{-tuwu} 'point in time', it can be used to query the time of an event without the presence of oblique marking.

(3-22) 
Abtuwu
vasxia?

\textbf{ab-tuwu} vasx-i-a

GQW-\text{Cl}_{p,i} arrive^{16}.NT-3SGS

'(When) which time did she arrive (at the settlement)?'

In contrast to marked questions, unmarked oblique questions are formed by simply adding the oblique suffix \textit{-ki} to \textit{ab-}, without a classifier. For example,

(3-23) 
Yaka
maitapa
abki
sia?

ya-ka maitapa \textbf{ab-ki} s-i-a

1SGPOSS-PW machete-\text{CL}_{res} GQW-OBL be-NT-3SGS

'Where is my machete?'

(3-24) 
Abki
tamina?

\textbf{ab-ki} tam-i-na

GQW-OBL put-NT-1SGS

'Where did you put (it)?'

3.4.6.2 \textit{abxi} 'HOW(WHAT)?'

Although \textit{abxi} may be related to \textit{ab-} historically, synchronically it must be treated as unanalyzable since \textit{xi} is not an isolatable morpheme. \textit{Abxi} commonly occurs with the generic verb \textit{t-} 'do' to produce questions about the nature of an action or event. For example,

\textbf{\textsuperscript{16} va}sx- denotes a situation where someone approaches or arrives specifically at a settlement.
Abxi can also be reduplicated to derive a question word with the meaning ‘how many/much/long?’. For example,

(3-26)  
\[ \text{Mugupa} \quad \text{abxiabxi} \quad \text{sia} \quad ? \]  
mugu-pa  \quad \text{abxi-abxi}  \quad s-i-a  
house-\text{Cl}_{\text{res}}  \quad \text{what-\text{RDL}}  \quad \text{be-NT-3SGS}  
‘How many houses are there?’

3.4.6.3 ANAMN- ‘WHAT KIND OF?’

AnamN- is used to query, or ask for specification of the kind of the entity under question. Formally, it is a common noun and always occurs as the first constituent of a compounding structure along with the noun which denotes the entity whose classification is being queried.

(3-27)  
\[ \text{Anamzaxuba} \quad ? \]  
\[ \text{anamN-saxuN-pa} \]  
\[ \text{what.kind.of-pig-\text{Cl}_{\text{res}}} \]  
‘What kind of pig? (i.e. is it a wild pig, white pig, small pig etc)’

(3-28)  
\[ \text{Anamguraba} \quad ? \]  
\[ \text{anamN-xuraN-pa} \]  
\[ \text{what.kind.of-person-\text{Cl}_{\text{res}}} \]  
‘What kind of person?’

It is no coincidence that the same compounding structure is found in general hyponymic compounds where the superordinate is realised as the first constituent and the hyponym is realised as the second noun (§5.3).

A clearly related form, anamg ‘what (its name)?’ is often used as a kind of hesitation form when a speaker is unsure about the participant or event he/she is talking about.
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3.4.6.4 ANAMUXRA ‘WHAT?’

Anamuxra is typically used in questions about the identity of inanimate objects and can be found in NPs bearing subject, object, instrument syntactic functions. It can also function as the predicate in non-verbal clauses.

(3-29)  
Adaka  
anamuxra ?

ad-a-ka  
anamuxra

DEM-ND-CL_{res}  
what

‘What is that?’

Questions relating to purpose (i.e., ‘why?’ questions) are formed with anamuxra as the object of the predicate -pa- ‘think’, which always occurs in the non-switch referent sequential medial form (§7.7; also §11.3).

(3-30)  
Anamuxra  
vata... ?

anamuxra  
va-ta

what  
think-2SGS

‘why did you do that? [lit. you think about what and so you...?]’

3.4.6.5 NAN ‘WHO?’

Nan ‘who/what (of names)?’ has two main functions. First, as shown in examples (3-30) to (3-32) it can be used to query the identity of human participants in various grammatical functions in the clause. Nan behaves like free pronouns and personal names in that it can only occur as the sole constituent of the NP. Morphologically, it takes dual and plural marking and when functioning as the object in verbal clauses, it takes accusative marking. Furthermore, given its association with animate referents, it must occur in the possessive oblique construction when questioning the identity of a participant in an oblique relation.

(3-31)  
Agwu  
wuitivka  
nan  
vt  
tamia ?

aN-xwu  
wuitiv-ka  
nan  
p-t  
tam-i-a

1sgPoss-PW  
firewood-CL_{res}  
who  
get-3SGS  
put-NT-3SGS

‘Who got our firewood and put (it)?’
(3-32)  
Nanx   nkuina?
nan-x   n-ku-i-na
who-ACC.SG  3SGO-give-NT-2SGS

’Who did you give it to?’

(3-33)  
Nan   n-xwu-ki   vina?
nan   n-xwu-ki   vi-i-na
whom  3SGPOSS-PW-OBL  come-NT-2SGS

’You came to whom?’

Nan is also used to form questions which query a person’s name, as shown in

(3-34):¹⁷

(3-34)  
Nabipa   nan?
na-bi-pa   nan
2SGPOSS-name-CLres  what

’What is your name?’

¹⁷ The equivalent form, ani ‘who’ in Apal, a related language displays a similar pattern of use
(Wade 1989: 150).
3.5 Verbal Adjuncts

A verbal adjunct is a word that occurs only in combination with the generic verb -t- ‘do’ to form a phrasal compound which expresses some kind of physical or mental condition (see §8.5.2). Examples are:

- **aki** ‘bitter’
- **iwuwu** ‘stickiness (of skin)’
- **mk** ‘an unpleasant effect’
- **nigi** ‘hunger’
- **tigi** ‘thirst’
- **vrpr** ‘weakness’

A couple of adjuncts such as **iwuwu** and **vrpr** display evidence of duplication, while **nigi** shows some correspondence to the noun **nN**- ‘food’ (itself derived from the verb **n**- ‘eat’). However, all adjuncts are unanalyisable and are unrelated to words belonging to other classes. They do not take classifiers, number or case marking and they cannot be modified by nominal modifiers. Adjuncts must immediately precede the verb; that is, nothing can come between them and the verb.

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18 Verbal adjuncts are a common feature of many Papuan languages (see Amele (Roberts 1987), Fore (Scott 1978), Imonda (Seiler 1985), Kalam (Pawley et al 2000), Lavukaleve (Terrill 1999)). In some languages, such as Kalam, they represent a core means of expanding the verbal lexicon. Pawley et al provide the following characterisation of verbal adjuncts in Kalam:

A verbal adjunct is a word or phrase that occurs only in partnership with a verb root, helping to define its meaning more specifically and which, together with the verb root, forms a complex verb. They differ from clausal adverbs in that verbal adjuncts always form a constituent with the verb, although not necessarily a continuous constituent. True verbal adjuncts cannot stand in a case relation with the verb, i.e. cannot be Subject, Direct Object, Locative, etc., cannot be possessed or modified by an adjective, and cannot modify a noun. However, there is a cline between true adjuncts and quasi-adjuncts that have adverb-, adjective- and noun-like properties (Pawley et al (1998: 5)).

Note that the term ‘adjunct’ as used by Pawley and others within the Papuan tradition languages differs from the more general current use of the term as a cover-all for any non-core material within the clause.

19 As noted in Foley (1986:119-120) the use of generic, or semantically bleached verbs is a particular feature of adjunct plus verb complex predicates in Papuan languages.
Besides adjuncts such as those above, there are a number of quasi-adjuncts that also combine with t- 'so' in phrasal compounds to express some kind of mental or physical condition. For example,

- **akuku-** 'tiredness'
- **apu** 'bad'
- **avi** 'good'
- **avrasrusru** (compound of **ava** 'saliva', **srusru** 'slippery'): describes the (unpleasant) effect of sago on the mouth which puts people off eating their food
- **yaku**- 'exhaustion'
- **mn** 'mucus'
- **vra**- 'sickness/illness'
- **xub** 'hot'
- **xmyi** 'cold'

When these words occur in condition phrasal compounds they display the following morphosyntactic characteristics:

(i) They lack post stem inflection, i.e., classifiers, number and case marking (whereas nouns and adjectives occurring as independent words in NPs must take post-stem inflection)

(ii) They occupy a fixed position with relation to verb (not true of NPs).

(iii) They cannot be modified (not true of nouns and adjectives in NPs)

However, these 'quasi-adjuncts' are distinguished from the set of 'true' adjuncts on the basis that they can be classified as nouns or adjectives (i.e. they can occur elsewhere as constituents of NPs which can bear subject, object or oblique relations in various clause types).

Adjunct plus verb clause types are discussed in §8.5.2 and §10.2.5.6.
3.6 Adverbs

Adverbs are words that modify constituents other than nouns (see Schachter 1985: 20). While many nominals can also serve as adverbial adjuncts, we can distinguish between ‘true’ adverbs and their nominal counterparts on the grounds that nominal adjuncts generally bear oblique marking whereas adverbs do not. A number of subtypes of adverbs can be distinguished including temporals, locationals, as well as adverbs of manner, frequency, negation and few other types. Adverbs can be divided into those that have scope over the entire clause or modify the predicate of the clause. Adverbs of all types in Anamuxra show relative flexibility in terms of their distribution within the clause. While adverbs with clause level scope such as temporals and locatives tend to occur clause initially, and adverbs such as manner adverbs which typically modify the verbal predicate tend to occur adjacent to the verb, these patterns reflect statistical probabilities rather than strict ordering rules.

Finally, apart from oblique marking, and a few other means of deriving adverbs from other word classes, Anamuxra also allows a few words which possess morphological properties of other word classes to be used as adverbs without any overt marking of the change of function.

3.6.1 Temporals

Temporals function as adjuncts with scope over the entire clause which specify the temporal setting of an event. They generally occur clause initially, though this is not obligatory. The class of temporal adjuncts in Anamuxra consists of several subclasses including day counters (§3.6.1), parts-of-day terms (§3.6.2), seasonal terms (§3.6.4) and a few other miscellaneous words (§3.6.5). There are also a number of nominals and classifiers which can serve as temporal adjuncts when they occur in oblique-marked NPs (§3.6.5).
3.6.1.1 DAY COUNTERS

Day counters identify the day on which an event takes place relative to the moment of speaking. All day counters in Anamuxra are underived, monomorphemic forms that can occur either as independent words in the clause or as the first constituent of the temporal complex (see §3.6.1.4 below). The full range of day counters are:

- *anuy* two days ago ~ before
- *aya* yesterday
- *adi* today ~ now
- *amu* tomorrow
- *ayir* day after tomorrow
- *apuyar* three days hence
- *nikan* four days hence
- *arabagin* five days hence

Notice that the term *adi* can be used to mean either ‘today’ or ‘now’, while *anuy* can be used with the specific meaning ‘two days ago’ or with the more general meaning ‘before’. Of the eight day counters, *apuyar, nikan* and *arabagin* are the least commonly used.20

3.6.1.2 PARTS-OF-DAY TERMS

Parts-of-day terms specify particular parts of a twenty-four hour period. Such terms can either occur as independent words or as the second term in a temporal complex (3.6.1.4).

20 This ‘marginal’ status is reflected by the fact that there is some confusion amongst speakers about their relative ordering.
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**yivynimsavi** middle of the night (11 - 2ish)

**uwudwai** post-midnight/pre-dawn (approx. 2am until sunrise)

**yivsa** morning (sunrise until about 11am)

**inasavi** middle of the day (from around 11am until 2pm)

**xzr** afternoon (from about 2pm until sunset)

**yiviaga** night (from sunset until around midnight)

**uwagzr** evening (sunset till 7ish)

Most partition terms refer to a period measured in terms of the position of the sun and/or the moon. Thus, **inasavi** refers to the part of the day when the sun is at the top of its arc, **xzr** specifies the period when the sun is in its descent, while **yiviaga** refers to the period when the sun has gone and the moon is in its ascent.

The term **inasavi** is segmentable into ina- sun plus savi ‘middle’. **Yiviaga** ‘night’ can also be segmented into yivi- ‘dark’ and -aga ‘CLres’. Because it carries a classifier, it lays some claim to being analysed as a nominal (adjective). As with other adjective nominals, yivi can be verbalised, as shown here:

(3-35)  

**yivipari**  

yivi-t-pa-ri  
dark-do-FP-3SGS  
‘It (became) dark’

Note, however, that **yiviaga** is not a true adjective: it cannot be used as a constituent of an NP (i.e. it cannot take number or case marking, and cannot modify nouns).

Finally, the terms **uwagzr** and **yivynimsavi** are both complex forms. However, unlike **inasavi**, both contain non-isolable morphemes.

(3-36)  

**uwagzr**  

uwaN-xzr  
??-afternoon  
‘evening’
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(3-37) yivNnimsavi
   yiv-\textsc{Nnim}-savi
dark-??-middle
   ‘middle of the night (midnight)’

3.6.1.3 SEASONAL TERMS
Anamuxra speakers recognise two seasons: \textit{sibi}- ‘wet season’ (approximately November to April) and \textit{inaxava-} dry season (approximately May to October). Both seasonal terms also occur as nouns. As nouns, these both take classifiers and number marking. When functioning as temporals, both occur without nominal inflection, and cannot be modified by adjectives etc. Seasonal terms are distinguished from day counters and parts-of-day terms on the basis that they cannot occur as part of the temporal complex.

3.6.1.4 THE TEMPORAL COMPLEX
As mentioned above, the day lexemes and parts-of-day lexemes are distinguished by their ability to combine to form a ‘temporal complex’. Such complexes, which have the same distribution as single temporal words, exhibit a strict constraint on their internal ordering which requires the day counter to occur before the part of the day counter. For example,

(3-38) Aya yivsa vdatxam adiki
      \texttt{aya} \texttt{yivsa} \texttt{vdatx-m} \texttt{ad-i-ki}
yesterday morning get.up-1SGS DEM-PROX-OBL

\textit{mudub} \textit{vam}
mudu-b va-m
come.up-OPT think-1SGS

“Yesterday morning I got up and I wanted to come here...’

(3-39) Adi yiviaga vasxbat.
      \texttt{adi} \texttt{yiviaga} \texttt{vasx-ba-t}
today night come.up-FF-3SGS

‘Tonight he’ll come up.’
3.6.1.5  EXPRESSION OF TEMPORAL SETTING BY OTHER MEANS

In addition to the temporals discussed above, there are a number of nouns which denote temporal entities or concepts, including:

\[
\begin{align*}
    &\text{igN-aba} & \text{‘day’} \\
    &\text{tauN-aba} & \text{‘month’} \\
    &\text{yavasibi-pa} & \text{‘year’} \\
    &\text{yavaxar-pa} & \text{‘year’}^{21}
\end{align*}
\]

These are distinguished from true temporals by the fact that in order to function as a temporal adjunct they must occur as a constituent of an oblique-marked NP.

There are several classifiers whose domains include various temporal concepts which attach to a nominal that can be used as a temporal adjunct. These classifiers include:

\[
\begin{align*}
    &-xv & \text{‘day’} \\
    &-tuwu & \text{‘point in time’} \\
    &-sibi & \text{‘wet season, year’}
\end{align*}
\]

For example,

(3-40) \( Ixvi \quad mugut... \)
\( i-xv-i \quad mugu-t \)
\( \text{PROX-CL}_{\text{day}-\text{OBL}} \quad \text{go.down-3SGS} \)
\( \text{‘On this day he went down...’} \)

3.6.2  Locationals

Locationals identify the location or direction of an action, event or object with or without respect to something or someone. Like temporals, locationals always function as adjuncts in the clause. While most nominals, including location names and oblique marked NPs, can also function as locational adjuncts, ‘true’ locationals are formally distinguished as a class by the fact that:

\[21\] The nature of the contrast between \textit{yavasibi-} and \textit{yavaxar-} requires further research. Note that the form \textit{yava-} occurs in both. However, this has no independent meaning. Nor does \textit{-xar}.
(i) They indicate spatial relations without the presence of either oblique suffix or by -vru-i ‘CLsection-OBL’ (whereas nominals other than non-location names, including relational nouns, cannot)

(ii) They do not freely occur as the core argument of predicates (in contrast to location names, which can)

The set of true locationals consists of the following terms:

- **akik** ‘long way off’
- **ngum** ‘close(by)’
- **sapap** ‘high up’
- **amug** ‘down, below’
- **avuav** ‘across’

Examples of **sapap** and **avuav** are given in the following examples.

(3-41) *Ugarapa* **sapap** **vmia.*

ugara-a-pa **sapap** **vm-i-a**
bird-CL,..,,. high.up **fly-NT-3SGS**

‘A bird is flying high up.’

(3-42) *Avuav* **wupari.*

**avuav** kwu-pa-ri
across **go-FP-3SGS**

‘He went across.’

There are also a small number of nominals which commonly act as locational adjuncts in the clause. Unlike the set of free locationals, these take classifiers and can function elsewhere as nouns. When serving as locationals these are marked by -vru-i ‘CLside-OBL’.
3.6.3 Manner adverbs

There is a small set of non-derived adverbs which specify the manner in which an action or process is carried out.

- **sarwe** ‘quickly’
- **mayar** ‘quickly’
- **vnam** ‘slowly; gently’
- **kuxbai** ‘easily; slowly’
- **arumnai** ‘strongly; quickly’

In all cases except *arumnai*, either full or partial reduplication may be applied to indicate greater intensity. (An adverb may take just one of these options). For example;

**FULL**

- **sarwe sarwe** ‘very quickly’
- **mayar mayar** ‘very quickly’

**PARTIAL**

- **vnam-nam** ‘very slowly/gently’
- **kuxbai-xbai** ‘very slowly’
Other manner adverbs are derived from nominals by the affixation of -vi 'way/manner'. For example,

- **aviN-vi** good-way ‘well’
- **apu-vi** bad-way ‘badly’
- **er-vi** dirty-way ‘dirtily’
- **mavNvi** nice-way ‘nicely’
- **nagnagN-vi** happy-way ‘happily’
- **tiguN-vi** rigid-way ‘rigid(ly)’
- **xtN-vi** different-way ‘differently’

There are a couple of words such as *suxvi* ‘same way’, which always occur with -vi. While historically these may have been regularly derived, synchronically they must be included in the set of unanalyzable (i.e. monomorphemic) manner adverbs.

Pro-manner adverbs are formed by adding -vi to a referential nominal:

- **a-vi** near distal deictic-way thus (that way)'
- **i-vi** PROX-way ‘thus (this way)’
- **u-vi** indefinite article-way ‘some way’

### 3.6.4 Adverbs of frequency and repetition

There are a handful of words which can specify the frequency or repetition of an action or process.

- **aruka** ‘for a long time, a lot’
- **skwi skwi** ‘all the time, continuously’
- **sxa** ‘again’
- **vivimuku** ‘for a little while’

Both *aru-ka* 'many, a lot-CLres' and *vivi-muku* 'a little-CLsm.am' are identical to adjective plus classifier forms.
Adverbs of specifying the number of times an action is carried out (i.e. adverbs of frequency) are derived from numerals through the addition of the classifier -xavu (§4.3). For example,

(3-43) \( Mzaxavitaya \ nsimupan. \)
\[ mza-xavu=taya \ n-simu-pa-n \]
\[ \text{one-CL=just 3SG0-spear-FP-1SGS} \]
'I speared it (the pig) just once.'

3.6.5 Miscellaneous adverbs

There is a small set of words which can be included in the class of adverbs which do not fit in the classes discussed so far. These express a range of meanings and include:

- ikuka 'just'
- mdadinaga 'together'
- sava 'just; only'
- sasaba 'around, scattered'
- sxam 'very; completely'

Sava 'just, only' corresponds in form to the root of the adjective sava(N)- 'empty'.

3.7 Negative irrealis amu

Amu negates future/irrealis clauses. It is one of three negators in Anamuxra, the others being -ma and -mazxa (see §3.7). Amu is distinguished by its invariant morphological form and by its flexible distribution in the clause.\(^{22}\)

\(^{22}\) Note the formal similarity between the negative irrealis word amu and the day counter amu 'tomorrow'. Although both indicate future or irrealis time frames, they are clearly not the same word given the act that amu 'negative' possesses a negative polarity value, which amu 'tomorrow' lacks.
Irrealis verb inflection is discussed in §7, while negation of clauses is discussed in §9.

3.8 Negatives -ma, -mazxa

While -ma ‘negative (REALIS)’, -mazxa ‘not yet’ are semantically related to the negative irrealis amu, the latter two are distinguished as a distinct class by their particular morphological characteristics.23 Unlike amu, which is morphologically invariant, both -ma and -mazxa require a pronominal prefix indicating the person-number features of the subject argument of their clause (§6.4.1). Significantly, in most cases this pronominal prefix is the only means of cross-referencing in the clause as the verb is inflected by the invariant negative marker -ba (for details see §7.6; §10.4). This morphological feature, then, distinguishes -ma and -mazxa from all other word classes (note that subject cross-referencing on the verb is realised through suffixes).24

Finally, while -ma is typically used to negate clauses in realis mood it can be used in irrealis clauses in place of amu.

3.9 Reciprocal aba

The reciprocal word aba is one of the few valency changing morphemes in Anamuxra and serves to indicate that two or more participants perform the same action with respect to each other.

Reciprocal constructions are discussed in §10.2.5.8.

23 mazxa is clearly related to -ma. One possible explanation is that it is a compound of -ma and sxa ‘again’ though this needs further investigation.

24 Z’graggen (1980) treated -ma as a verbal prefix. However, as shown in (10.4) -ma and the verb can be separated by other clause material.
3.10 Reflexive -xabi self

The word -xabi 'self' constitutes a word class of its own on the basis of its morphosyntactic and functional characteristics. It requires a pronominal prefix which indicates the person and number features of its referent. Despite the fact that the pronominal prefixes that -xabi takes are identical to those found on inalienable nouns such as body-part terms and kin-terms, -xabi is not a noun and does not head an NP. This is demonstrated by the fact that it cannot take number marking, nor can it be modified by a post-noun qualifier as can other nouns.25

Reflexive constructions are discussed in §10.2.5.7.

3.11 Discourse particle nxa

The final single member class is that represented by the discourse particle, nxa 'now/then'. Nxa is used to mark a change in the thematic progress in a narrative. It does not inflect and generally occurs as the first constituent of medial clause. For example,

(3-44)  
\[
\begin{align*}
\text{Namg}, & \quad \text{yiv=ti} & \quad \text{avasri-pa} & \quad \text{xriyai}, \\
\text{na-mn} & \quad \text{yiv=ti} & \quad \text{avasri-pa} & \quad \text{kr-i-ga-i} \\
\text{eat-1PLS} & \quad \text{dad=COM} & \quad \text{sago.soup-CL} & \quad \text{cook-NT-3PLS-DS.SEQ} \\
adaka & \quad \text{namg}, & \quad \text{nxa} & \quad \text{yi} & \quad \text{nigmm}, \\
ad-a-ka & \quad \text{na-mn} & \quad \text{nxa} & \quad \text{yi} & \quad \text{n}\text{ŋ}-m-\text{m} \\
\text{DEM-ND-CL} & \quad \text{eat-1PLS} & \quad \text{then} & \quad \text{1SGPRO} & \quad \text{3PLO}-\text{leave-1SGS} \\
muduin. \\
mudu-i-n \\
go.up-NT-1SGS \\
\text{‘We ate, and then father and all cooked sago soup, and then we ate then, and then, I left them and went up.’}
\end{align*}
\]

25 The lack of accusative marking and cross-referencing on the verb does not necessarily disprove -xabi's claim to membership of the class of nouns. As we have seen, both options are only available to nouns or NPs with animate referents and it is not clear whether the notion of 'self' should be considered animate or inanimate in Anamuxra.
3.12 Clitics

Clitics have distinct distributional and phonological properties. Specifically, members of the class clitics occur in close construction with clause level constituents immediately to their left. Most attach to a variety of constituents such as NPs, adverbs, predicates, or the whole clause. Phonologically, these forms display a high degree of boundedness with the final element of the preceding constituent. The set of clitics found in the corpus include:\(^{26}\)

\[
\begin{align*}
=ma & \quad \text{‘Polar Question (PQ)/FOCUS’} \\
=pu & \quad \text{‘first’} \\
=puta & \quad \text{‘too, as well’}^{27} \\
=taya & \quad \text{‘just’} \\
=taga & \quad \text{‘(NP) conjunction/comitative’} \\
=ti & \quad \text{‘(NP) conjunction/comitative’} \\
=xaka & \quad \text{‘suppositional’} \\
=xan & \quad \text{‘FOCUS’} \\
=xnaka & \quad \text{‘FOCUS’}
\end{align*}
\]

As most clitics are not described in detail elsewhere in this grammar, I shall briefly discuss the distribution and function of each in the sections that follow. Both =taga and =ti are discussed in §9.

3.12.1 =ma ‘polar question’

The primary function of the clitic =ma is to form polar, or yes-no questions. The scope of such questions is indicated by the position of =ma. For instance, if the focus of the question is the entire proposition, or more specifically, the truth value

\(^{26}\) Although clitics are by definition, not words, I have included them in this chapter because, for a number of clitics, the nature of their distribution and functional load makes it difficult to present them elsewhere in the grammar without incurring a fair degree of unhelpful repetition.

\(^{27}\) Another morpheme buka appears to share a similar meaning as =puta in the few examples I have of its use. However, at present there is insufficient evidence to properly determine its distribution and function. Consequently, I have not included buka in the present description.
of the entire proposition is under question, =ma typically attaches to the final constituent of the clause, which is usually the verb (§10.2.3). For example:

\[(3-45)\]
\[
\begin{array}{lll}
Na & \text{vinatuwupa} & \text{siama} ? \\
na & \text{vinatuwu-pa} & s-i-a=\textbf{ma} \\
2SGPRO & \text{mens.house-CLres} & \text{be-NT-3SGS=PQ}
\end{array}
\]

‘Do you have a mens house?’

Alternatively, =ma can attach to some other constituent to indicate that the focus of the question is restricted to the information carried by that constituent. For example,

\[(3-46)\]
\[
\begin{array}{lll}
\text{Ernis} & \text{vasxia} ? \\
\text{Ernis}=\textbf{ma} & \text{vasx-i-a} \\
PN=PQ & \text{come.up-NT-3SGS}
\end{array}
\]

‘Is Ernis coming up?’

\[(3-47)\]
\[
\begin{array}{lll}
\text{Adimdiŋma} & \text{adakumdiŋ} ? \\
ad-i-mdiŋ=\textbf{ma} & \text{ad-aku-mdiŋ} \\
\text{DEM-PROX-PL.HUM=PQ} & \text{DEM-FD-PL.HUM}
\end{array}
\]

‘Are these (people) those (people)?’

3.12.2 =pu ‘first’

The clitic =pu emphasises that an event will take or has taken place before another which is often, but not always presupposed, or has been mentioned before in the preceding discourse. In this role, =pu most commonly occurs on the verb in medial clauses. For example, in (3-48) one man asks the other whether they will eat now. The addressee replies that they should wash first.

\[(3-48)\]
\[
(\text{“Will we eat now?”})
\]
\[
\text{“anbiprpu”}
\]
\[
anN-vi-pr=\textbf{pu} \\
\text{water-wash-1DUS=first}
\]

‘We’ll wash first.’
=pu can also occur on other constituents in the clause as shown in (3-49). For instance:

(3-49) (“I’m going down to my garden”)

“Muduta Andrew=xpu nixiswara!”
Mudu-ta Andrew-x=pu n-xiswara
go.up-2SGS PN-ACC.SG=first 3SGO-tell
‘You go up and tell Andrew first!’

3.12.3 =puta ‘too, as well’

The clitic =puta has the meaning ‘too, as well’. It can attach to almost any constituent of the clause, though, in most examples in the corpus, it follows an NP where it indicates that the referent of the NP has the same role in an event or state as some other person or thing that has been previously mentioned or that can be understood from context. For example,

(3-50) (“Gabby went to the Station”)

“Yivputa”
yiv=puta
dad-too
‘Dad too (went to the Station).’

3.12.4 =taya ‘just/alone’

The clitic taya has only been observed following NPs. Its presence emphasises that the referent of the NP to which it is attached is the only entity involved in the activity. For example, in (3-51) =taya attaches to the oblique phrase and indicates that the actor of the clause stays on the road on his travels and does not go into the bush. In example (3-52), =taya following the derived adverb of frequency to emphasise the fact that the actor speared the pig once only.
(3-51)  

Ubitaya  
muguin.

ub-i=taya  
mugu-i-n
road-OBL-just  
go.down-NT-1SGS

‘He went down just on the road.’

(3-52)  

Mzaxavutaya  
nsimupan.

mza-xavu=taya  
n-simu-pa-n
one-CL=just  
3SGO-spear-FP-1SGS

‘I speared it (the pig) just once.’

Semantically, taya is similar to the adverbs sava ‘just’ and ikuka ‘just’ (§3.6). Further research is required to determine the precise semantic and functional relationships between the three.

3.12.5  =xaka ‘suppositional’

The clitic =xaka falls within the class of morphemes known as evidentials.\(^{28}\) It is used to mark information which the speaker supposes to be true, but for which s/he lacks the necessary evidence to be make an absolute assertion (i.e. one which s/he believes to be unequivocally true). The particular scope of =xaka in a clause is signalled by the particular constituent it attaches to. Note that when =xaka attaches to the predicate, the supposition can be interpreted either as applying to the whole clause or just to the predicate.

SUBJECT

(3-53)  

Yivxaka  
adaka  
nia

yiv=xaka  
ad-a-ka  
n-i-a
dad=SUPP  
DEM-ND-CLres  
eat-NT-3SGS

‘Dad probably ate that.’

---

\(^{28}\) See Foley (1986:165-166) for discussion of evidentials in Papuan languages.
TEMPORAL SETTING

(3-54) aixvraixaka sapari.
ai-xv-rai=xaka sa-pa-ri
two-CL_duy-DU=SUPP be-FP-3SGS

‘He was there probably for two days.’

ENTIRE EVENT

(3-55) Yatxibwataxaka varapari.
y-a-tximu-ba-ta=xaka para-pa-ri
1SGO-hit-FUT=2SGS=SUPP say-FP-3SGS

‘“He’s probably going to hit me.” she said.’

3.12.6 =xan ‘FOCUS’

=xan indicates (contrastive) focus or strong emphasis. It attaches to most constituents including the clause, core argument NPs or clause adjuncts.

Examples are:

(3-56) “Yima nataxadakunax nyixmnī.”
yi-ma natax-aku-na-x n-yix-mn-i
1SGS-NEG old-FD-CLRom-ACC.SG 3SGO-cry.to-1SGS-NEG.IR

varapari. “Yi awudsibugakunaxan
para-pa-ri yi awud-sibuNx-aku-na=xan
say-FP-3SGS 1SGPRO female-young-FD=FOC

nyixbam”

n-yix-ba-m
3SGO-cry.to-FUT=1SGS

‘“I won’t call out to (i.e. take as a wife) the old woman there” he thought, “I’ll call out to the young woman there.”’

(3-57) Varapari “Amu vximnai.”
para-pa-ri amu vxit-mnai
say-FP-3SGS NEG.IR be.afraid-2SGS-NEG.IR
"Yixan" vari-pa-ri. "yi Uipitak" vari-pa-ri.

yi=xan para-pa-ri yi Uipitak para-pa-ri
1SG PRO=FOC say-FP-3SGS 1SG PRO PN say-FP-3SGS

'He said "You can’t be afraid, (it's) I." he said.' "I am Uipitak", he said'.

(3-58) Yiviagaxan vasxiN.
yiviaga=xan vasx-i-N
night=FOC come-up-NT-1SGS

'We came up at night.'

3.12.7 =xnaka 'FOCUS'

The clitic =xnaka is used as a focus marker in non-interrogative sentences. Some examples of its use are:

(3-59) (That's Rebecca.)

(Nma.) Yam=xnaka !
n-ma yam=xnaka 3SGS-NEG Mum=FOC

'(No.) (It's) Mum!

(3-60) Adk=xnaka adaka.
ad-ka=xnaka ad-a-ka
DEM-CL=FOC DEM-ND-CLRES

'That (is) that.' [i.e. 'That's the one.']

While =xnaka and =xan seems to overlap in function, further research may reveal differences. Note that while =xan is commonly found in both narrative monologues and conversations, =xnaka is far more frequent in conversation than in narratives.
3.13 Interjections

Interjections are a small class which express emotional states, responses, or greetings. Typically, they comprise a complete utterance by themselves, occurring as a separate intonation grouping.29 Examples include:

- *abxa(i)* ‘enough!’
- *ad(i)xi(a)* ‘that’s right; yes; exactly (usually used in agreement with another’s speaker’s view/account)!’
- *aria* ‘OK, alright!’
- *avisd* ‘forget it!’
- *axi* ‘expression of shock, disappointment, reaction to pain’
- *mai* ‘hey! (usually used as an expression of shock at the misfortune suffered by another person e.g. if someone slips)!
- *nma* ‘No! (n-ma: 3sgS-NEG)
- *ni* ‘here, take it!’
- *na* ‘here, take it!’
- *nagu* ‘yes!’ (usually used in response to a polar question)
- *oi* ‘hey!’
- *si* ‘wow!’

---

29 Crowley (1982:76) observes that “the boundaries between what is linguistic and what is not linguistic become difficult to judge when dealing with interjections as many interjections do not fit the grammatical structure of an utterance, as well as being phonologically unusual in many cases”.

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Chapter 4
Classifiers

4.1 Introduction
Classifiers in Anamuxra occur as suffixes on most nominals. In all, there are 51 known classifiers in Anamuxra. 49 of these have specific semantic values. That is, they denote salient perceptual characteristics of the entities they classify. The other two classifiers, known as general classifiers, are semantically bleached and are used as substitutes for the more specific classifiers under certain semantic and pragmatic conditions.

This chapter describes the semantics of nominal classifiers in Anamuxra.¹ In §4.2, I outline a number of general features of classifiers and classification in Anamuxra. In §4.2.1, I present a typology of classifiers based on the semantic structure of the classes they define. This is followed by a consideration of the relations between classifiers and nouns (§4.2.2), the patterns of extension found in various classes (§4.2.3), and the productivity and flexibility of the classifier system (§4.2.4). In §4.3, I examine the semantic parameters of the system of classification in Anamuxra and the way that these are encoded by individual classifiers.

¹ The formal properties of classifiers are discussed in §5.
4.2 General features of classifiers and classification

4.2.1 Types of classifiers and the nature of classes

Three major types of classifiers can be distinguished in Anamuxra on the basis of the nature of the semantic structure of the classes they define; namely, ‘general’, ‘specific’ and ‘unique’.

General classifiers have the most semantically bleached semantic domains and are used as substitutes for most of the other classifiers under certain conditions. There are two such general classifiers in Anamuxra, the ‘residual’ and the ‘non-specific’.

Specific classifiers, the most common type found in Anamuxra, head classes built around prototypical exemplar nouns (entities) from which the class extends into a more or less heterogeneous whole (Craig n.d). As we shall see in §4.2.2, the degree and nature of the extension varies considerably from class to class.

Unique classifiers classify a type of entity which is denoted by either just one noun or by any compound containing that noun. For instance, the classifier -vat ‘fallen tree’ is only used for reference to fallen trees. It may be used in conjunction with the generic term for root, (ar)-vat- ‘tree-fallen tree’, or any compound specifying the type of plant: amura-vat- ‘betel pepper-fallen’, avn-vat- ‘coconut-fallen tree’. The set of unique classifiers in Anamuxra is given in table 4-1:

---

2 These three types correspond to the major types recognised by Craig (n.d) and Aikhenvald (2000).

3 In this description, I use the term ‘domain’ to refer to the semantic field denoted by a classifier.
CHAPTER 4 - CLASSIFIERS

Table 4-1: Unique classifiers

<table>
<thead>
<tr>
<th>Classifier</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>-miy</td>
<td>‘sprout/seedling’</td>
</tr>
<tr>
<td>-suk</td>
<td>‘garden block’</td>
</tr>
<tr>
<td>-vat</td>
<td>‘fallen tree’</td>
</tr>
<tr>
<td>-xb</td>
<td>‘bow’</td>
</tr>
<tr>
<td>-xuba</td>
<td>‘female genitals’</td>
</tr>
<tr>
<td>-xug</td>
<td>‘male genitals’</td>
</tr>
</tbody>
</table>

The classifier -tug ‘pot/cup’ requires some discussion. Prior to the introduction of drinking cups and mugs through European contact, this classifier would have met the criteria for unique classifiers since its domain consisted solely of various kinds of earthenware vessels, which share the generic term, \textit{wamN-} ‘pot’. However, since cups and mugs are referred to by the borrowed Tok Pisin term, \textit{kap}, and not by \textit{wamN-}, -tug can no longer be considered a unique classifier. An identical situation is found with the classifier -tua ‘bowl, plate’ whose domain has been extended to include metal and plastic plates which are referred to by the borrowed word, \textit{plet}.

There are two other classifiers which deserve mention here; namely -xida ‘tree’ and -vwa ‘settlement’. As with unique classifiers, the entities that fall within the domains of each of these may be referred to by a single generic term, \textit{ar-} ‘tree/shrub’ in the case of -xida, and \textit{vwa-} ‘settlement’ in the case of -vwa. However, both -xida and -vwa are excluded from the set of unique classifiers on the grounds that individual entities which belong to their respective domains can be referred to by distinct nouns (i.e. nouns not consisting of the generic term). In the case of trees and plants such distinct nouns denote species or specific varieties, while for settlements, the distinct nouns equate to proper names.
4.2.2 Patterns of extension in classes

In many cases, members of a particular class share the defining characteristics for that class. For instance, all members of the class headed by -mka share the features 'animate' and 'non-human' (see §4.3).

However, there are several cases where an entity does not display the major defining characteristics of the class to which it is assigned, but is included on the basis of a different set of features it shares with some members or even just one other member of the class. For instance, solid-bodied electric basses and guitars are included in the class of hollow objects, headed by the classifier -vk, despite the fact that they are not hollow. This 'anomaly' can be explained by the functional association solid-bodied guitars have with hollow-bodied acoustic guitars and drums as musical instruments.

Similarly, the chronological concept of month is included within the domain of -vuk ‘three-dimensional (spherical)’ not because months are perceived as three-dimensional (spherical) but because of the association of months with the moon, which is. This extension of -vuk to month is paralleled by the use of the noun taukN- to denote both ‘moon’ and ‘month’.

Finally, cars and trucks can be assigned to the domain of vara ‘2D flat, rigid’. This extension can be explained by the fact that early vehicles had a flat tray made from planks of timber. The use of the classifier for cars and trucks is paralleled by the use of the noun arvanaN- ‘ar-varaN (plank)’ to denote the same items.

4.2.3 Relations between classifiers and nouns

Within the set of unique classifiers, there are several which have the same form as the noun which denotes the entity they classify. The set of these ‘repeater’ classifiers include such examples as those listed in table 4-2:
There are also a number of other classifiers in Anamuxra which have the same form as a common noun in the language. The entity denoted by the corresponding noun is included in the domain of the classifier and typically provides the basis for the semantic features of the classifier’s domain. However, unlike true repeaters, the domain of these classifiers includes items other than those denoted by the corresponding noun. These specific classifiers include the examples in table 4-3:

<table>
<thead>
<tr>
<th>Classifier</th>
<th>Gloss</th>
<th>Noun Root</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>-vwa</td>
<td>‘place’</td>
<td>vwa-</td>
<td>‘place’</td>
</tr>
<tr>
<td>-miv</td>
<td>‘sprout/seedling’</td>
<td>miv-</td>
<td>‘sprout/seedling’</td>
</tr>
<tr>
<td>-vat</td>
<td>‘fallen tree’</td>
<td>-vat-</td>
<td>‘fallen tree’</td>
</tr>
</tbody>
</table>

Table 4-2: Repeater classifiers

Finally, there is another set of classifiers which correspond in form to an independent noun. However, unlike the previously mentioned classifier-noun pairs, the classifier and noun in this set show no semantic correspondence; that is,
the entity denoted by the noun is not included in the domain of the classifier. For example, the classifier -wak ‘one dimensional (long) and flexible’ (see §4.3) corresponds in form to the noun wak- ‘k.o fish/k.o tree’. However, since the items denoted by the noun do not fall within the domain of the classifier -wak, this correspondence can only be explained as one of homophony (synchronously, at least).

4.2.4 The productivity and flexibility of the classifier system

The productivity and flexibility of the classifier system in Anamuxra is demonstrated by its ability to absorb innovations in material culture and other spheres on the basis of the features articulated by existing classifiers. Some examples are given in Table 4-4;

<table>
<thead>
<tr>
<th>Classifier</th>
<th>Gloss</th>
<th>‘New’ entities</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>-vk</em></td>
<td>‘hollow’</td>
<td>plastic containers, guitars, motor vehicles, aeroplanes</td>
</tr>
<tr>
<td><em>-sv</em></td>
<td>‘bag’</td>
<td>backpacks, suitcases, plastic bags, briefcases etc</td>
</tr>
<tr>
<td><em>-ski</em></td>
<td>‘three-dimensional, rigid’</td>
<td>pens, pencils, drumsticks</td>
</tr>
</tbody>
</table>

Table 4-4: Classification of recently introduced items

The flexibility of the Anamuxra classifier system is also illustrated by the fact that entities may be classified by more than one classifier depending on which features a speaker focuses on. For example, a particular rock may either be classified as belonging within the domain of -tag ‘cubed’, as in (4-1) or within the domain of -vuk ‘spherical’ as in (4-2).⁴

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⁴ In the examples given, the two classifiers -tag and -vuk were tried with the same rock. The speaker accepted that both could be used for the same rock.
Another example of multiple classification is found in the case of motor vehicles which may be classified with either -vara 2D, flat, rigid or with -vuk 'hollow'.

4.3 Semantic parameters and the domains of classifiers

Classifiers encode a range of semantic features that can be grouped according to the following general parameters:

- animacy
- humanness
- gender
- condition: e.g. unfortunate
- extendedness: i.e. dimensionality, shape
- consistency: i.e. rigid, flexible
- size
- general inherent properties including material and functional characteristics
- time
- quantity
- partition
- collection

There is a complex interaction between these categories. Many features are found only in partnership along with other categories. For instance, consistency
always co-occurs with some expression of dimensionality. Some features combine with two or more distinct parameters. Finally, some parameters are only featured as defining a subset of a class based on a more inclusive set of features. In the following sections, I list each of the fifty classifiers, along with a general gloss and examples of entities which fall with the domain of each. I also provide specific comments on certain salient, or distinctive features of particular classifiers.

(A) Animacy (gender, humanness, condition)

There are a number of classifiers which can specify particular features of animate beings. However, only five do so exclusively. These are:

<table>
<thead>
<tr>
<th>CLASSIFIER</th>
<th>GLOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) -mka</td>
<td>non-human, animate</td>
</tr>
<tr>
<td>(2) -kura/-m</td>
<td>(human), male; human</td>
</tr>
<tr>
<td>(3) -nad/-na</td>
<td>(human), female</td>
</tr>
<tr>
<td>(4) -mga</td>
<td>unfortunate, (human), male; unfortunate humans</td>
</tr>
<tr>
<td>(5) -ska</td>
<td>unfortunate, (human) female</td>
</tr>
</tbody>
</table>

Besides animacy, three main parameters are encoded within this set: humanness, gender, and condition. However, the interaction between these is particularly complex and needs some explanation.

The scope of classifier 1 -mka ‘non-human animate’ includes all animals (sawuN- ‘pig’, mrkN- ‘dog’, ugarA- ‘bird’, akara- ‘chicken’, masuxuN- ‘cassowary’ etc) as well as all insects. Although the specification of -mka as ‘non-

---

7 The ‘dependency’ of CONSISTENCY on the specification of other physical properties such as dimension is well-attested in classifier languages, and according to Aikhenvald (2000:289), is always true of numeral classifier systems.

8 The numbering used in the presentation of the classifiers below reflects the order of appearance only.

9 See tabu (16), takr (36), tama (39) and saka (43) for classifiers which can either have animate or inanimate referents.
human' implies a class of distinct human beings, as we shall see, such a class is only partially borne out through the classifier system.

Classifier 2 and 3 each has two allomorphs, a long form, -kura and -nad, a short form, -m and -na. The allomorphs occur on different word classes and behave differently under different number-marking conditions. We shall consider each allomorph type in turn, starting with the short form. 10

The short form occurs with deictics, the general question word, ab- and vocatives. In the singular, -m and -na are used to refer to male and female humans respectively. However, both classifiers can be extended to larger non-human animate beings such as pigs, dogs, larger marsupials and chickens whose sex is obvious or significant for cultural reasons. In the plural, both -m and -na are supplanted by the portmanteau morpheme, -mdii 'plural, human'. Significantly, this results in a neutralisation of the gender contrast. Finally, neither can occur in the dual. Rather, the dual marker attaches directly to the stem of the nominal, resulting in a neutralisation of specification of gender, humanness and animacy.

The long forms, -kura (2) and -nad (3) occur on adjectives, numerals, the indefinite article and common nouns. Unlike the short forms these occur in all number contexts. In the singular, they have identical domains to the short forms. That is, -kura is used to refer to male humans and larger male non-human animate beings, while -nad is used to refer to female humans and larger female non-human animate creatures. In non-singular categories, however, reference is exclusively to non-human animates.

-nad occurs with regular dual and plural allomorphs, -rai--xai 'dual' and -η 'plural' and specifies two or more female humans. A different story emerges in the case of -kura. In the dual, -kura co-occurs with -maxai 'dual.human' while in

10 The distribution of the allomorphs of classifiers 2 and 3 and their interaction with number marking is discussed and exemplified in detail in §5.4.2.
the plural it occurs with the human plural suffix \textit{-mdiN}. In both cases, the resultant form has two potential functions. First, it can specify male humans. Alternatively, it can carry the more general feature \textit{+human} and can be used to refer to a group of people consisting of males and females.\footnote{It could be argued that \textit{-maxai} and \textit{-mdiN} are classifiers with the domain \textit{+[human]}, which also happen to mark dual and plural number, respectively. However, I have decided against this as it would mean allowing the possibility of double classifier marking on a single word.}

In figures 4-1 and 4-2 I represent the pattern of classification presented by classifiers 1-3:

\begin{center}
\begin{tabular}{ll}
\textbf{animates} & \\
\textbf{human} & \textbf{non-human} \\
(\text{plural only: \textit{-mdiN}}) & (-\textit{-mka}) \\
\textbf{male} & \textbf{female} \\
(\text{sg. only: \textit{-m}}) & (\text{sg. only: \textit{-na}}) \\
\end{tabular}
\end{center}

\textbf{Figure 4-1: Classification of animates (short forms)}

\begin{center}
\begin{tabular}{ll}
\textbf{animates} & \\
\textbf{human} & \textbf{non-human} \\
(\text{dual \textit{-kura-maxai};}
\text{plural: \textit{-kura-mdiN}}) & (-\textit{-mka}) \\
\textbf{male} & \textbf{female} \\
(\textit{-kura}) & (\textit{-nad}) \\
\end{tabular}
\end{center}

\textbf{Figure 4-2: Classification of animates (long forms)}
We turn now to classifiers 4 -mga and 5 -ska. These two are distinguished from the other animate classifiers in featuring specification for condition. They are used to refer to someone or something who suffers some misfortune. This can include illness or injury, overwork, or, even old age. -mga and -ska are themselves distinguished according to gender; -mga ‘male’ and -ska ‘female’. In (4-3), -ska is used in reference to an old woman who, every morning, has the task of cleaning up the rubbish left by a group of women who sing and dance through the previous night.

(4-3) natxaska ngwu sabugaj tarawudarawu
natx-a-ska nŋ-xwu sabuN-x-a-N tarawu-N-tarawu
old-ND-CLunf 3PLPRO-PW rubbish-ND-PL sweep-N-RDL
wugu mgramapari
kwu-N-kwu mg-ram-pa-ri
go-N-RDL tip.out-ITR-FP-3SGS
‘The poor old (woman) was sweeping and going (back and forward), tipping out their rubbish.’

In example (4-4), -mga is used in reference to a group of people who have their plans to fish a part of the river thwarted by a heavy rain that results in a flood.

(4-4) Kaspa ixrat vit agiswarapari
Kaspa kixra-t vi-t anŋ-xiswara-pa-ri
PN see-3SGS come-3SGS 1PLO-tell-FP-3SGS
“wuramga anbdaguiai” varapari.
xuraN-mga anbdagu-i-a-i para-pa-ri
person-CLunf.m river.rise-NT-3SGS-DS.SEQ say-FP-3SGS
‘Kaspa saw (it) and came and told us, saying “Poor person, the river has risen and so...”.’

However, like the long form of classifier 2, -kura, -mga is used as the default ‘human’ classifier in the plural. That is, it is used to refer to groups of unfortunate people, where the group is a mix of males and females.
(B) Extendedness (dimension, shape) and consistency

There are twelve classifiers whose domains are defined by such physical features as dimension, shape and consistency. These include:

<table>
<thead>
<tr>
<th>Classifier</th>
<th>Shape</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>-tag</td>
<td>3D, cubed</td>
<td>taxN- ‘stone, rock’, chunks of diced meat, vegetables</td>
</tr>
<tr>
<td>-vara</td>
<td>2D (flat), rigid</td>
<td>arvara- ‘plank of wood’, cassette case, madapiN- ‘comb’, plet ‘plate’</td>
</tr>
<tr>
<td>-tru</td>
<td>2D (flat), flexible</td>
<td>arvat- ‘leaf, sheet of paper, banknote’, vakra- ‘mat’</td>
</tr>
<tr>
<td>-wak</td>
<td>1D, flexible</td>
<td>vx- ‘vine, rope, string, belt’, xd- ‘root’</td>
</tr>
<tr>
<td>-ski</td>
<td>pointed, stick-like</td>
<td>skin- ‘point, tip’ arskiN- ‘stick(lit.tree-point), pen, pencil’, xuya- ‘spear’, finger, toe</td>
</tr>
<tr>
<td>-maka</td>
<td>lateral extension</td>
<td>armakaN- ‘branch’ anN- ‘river’ anmakaN- ‘river branch (creek, stream)’, xubugr- ‘arm’, igr- ‘leg’</td>
</tr>
<tr>
<td>-wada</td>
<td>protrusion</td>
<td>ridge or spur, spine of person/animal</td>
</tr>
<tr>
<td>-vk</td>
<td>hollow</td>
<td>vk- ‘bamboo’, botol ‘bottle’, ug- ‘hand drum, guitar incl. solid bodied electric guitar, radio’</td>
</tr>
<tr>
<td>-xna</td>
<td>tapered or curved</td>
<td>maita- ‘machete’, nabaN- ‘yam’</td>
</tr>
<tr>
<td>-vsa</td>
<td>surface</td>
<td>vsa- skin, aiN-vsa- ‘shoe (lit. foot-skin)’, wara- area of bush,</td>
</tr>
</tbody>
</table>
A number of these classifiers are clearly derived from plant or body-part terms (see nouns which have been underlined and emboldened). The part term can be considered the prototypical member of the class, that which provides the physical properties upon which the class is based (see §4.2.2 above). Finally, most of the above classifiers are used solely in reference to inanimate entities. The one exception is -tabu, which can be used in reference to short men, particularly young boys.

(C) Size

There is one classifier used solely to specify size of an entity:

(18) -iag  large, salient  animate and inanimate entities

(D) Specific inherent nature and function

There are some fourteen classifiers which have to do with the function of an item or which specify some material property other than shape, dimension, or consistency. Many of these are highly specific and relate to culturally salient items such as artefacts, objects relating to human settlement, and body- and plant-parts. A number are repeater or unique classifiers.
It is worth noting that although the classifier \textit{xuba} - ‘female genitals’ corresponds in form to the noun \textit{xuba(N)} - ‘hole’, holes do not fall within the domain of this classifier. Rather, they are specified along with roads by the classifier \textit{-xub}. A possible explanation for this ‘disassociation’ may rest with the strong taboo on reference to male and female genitalia. (Both \textit{-xuba} and \textit{-xug} ‘male genitals’ are most commonly used pejoratively). Given this taboo, holes

12 Banana trees provide excellent shelter from the elements in the garden. Their leaves are commonly cut and used as shelter when travelling during storms. Note that caves (\textit{tutuxu}) are not included in the domain of \textit{-tav}, even though they are occasionally used as shelters. This may reflect a relatively low value placed on caves as shelters (there aren’t that many in the area). Alternatively, it may reflect that the shelter class is additionally defined in terms of human manipulation of the entity.
may have been reassigned to the domain of -xub in order to avoid taboo-threatening ambiguity.  

(E) Human culture

(33) -tg  idea, talk, song, dance

xya- ‘idea, talk’, xzxz- ‘song, dance’

(F) Partitives

There are five classifiers which have to do with pieces or parts.

(34) -tba pieces separated tobacco leaf torn length-wise down its spine, yam cut down its length
(35) -mat same as tba
(36) -takr pieces separated tobacco leaf torn width-wise across its spine, long yam cut, broken across its width)
(37) -vug same as takr *can not be used to refer to females
(38) -vru section, side, end non-separated partitive

The first four of these specify pieces which have been physically partitioned.  
For example, the following example describes the state of a woman who has been split down the centre.

(4-5) Aitbrai sapari.
ai-tb-rai sa-pa-ri
two-CLpiece-DU be-FP-3SGS

‘She was in two pieces.’

Classifier 37 -takr, can also be used metaphorically to refer to a female of short stature (parallel -tabu for men).

13 It is not impossible to find a semantic explanation for the association of roads and holes. However, one can speculate that the association is based on the similarity in form between -xuba and -xub.

14 The pairs (34)-(35) and (36)-(37) need to be investigated further to establish the exact degree of overlap.
CHAPTER 4 - CLASSIFIERS

The fifth partitive classifier, -vru, specifies a part, section or end of some object which is not physically separated from the whole.

(H) Parcel

(39) -tbi parcel anything wrapped up

(I) Collectives

Classifiers which refer to groups include:

(40) -tama clan, clump tama(N) 'clan', axaN- sugar cane', \( v_k \)
(41) -sar bunch betelnut, bunch of coconuts
(42) -war same as sar
(43) -saka lot of e.g. That lot of people, etc (random grouping, compare with tama)

There is distinction between -saka and the others on the grounds that the others all represent inherent-type groupings. The full semantic range of -saka is yet to be investigated. I include a couple of examples of its use here:

(4-6) Adasaka yakua!
ad-a-saka ya-kua
DEM-ND-Cl \( _{coll} \) Isgo-give
‘Give that lot to me!’

(4-7) usaka mugupaqanga. Usaka sapaqanga.
u-saka mugu-pa-ra u-saka sa-pa-tqa
IA-Cl \( _{coll} \) go.down-FP-2/3PLS IA-Cl \( _{coll} \) be-FP-2/3PLS
‘One lot (of people) went down. One lot stayed.’

132
(J) Temporals

In addition to the extended use of -vuk (6) to refer to months, there are three classifiers which are used in reference to periods of time.

(44) -xy day
(45) -tuxu point in time
(46) -sibi wet season, year

(J) Quantity

(47) -muku small amount

(K) Action

Anamuxra has one classifier that is used to refer to performances of an action or activity.

(48) -xavu performance of action (N times)

An example of its use is given in (4-8):

(4-8) Mzaxavu nsimupan.
    mzaxavu n-simu-pa-n
    one-CLact 3SGO-spear-FP-1SGS'
    ‘I speared it once.’

(L) mark

(49) -xva mark, point in space

The classifier -xva is used in reference to some point in space.

(4-9) Ixvai sia.
    i-xva-i s-i-a
    PROX-CLmark-OBL be-NT-3SGS
    ‘He’s this high.’ [lit. ‘He’s at this mark.’]
(M) General

General classifiers are semantically bleached morphemes that are used as substitutes for specific and unique classifiers in certain semantic and pragmatic circumstances. There are two such classifiers.

(50) \(-xm\) ‘thing’

(51) \(-ka-pa-aga-aba^{15}\) ‘residual’

On current evidence, the precise differences between using the residual and \(-xm\) are unclear. One possibility is that \(-xm\) is used for unspecified objects, or for objects whose name the speaker has forgotten or does not want to mention (cf English *thingummy*).

The residual \(-pa-ka-aba-aga\) has several roles. First, it is used in a residual capacity where it represents a remainder category for inanimate entities that fall outside the domain of the other classifiers. Such entities include:

\[
\begin{align*}
\text{anN-} & \quad \text{‘water’} \\
\text{axs-} & \quad \text{‘hot water’} \\
\text{idiN-} & \quad \text{‘star’} \\
\text{maNa-} & \quad \text{‘mud’} \\
\text{tra-} & \quad \text{‘rain’} \\
\text{tva-} & \quad \text{‘basket’} \\
\text{ubadiN-} & \quad \text{‘roof’} \\
\text{uvs-} & \quad \text{‘fire’} \\
\text{xp-} & \quad \text{‘ground’} \\
\text{xup-} & \quad \text{‘firewood’}
\end{align*}
\]

As can be seen from this list, apart from being inanimate, these items are not linked semantically in any way. Modifiers of these nouns can only take the residual classifier.

\(^{15}\)These are allomorphs whose distribution is described in §5.4.
Second, the residual can substitute for one of the nameable classifiers. (Note that this option is typically only available for inanimate entities and non-human animate creatures. Human referents almost always occur with a particular human classifier.) For example, in (4-12) the classifier -sv ‘bag’ is used on the adjective, while in (4-13) the -ka allomorph of the residual classifier is used.

(4-12)  
vaxaba wususv  
vaxaN-pa wusu-sv  
string.bag-CL\textsubscript{res} new-CL\textsubscript{bag}  
‘new string bag’  

(4-13)  
vaxaba wusuka  
vaxaN-pa wusu-ka  
string.bag-CL\textsubscript{res} new-CL\textsubscript{res}  
‘new string bag’

The lack of semantic content of the residual is highlighted by its use on nouns co-occurring with modifiers marked with semantically specific classifiers. In Anamuxra, the use of semantically specific classifiers is restricted. Only a subset of semantically specific classifiers can be used and mostly in the derivation of nouns which denote humans. In most instances, a noun cannot take a nameable classifier whose domain includes the domain of the noun. For example,

(4-15) * sawuN-mka  
pig-CL\textsubscript{nhan}  
‘pig’

\textsuperscript{16} Results of a preliminary study of the alternation between the residual and nameable classifiers suggested that the choice may be associated with the distinction between ‘new’ and ‘old’ information, with nameable classifiers used for newly introduced participants in the discourse. However, further work is required to determine the interaction between classifiers and other morphosyntactic phenomena such as the presence/absence of nouns, cross-referencing on the verb and so on before any conclusions are made about the pragmatic role of classifiers in Anamuxra.
In most cases, where a non-derived noun requires post-stem inflection but is not eligible for number or oblique case marking (see chapter 5), the residual classifier is used, even where the noun occurs in an NP in which a modifier carries a nameable classifier. For example,

(4-14) \[ \text{mugupa} \quad \text{utav} \]
\[ \text{mugu-} \text{pa} \quad \text{u-} \text{tav} \]
\[ \text{house-CL}_{\text{res}} \quad \text{IA-CL}_{\text{abel}} \]

‘some house’

Thus, the residual serves as a means of producing a morphologically well-formed noun without unnecessary redundancy (see §5.2).
Chapter 5
Nominal morphology

5.1 Introduction

The class of nominals includes words that denote entities (common nouns, proper names), qualify or quantify entities (adjectives and numerals), locate entities with respect to the speaker or some other locus (demonstratives and deictics) or request information of some entity (interrogatives). Unlike their counterparts in many other Papuan languages, Anamuxra nominals display a high degree of morphological complexity. Nominals can inflect for class, number and case. New nominals can be productively derived though compounding or by the addition of one of a number of derivational affixes; most kin terms and partitives can take pronominal prefixing; and, finally, a number of nominals possess multiple stem/base forms that are morphologically determined.

In this chapter I consider the morphological profile of all nominals except independent pronouns which have a number of special features and are considered along with bound pronominals in Chapter 6. I begin with a general representation of nominal word structure in §5.2. In §5.3, I discuss various properties of the nominal stem including various processes of derivation and the nature of stem/base classes; while, in §5.4, I present the inflectional categories of class, number and case.
5.2  An overview of the structure of nominal words

All nominals have a stem (§5.3) and can be marked for number (§5.4.2.2), and all except place names can inflect for case (§5.4.2.3). Furthermore, most nominals also take classifier suffixes (§5.4.2.1); besides pronouns, only proper nouns, kin terms and the personal interrogative fail to take them. Finally, most inalienably possessed terms and a few other words can take a pronominal prefix indicating the person and number features of the possessor in possessive constructions where the possessor is animate (§5.4.1). We can represent these various morphological possibilities in the following formula:

\[(5-1) \text{ Nominal Wd} = (\text{PossPro}) + \text{ Stem} + (\text{Classifier}) + (\text{Number}) + (\text{Case})\]

A crucial distinction exists between nominals that minimally require post-stem inflection comprised of either a classifier, number marker or oblique case suffix and nominals that can occur without any such marking.\(^1\) For example, when occurring as a constituent of an NP, common nouns such as \textit{vaxa-} ‘string.bag’ require post-stem inflection whether the inflection comes from the set of classifier affixes (5-2), number affixes (5-3) or case affixes (5-4).\(^2\) However, not all nouns can take the stem + OBL form, or stem + NUM (see §5.4 for details).

\[(5-2)\]
\[
\begin{align*}
vaxaba \\
vaxaN-pa \\
\text{string.bag-Cl_res} \\
\text{‘string bag’}
\end{align*}
\]

---

\(^1\) An alternative way of contrasting the two sets is in terms of the \textit{minimal morphological constraint}, i.e. ‘*\text{stem}\_\text{wd}’, which states that words cannot consist of an uninflected stem. Nominals which require a post-stem inflection in order to stand alone can be said to be governed by the constraint while those that can occur as a bare stem are not subject to the constraint.

\(^2\) Some nouns and adjectives have special corresponding verbal adjunct forms which obligatorily occur without post-stem inflection (see §3.5; §8.5.2 for further details).
In contrast, all kin terms can occur without post-stem inflection and as exemplified by (5-8) do not take classifiers:

(5-6)  
\textsc{yaskat}  
ya-skat  
\textit{1SGPRO-sister}  
\textquote{my sister}'

(5-7)  
\textsc{nbava}  
n-bava  
\textit{3SGPOSS-mother's.brother}  
\textquote{his uncle}'

(5-8)  
* \textsc{ya-skat-ka}  
\textit{1SGPRO-sister-CL}\textsubscript{res}  
\textquote{my sister}'

The two classes of nominals (i.e., Stem + inflection and Stem only forms) are summarised in table 5-1 below.
<table>
<thead>
<tr>
<th>STEM + INFL</th>
<th>STEM only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free common nouns</td>
<td>Kin terms</td>
</tr>
<tr>
<td>Adjectives</td>
<td>Body-part terms (B)</td>
</tr>
<tr>
<td>Numerals</td>
<td>Personal interrogative</td>
</tr>
<tr>
<td>Non-personal interrogatives</td>
<td>Proper names</td>
</tr>
<tr>
<td>Deictics</td>
<td></td>
</tr>
<tr>
<td>Indefinite article</td>
<td></td>
</tr>
<tr>
<td>Body-part terms (A)</td>
<td></td>
</tr>
</tbody>
</table>

Table 5-1: Nominals and the minimal morphological word constraint

Significantly, the terms which can occur without post stem inflection are, in general, those which do not take classifiers, while those which must take post stem inflection are those that do take classifiers. The main exception to this generalisation is found within the class of body-part terms. All but two body-part terms can take classifiers, usually the residual (see §3.4.4.2). However, as shown in table 5-1, the class is divided into those which must minimally take a post-stem inflection (the class ‘A’ terms), as in the case of *mir- ‘tongue’ in (5-9) and those that can occur without any (the class ‘B’ terms), as in the case of -xubugr- ‘arm’ in (5-10).

(5-9)  

a. *namirka*  
na-mir-ka  
2SGPRO-tongue-CLres  
‘your tongue’

b. * na-mir  
2SGPRO-tongue  
‘your tongue’
Finally, the correlation between the constraint on the minimal morphological realisation of nominals and the distribution of classifiers offers an important insight into the use of the residual classifier. As we observed in the previous chapter, the residual classifier lacks overt semantic specification. Its primary function is as a default form where overt semantic classification is either semantically impossible, or pragmatically inappropriate. Given that both number and case marking are optional, and overt classification is not obligatory, the deployment of the residual can be viewed as a strategy for fulfilling the morphological constraint on classifier-taking nominals.

5.3 The nominal stem

5.3.1 An introduction to nominal stem structure

The nominal stem has a number of potential structural realisations, summarised in (5-11):

(5-11) a. Stem → Base + (Base) + (Derivational Affix)

b. Base → Root + (Stem Augment)

Minimally, all nominal stems consist of a base which is itself comprised of either a root, as in (5-12) and (5-13), or a root plus some augment material, the form and occurrence of which depends on both the class of the lexeme and the following inflectional material. For instance in (5-14), the stem/base/stem ubeN-
'hole' consists of the root, *uba-*(underlined) plus the augment, *N*, while in (5-15) the base/stem, *ikx- 'kina shell/brain' consists of the root, *ik-*(underlined) plus the augment, *x*. The distribution of augments is discussed in detail in §5.3.2.3

(5-12)  
ubai  
\[\text{stem} = \text{root}\]  
\(\text{uba}-i\)  
hole-OBL  
' in (a) hole'

(5-13)  
ikpa  
\[\text{stem} = \text{root}\]  
\(\text{ik}-\text{pa}\)  
kina.shell-CLres  
'kina shell'

(5-14)  
ubaga  
\[\text{stem} = \text{root} + \text{augment } N\]  
xubaN-ka  
hole-CLres  
'hole'

(5-15)  
ikxaka  
\[\text{stem} = \text{root} + \text{augment } x\]  
\(\text{ik}-\text{x}-\text{a-ka}\)  
kina.shell-ND-CLres  
'kina shell'

In addition to non-derived stems, Anamuxra allows nominal stems to be derived either through compounding, in which the bases of two nominals are combined as in (5-16) and (5-17) or,

(5-16)  
arvsaka  
\[\text{stem} = \text{base} (\text{root}) + \text{base} (\text{root})\]  
ar-vsa-ka  
tree-skin-CLres  
'tree bark'

---

3 A number of terms have been proposed in the literature for what I am calling 'stem augment' including: 'empty morph' (Hockett 1947), 'theme (vowel)' (Aronoff 1994: 45) and 'stem extenders' (Katamba 1993:47).
5 - NOMINAL MORPHOLOGY

(5-17) wurazapaga
    xuraN-sapaN-ka
    person-mound-CL
    ‘grave’

or, by adding a derivational affix (§5.3.4) base as illustrated here in (5-18) and (5-19):

(5-18) mdvasnad
    md-vas-nad
    male-lacking-CL
    ‘a widow/spinster’ (i.e. (a) female lacking (a) male)

(5-19) aribaskura
    ariN-vas-kura
    betelnut-lacking-CL
    ‘a man without betelnut’

Note that in (5-16) the compounded bases are both roots, while in (5-17) both bases consist of a root plus augment. Similarly, in (5-18) the base is a root while in (5-19) the base is a root plus augment.

5.3.2 Augmented bases and multiple stems/bases

5.3.2.1 GENERAL CLASSES

Most nominals have an invariant stem base which corresponds to a root form and occurs in all morphological environments. However, there are a number of nouns and adjectives which have multiple stem bases, that differ according to the presence/absence of one or more augment morphs. On the basis of the variation in base forms, we can posit three distinct classes for nominals, illustrated in table 5-2. (Bases are given in bold; roots are underlined; augments are given in italics.)
Membership of the classes is purely lexically determined.

(a) Class I

Class I nominals have the same base form as the root in all morphological environments. Members include ina- ‘sun’, avn- ‘coconut’, uvv- ‘fire’, mura- ‘garden’ and akakara- ‘chicken’.

(b) Class II

Class II nominals possess two stem bases:

a **bare stem** which corresponds to the root form and which is found in majority of inflectional environments and as the first member of a compound in which the second nominal is consonant initial.

an **x stem** which consists of the root plus the augment -x- and is found when the noun/adjective stem is the first member of a compound and the second is vowel-initial, or when combined with a demonstrative or deictic as discussed in (5.3.3.3).\(^4\)

---

\(^4\) Historically, \(x\) may have belonged to the following base. However, given that the same base can occur as the second element of a compound without a preceding \(x\) suggests that in these cases at least, \(x\) must be analysed as belonging to the preceding stem.
Nominals which belong to class II include common nouns ar- ‘tree’, ik- ‘kina shell’, mug- ‘house’, ug- ‘drum’, and adjectives wot- ‘large’ and nat- ‘old’.

(c) Class III

Class III nominals are very similar to class II lexemes. Both classes have a bare stem and an ‘x’ stem. However, class III nominals are distinguished by the presence of a third stem type: the unspecified nasal stem. The three stem types of class III and their distribution can be summarised as follows:

a **bare stem** which consists of the root and is used just with the -i allomorph of the oblique.

a **nasal stem** which consists of a root plus an underspecified nasal augment i.e root + N. It is used in all inflectional environments other than the -i oblique, and when it is the first constituent of a compound where the following constituent is consonant initial.

an **x stem** which is formed by adding the augment x to the nasal stem form; not the bare stem as is the case in class II. The x-stem is used when the nominal occurs as the first nominal of a compound in which the following stem is vowel initial.


(5-20)  
```
tamaga
tam-N-aga
put-N-Clres
'something for putting'
```
5.3.2.2 **INDEFINITE ARTICLE STEMS**

The indefinite article has two morphologically determined stem forms: _u_-, which is used with non-residual classifiers as in (5-21) and (5-22) and _uvaN_-, which is used elsewhere as in (5-23) and (5-24). For further discussion of the realisation of classifiers see §5.4.1.

(5-21)  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Classifier</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>utav</em></td>
<td>IA-CL_shel</td>
<td>‘one (house)’</td>
</tr>
</tbody>
</table>

(5-22)  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Classifier</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ukv</em></td>
<td>IA-CL_day</td>
<td>‘one (day)’</td>
</tr>
</tbody>
</table>

(5-23)  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Classifier</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>uvaga</em></td>
<td>IA-CL_res</td>
<td>‘one (thing)’</td>
</tr>
</tbody>
</table>

(5-24)  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Classifier</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>uvay</em></td>
<td>IA-PL</td>
<td>‘some (things)’</td>
</tr>
</tbody>
</table>

5.3.2.3 **X-N** - **XNA-** - **XX-** ‘GROUND’

The noun meaning ‘ground’ has three forms, /xna-/ which takes the oblique marker -i (see §5.4.2.3), /x-/ which occurs with the residual classifier and /xx-/ which occurs elsewhere.

---

5 See §2.# for explanation of /7/ realised as [k] in certain environments.
5.3.3 Compounding

Compounding is a process in which two, and less frequently three, nominal bases may be combined to form a single stem base. Three main patterns of compounding may be distinguished in Anamuxra: noun compounds (§5.3.3.1), cranberry compounds (§5.3.3.2), and heterogeneous nominal compounds (§5.3.3.3).

5.3.3.1 NOUN COMPOUNDS

Noun compounds consist of two noun bases. One of the most salient classes of noun-noun compounds involves the expression of whole-part relationships where the second noun denotes a part or product of the entity denoted by the first.

(5-28) sawuzagipa

\textit{sawuN-sagi} - pa

pig-tusk-\text{Cl}_{res}

'pig tusk'

---

6 There is only one recorded example of a compound consisting of three nouns.
(5-29) agamkyaga

**aga-mkN-aga**
k.o wild.fowl-egg-Clres
‘wild fowl egg’

(5-30) mrkzupa

**mrkN-su-pa**
dog-faeces-Clres
‘dog faeces’

(5-31) sawumuruka

**sawuN-muru-ka**
pig-meat-Clres
‘pig meat’

(5-32) wuranganzarpa

**xuraN-xazar-pa**
person-body fluids-Clres
‘human fluids’

(5-33) arvutka

**ar-vut-ka**
tree-leaf-Clres
‘leaf’

(5-34) armnuka

**ar-mnu-ka**
tree-seed-Clres
‘seed’

(5-35) arxika

**ar-xd-ka**
tree-root-Clres
‘root’
A feature of the part terms illustrated in (5-33) to (5-35) is that they can occur alone in generic reference, though they are more likely to occur in the compounded forms given above. Besides their use in generic compounds, these plant-part terms can be combined with a noun denoting a specific tree or plant variety. For example,

(5-36) \textit{manbutuka} \\
\textit{man\textsubscript{N}-vut-ka} \\
banana-leaf-\textsubscript{CL_{res}} \\
‘banana leaf’

(5-37) \textit{asaraunuka} \\
\textit{asara\textsubscript{N}-munu-ka} \\
tobacco.plant-seed-\textsubscript{CL_{res}} \\
‘tobacco seeds’

(5-38) \textit{mkrixdka} \\
\textit{mkri-xd-ka} \\
k.o. tree-root-\textsubscript{CL_{res}} \\
‘k.o tree root’

While body-part terms generally have animate possessors, there are several which are extended to indicate parts of inanimate entities as illustrated in the following examples:

(5-39) \textit{uvsmiraka} \\
\textit{uv\textsubscript{s}-mira-ka} \\
fire-tongue-\textsubscript{CL_{res}} \\
‘flame’

(5-40) \textit{uvsmkyaba} \\
\textit{uv\textsubscript{s}-mkN-aba} \\
fire-egg-\textsubscript{CL_{res}} \\
‘coal(s)’
Another type of whole-part compound is found in expressions such as *mugu-wuyu- ‘house-inside.of’. Here the second constituent is one of the set of spatial dimension nouns and denotes a spatial feature of the entity denoted by the first noun. Examples of such compounds include:  

(5-42)  
\[ \text{Muguwuyuki} \quad \text{nmzn.} \]  
\[ \text{mugu-xuyu-ki} \quad \text{nmz-ø-n} \]  
house-inside.of-OBL \quad \text{enter-NT-1SGS}  
‘I went inside the house.’

(5-43)  
\[ \text{Vakrasibka} \quad \text{tamia.} \]  
\[ \text{vakra-sib-ka} \quad \text{tam-a-pa-n} \]  
mat-top.of-CL \quad \text{put-FP-1SGS}  
‘I put (it) on top of the mat.’

(5-44)  
\[ \text{Vakrasimsim} \quad \text{sia.} \]  
\[ \text{vakra-simsim} \quad \text{s-i-a} \]  
mat-over \quad \text{be-NT-3SGS}  
‘It’s over the mat.’

Nominal compounds are productively used to express ‘kind of’ relations where the first noun expresses some attribute of the entity denoted by the second noun. For example:

(5-45)  
\[ \text{anbkpa} \]  
\[ \text{anN-vk-} \text{pa} \]  
water-bamboo-CL \quad \text{‘bamboo for carrying water’}  

\[ \text{Note that spatial dimension nouns differ with regard to oblique marking. } \text{xuyu- takes -ki when functioning as an locational adjunct, sib- ‘top.of’ can denote a location with or without the oblique suffix, while -simsim cannot take oblique marking (see §3.4.4.3).} \]
(5-46)  *asarabaxaba*  

**asaraN-vaxaN-pa**  

*tobacco-string.bag-CL*  

‘string bag used for carrying tobacco’

(5-47)  *warabaxaba*  

**waraN-vaxaN-pa**  

*forest-string.bag-CL*  

‘string bag used to carry goods to and from the forest/garden’

(5-45) and (5-46) are comparable in the sense that in both cases the first element specifies the function or purpose of the head noun constituent. (5-45) denotes bamboo used for carrying/storing water, while (5-46) denotes a string bag used to carry tobacco. (5-47) differs slightly from these two in that the specifier constituent does not denote the item which is carried or stored; one does not carry around the bush or jungle. Rather, the non-head element specifies the location of its primary use. While all string bags may be carried to the bush, this type of string bag is especially used to transport food and cooking implements to and from the garden.

Other examples of ‘hyponymic’ compounds in Anamuxra include:

(5-48)  *asgubaga*  

**asN-xubaN-ka**  

*devil-hole-CL*  

‘devil’s hole’

(5-49)  *asmawapa*  

**asN-mawa-pa**  

*devil-sago-CL*  

‘flour/biscuit/bread’

(5-50)  *yaxyawubaga*  

**ya-xya-xubaN-ka**  

*1SGPOSS-talk-hole-CL*  

‘my mouth’
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(5-51) **nsuwubaga**

n-*su*-**xubaN**-ka  
3SGPOSS-faeces-hole-\textit{CL}  
‘his anus’

(5-52) **agasapaga**

**aga-**sapaN-ka  
k.o wild.fowl-mound-\textit{CL}  
‘wild fowl’s mound’

(5-53) **wurazapaga**

**wuraN**-**sapaN**-ka  
person-mound-\textit{CL}  
‘grave’

(5-54) **idkamsapaga**

**idkam-**sapaN-ka  
k.o yam-mound-\textit{CL}  
‘planting site of k.o yam’

(5-55) **angubpa**

anN-**xub**-pa  
river-road-\textit{CL}  
‘road which leads to a river’

(5-56) **xnbinapa**

knN-**vina**-pa  
sleeping-floor-\textit{CL}  
‘bed’

Example (5-56) is interesting in that it contains a nominalised verb as the first constituent.

The final type of noun-noun compound found in Anamuxra is represented by (5-57). This compound differs from those above in that it consists of two nouns
which lack any further dependency between them. In other words, its range of reference is defined by listing the types of entities subsumed by the compound.\footnote{Such compounds are sometimes called bahuvrihi compounds (Spencer 1991: 311).}

\[(5-57) \quad \text{mawaxsipa} \]
\[\text{mawa-xsi-pa} \]
\[\text{sago-bean-CL}_{\text{res}} \]
\[\text{‘sago mixed with beans and cooked in bamboo’} \]

5.3.3.2 CRANBERRY COMPOUNDS

There is a small set of nouns which contain a non-isolable morpheme. In some cases such as (5-58) and (5-60), the unanalysable morpheme shows evidence of reduplication, though, as discussed in §5.3.6.2, these have no corresponding unreduplicated form. A few examples of cranberry compounds are:

\[(5-58) \quad \text{inaxavapa} \]
\[\text{ina-xava-pa} \]
\[\text{sun-?-CL}_{\text{res}} \]
\[\text{‘dry season’} \]

\[(5-59) \quad \text{muikwatkwatpa} \]
\[\text{mui-kwatkwat-pa} \]
\[\text{cockatoo-?-CL}_{\text{res}} \]
\[\text{‘a black cockatoo’} \]

\[(5-60) \quad \text{anmnaimnaipa} \]
\[\text{anN-mmaimnai-pa} \]
\[\text{water-?-CL}_{\text{res}} \]
\[\text{‘black surface dwelling water insect’} \]
5.3.3.3 **HETEROGENEOUS NOMINAL COMPOUNDS**

Heterogeneous nominal compounds are formed by combining two nominals of different word nominal subclasses classes. The following combinations have been observed:

- Noun + adjective
- Noun + numeral
- Noun + indefinite article
- Noun + demonstrative
- Adjective + numeral
- Adjective + demonstrative/deictic

These compounds behave as single phonological words taking a single primary stress. Examples are:

1. **(5-61)** *arigaka*  
   *ariNx-a-ka*  
   betelnut-ND-CL_res  
   ‘that betelnut’

2. **(5-62)** *wuragadam*  
   *xuraNx-ad-a-m*  
   person-DEM-ND-CL_male  
   ‘that man’

3. **(5-63)** *mrkgaimkarai*  
   *mrkNx-ai-mka-rai*  
   dog-two-CL_shan DU  
   ‘two dogs’

4. **(5-64)** *akakarumka*  
   *akakara-u-mka*  
   chicken-IA-CL_shan  
   ‘some chicken’
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(5-65)  
\[\text{wotximka} \quad \text{adjective + proximate}\]  
\[\text{wotx-i-mka}\]  
\[\text{big-ND-CL_{nhnn}}\]  
\['\text{this large (animal)}'\]

Significantly, these forms are functionally equivalent to their phrasal counterparts. For example, there is no semantic difference between (5-61) and (5-66).

(5-66)  
\[\text{aria}\]  
\[\text{aka}\]  
\[\text{ariN-pa}\]  
\[\text{a-ka}\]  
\[\text{betelnut-CL_{res}}\]  
\[\text{ND-CL_{res}}\]  
\['\text{that betelnut}'\]

Furthermore, these complex nominal compounds appear to retain some of their phrasal properties. For instance, a complex nominal compound consisting of a noun and a numeral cannot be modified by a numeral, while a complex nominal compound consisting of a deictic or demonstrative cannot be modified by a deictic or demonstrative.

(5-67)  
\[\text{* mrkgaimkarai}\]  
\[\text{aimkarai}\]  
\[\text{mrkNx-ai-mka-rai}\]  
\[\text{ai-mka-rai}\]  
\[\text{dog-two-CL_{nhnn}-DU}\]  
\[\text{two-CL_{nhnn}-DU}\]

(5-68)  
\[\text{* arigaka}\]  
\[\text{aka}\]  
\[\text{ariNx-a-ka}\]  
\[\text{a-ka}\]  
\[\text{betelnut-ND-CL_{res}}\]  
\[\text{ND-CL_{res}}\]

This parallels the word order constraint in nominal phrases whereby numerals precede a deictic. Further evidence that complex nominal compounds are transparent to NP word order constraints is the fact that it is not possible to have a demonstrative in the compound followed by either an adjective/and or a numeral.
5.3.4 Derivational affixes

Anamuxra has eight known derivational affixes which may be attached to nominals to produce a nominal stem which can then be inflected for class, number and case.

5.3.4.1 -TAGAN 'HAVING, WITH X'

-taga(N), which shows a close formal resemblance to taga 'conjunction/comitative' (see §9.3.2, §9.6), is added to nouns to derive a class III nominal with the meaning, ‘having X’. For example,

(5-69)  
wunaba    asr-tagaga  
xunaN-pa  asr-tagaN-ka  
plate-CLres mark-having-CLres  
‘plate with a mark’

(5-70)  
saxi-tagaga  
saxi-tagaN-ka  
tusk-having-CLres  
‘(pig) with tusks’

(5-71)  
wuradagabsa  
xuraN-tagaN-vwa  
person-having-CLsettle  
‘settlement with person’ (i.e. ‘inhabited settlement’)

(5-72)  
amadaganad  
amaN-tagaN-nad  
breast.milk-having-CLfem  
‘female having breast milk’ (i.e. woman who is lactating)

5.3.4.2 -VVWAWA 'SOMEONE WHO (DOES) A LOT OF (XING)'

This morpheme is added to nominalised verbs to produce a nominal with the meaning ‘someone who (does) a lot of (Xing)’. For example,
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(5-73)  
\[ \text{vuwuba} \quad \text{nvwu}wawwanad \]
\[ \text{vuwuN-pa} \quad \text{n-N-} \text{vwwawa-} \text{nad} \]
\[ \text{wild.cane-Cl} \text{res} \quad \text{eat-NOM-does.a.lot.of-Cl} \text{fem} \]
‘(female) who eats a lot of wild cane’

(5-74)  
\[ \text{sivxvwawakura} \]
\[ \text{sivx-N-vwwawa-} \text{kura} \]
\[ \text{lie-NOM-does.a.lot.of-Cl} \text{res} \]
‘(male) who lies a lot’

5.3.4.3  -VAS ‘LACKING, WITHOUT ~(SOMEONE WHO) DOES NOT X MUCH’

The affix -vas has two related derivational functions. Added to a noun, -vas forms a class I stem meaning ‘lacking X’, the opposite of nominals derived by -taga.

(5-75)  
\[ \text{mdvasnad} \]
\[ \text{md-vas-nad} \]
\[ \text{male-lacking-Cl} \text{fem} \]
‘a widow/spinster [lit. (a woman) lacking a man]’

(5-76)  
\[ \text{wagivasmaka} \]
\[ \text{wagi-vas-maka} \]
\[ \text{fish-lacking-Cl} \text{branch/river} \]
‘(river) lacking fish’

(5-77)  
\[ \text{xyavaskura} \]
\[ \text{xya-vas-kura} \]
\[ \text{talk-lacking-Cl} \text{male} \]
‘man lacking talk’

Suffixed to a nominalised verb, -vas forms a stem with the meaning ‘(someone who) does not X (much)’ as in (5-78) below. (see contrast with -vuwua above).

(5-78)  
\[ \text{nbasnad} \]
\[ \text{n-N-vas-nad} \]
\[ \text{eat-NOM-does.not-Cl} \text{fem} \]
‘(a woman) who does not eat (much)’
5.3.4.4  -MAR ‘SOMETHAT’

-mar is attached to an adjective to derive an adjective stem (class III) with the meaning of ‘somewhat, or a little X’. For example,

(5-79)  \[ \text{Yiv natmargura.} \]
\[ \text{yiv nat-\textbf{marN}-kura} \]
\[ \text{father old-a little-CLres} \]
\[ \text{‘Father is a little old.’} \]

(5-80)  \[ \text{mtmarNaga} \]
\[ \text{mt-\textbf{marN}-aga} \]
\[ \text{wet-a.little-CLres} \]
\[ \text{‘a little wet’} \]

(5-81)  \[ \text{nagumarNaga} \]
\[ \text{naguN-\textbf{marN}-aga} \]
\[ \text{red-a.little-CLres} \]
\[ \text{‘somewhat red’ (e.g. pink, rose)’} \]

Functionally, -mar appears to be equivalent to reduplication of adjectives discussed in §5.3.5.1 below. Furthermore, -mar itself can be reduplicated to indicate even subtler distinction of degree.

(5-82)  \[ \text{mtmarmargaga} \]
\[ \text{mt-\textbf{mar-marN}-aga} \]
\[ \text{wet-somewhat-RDL-CLres} \]
\[ \text{‘very slightly wet’} \]
5.3.4.5 **-sibun 'very, completely'**

This affix is attached to adjectives to derive an adjective with the meaning ‘very, completely X’.

(5-83) \[ \text{wususibugida} \]
\[ \text{wusu-} \text{sibun}-\text{xida} \]
\[ \text{new-completely-CLtree} \]
‘a completely new (tree) (i.e. something that has never been seen before)’

(5-84) \[ \text{atisibuNaga} \]
\[ \text{ati-} \text{sibuN}-\text{aga} \]
\[ \text{green-very-CLres} \]
‘dark green’

5.3.4.6 **-tig 'cooked in bamboo'**

-tig can be added to a noun typically referring to some food stuff such as mawa-‘sago’, to derive a noun with the meaning ‘X cooked in a section of bamboo’. For example:

(5-85) \[ \text{mawatigpa} \]
\[ \text{mawa-} \text{tig}-\text{pa} \]
\[ \text{sago-cooked.in.bamboo-CLres} \]
‘sago cooked in bamboo’

5.3.4.7 **-kur 'roasted in fire'**

This affix can be added to noun denoting a food item to derive a noun with the meaning ‘X roasted in fire’.

(5-86) \[ \text{mawakurpa} \]
\[ \text{mawa-} \text{kur}-\text{pa} \]
\[ \text{sago-roasted.in.fire-CLres} \]
‘sago (shaped into a ball) roasted in fire’
This suffix is added to a kinship term to form a collective noun, X-sxri, with the meaning ‘a group of two or more people one of whom is called ‘X’ by the other/s’. Typically, in groups involving cross-generational relations, or relations involving an age distinction in the kinship system, the kin term chosen represents the elder member of the group. Thus, when a group consists of a father plus his son/s, it will be the term for father that is used. When the kin term denotes a same-generation, same gender relation with no differentiation in age as in the case of -suva- ‘mother’s brother’s male child’, it is possible to interpret the meaning of the derived form as a group of two or more people who call each other ‘X’. In all cases, the kin term is prefixed with the third person singular possessive prefix n-.

Examples include:

(5-87)  
\textit{nsikasxri}  
\textit{n-sika-sxri}  
\textit{3SGPOSS-female.older.sister-COLL.KIN}  
‘sisters’

(5-88)  
\textit{nbavazxri}  
\textit{n-bavaN-sxri}  
\textit{3SGPOSS-mother’s brother-COLL.KIN}  
‘uncle and nephew’

(5-89)  
\textit{npayisxri}  
\textit{n-payi-sxri}  
\textit{3SGPOSS-father’s parent-coll.kin}  
‘grandparent and grandchild’

(5-90)  
\textit{nmzxri}  
\textit{n-md-sxri}  
\textit{3SGPOSS-mother-COLL.KIN}  
‘mother and child’
In the case of the collective term meaning ‘married couple’, the term for wife is the base term.

(5-91) \[ mnabixri \]
n-nabi-sxri
3SGPOSS-wife-COLL.KIN
‘married couple’

5.3.5 Reduplication

Within the class of nominals, reduplication is productively applied to most classes of adjectives. In addition, a few nouns display evidence of reduplication, though these must be considered non-productive for reasons given §5.3.5.2.

5.3.5.1 Adjectives

In the case of adjectives, reduplication applies to the bare stem base form, or root, to produce an adjective with the meaning ‘slightly~a little Xish’.9

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Meaning</th>
<th>Reduplicated form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>aru-</td>
<td>‘big’</td>
<td>aruaru-</td>
<td>‘slightly big’</td>
</tr>
<tr>
<td>ati-</td>
<td>‘green’</td>
<td>atiatii-</td>
<td>‘pale green’</td>
</tr>
<tr>
<td>mt-</td>
<td>‘wet’</td>
<td>mtmt-</td>
<td>‘slightly wet’</td>
</tr>
<tr>
<td>vru-</td>
<td>‘short’</td>
<td>vruvru-</td>
<td>‘slightly short’</td>
</tr>
<tr>
<td>vx-</td>
<td>‘dirty’</td>
<td>vxvx-</td>
<td>‘slightly dirty’</td>
</tr>
<tr>
<td>xya-</td>
<td>‘white’</td>
<td>xya_____</td>
<td>‘whitish, e.g. off-white’</td>
</tr>
</tbody>
</table>

Table 5-3: Reduplicated adjectives

---

9 There is some evidence that reduplication can also intensify the meaning of an adjective. That is the resultant form has a meaning ‘very X’. However, this meaning appears less common than the other.
Note that reduplication of adjectives appears to have the same effect as the addition of the affix \(-mar\) (§5.3.4.4).

As we shall see in §5.3.5, the reduplicated nominalised verb base is used as the base in a range of nominalisation constructions.

5.3.5.2 Nouns

A few nouns, mainly bird and insect names, appear to be reduplicated forms. However, in these cases, the derivation appears to be historical, and no longer transparent.

<table>
<thead>
<tr>
<th>RDL Noun</th>
<th>Meaning</th>
<th>unreduplicated equivalent</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammnaimnai-</td>
<td>'a black surface-dwelling water insect'</td>
<td>mnai-</td>
<td>'black spot found in white of eye'</td>
</tr>
<tr>
<td>samsam-</td>
<td>'insect (centipede?)'</td>
<td>sam-</td>
<td>'stone adze'</td>
</tr>
<tr>
<td>xzxz-</td>
<td>'dance'</td>
<td>xz-</td>
<td>'black ant'</td>
</tr>
<tr>
<td>warakwara-</td>
<td>'forest bird with longish legs that walks in a cross-legged fashion'</td>
<td>wara-</td>
<td>'forest', 'crab'</td>
</tr>
<tr>
<td>simsim-</td>
<td>'small flying fox'</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>smismi-</td>
<td>'small catfish'</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>maikwatkwat-</td>
<td>'black cockatoo'</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 5-5: Nouns displaying reduplication

For some of these, however, including \(simsim\)- 'small flying fox'; \(smismi\)- 'small catfish'; and the reduplicated form \(-kwatkwat\)- which is combined with \(mui\)- 'cockatoo' to form the compound noun which denotes a species of black cockatoo, there is no corresponding unreduplicated root. While the lack of a source for these forms points to non-productive reduplication, the meanings of both \(simsim\)- and \(smismi\)- suggest a possible link between reduplication and size where reduplication can be seen to have a diminutive function.
In the other cases where there is a corresponding unreduplicated root, there is no transparent correlation between the two forms.

5.3.6 Nominalisation

Verbs may be nominalised by two processes, both productive: the use of the suffix -gaiN, and the addition of a suffix that has the same shape as the nasal augment, -N on nouns. Importantly, as we shall see, the forms derived by each of these morphemes are not completely distinct in either their semantics or grammatical function.

5.3.6.1 VERB + -gaiN

-gaiN is added to verbs to derive an abstract action/state noun, which expresses “the fact, the act, the quality or occurrence of the verb” (Comrie and Thompson 1985: 350).

(5-92) \( TimgaN \)  
\( \text{time-gaiN} \)  
\( \text{running-ACT.NOM} \)  
\( \text{hard} \)  
\( \text{3SGO-do-NT-3SGS} \)  
\( \text{‘It was hard for it to run.’} \)

(5-93) \( VigaN \)  
\( \text{vi-gaiN} \)  
\( \text{come-ACT.NOM} \)  
\( \text{tiredness} \)  
\( \text{1SGO-do-NT-3SGS} \)  
\( \text{‘I’m tired of coming.’} \)

As shown by the following examples, the nominalised form may occur with any of the non-derived verb’s core arguments or adjuncts. While the affixation of -gaiN supplants all subject cross-referencing along with tense and mood marking, nominalised verbs still carry cross-referencing for their objects.

(5-94) \( Inapawu \)  
\( \text{ina-pa-wu} \)  
\( \text{sun-CL,..,-OBL} \)  
\( \text{‘I don’t feel like walking in the sun’} \)

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5.3.6.2 VERB + -N

5.3.6.2.1 Introduction

In the second type of nominalisation, an underspecified nasal augment is added to the verb root, paralleling the augmentation of class III nominals (see table 5-6 below). The meaning of the base forms of nominalised verbs derived in this way is neutral or indeterminate between action or participant nominalisation. Such specific meanings only surface when the base is realised in some particular morphosyntactic context. Therefore, it is not feasible to gloss the forms in Table 5-6.
In the following sections, I outline the main morphological contexts that the /N/ base occurs in along with the semantics associated with each type.

### 5.3.6.2.2 Unreduplicated nominalised bases

Unreduplicated ‘N’ bases occur in four main morphological environments:

1. **Compounds**: Base + Noun (Compound)
2. **Derived stem**: Base + Derivational Affix
3. **Base + Residual classifier**
4. **Base plus deictic + classifier**

#### (i) Compounds

The ‘N’ form nominalised verb base can occur as the first member of a compound in which it specifies the type of action associated with the entity denoted by the second noun. For example,

(5-98) \( xnbinapa \)

\[ \text{knN-vina-pa} \]

sleeping-floor-CL\(_{res} \)

‘bed’

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Nominalised base form</th>
</tr>
</thead>
<tbody>
<tr>
<td>dar-</td>
<td>‘listen/hear’</td>
<td>darN-</td>
</tr>
<tr>
<td>ix-</td>
<td>‘close’</td>
<td>ixN-</td>
</tr>
<tr>
<td>n-</td>
<td>‘eat’</td>
<td>nN-</td>
</tr>
<tr>
<td>tar-</td>
<td>‘put in’</td>
<td>tarN-</td>
</tr>
<tr>
<td>vi-</td>
<td>‘come’</td>
<td>viN-</td>
</tr>
<tr>
<td>vtagu-</td>
<td>‘walk’</td>
<td>vtaguN-</td>
</tr>
<tr>
<td>kn-</td>
<td>‘sleep’</td>
<td>knN-</td>
</tr>
</tbody>
</table>

**Table 5-6: Nominalised verb bases**
(ii) Base + Derivational Affix
There are two noun-deriving suffixes which derive agentive nouns from the
nominalised verb base: -vvwawa ‘does a lot of X’ (§5.3.4.2) and -vas ‘does not X
much’ (§5.3.4.3). Examples of their use include:

(5-99)  
sivuxbvuaakura  
sivux-N-vvwawa-kura  
 lie-NOM-does.a.lot.of-CL_{male}  
 ‘(man) who lies a lot’

(5-100)  
nbasnad  
n-N-vas-nad  
eat-NOM-does.not-CL_{tem}  
 ‘(a woman) who does not eat (much)’

(iii) Stem/Base+ (residual) classifier
The unreduplicated nominalised verb base can also serve as a stem to which a
classifier is added. In contrast to base + deictic forms (see below) and
reduplicated forms (§5.3.3.2.3), such derived nouns can be related to the verb in a
number of ways. First, like -gaN forms, the verb + N + CL_{res} names the action
denoted by the verb (action nominalisation). As can be seen from (5-100) and (5-
94) above, the two can be used interchangeably in certain environments.

(5-102)  
Steson muguNaga min.  
Steson mugu-N-aga mi-i-n  
PN go.down-NOM-CL_{res} do.not.feel.like-NT-1SGS  
‘I don’t feel like going down to Steson.’

(5-103)  
Tbovyaga nma avga.  
tbov-N-aga n-ma avN-ka  
smoke-NOM-CL_{res} 3SGS-NEG good-CL_{res}  
‘Smoking isn’t good.’

(5-104)  
taxyaga adika avga.  
tax-N-aga ad-i-ka avN-ka  
cut-NOM-CL_{res} DEM-PROX-CL_{res} good-CL_{res}  
‘This (kind of) cutting is good.’
The action function of verb + N + CLres, applies to most verbs nominalised in this way. However, other interpretations are possible. For instance, (5-103) and (5-104) illustrate participant nominalisation i.e. where the derived noun refers to one of the participants in the action denoted by verb from which it is derived (cf Comrie and Thompson (1985:351-356).) In (5-103) the nominalised verb refers to the object associated with the verb, while in (5-104) the nominalised verb indicates an instrument associated with the action denoted by the verb.

(5-104)  
nNaba
n-N-aba
eat-NOM-CLres
‘food’

(5-105)  
vtaguNaga
vtagu-N-aga
walk-NOM-CLres
‘something for walking e.g. walking stick’

However, interpretations appear to be idiosyncratic. In the case of nNaba the meaning ‘food’ appears to have become lexicalised at the expense of other interpretations.

Finally, the nominalised base can combine with a deictic or demonstrative to form a complex nominal stem that can then inflect in the same way as a non-compounded nominalised base. In (5-104), for example, the nominalised verb indicates a temporal ‘location’ associated with the verb; namely, the day of starting.

(5-106)  
Nuqudamgaxvi wata....
nuqudamNx-a-xv-i kwa-ta
start-NOM-ND-CLday-OBL go-2SGS
‘On the first day (i.e the day for starting), you go and....’
5 - NOMINAL MORPHOLOGY

5.3.6.2.3 Reduplicated bases

As with the unreduplicated base, a reduplicated nominalised base can either be affixed by a classifier or combined with a deictic to form a heterogeneous compound (see §5.3.3.3). Reduplicated nominalised verbs cannot be used to express action/stative nominalisation. Rather, in all known examples the reduplicated derived form indicates some type of participant nominalisation. In (5-107), the noun denotes the instrument used in performing the action of the verb. (5-108) to (5-109) give examples of locative nominalisation.

**INSTRUMENTAL**

(5-107)  
\[\text{xngngm} \]
\[\text{kn-N-kn-N-xm} \]
\[\text{sleep-N-RDL-NOM-CL_{thing}} \]

'bedsheet'

**LOCATION**

(5-108)  
\[\text{akumkaka} \quad \text{tardargavru} \]
\[\text{akumka-ka} \quad \text{tar-N-tar-Nx-a-vru} \]
\[\text{bamboo-CL_{res}} \quad \text{put.in-N-RDL-NOM-CL_{sect}} \]

'part for putting in the bamboo'

**LOCATION**

(5-109)  
\[\text{xngngavri} \]
\[\text{kn-N-kn-Nx-a-vru-i} \]
\[\text{sleep-N-RDL-NOM-ND-CL_{sect}OBL} \]

'place for sleeping'

**OBJECT**

(5-110)  
\[\text{turduryaga} \]
\[\text{tur-N-turN-aga} \]
\[\text{hold-N-RDL-NOM-CL_{res}} \]

'handle' (i.e. section for hold)
5.3.7 A note on kinship terms

A number of possessed kin terms appear to be morphologically complex forms. Consider for example the terms given in table 5-7 which are used to refer to relations belonging to the next generation.

<table>
<thead>
<tr>
<th>Male</th>
<th>Gloss</th>
<th>Female</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>-vgina</td>
<td>'father'</td>
<td>-mgina</td>
<td>'mother'</td>
</tr>
<tr>
<td>-vkwaxa</td>
<td>'spouse's father'</td>
<td>-mkwaxa</td>
<td>'spouse's mother'</td>
</tr>
<tr>
<td>-vjaru</td>
<td>'father's older brother'</td>
<td>-mjaru</td>
<td>'mother's older sister'</td>
</tr>
<tr>
<td>-vgag</td>
<td>'father's younger brother'</td>
<td>-mpag</td>
<td>'mother's younger sister'</td>
</tr>
</tbody>
</table>

Table 5-7: Complex kin terms

On the basis of the above set of kin terms, we can posit two stems -m, which may be translated as ‘plus one generation female’ and -v, which translates as ‘plus one generation male’ plus four derivational suffixes each of which marks a specific relationship between ego and the older generation, namely: -gina ‘parent’; -kwaxa ‘spouse’s parent’; -jaru ‘parent’s older sibling same sex’; and -gag ‘parent’s younger sibling same sex’.

While there are many other kin terms which are transparently derived forms which I shall not consider here, there are a number of other kinship terms that must be analysed as monomorphemic forms. These include:

- bava  ‘mother’s brother’
- mida  ‘sister’s husband’
- payi  ‘father’s parent’
- md    ‘male child’
- nawu  ‘female child’

Further research is required to determine (a) the semantics of the apparent constituents of the morphologically complex forms and (b) whether there is a systematic distinction between relations denoted by complex forms and those
denoted by monomorphemic forms. Until these matters are determined I take a conservative approach to the morphologically complex forms and treat them as unitary forms.

5.4 Inflection

5.4.1 Possessive prefixes

Most inalienable nouns, including kin terms and partitives with animate possessors, take a pronominal prefix indicating the person and number of their possessor. For example,

(5-111) yaxxvgna
ya-xxvgna
1SGPOSS-ear
‘my ear’

(5-112) narmida
nar-mida
2DUPOSS-male’s.sister’s.husband
‘your brother-in-law’

(5-113) naymkiki
nay-mkiki
2PLPOSS-rear
‘to your rear’

For a full list of possessive pronominal prefixes, see §6.4.1.

5.4.2 Classifiers, number and case

There are three major post-stem inflectional categories associated with nominal words: class, number and case. Most classifier-taking nominals can, under the appropriate conditions, simultaneously take separate affixes from each of these categories. In such cases, the ordering of affixes follows the pattern illustrated in (5-1), restated below as (5-114).
(5-114) Nominal Wd= (PossPro) + Stem +<Classifier>+Number+Case>

For example, in (5-115) the adjective aviN- takes the female classifier, -nad, followed by the plural marker -N and the non-singular accusative affix, -xi.

(5-115) Avinadgi nykixrapari. aviN-nad-n-xi nŋ-kixra-pa-ri
good-CLr,m-PL-ACC.NS 3PL0-see-FP-3SGS

‘He saw the good (females).’

As we shall see in the following sections, however, there is considerable variation in the manifestation of each of these three categories. This variation can be attributed to the influence of one or more of the following factors:

(i) word class
(ii) stem class
(iii) interaction between the inflectional categories
(iv) lexical (or arbitrary) specification

5.4.2.1 Classifiers

Of the fifty-one known classifiers, just three possess allomorphs whose distribution is morphologically conditioned; that is, not predicted by the phonological rules given in chapter 3. These are the residual, and the female and male classifiers. In addition, each of these display distinct (as from other classifiers) distributional properties in the context of number and case marking.

5.4.2.1.1 The residual classifier

(i) The residual and word classes

The residual classifier has four allomorphs: -pa, -ka, -aba and -aga. As can be seen from table 5-8 below, each of these four forms is associated, to some extent, with particular nominal classes. The most obvious association is between nominal
modifiers (adjectives, numerals, deitics, indefinite article, non-personal interrogative) and -ka. That is, all nominal modifiers, including all but two adjectives, must occur with the -ka allomorph.\textsuperscript{10}

<table>
<thead>
<tr>
<th>-pa</th>
<th>-ka</th>
<th>-aba</th>
<th>-aga</th>
</tr>
</thead>
<tbody>
<tr>
<td>c.nouns (I,II,III)</td>
<td>c.nouns (I,II,III)</td>
<td>c.nouns (III)</td>
<td>c.nouns (III)</td>
</tr>
<tr>
<td>body part terms</td>
<td>body part terms</td>
<td>nominalised verbs</td>
<td>nominalised verbs</td>
</tr>
<tr>
<td>adjectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>numerals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deictics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>indefinite article</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GQW (ab-)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-8: Residual classifier allomorphs and nominal word and stem classes

The correlation between nominal modifiers and -ka is underlined by the existence of a set of nominal roots which can function as either nouns or adjectives, where the adjective form takes the -ka allomorph and the corresponding noun takes -pa.

<table>
<thead>
<tr>
<th>Noun</th>
<th>Meaning</th>
<th>Adjective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>aixi-pa</td>
<td>‘charcoal’</td>
<td>aixi-ka</td>
<td>‘black’</td>
</tr>
<tr>
<td>ati-pa</td>
<td>‘a kind of green-leaved plant’</td>
<td>ati-ka</td>
<td>‘green’</td>
</tr>
<tr>
<td>mui-pa</td>
<td>‘a fight’</td>
<td>mui-ka</td>
<td>‘pugnacious, poisonous, strong (of tobacco, betelnut)’</td>
</tr>
</tbody>
</table>

Table 5-9: Noun-adjective pairs\textsuperscript{11}

\textsuperscript{10} The two exceptions within the class of adjectives, nagu- ‘red’ and sik- ‘unripe’ both take -aga. The latter is most likely historically related to -ka.

\textsuperscript{11} These pairings are best analysed as non-productive forms.
However, the criterion of word class is not completely sufficient for determining which allomorph will be used. The unpredictable variations from the predominant patterns of association are of several kinds. First, both -ka and -aga occur with members of the class of adjectives.

(5-116)  
apuka  
apu-ka  
bad-Cl_{res}  
‘bad (thing)’

(5-117)  
xbyaga  
xbN-aga  
hot-Cl_{res}  
‘hot (thing)’

Second, all four allomorphs occur with the class of common nouns, while both -ka and -pa occur with different body-part terms.\(^\text{12}\)

(5-118)  
murapa  
mura-pa  
garden-Cl_{res}  
‘(a) garden’

(5-119)  
umaga  
xubaN-ka  
hole-Cl_{res}  
‘hole’

(5-120)  
manyaba  
manN-aba  
banana-Cl_{res}  
‘banana’

---

\(^{12}\) No phonological, semantic, or pragmatic basis for this variation has been discovered.
Third, there are several common nouns which can take either -pa or -ka without a change in meaning or function. These include:

\[
\begin{array}{|c|c|}
\hline
\text{Lexeme} & \text{Gloss} \\
\hline
\text{mir-} & \text{‘tongue’} \\
\text{vut-} & \text{‘leaf’} \\
\text{mn-} & \text{‘seed’} \\
\hline
\end{array}
\]

Table 5-10: Nouns and body-part terms that take either -pa or -ka

Given the inconsistent variation in the distribution of the allomorphs of residual classifier, it must be concluded that their distribution is lexically determined.

\(\text{(ii) The residual classifier, number and case}\)

In addition to the lexically motivated allomorphy outlined above, there are further constraints on the realisation of the residual classifier which reflect a complex interaction between nominal class, number and case categories which I summarise in Table 5-11. (Note that ‘no’ here means obligatorily absent).
Table 5-11: Distribution of the residual classifier

* The numeral, ai- ‘two’ is excluded here, by definition.

The residual classifier is obligatorily present in the non-oblique singular form of all nominals which adhere to the minimal morphological constraint (see footnote 1 in §5.2) and are not marked by a non-generic classifier. For example,

(5-124) \[ \text{wuraba} \]
\[ \text{xuraN-\text{pa}} \]
\[ \text{person-CLres} \]
\[ \text{‘person’} \]

(5-125) \[ \text{vika} \]
\[ \text{vi-ka} \]
\[ \text{heavy-CLres} \]
\[ \text{‘heavy’} \]
The situation is more complex in the case of oblique and non-singular (dual/plural) number marking. For all nominals bar nouns and body-part terms, the residual classifier is in the context of both non-singular marking as shown by (5-130a-b) and (5-131a-b), and oblique marked singular forms, as shown in (5-132a-b) and (5-133a-b):

(5-130) a.  i-xai
    PROX-DU
    'these (two)'

b.  * i-ka-xai
    PROX-CLres-DU

(5-131) a.  uvaN-N
    IA-PL
    'some'
b. * uvaN-ka-N  
   IA-Clres-PL

(5-132) a. ad-a-ki  
   DEM-ND-OBL  
   ‘in/on that (thing)-there’

b. * ad-a-ka-ki / -i / -wu  
   DEM-ND-Cl-OBL

(5-133) a. apu-ki  
   bad-OBL  
   ‘in (a) bad one’

b. * apu-ka-ki / -i / -wu  
   bad-Clres-OBL

In the case of oblique and non-singular marking of nouns and body-part terms, however, there are two possibilities, shown here as (5-134a) and (5-134b).

(5-134) a. stem + Clres + Infl

b. stem + Infl

The first option, given as (5-134a), in which the residual classifier co-occurs with the number or case affix, is available to classifier-taking common nouns. For example,

(5-135)  
   ubagaxai  
   xubaN-ka-xai  
   hole-Clres-DU  
   ‘two holes’

(5-136)  
   ikpay  
   ik-pa-n  
   shell-Clres-Pl  
   ‘shells’
(5-137) sampaxu
noun+CL\textsubscript{res}+oblique
sam-\textbf{pa-wu}
cutting.tool-CL\textsubscript{res}-OBL
‘with (a) cutting tool’

The second option (5-134b) is identical to the pattern found for deictics, adjectives, numerals and so on: that is, the residual classifier is absent and the number or oblique marker attaches directly to the nominal stem.

(5-138) avnxrugai
dual
avn-xruN-\textbf{xai}
coconuts-ripe-DU
‘(two) ripe coconuts’

(5-139) wiay
plural
wia-\textbf{N}
spear-PL
‘spears’

(5-140) mugui
oblique
mugu-\textbf{i}
house-OBL
‘to (the) house’

This second option, however, is highly constrained. Some inanimate nouns such as aramu- ‘k.o tree’, maginakina- ‘ladder’, maita- ‘machete’ and ubaN- ‘hole’ allow the omission of the residual classifier in the presence of both oblique and number marking. Other inanimate nouns such as amnaN- ‘k.o stinging nettle plant’ and ar- ‘tree’ allow it to be omitted only in the context of oblique marking, while others like amura- ‘betel pepper’ allow it to be omitted in the presence of dual and plural marking, but not the oblique. Finally, there are a number of nouns including anaguN- ‘hook’, anaN- ‘work’, sakama- ‘tool for pounding sago’ which do not allow its omission in either context.

5.4.2.1.2 -na-nad ‘female’ and -m--kura ‘male’
As we saw in §4.3, both the male and female classifiers possess an alternation between a short form (-na for the female classifier and -m for the male) and a long form (-nad for the female classifier and -kura for the male). For both classifiers, the two allomorphs are in complementary distribution. As shown in table 5-11, the short form of both classifiers appears on deictics, address terms, the adjective *mux- ‘next, other’ (which can function as an address term), and the general question word, *ab-*, while the long form occurs with all other nominals.

<table>
<thead>
<tr>
<th></th>
<th>short form (-na/-m)</th>
<th>long form (-nad/-kura)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deictics</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Address Terms</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>mux- ‘other/next’</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>GQW</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>common nouns*</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Adjectives</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Numerals</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Indefinite article</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 5-12: Distribution of male and female classifier allomorphs

*those which take classifiers

Examples are:

(5-141) \( \text{ina} \quad \text{deictic} + \text{na} \)

\( \text{i-na} \)

PROX-CL\(_{\text{fem}}\)

’this (female)’

---

13 There is a clear correspondence in form between the short and long forms for classifier 1, though not so for classifier 2.
As we shall see in the next section, the long and short forms of both classifiers differ in their interaction with non-singular marking.

5.4.2.1.2.1 The female and male classifiers and number marking

In contrast to the residual classifier, most non-residual classifiers are obligatory when there is non-singular marking, irrespective of the class of the nominal to which they are attached. Nominals which take a non-residual classifier and non-singular number affix have the structure: stem + CLASSIFIER + NUMBER. For example,

(5-145) \textit{wataduxai}  
\textit{wataN-tua-xai}  
long-CL_{bowl-DU}  
'(two) long (bowls)'

(5-146) \textit{avibukN}  
\textit{aviN-vuk-\text{\textbf{n}}}  
good-CL_{sphere-PL}  
'good (coconuts)'

\textit{kim}  
\textit{ki-m}  
VOC-CL_{male}  
'You!'  

\textit{mizanad}  
miza-\text{\textbf{nad}}  
one-CL_{fem}  
'one (woman)'  

\textit{avigura}  
aviN-\text{\textbf{kura}}  
good-CL_{male}  
'good (man)'
The male and female classifiers also follow this pattern, though only for nouns, adjectives, numerals and the indefinite article; that is, for those with which the long form is used.

(5-149) arskiguraxai
ar-skiN-kura-xai
tree-stick-CL_{male}-DU
‘male teachers’

(5-150) aviNnadŋ
aviN-nad-ŋ
good-CL_{fem}-PL
‘good (women)’

(5-151) ukuramdag
u-kura-mdin
IA-CL_{male}-PL.HUM
‘some (men)’

However, the short forms of both the male and female classifiers behave like the residual and are obligatorily absent from dual and marking. For example,

(5-152) a. axai
a-xai
ND-DU
‘those (two men/women)’
5 - NOMINAL MORPHOLOGY

b. * a-nə-xai
   ND-CL\text{fem}\text{-DU}

c. * a-m-xai
   ND-CL\text{male}\text{-DU}

(5-153) a. kimdiə
   ki-mdɪn
   VOC-PL.HUM
   ‘you’

b. * ki-na-mdin / -ŋ
   ND-CL\text{fem}\text{-PL.hum/PL}

c. * ki-m-mdin / -ŋ
   PROX-CL\text{fem}\text{-PL.hum/PL}

In the case of dual marking (5-151a), the resulting form is identical to that of the residual. In the case of the plural, the stem is marked by the plural allomorph, -mdiy (5-152a) (see the following section on the full distribution of dual and plural allomorphs). A significant result of this interaction between male and female classifiers and number marking is neutralisation of the contrast between the classifiers. In the case of plural marking, the contrast between animate human versus animate non-human is maintained, but the contrast between gender is lost. In the case of dual marking, all semantic features associated with the male and female classifiers are neutralised.

5.4.2.2 NUMBER MARKING

5.4.2.2.1 Introduction

Anamuxra maximally distinguishes three numbers, singular, dual and plural, in NPs. In non-pronominal NPs only the dual and plural categories are overtly realised; the singular has no overt affixal realisation. Rather, nominals which must take post-stem inflection are realised as stem + CL when unmarked for case, as illustrated by (5-154) to (5-157):
Nominals which never take classifiers are simply realised as (Poss) + ‘stem’ as in (5-160) and (5-162).\textsuperscript{14}

\textsuperscript{14} Z'graggen (1980) analyses the residual classifier as a singular affix. However, there are two facts that argue against this analysis: a) the co-occurrence of the residual with non-singular markers; b) the use of the residual with ‘prototypical’ mass/non-count nouns such as water, rice and sand.
Body-part terms which optionally take a classifier can either occur with or without the classifier.

5.4.2.2.2 Dual number

The dual morpheme has three allomorphs: -maxai, -xai and -rai. The first of these, -maxai, is a portmanteau form which also specifies +human and occurs just with the long form of classifier 2, -kura.\textsuperscript{15}

(5-164) \textit{aviguramaxai}

 aviN-kura-\textbf{maxai}

good-CL\textsubscript{male}-DU.HUM

‘good (two men)’

\textsuperscript{15}Although there is a formal resemblance between \textit{maxai} and \textit{xai}, \textit{maxai} cannot be further analysed.
The distribution of -rai and -xai can be summarised as follows:

/ -xai / $/t(V) + _-$
/ -rai / $/k + _-$
elsewhere in free distribution

Examples include:

(5-165) a. aitruxai
   aitruxai
   ai-tru-xai
   two-CLflat-DU
   'two (leaves)'

b. * aitrurai
   aitrurai
   ai-tru-rai
   two-CLflat-DU

(5-166) a. aivukrai
   aivukrai
   ai-vuk-rai
   two-CLsph-DU
   'two (coconuts)'

b. * aivukxai
   aivukxai
   ai-vuk-xai
   two-CLsph-DU

(5-167) a. aitbarai
   aitbarai
   ai-tba-rai
   two-CLpart-DU
   'two (parts)'

b. aitbaxai
   aitbaxai
   ai-tba-xai
   two-CLpart-DU
   'two (parts)'
5.4.2.2.3 Plural number

The plural is marked by three allomorphs, -u, -mdiy and -wuyamdiy. The allomorph -mdiy is closely associated with category of humanness. First, it is used with the long allomorph of the male classifier, -kura, as shown in (5-168);

(5-168)  
arukuramdīŋ
aru-kura-\textbf{mdin}
big-\text{CL\_male}-\text{PL\_HUM}
‘important (men)’

As we saw in §4.3, -mdiy is also used to mark plural in the context of male and female classification on nominals that would otherwise take the short form of the male and female classifiers.

(5-169)  
andamdiN
ad-a-\textbf{mdin}
\text{DEM\_ND\_PL\_HUM}
‘those (people)’

The allomorph -xuyamdiy is used to mark plural on kin terms as shown here:

(5-170)  
nasuwa\textsuperscript{\text{w}}\textsuperscript{\text{u}}\textsuperscript{\text{yamdiy}}
na-suva-\textbf{xuyamdiŋ}
2SG\text{POSS\_mother\_s.brother\_s. son\_PL}
‘your cousins’

\footnote{\textsuperscript{16} Despite the fact that /N/ occurs in all three and the partial correspondence between -mdiy and -xuyamdiŋ, neither -mdiy and -xuyamdiŋ lend themselves to further synchronic analysis and are treated as unrelated, frozen forms.}
Finally, the allomorph -N, occurs in all other environments, including after the long form of the female classifier, -nad. For example,

(5-171)  
\( \text{aday} \)  
ad-a-N  
DC-ND-PL  
‘those’

(5-172)  
\( \text{aviN} \)  
aviN-N  
good-PL  
‘good (ones)’

(5-173)  
\( \text{upuky} \)  
u-vuk-N  
IA-CL\textsuperscript{toph}-PL  
‘some (round ones)’

(5-174)  
\( \text{vrunady} \)  
vru-nad-N  
short-CL\textsubscript{fem}-PL  
‘short (females)’

-N also occurs in the frozen form \( tamaN \) ‘clan’.

5.4.2.3 CASE MARKING

According to Foley “the typical Papuan case marking system may be summarised as the use of verbal affixes, often in combination with word order and/or nominal case affixes, for the central participants, actor and undergoer, and the use of nominal case markers for nominals functioning as adjuncts to the action or specifying its location” (Foley 1986:95). In these terms, Anamuxra may be seen as a ‘typical’ Papuan language. It employs pronominal verbal affixes (§6; §10.2) and nominal case marking to indicate the core semantic relations between NPs
and predicates; and a single nominal case affix, the oblique, to indicate non-core relations. The remainder of this section is devoted to these nominal case markers.

5.4.2.3.1 The accusative

Case marking in Anamuxra follows a nominative-accusative pattern. Nominative NPs are formally unmarked. There are two morphemes associated with accusative marking, =x ‘accusative, singular’ and =xi ‘accusative, non-singular (i.e. all dual and plural forms)’. As shown in the following examples, these are used to mark NPs with animate referents, or with salient inanimate referents bearing an object relation in transitive and ditransitive clauses (§10.2).

**SINGULAR**

(5-175)  
**Andrew**  
warapaŋ  
n tamangpaŋa.

Andrew=x  
wara-paŋ  
n-tamang-paŋa
PN=ACC.SG  
k.o ant-Cl rhetorical PL  
3SGO-bite-FP-3PLS

‘Ants bit Andrew.’

(5-176)  
**Adakum**  
yax  
yatuwumnabat.

[ad-aku-m]₇₉  
[yax]₇₉  
yatu-wu-mna-ba-t
DEM-FD-Cl male  
1SGPRO=ACC.SG  
1SGO-hit-IMM-FUT-3SGS

‘This (man) is about to kill me.’

(5-177)  
**Danielx**  
nkixram  
nxiswarin

Daniel=x  
n-kixra-m  
n-xiswar-i-n
PN=ACC.SG  
3SGO-see-1SGS  
3SGO-tell-NT-1SGS

Andrew=x=pu  
nxiswara
PN-ACC.SG=FIRST  
3SGO-tell

‘I saw Daniel and told him “You go talk to Andrew first.”’
NON-SINGULAR

(5-178a) *Narxi*  

\[
\begin{align*}
\text{nar}=\text{x}i & \quad \text{vra} & \quad \text{nartia}.
\end{align*}
\]

\[
\begin{align*}
\text{2DU} & \quad \text{PRO-ACC.NS} & \quad \text{sickness} & \quad \text{2DU} & \quad \text{PRO-do-NT-3SGS}
\end{align*}
\]

‘You are sick.’

(5-178b) *Nagi*  

\[
\begin{align*}
\text{na}=\text{xi} & \quad \text{napkixrin}
\end{align*}
\]

\[
\begin{align*}
\text{2PL} & \quad \text{PRO-ACC.NS} & \quad \text{2SG} & \quad \text{PRO-see-NT-1SGS}
\end{align*}
\]

‘I saw you.’

(5-179) *Ugurapəŋ*  

\[
\begin{align*}
\text{ugura-pa}=\text{ng} & \quad \text{nb}-\text{i}=\text{ŋa} & \quad \text{a-mka}=\text{ŋ}=\text{x}i
\end{align*}
\]

\[
\begin{align*}
\text{bird-CL}_{\text{res}} & \quad \text{die-NT-2/3PLS} & \quad \text{ND-CL}_{\text{aim}} & \quad \text{PL}=\text{ACC.NS}
\end{align*}
\]

\[
\begin{align*}
\text{nįkixrin}
\end{align*}
\]

\[
\begin{align*}
\text{3PLO-see-NT-1SGS}
\end{align*}
\]

‘I saw the birds that died.’

The accusative marking of the full NPs is optional. Compare (5-177) with (5-180) below.

(5-180) *Daniel*  

\[
\begin{align*}
\text{nkixrat} & \quad \text{nxiswaria}
\end{align*}
\]

\[
\begin{align*}
\text{Daniel} & \quad \text{3SGO-see-3SGS} & \quad \text{3SGO-tell-NT-3SGS}
\end{align*}
\]

\[
\begin{align*}
\text{Daniel} & \quad \text{n-kixra-t} & \quad \text{n-xiswar-i-a}
\end{align*}
\]

‘He saw Daniel and told him, saying “Go down and tell Andrew first.”’

For further discussion of accusative marking and core arguments see §10.2.2.
There is only one morpheme used to express the range of various peripheral (non-core) case relations recognised in Anamuxra. This morpheme, which I shall call the Oblique, has four allomorphs: -i, -ki, -wu and -r. The distribution of these allomorphs is summarised in Table 5-13. There are two strategies for oblique marking direct marking of the NP and the oblique possessive construction (§9.3.1). Only constituents of adjunct NPs with inanimate referents can be directly marked by oblique suffixes. NPs with animate referents must be realised in the oblique possessive construction.

<table>
<thead>
<tr>
<th></th>
<th>-i</th>
<th>-ki</th>
<th>-wu</th>
<th>-r</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>singular</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-residual classifiers</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>residual classifier</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stem only</td>
<td>nouns* and Far Distal</td>
<td>non-noun nouns** except Far Distal</td>
<td>+</td>
<td>vua- 'settlement'</td>
</tr>
<tr>
<td><strong>dual</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>plural</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>+</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Table 5-13: Distribution of the oblique allomorphs
* Those which allow oblique marking without classifier present
** those which take classifiers (i.e. not kin terms)

Finally, NPs headed by place names are never marked for oblique case because of the inherent locational component of their meaning.

As can be seen, there are several parameters which determine the distribution of the various allomorphs: ±number specification, ±non-residual classification and lexical specification.

The -i allomorph occurs in three environments:
i) on singular nominals marked by a specific classifier:

(5-181)  

Mugupa  

mugupa  

house-CLres  

Mugupa  

mugupa  

u-tav-i  

Ia-Cl_house-OBL  

Mugupa  

u-tav-i  

mug-i-r  

Mugupa  

mug-i-r  

nmza-pa-ri  

nmzapari.  

nmza-pa-ri  

enter-FP-3SGS  

‘He entered one house’

(5-182)  

“Apuvsai  

apu-vsa-ı  

bad-CLres-OBL  

‘We’ve come down to a bad place.’ he said.

mugir”  

mug-i-r  

para-pa-ri  

varapari.

mug-i-r  

come.down-NT-1DUS  

say-FP-3SGS

ii) on bare noun stems (i.e. singular nouns which lack specific classification)

(5-183)  

Mugui  

mugu-ı  

house-OBL  

Mugui  

mugu-ı  

s-i-a  

s-a  

‘It’s in the house.’

s-a

(5-184)  

IrbaaN  

iri-ı  

monitor.lizard-ND-PL  

IrbaaN  

iri-ı  

inai  

put-NT-3PLS  

inai  

tamiNa  

do-NT-3PLS

‘They put the monitor lizards in the sun.’

inai  

tamiNa

(5-185)  

Nxubugri  

n-xumbugr-ı  

3SGPRO-hand-OBL  

Nxubugri  

n-xumbugr-ı  

tura-t  

mugwagwiagl  

tura-t  

mugwagwia-ŋ-xi  

tura-pa-ri

3SGPRO-hand-OBL  

mugwagwia-ŋ-xi  

mugwagwiagl  

tura-pa-ri

3SgPro-hand-OBL  

mugwagwia-ŋ-xi

3SgPro-hand-OBL  

mugwagwiagl

‘He held them in his hand, he held the spears.’
iii) on the residual singular form of the far distal deictic

(5-186)  "Akwi"  varapari.
aku-ı  para-pa-ri
FD-OBL  say-FP-3SGS

"There." he said.

The -ki allomorph occurs on the singular form of all other non-noun nominals:

(5-187)  Txatpa  adiki  sapari.
txat-pa  ad-i-ki  sa-pa-ri
meat-CLres  DEM-PROX-OBL  be-FP-3SGS

'Meat was in this.'

(5-188)  Ubaga  uvagi  sxa  xrbata.
xuban-ka  uvan-ki  sxa  kr-ba-ta
hole-CLres  IA-OBL  again  cook-FUT-2SGS

'You burn (it) again in one hole.'

Recall that the residual classifier cannot occur in such environments
(§5.4.2.1.1).

The -wu allomorph occurs on nouns in the singular marked by the residual
classifier as shown in (5-189) to (5-191), or singular loan nouns which do not take
the residual classifier as in (5-192).

(5-189)  Uvspawu  xritvapan.
uvsp-wu  xritvapan
fire-CLres-OBL  burn-FP-3SGS

'I burnt it with fire.'

(5-190)  Vxgabawu  wamxan....
vxg-wu  kwua-m=xan
vine-CLres-OBL  go-1SGS=FOC

'I went on a vine and ......'
The final allomorph, -r, has the most restricted distribution of all the oblique
allomorphs, attaching to the stem of the noun vwa- ‘settlement’.

(5-193) vwar

vwa-r
settlement-OBL
‘in/at the settlement’
Chapter 6

Pronominals

6.1 Introduction

Two basic types of pronouns may be distinguished in Anamuxra: free pronouns, which function as NPs on their own, and bound pronoun forms. The set of bound pronominals includes five distinct sets: one set of prefixes, which is identical to the set of free pronouns except for the third person singular; and four distinct sets of suffixes. The pronominal prefixes are either attached to a verb to indicate the person and number of animate objects; to a noun or the possessive word to indicate the possessor in possessive constructions; or, to the negative word to index the subject of the clause. The four sets of pronominal suffixes all obligatorily attach to verbs to express the person and number details of subjects, but are distinguished from each other on the basis of their association with other categories such as status, mood and polarity. Free and bound forms can generally co-occur in Anamuxra, though the two sets differ in that bound forms are obligatory in most contexts, while free forms are not. Finally, there are some contexts in which bound forms do not occur where free forms can (§6.4.3).

A significant characteristic of a number of the pronominal sets in Anamuxra is the expression of person and number by discrete formatives. According to Foley (1986: 132) such morphological separation of person and number is known in just
a handful of Papuan languages. Another salient feature of Anamuxra pronouns is the close correspondence between the different sets of pronouns.

In this chapter, I deal with a number of formal and functional features of pronominals. I begin by giving a general overview of the six classes of pronouns, highlighting more general relationships between the individual sets. I then consider the form, distribution and functional properties of each.

### 6.2 Overview of pronominal classes

The complete range of pronominal forms, both free and bound, is given in table 6-1:

<table>
<thead>
<tr>
<th></th>
<th>Free</th>
<th>Bound</th>
<th>Set 1</th>
<th>Set 2</th>
<th>Set 3</th>
<th>Set 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prefixes</td>
<td>Suffixes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1sg</td>
<td>yi/ya</td>
<td>-m</td>
<td>-mn</td>
<td>-mna</td>
<td>-n</td>
<td></td>
</tr>
<tr>
<td>1du</td>
<td>ar</td>
<td>-pr</td>
<td>-mr</td>
<td>-mra</td>
<td>-r</td>
<td></td>
</tr>
<tr>
<td>1pl</td>
<td>aŋ</td>
<td>-mŋ</td>
<td>-mŋ</td>
<td>-mŋa</td>
<td>-ŋ</td>
<td></td>
</tr>
<tr>
<td>2sg</td>
<td>na</td>
<td>-ta</td>
<td>-n(a)</td>
<td>Ø</td>
<td>-na</td>
<td></td>
</tr>
<tr>
<td>2du</td>
<td>nar</td>
<td>-tar</td>
<td>-nr(a)</td>
<td>-mura</td>
<td>-ra</td>
<td></td>
</tr>
<tr>
<td>2pl</td>
<td>naŋ</td>
<td>-tŋja</td>
<td>-ŋja</td>
<td>-ŋja</td>
<td>-ŋja</td>
<td></td>
</tr>
<tr>
<td>3sg</td>
<td>nŋ</td>
<td>-t</td>
<td>-d</td>
<td>-d</td>
<td>-a~ri</td>
<td></td>
</tr>
<tr>
<td>3du</td>
<td>nr</td>
<td>-tr</td>
<td>-dr</td>
<td>-dr</td>
<td>-ra</td>
<td></td>
</tr>
<tr>
<td>3pl</td>
<td>nŋ</td>
<td>-tŋ</td>
<td>-dŋ</td>
<td>-dŋ</td>
<td>-ŋja</td>
<td></td>
</tr>
</tbody>
</table>

Table 6-1: Anamuxra pronominal forms

We can make the following general observations about the class of pronominals:

---

1 Papuan languages known to display this phenomena include: Kiwai, Nasioi, and Nimboran and to a lesser extent Gahuku and Yimas (see Foley (1986: 133-34) for details and references).
a. Anamuxra maximally distinguishes three numbers (singular, dual and plural) and three persons (first, second, third) in various sets, although the distinction between second and third person is collapsed in non-singular series within set 4 suffixes, while the distinction between singular and plural is neutralised in third person series of the free and prefix sets.

b. The free series and the pronominal prefixes are identical in all categories except the third person singular.

c. Bound pronominal suffixes are used to indicate number in case of animate subjects; for inanimate subjects the third person singular is used regardless of number.

d. There is a strong correspondence across the various classes between number category and form, with the most common correlations being:

\[
\begin{align*}
\text{singular} &= \emptyset \\
\text{dual} &= r \\
\text{plural} &= N
\end{align*}
\]

It is notable that both the singular and plural correspond to the pattern of number marking found in other NP constituents such as nouns, adjectives and deictics, whereas dual does not (cf. -xai~-rai~maxai (§5.4.2.2.2)).

e. The correspondence between ‘person’ and form across classes is less homogeneous than that found in ‘number’. However, several general patterns can be found. In the sets of free pronouns and pronominal prefixes we see the following correspondences:
CHAPTER 6 - PRONOMINALS

first = a (except 1sg)
second = na
third = n

while, in the subject pronominal classes, the following matches are found:

first = m/p
second = ta/n/mu
third = t/d

The exact patterns of person and number marking for each set are considered in detail in the following sections.

6.3 Free pronouns

6.3.1 Form

First and second person free pronouns display the maximal three-way distinction in number. In the third person series, however, the distinction between singular and plural is neutralised, with the plural form, ny, used for both. Given the regular association of the velar nasal with plurality, we can regard the singular usage in this pair as deviant, or irregular.

In addition, for the first person singular two distinct forms exist: ya, which is used as the head of NPs bearing the Object grammatical function in most transitive and ditransitive clauses; and yi, which is used elsewhere (see §6.3.2 below).

2 There is an interesting correlation here between bilabial articulation with first person and alveolar articulation with non-first person.
Apart from the irregular third person singular and the first person forms, it is possible to segment the free pronouns as follows:

(6-1) \[ \text{Pro} = \text{person} + \text{num} \]

where the person categories are realised as:

1 = a \\
2 = na \\
3 = n

and the number categories are realised as:

singular = \( \varnothing \) \\
dual = r \\
plural = \( \eta \)

By analogy with the structure of other nominals (§5), we could say that the person morpheme constitutes the stem, which can take number inflection according to the number of referents of the NP which it heads.

While there is a clear case for identifying distinct person/number formative s in both the class of free pronouns and a number of the other sets of pronominals, for the purposes of this grammar, I shall treat Anamuxra pronouns as monomorphemic forms. For instance, the sequence \( a-r \) '1person-dual' will simply

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>DUAL</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>yi/ya</td>
<td>ar</td>
<td>an( \eta )</td>
</tr>
<tr>
<td>Second</td>
<td>na</td>
<td>nar</td>
<td>na( \eta )</td>
</tr>
<tr>
<td>Third</td>
<td>n( \eta )</td>
<td>nr</td>
<td>n( \eta )</td>
</tr>
</tbody>
</table>

Table 6-2: Free pronouns
be treated as ar ‘1duPro’. My decision is guided by a number of factors. First, there are a number of suppletive forms in the different pronominal series which cannot be subjected to further analysis. Second, there are several different orderings of person-number formatives across the different sets. Finally, the non-discrete analysis not only represents a more practical approach for a descriptive grammar such as this, but probably more accurately reflects the synchronic situation for speakers.

6.3.2 Functions

Free pronouns occur as NPs which can function in a range of core and oblique grammatical roles. Note that when heading object NPs, the ya form of the first person singular is used (6-2), while yi is used in all other contexts (i.e. as subject NP of verbal predicate clauses (6-3), as possessor NP (6-4), and as the subject of verbless clauses (6-5). The following examples illustrate their use:

(6-2) | Adakum | yax | yatuwumnabat.
--- | --- | ---
| ad-aku-m | ya-x | ya-tuwu-mna-ba-t
| DEM-FD-CLml | 1SGPRO.ACC.SG | 1SGO-kill-IMM-FUT-3SGS

‘He is about to kill me.’

(6-3) | ‘Yi | naxwukixan | vin.’ | varapari.
--- | --- | --- | ---
| yi | na-xwu-ki | vi-i-n | para-pa-ri
| 1SGPRO | 2SGPOSS-PW-OBL=FOC | come-NT-1SGS | say-FP-3SGS

‘I came to you.’ he said.’

(6-4) | Varapari, | ‘Adika | yi | yaxwu
--- | --- | --- | ---
| para-pa-ri | ad-i-ka | yi | ya-xwu
| say-FP-3SGS | DEM-PROX-CLres | 1SGPRO | 1SGPOSS-PW

arimbaxnaka.”

ariN-pa=xnaka
betelnut-CLres=FOC

‘He said “This is my betelnut.”’

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(6-5) "Yi Uipitak." varapari.
vi Uipitak para-pa-ri
1SGPRO PN say-FP-3SGS

"I am Uipitak." he said.

(6-6) Na vinatuwupa siama?
na vinatuwu-pa s-i-a=ma
2SGPRO mens.house-CL.res be-NT-3SGS=PQ

"Do you have a men’s house?"

(6-7) Ny mudut, tpari.
mm mudut tpari
3SGPRO go.down-3SGS do-FP-3SGS

‘He went down and did (it).’

(6-8) ..vipr. ar xmyanadr.
vi-pr ar xmyjanaN-t-r
come-1DUS 1DURO work-do-1DUS

‘...we came, and we worked.’

(6-9) Ny tutxamkipay salimitgamana...
mm tutxamki-pa-ŋ salimi-t-ŋa
3PLPRO shirt-CL.res-PL sell-do-2/3PLS

‘While they were selling shirts...’

The occurrence of overt NPs in contexts in which it is grammatical to use a pronoun is rare. This is especially true of pronominal NPs. Out of 1400 clauses surveyed, only twenty-five contained a free pronoun. (Of these 12 = 1sg, 3 = 1du, 1 = 1pl; 3= 2sg, 4 =3sg/pl).

The dearth of free pronouns in texts can be explained in part at least by the fact that the basic categories expressed by pronouns are registered by the bound pronominal forms discussed below. Another reason for their scarcity is the fact that deictic words, marked for class and number, overlap functionally, with the set of third person pronouns.
(6-10) \( Ln \) \( nbia. \)

\[
\begin{align*}
\text{i-m} & \quad \text{nb-i-a} \\
\text{PROX-CL\_male} & \quad \text{die-NT-3SGS}
\end{align*}
\]

‘This (male) died.’

It seems that pronouns are most commonly employed in Anamuxra for emphasis though this needs to be confirmed through future research.

### 6.4 Bound (affixed) pronominal forms

#### 6.4.1 Pronominal prefixes

The set of pronominal prefixes is identical to the set of free pronouns in all cases except for the third person singular which is realised by the ‘regular’ form, \( n- \) (as opposed to the third person plural \( n\eta- \) in the set of free pronouns). As with their free form counterparts, there are distinct forms of the first person singular.

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>DUAL</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>( yi-/ya- )</td>
<td>( ar- )</td>
<td>( an\eta- )</td>
</tr>
<tr>
<td>Second</td>
<td>( na- )</td>
<td>( nar- )</td>
<td>( nan\eta- )</td>
</tr>
<tr>
<td>Third</td>
<td>( n- )</td>
<td>( nr- )</td>
<td>( n\eta- )</td>
</tr>
</tbody>
</table>

Table 6-3: Pronominal prefixes

It is worth noting that realisation of the third person singular as \( n- \) in the pronominal prefix set fits the predicted pattern of association outlined above for free pronouns where \( /n/ \) expresses the third person and \( \varnothing \) correlates with singular number. As such it lends support for the treatment of third person singular free pronoun as an irregular form.

Despite the near identity of the free and prefixing pronoun forms, the two sets can be distinguished according to a number of factors:
i) bound forms cannot be separated from the word to which they attach whereas free pronouns can. This is most clearly illustrated by the fact that 
\[ n- '3sg' \] never occurs as an independent form in the language.\(^3\)

ii) bound forms are phonologically incorporated and can take stress associated with the word to which they mark. For example,

\[(6-11) \quad /ya-kua/ \quad > \quad [yákwa]
\]

1DUO-give ‘Give (it) to me!’

iii) a bound form can co-occur with a free pronoun expressing the same person-number details in the same clause and expressing the same argument, whereas two free pronouns cannot

iv) bound forms are obligatory in certain morphological contexts whereas free pronouns are not.

The pronominal prefixes have the widest distributional and functional possibilities of all bound pronominal sets. As these possibilities are examined in detail elsewhere in the grammar, I shall give only a brief summary here.

First, pronominal prefixes can attach to the negative word, -\(ma\), to cross-reference the subject of negative realis clauses (§7.6.2.1.2). In this function, it is yi- that is used, while in all other functions ya- is used.

\[(6-12) \quad Yima \quad xnba.
\]

\[[yi-ma\]\[ kn-ba\]

1SGS-NEG sleep-NEG ‘I didn’t sleep.’

Second, they can be used to index animate objects in transitive and ditransitive clauses (§10.2).

\(^3\) Furthermore, there are no instances of a single consonant occurring as an independent form.
Third, they are used to show the possessor in possessive nominal phrases, either by attaching directly to the noun denoting the possessed object, as in the case of most inalienable nouns, or attaching to the possessive word in the case of alienable possession (see §9.3.1).

Finally, they attach to the reflexive word:

6.4.2 Suffixal forms

There are four distinct sets of pronominal suffixes which obligatorily attach to the verb. These forms typically mark both the person and number of the subject of the clause. However, inanimate subjects are all indexed by the third person singular
form, resulting in a neutralisation of the distinction number for these referents.
Although there are significant formal resemblances between several of the suffixal sets, they are clearly distinguished according to their occurrence with different tense, mood morphemes and by their association with categories such as status, tense and polarity (see §7.6, §7.7 for details).

6.4.2.1 Set 1 pronominal subject suffixes

Set 1 suffixes (see table 6-4 below) are one of three pronominal suffix sets which occur in two distinct constructions. First, they attach to verb stems inflected by the future/irrealis suffix -ba- to form indicative future/irrealis independent final verbs (see §7.6). For example,

\[(6-18)\] Tambamiŋ.
\[tam-ba-mŋ\]
\[put-FUT-1PLS\]
‘We will put (it).’

Second, they can attach directly to the verb stem to form the same subject sequential medial verb form.

\[(6-19)\] Tpr. muga-pr vwa-ad-i-ki
do-1DUS come.down-1DUS settlement-DEM-ND-OBL
tuwuvxapar.
tuwuvxa-pa-r come.up-PP-1DUS
‘We did (it), and then we came down, and we came up to this settlement.’
Table 6-4: Set 1 pronominal subject suffixes (Future/Irrealis independent final; same subject sequential medial)

Set 1 pronominal suffixes show the greatest regularity in terms of the morphological separation of person and number categories. As with free and prefixing pronouns, formatives expressing person precede those expressing number. Apart from the plural in the second person, which is realised as -\(\_ya\), the expression of number is identical to that found in free and prefixing pronominals. That is,

- singular = \(\emptyset\)
- dual = \(-r\)
- plural = \(-\eta\) (1/3 person) \(-\_ya\) (2 person)

However, set 1 has distinct person formatives, these being:

1 = \(-m\) (singular and plural) \(-p\) (dual)
2 = \(-ta\)
3 = \(-t\)

6.4.2.2 Set 2 pronominal subject suffixes

Set 2 subject pronominals, shown in table 6-5 below, occur in two contexts. First, they are used to form the different subject irrealis medial verb (see §7.7).

(6-20) *Vidi,* *nbam.*
\(vi\_d\_i\) \(n\)-\(ba\)-\(m\)
\(\text{come-3SGS-DS.SEQ}\) \(\text{eat-FUT-1SGS}\)
‘He will come, and then I will eat’~
‘If/When he comes, I will eat’
...umkax nsimuta
u-mka-x n-simu-ta
IA-Cl\textsubscript{hun}-ACC.SG 3SGO-spear-2SGS

vasxnai n-kixr\textsubscript{mna}
vasx-na-i n-kixr-mna
come.up.to.settlement-2SGS-DS.SEQ 3SGO-see-1SGS.NEC

varapari.
para-pa-ri
say-fp-3SGS

"...you shoot one, and then you come up, and I must see it.” he said.’

Second, they are used to form the negative irrealis final independent verb along with the negative irrealis suffix -i. As shown in (6-21) and (6-22) this verb combines with the negative irrealis word, amu, as the head of negative irrealis independent clauses (§7.6). For example,

(6-22) \begin{align*}
\text{amu} & \text{ vimni.} \\
\text{vi-} & \text{mn-i} \\
\text{come-1SGS-NEG.IR} & \\
\text{‘I won’t/can’t come’}
\end{align*}

(6-23) \begin{align*}
\text{amu} & \text{ xnmri.} \\
\text{kn-} & \text{mr-i} \\
\text{sleep-1DUS-NEG.IR} & \\
\text{‘We won’t sleep.’}
\end{align*}

Set 2 pronominals follow the established pattern of person and number. Person is expressed by one of three formatives: -m for first person, -n for second person and -d for third person.
Table 6-5: Set 2 pronominal subject suffixes (Negative irrealis (future); Different subject irrealis medial)

Ignoring the first person singular and the optional $a$ in second person forms, we can observe the following regularities in the formation of set 2 pronominals, where person formatives precede number in the fashion established for other sets already discussed:

- **Person**
  - 1 = $m$
  - 2 = $n$
  - 3 = $d$

- **Number**
  - singular = $\emptyset$
  - dual = $-r$
  - plural = $-N$

For second person pronouns containing $a$ we must, however, recognise a distinct set of portmanteau forms: $a$ = ‘2sg’, $ra$ = ‘2du’, $Na$ = ‘2.pl’. Finally, with the first person singular, it appears that singular number is expressed as $n$ rather than the ‘predicted’ $\emptyset$. While this is clearly irregular within the context of the paradigms discussed so far, we shall see that there is a close correlation between $n$ and singular number in sets 3 and 4.

---

4 An alternative analysis of these forms would be to say that the $a$ is a distinct morpheme expressing second person category.
6.4.2.3 **Set 3 pronominal subject suffixes**

The third set of irrealis subject pronominal suffixes are given here in table 6-5.

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>DUAL</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First</strong></td>
<td>-mna</td>
<td>-mra</td>
<td>-mNa</td>
</tr>
<tr>
<td><strong>Second</strong></td>
<td>ø</td>
<td>-mura</td>
<td>-muNa</td>
</tr>
<tr>
<td><strong>Third</strong></td>
<td>-d</td>
<td>-dr</td>
<td>-dN</td>
</tr>
</tbody>
</table>

Table 6-5: Set 3 pronominal subject suffixes (Necessitive mood)\(^5\)

These pronominal suffixes attach directly to the stem of the verb to produce necessitive mood verb forms (see §7.6). For example,

(6-24) *Aria!*  *xn-mra!*
aria  *kn-mra*
OK  sleep-1DUS.NEC
‘OK! Let’s sleep!’

(6-25) *Mimura!*
mi-*mura*
leave-2DUS.NEC
‘You two leave it!’

(6-26) “*Mawapa na-muŋa!*”  *varapari.*
mawa-pa  na-μuŋa  para-pa-ri
sago-CLres  eat-2SGS.NEC  say-FP-3SGS
‘Eat sago!’ he said.

(6-27) *Paulina*  *mugudo!*
Paulina  mugu-d-o
PN  go.down-3SGS.NEC-o
‘Paulina must go down-o!’\(^6\)

---

\(^5\) Note that the third person series are the same as the third person series of Set 2, while the first person series = Set 2 + a.

\(^6\) ‘o’ is added to end of speech when calling out to someone.
It will be noted that the second person singular has no overt marking. In these cases, the imperative is signalled by the bare verb stem, as shown in (6-28)\(^7\)

Besides the second person singular, which is realised without any overt marking on the verb, we can recognise a number of patterns of segmentation with this set. First, person is expressed by one of three formatives: -m for first person pronouns, -d for third person pronouns and -mu for non-singular second person pronouns. Second, in the case of number we find two sets of markers. In the third person, singular is realised by $\emptyset$ marking, dual by -r and plural by -ya. In the first person singular is realised by -na, while in both the first person and second person series, dual is marked by -ra and plural by -ya.

---

\(^7\) The 2sgS necessitive can also be realised by adding -ga to the stem (see §7.6 for details).
6.4.2.4 SET 4 PRONOMINAL SUBJECT SUFFIXES

In the paradigm for set 4 pronominal suffixes, given in table 6-6 below, the distinction between second person and third person is neutralised in both the dual and plural number series. The form -ra is used for both second and third person dual, while -Na is used for second and third person dual.

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>DUAL</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>-n</td>
<td>-r</td>
<td>-N</td>
</tr>
<tr>
<td>Second</td>
<td>-na</td>
<td>-ra</td>
<td>-Na</td>
</tr>
<tr>
<td>Third</td>
<td>-a~ri</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6-7: Set 4 subject pronominal suffixes (Far past and near past-present, realis; Precautionary)

Set 4 suffixes are the only set of suffixes which is not exclusively associated with the instantiation of verbs expressing irrealis status. They occur in the construction of three distinct verb types. First, they can occur after the far past tense suffix to realise realis far past tense affirmative verb forms. For example,

\[(6-30) \quad \text{Tamapara.} \]
\[
\text{tama-pa-ra} \quad \text{put-FP-2/3DU}S
\]
\‘You (dual)/they (dual) put (it).’

\[(6-31) \quad \text{Donald nmgina Felicity nsixpari.} \]
\[
\text{Donald n-mgina Felicity n-six-pa-ri}
\]
\[
\text{PN 3SGPOSS-mother PN 3SGO-carry-FP-3SGS}
\]
\‘Donald’s mother carried Felicity.’
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Second, they can attach after the near tense suffix -i-∅ to realise the near tense affirmative verb form, as illustrated by (6-31) to (6-33).^8

(6-32)  
Daniel-x nkixrin.
Daniel-x n-kixr-i-∅  
PN-ACC.SG 3SGO-see-NT-1SGS
'I saw Daniel.'

(6-33)  
Nxiswarapari, "Na yatuwina." varapari.
n-xiswara-pa-ri na ya-tuw-i-na para-pa-ri
3SGO-tell-FP-3SGS 2SGPRO 1SGO-hit-NT-2SGS say-FP-3SGS
'He told him, saying "You hit me" he said'

(6-34)  
"Nxa, nbia." varapari.
nxa nb-i-∅ para-pa-ri
now die-NT-3SGS say-FP-3SGS
"'Now, he died.' he thought.'

Finally, it can combine with the precautionary suffix, -d- to form verbs which head precautionary clauses (§7.6.2.3). For example,

(6-35)  
Xbardna.
xbar-d-na
fall.down-PREC-2SGS
'It wouldn't be good if you fell.'

When subjected to the same segmental analysis as applied to the other pronominal classes, set 4 reveals a different pattern of organisation in which the relative ordering of person and number formatives is the mirror image of that found in other pronominals, with number preceding person. The following form-category correspondences are observed.

---

^8 Both the far past and near tense realis forms can be used as heads of independent clauses or as the heads of different subject realis medial clauses (see §7.6).
Person

1 = $\emptyset$

2/3 = -a

Number

singular = -n
dual = -r
plural = -N

Neither of the third person suffixes conforms to this analysis. The morpheme -ri does not submit to analysis at all. The other third person suffix, -a, does contain the 2/3 person formative a, but there is no overt number marker.

6.4.3 The grammatical status of bound pronominal forms

It has been argued for a number of languages that bound pronominals represent more than just a mechanism of syntactic agreement involving the cross-referencing of arguments on verbs or other constituents. For instance, Foley (1991:227-228), in discussing the role of pronominal affixes in Yimas, claims that:

pronominal affixes actually fill the argument positions of the verb and (that) any noun phrases filling what seem to be the core argument position of the verb are actually only indirectly linked to it, by being in apposition to a pronominal affix which bears the same class, person, and number specifications as the noun phrase.

Foley’s analysis of pronominal affixes is based on a number of grounds. These have been summarised by Donohue (1999:124) as follows:

1. Overt nominals are not often used in discourse, referents mentioned solely by means of their pronominal affixes (Foley 1991:229-230)

2. Pronominal affixes referring to nominals distinguish more number categories than do the nominals themselves (Foley 1991:230-231)

9 Others to have argued as such include Bresnan and Mchombo (1987) for Chichewa, Baker (1991) for Mohawk, Donohue (1999) on Tukang Besi and Van Valin and LaPolla (1997) for Lakhota.

10 A fourth argument provided by Foley relates to possessor raising where human possessors can occur on the verb in spite of the fact that the corresponding noun cannot appear in the clause. I have not included it for consideration here for the simple fact that there is no evidence of such structures in Anamuxra in the current corpus.
3. Even though an NP cannot be headed by two conjoined nominals, a pronominal affix can agree in number with multiple nominals (Foley 1991:231)

We shall now consider these points as they apply to Anamuxra.

a) Omission of NPs

We have already noted that NPs, including those headed by free pronouns, which bear subject, object or possessor relations are rare in naturally occurring discourse in Anamuxra. In most discourse contexts, the pronominal affix represents the only means of identifying the referent in the clause. As such, Foley’s first argument seems to be valid for Anamuxra. However, there are a number of circumstances in which there is no overt pronominal affix present. First, whereas animate objects of transitive clauses are indexed on the verb by a pronominal prefix, inanimate objects are not (§10.2).

(6-37)  
Yiv nkixrin.  
yiv n-kixr-i-n  
father 3SGO-see-NT-1SGS  
‘I saw father.’

(6-38)  
Muguwaka ixrin.  
mugux-a-ka kixr-i-n  
house-ND-CL_res see-NT-1SGS  
‘I saw that house.’

Second, objects corresponding to the theme argument of ditransitive verbs are never cross-referenced on the verb, irrespective of the animacy of the referent. Rather, the pronominal prefix always cross-references the object associated with the recipient, goal or source of the verb (§10.2).

Foley deals with similar cases in Yimas by claiming that the theme argument is linked to a zero pronominal affix (Foley 1991: 233). Certainly, in the case of inanimate objects of transitive clauses, it is possible to envisage a zero pronominal prefix filling the slot associated with the pronominal prefix found with their
animate counterparts. However, given the lack of paradigmatic evidence in the other cases, arguments for a zero affix appear less tenable. (Any attempt to posit a pronominal affix in a particular position in the word would be open to the charge of arbitrariness).

b) Mismatch in number categories

Foley's second argument concerning the mismatch in number categories which favours pronominal affixes is not valid for Anamuxra. Indeed, in certain cases, the opposite is true. Specifically, inanimate subjects are indexed on the verb by a third person singular suffix, irrespective of the number marked on the corresponding NP. For example,

(6-39)  

\[ Vaxaŋ \quad \text{vaxaN-IJ} \quad \text{string.bag-PL} \quad \text{sia.} \quad \text{be-NT-3SGS} \]  

'There are string bags.'

Besides the problems associated with core arguments lacking any overt instantiation and the mismatch in number marking, there is a serious problem for the pronominal argument analysis related to the realisation of negative irrealis clauses. Generally, negative irrealis clauses are formed by the combination of the irrealis negative word, \textit{arnu} plus a verb inflected by set 2 irrealis subject suffixes. For example,

(6-40)  

\[ Amu \quad \text{vta} \quad \text{tamni.} \quad \text{NEG.IR} \quad \text{get-2SGS} \quad \text{put-2SGS-NEG.IR} \]  

'You won't get (it) and put (it).'

However, \textit{arnu} can be substituted in these clauses by the general negative word, \textit{-rna} (§10.4). As we have seen, \textit{-rna} is inflected by a pronominal prefix indexing the person and number features of the subject. For example,
In such cases, the subject is in fact marked on both the negative word and the verb. If we are to accept that pronominal affixes fill the argument position of verbal predicates, constructions such as that in (6-40) should be unacceptable under the universal condition that a predicate can possess only one subject.

To conclude, then, given mixed evidence for determining the grammatical status of pronominal affixes in Anamuxra, it may be more accurate, or more satisfactory at least to view the realisation of subject, object and possessor arguments as a combination of NP and pronominal affixation.11

11 Terrill (1999: 215) suggests a similar approach for Lavukaleve, a Papuan language of the Solomon Islands. Pawley (pc) notes a parallel situation in the Fijian language where the subject NP is discontinuous (see Pawley 1986: 96 for brief discussion of Standard Fijian).
Chapter 7

Verb morphology

7.1 Introduction

This chapter introduces the structure of the verbal word, with a particular focus on the distribution and functional properties of bound, or affixal morphemes. In §7.2, I provide an overview of the major, first order positions found in the verb. In §7.3, I deal with the few stem-deriving affixes found on Anamuxra verbs. §7.4 outlines the morphophonemic subclasses of verb bases that can be distinguished in different contexts, while §7.5 describes the set of various aspectual suffixes. Finally, §7.6 details the inflectional systems of final and medial verbs, which are characterised by a complex interaction between subject person-number marking, tense, polarity and mood, as well as by switch reference and relative tense in the case of medial verbs.

7.2 Overview of verb structure

The structure of the verb in Anamuxra may be represented schematically as follows:

\[
\text{Verb} \rightarrow (\text{ProPref}) + \textbf{Stem} + (\text{Asp}) + \{ \text{inflections} \}
\]

The first position in the verb is represented by the pronominal prefixes which index the animate Object of transitive and ditransitive verbs. The paradigm of
pronominal prefixes was given in §6.4.1 and their association with objects in terms of clause structure is discussed in §10.2.2.3. Here I give just a few examples of their use:

(7-2) \begin{align*}
Umkax & \quad akwi & \quad nsimupan. \\
[u-mka=x] & \quad aku-i & \quad n-simu-pa-n \\
1A-CL_{nhwe}=ACC.SG & \quad FD-OBL & \quad 3SGO-spear-FP-1SGS \\
\end{align*}
‘I speared one (pig) over there.’

(7-3) \begin{align*}
Adakum & \quad yax & \quad yatuwumnabat. \\
[ad-aku-m] & \quad [ya=x] & \quad vyu-tuwu-mna-ba-t \\
DEM-FD-CL_{male} & 1SGPRO=ACC.SG & 1SGO-kill-IMM-FUT-3SGS \\
\end{align*}
‘This (man) wants to kill me.’

(7-4) \begin{align*}
Na & \quad akakarapa & \quad nakwin. \\
na & \quad akakara-pa & \quad na-ku-i-n \\
2SGPRO & \quad chicken-CL_{res} & 2SGO-give-NT-1SGS \\
\end{align*}
‘I gave you the chicken.’

The second position in the verb is occupied by the stem. There are two derivational stem classes: simple and complex. Simple stems are those with no internal structure. For example,

(7-5) \begin{align*}
Muguin. \\
mugu-i-n & \quad go.down-NT-1SGS \\
\end{align*}
‘I went down.’

Complex stems can consist of compound stems as in (7-6) and (7-7) and stems with a derivational affix as in (7-8) and (7-9).

(7-6) \begin{align*}
Arinan. & \quad stem= noun + verb \\
arIN-na-Ø-n & \quad betelnut-eat-NT-1SGS \\
\end{align*}
‘I chewed betelnut.’
CHAPTER 7 - VERB MORPHOLOGY

(7-7) *Avidia.*

[stem= adj+ verb]

*avIN-t-i-a*
good-do-NT-3SGS

'It’s good.'

(7-8) *Tkramia.*

[stem= verb + DER]

*tk-ram-i-a*

be.full-CAUS-NT-3SGS

'He made (it) full.'

(7-9) *Madaguin.*

[stem= DER + Verb]

*maN-tagu-i-n*

awkwardly-step-NT-1SGS

'He slipped.'

Only complex stems with a derivational affix are considered in this chapter (see §7.4). Compound verbs are discussed along with other types of complex verbs in §8.

Inflection for aspect is optional and occurs immediately after the stem (§7.5).

The final inflectional positions on the verb are taken by the various affixes associated with tense-status-mood system as well as polarity, subject person and number, switch reference and relative tense. A major distinction is drawn between final verbs and medial verbs in terms of the types of inflections that each can take. Final verbs can take up to four suffixes which express mood, tense, status, polarity, subject person number. Medial verbs can take up to three post-aspect suffixes. Unlike final verbs they do not take specification for mood, but do take suffixes marking switch-reference and relative tense. The correspondence between functional categories of tense, status and mood is complex and is discussed in detail in §7.6 (final verbs) and §7.7 (medial verbs).
7.3 The base, the theme vowel and base classes

We can recognise two main bases for inflectional suffixes in the verb: 1 (a) the stem base, which can serve as the base for either aspect suffixes (7.5), final and medial inflections (§7.6, §7.7) ; and (b) stem + aspect base (hereafter ‘aspect bases’), which can serve as a base for medial and final inflections. 2

A number of base classes can be distinguished on the basis of (a) presence/absence of a theme vowel -a in the base in different morphological environments and (b) selection of allomorphs of the near tense morpheme. (The choice of near tense allomorphs, -i and -Ø, not only depends on the base but also the following subject person and number specification.) The intersection of (a) and (b) results in five distinct ‘base’ classes. These are illustrated in table 7-1 using non-derived stem base forms. However, the alternations found for these parallel those for derived stem bases and ‘aspect’ bases (see below). 3 The assignment of verbs to the different classes is purely lexical. For a summary of the possible sequences of morphemes within the ‘final/medial’ inflection position see §7.8.

---

1 I use the term ‘base’ here to mean “any unit to which affixes of any kind can be added” (Katamba 1993: 45).
2 This represents a simplified view of the possible bases in the Anamuxra verb. It does not take into account co-occurrence restrictions on different aspect and final and medial markers. Nor does it account for the more specific base possibilities for particular suffixes within the final and medial positions.
3 cf Aronoff’s (1994) discussion of Latin.
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Table 7-1: Base classes and example paradigms

Class I - C final
Class I bases take the -a- theme vowel before all inflectional categories except for the future and near tense. They take the -i allomorph of the near tense in all subject person-number categories. Class I aspect bases include the iterative base, marked by -ram (§7.5.1) and the exhaustive aspect form, marked by -xad (§7.5.2).

All verbs roots in this class are consonant final. The following are some Class I bases:

- **itx-** 'return'
- **mam-** 'dig'
- **mzr-** 'sit (down)'
- **tam-** 'put'
- **tar-** 'put in'
- **tax-** 'cut'
- **tm-** 'run'
- **tur-** 'hold'

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>tam-(a)</td>
<td>-ku-(a)</td>
<td>n-(a)</td>
<td>vi-</td>
<td>p</td>
</tr>
<tr>
<td>put</td>
<td>'give'</td>
<td>'eat'</td>
<td>'come'</td>
<td>'get'</td>
</tr>
</tbody>
</table>

Future (1SGS)  
- tam-ba-m  
- naku-ba-m  
- n-ba-m  
- vi-ba-m  
- p-ba-m

Near (3SGS)  
- tam-i-a  
- naku-i-a  
- n-i-a  
- vi-i-a  
- p-i-a

Near (1SGS)  
- tam-i-n  
- naku-i-n  
- n-ø-n  
- vi-i-n  
- p-ø-n

Far Past (1SGS)  
- tama-pa-n  
- naku-pa-n  
- na-pa-n  
- vi-pa-n  
- p-pa-n

SS seq (1SGS)  
- tama-m  
- nakua-m  
- na-m  
- vi-m  
- p-m

Necessitive (2SGS)  
- tama-ga  
- yakua-ga  
- na-ga  
- vi-ga  
- p-ga

Necessitive (2SGS) Short  
- tama  
- yakua  
- --  
- --  
- --
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Class II - /u/ final

Class II takes the a theme vowel in the same environments as Class I bases except for the Far Past, where they occur without -a. Like Class I, Class II bases take the -i- form of the near tense in all subject person/number categories. All Class II verbs are further distinguished by the fact that their roots end in /u/ (though note that not all roots that end in /u/ belong to class II).

- **abu**- 'pull out'
- **-ku**- 'give'
- **tagu**- 'step'
- **vtagu**- 'walk'
- **migu**- 'show'
- **tagu**- 'do again'
- **tuwu**- 'hit, kill, perform'
- **kwu**- 'go'

Class III - irregular C final

Class III bases take the -i- form of the near tense in the third person singular subject category. Elsewhere, they take ø. Class III bases take the a theme vowel in all categories except for the future and the third person singular (precisely where -i- is missing). Class III is the most restricted of the five classes. It consists of the stem plus -na (§7.4.3) as well as the following three non-derived stem classes.

- **n**- 'eat'
- **s**- 'be at'
- **was**- 'look (check)'

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Class IV /i/ final and irregular /u/ final

Class IV bases, like class I and II bases, take the -i- form of the near tense in all subject person/number categories. However, class IV bases are distinguished on the grounds that they never take the a thematic vowel (see also Class V below). Roots in this class are either /u/ or /i/ final. Examples of class IV members are:

- **simu-** ‘spear’
- **tximu-** ‘hit’
- **kamu-** ‘help’
- **mudu-** ‘go up’
- **mugu-** ‘go down’
- **vi-** ‘come’
- **mi-** ‘leave; lose’
- **ayi-** ‘cry’

Class V - C.final

Class V bases never take the theme vowel, but like class III they take the -i- form of the near in the third person singular subject and ø elsewhere. This class is composed of consonant-final roots. Members include:
There are two main verb stem deriving affixes in Anamuxra: the prefix maN- and the suffix -ram(a). There is another suffix, -n(a) which is treated here as a derivational affix, but which has no identifiable synchronic meaning.

7.4.1 ‘X awkwardly’ MaN-

MaN- is added to a verb to derive a verb with the meaning ‘X awkwardly’. For example,

(7-10) Aya yiviaga magnn.
aya yiviaga maN-kn-ø-n
yesterday night awkwardly-sleep-NT-1SGS
‘Last night, I slept awkwardly.’

(7-11) Madaguina.
maN-tagu-i-na
awkwardly-step-NT-1SGS
‘You slipped.’
7.4.2 Causative -ram(a)-

The Causative suffix -ram(a)- is used with intransitive stative verbs, including those derived from the combination of nouns, adjectives and the verb -t- ‘do’ (§8.5). It derives a transitive verb with a causer as the subject. The class of nominals that occur as the subject of the intransitive verb is the same as the object of the derived transitive verb. Examples of its use are:

\[(7-12)\]

\[
\text{Arigaka} \quad \text{aputramia.}
\]

\[
\text{ariNx-a-ka} \quad \text{apu-t-ram-i-a}
\]

betelnut-ND-CLres \quad \text{bad-do-CAUS-NT-3SGS}

'He made the betelnut bad.'

\[(7-13)\]

\[
\text{Vkpa} \quad \text{tkramin.}
\]

\[
\text{vkxaka} \quad \text{tik-ram-i-n}
\]

bamboo-CLres \quad \text{full-CAUS-NT-1SGS}

'I made the bamboo full.'

7.4.3 -n(a)-

There is a small set of verbs which can take the suffix -n, which forms a class III base. For a few verbs the addition of -n corresponds to a change in meaning.

\[(7-14)\]

\[
\text{tuwua(-)n-} \quad \text{‘pound sago’}
\]

\[
\text{tuwu-} \quad \text{‘hit’}
\]

\[(7-15)\]

\[
\text{iswara(-)n-} \quad \text{‘tell (story)’}
\]

\[
\text{iswar-} \quad \text{‘tell, speak to’}
\]

In other cases, however there is no discernible difference in the meaning of the two forms.\(^5\)

---

\(^4\) Note that the causative has the same form as the iterative aspect suffix -ram (see §7.4.2).

\(^5\) Future research may show that -n has an aspectual function, perhaps along the lines of 'extendedness'.
(7-16)  \( axa(\cdot)n- \)  
ax-  
‘bind’

(7-17)  \( av(\cdot)n- \)  
av-  
‘s own shelter, build (shelter)’

(7-18)  \( waga(\cdot)n- \)  
wag-  
‘boil (something)’

7.4.4 Reduplication

The reduplication of verbs is a productive process in Anamuxra. Reduplication is suffixing, and in all cases, the reduplicated stem takes the form base-N-reduplicant where the base and reduplicant are separated by a nasal segment which assimilates in place to the following consonant (§2.4.1). In cases where the verb is vowel initial, the epenthetic velar consonant is inserted after the nasal resulting in homorganic nasal velar stop cluster [ŋg]. For class IV and V verbs, reduplication applies to the root. Note that in cases where the root consists of single consonant as in \( t\- \) ‘do’, \( p\- \) ‘get’ both the base and reduplicant take the epenthetic vowel. Examples are given in table 7-2:

<table>
<thead>
<tr>
<th>verb root</th>
<th>meaning</th>
<th>reduplicated stem</th>
<th>phonetic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>/aŋi-/</td>
<td>‘cry’</td>
<td>aŋi-N-əŋi</td>
<td>[aŋʰəŋaŋi]</td>
</tr>
<tr>
<td>/βi-/</td>
<td>‘come’</td>
<td>βi-N-βi</td>
<td>[βəmbi]</td>
</tr>
<tr>
<td>/t-/</td>
<td>‘do’</td>
<td>t-N-t</td>
<td>[təndɔ]</td>
</tr>
<tr>
<td>/p-/</td>
<td>get</td>
<td>p-N-p</td>
<td>[βəmbɔ]</td>
</tr>
</tbody>
</table>

Table 7-2: Reduplication (classes IV and V)

---

6 Reduplication is treated here as a suffixing process on the grounds that (a) across word-classes, morphological derivation is generally suffixing (though man- awkwardly’ §7.4.1), and (b) elsewhere N occurs as a post-stem formative (see §5.3.2).
Reduplicated forms such as those above are used in same subject simultaneous medial constructions (§7.7.2.1, §11.3.3.1) and as the stem for nominalisation (§5.3.7).

For classes I and II there are two possibilities. First, reduplication can apply to just the root.

<table>
<thead>
<tr>
<th>verb root</th>
<th>meaning</th>
<th>reduplicated stem</th>
<th>phonetic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tur-/</td>
<td>‘hold’</td>
<td>tur-N-tur</td>
<td>[torndɔr]</td>
</tr>
<tr>
<td>/tam-/</td>
<td>‘put’</td>
<td>tam-N-tam</td>
<td>[tɔmndam]</td>
</tr>
<tr>
<td>/βtagu/</td>
<td>‘walk’</td>
<td>βtagu-N-βtagu</td>
<td>[βtɔŋgɔmbɔtɔŋgɔ]</td>
</tr>
<tr>
<td>/kwu/</td>
<td>‘go’</td>
<td>kwu-N-kwu</td>
<td>[wɔŋgu]</td>
</tr>
</tbody>
</table>

Table 7-3: Reduplication - Root (Classes I and II)

This form is used only as the base for nominalisation.

The second pattern of reduplication targets the augmented base i.e. root plus /a/. For example,

<table>
<thead>
<tr>
<th>verb root</th>
<th>meaning</th>
<th>reduplicated stem</th>
<th>phonetic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tura-/</td>
<td>‘hold’</td>
<td>tur-N-tur</td>
<td>[turanda]</td>
</tr>
<tr>
<td>/tama-/</td>
<td>‘put’</td>
<td>tama-N-tama</td>
<td>[tamandama]</td>
</tr>
<tr>
<td>/βtagua/</td>
<td>‘walk’</td>
<td>βtagua-N-βtagua</td>
<td>[βtɔŋgɔmbɔtɔŋgwa]</td>
</tr>
<tr>
<td>/kra-/</td>
<td>‘cook’</td>
<td>kra-N-kra</td>
<td>[xrangra]</td>
</tr>
</tbody>
</table>

Table 7-4 Reduplication Root plus a (Classes I and II)

The second reduplicated form is used in same subject simultaneous medial constructions.

---

7 Reduplication of class III stems is yet to be accounted for.
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7.5 Aspect

Anamuxra distinguishes five aspectual categories morphologically on the verb: exhaustive, iterative, still, habitual and imminent.

7.5.1 The exhaustive: -xad(a)-

The exhaustive suffix, -xad(a)- indicates that an event has reached completion through the total affectedness of an object as in (7-19) to (7-23),

(7-19)  
Yi  naxadin.  
yi na-xad-i-n  
ISGPRO eat-EXH-NT-1SGS  
'I ate (all the food).'

(7-20)  
Muguwaka  uvspa  vxadapari.  
mugux-a-ka  uvs-pa  p-xada-pa-ri  
house-ND-CLres fire-CLres get-EXH-FP-3SGS  
'The fire got the whole house.'

(7-21)  
Tuxadapari.  
tu-xada-pa-ri  
burn-EXP-FP-3SGS  
'It burnt (it) completely.'

(7-22)  
Igi  yatxadia.  
igi ya-t-xad-i-a  
forgetfulness ISG0-do-EXH-NT-3SGS  
'I completely forgot'  

(7-23)  
Tmadxadia.  
tmaN-t-xad-i-a  
forest-do-EXH-NT-3SGS  
'It is overgrown.' [lit. 'It is completely forest. ']

---

8 Some speakers preferred to use the modifier sxam 'all, completely' rather than -xad to express the meaning of this example, saying sxam igi yatia 'I completely forgot' (completely forgetfulness ISG0-do-NT-3SGS).
7.5.2 The iterative: -ram(a)-

The iterative is indicated by the suffix, -ram(a)- and describes several instances of the same situation. For example,

\[ Uviramam \quad tuxamkaki \quad tarini, \]

\[ uvi-rama-m \quad tuxamk-a-ki \quad tar-i-n-i \]

\[ \text{twist.off-ITR-1SGS} \quad \text{shirt -ND-OBL} \quad \text{put.into-1SGS-DS.SEQ} \]

\[ muguiai, \quad abxa \quad muduin. \]

\[ mugu-i-a-i \quad abxa \quad mudu-i-n \]

\[ \text{go.down-NT-3SGS-DS.SEQ} \quad \text{now} \quad \text{go.up-NT-1SGS} \]

'I broke off (the betelnut), put them into my shirt (pocket), and now I went up.'

\[ Taxirwuramam, \quad tavadaramam, \quad wutaxibiram.... \]

\[ taxirwu-rama-m \quad tavada-rama-m \quad kuta-xibira-m \]

\[ \text{cut-ITR-1SGS} \quad \text{split-ITR-1SGS} \quad \text{hold-align-1SGS} \]

'I cut (the fronds), split (them), aligned (them)....'

7.5.3 The habitual -d-

A verb marked for habitual aspect describes a situation which is characteristic of an extended period of time (Comrie 1976:27-28). There are two means of marking habitual aspect in Anamuxra: the affixation of -d and the use of the t- 'do' in Independent SVCs (§8.2.6). The auxiliary option is much more common in the corpus used for this study. It is unclear what, if any functional differences there are between the two constructions. Examples of the use of -d are as follows:

\[ Na-\eta \quad xndi\eta. \]

\[ na-\eta \quad kn-d-i-\eta \]

\[ \text{eat-3PLS} \quad \text{sleep-HAB-NT-3SGS} \]

'They cook, and then we sleep'

---

9 It is possible that the verb -d 'hab' is better analysed as consisting of a nominalised verb plus the verb -t 'do'. For example, kn\_d\_i\_\eta /kn-N-t-i-\eta/ 'sleep-NOM-do-NT-1SGS (we do sleeping)'. Such an analysis would fit with other nominal plus t- 'do' compounds described in §8.5).
...sxa  uvxadija.
sxa  uvxa-d-i-ŋa
again  wash-HAB-NT-2/3PLS
‘...again they wash (it).’

7.5.4 The persistent -bd-

-bd- expresses persistent aspect and can be given the English translation ‘still’. This aspect describes an event that has continued from an earlier point in time. Examples include:

(7-28)  Xnbdia.
kn-bd-i-a
sleep-PERST-NT-3SGS
‘He’s still sleeping.’

(7-29)  Nbdia.
 n-bd-i-na
‘eat-PERST-NT-2SGS’
‘You’re still eating.’

7.5.5 The imminent: -mna-

The imminent suffix -mna- indicates that an event is about to occur. For example,

(7-30)  Yatuwumnabat.
ya-tuwu-mna-ba-t
1SGO-kill-IMM-FUT-3SGS
‘He’s about to kill me.’

(7-31)  Nbmnabat.
nb-mna-ba-t
die-IMM-FUT-3SGS
‘She’s about to die.’

There is some suggestion that included in the meaning of the persistent aspect is the idea that the persistence of an event is contrary to expectation. However, this needs to be confirmed by further study.
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(7-32)  
\[Uxv\text{mnabat.}\]  
\[uvx-mna-ba-t\]  
dawn-IMM-FUT-3SGS  
'It's nearly dawn'

The imminent is restricted to the future as illustrated by the unacceptability of (7-33):

(7-33)  
\[^{\star}ya-tuwu-mna-pa-n\]  
1SGO-kill-IMM-FP-3SGS  
'He was about to kill me.'

7.6  Final verb inflections

7.6.1  Introduction

A final verb can occur in clauses which can terminate a switch reference chaining construction (§11.3) and which provide specification of mood or tense over the entire chain. There are two main final verb types: independent and co-dependent.

Besides subject person and number, the full range of grammatical categories expressed on final verbs are:

\begin{itemize}
  \item \textbf{Mood:} Indicative, Necessitive, Precautionary, Optative, Counterfactual
  \item \textbf{Polarity:} Affirmative, Negative
  \item \textbf{Status:} Realis, Irrealis
  \item \textbf{Tense:} Non future (Far Past, Near), Future
\end{itemize}

The following general points about the morphological realisation of the above functional categories should be noted:

a. There are restrictions on the co-expression of different categories. For instance, negative polarity and tense categories are only marked in the indicative mood and not in the necessitive, precautionary or optative mood.

b. There are just a few cases such as the precautionary mood -\(\text{d}\) where a single morpheme expresses just one functional category. More commonly, two or more categories are combined in a single (portmanteau) morpheme. The
necessititive mood, for instance, is combined with subject person-number indexing in the form of set 3 pronominal subject suffixes. Similarly, the suffix -ba, combines realis status (non-future tense), negative polarity as well as indicative mood for independent verbs.

c. In some cases, a functional category is the product of the combination of inflections.

d. Some categories are expressed differently depending on the presence of other categories. For example, in the non-future negation is expressed on the by the -ba along with the negative word -ma whereas in the future, negation is marked by the presence of set 2 subject pronominal suffix plus the negative irrealis suffix -i along with negative word amu.

Given the lack of consistent one-to-one correspondence between individual inflections and functional categories, the following discussion is organised in terms of syntactic/functional categories rather than individual morphemes. I first consider the form of final verbs, then the form of co-dependent verbs.

7.6.2 Independent final verbs

Independent final verbs (hereafter ‘independent’ verbs) are those which head a clause that either stands alone in a single base of a simple sentence and can be interpreted as a complete, non-elliptical utterance, or which heads a clause which serves as the final clause in a switch reference chaining construction. Morphologically, independent verbs can be defined negatively as verbs which do not contain a medial suffix and which are not marked as co-dependent.\textsuperscript{11}

Anamuxra distinguishes four moods on independent verbs: indicative, which is used as the basis for both interrogative and declarative constructions, necessitive, precautionary and optative.

7.6.2.1 INDICATIVE MOOD FORMS

There is no discrete affix marking indicative mood. Rather, indicative mood is identified by the use of different combinations of affixes expressing tense/status,

\textsuperscript{11} MacDonald (1990: 173) gives a similar definition of Independent (final) verbs in Tausa.
polarity and subject person-number categories. The indicative form is used as
the basis for both declarative and interrogative constructions. The declarative
indicative is the unmarked mood; whereas interrogative constructions are
distinguished either by presence of the clitic =ma (§3.12.1) which marks polar
questions or of one of the set of interrogative words (§3.4.6). Compare the
following examples:

(7-34) Yakixrina.
   ya-kixr-i-na
   1SGO-see-NT-2SGS
   ‘You saw me.’

(7-35) Yakxrinama?
   ya-kixr-i-na=ma
   1SGO-see-NT-2SGS=PQ
   ‘Did you see me?’

(7-36) Abki yakixrina?
   ab-ki ya-kixr-i-na
   GQW-OBL 1SGO-see-NT-2SGS
   ‘Where did you see me?’

The indicative is the only mood in which a distinction is made between
affirmative and negative propositions. It is also the only mood in which tense
categories are formally distinguished on the verb.

7.6.2.1.1 Affirmative indicative verbs

Within the set of affirmative indicative independent verbs, three tenses are
distinguished morphologically on the verb: far past, near past-present and future.
These tenses divide according to the realis-irrealis status distinction as indicated
in table 7-5.12

12 See §11.3.4 for evidence of the realis/irrealis distinction manifested in DS medial forms.
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<table>
<thead>
<tr>
<th>Realis</th>
<th>Irrealis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far past</td>
<td>Future</td>
</tr>
<tr>
<td>Near-past-present</td>
<td></td>
</tr>
</tbody>
</table>

Table 7-5: The correspondence between tense-status

It should be noted, however, that of the two categories, tense and status, the former is the dominant inflectional category in indicative forms. Status is expressed implicitly by the choice of tense (and also subject person-number marking) and surfaces in the form of different subject medial verbs (see §7.7.2.2; also §11.3).

**Far past: -pa + SUBJ (set 4)**
The indicative affirmative far past verb is formed with the suffix, -pa, plus the appropriate set 4 subject pronominal suffix (§6.4.2.4) and is used to describe situations which occurred some time prior to the end of the day before yesterday as shown in figure 7-1:

![Figure 7-1: The domain of far past](image)

Example (7-37) refers to an event which occurred exactly two days prior to the moment of speaking, (7-38) refers to events that took place over ten years before, while (7-39) is taken from a legend.
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(7-37)  
vwadiki  
tuwuvxapar.

vwa-ad-i-ki  
tuwuvxa-pa-r  
place-DEM-PROX-OBL  
come.up-FP-1DUS

'...and then, we (two) came upon this place.'

(7-38)  
Ikuka  
ixnapay.

ikuka  
kn-pa-n  
just  
sleep-FP-1PLS

'We just slept (without bedding).'

(7-39)  
Ukura  
xrapari.

u-kura  
kra-pa-ri  
IA-CLmale  
cook-FP-3SGS

'One man cooked (sago).'

Near past-present: -i-Ø + SUBJ (set 4)

The near past-present tense (hereafter, 'near tense') is marked either by the suffix 
-i- or by Ø depending on the stem class as described in §7.3.2, plus the appropriate 
set 4 subject suffix. It most commonly marks an event as ongoing at the moment 
of speaking or as located prior to the moment of speaking either earlier in the 
same day or the day before (yesterday). The domain of the contemporaneous tense 
is represented as:

day before  yesterday  today

Figure 7-2. The domain of the Near

Examples are:
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(7-40)  
... wubi  muguin  
xub-i  mugu-i-n  
road-OBL  go.down-NT-1SGS  
'... (and then) I went down the road.'

(7-41)  
... nxa,  yi  nānymim,  mudin.  
nxa  yi  nā-μi-m  mud-i-n  
then  1SGPRO  3PLO-leave-1SGS  come.up-NT-1SGS  
'...then, I left them and came up.'

(7-42)  
Mubay  vn.  
muN-pa-n  p-g-n  
k.o yam-CL-res-PL  get-NT-1SGS  
'I got yams.'

(7-43)  
... ar  xmyanadr  
ar  xmyanjaN-t-g-r  
2SGPRO  work-do-NT-1DUS  
'... we two worked.'

The near tense can be used as a kind of narrative present. Consider the example in (7-44), which is taken from a legend about two ancestral beings. For the most part, the narrative is presented in the far past tense, as illustrated by sentence (7-44a). However, the narrator switches from the far past to the near tense in the next three sentences (7-44b-d). This switch from past to present is used to make the action more vivid for the listener.\[13\]

(7-44)  
\(a\). Adaka  nma  
ad-a-ka  n-ma  
DEM-ND-CLres  3SGS-NEG  
msdbai  tpari  adam  
msN-t-ba-i  t-pa-ri-i  ad-a-m  
sweet-do-NEG-DEP  do-FP-3SGS-DS.SEQ  DEM-ND-CLmale

\[13\] cf English narrative style.
tamapari.
tama-\textipa{pa}-ri
put-FP-3SGS
‘That wasn’t sweet and so that man put it (aside).’

\begin{table}[h]
\begin{tabular}{|l|l|l|l|}
\hline
b. Vadamdugava & nxwu & aka & xria. \\
Vadamdugava & n-xwu & a-ka & kr-\textipa{t}\textipa{-a} \\
PN & 3SGPOSS-PW & ND-CLres & cook-NT-3SGS \\
\hline
\end{tabular}
\end{table}

‘Vadamdugava cooks his.’

c. Waragidia.

waragid-\textipa{t}\textipa{-a}
take.away-NT-3SGS
‘He takes (it) away.’

d. Nia.

n-\textipa{t}\textipa{-a}
eat-NT-3SGS
‘He eats (it).’

There is also some evidence that the near tense can be used as a general past tense marker when combined with certain temporals associated with the span of time normally denoted by the past tense marker. For example,

(7-45) \textit{Anuj} \quad \textit{xbaria}.

anuj \quad xbar-\textipa{t}\textipa{-a}
two.days.ago \quad fall.down-NT-3SGS
‘Two days ago s/he/it fell down.’

Finally, the near tense verb form can be used to refer to future events instead of the future tense form (see below) when the speaker wants to highlight the imminency or certainty of the realisation of the event. For example, in (7-46) the speaker tells his friend that he is going up using the future tense, despite the fact that he had not left.\footnote{cf English ‘going to’ future.}
CHAPTER 7 - VERB MORPHOLOGY

(7-46)  

\[ \text{Ten klok} \quad \text{tiaixan,} \quad \text{nxiswaram,} \]

\[ \text{ten klok} \quad \text{t-ɪ-a-i=xan} \quad \text{n-xiswara-m} \]

\[ \text{ten o’clock} \quad \text{do/make-NT-3SGS-DS.SEQ=FOC} \quad \text{3SGO-talk-1SGS} \]

“\text{Yi} \quad \text{muduin.”} \quad \text{varin.} \]

\[ \text{yi} \quad \text{mudu-i-n} \quad \text{par-ɪ-n} \]

\[ \text{1SGPRO} \quad \text{go up-NT-1SGS} \quad \text{say-NT-1SGS} \]

‘It was ten o’clock, and I told him, saying ‘I am going up.’

Future: -ba + SUBJ (Set 1)

The future is marked by the suffix -ba plus set 1 subject pronominal suffixes, and locates an event after the moment of speaking.\(^{15}\) That is,

\[
\begin{array}{c}
\text{MOS} \\
\text{The domain of the Future}
\end{array}
\]

\[ \text{Examples of verbs in future tense are:} \]

(7-47)  

\[ \text{Nxa,} \quad \text{ugupa} \quad \text{avibi} \quad \text{tuwuvxbat.} \]

\[ \text{nxa} \quad \text{ugu-pa} \quad \text{aviN-vi} \quad \text{tuwuvx-} \text{ba-t} \]

\[ \text{now} \quad \text{hand.drum} \quad \text{good-ADV} \quad \text{come.up-FUT-3SGS} \]

‘Now, the hand drum will come up well.’

\[ \text{15 As is commonly the case cross-linguistically, the speaker may be either the current speaker or a speaker in a quote.} \]
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(7-48)  
\begin{align*}
\text{Arukura} & \quad \text{varbat,} \\
\text{aru-kura} & \quad \text{par-\textbf{ba}-t} \\
\text{large-Cl}_{\text{res}} & \quad \text{say-FUT-3SGS} \\
\text{mukrpa} & \quad \text{possum-Cl}_{\text{res}} \\
\end{align*}

\textit{nkixrbata} \quad \text{varbat.}

\begin{align*}
\text{n-kixr-\textbf{ha}-ta} & \quad \text{par-\textbf{ba}-t} \\
3\text{SGO-see-FUT-2SGS} & \quad \text{say-FUT-3SGS} \\
\end{align*}

‘A big man will say “You will see a possum.”’

(7-49)  
\begin{align*}
\text{Wusuana} & \quad \text{“Aka} \\
\text{wusu-a-na} & \quad \text{yi} \\
\text{new-ND-Cl}_{\text{res}} & \quad \text{iSGPRO} \\
\text{sx-bam.”} & \quad \text{say-PP-3SGS} \\
\end{align*}

\begin{align*}
\text{varapari.} & \quad \text{a-ka} \\
\text{para-pa-ri} & \quad \text{sx-\textbf{ha}-m} \\
\text{say-PP-3SGS} & \quad \text{carry-FUT-1SGS} \\
\end{align*}

‘The new woman said “I will carry it.”’

7.6.2.1.2 Negative indicative forms

Negation of clauses in Anamuxra is realised through a combination of verbal inflection and a negative word (see §10.4). In terms of inflection on verbs, Anamuxra has two distinct forms: one which is associated with realis status/non-future and another which is associated with irrealis status/future.

Negative realis/future: \textit{-ba}

The negative realis/non-future verb is marked by the suffix \textit{-ba}. There is no indexation of the person-number features of the subject. Rather, these features are registered by the pronominal prefix attached to the negative word, \textit{-ma} (§3.8). The negative non-future can either be used to indicate that the event is not occurring at the moment of speaking or that an event did not occur before the moment of speaking.
Examples of the negative realis/non-future are:

(7-50)  
\[ Agma \]  
yivjanaz-ba.  
\[ ajj-ma \]  
yivjanaz-ba  
1PLS-NEG night.spear.fish-NEG  
'We didn’t go night spear fishing.'

(7-51)  
\[ Nma \]  
mugupa  
\[ n-ma \]  
mugu-pa  
3SGS-NF.NEG house-CL,res build.(shelter)-NEG  
'He didn’t build a house'

(7-52)  
\[ ...yiv \]  
nma  
nnabi  
ntximuba.  
yiv n-ma n-nabi n-tximu-ba  
father 3SGS-NEG 3SGPOSS-wife 3SGO-hit-NEG  
'(and so)...father didn’t hit his wife.'

It should be noted that besides marking non-future final verbs, -ba is also used to mark medial verbs that occur in clauses chains specified as irrealis (see §7.7.3).

**Negative irrealis/future: SUBJ (set 2) + -i**

The irrealis/future negative indicates that an event will, would or should not occur. The negative non-future is indicated by attaching a set 2 subject pronominal and the negative irrealis suffix -i, plus the ‘negative irrealis’ word amu.\(^{16}\)

(7-53)  
\[ Amu \]  
\[ xmnmi. \]  
\[ Amu \]  
kn-\[ mn-i \]  
NEG.IR sleep-1SGS-NEG.IR  
'I won’t sleep~  
'I wouldn’t sleep~

\(^{16}\) Note that the set 2 subject suffixes are also used with the irrealis different subject medial verb (§7.7.2.2)
While the negative word *amu* is typically used in such constructions, the general negative *-ma* can also be used without any difference to the meaning of the clause. For example,

(7-54)  
Nama  sxa  vadinai.  
na-ma  sxa  vad-na-i  
2SGS-NEG  again  chop-2SGS-NEG.IR  
‘You won’t chop (it) again.’

(7-55)  
Nma  sasaba  aji-di.  
n-ma  sasaba  aji-d-i  
3SGS-NEG  around.about  sing.out-3SGS-NEG.IR  
‘It won’t sing out around about.’

7.6.2.2 NECESSITIVE FORMS

The necessitive mood indicates the need for a situation to take place. Appropriate English translations range over a number of moods: imperative, necessitive, and hortative depending on the person-number features of the subject. A verb in the necessitive mood is marked by the portmanteau set 3 pronominals (§6.4.2.3) which mark the second person singular subject with with a zero morpheme. The second person singular can also be marked by the suffix *-ga*. Examples are:

(7-56)  
Nkixramma!  
n-kixra-mma  
3SGO-see-1SGS.NEC  
‘I must see it’

(7-57)  
Mañar  akspa  yakua!  
mañar  aks-pa  ya-kua  
quickly  climbing rope-CLres  1SGO-give  
‘Give me the rope quickly!’
(7-58)  

Kina!  
ki-na  
VOC-CL$_{tem}$  
‘You. Go see her!’

Wata  
kwua-ta  
go-2SGS  
3SGPRO-see

nkixra!  
\textbf{n-kixra}

(7-59)  

Namaq!  
n-a-muna  
eat-2PLS.NEC

‘You must eat (it)!’ he said.’

Namuna!  
na-muna  
para-pa-ri  
say-FP-3SGS

Wata  
kwua-ta  
go-2SGS  
3SGPRO-see

‘You. Go see her!’

(7-60)  

“Npirata,  
n-nai,  
3SGGO-fetch-2SGS  
3SGPRO-give-2SGS.NEC

\textbf{itxat}  
\textbf{nnai}  
\textbf{mudud !}”,  
\textbf{itxa-t}  
\textbf{mudu-d}

\textbf{varapari}.  
\textbf{para-pa-ri}  
say-FP-3SGS

You fetch him, and eat, and then he must go back!” he said.’

(7-61)  

“Wiaski  
wia-a-ski  
spear-ND-CL$_{ng}$

\textbf{abuta}  
\textbf{vi-ta}  
\textbf{yakuaga!},  
\textbf{vi-ta}  
\textbf{varapari}.

\textbf{vta}  
\textbf{pull.out-2SGS}  
\textbf{come-2SGS}

\textbf{yakuaga!},  
\textbf{par-pa-ri}  
\textbf{say-FP-3SGS}

“Pull out the spear, come and give it to me!” he said”.

While the \textit{-ga} form of the second person is available to all verbs, the zero marked form of the second person subject necessitive mood is only available for class I and II verbs; that is, verbs which can take the \textit{a} stem.

(7-62)  

a.  
*kn  
sleep

‘sleep!’

b.  
*vi  
come

‘come!’
7.6.2.3 **Precautionary Forms**

The precautionary serves to indicate some situation which the speaker deems to be undesirable or which will have undesirable consequences.\(^\text{17}\) It is commonly used as a helpful warning. The precautionary is marked by the suffix, \(-d\), plus set 4 subject pronominals (§6.4.2.4). Examples include:

(7-63) \[\text{Uvspa natuda!}\]
\[\text{uvs-pa na-tu-}d\text{-a}\]
\[\text{fire-CLres 2SGO-burn-PREC-3SGS}\]
\[\text{‘Be careful the fire doesn’t burn you!’}\]

(7-64) \[\text{Xbardna!}\]
\[\text{xbar-}d\text{-na}\]
\[\text{fall.down-PREC-2SGS}\]
\[\text{‘Don’t fall down!’}\]

(7-65) \[\text{“Nnbuga}ka \quad \text{vuxda”} \quad \text{vam.}\]
\[\text{n-nbuNx-a-ka vux-}d\text{-a pa-m}\]
\[\text{3SGPOSS-head-ND-CLres swing-PREC-3SGS think-1SGS}\]
\[\text{“It wouldn’t be good if its head were to swing” I thought. (and so I tied it to the post.)’}\]

(7-66) \[\text{Travidn}\]
\[\text{tra-vi-}d\text{-n}\]
\[\text{rain-wash-PRC-1SGS think-3SGS}\]
\[\text{“It wouldn’t be good if I get rained on”, she thought. (and so she returned.)’}\]

It is notable that while the precautionary co-occurs with set 4 subject pronominals, which are associated with the non future, or realis tense (i.e. the far past and near present-present), rather than the pronominal suffixes associated with

\(^\text{17}\) Constructions exhibiting equivalent mood categories in other languages are sometimes referred to as ‘lest’ constructions, ‘avolitional’ or ‘aversative’ constructions.
the future or irrealis, constructions marked with the precautionary are interpreted as being irrealis, or hypothetical.\textsuperscript{18}

### 7.6.2.4 Optative Forms

The optative is marked by the suffix \textit{-b} and indicates that the subject wants to perform the event described by the verb. There is no overt specification of the person-number details of the subject in the optative form of verbs. Examples include:

\begin{align*}
(7-67) & \quad \begin{array}{ll}
\text{Adam} & \text{wurb.} \\
\text{ad-a-m} & \text{wur-}b \\
\text{DEM-ND-Cl}\text{male} & \text{defecate-OPT}
\end{array} \\
& \text{That one (male) wants to defecate.} \\

(7-68) & \quad \begin{array}{ll}
\text{Arinb.} & \\
\text{ariN-n-}b & \text{betelnut-eat-OPT}
\end{array} \\
& \text{‘I/you/he etc wants to chew betelnut.’}
\end{align*}

### 7.6.3 Co-dependent Final Verbs

A co-dependent final verb occurs as the final clause of a sentence base that is in a reciprocal, though not necessarily a symmetrical, structural and semantic dependency with another sentence base. In Anamuxra, examples of co-dependent verbs are found in counterfactual constructions (see §11.4). Such constructions consist the protasis, or condition and the apodosis, or consequence. We will consider the verb forms that head each part in turn.

\textsuperscript{18} A similar situation is found with the precautionary in Tauya, a related member of the Madang family (MacDonald 1990: 202-203).
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7.6.3.1 COUNTERFACTUAL PROTASIS VERB

7.6.3.1.1 Affirmative counterfactual protasis verbs

The counterfactual protasis (CFP) verb occurs in the final clause of the protasis base of a counterfactual construction (§11.4.1). It has the following structural possibilities:

(7-69) \( V_{\text{base}} + \text{FP/CT} + \text{SUBJ 4} + \text{baski} \)

There is a verb base that consists of stem and optional aspect marker, which takes either the far past or near tense suffix, followed by the appropriate set 4 subject pronominal suffix, followed by -\textit{baski} which marks the clause as counterfactual protasis’. Examples of this form appeared underlined in the following examples:

(7-70) \begin{align*}
\text{Arimba} & \quad \text{vnaski,} & \quad \text{sivituwin}i. \\
\text{ariN-pa} & \quad \text{p-n-baski} & \quad \text{sivi-tuxu-i-n-i} \\
\text{betlnut-CL}_{\text{res}} & \quad \text{get-1SGS-CFP} & \quad \text{grass-hit-NT-1SGS-CFA} \\
\end{align*}

‘If I had got betelnut, I would have cut grass.’

(7-71) \begin{align*}
\text{Anuuj} & \quad \text{maitap}a & \quad \text{maivpanbaski,} \\
\text{anung} & \quad \text{maita-pa} & \quad \text{maiv-pa-n-baski} \\
\text{day.before.yesterday} & \quad \text{machete-CL}_{\text{res}} & \quad \text{buy-FP-1SGS-CFA} \\
\text{murai} & & \text{mugwin}i. \\
\text{mura-i} & \quad \text{mgu-i-n-i} \\
\text{garden-OBL} & \quad \text{go.down-NT-1SGS-CFA} \\
\end{align*}

‘If I had bought a machete two days ago, I would have gone down to the garden.’

7.6.3.1.2 Negative counterfactual protasis verbs

There are two strategies for marking negative counterfactual protasis clauses. In the first strategy, the negative counterfactual protasis suffix -\textit{baskivaski} is added
to the verb base (i.e. stem + (asp)). Unlike the affirmative CFP verb, there is no subject person-number marking. For example,

(7-72)  
\[
\begin{align*}
\text{Steson} & \quad \text{mugubaskivasi,} \quad \text{svarapani.} \\
\text{station} & \quad \text{mugu-} \underline{\text{baskivaksi}} \quad \text{svar-pa-n-i} \\
\text{station} & \quad \text{go.down-NEG.CFP} \quad \text{go.bush-FP-1SGS-CFA}
\end{align*}
\]

‘If I hadn’t gone down to the station, I would have gone bush.’

The second means of marking negation on the counterfactual protasis verb parallels negative marking of co-ordinate medial verbs (see §7.7 below). The verb is marked by the non-future negative suffix \text{-ba} plus the dependent suffix \text{-i} and is followed by the auxiliary \text{t-} ‘do’ which takes the same inflection as the affirmative counterfactual verb forms (i.e. tense, subject person-number and the counterfactual marker, \text{-baski}). Consider the following:

(7-74)  
\[
\begin{align*}
\text{Steson} & \quad \text{mugubai} \quad \text{tpanbaski}. \\
\text{Station} & \quad \text{mgu-ba-i} \quad \text{t-pa-n-} \underline{\text{baski}} \\
\text{PN} & \quad \text{go.down-NEG-NEG.DEP} \quad \text{do-FP-1SGS-CFA}
\end{align*}
\]

\[
\begin{align*}
\text{yima} & \quad \text{maita-pa} \quad \text{maivapani.} \\
yi-ma & \quad \text{maita-pa} \quad \text{maiv-pa-n-i} \\
1SGPRO-NEG & \quad \text{machete-CLres} \quad \text{buy-FP-1SGS-CFA}
\end{align*}
\]

‘If I hadn’t gone down to the station, I wouldn’t have bought that knife.’
7.6.3.2 **COUNTERFACTUAL APODOSIS VERB**

The counterfactual apodosis (CFA) verb has the following structure:

\[(7-75) \text{Vbase + FP/NT + SUBJ 4 + -i}\]

Either the far past or present tense suffix is added to the stem + (asp) base and is followed by the appropriate set 4 subject pronominal suffix, which in turn is followed by the counterfactual apodosis suffix -i.

\[(7-76)\]

\[\begin{array}{lll}
\text{Steson} & \text{mugupanbaski,} & \text{maitapa} \\
\text{station} & \text{mgu-pa-n-baski} & \text{maita-pa} \\
\text{station} & \text{go.down-FP-1SGS-CFP} & \text{machete-CL}\text{-res} \\
\end{array}\]

*maivpani.*

maiv-pa-n-\text{\textbar}\text{-CFA}

‘If I had gone down to Steson, I would have bought a machete.’

\[(7-77)\]

\[\begin{array}{lll}
\text{Aya} & \text{vinabaski,} & \text{yima} \\
\text{aya} & \text{vi-i-na-baski} & \text{yi-ma} \\
\text{yesterday} & \text{come-NT-2SGS-CFP} & \text{1SGPRO-NEG} \\
\end{array}\]

*mugwini.*

mugu-i-n-\text{\textbar}\text{-CFA}

‘If you had come yesterday, I wouldn’t have gone down.’

### 7.7 **Medial verbs**

#### 7.7.1 **Introduction**

Medial verbs occur in co-ordinate medial (i.e. non-final) clauses in switch reference clause chaining constructions (§11.3). There are four types of medial verbs based on the parameters of switch reference (same versus different subject...
following) and relative tense (sequential versus simultaneous): (i) same subject sequential, (ii) same subject simultaneous, (iii) different subject sequential and (iv) different subject simultaneous. Given the shared features of negated medial forms, the following presentation of these medial types is organised first around the distinction between affirmative and negative forms.

7.7.2 Affirmative medial forms

7.7.2.1 SAME SUBJECT MEDIAL VERBS

A same subject medial verb occurs in a co-ordinate medial clause whose subjects referent is coreferential with that of the following clause. The class of SS medial verbs divides into simultaneous and sequential forms; with the two showing quite different morphological traits.

Same subject sequential medial verb

The same subject sequential (SS seq) verb is formed by attaching a set 1 subject pronominal (§6.4.2.2) to the verb stem. That is:

\[(7-78) \quad \text{Vbase} + \text{SUBJ 1}\]

It is not marked for tense, status, or mood. Such a verb typically refers to an event which precedes the event described by the following clause and which shares the same subject as that following clause (§11.3.2).\(^{19}\) Examples include:

\[(7-79) \quad \text{Wubi} \quad \text{mugum,} \quad \text{sxa} \quad \text{svarin.} \]
\[\text{xub-i} \quad \text{mgu-}{\text{-m}} \quad \text{sxa} \quad \text{svar-i-n} \]
\[\text{road-OBL} \quad \text{go.down-1SGS} \quad \text{again} \quad \text{go.bush-NT-1SGS} \]

‘I went down the road and then went bush again.’

\(^{19}\) Like many languages with switch-reference, identity of subjects within the system of switch-reference in Anamuxra encompasses ‘referential overlap (i.e. where the subject of one clause is included in the subject of the other clause) as well as ‘strict’ identity (i.e. where the subjects of the two clauses are identical) (see §11.3.2 for details).
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(7-80) *Mugut, nsimga nixiswarapari.*

mgu-*t* n-simga n-xiswara-pa-ri
go.down-3SGS 3SGPRO-older.brother 3SGO-tell-FP-3SGS

‘He went down and spoke to his brother.’

(7-81)

<table>
<thead>
<tr>
<th>Arari</th>
<th>nkaxai</th>
<th>mgatr,</th>
<th>Abrigaada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arari</td>
<td>n-ka-xai</td>
<td>mga-tr</td>
<td>Abrigaada</td>
</tr>
<tr>
<td>PN</td>
<td>3SGPOSS-PW-DU</td>
<td>come.down-3DUS</td>
<td>PN</td>
</tr>
</tbody>
</table>

mawapa taxapara.
mawa-pa taxa-pa-ra
sago-CLres cut-FP-3DUS

‘Two (men) from Arari came down and cut sago at Abringada.’

**Same subject simultaneous medial verb**

A same subject simultaneous (SS sim) medial verb heads a clause which refers to an event that overlaps the event described by the following clause. There are two forms which can function as SS sim verbs. The first consists of verb base plus the suffix -nini, while the second consists of the reduplicated verb stem (§7.4.4). That is,

(7-82) a. SS sim = Vbase + nini

b. SS sim = reduplicated V base

Both cases lack marking for subject person and number as well as tense, status and mood (§11.3.4). An example of each form are given is given in (7-83) and (7-84) respectively.

(7-83) *Ugaraxixranini vasxapr...*

ugara-xixra-*nini* vasxa-pr
bird-look-SS.SIM come.up-1DUS

‘While we looked for birds, we came up.’
7.7.2.2 DIFFERENT SUBJECT MEDIAL VERBS

A different subject (DS) medial verb occurs in a co-ordinate medial clause whose subject is not coreferential with that of the following clause. Like SS medial verbs, DS medial verbs are distinguished as either sequential or simultaneous. Unlike SS medial verbs, status and tense are overtly signalled on DS verbs. However, this must be seen as agreement and not independent specification for reasons discussed in §11.3.4.2.

Different subject sequential verbs

The DS sequential verb occurs in a co-ordinate medial clause in a switch reference chain construction and describes an event which occurs prior to the event described by the following clause and whose subject is different from that of the following clause. A DS sequential verb can have one of the two structures shown below.

(7-85) a. Vbase + Tense (i.e. FP/NT) + SUBJ 4 + -i

b. Vbase + SUBJ 2 + -i

In both cases, the DS sequential takes the portmanteau suffix -i ‘different subject sequential’. The two forms differ in terms of the presence/absence of tense suffix and in the choice of subject pronominal suffix set. Their used is determined by the status of the switch reference construction (SRC). Type ‘a’ is used in realis SRCs (§11.3.4.2.2). The verb takes either far past or near past tense followed by a set 4 subject pronominal suffix, with the choice of tense determined by the tense of the overall clause which is indicated by the verb in the final clause. For example,
(7-86) **Tuwuvarapani,**  
\[ \text{tuwuvara-pa-n-I} \quad \text{sxa} \quad \text{maimaidapari.} \]  
blow-FP-1SGS-DS.SEQ  
'I blew it and it opened again.'

(7-87) **Tuwuvarini,**  
\[ \text{tuwuvar-i-n-I} \quad \text{sxa} \quad \text{maimaidi-ri.} \]  
blow-NT-1SGS-DS.SEQ  
'I blew it and it opened again.'

Type 'b' DS sequential medials are used in irrealis SRCs. The verb takes the appropriate set 2 subject pronominal suffix.

(7-88) **Vdi,**  
\[ \text{vi-d-I3} \quad \text{kwu-ba-m} \]  
come-3SGS-DS.SEQ  
'If he comes, I will go.'

Different subject simultaneous

The different subject simultaneous (DS sim) medial verb has the same basic structural properties as described for its sequential counterpart, except that, where DS sequential verbs take the different subject sequential suffix -i, DS simultaneous verbs take the simultaneous suffix -mana. That is:

(7-89) a. Vbase + Tense (i.e. FP, NT) + SUBJ 4 + -mana

b. Vbase + SUBJ 2 + -mana

The two structures have the same distribution as their sequential counterparts with respect to status. That is, type a occurs in chains which are specified as realis, while type b is used in all irrealis chaining constructions. Examples of DS simultaneous verbs with each type are:

---

20 The different functional interpretations indexed here are discussed in §11.3.3.
CHAPTER 7 - VERB MORPHOLOGY

REALIS - FAR PAST

(7-90)  Vadamugava isparimana, Asaxivuk ispari.
Vadamugava is-pa-ri-mana Asaxivuk is-pa-ri
PN draw-FP-1SGS-DS.SIM PN draw-FP-3SGS

‘As Vadamugava drew (his bow), Asaxivuk drew (his bow).’

REALIS - NEAR TENSE

(7-91)  ..sianama, mugum, arimba aisarxai
s-i-a-mana mugu-m ariN-pa ai-sar-xai
be-NT-3SGS-DSSEQ go.down-1SGS betelnut-CLres two-CLbranch-DU
sisn.
sis-Ø-n
strip.off-NT-1SGS

‘(and then) ... while he waited, I went down and stripped off two bunches of betelnut.’

IRREALIS

(7-92)  Anbidmana, yi xrbam.
anN-vi-d-mana yi kr-ba-m
water-bathe-3SGS-DSSim 1SGPRO cook-FUT-1SGS

‘While he bathes, I will cook.’

7.7.3 Negative medial forms

All medial verbs are negated by employing the auxiliary construction, where the lexical verb is marked with the non-future negative suffix, -ba, plus the (negative) dependent suffix -i, and combines with the auxiliary support verb -t- ‘do’ which takes the medial suffixes found in affirmative forms. For example, in (7-84) t-takes the Set 2 third person singular subject suffix associated with irrealis status plus the different subject sequential suffix -i.
(7-93)  

| avdbai   | tdi, | sxa | umuku |
| avIN-t-ha-i | t-d-i | sxa | u-muku |
| good-do-NEG-DEP | do-3SGS-DS.SEQ | again | IA-CL$_{dim}$ |

xrbata.

kr-ba-ta
burn-FUT-2SGS

‘If it isn’t good, then you’ll burn it a little again.’

Auxiliary constructions are discussed in detail in §8.4.
### 7.8 Summary of form and function of final and medial verbs

Table 7-6 sets out the complete set of functional categories expressed by the medial and final inflections along with their morphological realisation.

<table>
<thead>
<tr>
<th>Verb type</th>
<th>Functional Category</th>
<th>Inflection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>Indicative affirmative near</td>
<td>-i-ø</td>
</tr>
<tr>
<td></td>
<td>Indicative affirmative far past</td>
<td>pa-</td>
</tr>
<tr>
<td></td>
<td>Indicative affirmative future</td>
<td>ba-</td>
</tr>
<tr>
<td></td>
<td>Indicative negative future</td>
<td>SUBJ 4</td>
</tr>
<tr>
<td></td>
<td>Indicative negative non-future</td>
<td>ba</td>
</tr>
<tr>
<td></td>
<td>Necessitive</td>
<td>SUBJ 3</td>
</tr>
<tr>
<td></td>
<td>Precautionary</td>
<td>-d-</td>
</tr>
<tr>
<td></td>
<td>Optative</td>
<td>-b</td>
</tr>
<tr>
<td>Co-dependent</td>
<td>Counterfactual protasis negative</td>
<td>baskivaski</td>
</tr>
<tr>
<td></td>
<td>CF protasis affirmative near</td>
<td>-i-ø</td>
</tr>
<tr>
<td></td>
<td>CF protasis affirmative far past</td>
<td>pa-</td>
</tr>
<tr>
<td></td>
<td>CF apodosis near</td>
<td>-i-ø</td>
</tr>
<tr>
<td></td>
<td>Counter apodosis far past</td>
<td>pa-</td>
</tr>
<tr>
<td><strong>MEDIAL</strong></td>
<td>Same referent sequential</td>
<td>SUBJ 2</td>
</tr>
<tr>
<td></td>
<td>Same referent simultaneous</td>
<td>nini</td>
</tr>
<tr>
<td></td>
<td>Same referent simultaneous</td>
<td>reduplicated stem</td>
</tr>
<tr>
<td></td>
<td>Different ref. near sequential</td>
<td>-i-ø</td>
</tr>
<tr>
<td></td>
<td>Different ref. near sequential</td>
<td>pa-</td>
</tr>
<tr>
<td></td>
<td>Different ref. future sequential</td>
<td>SUBJ 4</td>
</tr>
<tr>
<td></td>
<td>Different ref. near simultaneous</td>
<td>-i-ø</td>
</tr>
<tr>
<td></td>
<td>Different ref. far past simult.</td>
<td>pa-</td>
</tr>
</tbody>
</table>

Table 7-6: Functional categories and form of final and medial verbs
CHAPTER 7 - VERB MORPHOLOGY

7.8.1 A note on -i

It will have been noticed that a suffix -i occurs in four morphosyntactic environments:

(i) Final co-dependent verb of second (apodosis) base in counterfactual constructions (function of -i = counterfactual apodosis).

(ii) Final independent negative irrealis verb (function = negative irrealis).

(iii) Medial negative verb followed by auxiliary support verb t- ‘do’ which takes medial inflections (function = dependent)

(iv) Medial affirmative different subject sequential verb (function = different subject sequential)

It is clear that the first three forms which take -i share the semantic property of referring to unrealised events. (iv) appears to be synchronically unrelated to the other uses but historically it may be the result of reanalysis of the unreal event meaning to switch reference.

In the current description I have chosen to gloss each occurrence of -i according to its meaning within each environment. However, an alternative approach would be to argue, in the case of the first three at least, that -i has a general meaning of unrealised event and that further functional properties are determined by its syntactic distribution.
7.9 Other inflections

-\textit{pu} 'but' is added to medial verbs to indicate that the event described by the medial clause was or will be ineffective, counter to expectation, because of some state of affairs indicated by the following clause (see §11.3.3.3 for further details). For example,

\begin{align*}
\text{(7-94)} & \quad \text{Murai} \quad \text{muguwaki} \quad \text{mudum,} \\
& \quad \text{mura-i} \quad \text{mugu-a-ki} \quad \text{mudu-m} \\
& \quad \text{garden-OBL} \quad \text{house-ND-OBL} \quad \text{go.up-1SGS} \\
& \quad \text{ixrinipu,} \quad \text{nma} \quad \text{sba} \\
& \quad \text{kixr-i-n-i-\textit{pu}} \quad \text{n-ma} \quad \text{s-ba} \\
& \quad \text{look-NT-1SGS-DSSEQ-but} \quad \text{3SGPRO-NEG} \quad \text{be-NEG} \\
\end{align*}

'I went to the house in the garden and looked but there weren't any (dry coconuts).’
Chapter 8

Complex verbs

8.1 Introduction

A complex verb (CV) is a verbal predicate which is composed of constituent morphemes but which functions syntactically as a unit, either a word or a phrase. Although this definition encompasses verbs consisting of a base plus derivational affix, this chapter focusses on complex predicates which contain two lexical roots.¹ There are four main CV types in Anamuxra: serial verbs, idiomatic verbal compounds, auxiliary verb constructions and non-verb plus verb compounds.

8.2 Serial verb constructions

8.2.1 Introduction

Verb serialisation is a process in which two or more verbs are combined to form a unitary verbal predicate. In Anamuxra, as in many other languages which possess serial verbs, serial verb constructions (SVCs) vary considerably in terms of their morphosyntactic and functional properties. A key issue related to this variation is how distinct SVCs are from other construction types such as verbal compounds

¹ This characterisation of complex predicates corresponds to Klamer (1998:275), which in turn is based on Foley (1997:355).
§8.3 and switch reference constructions (§11.3). As we shall see, the boundaries between SVCs and these other construction types in Anamuxra are not always clear-cut.

I will begin the discussion with a general definition of SVCs derived from cross-linguistic evidence (§8.2.2). In §8.2.3, I introduce the functional and grammatical parameters I use to classify SVCs in Anamuxra, while in §8.2.4 and §8.2.5, I describe the main SVC types found in the language.

8.2.2 General features of verb serialisation

Verb serialisation is attested in a diverse range of languages from Papua New Guinea, Oceania, South-East Asia, Central and South America and West Africa. While there is considerable variation found in terms of the characteristics displayed by SVCs both cross-linguistically and within individual languages, it is possible to identify a cluster of core, or basic criteria for identifying a construction as an SVC.

(8-1) A serial verb construction is a sequence of two or more verbs which act like a single verb in various ways, including the following: 2

(i) The SVC is a single grammatical unit which forms a single constituent, the predicate, in single verbal clauses.

(ii) Each verb can function as the sole predicate in a monoverbal clause.

(iii) The verbs share at least one argument (typically the subject). 3

(iv) There are no morphemes characteristic of clause boundaries present, e.g. there is no subordination, coordination, or switch reference morphology marking.

2 These criteria are derived from a number of sources including Bradshaw 1982; Foley and Olsen 1985; Durie 1997; Pawley and Lane 1998; and, Aikhenvald 1999.

3 This feature is sometimes omitted or modified in light of what Crowley (1987) calls ‘ambient serialisation’ (see footnote 8 for further details).
(v) The verbs cannot be separated by intonational cues including pauses normally associated with clause boundaries.4

(vi) The component verbs of an SVC share tense, aspect, mood and often polarity.5

(vii) The SVC may take a single set of peripheral (non-core) adjuncts such as locationals, temporals and so on.

Serial verbs are identified by the clustering of the features listed above rather than by an absolute definition which can be applied without exception.6

There are some constructions in Anamuxra such as certain Juxtaposed SVCs (§8.2.4) which meet all of these criteria. There are, however, other constructions which fail to meet one or more of these criteria. For instance, both Medial SVCs (§8.2.5) and Independent SVCs (§8.2.6) breach criterion ‘iv’, the ‘no morphemes diagnostic of clause boundaries’ constraint.

8.2.3 A classification of SVCs in Anamuxra

8.2.3.1 INTRODUCTION

There are a number of parameters which can be used to classify serial verb constructions in Anamuxra, including the morphological characteristics of the constituent verbs, the contiguity (or continuity) of the sequencing of constituent verbs, the phonological incorporation of constituent verbs, the correspondence between the argument structure of the serial verb construction and the constituent verbs and argument sharing between the component verbs, restrictions on

4 Intonation contours and the length of pauses show considerable variation in spontaneous speech. This variation appears to depend not only on the syntactic structure involved, but also on such factors as hesitancy, style and the speed of speech, each of which can differ substantially from speaker to speaker. Consequently, until a more detailed study of prosodic features of Anamuxra is undertaken, I will treat them as a useful, but impressionistic guide in the identification of SVCs.

5 There are no examples of SVCs in which the individual verbs do not share polarity - see examples of negation through §8.2.4, §8.2.5 and §8.2.6.

6This characteristic is sometimes presented as if it is a ‘problem’ special to serial verbs. However, it is not unique to them. A number of other categories also show this, e.g. the notions of ‘subject’, ‘subordination’ and so on.
combinations of verbs belonging to different semantic classes and the semantic functions encoded by the constructions. I shall now describe each of these parameters.

8.2.3.2 MORPHOLOGICAL POSSIBILITIES

Three types of serial verb construction may be distinguished in Anamuxra on the basis of the morphological behaviour of the constituent verbs:

a) **Juxtaposed SVCs** - in which two verb stems are juxtaposed to form a single morphological word which takes a single set of inflections. Object prefixing, when it occurs, precedes the first verb in the sequence, while affixes specifying aspect, subject person-number, mood, tense and polarity occur after the second stem.

b) **Medial SVCs** - in which the first verb takes the same subject sequential medial form (§7.7; §11.3), while the series final verb inflects as either a medial or final verb, depending on the overall position of the SVC in the sentence base.

b) **Independent SVCs** - in which both verbs in the series are realised as final independent verb forms (§7.6.2).

8.2.3.3 CONTIGUOUS VERSUS NON-CONTIGUOUS SEQUENCING

Serial verb constructions may be contiguous or non-contiguous. In contiguous serialisation the sequence of verbs cannot be interrupted by NPs which realise core arguments associated with the verbs or by other material such as negative words. These items typically occur before the verb sequence. Non-contiguous serialisation, on the other hand, allows the intervention of such constituents. Of the three morphological types, Juxtaposed SVCs (§8.2.4) and Independent SVCs (§8.2.6) are always contiguous while medial SVCs can either be contiguous or non-contiguous (§8.2.5).

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CHAPTER 8 - COMPLEX VERBS

8.2.3.4 PHONOLOGICAL INCORPORATION

SVCs can either be incorporating or non-incorporating. In incorporated series, the verbs form a single phonological word, taking a single primary stress, whereas in non-incorporated series the verbs remain independent phonological words. Again, we find a distinction between Juxtaposed SVCs (§8.2.4) and Independent SVCs (§8.2.6) on the one hand, and Medial SVCs (§8.2.5) on the other, with the first two realised as incorporated sequences and the latter as non-incorporated sequences.

8.2.3.5 ARGUMENT STRUCTURE PROPERTIES OF SVCs

As specified in §8.2.2, SVCs generally require that the verbs in the series share at least one argument. Three major patterns of argument sharing are observed in Anamuxra SVCs:

(i) same-subject, where the verbs share the same subject (i.e. the underlying subjects of the respective verbs in the series both correspond to the subject of the SVC)  

(ii) shared subject and object, where both verbs are transitive and the share the same subject and object (i.e. $V_1$ Subject = $V_2$ Subject and $V_1$ Object = $V_2$ Object)

(iii) object-subject, where the underlying object of the first verb equates to the underlying subject of the second verb (i.e. $V_1$ Object = $V_2$ Subject)

8.2.3.6 SYMMETRICALITY

"Symmetricality" relates to the restrictions on the combination of semantic types of verbs that can occur in particular SVCs. Symmetrical SVCs are those in which

---

8 A number of languages with serial verbs display a fourth pattern of argument sharing/structure known as ambient serialisation, where the argument(s) of the second verb bears no identity to any of the arguments of the first. In this kind of serialisation, "the second verb refers to the general act with no participants in mind" (Crowley 1987:40). Anamuxra, however, appears to lack ambient serialisation.

9 I use 'underlying' here to refer to the grammatical relations that the core arguments of individual verbs would bear in non-serial monoclausal constructions. See Durie (1997) for discussion of the nature of argument sharing.

10 Object-subject correspondence is commonly referred to as 'switch-subject' in the literature.
each verb in the series comes from an open class of verbs. Asymmetrical SVCs are those in which one of the verbs is taken from a restricted subclass of verb types, while the other is taken from an open class of verbs.

Most SVCs in Anamuxra are asymmetrical. Only cause-effect SVCs (§8.2.4.2; §8.2.5.2) allow each constituent to be taken from an open class. The restrictions on the types of verbs that can be used in asymmetrical constructions are closely connected to the semantic character of the overall serial construction. For instance, in ‘directional’ SVCs (§8.2.5.7), the second verb must come from the subclass of direction-motion verbs; while in inceptive SVCs (§8.2.5.5) the first verb is nuyudam- ‘begin’.¹¹

8.2.3.7 SEMANTIC TYPES OF SVCs AND THEIR INTERACTION WITH OTHER PARAMETERS

Serial verb constructions in Anamuxra fall into the following semantic types (the section numbers indicate where each semantic type is discussed):

- checking (§8.2.4.1, §8.2.5.1)
- cause-allow (§8.2.4.2, §8.2.5.2)
- beneficiary-goal (§8.2.5.3)
- trying (§8.2.5.4)
- inception (§8.2.5.5)
- associative (§8.2.5.6)
- direction (§8.2.5.7)
- habitual aspect (§8.2.6)

¹¹ Foley and Olsen (1985) suggest that it is more likely for the semantically restricted verb to follow the unrestricted verb. In Anamuxra, however, we find SVCs where the semantically restricted occurs first as in the beneficiary-goal SVCs; and SVCs where the restricted verb occurs second as in the directional SVCs. See also Aikhenvald (1999) on the links between symmetry and functional characteristics.
The different types of SVCs in Anamuxra are summarised in Table 8-1 in terms of the interaction of the various parameters established above.

<table>
<thead>
<tr>
<th>Morphological type</th>
<th>Semantic type</th>
<th>Contiguity</th>
<th>Incorp’n</th>
<th>Argument sharing</th>
<th>Symmetry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juxtaposed</td>
<td>Checking</td>
<td>Yes</td>
<td>Yes</td>
<td>same-subj</td>
<td>V₂ restricted</td>
</tr>
<tr>
<td></td>
<td>Cause-allow</td>
<td>Yes</td>
<td>Yes</td>
<td>same-subj &amp; obj-subj</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Checking</td>
<td>Yes</td>
<td>No</td>
<td>same-subj</td>
<td>V₂ restricted</td>
</tr>
<tr>
<td></td>
<td>Cause-allow</td>
<td>Yes</td>
<td>No</td>
<td>same-subj &amp; obj-subj</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Beneficiary-goal</td>
<td>Optional</td>
<td>No</td>
<td>same-subj</td>
<td>V₁ restricted</td>
</tr>
<tr>
<td></td>
<td>Trying</td>
<td>Optional</td>
<td>No</td>
<td>same-subj</td>
<td>V₁ restricted</td>
</tr>
<tr>
<td></td>
<td>Inception</td>
<td>No</td>
<td>No</td>
<td>same-subj</td>
<td>V₁ restricted</td>
</tr>
<tr>
<td></td>
<td>Association</td>
<td>No</td>
<td>No</td>
<td>same-subj</td>
<td>V₁ restricted</td>
</tr>
<tr>
<td></td>
<td>Direction</td>
<td>Yes</td>
<td>No</td>
<td>same-subj</td>
<td>V₂ restricted</td>
</tr>
<tr>
<td></td>
<td>Habitual</td>
<td>Yes</td>
<td>Yes</td>
<td>same-subj</td>
<td>V₂ restricted</td>
</tr>
</tbody>
</table>

Table 8-1: Interaction of different parameters in Anamuxra SVCs

### 8.2.4 Juxtaposed SVCs

Juxtaposed SVCs are the more tightly bound of the two morphological types. They are contiguous and incorporating, always occurring with a single intonational contour. There is no suffixal material associated with the first verb in the series; the whole SVC takes a single set of inflections. Object prefixing must precede the first verb in the sequence, while affixes specifying aspect, subject person-number, mood, tense and polarity occur after the second stem. (If the SVC is a medial constituent of a clause chain (§11.3) then it takes medial inflection (§7.7); if it heads a chain final clause it takes final verb inflection (§7.6).)
CHAPTER 8 - COMPLEX VERBS

Two functional types have been observed: those which denote checking and those which express causality.

8.2.4.1 CHECKING: \( V_1 + \text{wasa} \) 'check'

When the verb \( \text{wasa} \) 'check' occurs as the second verb in a juxtaposed SVC, it indicates that the subject is performing the action of the first verb in order to test or check something.\(^{12}\) For example, in (8-2) \( \text{tuvw}-\text{wasa}(a) \) ‘hit-check’ describes hitting a hand drum in order to test the quality of its sound, while in (8-3) \( \text{nbda}-\text{wasa}(a) \) ‘ask-check’ describes the act of checking by asking.

(8-2) \( \ldots \text{simuta} \quad \text{nxa} \quad \text{tuvwuwashata} \)

simu-ta \( \text{nxa} \quad \text{tuvuw-was}-\text{ba-ta} \)
spear-2SGS \( \text{now} \quad \text{hit-check-FUT-2SGS} \)

'...you spear (it), and now you check by hitting (it).'

(8-3) \( \text{Nnbdawasapari.} \)

n-\( \text{nbda-}\text{wasa} \)-pa-ri
3SG0-ask-check-FP-3SGS

'He checked by asking him.'

Anamuxra also expresses the testing function in the form of a medial SVC (§8.2.5.1.2).

8.2.4.2 CAUSE-ALLOW

Cause-allow SVCs are symmetrical, i.e. they consist of two verbs from unrestricted verb classes. In these SVCs, the action described by the first verb in the series either causes, or allows for the action expressed by the second verb in the series. Two subtypes of cause-allow juxtaposed SVCs are found in Anamuxra. In the first, both verbs in the series are underlyingly transitive verbs

\(^{12}\) According to speakers of the Waiateng dialect, \( \text{wasa} \) is found in the neighbouring dialect of Swanzambi as the equivalent to the Waiateng \( (k)\text{ixra} \) ‘look/see’. Interestingly, in the Waiateng dialect, \( (k)\text{ixra} \) is never used in juxtaposed SVCs, though it is used interchangeably with \( \text{wasa} \) in medial SVCs with the same function (see §8.2.5.1.1). As such, \( \text{wasa} \) can be seen to be grammaticised in the Waiateng dialect.
which denote an action performed by the subject which affects the object in some way. The first verb in the series (V1) describes the type of action performed, the second verb (V2) typically specifies, or emphasises the effect on the object. For example:

(8-4) \[ \ldots ntu\text{-}uwu\text{-}vada\text{-}pa\text{-}ri. \]
\[ n\text{-}tu\text{-}wu\text{-}vada\text{-}pa\text{-}ri \]
\[ 3SG0\text{-}hit\text{-}break_{1^{3}-FP\text{-}3SGS} \]
\[ \ldots \text{he split her.} \]

(8-5) \[ \ldots xdx\text{-}ay \quad ubagaka \]
\[ xdx\text{-}a\text{-}\eta \quad xubaNx\text{-}a\text{-}ka \]
\[ \text{root\text{-}ND\text{-}PL} \quad \text{hole\text{-}ND\text{-}CL} \]
\[ \text{simu\text{-}ixa\text{-}pa\text{-}ri} \]
\[ \ldots \text{the roots closed up the hole.} \]

(8-6) \[ Taxavkrata... \]
\[ taxa\text{-}vkra\text{-}ta \]
\[ \text{cut\text{-}take.away\text{-}2SGS} \]
\[ \ldots \text{You clear (it) and then...} \]

In the second type of cause-allow juxtaposed SVC, the first verb (V1) is transitive and the second verb (V2) intransitive, where the underlying object of V1 corresponds to the underlying subject of V2 and V2 indicates the result of V1. For example, in (8-7) the subject of V1 presses on the object which results in the object going down.

(8-7) \[ \text{N\text{xwu} \quad maravgaki \quad wutamugupari.} \]
\[ n\text{-}xwu \quad maravNx\text{-}a\text{-}ki \quad kuta\text{-}mugu\text{-}pa\text{-}ri \]
\[ 3SGPOSS\text{-}PW \quad \text{ginger\text{-}ND\text{-}OBL} \quad \text{press\text{-}go.down\text{-}FP\text{-}3SGS} \]
\[ \text{He inserted (it) into his ginger.} \]

Similar cause-allow relations are also found in medial SVCs (see §8.2.5.2).

---

13 Tests have shown \textit{wad} \textquoteleft break\textquoteright to be a transitive only predicate, though as noted by Durie \textquoteleft one cannot assume that a serialised verb will have the same argument structure in serialisation that it has when used alone\textquoteright (1997: 324).

14 \textit{ixa} \textquoteleft close\textquoteright is a used a transitive verb only.
8.2.5 Medial SVCs

Medial SVCs are so named because the form of the first verb in the series is identical to the verb which heads same-subject sequential medial clause in switch reference chaining constructions (§11.3). Despite this correspondence in form, medial SVCs have a number of characteristics which distinguish them from clause chaining structures, including:

• restrictions on the occurrence of adjunct material;
• fronting of arguments underlyingly associated with the second verb of the series before V1;
• the semantic bleaching or grammaticalisation of one of the verbs in the series; and,
• a tendency for the verbs to be produced under a single intonation contour.

Medial SVCs express a much wider range of semantic functions than Juxtaposed SVCs. These include: checking, cause-effect, beneficiary-goal, try, inception and direction. Most Medial SVCs are of the same-subject variety.

8.2.5.1 Checking

We saw in §8.2.4.1 that juxtaposed SVCs containing the verb wasa- 'check' as the second verb such as (8-2) restated here as (8-9) for convenience, express the meaning of checking or testing.

(8-8) Simuta nxa tuwuwasbata.
simu-ta nxa tuwu-~ba-ta
‘You spear (it) and now you check by hitting (it).’

Checking can also be expressed through medial serialisation. There is no discernable difference in the meaning of the corresponding Medial and Juxtaposed structures. Compare (8-8) and (8-9).
Evidence that examples like (8-13) and (8-14) are SVCs rather than biclausal constructions comes from the scope and distribution of adverbs. As in most other Medial SVCs, adverbs must occur before the first verb of the series and have the entire SVC as their scope.

Finally, as mentioned in footnote 12, Waiateng speakers also use -(k)-ixra-‘see’ as an alternant to wasa- to form checking Medial SVCs. For example,

(8-13)  
Tuwata  ixranai...

(8-12) * tuwua-ta  sxaxa  was-na-i
hit-2SGS  again  check-NT-2SGS-DS.SEQ
‘Again, you check by hitting (it) and...’

(8-11)  
Sxa  tuwata  wasna-i...

(8-10)  
Nyixt  wasapari.

Evidence that examples like (8-13) and (8-14) are SVCs rather than biclausal constructions comes from the scope and distribution of adverbs. As in most other Medial SVCs, adverbs must occur before the first verb of the series and have the entire SVC as their scope.

Finally, as mentioned in footnote 12, Waiateng speakers also use -(k)-ixra-‘see’ as an alternant to wasa- to form checking Medial SVCs. For example,

(8-13)  
Tuwata  ixranai...

(8-12) * tuwua-ta  sxaxa  was-na-i
hit-2SGS  again  check-NT-2SGS-DS.SEQ
‘Again, you check by hitting (it) and...’

(8-11)  
Sxa  tuwata  wasna-i...

(8-10)  
Nyixt  wasapari.

Evidence that examples like (8-13) and (8-14) are SVCs rather than biclausal constructions comes from the scope and distribution of adverbs. As in most other Medial SVCs, adverbs must occur before the first verb of the series and have the entire SVC as their scope.

Finally, as mentioned in footnote 12, Waiateng speakers also use -(k)-ixra-‘see’ as an alternant to wasa- to form checking Medial SVCs. For example,
8.2.5.2 CAUSE-ALLOW

Medial cause-allow SVCs show the same range of possibilities as their juxtaposed counterparts with regard to argument sharing and the semantic relations between the verbs in the series. First, both verbs can be transitive, where S1=S2 and O1=O2. In these cases, V1 typically describes the type of action. For example,

(8-14) ...uvsiapugaka tixam muduwam...

uvsiapunx-a-ka tixa-m muduwua-m
fire-dust-ND-Cl-res brush.with.hand-1SGS throw.away-1SGS

‘...I brushed away the ashes and then...’

(8-15) ...migtr muduwatr...

mig-tr muduwua-tr
pour-3DUS throw.away-3DUS

‘...they tipped it out and...’

The status of the above examples as SVCs is supported by two facts. First, they are produced within a single intonational contour (though note our earlier comments above on the significance of intonation as a diagnostic for SVCs). Second, an adverb must occur before the first verb of the series and must be interpreted as having scope over the entire SVC.

(8-16) Wuyabi migtr muduwatr....

wuyaN-vi mig-tr muduwua-tr
straight-ADV pour-3DUS throw away-3DUS

‘They tipped (it) out carefully and...’

(8-17) * ..migtr wuyabi muduwatr....

mig-tr wuyaN-vi muduwua-tr
pour-3DUS straight-ADV throw.away-3DUS

‘..they tipped (it) out carefully and...’
CHAPTER 8 - COMPLEX VERBS

(8-18) ...

...uvsyapugaka  manar  tixam
uvs-yapuNx-a-ka  manar  tixa-m
fire-ash-ND-CLres  quickly  brush.with.hand-1SGS

muduwam...

muduwua-m
throw.away-1SGS
'...I brushed away the ashes quickly and...'

(8-19) *

...uvsyapugaka  tixam  manar
. uvs-yapuNx-a-ka  tixa-m  manar
. fire-ash-ND-CLres  brush.with.hand-1SGS  quickly

muduwam

muduwua-m
throw.away-1SGS
'...I brushed away the ashes quickly and...'

Second, medial SVCs can also consist of a series of transitive - intransitive verbs where O1 = S2 and V2 expresses a change in the state of the shared argument (O1 = S2) that results from an action performed by S1 on it. In (8-39) below, we have an example of a object-subject SVC with a resultative meaning, where the logical object of tama- 'put' is interpreted as the logical subject of the second verb mudu- 'go.up' in the event.

(8-20) ...

...ikxay  tamadama  mudum...
. ikx-a-nj  tama-N-tama  mudu-m
. lime.shell-ND-PL  put-N-RDL  go.up-1SGS

'...I stacked the lime shells and ...'

The subject of the first verb 'I' does not 'go up'; it is the lime shells that 'go up'. However, the subject pronominal suffix on the second verb actually refers to the underlying subject of the first verb and not the underlying subject of the second verb.
8.2.5.3 BENEFICIARY/GOAL: -pa- 'think' + V₂

A common feature of serialising languages is the use of serialisation to introduce a beneficiary/goal argument as an argument of the serial verb. In Anamuxra, this is achieved by the use of -pa- 'think'. -pa- 'think' is a bivalent verb taking an agent and theme argument. When -pa- occurs as the first verb of an SVC, the 'theme' argument is interpreted as the beneficiary or goal of the action described by the second verb in the series. Examples (8-21) and (8-22) show -pa- used to introduce a beneficiary while (8-23) illustrates its use in introducing a goal.16

(8-21) ... npat ngaka wagapari.
  n-pa-t nNxa-ka waga-ri
  3SGO-think-3SGS food-ND-cl res boil-FP-3SGS
  '... he boiled the food for him.'

(8-22) Nypam muguavn.
  nng-pa-n mugu-av n
  3PLO-think-1SGS house-build.shelter-NT-1SGS
  'I built (a) house for them.'

(8-23) Npat aitpari.
  n-pa-t ait-ri
  3SGO-think-3SGS like-FP-3SGS
  'She likes/desires you.'

Given that examples (11-21) to (11-23) are both structurally identical to medial clause constructions and semantically compatible with a bi-clausal interpretation, what are the grounds for treating them as SVCs? First, the whole SVC is produced within a single intonation contour. Second, -pa- can never be independently negated.

16 From a cross-linguistic perspective, Anamuxra beneficiary-goal SVCs are unusual. As noted by Durie, in most languages with serialisation, the verb which introduces the beneficiary or goal occurs second and stands in a effect relation with the preceding verb (Durie 1997: 334). However, in Anamuxra occurs first and expresses intention or purpose. The beneficiary SVC may be loosely paraphrased as 'someone thinks of someone else and does/feels something because of that.'
A feature of beneficiary medial SVCs is that the negative word can either occur before the entire series as in (8-24) or between -pa- and the second verb as in (8-25).

(8-24)  
Yima  njpam  muguavba.  
Yima-NEG  3PL0-think-LSGS  house-build.shelter-NT-NEG  
'I didn’t built a house for them.'

(8-25)  
Nypam  yima  muguavba.  
Nypam  yi-ma  mugu-av-ba  
3PL0-think-LSGS  1SGS-NEG  house-build.shelter-NEG  
'I didn’t built a house for them.'

There is no apparent difference in the meaning of (8-24) and (8-25), and despite the difference in the position of the negative word, the scope of the negative includes both verbs in each case.

There are also cases such as (8-26) and (8-27) below, where the logical object of V2 occurs before the first verb with no apparent difference in meaning from those where the object occurs between the two verbs as in (8-24) and (8-25) above.

(8-26)  
Ngaka  npat  wagapari.  
Ngaka  nNx-a-ka  n-pa-t  wag-pa-ri  
food-ND-CLres  3SG0-think-3SGS  boil-FP-3SGS  
'He boiled the food for him.'

(8-27)  
Mugupa  njpam  avn.  
Mugupa  mugu-pa  nj-pa-m  mugu-av-Ø-n  
house-CLres  3PL0-think-LSGS  build.shelter-NT-1SGS  
'I built a house for them.'
8.2.5.4 TRY: **abid-** ‘TRY’ + $V_2$

**Abid**- ‘try’ can occur as the first verb of an SVC to indicate that the subject attempts to perform the action described by the following verb in the series. As with beneficiary SVCs, when the second verb is a transitive predicate, its underlying object may either occur after the first verb (**abid-** ) as in (8-28), or before, as in (8-29), without any apparent effect on the meaning.\(^{17}\)

\[(8-28)\]

<table>
<thead>
<tr>
<th>Abidm</th>
<th>arigaka</th>
<th>nan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>abid-m</td>
<td>arinX-a-ka</td>
<td>na-o-ntry-lSGS</td>
</tr>
<tr>
<td>betelnut-ND-CLres</td>
<td>eat-NT-lSGS</td>
<td></td>
</tr>
</tbody>
</table>

‘I tried chewing the betelnut.’

\[(8-29)\]

<table>
<thead>
<tr>
<th>Arigaka</th>
<th>abidm</th>
<th>nan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>arinX-a-ka</td>
<td>abid-m</td>
<td>na-o-nbetelnut-ND-CLres</td>
</tr>
<tr>
<td>eat-NT-lSGS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘I tried chewing the betelnut.’

8.2.5.5 INCEPTIVE: **nuudama-** ‘BEGIN’ + $V_2$

**Nuudama**- ‘begin’ is used in Medial SVCs to indicate the inception of the event described by the second verb in the series as shown in examples (8-30) and (8-31) below. Note that in both examples the scope of the habitual, marked by $t$-, extends over the entire series. Also, in (8-31) the instrument NP *vanamuyaki* ‘with tulip bark’ is interpreted as belonging to the entire series.

\[(8-30)\]

<table>
<thead>
<tr>
<th>Nuudamamaj</th>
<th>taxirwiŋ</th>
<th>tŋ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>nuudama-maj</td>
<td>taxirwu-iŋ</td>
<td>t-oŋ</td>
</tr>
<tr>
<td>start-1PLS</td>
<td>cut-NT-1PLS</td>
<td>do-NT-1SGS</td>
</tr>
</tbody>
</table>

‘We begin cutting.’

\(^{17}\) It is possible that the variable positioning of the object is pragmatically motivated; with fronting associated with topicalisation. However, further research is required to determine whether this is so.
8.2.5.6 ASSOCIATIVE: -PIRA- ‘GET’ + V2

-pira- ‘fetch/get’ occurs as the first verb of a series to indicate that fetching its logical object is prerequisite to the performance of the action described by the second verb. Furthermore, use of -pira- implies some type of coercion of the object by the subject to perform the act described by the second verb. For example,

(8-32) \( \text{N} \text{ypirat} \quad \text{vtagupari.} \)

\( \text{n} \text{nj-pira-t} \quad \text{vtagu-pa-ri} \)

3PL0-fetch-3SGS walk-fp-3SGS

‘He took them walking.’

(8-33) \( \text{Na} \quad \text{n} \text{nytaga} \quad \text{sat} \quad \text{sat} \quad \text{npirata} \)

\( \text{na} \quad \text{n} \text{n} \text{j=taga} \quad \text{sa-t} \quad \text{sa-t} \quad \text{n} \text{pira-ta} \)

2SGPRO 3SGPRO=COM be-3SGS be-3SGS 3SGO-get-2SGS

\( \text{nnai}... \)

\( \text{n} \text{-na-i} \)

eat-2SGS-DS_SEQ

‘He’ll stay with you and you eat with him and then.’

8.2.5.7 DIRECTION: \( V_1 \) + MOTION-DIRECTION VERB

When a medial SVC contains one of the six directional motion verbs as its second verb (see table 8-2 below), and the two verbs share the same subject, the second verb indicates the direction of movement of the action denoted by the first verb of the series.
<table>
<thead>
<tr>
<th>$\text{kwu}$- ‘go’</th>
<th>$\text{vi}$- ‘come’</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{mugu}$- ‘go down’</td>
<td>$\text{mug}$- ‘come down’</td>
</tr>
<tr>
<td>$\text{mudu}$- ‘go up’</td>
<td>$\text{mud}$- ‘come up’</td>
</tr>
</tbody>
</table>

Table 8-2: Directional motion verbs

For example, in (8-34) $\text{mugu}$- ‘go.down’ specifies that the act of returning described by the first verb involves movement down and away from the locus. In (8-35), the act of chasing is specified as involving movement down and towards the directional locus.

(8-34)  
\begin{align*}
\text{ltxat} & \quad \text{mugut}... \\
\text{ltxat}-t & \quad \text{mugu}-t \\
\text{return-3SGS} & \quad \text{go.down-3SGS} \\
\text{‘He went back down and...’}
\end{align*}

(8-35)  
\begin{align*}
\text{...ngivij} & \quad \text{mugan}... \\
\text{n\textsuperscript{3}xivi}\text{-}\text{ŋ} & \quad \text{muga}\text{-ŋ} \\
\text{3PL0-chase-3PLS} & \quad \text{come.down-3PLS} \\
\text{‘...they chased them down and...’}
\end{align*}

(8-36)  
\begin{align*}
\text{(It (the post) went down and speared into the shell full of betelnut juice.)} \\
\text{Xdatpa} & \quad \text{aka} & \quad \text{v\textsuperscript{ŋ}arat} & \quad \text{mudupari}. \\
\text{xdat-pa} & \quad \text{a-ka} & \quad \text{v\textsuperscript{ŋ}ara}-t & \quad \text{mudu-pa}-\text{ri} \\
\text{post-CL\textsubscript{res}} & \quad \text{ND-CL\textsubscript{res}} & \text{trail-3SGS} & \quad \text{go.up-FP-3SGS} \\
\text{‘It (betelnut juice) trailed the pole and went up.’}
\end{align*}

The following example is notable for the fact that it contains two motion verbs: $V_1 = \text{aikvara}$- ‘descend’ and $V_2 = \text{muga}$- ‘come.down’. Although there is some overlap in the specification of downward motion, $\text{muga}$- contributes the added specification of movement toward the directional locus.
Example (8-38) illustrates the monoclausal status of direction SVCs both in terms of negation and habitual aspect.

Finally, (8-39) illustrates the use of the reduplicated same subject medial simultaneous forms in medial direction SVCs. In this case, the reduplicated form indicates iteration or cyclicity of the event. As in (8-37), the scope of the habitual aspect marked by \( t \)- ‘do’ over the whole event described by the SVC provides evidence that the two verbs are not simply a sequence of separate clauses.

8.2.6 Independent SVCs

Independent SVCs are used only to form the habitual aspect. The consist of a main lexical verb followed by the generic verb \( t \)- ‘do, make’. Both the main verb and \( t \)- take final independent verb inflection. To form the present habitual, both verbs take near tense marking plus set 4 subject pronominal suffixes. Example (8-40) is taken from a text describing how Anamuxra speakers make an \( ugu- \)
‘hand drum’. At this point in the text, the speaker is referring to how it is usual to scrape the ‘neck’ of the hand drum at this stage of the process.

(8-40) \[\text{Nxuptmaka} \quad \text{ari} \quad \text{ty}.
\]
\[\text{nx-uptm-a-ka} \quad \text{ar-i} \quad \text{t-ø} \]
\[3\text{SGPRO-neck-ND-CL} \quad \text{scrape-NT-1PLS} \quad \text{do-NT-1PLS} \]

‘We usually scrape its neck.’

(8-41) \[\text{Vakipa} \quad \text{tavaxi} \quad \text{ty}.
\]
\[\text{vaki-pa} \quad \text{tavax-i} \quad \text{t-ø} \]
\[\text{cane-CL} \quad \text{cut-NT-1PLS} \quad \text{do-NT-1SGS} \]

‘We usually cut cane.’

In the past habitual, the lexical verb takes the near tense form, while \(t\)- takes the far past tense form plus a set four pronominal suffix. For example,

(8-42) \[\text{Asaradbuvn} \quad \text{tpa}.
\]
\[\text{asaraN-tbuy-ø-n} \quad \text{t-pa-n} \]
\[\text{tobacco-smoke-NT-1SGS} \quad \text{do-PP-1SGS} \]

‘I used to smoke.’

In negative habitual constructions illustrated in (8-43), both the main verb and the auxiliary \(t\)- are marked with the negative suffix.

(8-43) \[\text{Yima} \quad \text{nba} \quad \text{tba}.
\]
\[\text{yi-ma} \quad \text{n-ba} \quad \text{t-ba} \]
\[\text{1SGS-NEG} \quad \text{chew-NEG} \quad \text{do-NEG} \]

‘I don’t chew (betelnut).’

Although both the main verb and \(t\)- take inflections associated with independent verbs, habitual SVCs function as a single syntactic predicate and are distinguished from sequences of two independent finite clauses on several grounds. First, the two verbs cannot be interrupted by prosodic features associated with distinct independent clauses (i.e. a sharp downward step in the intonation
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contour and a significant pause\(^\text{18}\)). Second, in sequences of independent finite clauses, each clause is allowed a full complement of core NPs and adjunct material. In contrast, the verb plus auxiliary take a single set of core NPs and adjuncts and these can never intervene between the two verbs. Third, the two verbs of the main verb and the auxiliary must agree in polarity.

\begin{align*}
(8-44) & \quad * \text{yi-ma} \quad \text{na-n} \quad \text{t}-\text{ba} \\
& \quad 1\text{SGS-NEG} \quad \text{chew-NT-1SGS} \quad \text{do-NEG}
\end{align*}

\begin{align*}
(8-45) & \quad * \text{yi-ma} \quad \text{n}-\text{ba} \quad \text{t}-\text{o-}n \\
& \quad 1\text{SGS-NEG} \quad \text{chew-NEG} \quad \text{do-NT-1SGS}
\end{align*}

8.2.7 Combinations of basic types

In addition to the kinds of SVCs described above, Anamuxra allows the formation of ‘complex’ SVCs: that is, combinations of juxtaposed, medial SVCs and finite SVCs. For instance, (8-46) consists of three verbs, while the SVC in (8-47) consists of a Medial SVC which itself contains a juxtaposed SVC tura-wasa-.

Example (8-48) is an independent SVC composed of the medial SVC itxay muduba plus tba.

\begin{align*}
(8-46) & \quad \ldots \text{abid}ta \quad \text{tuwuvar}ata \quad \text{ixr}bata. \\
& \quad \text{abid-}ta \quad \text{tuwuv}ara-\text{ta} \quad \text{kixr-}ba-ta \\
& \quad \text{try-2SGS} \quad \text{blow-2SGS} \quad \text{look-FUT-2SGS} \\
& \quad '...you can try to test it by blowing.'
\end{align*}

\begin{align*}
(8-47) & \quad \text{Abidy} \quad \text{turawasay...} \\
& \quad \text{abid-}\eta \quad \text{tura-}wasa-\eta \\
& \quad \text{try-3PLS} \quad \text{hold-check-3PLS} \\
& \quad 'Try to check it by holding.'
\end{align*}

\(^{18}\) A significant pause is defined as being greater than .2 sec or longer.
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(8-48)  
Nyma  itxaŋ  muduba  tba.

ŋŋ-ma  itxa-ŋ  mudu-ba  t-ba
3PLS-NEG  return-3PLS  go.up-NEG  do-NEG

‘They never returned.’

8.2.8  A comment on the iteration of verbs

Anamuxra uses the iteration of medial verbs to indicate that an activity or state is sustained over a period of time. For example,

(8-49)  
Svirm,  mudum,  mudum,  mudum,  mudum,

svir-m  mudu-m  mudu-m  mudu-m  mudu-m
bind-1SGS  go.up-1SGS  go.up-1SGS  go.up-1SGS  go.up-1SGS

mudum,  upri,  upri  vratia.

mudu-m  u-vru-i  u-vru-i  prat-i-a
go.up-1SGS  IA-CL-sec-OBL  IA-CL-sec-OBL  be.finished-NT-3SGS

‘I bound (it), going up, and up, and up, and up, on one side, on one side it was finished.’

(8-50)  
Upri  vratiai,  samŋ,

u-vru-i  prat-i-a-i  sa-mŋ
IA-CL-sec-OBL  be.finished-NT-3SGS-DS.SEQ  be-1PLS

samŋ  vasxŋ.

sa-mŋ  vasx-i-ŋ
be-1PLS  come.up-NT-1PLS

‘On one side, it was finished, and we waited and waited, then we came up.’

As (8-49) and (8-50) illustrate, the number of repetitions varies considerably. This variation most likely reflects both the time lapse being conveyed and stylistic preference on the part of the speaker. Interestingly, in Anamuxra, iteration to convey a prolongation of an event can be applied to other constituents besides verbs. For example, in (8-51) the locative phrase xubi ‘along (the) road’ is iterated to accentuate the distance.
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(8-51)  
(He came down.)

\[ Wubi, \quad wubi, \quad wubi, \quad wubi, \quad wubi, \quad xub-i \quad xub-i \quad xub-i \quad xub-i \quad xub-i \quad \text{road-OBL \ road-OBL \ road-OBL \ road-OBL \ road-OBL} \]

\[ wubi, \quad wubi, \quad Arari \quad vaxsapari. \quad xub-i \quad xub-i \quad \text{Arari \ vaxsa-pa-ri} \quad \text{road-OBL \ road-OBL \ PN \ come.up-FP-3SGS} \]

‘He kept going on the road, and then he came up (to) Arari.’

There are several ways in which iteration differs from verb serialisation constructions discussed above. First, iteration is open ended, whereas serialisation is far more restricted. Second, iteration is not just restricted to verbs. Third, there is typically a distinct intonation contour associated with each instance of the unit. Consequently, I consider a sequence of iterated verbs such as those to be not an SVC but a marker of aspect.\(^{19}\)

8.3 
**Idiomatic verbal compounds**

Idiomatic verbal compounds, like juxtaposed SVCs, consist of two juxtaposed stems that form a single phonological word. Idiomatic verbal compounds differ from juxtaposed SVCs in that the meanings of the former are non-compositional, i.e. not directly derivable from the meaning of the individual verbs, whereas juxtaposed SVCs have compositional meanings.\(^{20}\) The following are the only examples of idiomatic verbal compounds found in my corpus:

---

19 Pawley (1997:22) offers a similar analysis of the iteration of verb roots in Kalam.

20 A similar distinction is made by Bruce (1984:167) for Alamblak compounds and serial constructions.
tagu-av- step-build.shelter ‘surround’
tama-(x)-ixr- put-look ‘look up’
tuwu-var- hit-say ‘blow’
v-tagu- get-step- ‘walk’
muda-tagu- come.up-step- ‘climb (up or down)’

These forms have unequivocal lexical status in the language (cf Bruce 186: 28) in so far as (i) they are the standard way of expressing the concept and (ii) they are idioms, not literal expressions.

8.4 Auxiliary verb constructions

The verb \( t- \) can be used in a number of ways. It can be (i) a main verb with the meaning ‘do, make, happen’ (ii) a pro-verb (especially common in tail-head linkage (see § 11.8)) (iii) a marker of habitual aspect in finite SVCs and (iv) the auxiliary in a main verb plus auxiliary verb complex. It is use (iv) that we are concerned with here.

As an auxiliary, \( t- \) acts as a support verb or peg to carry the inflection of a either negative medial verb or a negative counterfactual protasis verb. In both cases, the lexical or main verb takes the negative suffix \(-ba\) plus the dependent suffix \(-i\), and is followed by the auxiliary verb \( t- \) which takes the identical inflection found on affirmative medial or counterfactual conditional verbs. For example, in (8-52), the main verb, itself a complex verb consisting of the adjective \( aviN- \) ‘good’ plus \( t- \) ‘do’ (see §8.5.1.1), is marked by the negative suffix. It is followed by the auxiliary \( t- \) which takes the third person singular suffix \(-d\) and the different referent sequential suffix \(-i\). In (8-53), the main verb \( mugu- \) ‘go.down’ is marked by the negative suffix \(-ba\) plus the negative dependent suffix \(-i\) and \( t- \) is marked as first person singular far past counterfactual conditional.
Like the habitual SVC, the negative-auxiliary complex construction is typically produced without an intonational break associated with clause or sentence boundaries and other constituents can never intervene between the main verb and the auxiliary. The negative auxiliary complex is distinguished from SVCs on the basis that the combination of the two verbs is overtly marked by the dependent suffix -i, and also by the fact that t- does not contribute to the meaning of the complex.

8.5 Non-verb plus verb constructions

We now turn to CVCs that consist of a non-verbal element plus a verb. A number of different classes can fill the non-verbal slot in these compounds, including noun stems, adjective stems, Tok Pisin loan forms, and unanalysable, or ‘adjunct’ forms. The discussion begins in §8.4.1 with non-verb plus verb constructions that are realised as single phonological and morphological words. §8.4.2, describes non-verb plus verb structures that constitute phrasal compounds.
8.5.1 Single word compounds

In this section I discuss non-verb plus verb compounds that behave as single phonological and grammatical words. These single word compounds take a single primary stress, can never be interrupted by a pause and do not allow intervening morphological material between the two constituents. There are four main types of single word compounds: adjective plus t- ‘do’, noun plus verb, Tok Pisin loan plus t- ‘do’ and frozen, or cranberry compounds.

8.5.1.1 ADJECTIVE + T- ‘DO’

An adjective may be combined with the verb t- ‘do’ to produce an intransitive, stative predicate. In such complex constructions, t- functions as a copula verb and the meaning is determined by the incorporated adjective. Examples are:

- *apu-t-* bad-do ‘be bad’
- *aviN-t-* good-do ‘be good’
- *muNuN-t-* ripe-do ‘be ripe’
- *nagnagN-t-* happy-do ‘be happy’
- *tak-t-* strong-do ‘be strong’
- *umaumau-t-* crazy-do ‘be crazy’
- *vi-t-* heavy-do ‘be heavy, be pregnant’
- *xbN-t-* hot-do ‘be hot’
- *xrN-t-* cold-do ‘be cold’

(8-54) contains the compound *aru-t-* ‘large-do’ used as a medial verb.

(8-54)  

Avnaxida  arut,  xdaxaj

avn-a-xida  **aru-t-t**  xdax-a-nj

coconut-ND-CLtree  large-do-3SGS  root-ND-PL

xubagaka  simuixpari.

ubaNx-a-ka  simu-ix-pa-ri

hole-ND-CLres  spear-close-FP-3SGS

‘The coconut tree grew large and the roots closed the hole.’
8.5.1.2 NOUN + VERB COMPOUNDS

Compounds composed of a noun stem plus verb are extremely common in Anamuxra. Some noun-verb compounds have predictable meanings, other have meanings that are idiomatic, i.e. not determinable from the meaning of their individual components.

The most common type of noun-verb compound is that in which the noun corresponds to the participant bearing the object relation in the equivalent transitive construction. The following are examples of object incorporation:

- **ar-tuxu-** tree-hit ‘clear the skyline of a garden by removing the branches of trees’
- **xzxz-tuxu-** singsing-hit ‘perform a dance/sing’
- **sivi-tuxu-** grass-hit ‘cut grass’
- **ainN-muduxu-** leg-throw.away ‘kick’
- **xub-muduxu-** arm-throw.away ‘punch’
- **anN-xuasix-** water-scoop.up ‘scoop up water’
- **ariN-na-** betelnut-chew ‘chew betelnut’
- **asara-iapar-** tobacco-roll ‘roll a cigarette’
- **asaraN-tbov-** tobacco- ‘smoke’
- **mugu-av-** house-build.(shelter) ‘build a house’
- **asr-tam-** sign-put ‘put a mark, inscribe, write,’
- **azN-tam-** decoration-put.on ‘put decoration on’
- **wunaN-tam-** plate-put ‘put out plates in preparation for serving food’
- **xmyanaN-t-** work-do work
- **mui-simu-** fight-spear ‘empower with fighting ability’
- **irbaN-sxi-** monitor.lizard-carry ‘disguise as a monitor lizard’
- **umi-tuxu-** smell-hit ‘smell’

Object incorporation is a valency-decreasing process in Anamuxra. That is, where an object is incorporated, the verb is intransitive. It cannot take pronominal object prefixes or occur with a full object NP. (See §10.2.2.3 for details.)
The incorporated nouns in these compounds are non-referential and the complex serves to denote generic events or processes. For example,

(8-55)  \textbf{Ariinan.}  
\texttt{ariN-na-o-n} 
\text{betelnut-chew-NT-1SGS} 
'I chewed betelnut.'

In the case of non-idiomatic compounds, this generic interpretation is available in an analytic equivalent (i.e. where the verb is realised as a transitive form and accompanied by an independent object NP).

(8-56)  \textbf{ariiba}  
\texttt{ari}-\text{na} \text{--} \text{na-o-n}  
\text{betelnut-CLres} \text{-} \text{eat-NT-1SGS} 
'I chewed a betelnut.'  
'I chewed betelnut.'

While the typical relation in noun-verb compounds is that of verb and object/patient, Anamuxra allows the incorporation of other nominals that would occur as common adjuncts expressing roles such instrument, means, or manner. For example,

\begin{itemize}
\item \texttt{anN-\textit{vi} - water-bathe} \hfill \text{‘bathe’}
\item \texttt{maya-\textit{vi} - mud-bathe} \hfill \text{‘wash in mud’}
\item \texttt{mor-\textit{vi} - sweat-bathe} \hfill \text{‘sweat’}
\item \texttt{tra-\textit{vi} - rain-bathe} \hfill \text{‘bathe in rain (get wet by rain, get rained on’}
\item \texttt{vraN-xn- sickness-sleep} \hfill \text{‘sleep because of/with sickness’}
\end{itemize}
or even subject, as in

\[ \textit{mira-tagu} \quad \text{flame-step} \quad \textit{‘blaze’} \]

8.5.1.3 **TOK PISIN LOANS + T- ‘DO’**

Tok Pisin verbs are borrowed into Anamuxra as non-verbal stems. This is shown by the fact that they do not directly take inflection associated with native verbs. Rather, they must combine with \textit{t-} ‘do’ to form an inflectable verb stem which can take suffixes marking tense, mood, polarity, subject person-number and so on.\(^{21}\)

\[
\begin{align*}
\textit{drivim(i)-t-} & \quad \text{drive-do} \quad \text{‘drive’}^{22} \\
\textit{raun-t-} & \quad \text{wander-do} \quad \text{‘wander’} \\
\textit{sain-t-} & \quad \text{shine-do} \quad \text{‘shine’} \\
\textit{selim(i)-t-} & \quad \text{sell-do} \quad \text{‘sell’} \\
\textit{senisim(i)-t-} & \quad \text{change-do} \quad \text{‘change’}
\end{align*}
\]

8.5.1.4 **FROZEN COMPOUNDS**

There are a few non-verb + verb compounds in which the non-verbal element is a non-isolable form that occurs only in frozen compounds.

\[
\begin{align*}
\textit{avr-tam-} & \quad \textit{avr-put} \quad \text{‘be.breathless’} \\
\textit{avr-s-} & \quad \textit{avr-be} \quad \text{‘rest’}
\end{align*}
\]

A possible gloss for \textit{avr-} here might be ‘breath’ where \textit{avrtam} translates as ‘put breath’ and \textit{avrs} translates as ‘have breath’ [lit. ‘breath be’], as in possessor clauses discussed in §10.2.5.5.

\(^{21}\) Unfortunately, there are no examples in the corpus of transitive loan verbs used with animate objects and so it is not possible to tell how pronominal object prefixes are dealt with in such constructions.

\(^{22}\) The parenthesised ‘i’ most likely represents an epenthetic vowel, though note the parallel to the linking i in medial do constructions described above.
8.5.2 Phrasal compounds: condition predicates

A phrasal compound resembles a single word compound in that it composed of a non-verbal element followed by a verb that together behave as a tightly-bound syntactic unit. The two constituents cannot be separated by other clause level material such as NPs, negative words or adverbs. Furthermore, the non-verbal constituent is either a non-isolable form or a restricted nominal base form that occurs only in the compound.

Unlike single word compounds, however, the non-verbal constituent and the verb of phrasal compounds are independent phonological and morphological words: (a) take separate primary word stress (b) can be interrupted by intonation breaks (c) show no evidence of word internal morphophonemic processes and (d) the constituents can be separated by morphological elements associated with word boundaries, e.g. pronominal object prefixes on the verb.

Phrasal compounds typically express physical or mental condition. The verb slot is filled by \(-t-\) ‘do’, while the non-verbal element denotes the mental or physical condition. The following list of condition plus \(-t-\) CVCs is divided into those in which the condition element is a recognisable noun/adjective root and those in which it is a non-isolable verbal adunct form (see §3.5).

**RECOGNISABLE NOUN ROOT**

<table>
<thead>
<tr>
<th>Non-verbal</th>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>akuku -t-</td>
<td>drowsiness do</td>
<td>‘(feel) drowsy/sleepy’</td>
</tr>
<tr>
<td>apu -t-</td>
<td>bad(ness) do</td>
<td>‘(feel) bad/unwell’</td>
</tr>
<tr>
<td>avasri -t-</td>
<td>sago.soup do</td>
<td>‘(feel) unpleasant in the mouth’</td>
</tr>
<tr>
<td>avi -t-</td>
<td>good(ness) do</td>
<td>‘(feel) good/well’</td>
</tr>
<tr>
<td>mur -t-</td>
<td>sweat do</td>
<td>‘(feel) sweaty’</td>
</tr>
<tr>
<td>xumNi -t-</td>
<td>cold do</td>
<td>‘(feel) cold’</td>
</tr>
<tr>
<td>vra -t-</td>
<td>sick(ness) do</td>
<td>‘(feel) hungry’</td>
</tr>
<tr>
<td>yaku -t-</td>
<td>tiredness do</td>
<td>‘(feel) tired’</td>
</tr>
</tbody>
</table>
### Complex Verbs

#### Non-isolable ‘Verbal Adjunct’ Condition Element

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>axva</code></td>
<td>difficulty do ‘(have) difficulty in X-ing’</td>
</tr>
<tr>
<td><code>aki</code></td>
<td>bitterness do</td>
</tr>
<tr>
<td><code>igi</code></td>
<td>out.of.mind do ‘forget’</td>
</tr>
<tr>
<td><code>nigi</code></td>
<td>hunger do ‘(feel) hungry’</td>
</tr>
<tr>
<td><code>tigi</code></td>
<td>thirst do ‘(feel) thirsty’</td>
</tr>
<tr>
<td><code>vxi</code></td>
<td>fright do ‘(feel) frightened’</td>
</tr>
<tr>
<td><code>vrpr</code></td>
<td>do ‘(feel) sore’</td>
</tr>
</tbody>
</table>

Complex condition predicates are impersonal constructions with invariant third person singular subject marking. Most take a single experiencer argument, which is realised as a nominative NP, but is cross-referenced on the verb by pronominal object prefix, as in (8-57).

(8-57)  

`Yi nigi yatia.`

yi `nigi` ya-t-i-a  
1SGPRO hunger 1SGO-do-NT-3SGS  
‘I feel/am hungry.’

However, the complex conditional, `axva` `-t- ‘difficulty do’, takes both an experiencer argument and a theme argument. For example,

(8-58)  

`Yi dargaj axva yatia.`

yi `dargaj` `axva` ya-t-i-a  
1SGPRO hear-ACT.NOM difficulty 1SGO-do-NT-3SGS  
‘It is difficult for me to hear.’
Chapter 9

Nominal phrases

9.1 Introduction

Nominal phrases (NPs) in Anamuxra can either be simple or complex. A simple NP consists of one or more nominal words that are not embedded within another NP or phrasal constituent. Complex NPs, on the other hand, are composed of two or more simple NPs, or an embedded clause, and include such constructions as conjoined NPs, possessive NPs, and NPs containing relative clauses. In this chapter I describe the structure of all NP types except for those containing relative clauses which are discussed in §11.6. I also describe the distribution of case and number marking with respect to the NP.

9.2 The simple nominal phrase

The simple nominal phrase can consist of an independent pronoun, as in (9-1):

(9-1)  
\[
\begin{align*}
  & Adakum & yax & \text{yatuwumnabat.} \\
  & [ad-aku-m]_{\text{NP}} & [ya-x]_{\text{NP}} & \text{ya-tuwu-mna-ba-t} \\
  & \text{DEM-FD-CL-male} & \text{1SGPRO-ACC.SG} & \text{1SGO-kill-IMM-FUT-3SGS}
\end{align*}
\]

‘This man is about to kill me.’
or a proper noun, as shown in (9-2):

(9-2)  

<table>
<thead>
<tr>
<th>[Uipitak]NP</th>
<th>mugu-t</th>
<th>[Anabarimarak]NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PN</td>
<td>go.down-3SGS</td>
<td>PN</td>
</tr>
</tbody>
</table>

\[ \text{tuwuvxapari.} \]
\[ \text{tuwuvxa-pa-ri} \]
\[ \text{come.upon-FP-3SGS} \]

‘Uipitak went down and came upon Anambarimaraki.’

Alternatively, it may consist of one or more nominals of the other nominal classes such as common nouns, adjectives, numerals, indefinite articles and deictics. The constituent structure of the simple common NP in Anamuxra is shown in figure 9-1:

\[ \text{NP} \rightarrow (\text{Noun}) \ (\text{Adjective}^p) \ (\text{Numeral Phrase}) \ (\text{Deictic}) \]

\[ \text{i) where at least one constituent must occur} \]
\[ \text{ii) any one of these can occur alone} \]

Figure 9-1: Basic structure of the simple common NP

An important point to note about the above formula is that while it correctly predicts that the simple NP can have up to four slots filled as well as multiple adjectives, such maximal expansions are not found in the text corpus and are only known through elicitation. Rather, the most commonly found simple common NPs consist of either one or two nominals. (Note that while figure 9-1 correctly suggests that simple NPs containing more than one constituent may consist of any combination of the nominals in the schema, this is true of elicited examples only; all examples of multi-constituent simple NPs in the text corpus contain a noun.) Examples of NPs containing a single nominal include:
(9-3) **Warapay** ntamangpaya. [noun]

[warap-

\[ wara-pa-glNP \]

k.o ant-CLres-PL 3SGO-bite-FP-3PLS

'Ants bit him.'

(9-4) **Avinand** mzar sia [adjective]

[avin-

\[ avin-nad\]NP mzar-t s-i-a

good-CLfem sit.down-3SGS be-NT-3SGS

'A good (female) sat down and waited.'

(9-5) **Aitbarai** sapari. [numeral]

[ait-

\[ ai-tba-rai\]NP sa-pa-ri

two-CLpiec-DU be-FP-3SGS

'There are two pieces.'

(9-6) **Unkax akui nsimupan** [Ind.art]& [deictic]

[u-

\[ u-mka=x\]NP \[ aku-i\]NP n-simu-pa-n

IA-CLres=ACC.SG FD-OBL 3SGO-spear-FP-1SGS

'I speared one (pig) over there.'

Examples of simple NPs consisting of two nominals include:

(9-7) **Mugupa utavi nmzapari.** [noun+IA]

[mugu-

\[ mugu-pa u-tav-i\]NP nmza-pa-ri

house-CLres IA-CLres-OBL enter-FP-3SGS

'He entered one house.'

(9-8) **Ariba aisaraxai sisn.** [noun+num.]

[ari-

\[ ariN-pa ai-sara-xai\]NP sis-ø-n

betelnut-CLres two-CLbunch-DU tear.off-NT-1SGS

'I tore off two bunches of betelnut.'

(9-9) **Uvspa wotka tupari.** [noun+adjective]

[uvs-

\[ uvs-pa wot-ka\]NP tu-pa-ri

fire-CLres big-CLdim burn-FP-3SGS

'A big fire burnt.'
CHAPTER 9 - NOMINAL PHRASES

9.3 Complex nominal phrases

9.3.1 Possessive nominal phrases

Anamuxra distinguishes formally between 'inalienable' and 'alienable' possession. Possessive nominal phrases expressing inalienable possession are formed with the possessor NP preceding the possessed NP. The noun of the possessed NP is marked by a pronominal prefix which indicates the person and number details of the possessor (see §6.4.1). The phrase level organisation of the inalienable possessive NP can be stated as:

\[
\text{NP(possessive)} \rightarrow \text{NP}_{\text{posr}} \text{ NP}_{\text{possd}}
\]

Figure 9-2: Basic structure of the Possessive NP (Inalienable)

Examples of this construction are given here in (9-10) to (9-12):

(9-10) 
Andrew nsimga
Andrew n-simga
PN 3SGPOSS-older brother
‘Andrew’s older brother’

(9-11) 
Peter nnabi
Peter n-nabi
PN 3SGPOSS-wife
‘Peter’s wife’

(9-12) 
asyaba ngumra
asN-aba n-gumra
devil-CLres 3SGPOSS-eye
‘a devil’s eye’

Possessive NPs expressing alienable possession, on the other hand, are formed according to the schema in figure 9-3. The possessor NP precedes the possessed NP with the two linked by an intervening possessor word (PW) -xwu- ~ -ka-
which is formally part of the possessed NP. The possessive word shows many morphological characteristics of the nominal. It is marked by a pronominal prefix (§5.4.1) indicating the person and number of the possessor and it takes the classifier, number and case marking (§5.4.2) associated with the possessed NP in cases where all other constituents of the possessed NP are omitted (see below).

\[
\begin{align*}
\text{NP(possessive)} & \rightarrow \text{NP}_{\text{poss}} \quad \text{NP}_{\text{possd}} \\
\text{NP(possd)} & \rightarrow \text{PW} \quad \text{NP}
\end{align*}
\]

Figure 9-3 Possessive NP (Alienable)

Examples of possessive NPs expressing alienable possession are:

(9-13) \hspace{1cm} Peter \hspace{1cm} nxwu \hspace{1cm} mugupa

\[
\begin{align*}
\text{[[Peter]}_{\text{poss}'} \text{NP}} & \quad \text{[n-xwu}} & \quad \text{[mugu-pa]}_{\text{poss'd NP}} \quad \text{possNP} \\
\text{PN} & \quad 3\text{SGPOSS-PW} & \quad \text{house-CL}_{\text{res}} \\
\text{‘Peter’s house’}
\end{align*}
\]

(9-14) \hspace{1cm} Andrew \hspace{1cm} nxwu \hspace{1cm} srivaxaba

\[
\begin{align*}
\text{[[Andrew]}_{\text{poss}'} \text{NP}} & \quad \text{[n-xwu}} & \quad \text{[srivaxaN-pa]}_{\text{possd NP}} \quad \text{possNP} \\
\text{PN} & \quad 3\text{SGPOSS-PW} & \quad \text{small.style.string.bag-CL}_{\text{res}} \\
\text{‘Andrew’s string bag’}
\end{align*}
\]

(9-15) \hspace{1cm} Vadamdagavati \hspace{1cm} Asaxivuk

\[
\begin{align*}
\text{[[Vadamdagava=ti}} & \quad \text{Asaxivuk}]_{\text{possNP}} \\
\text{PN=CONJ} & \quad \text{PN} \\
\text{nr-ka} & \quad \text{xyapa} \\
\text{[nr-ka}} & \quad \text{[xya-pa]}_{\text{possd NP}} \quad \text{possNP} \\
3\text{DUPOSS-PW} & \quad \text{story-CL}_{\text{res}} \\
\text{‘Vadamdagava and Asaxivuk’s story’}
\end{align*}
\]

1 Both -xwu- and -ka- are used in Waiateng, while only the latter is used in Midivi and Ikundun.
CHAPTER 9 - NOMINAL PHRASES

(9-16) \[Yamti \quad ngka \quad xngngavri\]

[[[yam=ti]_{pos'};NP \quad [m\=ka]_{possNP} \quad [knN-kNkNx-\text{a-vru-}i]_{possdNP;possNP}\mum=\text{COM} \quad 3\text{PLPOSS-PW} \quad \text{sleep-RDL-ND-CL}_{\text{space-OBL}}

‘Mum and [their] sleeping space’

9.3.1.1 OMISION OF MATERIAL IN POSSESSIVE CONSTRUCTIONS

Omission of material in both types of possessive NPs is extremely common. In alienable possessive NPs, there are three possibilities. First, the possessor NP may be omitted, as in (9-17) and (9-18):

(9-17) \[nxwu \quad makubay\]

[[n-xwu \quad [makuN-pa-\=u]]_{possd NP;possNP} \quad 3\text{SGPOSS-PW} \quad \text{cargo-CL}_{\text{res-PL}}

‘(his) belongings’

(9-18) \[yaxwu \quad suavsai\]

[[ya-xwu \quad [su-a-\text{vsa-}i]]_{possd NP;possNP} \quad 1\text{SGPOSS-PW} \quad \text{same-ND-CL}_{\text{space-OBL}}

‘to the same (place) of mine’

Second, all elements of the possessed NP except the possessive particle may be omitted, as in (9-19) and (9-20). In these cases, the possessive particle takes the classifier, number and case marking associated with the possessed NP. The distribution of the different inflectional categories on the possessive word is identical to that outlined for the non-noun nominals (including the possessive word) discussed in §5.

(9-19) \[Peter \quad nxwutav\]

[[Peter]_{pos';NP} \quad [n-xwu-tav]_{possd NP;possNP} \quad \text{PN} \quad 3\text{SGPRO-PW-CL}_{\text{shel}}

‘Peter’s (house)’

(9-20) \[ukura \quad nxwuka\]

[[\text{u-kura}] \quad [n-xwu-\text{ka}]_{possd NP;possNP} \quad \text{IA-CL}_{\text{male}} \quad 3\text{SGPOSS-PW-CL}_{\text{res}}

‘one man’s (sago)’

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Finally, both the possessor NP and all elements of the possessed NP except the possessive word can be omitted as shown below in (9-21) and (9-22). Again, the possessive word takes the appropriate inflection.

(9-21)  
\[
\text{yaxwuka} \\
[[\text{ya-xwu-ka}]_{\text{Poss'dNP}}]_{\text{PossNP}} \\
1\text{SGPOSS-PW-CLres} \\
'\text{mine}'
\]

(9-22)  
\[
\text{nxwumka} \\
[[\text{n-xwu-mka}]_{\text{Poss'dNP}}]_{\text{PossNP}} \\
3\text{SGPOSS-PW-CLmhan} \\
'\text{his (pig)}'
\]

In contrast to the range of possibilities found with the alienable possessive NP, the only constituent of the inalienable possessive NP that is known to be omitted is the possessor NP, as shown here in (9-23) and (9-24):

(9-23)  
\[
\text{yaskwarpa} \\
[[\text{ya-skwar-pa}]_{\text{Poss'dNP}}]_{\text{PossNP}} \\
1\text{SGPOSS-nose-CLres} \\
'my nose'
\]

(9-24)  
\[
\text{nyxuaN-x-a-y} \\
[[\text{n-y-xuaN-x-a-y}]_{\text{Poss'dNP}}]_{\text{PossNP}} \\
3\text{PLPOSS-footprint-ND-PL} \\
'their footprints'
\]
9.3.1.2  **POSSESSIVE NOUN PHRASES EXPRESSING SOURCE**

Apart from expressing the notion of possession, outlined above, possessive NPs are also used in Anamuxra to express the source relation ‘X from/of Y’. In such cases, the possessor NP refers to the source. In both cases, the possessor NP refers to the source and can either be realised as a Proper name or as an oblique marked NP. Examples of such NPs include:

(9-25) \[ \text{asgubagi} \quad nka \quad \text{imdiy} \]
\[ \text{asN-xubaN-ki} \quad n-ka \quad i-mdiŋj \]
\[ \text{devil-hole-OBL} \quad 3\text{SGPOSS-PW} \quad \text{PROX-PL.HUM} \]
\[ \text{‘the people from the devil’s hole’} \]

(9-26) \[ \text{xtbwagi} \quad nka \quad \text{mumugi} \]
\[ \text{xtN-vwa-ŋ-ki} \quad n-ka \quad \text{mumuN-ŋ-xi} \]
\[ \text{different-place-PL-OBL} \quad 3\text{SGPOSS-PW} \quad \text{child-PL-ACC.NS} \]
\[ \text{‘children from different places’} \]

(9-27) \[ \text{Arari} \quad \text{nkaxai} \]
\[ \text{Arari} \quad n-ka-xai \]
\[ \text{PN} \quad 3\text{SGPOSS-PW-DU} \]
\[ \text{‘two (men) of Arari’} \]

9.3.1.3  **POSSESSIVE NOMINAL PHRASES EXPRESSING HUMAN LOCATIVE**

Simple nominal phrases with human referents cannot take direct oblique marking. For example,

(9-28) \[ *\text{Peter-i} \]
\[ \text{PN-OBL} \]

(9-29) \[ *\text{mumuN-ka-i} \]
\[ \text{child-OBL} \]

(9-30) \[ *\text{natx-a-ska-i} \]
\[ \text{old-ND-CL\text{\textsuperscript{unfort.sen}}-OBL} \]
Rather, in order to refer to a human as a location, Anamuxra employs the possessive construction. In such cases, the possessor NP refers to the human goal or source and the possessive word is marked by a pronominal prefix agreeing with the possessor and by the oblique suffix -ki. The possessed NP slot can never be filled. Examples of possessive locative constructions are:

(9-31)  
\[ \text{Mumugaka} \quad \text{Uipitak} \quad n\text{wuxuki} \quad \text{tuwuvxapari} \]
\[ \text{mumu}N\text{-a-ka} \quad \text{Uipitak} \quad n\text{-xwu-ki} \quad \text{tuwuvxa-pa-ri} \]
\[ \text{child-ND-Cl_{res}} \quad \text{PN} \quad 3\text{SGPOSS-PW-OBL} \quad \text{come.up-FP-3SGS} \]

‘The child came up to Uipitak.’

(9-32)  
\[ \text{Mumugai} \quad \text{mugatr.} \quad \text{arxwuki} \]
\[ \text{mumuN-xai} \quad \text{muga-tr} \quad \text{ar-xwu-ki} \]
\[ \text{child-DU} \quad \text{come.down-3DUS} \quad 1\text{DUPOSS-PW-OBL} \]
\[ \text{tuwuvxarai...} \]
\[ \text{tuwuvx-i-ra-i} \]
\[ \text{come.up-NT-3DUS-DS.SEQ} \]

‘Two children came down and came up to us.’

Note that such constructions are identical in form to those where the possessed entity represents the location in which the possessed NP is omitted. For example,

(9-33)  
\[ \text{Agwuki} \quad \text{tuwuvxapari.} \]
\[ \text{a}N\text{-xwu-ki} \quad \text{tuwuvxa-pa-ri} \]
\[ 1\text{PLPOSS-PW-OBL} \quad \text{come.up-FP-3SGS} \]

‘He came up to us.’  
‘He came up to our (house, place, etc.).’

The two readings are generally distinguished on the basis of contextual cues.²

² Note, that while examples such (9-34) are found with the possessed item interpreted as locative, it is usually the case that a nameable classifier such as -vwa ‘settlement’ or -tav ‘shelter’ will be used in place of the omitted possessed NP (see §9.3.1.1). Where a nameable classifier does occur, there is no ambiguity: the phrase can only be interpreted as referring to a possessed location.
9.3.2 Conjoined nominal phrases

Anamuxra possesses two strategies for conjoining nominal phrases: conjunction through the use of an overt conjunctive clitic; and conjunction by juxtaposition of the coordinate NPs.

9.3.2.1 CONJUNCTION AND TI AND TAGA

The basic structure of nominal phrases containing NPs conjoined by an overt conjunctive clitic which attaches to the first NP is represented in figure 9-4 below.

\[
\text{NP} \rightarrow \text{NP=CONJ} \quad \text{NP}
\]

Figure 9-4: Conjoined NPs involving ti and taga

There are two clitics which can fill the conjunctive slot in such constructions: =ti and =taga. These conjunctive clitics are also used to mark the comitative relation described in §9.6.4. It is important to note however that in my corpus of non-elicited material =ti is more commonly used as a co-ordinating conjunction, while =taga is more commonly used as comitative marker.

=ti occurs both in conjoined constructions where both coordinate nominal phrases are present, as in (9-34) and (9-35), and in nominal phrases where the second NP is omitted as in (9-36) and (9-37). The fact that these are coordinate NPs is evidenced by the pronominal indexing. Thus, for instance in both (9-34) and (9-35), the conjoined NPs represent the possessor NP and are indexed as a single constituent on the possessive word by the dual suffix, nr- . In (9-36) where there is only one overt NP, the subject pronominal suffix indicates that the whole

---

3 Taga is identical to the morpheme used to derive attributive nominal compounds (see 5.3.4.1).
4 Payne (1985) notes that a strategy found in a number of languages is one where "the co-ordinating particle is identical to the preposition or postposition marking the comitative sense of 'with', or alternatively one of the adjuncts is inflected with a comitative case form" (1985:29).
NP is plural. (In examples in which one of the coordinate NPs is omitted, I have indicated the missing NP by ‘φ’.)

(9-34) Vadamdugavati Asaxivuk nrka xyapa

[Vadamdugavati]=ti [Asaxivuk]_NP nr-ka xya-pa
PN=CONJ PN 3DUPOSS-PW story-CLres

‘Vadamdugavata and Asaxivuk’s story’

(9-35) Yiv Antoni nnabi nrka

[[yiv Anton]=ti [n-nabi]]_NP nr-ka
father PN=CONJ 3SGPOSS-wife 3DUPOSS-PW

vaxaba agwu boksaka vt...

vaxaN-pa aj-xwu boks-a-ka p-t
string-bag-CLres 1PL.POSS-PW box-ND-CLres get-3SGS

‘She got father Anton and his wife’s string bag and our box and then...’

(9-36) Yamti nrka xngngavri

[[yam]=ti [ø]]_NP kn-ka
mother=CONJ 3PL.POSS-PW sleep-RDL-ND-CLsect-OBL

wat...

kwua-t

‘She went to mother (and their) sleeping section (bedroom) and...’

(9-37) ...yivti avasripa xriyai...

[[yiv]=ti [ø]]_NP avasri-pa kr-i-ŋa-i
father=CONJ sago.soup-CLres cook-NT-3PLS-DS.SEQ

‘...and father and (they) cooked sago soup and...’

Taga has only been observed in constructions where the second NP is omitted as shown in (9-38). (For discussion of appositional constructions see §9.5.)
Finally, as indicated by figure 9-4, the use of the conjunctive particle is usually restricted to the conjunction of two NPs. Longer chains of coordinate NPs each separated from the next by a conjunctive particle have been recorded but only through elicitation.

9.3.2.2 JUXTAPOSED CO-ORDINATE NOMINAL PHRASES

As mentioned above, Anamuxra speakers may also conjoin NPs by simply juxtaposing them. In principle any number of noun phrases may be conjoined in this way, though in practice speakers are limited by constraints on relevance and processability. The longest example in the text corpus, shown in example (9-39) below, contains three conjoined NPs. We can represent the structural possibility of conjunction by juxtaposition as:

NP → NP^n

Figure 9-5: Juxtaposed conjoined NPs

In (9-39) the NPs, Donald nmgina, Andrew and yi are conjoined through juxtaposition. The fact that they are conjoined is illustrated by the fact that they must be interpreted as combining as the subject of the verb mugu- ‘go.down’ in order to justify the plural number specification for subject on the verb. Similarly, in (9-40), the three juxtaposed NPs, kuramkaka, aduramkaka and vakimkaka conjoin to form the subject of the verb -tura- ‘hold’, though in this case the resultant plurality is not registered on the verb since they are inanimate (see §10.2.2 for discussion of the interaction of animacy and agreement). Finally, in
(9-41) the NPs *wunaba* and *wamyaba* are conjoined through their juxtaposition only and function together as the object of the verb *nbur-* ‘wash’.

(9-39) *Donald* *nmgina,* *Andrew,* *yi* *mugupay*

[Donald *n-mgina* Andrew *yi*]NP mugu-pa-ŋ

PN 3SGPOSS-mother PN 1SGPRO go.down-FP-1PLS

‘Donald’s mother, Andrew and I went down.’

(9-40) *Kuramkaka,* *aduramkaka,*

[kura-mk-a-ka aduraN-mk-a-ka]

k.o cane-thorn-ND-CL, k.o cane-thorn-ND-CLres

vakimkaka nkturapari.

vaki-mk-a-ka]NP n-ktura-pa-ri

cane(sp)-thorn-ND-CLres 3SGO-hold-FP-3SGS

‘The thorns of the cane will hold him.’

(9-41) *Ani* *mugut,* *wunamba,* *wamyaba*

an-i mugu-t xunaN-pa wamN-aban

river-OBL go down-3SGS plate-CLres pot-CLres

nburnapari.

nburna-pa-ri

wash-FP-3SGS

‘She went down to the river and she washed plates and pots.’

9.4 Nominal phrase compounds

Kin terms and proper nouns are usually restricted in their ability to co-occur with other nominals. The only clear example where they do is in structures such as those in (9-42) and (9-43). (9-42) consists of a kin term plus Proper Name, while (9-43) consists of a kin term plus common noun.

(9-42) *yam* *Alice*

'yam Alice mother PN

‘Mother Alice’
Another common sub-type of this construction consists of NPs containing a place name and an NP containing a topographical noun, in that sequence. Examples are given in (9-44) to (9-46).

(9-44)  
\[
\begin{align*}
\text{Arari} & \quad \text{vwaki} \\
\text{Arari} & \quad \text{vwa-a-ki} \\
\text{PN} & \quad \text{settlement-ND-OBL}
\end{align*}
\]

‘at Arari’

(9-45)  
\[
\begin{align*}
\text{Asawawui} & \quad \text{vwar} \\
\text{Asawawui} & \quad \text{vwar} \\
\text{PN} & \quad \text{settlement-OBL}
\end{align*}
\]

‘at Asawawoi’

(9-46)  
\[
\begin{align*}
\text{Xzivu} & \quad \text{ani} \\
\text{Xzxivu} & \quad \text{an-i} \\
\text{PN} & \quad \text{river-OBL}
\end{align*}
\]

‘along Xzivu’

9.5  Appositive (elaborating) nominal phrases

An NP can stand in apposition to another NP where both are coreferential but the second NP further specifies the reference of the first. For example, in (9-47) below, the NP xyakyandimti ‘this white man and (I)’ elaborates the first NP, which consists of the 1 dual independent pronoun, \( ar \), by specifying exactly who apart from the speaker is referred to by \( ar \). Similarly, the NP awudmumuga taga ‘girl and (her)’, elaborates the first NP, which also consists of a pronoun, the third person dual, \( nr \).
Ar, xyakyadimti,
ar xya-xya-ad-i-m=ti
1DUPRO white-RDL-DEM-PROX-CL res=CONJ

vwadiki sapr ...
vwa-ad-i-ki sa-pr
settlement-DEM-ND-OBL be-1DUS
'We, this white man and (I), were at this place…'

Nr, awudmumugataga mugupara.
3DUPRO female-child-CL res=CONJ go.down-FP-3DUS
'They, (mother) and (the) girl, went down.'

ay, yivti, agwu rumaki
ang yiv=ti aŋ-xwu rum-a-ki
1PLPRO father=COM 1PLPOSS-PW room-ND-OBL
'in our, dad and (us), room'

Such elaborating structures are not restricted to pronoun plus conjoined NP sequences, however, as shown here in (9-50) to (9-52).

Muxam, agxam daramamapari.
mux-a-m agx-a-m dararama-pa-ri
next-ND-CL male last-ND-CL male think-FP-3SGS
'The next (male), the last (male), thought.'

Ukura, Asaxivuk, savamsai tamurpari.
u-kura Asaxivuk savamsa-i tamur-pa-ri
IA-CL male PN clear.place-OBL make.fire-FP-3SGS
'One man, Asaxivuk, made a fire in a clear place'

Yam Alice, yam doktaboi nnabi...
yam Alice yam doktaboi n-nabi
mother PN mother medical.orderly 3SGPOSS-wife
'Mother Alice, Mother, the medical orderly’s wife…'
‘He came up to his (place), Waiateng and then...’

9.6 The comitative

The comitative is most typically marked by =taga, though a couple of examples have been found where =ti is used (see discussion in §9.3.2). It is common for the NP with which the comitative item is associated to be omitted, as shown in (9-55) and (9-57).

‘I’ve been with (this) kind of female.’

‘I bound it with (i.e. to) the tree.’

‘Your letter is with Stephen.’

‘He stayed with his aunty.’

9.7 Classifiers, case and number inflection in the NP

Both case and number marking normally occur on only the rightmost constituent of the nominal phrase. Examples illustrating this pattern are presented here in
(9-58) to (9-61). (9-61) is a particularly interesting example as it illustrates the application of accusative case to a coordinate NP where the second NP is omitted.

(9-58) \[ \begin{align*}
\text{Mugupa} & \quad \text{utavi} & \quad \text{nmzapari}. \\
mugu-pa & \quad \text{u-tav-i} & \quad \text{nmza-pa-ri} \\
\text{house-CL} & \quad \text{IA-CL}_{\text{absol}}-\text{OBL} & \quad \text{enter-FP-3SGS} \\
\text{‘He entered one house.’} \\
\end{align*} \]

(9-59) \[ \begin{align*}
\text{Lamaka} & \quad \text{ya-xwu} & \quad \text{tva-pa} & \quad \text{wotxakui} \\
\text{lam-a-ka} & \quad \text{[ya-xwu tva-pa wotxaku-\text{NP}]} & \quad \text{1SGPOSS-PW basket-CL}_{\text{res}} & \quad \text{large-FD-OBL} \\
\text{‘lamp-ND-CL}_{\text{res}} & \quad \text{my large basket.’} \\
\text{xbirpan.} \\
\text{xbir-pa-n} \\
\text{‘I carried the lamp in my large basket.’} \\
\end{align*} \]

(9-60) \[ \begin{align*}
\text{Tayiba} & \quad \text{umkax} & \quad \text{nppari}. \\
\text{tanjiN-pa} & \quad \text{u-mka=x} & \quad \text{n-p-pa-ri} \\
\text{bandicoot-CL}_{\text{res}} & \quad \text{IA-CL}_{\text{human}}=\text{ACC.NS} & \quad \text{3SGO-get-FP-3SGS} \\
\text{‘He got one bandicoot.’} \\
\end{align*} \]

(9-61) \[ \begin{align*}
\text{Yamtiximany-mr} & \quad \text{sana?} \\
[yam]=\text{ti[ø]=xi}]_{\text{NP}=\text{ma}} & \quad \text{nį}=\text{mr} & \quad \text{sa-ø-na} \\
\text{Mother =CONJ=ACC.NS=PQ} & \quad \text{3PLO-behind} & \quad \text{be-NT-2SGS} \\
\text{‘Are you following mother and (them)?’} \\
\end{align*} \]
Chapter 10

Basic clause structure

10.1 Introduction

Two main, morphosyntactically distinct types of clauses may be distinguished in Anamuxra; those which contain a verbal predicate; and, those which are headed by a nominal predicate.

In this chapter I examine a number of general morphosyntactic properties of both these clause types. In §10.2, I consider various aspects of affirmative verbal clauses, including: the syntactic roles held by core arguments; features of constituent order; and, the realisation of core arguments in basic intransitive, transitive and ditransitive clauses. I also account for several verbal clause types that deviate from the basic pattern. In §10.3, I consider the core features of non-verbal clauses. In §10.4 I discuss the negation of both verbal and non-verbal clauses; while, in section §10.5 I outline the realisation of non-core, or adjunct constituents, such as adverbs, temporals, locationals and oblique-marked NPs.

10.2 Verbal clauses

10.2.1 Introduction

The basic verbal clause consists maximally of a verbal predicate, between one and three core arguments, and any number of non-core, or adjunct constituents. Core arguments are those elements required by the semantics of the predicate; roughly
speaking, they may be said to represent the 'participants' of the event or state encoded by the clause. The majority of core arguments in Anamuxra are realised as non-oblique marked NPs. However, some arguments of certain verbs, especially speech act verbs, are realised as complement clauses (§11.5).

10.2.2 Syntactic functions and grammatical relations

10.2.2.1 SYNTACTIC FUNCTIONS

An important feature of core arguments is the grammatical relation they have within the clause. Grammatical relations may be accounted for in terms of the terms of the following primitive semantico-syntactic functions:

- **S**: the single argument of an intransitive verb
- **A**: the argument in transitive and ditransitive clauses which is treated in the manner normally afforded to the Agent of a P[ri]m[ary] T[ran]s[itive] V[erb]
- **P**: the argument in a mono-transitive verb which is treated in the manner normally associated with the Patient of a Primary transitive verb
- **T**: the theme argument of ditransitive clauses
- **G**: the goal, source or recipient argument of ditransitive clauses

While the above syntactic functions are generally easily recognisable in Anamuxra clauses, it proves more useful to discuss the morphosyntactic behaviour of core arguments in terms of grammatical relations such as Subject and Object.

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1 The notions A, S, P are used here following Comrie 1978, Dixon 1979 (though note that Dixon uses 'O' for 'P') and Andrews 1985. The terms 'T' and 'G' were first proposed by Croft 1990 following Dryer 1986.

2 While mono-transitive and ditransitive clauses are transitive, I shall use the term 'transitive clause' to refer mono-transitive clauses unless otherwise specified.
10.2.2.2 SUBJECTS

In Anamuxra, evidence of grammatical relations comes from two main morphological tests: cross-referencing on the verb and case marking of NPs. In each of these, Anamuxra displays what is commonly known as (nominative) - accusative patterning; that is, arguments with A function and those with S function are treated alike, in contrast to all other arguments (i.e. P, T and G).

Following tradition, it is possible to posit the grammatical relation of Subject to cover both A and S arguments. The morphosyntactic properties of subjects in Anamuxra are:

(i) They are realised by nominative NPs (Nominative NPs take no overt case marking; see §5.4).

(ii) In most clauses, they are cross-referenced on most forms of the verb (see §7.6, §7.7.) by a pronominal suffix. In the case of subjects with human referents, the pronominal suffix indicates both person and number features; while, for non-human referents, the number agreement is suspended and the third person-singular suffix is used.

(iii) In realis negative constructions, they are not cross-referenced on the verb by a pronominal suffix but, rather, are indicated by a pronominal prefix which attaches to the negative word -rna (§3.8, §6.4.1, §10.4).

10.2.2.3 OBJECTS

10.2.2.3.1 Introduction

The term 'object' is used here to refer to any core argument in a clause that is not a subject; that is, arguments with either P, T or G functions. Thus, in transitive clauses (i.e. clauses which contain an A and a P function), the A argument bears the subject grammatical relation and the P argument is associated with the object relation; while in ditransitive clauses (i.e. clauses which contain an A argument, and a T and a G argument) A is assigned the subject relation and both T and G bear the grammatical relation of object. However, while each of the three non-A/S arguments bear the grammatical relation of object, the influence of animacy and the thematic role hierarchy (see below) on the morphological coding of P, T and G arguments results in certain inconsistencies in the overall morphological profile of objects.
10.2.2.3.2 Cross-referencing on the verb

Pronominal prefixes attached to the verb typically indicate the person-number features of the object of the clause. Note, however, that not all objects receive such marking. In transitive clauses, only animate P objects are indexed on the verb, while inanimate P objects are not.

**ANIMATE P OBJECT**

(10-1)  
\[ A_g \]  
\[ \text{adakuax} \]  
\[ \text{mnadiq}. \]

\[ \text{an} \]  
\[ \text{ad-aku-a=x} \]  
\[ \text{n-na-d-i-ŋ} \]

\[ 1\text{PLPRO DEM-FD-CL=ACC.SG} \]  
\[ 3\text{SGO-eat-HAB-NT-1PLS} \]

‘We eat that [pig].’

**INANIMATE P OBJECT**

(10-2)  
\[ \text{Arigaka} \]  
\[ \text{nat...} \]

\[ \text{ariNx-a-ka} \]  
\[ \text{na-t} \]

\[ \text{betelnut-ND-CL-res} \]  
\[ \text{chew-3SGS} \]

‘He chewed the betelnut and then...’

In ditransitive clauses, the pronominal prefix always cross-references the object associated with the G function (GO), irrespective of the animacy of the T function object (TO). (A fact of Anamuxra is that all Gs are animate).

**ANIMATE T OBJECT**

(10-3)  
\[ \text{Umka} \]  
\[ \text{yakua!} \]

\[ \text{u-mka} \]  
\[ \text{ya-kua} \]

\[ \text{IA-CL-nhan} \]  
\[ \text{1SGO-give} \]

‘Give me one (chicken).’

**INANIMATE T OBJECT**

(10-4)  
\[ \text{wiapa} \]  
\[ \text{uvaga} \]  
\[ \text{yakua!} \]

\[ \text{wia-pa} \]  
\[ \text{uyaN-ka} \]  
\[ \text{ya-kua} \]

\[ \text{spear-CL-res} \]  
\[ \text{IA-CL-nhan} \]  
\[ \text{1SGO-give} \]

‘Give me one spear!’

In the case of P objects (i.e. objects in transitive clauses), the occurrence of the pronominal object prefix is clearly determined on the basis of the animacy of
the object referent. In contrast, while it would be possible to explain the choice of the G object over inanimate TOs in ditransitive clauses in terms of animacy, such an explanation is not available where both the GO and the TO are animate. One way of accounting for this is in terms of the influence of a Thematic Hierarchy such as that as postulated by Bresnan and Kenerva (1989). The Thematic Hierarchy assumes that semantic roles are ranked, in an ordered hierarchy. (Note that we are only interested here in the relationship between Beneficiary/Goal (= our Goal function) and Theme.)

(10-5)  Agent > **Beneficiary/Goal** > Instrument > Patient/Theme > Locative

With respect to object marking in Anamuxra, this hierarchy correctly predicts that an argument bearing the G function (=goal-beneficiary) rather than an argument bearing a T function (= Theme) will be indexed on the verb. Note, though, that for this prediction to hold we must also assume that the thematic hierarchy outranks animacy in importance for determining the use of object pronominal marking.

To conclude, then, we can see that with respect to cross-referencing on the verb, animate P objects behave like G objects while inanimate P objects behave like T Objects. We can represent these two patterns as follows:

(10-6)  

\[ \begin{array}{cc}
\text{animate P} & \text{inanimate P} \\
T & P \\
G & 
\end{array} \]

10.2.2.3.3 Case marking

As we saw in §5.4.2.3, the accusative case marker \( =x_{=}xi \) is associated with object arguments. In certain respects, the distribution of the accusative parallels
the use of the pronominal object prefix outlined above. For instance, it can only ever appear on object NPs with animate referents (though note the optionality of its use with non-pronominal NPs (see §5.4.2.3.1)). However, while speakers readily judge accusative with inanimate Ts as unacceptable, there is some ambiguity over its use with animate Ts. While there is a preference for ditransitive clauses in which only the GO is marked, when asked to judge equivalent clauses in which both the TO and GO are marked or in which just the TO is the only accusatively marked NP, speakers are less adamant about their grammaticality. A possible explanation for this ambiguity may be that the thematic hierarchy does not clearly outrank animacy as it does in the case of object cross-referencing; in other words, the animacy of the TO influences speaker judgements.

Thus, for case marking, we are left with four possible patterns, summarised here in (10-7):

\[(10-7)\]

\begin{align*}
\text{a. inan. P & inan. T or anim. T} & \quad \text{b. anim. P & inan. T or anim. T} \\
& \quad \text{(where TH outranks animacy)} & \quad \text{(where TH outranks animacy)} \\
\end{align*}

\[
\begin{array}{cc}
\text{P} & \text{G} \\
\text{T} & \text{T} \\
\end{array}
\]

\[
\begin{array}{cc}
\text{P} & \text{G} \\
\text{T} & \text{T} \\
\end{array}
\]

\begin{align*}
\text{c. anim. P, anim. T} & \quad \text{d. inan. P, anim. T} \\
& \quad \text{(where animacy outranks the TH)} & \quad \text{(animacy outranks the TH)} \\
\end{align*}

\[
\begin{array}{cc}
\text{P} & \text{G} \\
\text{T} & \text{T} \\
\end{array}
\]

\[
\begin{array}{cc}
\text{P} & \text{G} \\
\text{T} & \text{T} \\
\end{array}
\]

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10.2.3 Constituent order

Verbal predicates are typically the final constituent in the clause. In contrast, the ordering of core NPs is relatively flexible. Their position in the clause is governed by pragmatic, rather than syntactic principles. Thus, in clauses containing both a subject NP and object NP, either can occur in initial position. Examples (10-8) to (10-10) are clauses with initial subject, while (10-11) to (10-13) illustrate clauses with initial object. (Note the the object NPs in (10-9) and (10-11) lack accusative marking.)

(10-8) \[ \text{This contrasts with languages such as English where the syntactic order of core NPs is used to determine the grammatical functions of the core NPs.} \]

(10-8) \[ A\eta \quad adakuax \quad nnadi\eta. \]
\[ [\text{an}]_{\text{subj}} \quad [\text{ad-aku-a-x}]_{\text{obj}} \quad n-na-d-i-\eta \]
\[ 1\text{PLPRO} \quad \text{DEM-FD-CL}_{\text{res}}\text{-ACC.SG} \quad 3\text{SGO-eat-HAB-NT-1PLS} \]
\[ \text{‘We eat that.’} \]

(10-9) \[ N\eta \quad sawuba \quad nsimut,\ldots. \]
\[ [\text{nu}]_{\text{subj}} \quad [\text{sawuN-pa}]_{\text{obj}} \quad n-simu-t \]
\[ 3\text{SGPRO} \quad \text{pig-CL}_{\text{res}} \quad 3\text{SGO-spear-3SGS} \]
\[ \text{‘He speared a pig and ...’} \]

(10-10) \[ Adakum \quad yax \quad yatuwumnbati. \]
\[ [\text{ad-aku-m}]_{\text{subj}} \quad [\text{ya-x}]_{\text{obj}} \quad ya-twu-mna-ba-t \]
\[ \text{DEM-FD-CL}_{\text{mi}} \quad 1\text{SGPRO-ACC.SG} \quad 1\text{SGO-kill-IMM-FUT-3SGS} \]
\[ \text{‘That (man) is about to kill me.’} \]

(10-11) \[ Avnrxrugala \quad Steven \quad vpari. \]
\[ [\text{avn-rxruNx-a-\eta}]_{\text{obj}} \quad [\text{Steven}]_{\text{subj}} \quad p-pa-ri \]
\[ \text{coconut-dry-ND-PL PN} \quad \text{get-FP-3SGS} \]
\[ \text{‘Steven got the dry coconuts.’} \]

(10-12) \[ Adamkax \quad nvquina \quad nxirwupari. \]
\[ [\text{ad-a-mka-x}]_{\text{obj}} \quad [\text{nvquina}]_{\text{subj}} \quad n-xirwu-pa-ri \]
\[ \text{DEM-ND-CL}_{\text{shana-ACC.SG}} \quad 3\text{SGO-father} \quad 3\text{SGO-cut-FP-3SGS} \]
\[ \text{‘His father cut that (pig).’} \]
In clauses containing three core NPs, any configuration is possible. For example,

(10-14)  
\[\text{nataxaska} \text{ nsuva} \text{ aksaka} \text{ nkupari.}\]  
\[\text{[nataxaska]}_{\text{subj}} \text{ [nsuva]}_{\text{Gobj}} \text{ [aks-a-ka]}_{\text{Tobj}} \text{ n-ku-pa-ri}\]  
old-ND-CLunfem 3SGPoss-cousin rope-ND-CLres 3SGO-give-FP-3SGS  
'The poor old (female) gave his cousin the rope.'

(10-15)  
\[\text{aksaka} \text{ nataxaska} \text{ nsuva} \text{ nkupari.}\]  
\[\text{[aks-a-ka]}_{\text{Tobj}} \text{ [nataxaska]}_{\text{subj}} \text{ [nsuva]}_{\text{Gobj}} \text{ n-ku-pa-ri}\]  
rope-ND-CLres old-ND-CLunfem 3SGPoss-cousin 3SGO-give-FP-3SGS  
'The poor old (female) gave his cousin the rope.'

(10-16)  
\[\text{nsuva} \text{ nataxaska} \text{ aksaka} \text{ nkupari.}\]  
\[\text{[nsuva]}_{\text{Gobj}} \text{ [nataxaska]}_{\text{subj}} \text{ [aks-a-ka]}_{\text{Tobj}} \text{ n-ku-pa-ri}\]  
3SGPoss-cousin old-ND-CLunfem rope-ND-CLres 3SGO-give-FP-3SGS  
'The poor old (female) gave his cousin the rope.'

10.2.4 Expression of core arguments

As indicated by the discussion in the previous sections, there are two main ways in which core arguments are expressed in verbal clauses:

(i) Pronominal affixation (either on the verb or on the negative word, -ma), and

(ii) overt NPs

There is a significant difference between pronominal affixation and overt NPs. Pronominal affixation is obligatory when it is available. In contrast, there are no

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4 Ditransitive clauses containing the full complement of core NPs have only been observed through elicitation.
grammatical requirements for the use of overt NPs. Examples of clauses lacking one or more overt NPs are:

**INTRANSITIVE CLAUSE: NO SUBJECT NP**

(10-17)  
Obi.  
 nb-i-a  
die-NT-3SGS  
‘He died.’

**TRANSITIVE CLAUSE: NO SUBJECT NP**

(10-18)  
maurimpa  
tbuina.  
maurim-pa  
tbu-i-na  
sweet.potato-Cl-res  
bury-NT-2SGS  
‘You bury sweet potato.’

**TRANSITIVE CLAUSE: NO OBJECT NP**

(10-19)  
Ukura  
xrapari  
u-kura  
kra-pa-ri  
1A-Cl-male  
cook-FP-3SGS  
‘One man cooked (sago).’

**TRANSITIVE CLAUSE: NO SUBJECT OR OBJECT NP**

(10-20)  
Xria.  
kr-i-a  
cook-NT-3SGS  
‘He cooked (it).’

**DITRANSITIVE CLAUSE: NO SUBJECT OR G OBJECT NP**

(10-21)  
Nxwu  
maravggaka  
nukupari.  
n-xwu  
maravgNx-a-ka  
n-ku-pa-ri  
3SGPOSS-PW  
ginger.plant-ND-Cl-res  
3SGO-give-FP-3SGS  
‘He gave him his ginger plant.’
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DITRANSITIVE CLAUSE: NO SUBJECT OR T OBJECT NP

(10-22) Nvgina  nukupari.
        n-vgina n-ku-pa-ri
43GPOSS-father  3SGGIVE-FF-3SGS
'She gave his father (the betelnut).'

DITRANSITIVE CLAUSE: NO OVERT NPS

(10-23) Yakunay...
ya-ku-na-i
1SGGIVE-2SGSDSEQ
'You give me (the string bag) and ...'

In table 10-1 below I have outlined the various options available to different core arguments.

<table>
<thead>
<tr>
<th></th>
<th>Overt NP (Optional)</th>
<th>Pronominal Affixation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subjects</td>
<td>P Objects</td>
</tr>
<tr>
<td>Subjects</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>P Objects</td>
<td>All</td>
<td>All</td>
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<tr>
<td>G Objects</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>T Objects</td>
<td>All</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 10-1: Expression of core arguments

Subjects, G objects and animate P objects can be expressed by an overt NP together with pronominal affixation, or by pronominal affixation only. In contrast, T objects and inanimate P objects are either expressed by an overt NP or not at all.
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10.2.5 Types of verbal clauses

In this section we first outline the base verbal clause types: namely, intransitive, transitive and ditransitive clauses; and then describe various verbal clauses which vary from the basic clause construction.

10.2.5.1 INTRANSITIVE CLAUSES

Intransitive clauses consist of a verbal predicate and a single core argument which functions as the subject of the clause. In (10-26), the intransitive verb nb- 'die' occurs with the nominal phrase i-m, which realises the subject. The person and number details of the subject are cross-referenced by the third person singular suffix, -a. In (10-27), the subject of the clause is realised by the inanimate NP, tagnaba aivukrai 'two stones'. Although the subject NP is formally dual, because the referent is inanimate, the third person singular subject pronominal suffix is used.

(10-24)  
\[
\begin{align*}
\text{Im} & \quad \text{nbia} & \quad \text{varapari.} \\
\text{i-m} & \quad \text{nb-i-a} & \quad \text{para-pa-ri} \\
\text{PROX-CL} & \quad \text{die-NT-3SGS} & \quad \text{say-FP-3SGS} \\
\end{align*}
\]

"This (male) died," he said.

(10-25)  
\[
\begin{align*}
\text{Tagnaba} & \quad \text{aivukrai} & \quad \text{Arari} & \quad \text{vwaki} \\
\text{tagN-aba} & \quad \text{ai-vuk-rai} & \quad \text{Arari} & \quad \text{vwa-a-ki} \\
\text{stone-CL-res} & \quad \text{two-CL-spher-DU} & \quad \text{PN} & \quad \text{place-ND-OBL} \\
\text{sia} & \quad \text{tia.} \\
\text{s-i-a} & \quad \text{t-i-a} \\
\text{be-NT-3SGS} & \quad \text{do-NT-3SGS} \\
\end{align*}
\]

'There are two stones at the place, Arari.'

Other examples of intransitive clauses include:

(10-26)  
\[
\begin{align*}
\text{Uvspa} & \quad \text{wotka} & \quad \text{tupari.} \\
\text{uvs-pa} & \quad \text{wot-ka} & \quad \text{tu-pa-ri} \\
\text{fire-CL-res} & \quad \text{large-CL-res} & \quad \text{burn-FP-3SGS} \\
\end{align*}
\]

'A large fire burned.'
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(10-27)  
Inaka   mugut...
ina-a-ka  mugu-t
sun-ND-Clres  go.down-3SGS
'The sun went down (and then...')

(10-28)  
Muyipa  avidia.
muyi-pa  aviN-t-i-a
fight-Clres  good-do-NT-3SGS
'(The) fight is good.'

10.2.5.2 BASIC TRANSITIVE CLAUSES

Basic transitive clauses have at their core a verb which takes two arguments; a Subject and an Object. Example (10-29) shows a transitive clause comprising the verb, -tuwu- 'kill', its subject, which is realised by the nominative NP adakum and cross-referenced by the third person singular subject suffix, -t, and its animate object, which is realised by the accusative NP, ya-x, and cross-referenced by the first person singular object prefix, ya-. In contrast, the example in (10-30) shows a transitive clause where the object of the clause, mavakur-pa 'ball of sago' is an inanimate entity. Here, only the subject argument u-kura 'IA-CLmale' is cross-referenced on the verb, kr- 'cook'.

(10-29)  
Adakum  yax  yatuwumnaBAT.
ad-aku-m  ya-x  ya-tuwu-mna-ba-t
DEM-FD-CLml  1SGPRO.ACC.SG  1SGO-kill-IMM-FUT-3SGS
'That (man) is about to kill me.'

(10-30)  
Ukura  mavakurpa  xrapari.
u-kura  mavakur-pa  kra-pa-ri
IA-Clmale  ball.of.sago-Clres  cook-FP-3SGS
'One man cooked a ball of sago.'

(10-31)  
Amuraka  ukura  uvipari.
amura-a-ka  u-kura  uvi-pa-ri
betel.pepper-ND-Clres  IA-Clmale  pick-FP-3SGS
'Some man picked the betel peeper.'
A final note should be made of the structural ambiguity that stems from the fact that object NPs can occur without overt accusative marking. Consider the following example:

(10-32)  
\[ \begin{align*} 
Nsuvax \quad nkixrapari. \\
n-suva \quad n-kixra-pa-ri \\
3SGPOSS-cousin \quad 3SGO-see-PP-3SGS \\
'His cousin saw him.' & ~ \\
'He saw his cousin.' & 
\end{align*} \]

In this example, and ones like it where both the subject and object are in third person (the situation is identical where both the subject and object are both dual or both plural,) there is no structural cue as to whether the NP \textit{nsuva} 'his cousin' should be interpreted as the subject or the object of the clause. The same ambiguity arises where both subject and object are inanimates. In such cases, the correct interpretation of the grammatical roles of the constituent relies on contextual cues. Similar ambiguities are found in ditransitive clauses.

\textbf{10.2.5.3 DITRANSITIVE CLAUSES}

Ditransitive clauses in Anamuxra refer to transfer events. Such events typically involve three participants; an agent who initiates and controls the transfer; a patient or theme which is the entity transferred; and, either a recipient/goal to which the patient/theme is transferred or a source from which the theme is transferred. There are only four known verbs which predicate ditransitive clauses in Anamuxra: three which possess a recipient/goal: -\textit{ku}- 'give'; -\textit{migu}- 'show' and -\textit{iswar}- 'tell'; and, one which possesses a source, \textit{maiv}- 'buy'. (Note that \textit{maiv}- is an ambitransitive verb that can function either transitively or ditransitively - see §3.3.)

(10-33)  
\[ \begin{align*} 
Nsuvax \quad aksaka \quad nukupari. \\
n-suva \quad aks-a-ka \quad n-ku-pa-ri \\
3SGPOSS-cousin \quad rope-ND-CL\textsubscript{res} \quad 3SGO-give-PP-3SGS \\
'She gave his cousin the rope.' & 
\end{align*} \]
10.2.5.4 INCORPORATED OBJECT CLAUSES

Incorporated object clauses are headed by an intransitive predicate which has been derived from a transitive verb by the incorporation of a noun root (§8.5.1.2). The noun root corresponds to the argument of the verb which functions as the object in the equivalent transitive clause. For example:

(10-37) \[ Yiv \quad arinia. \]

\[ yiv \quad ariN-n-i-a \]
father betelnut-eat-NT-3SGS

'Father chewed betelnut.'

(10-38) \[ Yiv \quad ariba \quad nia. \]

\[ yiv \quad ariN-pa \quad n-i-a \]
father betelnut-CLres eat-NT-3SGS

'Father chewed (a) betelnut'

That the clause headed by the derived verb is formally intransitive is shown by the fact that it is ungrammatical to include a full NP which corresponds to the object relation, as shown in (10-39) below.
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(10-39) *Yiv ari b a arinia.

yiv ariN-pa ariN-n-i-a
dad betelnut-CLres betelnut-eat-NT-3SGS

Other examples of incorporated object clauses include:

(10-40) Anuy akuvri anbipar.

anung aku-vru-i anN-vi-pa-r
day.before.yesterday FD-CLside water-bathe-FP-1DUS

‘The day before yesterday, we (two) washed over that way.’

(10-41) Awudy xzxztuwiya tiya.

awud-ŋ xzxz-tuwu-i-ŋa t-ŋ-ŋa
dance-perform-NT-2/3PLS do-NT-2/3plS

‘Women dance.’

10.2.5.6 LOCATIVE CLAUSES

Locative clauses express the location of an entity with repect to another entity.

(10-42)

[...

(10-43)

[a...

10.2.5.6 VERBAL POSSESSIVE CLAUSES (EXTERNAL POSSESSION)

A verbal possessive clause is one which indicates that one entity possesses another. Such clauses are formed in Anamuxra with the verb s- ‘be’ which functions as a two-argument predicate. The argument corresponding to the possessed entity is marked as subject by the pronominal suffix on the verb and is realised by an NP which is unmarked for accusative case. The possessor ‘argument’ is realised by an unmarked, or nominative form of the NP normally
associated with subjects but is not cross-referenced on the verb. For instance, in (10-44c) the possessor is realised by yi, the nominative form of the first person singular pronoun, while the argument which equates to the possessed item is realised by the NP, asaraba. In (10-44a), the possessor is realised by the second person singular pronoun na, and the possessed item is realised as vinatuwupa ‘men’s house’.

(10-44a)  
\[
\text{Yi} \quad \text{asaraba} \quad \text{sia}.
\]
\[
[\text{yi}]_{\text{Poss}}' \quad [\text{asaraN-pa}]_{\text{Poss'd}} \quad \text{s-i-a}
\]
\[
1\text{SGPRO} \quad \text{tobacco-CLres} \quad \text{be-NT-3SGS}
\]

'I have tobacco.'

(10-44b)  
\[
\text{Na} \quad \text{vinatuwupa} \quad \text{siama}?
\]
\[
[\text{na}]_{\text{Poss}}' \quad [\text{vinatuwu-pa}]_{\text{Poss'd}} \quad \text{s-i-a=ma}
\]
\[
2\text{SGPRO} \quad \text{men’s.house-CLres} \quad \text{be-NT-3SGS=PQ}
\]

'Do you have a men’s house?'

(10-44c)  
\[
\text{Yi} \quad \text{sawuba} \quad \text{aimkarai} \quad \text{sara}
\]
\[
[\text{yi}]_{\text{Poss}}' \quad [\text{sawuN-pa}]_{\text{Poss'd}} \quad \text{ai-mka-rai}
\]
\[
1\text{SGPRO} \quad \text{pig-CLres} \quad \text{two-CLNHAN-DU} \quad \text{be-NT-2/3DUS}
\]

'I have two pigs.'

10.2.5.7 IMPERSONAL CONDITION CONSTRUCTIONS

An impersonal condition construction (ICC) typically expounds some situation in which an animate being, usually human, experiences some physical or mental process which they do not initiate or control. An ICC is headed by a complex verb which is composed of a verbal adjunct or fixed noun/adjective root which expresses the mental-physical condition and the verb -t- ‘do’ (see §8.5.2). Such constructions occur only with the third person singular subject marking. The experiencer is obligatorily indicated by a pronominal object prefix on -t-. and can be realised by an overt NP. The condition element does not inflect like true nouns or adjectives; it cannot be modified, and it must occur before the immediately before the predicate. The basic structure of the ICCs can be represented as:
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(Experiencer NP_i) + CONDITION + Obj. -t- 3sgS

Figure 10-1: Structure of the impersonal condition clause

Examples of ICCs are:

(10-45)  
Peter vra ntiya.  
Peter vra n-t-i-a  
PN sick 3SGO-do-NT-3SGS  
'Peter feels/is sick.'

(10-46)  
Tigi aytia.  
tigi aŋ-t-i-a  
thirst 1PLO-do-NT-3SGS  
'We feel/am thirsty.'

(10-47)  
Yaku natiya.  
yaku ya-t-i-a  
lethargy 2PLO-do-NT-3SGS  
'I feel/am lethargic.'

(10-48)  
Akuku natia.  
akuku na-t-i-a  
tiredness 2SGO-do-NT-3SGS  
'You feel/are tired.'

As mentioned above, the experiencer is cross-referenced on the verb by the pronominal object prefix. However, the experiencer NP itself displays morphological traits of NPs associated with subjects; that is, it always occurs in the unmarked, or nominative form. This is clearly shown in the following example where the experiencer NP is realised by the nominative form of the first person singular pronoun yi.
The grammatical status of the incorporated condition element is ambiguous. Although semantically it can be analysed as the cause of the experience, there is no decisive evidence to determine whether or not it functions as the subject.

10.2.5.8 Reflexive Constructions

Reflexive constructions are those in which the subject and object referents are understood as being the same entity and in which the reflexive is signalled by use of the reflexive word which consists of the base form, -xabi ‘self’, marked by a pronominal prefix detailing the person-number features of the object (and subject). The verb takes subject inflection, but not object marking. The subject pronominal suffix must agree in person and number with the pronominal prefix on the reflexive. As in other clauses, the subject can be expressed by both an overt NP and pronominal affixation as in (10-50) and (10-51), or through pronominal affixation only, as in (10-52). Examples of reflexives are:

(10-50)  
\[
\begin{array}{lll}
Yi & yaxabi & ixrin. \\
\text{yi} & \text{ya-xabi} & \text{kixr-i-n} \\
\text{1SGPRO} & \text{1SGPRO-REFL} & \text{see-NT-1SGS} \\
\end{array}
\]

‘I saw myself.’

(10-51)  
\[
\begin{array}{lll}
Na & naxabi & tuwina. \\
\text{na} & \text{na-xabi} & \text{tuwu-i-na} \\
\text{2SGPRO} & \text{2SGPRO-self} & \text{hit-FP-2SGS} \\
\end{array}
\]

‘You hit yourself.’

(10-52)  
\[
\begin{array}{lll}
nxabi & nskwari & tuwuia. \\
n-xabi & n-skwar-i & tuwu-i-a \\
\text{3SGPRO-REFL} & \text{3SGPRO-nose-OBL} & \text{hit-RT-3SGS} \\
\end{array}
\]

‘She hit herself on her nose.’
Like many languages, Anamuxra also uses the reflexive pronoun as an emphatic marker. However, in transitive clauses the two functions are clearly distinguished from each other. For example, in (10-55) nxabi can only be interpreted as an emphatic marker, given the presence of the third person singular suffix n- on the verb.

(10-53)     Yam     nxabi     nkixria.
yam      n-xabi      n-kixr-i-a
other  3SGPRO-REFL  3SGO-see-NT-3SGS
‘Mother, herself, saw it’
*Mother saw herself’

10.2.5.9 RECIPROCAL CONSTRUCTIONS

Reciprocal constructions are signalled by the use of the reciprocal particle, aba. The verb takes subject inflection which cross-references the person-number details of the participants referred to by the NP. Such constructions encode situations wherein two or more participants act on or towards each other in the same way at some time. In other words, each participant is simultaneously actor and undergoer in the same event. Examples of acceptable reciprocal constructions are given in (10-54)-(10-57).

(10-54)   Ar      aba      tuwir.
ar     aba   tuwu-i-r
1DUPRO   RECIP   hit-NT-1DUS
‘We two hit each other’

(10-55)  Aba      murgra.
aba      murg-∅-ra
RECIP    hold -NT-2/3DUS
‘They held each other.’

5The expression of the reciprocal is basically the same as that of the reflexive, with the difference that the reciprocal particle does not have (redundant) subject agreement cross-referencing.
An inherent part of reciprocality is the involvement at least two participants, which explains the unacceptability of constructions such (10-58):

(10-58) *Aba tuwin.
aba tuwu-i-n
RECIPI hit-NT-1SGS
‘I hit each other.’

It will be observed from (10-54) to (10-57) that the verb is not marked by an pronominal prefix associated with object cross-referencing. Combining the reciprocal particle with verbs that have both subject and object pronominal marking produces an ungrammatical construction.

(10-59) *Aba artuwira.
aba ar-tuwu-i-ra
RECIPI 1DUO-hit-NT-2DUS
‘You two hit us each other.’

(10-60) *Aba yatuwina.
aba ya-tuwu-i-na
RECIPI 1SGO-hit-NT-2SGS
‘You two hit me each other.’

10.3 Nominal clauses

Nominal clauses are distinguished from their verbal counterparts by the fact that they have a nominal predicate rather than a verbal one. Unlike their verbal
counterparts, nominal clauses are never specified for tense or aspect; they can only occur in declarative or interrogative mood and there is no person-number pronominal indexing of the core arguments.

There are two main types of nominal clauses: equative/attributive and similitive. We shall consider each of these in turn.

10.3.1 Equative/attributive nominal clauses

Equative/attributive (EA) clauses consist of a nominal predicate which takes a single argument bearing the subject grammatical relation. As verbal clauses, the subject of EA nominal clauses is identified by the use of the nominative form of NPs and pronominal cross-referencing on the negative word -ma. However, subjects of nominal clauses are not indexed on the predicate by a pronominal suffix as in the case of verbal clauses. Rather, the nominal predicate agrees in number with the number of the subject. It may also take a classifier which denotes the class to which the referent of the subject NP belongs.

An equative/attributive nominal clause expresses something about the subject.

(10-61) \[ Yi \hspace{1em} Uipitak. \]
\[ yi \hspace{1em} Uipitak \]
\[ 1SGPRO \hspace{1em} PN \]
‘I am Uipitak.’

(10-62) \[ Adakwa \hspace{1em} ayka \hspace{1em} txatpa. \]
\[ ad-aku-ka \hspace{1em} aŋ-ka \hspace{1em} txat-pa \]
\[ DC-FD-CL_{res} \hspace{1em} 1PLPRO-PW \hspace{1em} meat-CL_{res} \]
‘That is our meat.’

(10-63) \[ Sawugika \hspace{1em} naxwuka. \]
\[ saxuNx-i-ka \hspace{1em} na-xwu-ka \]
\[ pig-PROX-CL_{res} \hspace{1em} 2SGPRO-PW-CL_{res} \]
‘This pig is yours.’
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(10-64)  
Sawuba txatpa.
sawuN-pa txat-pa  
pig-Cl_res meat-Cl_res

'Pig is meat.'

(10-65)  
Avagaka natxana.
avaNx-a-ka natx-a-na  
dry-ND-Cl_res old-ND-Cl_res

'(The) dry one is the old one (female).'

(10-66)  
Adakua sawuba.
ad-aku-ka suwuN-pa  
DEM-FD-Cl_res pig-Cl_res

'That (one) is a pig.'

The predicate NP may express some permanent attribute of the referent of the argument NP, as in (10-68) to (10-69).

(10-67)  
Adam wotkura.
ad-a-m wot-kura  
DEM-ND-Cl_res big-Cl_res

'That one (male) is big.'

(10-68)  
Adixida avigida.
ad-i-xida aviN-xida  
DC-PX-Cl_res good-Cl_res

'This tree is good.'

(10-69)  
Nxwu vaxaba vika.
n-xwu vaxaN-pa vi-ka  
3SGPro-PW string bag-Cl_res heavy-Cl_res

'Your string bag is heavy.'

---

6 This is taken from a story in which each day a group of women transform into betelnut. At night they return to their human form to perform a dance.
10.3.2 Similitive clauses

Similitive nominal clauses express the condition that one entity is the same as another and consists of the non-verbal predicate *mana* - 'same' and two NPs which denote the compared entities. *Mana*- can either be suffixed by a classifier which agrees with the class of compared objects as in (10-72), or it occurs as a bare stem as in (10-73).

(10-71)  
John    Robert  managura.  
John    Robert  manaN-kura  
PN      PN      same-CL

‘John is like/the same as Robert.’

(10-72)  
xyapa   anditg  muxatg  mana.  
xya-pa  ad-i-tg  mux-a-tg  mana  
story-CL  DEM-PROX-CL  another-ND-CL  same

‘This story is the same as the other (story).’

10.4 Negation in the clause

10.4.1 Negation in verbal clauses

Negation is signalled in verbal clauses by the concurrent use of verbal suffix and one of two negative words. The choice of the negative word generally depends on the status/tense of clause. In non-future events, the negative particle -*ma* is used. -*ma* carries a pronominal prefix which cross references the details of the subject of the clause. For example,

(10-73)  
Ayma    muduba.  
ap-ma    mudu-ba  
1PLS-NEG  go up-NEG

‘We didn’t go up.’
The negative in the irrealis (future), on the other hand, is marked by *amu* and set 2 pronominal subject suffixes plus -i. For example,

(10-77)  
\[
\text{Amu} \quad \text{anxtimumrai.}
\]

\[
\text{amu} \quad \text{an-}\text{tximu-mra-i} \quad \text{NEG.IR} \quad \text{1PLO-hit-1DU-S-NEG.IR}
\]

‘You two won’t hit us.’

(10-78)  
\[
\text{Amu} \quad \text{nmni.}
\]

\[
\text{amu} \quad \text{n-mn-i} \quad \text{NEG.IR} \quad \text{eat-1SGS-NEG.IR}
\]

‘I won’t eat.’

Note that some speakers use the -*ma* word in both irrealis and irrealis clauses. In this case, -*ma* has been reanalysed as a general negative marker. For example,
10.4.2 Negation in nominal clauses

In contrast to the discontinuous negative marking in verbal predicate clauses, non-verbal predicate clauses are marked solely by -ma; the predicate NP is not marked at all. Examples of negation in equative/attributive nominal clauses include:

(10-80) \textit{Yima} \hspace{1cm} \textit{asgaba.} \\
yi-ma \hspace{1cm} asN-aba \\
\textit{1SGS-NEG devil-CL_{res}} \\
'I am not a devil.'

(10-81) \textit{Adakua} \hspace{1cm} \textit{nma} \hspace{1cm} \textit{wuraba.} \\
ad-aku-ka \hspace{1cm} n-ma \hspace{1cm} xuraN-pa \\
DEM-FD-CL_{res} \hspace{1cm} 3SGS-NEG person-CL_{res} \\
'That isn't a person.'

(10-82) \textit{Adakua} \hspace{1cm} \textit{nma} \hspace{1cm} \textit{anjka} \hspace{1cm} \textit{tabugura.} \\
ad-aku-ka \hspace{1cm} n-ma \hspace{1cm} anj-ka \hspace{1cm} tabuN-kura \\
DEM-FD-CL_{res} \hspace{1cm} 3SGS-NEG 1PLPOSS-PW enemy-CL_{male} \\
'That isn't our enemy.'

(10-83) \textit{Angaka} \hspace{1cm} \textit{nma} \hspace{1cm} \textit{aviga.} \\
anNx-aka \hspace{1cm} n-ma \hspace{1cm} aviN-ka \\
river-ND-CL_{res} \hspace{1cm} 3SGS-NEG good-CL_{res} \\
'The river isn't good.'

(10-84) \textit{Arpa} \hspace{1cm} \textit{ixida} \hspace{1cm} \textit{nma} \hspace{1cm} \textit{akuwida} \hspace{1cm} \textit{managida.} \\
ar-pa \hspace{1cm} i-xida \hspace{1cm} n-ma \hspace{1cm} aku-xida \hspace{1cm} manaN-xida \\
tree-CL_{res} \hspace{1cm} PROX-CL_{tree} \hspace{1cm} 3SGS-NEG FD-CL_{tree} same-CL_{tree} \\
'This tree is not the same as that (tree).'

An example of a negated similitive construction is given in (10-85).

(10-85) \textit{John} \hspace{1cm} \textit{nma} \hspace{1cm} \textit{Robert} \hspace{1cm} \textit{managura.} \\
John \hspace{1cm} n-ma \hspace{1cm} Robert \hspace{1cm} manaN-kura \\
PN \hspace{1cm} 3SGS-NEG Robert same-CL_{male} \\
'John isn't the same as Robert.'
10.5 Clausal adjuncts: non-core constituents in the clause

As we saw in §10.2, core arguments are part of the subcategorisation frame of the predicate. Non-core, or adjunct functions, in contrast, include those constituents besides the predicate that are not subcategorised for by the predicate. These include all adverbs, place names, oblique marked nominals identifying temporal and spatial locations, and instruments. As with core argument NPs, the positioning of adjuncts in the clause appears to be determined by pragmatic factors with the consequence that adjuncts may occur in various positions in the clause, typically preverbally. For example, in (10-86) the adverb, sxa ‘again’, occurs immediately before the verb, while in (10-87) it occurs before the object argument.

**ADVERB**

(10-86) ...yi sxa svarin.

yi sxa svar-i-n
1SGPRO again go.bush-NT-1SGS

‘...I went bush again.’

**ADVERB**

(10-87) Sxa ukub xritxapan.

sxa u-xub xritxa-pa-n
again IA-CLhole burn-FP-1SGS

‘Again, I burnt a hole.’

Other examples of clauses containing adjuncts are:

**ADVERB**

(10-88) Mayar akspa yakua!

manar aks-pa ya-kwa
quickly rope-CLres 1SGO-give

‘Give me the rope quickly!’
CHAPTER 10 - BASIC CLAUSE STRUCTURE

TEMPORAL ADVERB
(10-89) Tatgari aya vdatxat...
Tatgari aya vdatxa-t...
PN yesterday get.up-3SGS
‘Tatgari, yesterday, got up (and then...’

LOCATIVE (OBLIQUE-MARKED NP)
(10-90) Vwar xyapa mudupari.
Vwar xya-pa mudu-pa-ri
settlement-OBL talk-C1res go.up-PP-3SGS
‘Talk went up to the village.’

Adjuncts in negative clauses display the same distributional properties as in affirmative clauses.

LOCATIVE (OBLIQUE-MARKED NP)
(10-91) Adiki nma ukumuxra sba.
ad-i-ki n-ma ukumuxra s-ba
DEM-PROX-OBL 3SGS-NEG something be-NEG
‘There’s nothing in this’

LOCATIVE (OBLIQUE-MARKED NP)
(10-92) Adavwai nma mdkura sba.
ad-a-vwa-i n-ma md-kura s-ba
DEM-ND-CLplace-OBL 3SGS-NEG man-CLmale be-NEG
‘There were no men at this place.’

LOCATIVE (OBLIQUE-MARKED NP)
(10-93) Ariba nma adiki sba.
ariN-pa n-ma ad-i-ki s-ba
betelnut-CLres 3SGO-NEG DEM-PROX-OBL be-NEG
‘There was no betelnut here.’

Finally, clauses may include multiple adjuncts. The following example, contains two adverbs.
‘I didn’t shoot it one more time.’
Chapter 11
Sentence structure, clause combining and intersentential relations

11.1 Introduction
This chapter describes syntactic structures beyond the clause level. §11.2 outlines the structure of the sentence. §11.3 describes clause chaining structures also known as switch-reference constructions. §11.4 deals with counterfactual constructions. §11.5 and §11.6 deal with complement clauses and relative clauses, respectively. §11.7 discusses sentence fragments while §11.8 describes tail-head linkage across two sentences.

11.2 The sentence
For the purposes of the discussion that follows, it will be sufficient to recognise a sentence as having the internal structure represented in (11-1):

(11-1) \( S \rightarrow \text{BASE} \ ((\text{CONJ}) \ (\text{BASE})) \)
where a base can consist of either a single independent verbal clause (§10.2) or a non-verbal clause (§10.3); or, a switch reference construction (§11.3).\(^1\)

---

\(^1\) There are various pragmatic possibilities not covered in this definition. However, I have omitted them here as they do not bear directly on the discussion.
Examples of sentences containing a single base are:

**S = (BASE = SINGLE VERBAL CLAUSE)**

(11-2)  
Adaki  
adaxvi  
[ad-a-ki  
ad-a-xv-i  
DEM-ND-OBL  
DEM-ND-CL-day-OBL  
'sleep-FP-1PLS'  
'We slept there on that day.'

**S → BASE = NON-VERBAL CLAUSE**

(11-3)  
Ika  
yawwuka.  
[ya-xwu-ka]  
PROX-CLres  
1SGPOSS-PW-CLres  
'This is mine.'

**S → BASE = SWITCH REFERENCE CONSTRUCTION**

(11-4)  
Arigaka  
napr,  
sarmana.  
[ariNx-a-ka  
na-pr  
betelnut-ND-CLres  
eat-1DUS  
be-NT-1DUS-DS.SIM  
mumugaxai  
mudira.  
mumuN-ka-xai  
mud-i-ra]  
child-CLres-DU  
come.up-NT-2/3DUS  
'We chewed the betelnut, and while we waited, two children came up.'

There are two structural possiblities associated with sentences composed of two bases. First, the bases may be juxtaposed, co-dependent forms as in the case of counterfactual constructions.

(11-5)  
Sarep  
vnbaski.  
siviwuwin.  
[sarep  
p-n-baski]  
scythe  
get-NT-1SGS-CFP  
grass-hit-NT-1SGS-CFA  
'If I had got a scythe, I would have cut grass.'
Second, the bases may be independent bases that are conjoined by the conjunctive particle \( o \) 'or'.

\[
(11-6) \quad \text{Yiv} \quad \text{xniama?} \quad o \quad \text{svariama?}
\]

\[
[[\text{yiv kn-i-a=ma}]_{\text{Base 1}} \quad o \quad [\text{svar-i-a=ma}]_{\text{Base 2}}]_{\text{Sentence}}
\]

\begin{align*}
\text{Father} & \quad \text{sleep-NT-3SGS=PQ} \quad \text{or} \quad \text{sleep-NT-3SGS=PQ} \\
\end{align*}

'Is father sleeping? or did he go bush?'

11.3 Switch-reference constructions

11.3.1 Introduction

A switch-reference construction (SRC) is a chaining structure that consists of one or more medial clauses followed by a final clause. This ordering is obligatory; the medial clause must precede the final clause. Thus,

\[
(11-7) \quad \text{SRC} \rightarrow [X^n \quad V_{\text{medial}}]^n \quad + \quad [X^n \quad V_{\text{final}}]
\]

For example, the SRC in (11-8) consists of five clauses, the first four (A-D) are medial clauses, the last (E) is a final clause.

\[
(11-8) \quad V\text{wadki} \quad a\text{qtamapari}, \quad m\text{ugumy},
\]

\[
[v\text{wad-ki} \quad a\text{q-tama-pa-ri-i}]_A \quad [m\text{ugu-mnj}]_B \\
\text{settlement-DEM-OBL} \quad \text{1PLS-put-FP-3SGS-DS.SEQ} \quad \text{go.down-1PLS}
\]

\[
v\text{wa-r} \quad m\text{kudamamnj}. \quad x\text{npaymana}.
\]

\[
[v\text{wa-r} \quad m\text{kun-tama-mnj}]_C \quad [k\text{n-pa-ŋ-mana}]_D \\
\text{place-OBL} \quad \text{cargo-put-1PLS} \quad \text{sleep-FP-1PLS-DS.SIM}
\]

---

2 The conjunctive particle \( o \) has the same form and function as the Tok Pisin particle, \( o \), suggesting that it may have been borrowed from Tok Pisin.

3 My use of the term 'switch-reference construction' to describe clause chains follows Farr (1999).
A medial clause is distinguished for both switch reference, i.e. whether its subject is either coreferential or noncoreferential with the subject of the following clause (§11.3.2) and relative tense, i.e. whether it describes an event that occurs before (sequential) or overlaps with (simultaneous) the event described by the following clause (§11.3.3.1). In contrast, a final clause is not specified for either of these parameters and represents the termination of reference tracking and temporal sequencing encoded in the preceding medial clauses.

As discussed in §7.7, a medial verb is not inflectable for mood, while a final verb is. Thus, subject to certain conditions (§11.3.4) all medial clauses in an SRC take their specification for mood from the final clause.

In most cases, the final verb/clause also determines the overall modal status and temporal orientation of the entire SRC according to which medial verbs are interpreted. Note, though, that in contrast to mood, different types of dependency are found within the set of medial verbs with respect to status and tense. Same subject medials are completely unmarked for tense and status and therefore take their specification directly from the final verb/clause, different subject medials are marked for tense/status distinctions. For these, dependency on the final verb is manifested as grammatical agreement (see §11.3.4).

Although medial clauses may be syntactically dependent on the final clause for their mood, tense or status, they are not syntactically part of the final clause.
i.e. embedded within the final clause. Like the final clause, they serve as a distinct base in the chain and can be seen to be juxtaposed co-ordinated constituents.4

11.3.2 Switch reference

11.3.2.1 INTRODUCTION
The term ‘switch-reference’ was first adopted by Jacobson (1967, 1983) to describe a morpheme which marks a change in the subject in a sequence of two clauses. In Haiman and Munro (1983), the term switch-reference is extended to include devices that indicate whether the subject changes or remains the same. It is in this extended sense that I use the the term here.

There has been some conjecture about whether switch reference is generally definable in terms of subjecthood or whether it is governed by other factors such as agent-ness or topicality. Haiman and Munro (1983) argue that:

“canonical switch-reference is an inflectional category of the verb, which indicates whether or not its subject is identical with the subject of some other verb....Characterisation of ‘subject’ is strictly syntactic rather than semantic or pragmatic in most cases: it is not the agent or topic which is being traced (Haiman and Munro 1983:x,xii).

In contrast, Roberts (1988, 1997) has argued that in a number of Papuan languages, “switch-reference can be diagnosed as agent-oriented or topic oriented” (Roberts 1997: 103).5

In the case of Anamuxra, we do find cases in which switch-reference is guided by topicalisation rather than subjecthood (see §11.3.2.3). However, further research is required to determine the extent to which topicalisation drives the switch-reference system and whether examples which appear to target the

4 Foley (1986: 177) coined the term ‘co-ordinate dependent’ to represent the syntactic status of such medial clauses.
5 For other approaches see Foley and Van Valin (1984) and Foley (1986).
syntactic relation ‘subject’ can be accounted for by topicality or some other means. Thus, in the present description, I adopt a position similar to that taken by Farr (1999) in her analysis of switch reference in Korafe, a language spoken in the Northern Province, PNG and like Anamuxra, a member of the Trans New Guinea family. That is, I claim that while topicalisation can influence the choices made in terms of whether to employ same or different subject marking, switch-reference in Anamuxra is subject-oriented.6

I begin by considering examples where SS/DS appears to conform to the ‘canonical’ syntactic model of switch reference described by Haiman and Munro. In the following sections, I describe cases in which SS/DS marking deviates from this pattern.

Throughout the discussion of switch-reference constructions I shall use the terms ‘marked’ and ‘controlling’ clause to refer to the clause marked for switch reference and the clause that follows the medial clause, respectively.7 (The same terms are used for the discussion of relative tense in §11.3.3.1).

11.3.2.2 Grammatical subject: strict identity/non-identity
In the model of switch reference as a grammatical device, SS is used where the subject of the marked clause and the subject of the controlling clause are identical, while DS is used where the two subjects are not the same. In example (11-9), the subjects of the two clauses are identical, both first person singular, and the marked clause is same subject.

(11-10) illustrates different subject on the marked clause. Here, the subject of the marked clause is first person dual, while the subject of the controlling clause is third person dual. The sets of participants associated with the

---

6 Reesink (1983, 1987) has a similar analysis of Usan.
subject of each clause are distinct (i.e. there is no overlap between the sets - see below).

(11-9)  \(Ubi\)  
\[
\begin{align*}
\text{ub-i} & \quad \text{mugu-m} \\
\text{road-OBL} & \quad \text{go.down-1SGS} \\
\text{svar-i-n} & \quad \text{go.bush-NT-1SGS}
\end{align*}
\]
'I went down on the road and then I went bush.'

(11-10)  
\[
\begin{align*}
\text{sa-o-r-mana} & \quad \text{mumuN-ka-xai} \\
\text{be-NT-1DUS-DS.SIM} & \quad \text{mud-i-ra}
\end{align*}
\]
'... and while we waited, two children came up.'

11.3.2.3 *GRAMMATICAL SUBJECT

There are a number of situations in which the patterning of SS/DS marking does not conform to the canonical grammatical model of switch-reference discussed in the previous section: (i) where the sets of participants of the marked and controlling clause overlap, and (ii) where the subjects of the marked and controlling clauses refer to distinct, non-overlapping participant sets.

11.3.2.3.1 Referential overlap

In referential overlap, there is a shift in the number and/or person of the subject between two clauses, such the subject of one clause defines a set of participants and the subject of the other clause represents a partition of that set. (cf Longacre 1972; Farr 1999:218; Roberts 1997:157-158).

In Anamuxra, the choice of SS or DS is controlled by directionality of the relationship. That is, same subject is used where the subject of the controlling clause is included in the subject of the marked clause, while different subject is
used where the subject of the marked clause is included in the controlling clause. Examples of same subject are:

SS: **1du → 1sg**

(11-11) \[ Wapr, \quad \text{vanaga} \quad \text{wutupanmana,...} \]
\[ \text{kwua-}pr \quad \text{vanaNx-a} \quad \text{kutupanmana...} \]
\[ \text{go-1DuS} \quad \text{tulip-ND-Pl} \quad \text{pick-FP-1SGS-DS.SIM} \]

'We went and while I was picking tulip (leaves)....'

SS: **1du → 3sgs**

(11-12) \[ Yivti \quad \text{mudapr} \quad \text{varapari...} \]
\[ yiv=ti \quad \text{muda-}pr \quad \text{para-pa-ri} \]
\[ \text{dad=COM} \quad \text{go.up-1DuS} \quad \text{say-FP-3SGS} \]

'Dad and I went up and he (dad) said...'

SS: **1pl → 1sgs**

(11-13) \[ Namy, \quad \text{nxa}, \quad \text{yi} \quad \text{nigym}, \quad \text{mudin.} \]
\[ \text{na-}mn \quad \text{nxa} \quad \text{yi} \quad \text{nig-m-m} \quad \text{mud-i-n} \]
\[ \text{eat-1PLS} \quad \text{now} \quad \text{1SGPRO} \quad \text{3PL0-leave-1SGS} \quad \text{go.up-NT-1SGS} \]

'We ate, and now, I left them, and went up.'

SS: **3du → 3sg**

(11-14) \[ Uvsaka \quad \text{tamutr}, \quad \text{ukura}, \quad \text{Asaxiwuk a} \]
\[ \text{[uvS-a-ka} \quad \text{tamut-}tr]_{SS} \quad \text{[u-kra} \quad \text{Asaxiwuk a} \]
\[ \text{fire-ND-Cl-res} \quad \text{make.fire-3DuS} \quad \text{one-Cl-male} \quad \text{PN} \quad \text{ah} \]
\[ \text{savamsai} \quad \text{tamur pari}. \quad \text{[savamsa-i} \quad \text{tamur-pa-ri]_{FINAL} \quad \text{clear.place-OBL} \quad \text{make.fire-FP-3SGS} \]

'They made fire; one man, Asaxiwuk made a fire in a clear place.'

---

8 The range of referential overlapping possibilities was checked with three speakers by elicitation using the frame 'ate, and went'. A number of difficulties were encountered during the sessions with each of the three speakers. In particular, controlling the distinction between identity and overlap proved difficult where the two subjects shared person and number features (i.e 1pl -> 1pl).
Examples of referential overlap where the marked clause is different subject are given below.

**DS: 3SGS → 1DUus**

(11-15) \(Ny\)miai, \(v\)ipr, \(a\)r

\(n\)ŋ-mi-\(î\)-\(a\)-\(i\) \(v\)i-pr \(a\)r

3PLO-leave-NT-3SGS-DS_SEQ 1DUS 1DUPRO

\(xm\)yanadr.

\(xm\)\(anja\)N-t-\(ø\)-\(r\)

work-do-NT-1DUUS

‘He left them, and then we came, and then we worked.’

**DS: 1SGS → 1DUUS**

(11-16) \(S\)ispr, \(v\)ipr, \(n\)xwuki

sis-pr vi-pr n-xwu-ki

strip.off-1DUUS come-1DUUS 3SGPOSS-OBL

\(tu\)uwuxini  

\(tu\)uwuvx-i-\(n\)-\(î\) \(m\)udatagua-pr...

\(c\)ome.to-NT-1SGS-DS_SEQ climb-1DUUS

‘We stripped (it) off, and then we came and I came up to him and then we climbed (up)...’

In the (11-17) below, the SRC contains three clauses; two medial clauses and a final clause. The subjects of first medial clause and the final clause are both third person plural and share the same set of participants. The subject of the second clause is first person plural and includes the set of participants referred to by subjects of the first and third clause along with the speaker. In terms of the SS/DS marking, the transition from the third person plural subject in the first medial clause to the first person plural subject in the second medial clause is treated as SS, while the transition from the first person plural subject of the second medial clause to the third person plural subject in the final clause is marked as DS. That is: 3plS_DS → 1plS_SS → 3plS.
CHAPTER 11- SENTENCE STRUCTURE, CLAUSE COMBINING AND INTERSENTENTIAL RELATIONS

(11-17)  
Azyaba      wuyadpayai,       xzr
[azi-aba wuyad-pa-na-i]ss       [xzr
body.adornment-Cl_res straighten-FP-PL-DS.SEQ afternoon

mugumy,     vwatabugaki       njka
mugu-mnjss   [vwa-tabuN-a-ki   nj-ka
go.down-1PLS  settement-front-ND-OBL  3PLPOSS-PW

vadpay   uvirapaya.

vad-pa-i交谈 uvira-pa-nja_FINAL
skirt-Cl-PL wrap-FP-2/3PLS

'They straightened the body adornments and then in the afternoon we went down, and they wrapped (i.e put on) their skirts.'

Similarly, the following example illustrates transition from first person plural subject to third person plural subject.

(11-18)  
Namy,       yivti        avasripa      xriqai...
[na-mn]ss  [yiv=ti avasri-pa kr-i-na-i]
eat-1PLS  father=COM  sago.soup-Cl_res  cook-NT-2/3PLS-DS.SEQ

'We ate and then dad and the others cooked sago soup and...'

11.3.2.3.2 Distinct grammatical subjects

There are number of cases in which SS medial marking occurs where the subjects of the marked and controlling clause are distinct. As I show, the use of SS in these cases reflects the saliency, or topicality of the controlling clause.

(a) $S_{MC} \rightarrow O_{CC}$ (Topic)

In the following examples, the subject of the marked clause is coreferential with the object of controlling clause, which is judged to be more salient, or topical than the subject of the controlling clause. That is:

$$MC = \left[ \text{Subject}_i \right]_{SS} \quad CC = \left[ \text{Object}_i \quad \text{Subject}_j \right]_{[+TOP]}$$

**Figure 11-1:** SS marking where $S_{MC} = O_{CC}$ (+topic)
Examples are:

(11-19)  
\[
\text{Murai} \quad \text{xmṛ\text{na}adm}, \quad \text{t}i\text{gi} \quad \text{ya}t\text{i}a  \\
\text{[mura-i} \quad \text{xmṛ\text{na}N-t-m],} \quad \text{[t}i\text{gi} \quad \text{ya-t-i-a]}  \\
garden-OBL \quad \text{work-do-1SG} \quad \text{thirst} \quad \text{1SGO-do-NT-3SGS}  \\
\text{`}I \text{worked \ in \ the \ garden, \ and \ so \ I}' \text{m \ thirsty.}'
\]

(11-20)  
\[
\text{Wata} \quad \text{muyavapa} \quad \text{napratdi}...  \\
\text{[kwua-ta]s} \quad \text{[muyava-pa} \quad \text{na-prat-d-i]}  \\
go-2SGS \quad \text{grass-CL}_{res} \quad 2SGO-not.be-3SGS-DS  \\
\text{}`You \ go \ and \ then \ if \ there \ is \ no \ grass \ cutting \ for \ you \ to \ do...'
\]

Note that the coreference of the subject and object can be strict identity as in the above cases or overlapping as in the following examples.

(11-21)  
\[
\text{Wapr,} \quad \text{Andrewx} \quad \text{warapay} \quad \text{ntamangpay}\text{a}.  \\
\text{[kwua-pr]s} \quad \text{[Andrew-x} \quad \text{wara-pa-ŋ} \quad \text{n-tamang-pa-pa]}  \\
go-1DUS \quad \text{Andrew-ACC.SG} \quad \text{k.o \ ant-CL}_{res}-\text{PL} \quad \text{3SGO-bite-PP-3PLS}  \\
\text{}`We \ two \ went \ and \ then \ ants \ bit \ Andrew.'
\]

(11-22)  
\[
\text{...vasxamŋy,} \quad \text{manbutpa}  \\
\text{[vasxa-mn]s} \quad \text{[manN-vut-pa}  \\
\text{come.up-1PLS} \quad \text{banana-leaf-CL}_{res}  \\
yapratiai, \quad \text{vim,} \quad \text{Andrew}  \\
\text{ya-prat-i-a-i]}s \quad \text{[vi-m]s} \quad \text{[Andrew}  \\
\text{1SGO-not.be-NT-3SGS-DS.SEQ} \quad \text{come-1SGS} \quad \text{PN}  \\
\text{nkixrin.}  \\
\text{n-kixr-i-n]}  \\
\text{3SGO-see-NT-1SGS}  \\
\text{`..we \ came \ and \ I \ did \ not \ have \ any \ paper, \ so \ I \ came \ and \ saw} \text{Andrew.'}
\]

(b) Other cases

SS medial forms can also be used when the following clause as a means of 'subtopicalising' (Roberts 1987: 103) an inanimate subject of an intransitive
clause. For instance, in (11-23) the clause *yivapari* ‘it was dark and’ is
preceded by the SS medial clause *mgtr muduxatr* ‘they threw it out’.

(11-23)  
Mugatr,  Abriŋada  mavapa  taxa-tr,  
[muga-tr] [Abriŋada mava-pa taxa-tr]  
come.down-3DUS  PN  sago-CLres  cut-3DUS  
tuwanatr,  uvaxatr,  mgtr  muduwatr,  
[tuwana-tr] [uvaxa-tr] [mg-tr muduwua-tr]  
pound-3DUS  wash-3DUS  pour-3DUS  throw.away-3DUS  
*yivitpari*,  Asaxivuk  “Abki  xnbapr?”  
[yivi-t-pa-ri-i] [Asaxivuk ab-ki kn-ba-pr]  
dark-DO-FP-3SGS-DS.SEQ  PN  GQW-OBL  sleep-FUT-1DUS  

*varapari.*

para-pa-ri  
say-FP-3SGS

‘They came down and cut sago at AbriNada and they pounded it, and
washed it and tipped it out, and when it was dark, Arskivuk said
“where are we going to sleep?” he said.’

(11-24)  
Wamŋ  vivimuku  siamana...  
wa-mn [vivi-muku s-i-ŋ-mana]  
go-1SGS  small-CLsm.am  be-3SGS-DS.SIM  
‘We went and while a little is there...’

(11-25)  
...vta  sxā  sbat.  
[p-ta] [sxā s-ba-t]  
...get-2SGS  again  be-FUT-3SGS  
‘...you’ll get (it), and then it’ll be there again.’
11.3.3 Temporal and logical relations in SRCs

In this section we consider the different temporal and logical relations that can hold between clauses in an SRC.

11.3.3.1 Relative Tense

Relative tense is defined by Trask (1993) as a tense form whose temporal point of reference is determined by its syntactic relation to another tense form (Trask 1993: 238). In the context of SRCs, relative tense describes the arrangement whereby each medial clause has its own tense reference defined in relation to the event described by following clause. Anamuxra makes a binary distinction between sequential medial clauses and simultaneous medial clauses.

A sequential clause denotes an event that occurs prior to the event denoted by the following clause.

\[
\text{Sequential: } \quad \text{Event A} \quad \text{Event B}
\]

Figure 11-2: Sequential relative tense

For example, the SRC in (11-26), which consists of two SS medial sequential clauses A and B and a final clause C, describes a sequence of consecutive events: A then B then C.

(11-26) \( \text{Vkpa} \quad \text{tavaxata,} \quad \text{sxrata,} \quad \text{xmwandagaka} \)

\( [\text{vk-pa} \quad \text{tavxa-ta}]_A \quad [\text{sxra-ta}]_B \quad [\text{xm-wadaNx-a-ka}] \)

\( \text{bamboo-CLres} \quad \text{cut-2SGS} \quad \text{break-2SGS} \quad \text{bow-string-ND-CLres} \)

\( \text{tivrabata.} \)

\( \text{tvra-ba-ta}]_C \text{attach-FUT-2SGS} \)

‘You’ll cut bamboo, and then break it and then tighten the bow string.’
(11-27) provides an example of sequencing of events in which there is a change of subject.

(11-27) 

Tuwuvarapani,  
sxa  
maimaidapari.

[Tuwuvara-pa-n-\text{i}]  
[sxa maimaida-pa-ri]  
blow-FP-1SGS-DS-SEQ  
again open-FP-3SGS  
'I blew on (it), and then it opened again.'

There is, in principle, no limit to the number of clauses that can occur in succession.\(^9\) The following example consists of seven SS medial verbs, each of which can be interpreted as denoting an event which precedes the clause that follows it.

(11-28) 

Vkpa.  
Wata  
Vkmuska

[vk-pa]  
[kwua-ta]_{SEQ}  
[VKmus-ka]  
bamboo-CLres  
go-2SGS  
k.o bamboo-CLres  

ixrata,  
taxirwuta,  
avibi  
upri  
xrwuta,  
kixra-ta]_{SEQ}  
[taxirwu-ta]_{SEQ}  
[aviN-\text{i}]  
[u-vru-i]  
xrxu-ta]_{SEQ}  
see-2SGS  
cut-2SGS  
good-ADV  
IA-CLade-OBL  
saw-2SGS  

upri  
xrwuta,  
ata,  
uvspa

[u-vru-i]  
xrwu-ta]_{SEQ}  
[vasxa-ta]_{SEQ}  
[uvspa]  
IA-CLade-OBL  
saw-2SGS  
come.up-2SGS  
fire-CLres  

vivimuku  
vita,  
ubagaxai  
xritxbata.  
vivi-muku  
p-ta]_{SEQ}  
[xubaN-ka-xai]  
xritx-ba-ta]_{FINAL}  
small-CLam,am  
get-2SGS  
hole-CLres-DU  
burn-FUT-2SGS  

'Bamboo; you go, you see k.o bamboo, you cut it, you saw one end well, saw one (the other) end, you come up, you get a small fire and then you burn two holes.'

---

\(^9\) That is, in terms of syntactic constraints, at least. The fact that SRCs do have an end and that a single text typically consists of more than one SRC reflects the influence of parameters that guide cohesiveness (Halliday and Hasan 1976) as well as speaker style and so on.
A simultaneous clause denotes an event that overlaps, wholly or partly, with the events denoted by the following clause or clauses.\(^\text{10}\)

Simultaneous: \( \text{Event A} \rightarrow \text{Event B} \)

**Figure 11-3: Simultaneous relative tense**

In each of the examples below clause A = simultaneous clause and describes an event that occurs at the same time as that referred to by clause B.

\begin{align*}
\text{(11-29) } & \ldots \text{ugarixranini} \quad \text{vasxapar.} \\
& \quad [\text{ugara-ixra-}\text{nini}]_A \quad [\text{vasxa-pa-}r]_B \\
& \quad \text{bird-look-SS.SIM} \quad \text{come.up-FP-1DUS} \\
& \quad \ldots \text{while we looked for birds, we came up.}'
\end{align*}

\begin{align*}
\text{(11-30) } & \text{Ukura} \quad \text{nuxwu} \quad \text{xmxaka} \quad \text{tvramaparimana}, \\
& \quad [\text{u-kura} \quad \text{n-xwu}] \quad [\text{xmx-a-ka}] \quad [\text{tvrama-pa-ri-}\text{mana}]_A \\
& \quad \text{IA-CL}_{\text{male}} \quad \text{3SGPOSS-PW} \quad \text{bow-ND-Cl-res} \quad \text{tighten-FP-3SGS-DS.SIM} \\
& \quad \text{ukura} \quad \text{nuxwu} \quad \text{xmxaka} \quad \text{tvramapari.} \\
& \quad [\text{u-kura} \quad \text{n-xwu}] \quad [\text{xmx-a-ka}] \quad [\text{tvrama-pa-ri}]_B \\
& \quad \text{IA-CL}_{\text{male}} \quad \text{3SGPOSS-PW} \quad \text{bow-ND-Cl}_{\text{res}} \quad \text{tighten-FP-3SGS} \\
& \quad \ldots \text{As one man tightened his bow, one man tightened his bow.}'
\end{align*}

\begin{align*}
\text{(11-31) } & \text{Nmyaruti} \quad \text{saparimana}, \quad \text{at} \\
& \quad [\text{n-}m\text{̄aru=ti}] \quad [\text{sa-pa-ri-}\text{mana}]_A \quad [\text{at}] \\
& \quad \text{3sgP-aunty=COM} \quad \text{be-FP-3SGS-DS.SIM} \quad \text{1PLPRO} \\
& \quad Xzxivu \quad \text{ani} \quad \text{mugupan}. \\
& \quad Xzxivu \quad \text{an-i} \quad \text{mugu-pa-at} \quad \text{B} \\
& \quad \text{PN} \quad \text{river-OBL} \quad \text{go.down-FP-1PLS} \\
& \quad \ldots \text{While he stayed with his aunty, we went down to the river, Xzxivu.}'
\end{align*}

\(^{10}\) Simultaneous clauses can be seen as presenting an event which lies outside the main sequence of events.
A feature of the sequencing of clauses within the SRC is the requirement for iconic ordering of its clauses with respect to the temporal continuum. In the case of sequentially related clauses, the event described by the marked clause must occur before the following, or controlling clause. In the case of clauses describing simultaneous events, the marked clause must describe an event that has a starting point that is not subsequent to the starting point of the situation described by the following clause.

11.3.3.2 First clauses

The clitic =pu ‘first’ can be added to a sequential medial clause to emphasise the temporal priority of that clause. For example,

(11-32) Ngaba aviga, aviga umuku

nŋ-aba aviN-ka aviN-ka u-muku
food-Cl_res good-Cl_res good-Cl_res IA-Cl_sm.am

wagdipu, vta, mugnai

wag-d-i=pu p-ta mug-na-i
boil-3SGS-DEP=first get-2SGS com_cdown-2SGS-DS.SEQ

n-mna.

n-mna
eat-1SGS.NEC

‘He must cook a little good food first, then you must get it and come, then I must eat (it).’

SRCs in which a ‘first’ clause is followed by a clause denoting the subsequent event are quite rare in naturally occurring discourse. More often, the expected following clause is omitted (see §11.7).

11.3.3.3 Counter-to-Expectation

As mentioned in §7.8, -pu ‘but’ is added to medial verbs to indicate that the event described by the medial clause was or will be ineffective, counter to expectation, because of some state of affairs indicated by the following clause. For example, in
(11-33) the speaker describes a time when he went looking for coconuts. He fully expected to find some in a particular garden. However, his attempt to find them was thwarted by the fact that his brother, Steven, had already taken them. Similarly, in (11-34), the purpose of digging up the wild fowl nest, to find eggs, was not accomplished because there were no eggs in the nest.

(11-33) *Ubitaia*  
ub-i=taia  
road-OBL=just  

*ani*  
an-i  

*wam,*  
kwua-m  

*avnaka*  
avn-a-ka  

...(11-34) *Vuwururi*  
i.xranipu,  

*Stephen*  

ixranipu,  

*kixr-n-i-*pu  

Stephen  

Vuxururi  

look-NT-1SGS-DS.SEQ-but  

PN  

...Vuwururi  

mugupr  

agasapagaki  

Vuxururi  

mugu-pr  

aga-sapaNx-a-ki  

PN  

goodown-1DUS  

bush.fowl-mound-ND-OBL  

ixrapr  

ara-paripu,  

nma  

sba,  

kixra-pr  

ara-pa-r-i-*pu  

n-ma  

s-ba  

look-1DUS  

scrape-FP-1DUS-DS.SEQ-but  

3SGS-NEG  

be-NEG  

*agamkgupuk.*  

aga-mkNx-u-vuk  
bush.fowl-egg-IA-CLeph  

"We went down to Vuxururi and looked in the nest of a bush fowl and we scraped but there wasn’t one, a bush fowl egg."

In the next example -*pu* indicates that the actor’s efforts to make a fire contradicted the general expectation that fires are made in clear spaces.
A feature of counter-to-expectation constructions is the potential for the suspension of iconic ordering found elsewhere in SRCs. This is clearly shown in (11-33), where the clause following the contrastively marked medial clause occurs in the far past, indicating that the reason for the failure of the search lay in an event that occurred prior to the search.

11.3.3.4 CAUSATION

The event described by a sequential medial clause may be interpreted as the cause of the event described by the next clause in the chain. The inferred causal relationship between the marked clause and the following clause is determined by contextual factors. (11-36) to (11-37) illustrate SRCs with known causal interpretations. The first two examples consist of SS medial clauses inferred as the cause of the event described by the following clause, while (11-38) contains a negative DS medial clause functioning as the cause.

(11-36)  

\[
\begin{align*}
\text{Yam} & \quad \text{xvitmat}, \\
\text{mother} & \quad \text{be.afraid.-3SGS} \\
\text{[yam xvitma-t]}_{\text{Clau}se} & \quad [\text{n-ma} \quad \text{awadamar-ba}]_{\text{Effect}} \\
\text{[n-ma} & \quad \text{awadamar-ba}]_{\text{Effec}t} \\
\text{3SGS-NEG} & \quad \text{yell.out.-NEG}
\end{align*}
\]

‘Mum was afraid, and so she didn’t yell out’
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(11-37) "Adaka asyaba ngumra" vat
[ad-a-ka asN-aba n-gumra pa-t]caus
DEM-ND-CLres devil-CLres 3SGS-eye think-3SGS

"That (is) a devil's eye" he thought and so he turned around.'

(11-38) Muxam vivmuku xrat, waragidat.
[mux-a-m vivi-muku kra-t] [wargida-t]
VOC-ND-CLmale small-CLsmale cook-3SGS take.away-3SGS

naparipu, adaka msdbai
[na-pa-ri-pu] [ad-a-ka] msd-ba-i
eat-3SGS-DSSEQ DEM-ND-CLres sweet-NEG-DEP

tpari, adam tamarap.
[t-pa-ri-i]caus [ad-a-m tama-pa-ri]caus
do-3SGS-DSSEQ DEM-ND-CLres put-3SGS

'That man cooked a little, and took it away and ate it, but that wasn't sweet and so he left it'

The formation of the 'why?' question in Anamuxra is another example of causal inference. For example,

(11-39) Anamuxra vaga, aba tuwiŋa?
[anamuxra vaŋ]caus [aba] tuwu-iŋ]caus
what think-2PLS RECIP hit-NT-2/3PLS

'Why did you hit each other?' [lit. you think what and so you hit each other?]

11.3.3.5 CONDITIONALITY

Conditional constructions refer to situations in which the speaker predicts what will or might be, given some set of circumstances. Conditionality is one of the relations ascribed to SRCs with irrealis modal status. In such cases, a medial clause is interpreted as the condition (protasis), while the following clause is
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interpreted as the consequent action (apodosis). The conditional interpretation is typically distinguished from sequential and causal readings by a distinct intonation pattern, where the protasis terminates with a sharp rise in the intonation contour. For example,

(11-40)  
\[
\begin{array}{l}
Xrdi. & nbam. \\
kr-di & n-ba-m \\
\text{[cook-FUT-3SGS]}_{\text{COND}} & \text{[eat-FUT-1SGS]}_{\text{CONS}} \\
\end{array}
\]

'If he cooks, I'll eat.'  (conditional)  
*He will cook and (then) I will eat.'  (sequential)  
*He will cook and so I will eat.'  (causal)

The other readings, in contrast, are generally realised with much flatter contours:

(11-41)  
\[
\begin{array}{l}
Xrdi. & nbam. \\
[n-kr-di] & [n-ba-m] \\
\text{cook-FUT-3SGS} & \text{eat-FUT-1SGS} \\
\end{array}
\]

'He will cook and (then) I will eat.'  (sequential)  
'He will cook and so I will eat.'  (causal)  
??*'If he cooks, I will eat.'  (conditional)

Further examples of conditional constructions are shown in (11-42) to (11-46). In (11-42) to (11-44), both condition and consequent clauses are affirmative, (11-45) contains a negative condition, and (11-46) contains a negative consequence.

(11-42)  
\[
\begin{array}{l}
Madang & wam, & nxiswarbam. \\
Madang & kwua-m & n-xiswar-ba-m \\
PN & go-1SGS & 3SGO-tell-FUT-1SGS \\
\end{array}
\]

'If I go to Madang, I will tell him.'


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(11-43)  
Akakarapa  anidi,  arukuramdiy

[akakara-pa  an-i-d-i]_cond  [aru-kura-mdiŋ]
chicken-Clres  cry-3SGS-DS.SEC  many-Cl_male-PL.HUM

varbaj  "Wuramba  nbm nabat."  varbaj.

par-baŋ]_cons  xuraN-pa  nb-mna-ba-t  par-baŋ
say-FUT-3PLS  person-Clres  die-IMM-FUT-3SGS  say-FUT-3PLS
‘If the rooster crows, the big men will say “(A) person is about to die.”’

(11-44)  
Nago,  muquuddi,  sivituwubata.

[nago  muquud-d-i]_cond  [sivi-tuxu-ba-ta]_cons
yes  ripe-3SGS-DS.SEQ  grass-hit-FUT-2SGS
‘Yes, if it is ripe, you (will) cut grass.’

(11-45)  
Avindbai  tdi,  sxa

[aviN-t-ba-i  t-d-i]_cond  [sxa]
good-do-NEG-DEP  do-3SGS-DS.SEQ  again

umuku  xrbata.
u-muku  kr-ba-ta]_cons
one-Cl_subam  burn-FUT-2SGS
‘If it isn’t right, then you should burn it a little more.’

(11-46)  
Vdi,  amu  wumjni

[vi-d-i]_cond  [amu  kwu-mn-i]_cons
come-3SGS-DS.SEQ  NEG.IR  go-1SGS-NEG.IR
‘If he comes, I won’t go.’

11.3.4 Mood, status and tense in SRCs

11.3.4.1 INTRODUCTION

This section deals with the mood, modal status and temporal orientation of SRCs and with constraints on the relationships between medial and final clauses with respect to these categories.
11.3.4.2 Status-Tense

11.3.4.2.1 Introduction

Status and tense are closely related in terms of their morphological realisation on the verb. However, semantically, they are distinct categories. Tense is a deictic category that:

locates the time of the reported event with respect to the time of the speech event...[and which] is crucially concerned with grounding the reported event in the real world. (Foley and Van Valin 1984: 208-9)

Status relates to the expression of the “actuality of the event, whether it has been realised or not” (Foley 1986: 158). Status can be seen as a binary distinction between realis (i.e. situated in the actual, or factual world) versus irrealis (i.e. situated in some non-actual, or fictional world. ¹¹

11.3.4.2.2 Realisation of Status

There are several ways in which status (realis/irrealis) is realised throughout the SRC in Anamuxra. On final affirmative verbs, status is expressed implicitly through the choice of mood, tense and subject person-number marking. In the affirmative indicative, the far past (-pa) and near (-i~∅) are used in realis propositions, while the future (-ba) correlates with irrealis status. On final negative verbs, realis is marked by (-ba), while irrealis is marked by Set 2 subject suffixes plus -i.

SS medial verbs, both sequential and simultaneous forms, lack marking for status and are completely dependent on the status of the following final clause.

¹¹ The view of status as a binary distinction is expressed by both Foley and Valin (1984: 213) and Foley (1986: 158).
For example:

**REALIS (FINAL VERB = FAR PAST)**

(11-47) \[ \begin{align*}
Vm & \quad \text{vaxxam}, & uvspawu & \quad \text{xritvapan.} \\
p-m & \quad \text{vaxxa-m} & \quad \text{uvsp-a-wu} & \quad \text{xritv-pa-n} \\
\text{get-1SGS} & \quad \text{come.up-1SGS} & \quad \text{fire-CI-res-OBL} & \quad \text{burn-FP-1SGS}
\end{align*} \]

‘You get it, and come up, and burn it with fire.’

**REALIS (FINAL VERB = NEAR)**

(11-48) \[ \begin{align*}
Wubi & \quad \text{mugum}, & \quad \text{sxa} & \quad \text{svarin.} \\
xub-i & \quad \text{mugu-m} & \quad \text{sxa} & \quad \text{svar-i-n} \\
\text{road-OBL} & \quad \text{go.down-1SGS} & \quad \text{again} & \quad \text{go.bush-NT-1SGS}
\end{align*} \]

‘I went down the road, and then I went bush again’

**IRREALIS (FINAL = FUTURE)**

(11-49) \[ \begin{align*}
\text{Vasxata} & \quad \text{sbata.} \\
\text{vasxa-ta} & \quad \text{s-ba-ta} \\
\text{come.up-2SGS} & \quad \text{be-FUT-2SGS}
\end{align*} \]

‘You will come up, and then wait.’

**IRREALIS (FINAL = NECESSITIVE)**

(11-50) \[ \begin{align*}
\text{Viŋa,} & \quad \text{yakumuŋa!} \\
\text{vi-ŋa} & \quad \text{ya-ku-muŋa} \\
\text{come-2SGS} & \quad \text{1SGO-give-2PLS.NEC}
\end{align*} \]

‘Come and give (them) to me!’

DS medials, however, indicate the realis/irrealis distinction by suffixation. DS medials have two inflectional options: (i) take either far past or near tense suffix plus set 4 subject pronominal; (ii) take the Set 2 subject pronominal suffixes. Option (i) is used realis SRCs, while option (ii) in irrealis constructions.

**REALIS: (FINAL VERB = AFFIRMATIVE FAR PAST)**

(11-51) \[ \begin{align*}
\text{Ibirapayai,} & \quad \text{nNnbdapari...} \\
\text{ibira-pa-ŋa-i} & \quad \text{nN-ndba-pa-ri-i} \\
\text{celebrate-FP-2/3PLS-DS.SEQ} & \quad \text{3PLO-ask-FP-3SGS-DS.SEQ}
\end{align*} \]

‘They celebrated, and then he asked them...’
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REALIS: (FINAL VERB = AFFIRMATIVE NEAR)

(11-52) *Ny-miai, vipr, ar xmyanadr.*

nŋ-mi-i-a-i vi-pr ar xŋanaN-t-ŋ-r
3PL0-leave-NT-3SGS-DS.SEQ come-1DU S 1DU S work-do-NT-1DU S

'He left them, and then we came, and then we worked.'

REALIS (DS = FP, VERB=NEGATIVE)

(11-53) *Tpayai, yiv nnabi nma*

t-pa-ŋa-i yiv n-nabi n-ma
do-FP-2/3PLS-DS.SEQ father 3SGPOSS-wife 3SGS-NEG

ntximu-ba.

n-tximu-ba
3SG0-hit-NEG

'They did it, and so father didn’t hit his wife.'

When the status of the final verb is construed as irrealis, the DS medial takes the set 2 pronominal suffixes.

IRREALIS: (FINAL VERB = AFFIRMATIVE FUTURE)

(11-54) *Yam xrdi, nbamŋ.*

yam kr-d-i n-ba-mŋ
mother cook-3SGS-DS.SEQ eat-FUT-1PLS

'Mother will cook and then we’ll eat.'

11.3.4.2.3 Realisation of tense

As we have seen, affirmative final verbs mark three tense distinctions: far past, near and future in the indicative mood. Tense in negative forms is implicit in the marking for realis (=non-future) and irrealis (=future).

SS medials lack tense marking and read their temporal specification off the final verb (see examples above). In contrast, DS medials do inflect for tense. However, this marking is limited to realis (non-future) constructions. (In irrealis constructions, DS medials take the irrealis marking).
When the final verb is affirmative far past, the DS medial also takes the far past tense suffix and when it is in near tense, the DS medial takes the near tense.

**DS: Far past**

(11-55)  
*Niyixapajai, tuwuvxapari.*  
\[n-yixa-**pa**-{a-\(i\)}_{DS} \quad [tuwuvxa-**pa**-{ri}]_{P}\]  
3SGO-cry-FP-2/3PLS-DS.SEQ \quad come.up-FP-3SGS  
'They called out to him, and he came up.'

**DS: Near tense**

(11-56)  
*Uvsaka \quad vm, tamurni,*  
\[uvs-a-{ka} \quad p-{m} \quad tamur-\(\emptyset\)-n-i\]  
fire-ND-CL\textsubscript{res} \quad get-1SGS \quad make.fire-NT-1SGS-DS.SEQ  
\[tuia\text{ma}, mudi, mugu.\]  
\[tu-i-a-mana \quad mud-i-n \quad mugu-i\]  
burn-NT-3SGS-DS.SIM \quad come.up-NT-1SGS \quad house-OBL  
'I got fire and then I made a fire and then, while it burnt, I came up, to the house.'

DS medials also inflect for tense within realis SRCs with a final negative verb. Note that in such cases, the tense of the SRC is only explicitly expressed on the medial verb.
(11-57) ...Vuwururi mugupr agasapagaki
Vuwururi mugu-pr aga-sapax-a-ki
PN go.down-IDUS bush.fowl-mound-ND-OBL

ixrapr araparipu,
ixra-pr [ara-pa-r-i-pu]
look-IDUS scrape-FP-IDUS-DS-SEQ-but

nma sba
[n-ma s-ba]
3SGS-NEG be-NEG

aga-mkNX-u-vuk]
bush.fowl-egg-IA-cl

“We went down to Vuxururi and looked in the nest of a bush fowl and we scraped but it wasn’t there, a bush fowl egg.”

11.3.4.2.4 Summing up tense and status in SRCs.

To sum up, then, we find that while the overall status and tense of the SRC is determined by the final verb, there are occasions where the choice of DS medial form provides the only explicit indication of tense or status in the chain.

11.3.4.3 MOOD

11.3.4.3.1 Introduction

Mood is the verbal category which expresses the communicative intention, i.e. speech act value, of an utterance. As described in §7.6, four moods are distinguished on final independent verbs: indicative, necessitive, optative and precautionary. The indicative is used for both declarative and interrogative constructions. Declaratives are unmarked, while interrogatives are overtly marked, not by verbal inflection though, but through presence of either a question word or the polar question clitic. The declarative/interrogative distinction is found only in the indicative mood.

Medial verbs do not inflect for mood. Medial verbs very often depend on the mood of the following final verb, for their own mood interpretation. However, as I shall explain in the sections that follow, there are certain, definable conditions
under which a medial clause can be interpreted as being excluded from the scope of the mood specified on the final verb.

11.3.4.3.2 Indicative mood

As noted above, there are two types of indicative mood: declarative, which is the mood of assertions, or statements, and interrogative, which is the mood associated with questions.

11.3.4.3.2.1 Declaratives

In an SRC which terminates in a final indicative verb and which lacks question words or marking by the polar question word, all clauses in the chain are interpreted as being in declarative mood.

(11-58)  
Simrut, awudana tuwuvapari.

simru-t awud-a-na tuwuvaxa-pa-ri
break-3SGS female-ND-CLre come.up-FP-3SGS

'It (the betelnut) broke and then the woman came up.'

(11-59)  
Nymiai, vipr, ar

nη-mi-ı-a-i vi-pr ar
3PLO-leave-NT-3SGS-DS.SEQ come-1DUS IDUPRO

xmyanadr,
xmŋanaN-t-ơ-r
work-do-NT-1DUS

'He left them, and then we came, and then we worked.'

11.3.4.3.2.2 Interrogatives

The interrogative mood can be expressed either by a question word in content questions (§3.4.6) or the clitic =ma in polar questions (§3.12.1). Although the two types of interrogative are formally distinct, they display similar properties with regard to their distribution in SRCs.
(a) Content questions

Question words occur in both medial and final clauses of SRCs in Anamuxra. There are no rules which can move them across clause boundaries; rather, they remain in the clause of their syntactic origin. Paralleling this restriction on the position of interrogative words in SRCs is the constraint that it is only the content of the clause in which the question word occurs that is questioned. Thus, in (11-60) the question word, *anamuxra* 'what?' occurs as a constituent of the medial clause headed by *nsimuy* 'they spear'. The force of the question word is restricted to that clause such that the following medial and final clauses are interpreted as assertions.

(11-60)  

<table>
<thead>
<tr>
<th>Adakumdiy</th>
<th>anamuxrax</th>
<th>nsimuy,</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ad-aku-mdin]</td>
<td>anamuxrax</td>
<td>nsimu-ŋ]ₘ</td>
</tr>
<tr>
<td>DEM-FD-PL.HUM</td>
<td>what-ACC.SG</td>
<td>3SGO-spear-3PLS</td>
</tr>
<tr>
<td>vasxay</td>
<td>ibriya?</td>
<td></td>
</tr>
<tr>
<td>[vasxa-ŋ]</td>
<td>ibr-i-ŋa]₆</td>
<td></td>
</tr>
<tr>
<td>come.up-3PLS</td>
<td>celebrate-NT-2/3PLS</td>
<td></td>
</tr>
</tbody>
</table>

‘What did they shoot, so that they came up, and celebrated?’

(11-61)  

<table>
<thead>
<tr>
<th>Muxana!</th>
<th>Nanx</th>
<th>vata,</th>
<th>ixrina?</th>
</tr>
</thead>
<tbody>
<tr>
<td>mux-a-na</td>
<td>[nan-x]</td>
<td>pa-ta]ₘ</td>
<td>[kixr-i-na]₆</td>
</tr>
<tr>
<td>VOC-ND-CLtem</td>
<td>who-ACC.SG</td>
<td>think-2SGS</td>
<td>look-NT-2SGS</td>
</tr>
</tbody>
</table>

‘Woman! Who are you thinking of so that you look?’

(11-62)  

<table>
<thead>
<tr>
<th>vita</th>
<th>nanx</th>
<th>nkixrina ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[vi-ta]ₘ</td>
<td>[nan-x]</td>
<td>n-kixr-i-na]₆</td>
</tr>
<tr>
<td>come-2SGS</td>
<td>who-ACC.SG</td>
<td>3SGO-see-NT-2SGS</td>
</tr>
</tbody>
</table>

‘You came, and who did you see?’
(b) Polar questions

When =ma occurs in medial clause, only the content of that clause is questioned.

(11-63) \[Na\ mitama, \ itxina?\]
\[na \ mi-ta=ma \ itx-i-na\]
\[2SGPRO \ do.not.feel.like-2SGS=PQ \ return-NT-2SGS\]

'You didn’t feel like (it) and so you returned?'

When the clitic occurs in the final clause as in (11-64), the question can be interpreted as directed to the entire sequence, or as applying to the content of the final clause.

(11-64) \[Adam nat xniama?\]
\[adam na-t kn-i-a=ma\]
\[DEM-ND-CLmale \ eat-3SGS \ sleep-NT-3SGS=PQ\]

'Did that man eat and then sleep?'

11.3.4.3.3 Necessitive

Necessitive mood on a final verb has scope over preceding SS medial verbs. For example:

(11-65) \[Mugupr, nmaragumra!\]
\[mugu-\text{pr} \ n-marag-\text{mra}\]
\[go.down-1DUS \ 3SGO-carry-1DUS.NEC\]

'We must go down and carry her!'

(11-66) \[Mudupr Asavaxui xnmra!\]
\[mudu-\text{pr} \ Asavaxui \ kn-\text{mra}\]
\[go.up-1DUS \ PN \ sleep-1DUS.NEC\]

'Let’s go up and sleep at Asavaxui!'
CHAPTER 11- SENTENCE STRUCTURE, CLAUSE COMBINING AND INTERSENTENTIAL RELATIONS

(11-67) Vnamnam  muduta,  ixrata,

[vnam-nam  mudu-ta]  [kixra-ta]  
gently-PRDL  go.up-2sgS  look-2sgS

upuk  usari  uviga!

[u-vuk  u-sar-i  uvi-ga]
IA-CL_Ngh  IA-CL_Bch-OBL  twist.off-2SGS.NEC

‘Go up gently, and look, and then twist off one (betelnut) from one bunch!’

Examples of DS medials with necessitive interpretation are:

(11-68) Yakunai,  yi  sxmna

[ya-ku-na-i]  [yi  sx_mna]  
1SGO-give-2SGS-DS.SEQ  1SGPRO  carry-1SGS.NEC

“You must give (it) to me, (and) I must carry it!”

(11-69) Amu  svarata,  umkax  nsimuta,

amu  svara-ta  u-mka-x  n-simu-ta

tomorrow  go.bush-2SGS  one-CL_simu-ACC.SG  3sgO-spear-2sgS

vasxnai,  nkixranna!

vasx-na-i  n-kixra-mna

come.up-2SGS-DS.SEQ  3sgO-see-1SGS.NEC

‘Tomorrow, you must go bush, and spear a pig, and then come up, and I must see it!’

(11-70) Npirata.  nnai,  itxaat  mudud!

n-pira-ta  n-na-i  itxa-t  mdu-d

3SGO-wash-2SGS  eat-2SGS-DS.SEQ  return-3SGS  go.up-3SGS.NEC

‘Eat with him and then he must return!’

Both SS and DS medials preceding a final verb in the necessitive mood may act as hypothetical protasis when marked by a sharp rise in intonation.

(11-71) Wam,  xzxxtuwumna!

kwua-m  xzxxtuwumna

go-1SGS  dance-perform-1SGS.NEC

‘If I go, I must perform a dance.’

361
(11-72)  
Vidi, nixiswaranga!
vi-d-i n-xiswar-i-n
come-3SGS-DS.SEQ 3SGO-tell-NT-1SGS
‘If he comes, tell him!’

In such cases, the scope of the necessitive does not extend to the conditional medial clause.

11.3.4.4 OPTATIVE

In all cases where an SS medial followed by an final optative verb, both the medial and final clauses were interpreted as being optative.

(11-73)  
Nam xnb.
na-m kn-b
eat-1SGS sleep-OPT
‘I want to eat and then sleep.’

SRCs consisting of a DS medial verb is followed by a final verb in the optative mood are unattested in my corpus and proved unelicitable.

11.3.4.5 PRECAUTIONARY

SRCs with a final verb in the precautionary mood and a preceding SS were only observed through elicitation. In all cases the medial verb was interpreted as sharing the precautionary mood of the final verb.

(11-74)  
Vit, nakixrda.
vi-t na-kixr-d-a
come-3SGS 2SGO-see-PREC-3SGS
‘It wouldn’t be good if he comes, and he sees you.’

SRCs with a final precautionary verb and a preceding DS medial were not found in the corpus of texts, and proved impossible to elicit.
11.3.5 The scope of the suppositional

The suppositional clitic, =xaka (see §3.12.5) may attach to any constituent of the clause, depending on which part of the proposition the speaker is unsure about. As with interrogatives, the scope of =xaka in SRCs is restricted to the clause in which it occurs. For example in (11-75), =xaka attaches to the medial verb. The speaker is hypothesising that the boy’s swollen nose is due to someone hitting him.

(11-75)  

<table>
<thead>
<tr>
<th>O!</th>
<th>Adakum</th>
<th>ntximixaixaka</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCL</td>
<td>DEM-FD-CL Mime</td>
<td>3SGO-hit-NT-2/3PLS-DS.SEQ=SUPP</td>
</tr>
</tbody>
</table>

- nskwaraka wottia.  
- n-skwar-a-ka wot-t-i-a  
- 3SG.POSS-nose-ND-CL Male large-do-NT-3SGS

‘Oh! I think they hit this man and so his nose has become large.’

11.3.6 Operation of negation in SRCs

11.3.6.1 INDEPENDENTLY NEGATED CLAUSES

Both medial clauses and final clauses may be independently negated. The scope of negation is defined by the inflected verb and the negative word (see §10.4 on negation in basic clause types). Clauses before the negative word are excluded from the scope of the negation as are clauses after the negated clause. For example, in both (11-76) and (11-77) the final clause (B) is negated, while the preceding medial clause (A) is interpreted as having positive polarity.

(11-76)  

<table>
<thead>
<tr>
<th>Yam</th>
<th>vxinmai,</th>
<th>nma</th>
<th>awadamurba.</th>
</tr>
</thead>
</table>

‘Mum was afraid, so she didn’t yell out.’

(11-77)  

| Nibugam, Sigibariag, yixat, nma xnba. |
|---------|----------|-----|-------------|
| [nibuNx-a-m Sigibariag yixa-t]A | [n-ma kn-ba]B |
| first-ND-CL Male PN cry-3SGS 3SGS-NEG sleep-NEG |

‘The first born, Sigibariag, cried, and (so?) he didn’t sleep.’
(11-78) below is an example of a negated medial clause, annotated as B. In accordance with the constraint on negative scope, neither the preceding medial clause (A) nor the following final clause (C) can be interpreted as falling within the scope of the B’s negative polarity.

\[
\begin{array}{llllll}
\text{Asavaxui} & \text{mudataguat,} & \text{asavaxui} & \text{vwaki} \\
\text{[Asavaxui} & \text{mudatagua-t]}_A & \text{[Asavaxui} & \text{vwa-a-ki} \\
\text{PN} & \text{climb-3SGS} & \text{PN} & \text{place-ND-OBL} \\
n\text{ma} & \text{wurabay} & \text{sba} & \text{tpagai}, \\
n\text{-ma} & \text{xuraN-pa-ŋ} & \text{s-ba-i} & \text{t-pa-ŋa-i]}_B \\
3\text{sgS-NEG} & \text{person-CLRES-PL} & \text{be-FP-NEG-DEP} & \text{do-FP-2/3PLS-DS-SEQ} \\
m\text{ugupa} & \text{utavi} & \text{nmzapari}. \\
\text{[mugu-pa} & \text{u-tav-i} & \text{nmza-pa-ri]}_C \\
\text{house-CLRES} & \text{IA-CLsh} & \text{enter-FP-3SGS} \\
\end{array}
\]

'He climbed up to Asavaxui, and at that place Asavaxui there were no people, and so he entered one house.'

While in most instances of verbal clauses, negation is expressed through the co-occurrence of verb inflection plus negative word, there is some evidence that it can be performed by just the negative verb form. For example, in (11-79) the negated medial clause (D) lacks a negative word. Note, though, that despite the absence of the negative word, the preceding clauses are still excluded from the scope of the negative. A possible explanation for this is that the adversative suffix defines the boundary of negative scope.\(^{12}\)

---

\(^{12}\) There are no examples of a negative clause lacking a negative word which is preceded by a medial clause not marked by the adversative. Consequently, it is not possible to say unequivocally whether it is the adversative which acts as a barrier to negative scope or whether in fact the restrictions on the negative in these cases are contextually determined.
(11-79)  

*Muxam* vivmuku xrat, waragidat,  

[mux-a-m vivi-muku kra-t]A [wargida-t]B  

VOC-ND-clmale small-clnamam cook-3SGS take.away-3SGS  

naparipu, adaka msdbai  

[na-pa-ri-i=pu]C [ad-a-ka msN-t-ba-i  

eat-FP-3SGS-DSSEQ=first DEM-ND-CLRES sweet-do-NEG-DEP  

*tpari,* adam tamapari.  

t-pa-ri-i]D [ad-a-m tama-pa-ri]E  

do-FP-3SGS-DSSEQ DEM-ND-clres put-FP-3SGS  

'That man cooked a little, and took it away and ate it, but that wasn’t sweet and so he left it.'

11.3.6.2 OTHER POSSIBILITIES: NON-INDEPENDENTLY NEGATED CLAUSES

In addition to the independently negated structures described above, Anamuxra also allows the negative word to occur at the beginning of a sequence of SS medial clauses, although this a less favoured strategy.13 We can represent this option templatically as:

(11-80)  

NEG V1-SS V2-NEG  

In such constructions three distinct interpretations of the scope of the negative are found:

(a) V1 is negative, V2 is positive  

(ii) V1 is positive, V2 is negative  

(iii) both clauses are negative  

Significantly, these interpretations are mutually exclusive between verbs; that is, a particular combination of verbs can only be interpreted as having one of the three scope types. Examples of each are given as:

13 Whereas SRCs containing independently negated clauses are found frequently in the corpus used for this study, SRCs with ‘fronted’ negative word have only been observed through elicitation.
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Type (i)

(11-81) Yima nam, muduba.
    yi-ma na-m mudu-ba
    1SGS-NEG eat-1SGS go.up-NEG

'I didn’t eat and I went up.'

Type (ii)

(11-82) Nama vasxata sbata.
    na-ma vasxa-ta s-ba-ta
    2SGS-NEG come.up-2SGS be-FUT-2SGS

'I came up, (but) I didn’t stay.'

Type (iii)

(11-83) Yima sam, nba.
    yi-ma sa-m n-ba
    1SGS-NEG be-1SGS eat-NEG

'I didn’t stay and eat.' (i.e. I didn’t stay, I didn’t eat.)

At present, the restriction on the association between scope type and verb combinations appears to be arbitrary, though future research may reveal a systematic basis for these patterns.

11.4 Counterfactual constructions

11.4.1 General properties

A counterfactual construction is composed of two sentential bases: the protasis or condition (BASE 1) and the apodosis or consequence (BASE 2). Each base is terminated by a co-dependent verb (§7.6.3). Counterfactuals are conditional structures, expressing a view of the speaker that some situation, denoted by the apodosis, could have or would have been true if other another set of events or states, denoted by the protasis base, were true; but since those other states or
events are not true, then the proposition associated with the apodosis base is also not true (Givón 1990:831). 14

Each base of the counterfactual construction can consist of a single clause as in (11-84) or an SRC as in the case of the protasis in (11-85).

(11-84)  
Sarep  
vnaski,  
sivituwini.  
[sarep  
p-Ø-n-baski]Protasis  
scythe  
get-NT-1SGS-CFP  
‘If I had got a scythe, I would have cut grass.’

(11-85)  
Anuŋ  
maitapa  
maivpanbaski,  
[anuŋ  
maita-pa  
day.before.yesterday  
machete-CL]Protasis  
murai  
wan,  
maitapa  
murai-wam,  
[mura-i  
kwua-m  
garden-OBL  
garden-OBL  
Tree-hit-FP]Apodosis  
‘If I had bought a machete two days ago, I would have gone to the garden and cleared trees.’

11.4.2 Tense and grounding in counterfactuals

The terminal clauses of both bases take (non-future) tense marking; which varies according to whether the situations referred to are grounded in the domain of the far past or near tense. For example,

(11-86)  
Aya  
vnaski,  
sivituwini.  
[aya  
p-Ø-n-baski]Protasis  
yesterday  
get-NT-2SGS-CFP  
‘If I had come, I would have cut grass.’

14 In contrast to hypothetical conditionals (§11.3.3.5), the truth value of the counterfactual conditional is firm and negative (Givón 1990:831).
Despite the fact that the apodosis takes the realis tense inflections of far past or near tense, when it is marked for near tense, it may be interpreted as referring to some point in the future. This is illustrated by the use of temporal adverbs specifying future time. For example,

(11.4.3 Negation in counterfactual constructions)

11.4.3.1 NEGATIVE PROTASIS

There are two strategies for negating the condition clause in counterfactual constructions in Anamuxra. First, the final apodosis verb is suffixed using the negative suffix -ba, which is followed by the negative counterfactual suffix, -skivaski. For example,

(11-89)  
Stesin  mugubaskivaski,  svarapani.  
estesin  mugu-baskivaski  svara-pa-n-i  
station  go.down-CFP.NEG  go.bush-FP-1SGS-CFA  
'If I hadn’t gone down to the station, I would have gone bush.'
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(11-90)  
<table>
<thead>
<tr>
<th>Aya</th>
<th>trapa</th>
<th>mugubaskivaski,</th>
</tr>
</thead>
<tbody>
<tr>
<td>aya</td>
<td>tra-pa</td>
<td>mugu-baskivaski</td>
</tr>
<tr>
<td>yesterday</td>
<td>rain-CLres</td>
<td>come.down-CFP.NEG</td>
</tr>
</tbody>
</table>

svarini.

svar-i-n-i
go.bush-NT-1SGS-CFA

'If it hadn’t rained yesterday, I would have gone bush.'

Note that unlike negation in other clauses (see §10.4; §11.3.5), the negative word is not used in these cases.

(11-91)  
<table>
<thead>
<tr>
<th>*yima</th>
<th>Stesin</th>
<th>mugubaskivaski,</th>
<th>svarapani.</th>
</tr>
</thead>
<tbody>
<tr>
<td>yi-ma</td>
<td>stesin</td>
<td>mugu-baskivaski</td>
<td>svara-pa-n-i</td>
</tr>
<tr>
<td>1SGS-NEG</td>
<td>station</td>
<td>go.down-NEG.CFP</td>
<td>go.bush-FP-1SGS-CFA</td>
</tr>
</tbody>
</table>

The second strategy uses negative t- auxiliary construction found in negative medial clauses, where the verb is marked by -ba plus the negative dependent suffix -i and t- is inflected for tense, subject person-number features and the counterfactual marker, -baski. For example,

(11-92)  
<table>
<thead>
<tr>
<th>Aya</th>
<th>vibai</th>
<th>t nabaski,</th>
</tr>
</thead>
<tbody>
<tr>
<td>aya</td>
<td>vi-ba-i</td>
<td>t-na-baski</td>
</tr>
<tr>
<td>yesterday</td>
<td>come-NEG-DEP</td>
<td>do-NT-2SGS-CFP</td>
</tr>
</tbody>
</table>

muguini.

mugu-i-n-i
go.down-NT-1SGS-CFA

 'If you hadn’t come yesterday, I would have gone down.'

Again, the negative word does not occur in these cases.
11.4.3.2 NEGATIVE APODOSIS

Unlike the verb in the condition clause, the verb in main event counterfactuals does not vary with the affirmative/negative distinction. The polarity of the apodosis base is signalled solely by the presence/absence of the negative sentential word, as illustrated below. As with the future negative in independent verbs, *amu appears to be in free alternation with -ma (see §3.8).

\[
(11-94) \begin{align*}
\text{Aya} & \quad \text{vinabaski} & \quad \text{yima/amu} \\
\text{aya} & \quad \text{vi-i-na-baski,} & \quad \text{yi-ma/amu} \\
\text{yesterday} & \quad \text{come-NT-2SGS-CFA} & \quad \text{1SGS-NEG/NEG.IR}
\end{align*}
\]

*muguini.*

mugu-i-n-i
go.down-NT-1SGS-CFA

‘If you had come yesterday, I wouldn’t have gone down.’

\[
(11-95) \begin{align*}
\text{Stesin} & \quad \text{mugubai} & \quad \text{tpanbaski} & \quad \text{yima/amu} \\
\text{stesin} & \quad \text{mugu-ba-i} & \quad \text{t-pa-n-baski} & \quad \text{yi-ma/amu} \\
\text{station} & \quad \text{go.down-NEG-DEP} & \quad \text{do-FP-1SGS-CFP} & \quad \text{1SGS-NEG/NEG.IR}
\end{align*}
\]

*maitapa*  
maivpani

maita-pa  
maiv-pa-n-i
machete-Cl  
buy-FP-1SGS-CFA

‘If I hadn’t gone down to the station, I wouldn’t have bought that knife.’
11.5 Complement structures

11.5.1 Introduction

Complement constructions are those in which a predication, the complement, functions as the argument of a predicate. The latter is referred to as the complement taking predicate (CTP) (Noonan 1985:64).

The most commonly occurring CTPs in my data set belong to the classes of utterance and cognition verbs. In the sections that follow we shall consider these and other classes of complement-taking predicates in terms of the types of complements they take and the various structural relationships that obtain between the clause headed by the CTP (the matrix clause) and the complement clause.

11.5.2 Utterance predicates

11.5.2.1 INTRODUCTION

Utterance predicates describe the transfer of information initiated by an agentive subject. The complement represents the transferred information, while the CTP describes the manner of transfer and the mood of the original utterance (Noonan 1985: 110).

Across the world’s languages, there are generally two ways in which the information given by a complement of an utterance predicate may be framed: either as a direct quotation or as an indirect quotation. Direct quotation involves presenting the actual words and intonation of the speaker who produced the utterance, while indirect quotations present the words of the original speaker with some adaptation which involves some deictic or other re-orientation. (Noonan 1985: 111).
11.5.2.2 BASIC QUOTE STRUCTURE

Anamuxra has one main complement-taking utterance predicate: par- ‘say’. In the basic quote structure, the complement occurs before par- but after the subject. That is,

\[
\begin{array}{ccc}
\text{(SUBJ)} & \text{COMP} & \text{par-} \\
\end{array}
\]

**Figure 11-4: Basic quote construction**

This structure is illustrated in (11-96).

(11-96)  
\[
\begin{array}{cccc}
\text{wusuana} & \text{"Aka} & \text{yi} & \text{sixbam."} \\
\text{wusu-a-na} & \text{a-ka} & \text{yi} & \text{sx-ba-m} \\
\text{new-ND-ND_fem} & \text{ND-CL_res} & \text{1SGPRO} & \text{carry-FUT-1SGS} \\
\end{array}
\]

\text{varapari.}

**para-pa-ri**

say-FP-3SGS

“The new woman said “I will carry it.””

In such constructions, the relative ordering of the COMP and the core NPs is fixed. It is unacceptable for the subject to occur between the complement and its matrix verb as in (11-97).

(11-97)  
\[
\begin{array}{cccc}
\ast \text{"Aka} & \text{yi} & \text{sixbam"} & \text{wusuwana} \\
\text{[a-ka} & \text{yi} & \text{sx-ba-m }\_\text{COMP} & \text{wusu-a-na} \\
\text{ND-CL_res} & \text{1SGPRO} & \text{carry-FUT-1SGS} & \text{new-ND-CL_fem} \\
\end{array}
\]

\text{varapari.}

**para-pa-ri**

say-FP-3SGS

“The new woman said “I will carry it.””
Overt core NPs are commonly omitted. Thus, in the following examples only the direct quotation and the utterance verb are present.

(11-98)   Adaki sapaymana, "Mawapa
          ad-a-ki sa-pa-ŋ-mana [mawa-pa
          DEM-ND-OBL be-FP-1PLS-DS.SIM sago-CLres
          namuŋa." varapari.
          na-muŋa]s-comp para-pa-ri
          eat-3PLS.NEC say-FP-3SGS
          ‘While we waited, he said “You must eat sago!”’

(11-99)   “Naxwu awudmumugakua awadamuria
          na-xwu awud-mumuNx-aku-a awadamuru-i-a
          2SGPOSS-PW female-child-FD-CLres call.out-NT-3SGS
          "Agwu mugupa tuia" varia.'’
          an-xwu mugu-pa tu-i-a par-i-a
          1PLPOSS-PW house-CLres burn-NT-3SGS say-NT-3SGS
          varapapa
          par-pa-na
          say-FP-2/3PLS
          ‘…they said “your young girl called out, saying “our house is on fire.”’”

(11-100)   …nxiswaria “Muduta Andrewxpu
          n-xiswar-i-a mudu-ta Andrew-x=pu
          3SGO-tell-NT-3SGS go down-2SGS Andrew-ACC.SG=first
          nxiswaraga” varia.
          n-xiswara-ga par-i-a
          3SGO-tell-2SGS.NEC say-NT-3SGS
          ‘…he said to him “Go down and tell Andrew first.”’

The lack of an overt complementizer means that in cases such as (11-99) and (11-100) there is no direct evidence of the complement being embedded; the complement appears simply juxtaposed to the speech act verb.
11.5.2.3 The pre-quote strategy

In addition to the basic quote structure described in the previous section, Anamuxra also allows this quote structure to be preceded by a pre-quote formula in which par- or some other utterance predicates can be used to further specify the nature of the speech act. Other utterance predicates that can be used in the pre-quote position include:

\[
\begin{align*}
(-)xiswar- & \quad \text{‘talk (to)’} \\
-nbd & \quad \text{‘ask’} \\
awadamuru- & \quad \text{‘call out’} \\
-yix- & \quad \text{‘cry out’}
\end{align*}
\]

The pre-quote is not part of the clause headed by the final par-. Rather, it is a separate base (syntactic p332), juxtaposed to the main quote clause. The structure of the pre-quote plus main quote clause can be represented in templatic form as:

\[
\text{(Pre-Quote), COMP par-}
\]

Figure 11-5: The pre-quote structure

Examples are:

PRE-QUOTE = PAR- ‘SAY’

(11-101) Adana varapari “Nma! Ar sxam
ad-a-na para-pa-ri n-ma ar sxam
DEM-ND-Cl\text{fem} say-FP-3SGS 3SGS-NEG 1DUPRO completely

nanabixai.” varapari.

na-nabi-xai para-pa-ri
2SGS-wife-DU say-FP-3SGS

‘That woman said “No! The two of us together will be your wives.”’

---

15 A similar strategy is used in Apal , another Southern Adelbert language (see Wade 1989: 26-27).
(11-102) Varin, “Avisd! Mugum para-i-n avisd mugu-m think-NT-1SGS forget.it go.down-1SGS

mugum, avnxrugai ixranampu.”
mugu-m avn-xruN-xai kixrana-m=pu
go.down-1SGS coconut-dry-DU look-1SGS=FIRST

varin.

para-i-n
say-NT-1SGS
‘I thought. “Forget it! I’ll go down and look for two dry coconuts first.” I thought.’

(11-103) Varapari “Mzrata saga!” varapari.
para-pa-ri mzra-ta sa-ga para-pa-ri
say-FP-3SGS sit.down-2SGS be-2SGS.NEC say-FP-3SGS

‘She said “Sit down and wait!”’

PRE-QUOTE = AWADAMRIA ‘CALL.OUT’

(11-104) “Na-xwu awudmumuNx-aku-a awadamura
na-xwu awud-mumuNx-aku-a awadamura-i-a
2SGPRO-PW female-child-FD-CLres call.out-NT-3SGS

“Agwu mugupa tuia.” varia”
an-xwu mugu-pa tu-i-a par-ia
1PLPOSS-PW house-CLres burn-NT-3SGS say-NT-3SGS

varapenja.

para-pa-ŋa
say-FP-3SGS
‘...and they said “Your girl called out, saying “Our house is on fire.””’
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PRE-QUOTE = ISWAR - ‘TELL’
(11-105) Agiswarapari "Wuramga anbdaguiai.”
   an-xiswar-pa-ri xuraN-mga anN-vntag-i-a-i
   1PLO-tell-FP-3SGS person-Clunf water-rise-NT-3SGS-DSSEQ

varapari.

para-pa-ri
say-FP-3SGS

‘He told us, saying “Poor man, the tide has risen.”’

PRE-QUOTE = YIX - ‘CRY OUT’
(11-106) Ulipitak niyiuxpari "wiaka vta
   Ulipitak n-yix-pa-ri wia-a-a-ka p-ta
   PN 3SGO-cry.out.to-FP-3SGS spear-ND-Clres get-2SGS

vi!” varapari
vi para-pa-ri
come say-FP-3SGS

‘He cried out to him, saying “get the spear and come!”’

Finally, in examples containing an overt subject NP, that NP generally precedes the utterance predicate. However, cases have been observed where the subject occurs after the verbal predicate as an afterthought. For example,

(11-107) Varapari, Vadamdugava, "Mudupr Asavwui
   par-pa-ri Vadamdugava mdu-pr Asavwui
   say-FP-3SGS PN go.up-IDUS PN

xnmrar!” varapari.
kn-mra para-pa-ri
sleep-IDUS say-FP-3SGS

‘He said, Vadamdugava, “Let’s go up and sleep at Asavwui!”’

11.5.2.4 INTERJECTING PAR-
In addition to the basic structures discussed in the previous section, there is a variation in which the interjection of the general speech act predicate par- occurs within the speech complement.
In most instances, these interjections occur at some salient constituent boundary that could otherwise be marked by a pause. For instance, it is commonly used to separate a vocative as in (11-108) and (11-109), or an interjection as in (11-110) and (11-111) from the rest of the quote. It can be used to separate two sentences, as in the case of the second interjecting varapari in (11-112) respectively, or it may be used to separate. As with the post-complement par-, interjecting par- always agrees in status-tense and subject person-number details with the main speech act predicate. Some examples are:

(11-108)  "Isuva!"  varapari  "A  adi  vwar

isuva  para-pa-ri  a  adi  vwa-r

cousin  say-FP-3SGS  ah  today  place-OBL.

"sbapr."  varapari.

s-ba-pr  para-pa-ri

be-FUT-1DUS  say-FP-3SGS

"‘Cousin!’ he said ‘Ah, today we will stay in the camp.’”

(11-109)  Ngiswarapari  "Kimdiy!’  varapari  "Adaka

nn-xiswar-pa-ri  ki-mdiŋ  par-pa-ri  ad-a-ka

3PLO-say-FP-3SGS  VOC-PL.HUM  say-FP-3SGS  DEM-ND-CLres.

awudy  xzxztuwiya  tŋa.

awud-ŋ  xzxz-tuwu-i-ŋa  t-ŋ-ŋa

woman-PL  dance-perform-NT-3PLS  do-NT-3PLS

‘He told them, saying “Hey you!” “That’s women performing a dance.”’
"O!" varapari "Yima nataxadakunax

o para-pa-ri yi-ma natax-ad-aku-na-x

oh say-FP-3SGS 1SGS-NEG old-DEM-FD-CL_3fem-ACC.SG

niyiixmi." varapari "Yi

n-yixu-mn-i para-pa-ri yi

3SGO-cry-1SGS-NEG.IR say-FP-3SGS 1SGPRO

awudsibugakunaxan nyixbam."

awud-sbuNx -aku-na-xan n-yix-ba-m

woman-adolescent-FD-CL_3fem.=FOC 3SGO-cry-FP-1SGS

"Oh! he thought, "I won’t cry out to that old woman; I’ll cry out to the young woman."

"Nma!" varapari "Tbbam" varapari.

n-ma para-pa-ri tb-ba-m para-pa-ri

3SGS-NEG say-FP-3SGS plant-FUT-1SGS say-FP-3SGS

"No!" he said “I will plant them.”

"Aria!" varapari "Aria! vakrapa ixramna"

aria para-pa-ri aria vakra-pa kixr-mra

O.K say-FP-3SGS O.K mat-CL_res look-1DUS.NEC

varapari "Tpr, idanapr, kn-mra!"

para-pa-ri t-pr idana-pr kn-mra
say-FP-3SGS do-1DUS make.bed-1DUS sleep-1DUS.NEC

varapari.

para-pa-ri

say-FP-3SGS

"O.K!" he said "We must look for a mat!" he said. "We must make a bed and sleep."
Finally, there are instances where it may be inserted clause internally as in the example below:

(11-113)  | Varapari | “Arigakuwidai,” | varapari |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>para-pa-ri</td>
<td>[ariNx-aku-wida-i]</td>
<td>para-pa-ri</td>
</tr>
<tr>
<td>say-FP-3SGS</td>
<td>betelnut-FD-Cl.tree-OBL</td>
<td>say-FP-3SGS</td>
</tr>
</tbody>
</table>

"amu wutibkutib mudunai” varapari.
amu kutib-kutib mudu-na-i[ls-comp para-pa-ri
NEG.IR hold-RDL go.up-2SGS-DS.SEQ say-FP-3SGS

"She said “that tree” she said “you cannot go up noisily.”"

11.5.2.5 PA- 'THINK (ABOUT)'

Sentential complements of pa- may take three forms: a) those with a final finite base as in (11-114); and, b) those with a final desiderative base, as in (11-115) and c) those with base composed of a non-verbal clause as in (11-116).

(11-114)  | Muraixaka | tamia | vam |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>mura-i=xaka</td>
<td>tam-i-a</td>
<td>pa-m</td>
</tr>
</tbody>
</table>
garden-OBL=SUPP | put-NT-3SGS | think-1SGS |

mudum murai ixrin
mudu-m mura-i kixr-i-n
go.down-1SGS garden-OBL look-NT-1SGS

"I thought, “he put (them) in the garden” and so I went down and looked in the garden.’

(11-115)  | Adiki | mudub | vam |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ad-i-ki</td>
<td>mudu-b</td>
<td>pa-m</td>
</tr>
<tr>
<td>DEM-PROX-OBL</td>
<td>go.down-OPT</td>
<td>think-1SGS</td>
</tr>
</tbody>
</table>

dararamin.
dararam-i-n think-NT-1SGS

"I want to go up here”, I thought, and so I thought.’
CHAPTER 11- SENTENCE STRUCTURE, CLAUSE COMBINING AND INTERSENTENTIAL RELATIONS

(11-116) “Adaka asŋaba ngumra.” vat
ad-a-ka asN-aba n-gumra pa-t
DEM-ND-CLres devil-CLres 3SGS-eye think-3SGS

xrítxapari.
xrítxa-pa-ri
tum-FP-3SGS
‘That (is) a devil’s eye, he thought, and so he turned around.’

11.5.2.6 PHYSICAL-MENTAL CONDITION PREDICATES

There are two mental-physical condition complex verbs (§8.5.2) that can take nominalised complements: axva -t- ‘have difficulty in’ and igi -t- ‘forget’. Both take a nominalised complement, which can either occur before or after the verb.

(10-117) Yi dargay axva yatia
yi dar-gaŋ axva ya-t-i-a
1SGPRO hear-ACT.NOM difficulty 1SGO-do-NT-3SGS
‘It is difficult for me to hear.’ (i.e. difficulty does me in hearing.)

(11-118) n amd igi ntia wugaN.
n a-md igi n-t-i-a [ku-gaN]N-COMP
2SGPOSS-son forgetfulness 3SGO-do-NT-3SGS go-ACT.NOM
‘You son forgot to go/forgot about going.’

(10-119) Namd wugaN igi ntia.
na-md [kwu-gaN]N-COMP igi n-t-i-a
2SGPOSS-son go-ACT.NOM forgetfulness 3SGO-do-NT-3SGS
‘You son forgot to go/forgot about going.’

11.5.2.7 MI- ‘DO.NOT.FEEL.LIKE’

There is one predicate, mi- ‘do.not.feel.like’, which denotes a negative feeling toward a particular event or situation. The complement of this predicate represents the event for which the subject holds a negative desire. In all known cases the complement is realised as a nominalised clause, which can occur in either pre- or post-CTP position, as shown here in the following examples.

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PRE-NTP POSITION

(11-120) \[Stesin \quad mugu\text{-}guaN \quad \text{mi\text{-}i\text{-}n}\]
stesin \quad mugu\text{-}gaN \quad mi\text{-}i\text{-}n
station \quad go\text{-}down\text{-}ACT\text{.NOM} \quad do\text{.not}\text{.feel}\text{.like\text{-}NT\text{-}1SGS}

‘I don’t feel like going down to the station.’

POST-NTP POSITION

(11-121) \[Yi \quad min\]
yi \quad mi\text{-}i\text{-}n
1SGPRO \quad do\text{.not}\text{.feel}\text{.like\text{-}NT\text{-}1SGS}

\[\text{n-}tximu\text{-}gaN\]
3SGO\text{-}hit\text{-}ACT\text{.NOM}

‘I don’t feel like hitting him.’

11.6 Relative clause constructions

11.6.1 Introduction

A relative clause is a subordinate clause that modifies a constituent external to it by virtue of containing a constituent that is in some sense semantically equivalent to the modified constituent (Andrews 1985b:4-5). All known relative clauses in Anamuxra are restrictive. Three principal components can be distinguished in Anamuxra relative clauses: (i) a domain noun/NP, (ii) a restricting clause which is headed by an independent verb and which specifies some subset of referents within the domain indicated by the domain noun, (iii) and a deictic/demonstrative which binds the relativised constituent of the relative clause. The domain NP occurs before all other material, while the deictic/demonstrative occurs last in the clause construction. For example, in (11-122) the whole relative clause consists of the string \(awudnad\ papayapaxai maivia anax\) ‘the woman who bought two pawpaws’ which is embedded in the matrix clause headed by \(ixrin\) and acts as the
object of the matrix clause headed by the verb, \( nkixrin \). The noun \( awudnad \) 'woman' is the domain noun and the deictic is realised as \( anax \).

\[(11-122)\]  
\[
\begin{array}{cccc}
\text{Awudnad} & \text{papayapaxai} & \text{maivia} & \text{anax} \\
\text{female-CL\text{\textsubscript{fem}}} & \text{pawpaw-CL\text{\textsubscript{mas}}} & \text{buy-NT-3SGS} & \text{ND-CL\text{\textsubscript{fem}}-ACC.SG}
\end{array}
\]

\( nkixrin \).

\( n-kixr-i-n \)

3SGO-see-NT-1SGS

'I saw the woman who bought two pawpaws.'

On present evidence, it is not entirely clear whether relative clauses are internal (i.e. the domain NP occurs within the restrictive clause (Keenan 1985: 143-161)), or external (i.e. the domain NP occurs outside the clause (Keenan 1985: 161)). Under an internal analysis the relative clause in (11-122) would have the following structure:

![Diagram](figure)

\textbf{Figure 11-6: Internal analysis of relative clause}

Conversely, an analysis of the same relative clause as an external RC would have the following structure:

\[16\] The fact that the domain NP typically occurs in initial position in Anamuxra does not clarify the ambiguity between the internal and the external interpretations.
The deictic plays a dual role in relative constructions. First, its presence marks the whole relative construction as an embedded NP that functions as an argument of the matrix clause. In this capacity, it takes case marking indicating the role of the RC in the matrix. For instance, in (11-123) above the deictic takes the single accusative suffix, to indicate that the referent of the clause is the object of the matrix verb. (Note that the role of the RC is also cross-referenced on the verb). In contrast, in (11-123) below the RC has an oblique function in the matrix clause and thus takes oblique marking:

**RC = OBLIQUE IN MAIN CLAUSE**

(11-123)  

\[
\begin{align*}
mudut & \quad n\bar{\eta} & \quad siaxaki & \quad sxa \\
mudu-t & \quad n\bar{\eta} & \quad [siax-a-ki] & \quad sxa \\
go.\text{up-3SGS} & \quad 3\text{SGPRO} & \quad \text{ripe-ND-OBL} & \quad \text{again} \\
nsuva & \quad uvipari & \quad aki & \quad uvipari \\
n-suva & \quad uvi-pa-ri & \quad a-ki] & \quad uvi-pa-ri \\
3\text{SGPRO-cousin} & \quad \text{twist.off-3SGS} & \quad \text{ND-OBL} & \quad \text{twist.off-3SGS}
\end{align*}
\]

'He went up and twisted (one) off from the ripe (betelnut) that his cousin had twisted (one) off from'

Second, the deictic cross-references or binds the relativised argument of the relative clause through inflection for the class and number of the NP’s referent. Thus, in (11-123), the deictic takes the female classifier form -na which corresponds to the head NP, awudnad. In (11-125) below, where the head of the RC, ugarapay, is dual, the deictic takes plural marking. Note that the interaction
between class, number and case marking on the deictic relativiser is identical
to the general pattern described for nominals in §5.4.2.3.

(11-124)  
\[
\begin{align*}
\text{Ugurapay} & \quad \text{nbīŋa} & \quad \text{amkagi} \\
\text{ugura-pa-ng} & \quad \text{nb-iŋa} & \quad \text{a-mka-ŋ}=\text{Xi} \\
\text{bird-CL}_{\text{res}}\text{-PL} & \quad \text{die-NT-2/3PLS} & \quad \text{ND-CL}_{\text{selin}}\text{-PL}=\text{ACC.NS} \\
\end{align*}
\]

\text{nŋkixrin.} 

\text{nŋ-kixr-i-n} 

3PLO-see-NT-1SGS 

‘I saw the birds that died.’

There is a general tendency in RCs to use the near distal deictic, \textit{a-}, as the
default form of the determiner (see §3.4.5.3). However, as the following examples
show, other possibilities are allowed. In (11-125) the demonstrative plus near
distal deictic form \textit{adaka} is used, while in (11-126), the determiner is realised by
proximate deictic \textit{i}.

(11-125)  
\[
\begin{align*}
\text{.....muguwaki} & \quad \text{vakrapa} & \quad \text{vivimuku} \\
\text{[mugux-a-ki} & \quad \text{[vakra-pa} & \quad \text{vivi-muku} \\
\text{house-ND-OBL} & \quad \text{mat-CL}_{\text{res}} & \quad \text{small-CL}_{\text{sm.an}} \\
\end{align*}
\]

\text{manai} 

\text{sapari} 

\text{adaka} 

\text{vt} 

\text{ mana-i} 

\text{sa-pa-ri} 

\text{ad-a-ka][RC} 

\text{p-t]MC} 

\text{outside-OBL} 

\text{be-FP-3SGS} 

\text{DEM-ND-CL}_{\text{res}} 

\text{get-3SGS} 

\text{avnapari.} 

\text{avna-pa-ri} 

cover-FP-3SGS 

‘...(and so) at the house, she got the little mat that was outside, and
covered herself.’
Consistent with the frequent omission of core argument NPs in Anamuxra, it is not uncommon to find relative clauses in which the domain NP has been omitted. For example,

(11-127)  

<table>
<thead>
<tr>
<th>Nbia</th>
<th>amx</th>
<th>nkixrapan</th>
</tr>
</thead>
<tbody>
<tr>
<td>[nb-i-a</td>
<td>a-m=x ]RC</td>
<td>n-kixra-pa-n</td>
</tr>
<tr>
<td>die-NT-3SGS</td>
<td>ND-CL-male=ACC.SG</td>
<td>3SGO-see-FP-1SGS</td>
</tr>
</tbody>
</table>

‘I saw the male who died.’

In such cases, the classifier and number marking on the deictic provide evidence of the domain of relativisation. Thus, in (11-127) the classifier -m ‘male’ indicates that the domain of relativisation is restricted to the set of males.\(^\text{17}\)

11.6.2 Relativizable positions

At present we have evidence of relativisation of the core arguments S, A and P as well as obliques (source, instrumental). Relativisation of other grammatical positions is unattested in the current corpus of data.\(^\text{18}\) Examples showing each type of relativisation are given in (11-128)-(11-134):

\(^{17}\) This suggests that the deictic may be the head of the relative clause.

\(^{18}\) The limited evidence relating to relative clauses is due to two factors: (a) relative clauses rarely occurred in the texts and spontaneous speech recorded by the author. Less than twenty tokens were found in the entire corpus of texts and other material (b) they (relative clauses) proved extremely difficult to elicit across a range of speakers. This threw some doubts over the value of even those successfully elicited examples. Because of the restrictions on the range of examples, it is not possible to determine whether Anamuxra conforms to the Accessibility Hierarchy proposed by Keen and Comrie (1979).
CHAPTER 11- SENTENCE STRUCTURE, CLAUSE COMBINING AND INTERSENTENTIAL RELATIONS

SUBJECT

A

(11-128) Awudnad papayapaxai maivia anax
[auxd-nad papaya-pa-xai maiv-i-a a-na-x]
female-CLfem pawpaw-CLres-DU buy-NT-3SGS ND-CLfem-ACC.SG

nkixrin.
n-kixr-i-n
3SGO-see-NT-1SGS
‘I saw the woman who bought two pawpaws.’

S

(11-129) Wuragam nbapari aiag n-kutawasapari
[[xuraNx-a-m nba-pa-ri a-iag=x]RC n-kuta-was-pa-ri]MC
man-ND-CLmal die-FP-3SGS ND-CLlarge=ACC.SG 3SGO-feel-FP-3SGS
‘He felt the man who had died.’

(11-130) Arpa uruwia axida ixrin.
[[ar-pa uruw-i-a a-xida]RC kixr-i-n]MC
tree-CLres be.broken-NT-3SGS ND-CLtree see-NT-1SGS
‘I saw the tree that broke.’

(11-131) ..... muguwaki vakrapa vivimuku
[mugux-a-ki [vakra-pa vivi-muku
house-ND-OBL mat-CLres small-CLsmall

manai sapari adaka vt
mana-i sa-pa-ri ad-a-ka]RC p-t]MC
outside-OBL be-FP-3SGS DEM-ND-CLres get-3SGS

avnapari.
avna-pa-ri
shelter-FP-3SGS
‘...(and so) at the house, she got the little mat that was outside and covered herself.’
Chapter II - Sentence Structure, Clause Combining and Intersentential Relations

Object

P

\[ Mugu\text{-}pa\text{ }av\text{-}pan\text{ }atav\text{ }vxaria. \]

\[ [mugu\text{-}pa\text{ }av\text{-}pa\text{-}n\text{ a-tav}]_{RC}\text{ }vxar\text{-}i\text{-}a \]

\[ \text{house-CL, res}\text{ build-FP-1SGS}\text{ ND-CL shell}\text{ break-NT-3SGS} \]

'The house I built broke.'

Oblique (Source)

\[ Mudut,\text{ }m\text{ n}\text{ }siaxaki\text{ }sxa \]

\[ mudu\text{-}t\text{ n}\text{ [siax-a-ki\text{ sxa}]}\]

\[ \text{go.up-3SGS}\text{ 3SGPRO ripe-ND-OBL again} \]

\[ nsuva\text{ }uvipari\text{ }aki\text{ }uvipari. \]

\[ n-suva\text{ }uvi-pa-ri\text{ a-ki}_{RC}\text{ uvi-pa-ri}_{MC} \]

\[ 3S\text{PRO-cousin twist.off-FP-3SGS ND-OBL twist.off-FP-3SGS} \]

'He went up and twisted (one) off from the ripe (betelnut) that his cousin had twisted (one) off from.'

Instrumental

\[ Ukura\text{ }yatuia\text{ }ivuk\text{ }ixra \]

\[ [u-kura\text{ ya-tu-i-a\text{ i-vuk}]_{RC}\text{ kixra}_{MC} \]

\[ \text{one-CL,male\text{ 1SGO-hit-NT-3SGS PROX-CL sph see} \]

\[ varapari. \]

\[ \text{para-pa-ri say-FP-3SGS} \]

"See this (betelnut) that a man hit me with." she said.'

11.7 ‘Final’ medial clause constructions

In earlier discussion, single verbal clauses and switch reference constructions generally require the presence of a final verb. However, there are several contexts in which a sentence base can terminate in a medial clause. First, a medial clause can occur as the final/only clause when it refers to a cause, or reason for a state of affairs which the speaker assumes is known to the addressee either from the preceding discourse or through contextual cues. For example, in (11-136), speaker
tells a group of people, who were planning to go spear fishing at night, that river has flooded. As a consequence, they won’t be able to go spear fishing.

(11-135) *Agiswarapari*  
*an-ji-xiswar-pa-ri*  
*IPLO-tell-FP-3SGS*

“*Wuramga*

*anbdaguiai.*  
*anN-vdagu-i-a-i*

river-rise-NT-3SGS-DS.SEQ say-FP-3SGS

‘He said to us “Poor man, the river has risen and so (you won’t be able to go spear fishing).”’

The omission of the effect or consequence is common in ‘why?’ questions as shown in the following examples.

(11-136) *Anamuxra*  
*anamuxra pa-ta*

‘Why?’ [lit. you think what and so (act in that way)]]?’

(11-137) *Maksi! Abki*

*maksi ab-ki pa-ta*

‘Maksi! why?’ [lit. ‘Maksi, where are you thinking of (so that you are acting in that way)?’]

Second, an SRC can terminate in a first clause (i.e a medial clause marked by the suffix -pu), where speaker assumes the subsequent action is transparent to the addressee. For example, (11-138) is taken from a context in which the speaker has arrived to accompany the addressee on a short journey. The addressee is in the middle of eating a meal. When he sees the speaker, he puts down his plate and rises in preparation to leave. However, the speaker tells him that he should finish eating first.
In the next example, the subsequent action is established in the preceding discourse. The speaker decided to go and find two dry coconuts before coming to village.

(11-139)  

...adiki  
mudub  
vam,  
dararamin  
ad-i-ki  
mudu-b  
pa-m  
dararam-i-n  
DEM-PROX-OBL  
go.up-OPT  
think-1SGS  
think-NT-1SGS  

"Tmpu"  
varin,  
"Avisd!  
Mugum,  
t-m-pu  
par-i-n  
avisd  
mugu-m  
do-1SGS-but  
say-NT-1SGS  
for.it  
go.down-1SGS  
mugum,  
avnxrugai  
ixranampu."  
varin.  
mugu-m  
av-n-xruN-xai  
ixrana-m-pu  
par-i-n  
go.down-1sgS  
coconut-ripe-DU  
look-1SGS-first  
say-NT-1SGS  

'and I wanted to come up here, and I thought "But, forget it I'll go down, I'll go down, and look for two ripe coconuts first.'

11.8 Tail-head linkage

11.8.1 Introduction

Tail-head linkage, in its most general sense, involves the recapitulation of some or all of the information given by the final clause, or clauses, of a sentence in the sentence that follows it. There are two basic means by which tail-head linkage is achieved in Anamuxra: 'lexical' repetition and 'pro-verb' substitution. We shall consider each of these in turn.

11.8.2 Lexical repetition

There are two basic possibilities for lexical tail-head constructions in terms of the realisation between the tail clause and the head clause:
(i) **identical repetition**: where all constituents of the final clause are included in the repetition. For example,

(11-140)  

a. Aksaka  
aks-a-ka  
rope-ND-CLres  

<table>
<thead>
<tr>
<th>aks-a-ka</th>
<th>n-ku-pa-ri</th>
<th>3SGO-give-FP-3SGS</th>
</tr>
</thead>
</table>

b. Aksaka  
aks-a-ka  
rope-ND-CLres  

<table>
<thead>
<tr>
<th>aks-a-ka</th>
<th>n-kua-t</th>
<th>para-ri</th>
<th>rope-ND-CLres</th>
<th>3SGO-give-FP-3SGS</th>
<th>say-FP-3SGS</th>
</tr>
</thead>
</table>

‘She gave him the rope. She gave him the rope and then said...’

ii) **reduced repetition**: where some of the information in the final clause is not repeated. For example,

(11-141)  

a. War, natixsuanax nnbdapari.  
kua-t natx-su-a-na-x n-nbda-pa-ri  
go-3SGS old-same-ND-CLfem,-ACC.SG 3SGO-ask-FP-3SGS  

b. Natxana nnbdapari, aksaka  
natx-a-na n-nbda-pa-ri-i aks-a-ka  
old-ND-CLfem 3SGO-ask-FP-3SGS-DS.SEQ rope-ND-CLres  

<table>
<thead>
<tr>
<th>n-ku-pa-ri</th>
<th>3SGO-give-FP-3SGS</th>
</tr>
</thead>
</table>

‘He went and asked the same old woman. He asked the old woman and she gave him the rope.’

(11-142)  

a. ...muday, wuivij wuyadramija.  
muda-ŋ wuiv-i-ŋ wuyad-ram-i-ŋa  
come.up-3PLS firewood-PROX-PL straighten-ITR-NT-2/3PLS  

b. Wuyadramay, tamaŋ...  
wuyad-rama-ŋ tama-ŋ  
straighten-3PLS put-3PLS  

‘...and they came up and straightened all this firewood. They straightened (it) and then they put it...’
One of the features of the tail-head construction is that it allows the speaker to make explicit the temporal and logical relations, as well as relations of switch reference, that hold between the events described by the tail clause of one sentence and the clause/s that follow the head clause in the following sentence. Without tail-head linkage, such relations would remain implicit.

11.8.3 Pro-verb tail-head links

The second strategy employed in the formation of tail-head constructions is the use of pro-verb -t- ‘do’ as a substitute for the contents of the tail clause. For example,

\[(11\text{-}143)\text{ a. }...\text{nxa} \quad \text{muyadaka} \quad \text{mipapa.}\]
\[
\begin{array}{ll}
\text{nxa} & \text{muyi-ad-a-ka} & \text{mi-pa-ŋa} \\
\text{now} & \text{fight-DEM-ND-CL}_{\text{res}} & \text{leave-FP-2/3PLS}
\end{array}
\]

and now they left the fight.'

\[(11\text{-}143)\text{ b. }\text{Tpamana}, \quad \text{pataka} \quad \text{vratpari.}\]
\[
\begin{array}{ll}
\text{t-pa-ŋa-man} & \text{pati-a-ka} & \text{prat-pa-ri} \\
\text{do-FP-2/3PLS-DS.SIM} & \text{party-ND-CL}_{\text{res}} & \text{not.be-FP-3SGS}
\end{array}
\]

‘And as they did this, the party ended.’

When a sentence concludes with a clause containing a speech act verb and its complement, -t- ‘do’ may be used to reiterate the actual speech act as in (11-144) or it may be used iterate the occurrence of the events described by the complement of the speech act as in (11-145).
CHAPTER II- SENTENCE STRUCTURE, CLAUSE COMBINING AND INTERSENTENTIAL RELATIONS

ITERATION OF THE SPEECH ACT

(11-144) a. agiswarapaya \textit{"wuyadkukuyabi tuwumuŋa"}
   aŋ-xiswara-pa-ŋa kuyadkukuyabi tuwu-muŋa
   1PLO-tell-FP-2/3PLS well perform-1PLS.NEC

\textit{varapaya.}
para-pa-ŋa
say-FP-2/3PLS
\textquotedblleft They told us, saying \text{"Perform well!\textquotedblright}\textquotedblright

b. \textit{Tpaya-i...}
   t-pa-ŋa-i
do-FP-2/3PLS-DS.SEQ
\textit{\textquotedblleft They said this and then...\textquotedblright}\textquotedblright

ITERATION OF THE EVENTS DESCRIBED BY THE CTP COMPLEMENT

(11-145) \begin{tabular}{llllll}
         & Aria & varapari & vakrapa & ixramra & varapari \\
aria & para-pa-ri & vakra-pa & ixra-mra & para-pa-ri \\
OK & say-FP-3SGS & mat-CL & look-1SGS.NEC & say-FP-3SGS \\
\end{tabular}

\begin{tabular}{llllll}
prr & idanapr & xnmra & varapari \\
t-pr & idana-pr & kn-mra & para-pa-ri \\
do-1DUS & make.bed-1DUS & sleep-1DUS.NEC & say-FP-3SGS \\
\end{tabular}
\textit{\textquotedblleft \text{"OK\textquotedblright}, he said, \text{"Let\textquoteright s look for a mat\textquoteright}, he said. \text{"Let\textquoteright s do this and then build a bed and sleep\textquoteright\textquotedblright} he said\textquoteright\textquotedblright.\textquotedblright}

\textit{T-} can also be used to introduce a reiteration of the action described by the
\textit{\textquoteleft\textquoteleft tail\textquoteright\textquoteright as shown in (11-146):

(11-146) a. Adavi \textit{nbapara.}
   ad-a-vi nba-pa-ra
   DEM-ND-OBL die-FP-2/3DUS
   \textit{\textquoteleft They died there.\textquoteleft\textquotedblright}\textquotedblright

b. \textit{Tir, \textit{nbapara.}
   t-tr nba-pa-ra
   do-3DUS die-FP-3DUS
   \textit{\textquoteleft They did this; they died.\textquoteleft\textquotedblright}\textquotedblright}
11.8.4 A note on the non-final use of the pro-verb

In addition to linking to sentences, the pro-verb can be used mid-chain: that is, between two medial clauses. While this not strictly a tail-head construction, such medial use of -t- does appear to parallel the effect of thematic change that is normally achieved by ending an SRC (and sentence) with an independent verb and then beginning a new sentence. For example,

(11-147)  

<table>
<thead>
<tr>
<th>Mudam,</th>
<th>Andrew</th>
<th>sapr,</th>
<th>sapr,</th>
</tr>
</thead>
<tbody>
<tr>
<td>muda-m</td>
<td>Andrew=ti</td>
<td>sa-pr</td>
<td>sa-pr</td>
</tr>
<tr>
<td>come.up-1SGS</td>
<td>PN=COM</td>
<td>be-1DUS</td>
<td>be-1DUS</td>
</tr>
</tbody>
</table>

\[ tpr,\ yi \quad sxa \quad svarin. \]

\[ t-pr \quad yi \quad sxa \quad svar-i-n \]

do-1DUS 1SGPRO again go.bush-NT-1SGS

I came up and Andrew and I were there, and we were there, and then I went bush again.'
Appendix

Texts

1. *Nama tppax npgnai. ‘You shouldn’t mimic a *tppa*.’*

1

<table>
<thead>
<tr>
<th>Mugupa</th>
<th>wusutavi</th>
<th>sata,</th>
<th>nama</th>
</tr>
</thead>
<tbody>
<tr>
<td>mugu-pa</td>
<td>wusu-tav-i</td>
<td>sa-ta</td>
<td>na-ma</td>
</tr>
<tr>
<td>house-Cl</td>
<td>new-Cl_shet-OBL</td>
<td>be-2SGS</td>
<td>2SGS-NEG</td>
</tr>
</tbody>
</table>

*tppax* | *npgnai.* | *varapan.*
| tp-pa-x | npg-na-i | para-pa-n |
| k.o bird-Cl | mimic-2SGS-NEG.IR | say-FP-1SGS |

“If you are in a new house, you shouldn’t mimic a *tppa*.” I said.’

2

<table>
<thead>
<tr>
<th>Adavi</th>
<th>tmai,</th>
<th>muguwaka</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad-a-vi</td>
<td>t-na-i</td>
<td>mugux-a-ka</td>
</tr>
<tr>
<td>DEM-ND-ADV</td>
<td>do-2SGS-DS.SEQ</td>
<td>house-ND-Cl</td>
</tr>
</tbody>
</table>

vXRabarat.

vXara-ba-t

break up-FUT-3SGS

‘If you do that, the house will break up.’

3

<table>
<thead>
<tr>
<th>Adavi</th>
<th>variq</th>
<th>tŋ</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad-a-vi</td>
<td>par-iŋ</td>
<td>t-øŋ</td>
</tr>
<tr>
<td>DEM-ND-ADV</td>
<td>say-NT-IPLS</td>
<td>do-NT-IPLS</td>
</tr>
</tbody>
</table>

‘We say (it) thus.’

1 *a kind of forest bird.*
2. Agasapaga. ‘Bush fowl mound.’

1. Ar

<table>
<thead>
<tr>
<th>Text</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>xyaxyadmti</td>
<td>vwa-ad-a-ki</td>
</tr>
<tr>
<td>xya-xya-ad-i-m-ti</td>
<td>vwa-ad-a-ki</td>
</tr>
<tr>
<td>white-RDL-DEM-PROX-CL_{male}=CO</td>
<td>settlement-DEM-ND-OBL</td>
</tr>
<tr>
<td>sapr,</td>
<td>mudupr,</td>
</tr>
<tr>
<td>sa-pr</td>
<td>Ubrizawada</td>
</tr>
<tr>
<td>be-1DUS</td>
<td>go.up-1DUS</td>
</tr>
<tr>
<td>tpr,</td>
<td>adakua,</td>
</tr>
<tr>
<td>t-pr</td>
<td>Vuwururi</td>
</tr>
<tr>
<td>do-1DUS</td>
<td>DEM-FD-CL_{res}</td>
</tr>
<tr>
<td>agasapagaki</td>
<td>ixrapr,</td>
</tr>
<tr>
<td>aga-sapa Nx-a-ki</td>
<td>kixra-pr</td>
</tr>
<tr>
<td>k.o bush.fowl-mound-ND-OBL</td>
<td>look-1DUS</td>
</tr>
<tr>
<td>nma</td>
<td>sba,</td>
</tr>
<tr>
<td>3SGS-NEG</td>
<td>agamkgupuk.</td>
</tr>
</tbody>
</table>

‘We two, this white man and (I) were at that settlement, and we went up, we went up to Ubrizawada, and at Nmurkim we did (it), that, and then we went down to Vuwururi.’

2. Ar

<table>
<thead>
<tr>
<th>Text</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>mugupr,</td>
<td>tamaxixrapr,</td>
</tr>
<tr>
<td>tigafia</td>
<td>tama-xixra-pr</td>
</tr>
<tr>
<td>do-3SGS-DUS-SEQ</td>
<td>go.down-1DUS</td>
</tr>
<tr>
<td>put-look-1DUS</td>
<td>pandanus-ND-PL</td>
</tr>
<tr>
<td>mudupr</td>
<td>mdapr</td>
</tr>
<tr>
<td>vanabay</td>
<td>wutaguta</td>
</tr>
<tr>
<td>mugupr</td>
<td>muda-pr</td>
</tr>
<tr>
<td>vanaN-pa-\tau</td>
<td>kuta-N-kuta</td>
</tr>
<tr>
<td>come.up-1DUS</td>
<td>come.up-1DUS</td>
</tr>
<tr>
<td>tulip-CL_{res}-PL</td>
<td>pick-N-RDL</td>
</tr>
</tbody>
</table>

‘And then, we went down and looked upwards for pandanus and we went down and came up and while while picked tulip we came up.’
We came up and went across, and while I was picking the tulip, we two went and ants bit Andrew.

Ants bit Andrew.

Again we came back and went up and came upon the road and then while looked for birds we came up.

Again, we came back up.

settlement-DEM-PROX-OBL
tuwuvoxar.
tuwuvxa-pa-r
come.up-FF-1DUS
‘And so, we came down, and came upon to this settlement.’
References


REFERENCES


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REFERENCES


